

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P188109

Luminaire Tested: **QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188109
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P92792)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)
Description: LUMARK QUADCAST PARKING GARAGE/CANOPY FIXTURE W/4 ROTATING OPTICAL LIGHT PANELS
Light Source: (4) 4000K SMT LED OPTICAL PANELS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5184.2 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.23')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U3 - G2

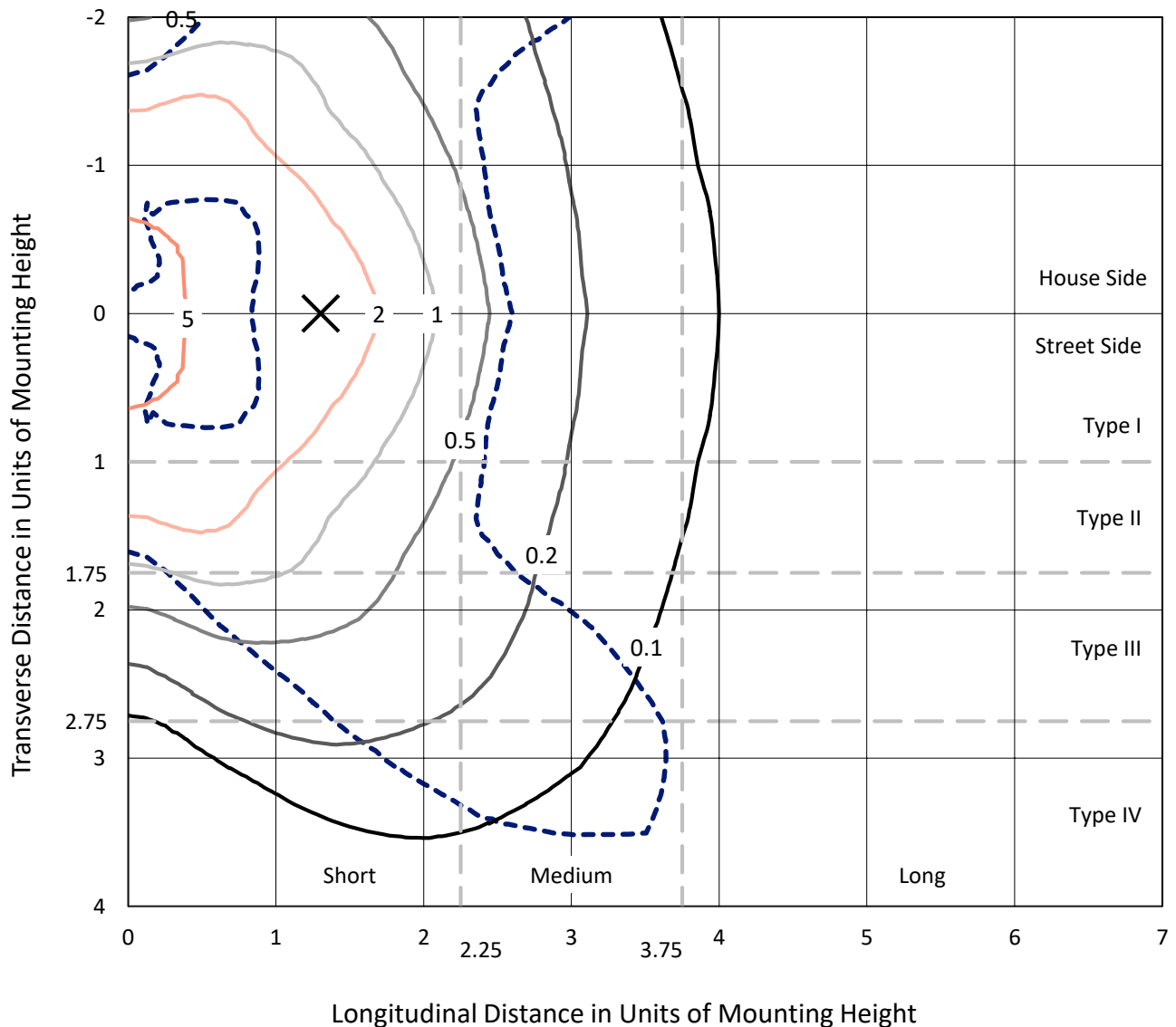
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

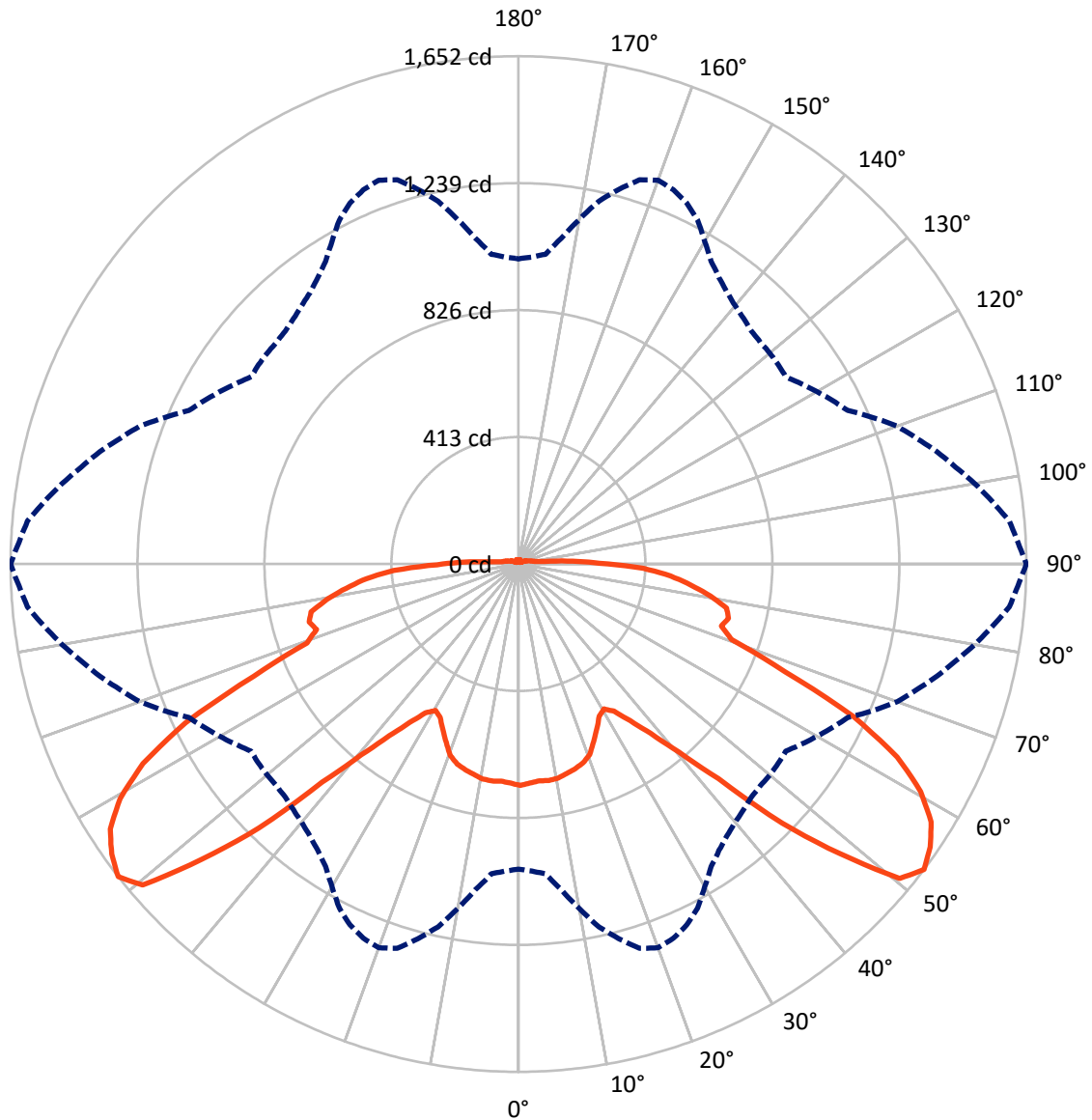


Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 52.5-Deg Vertical

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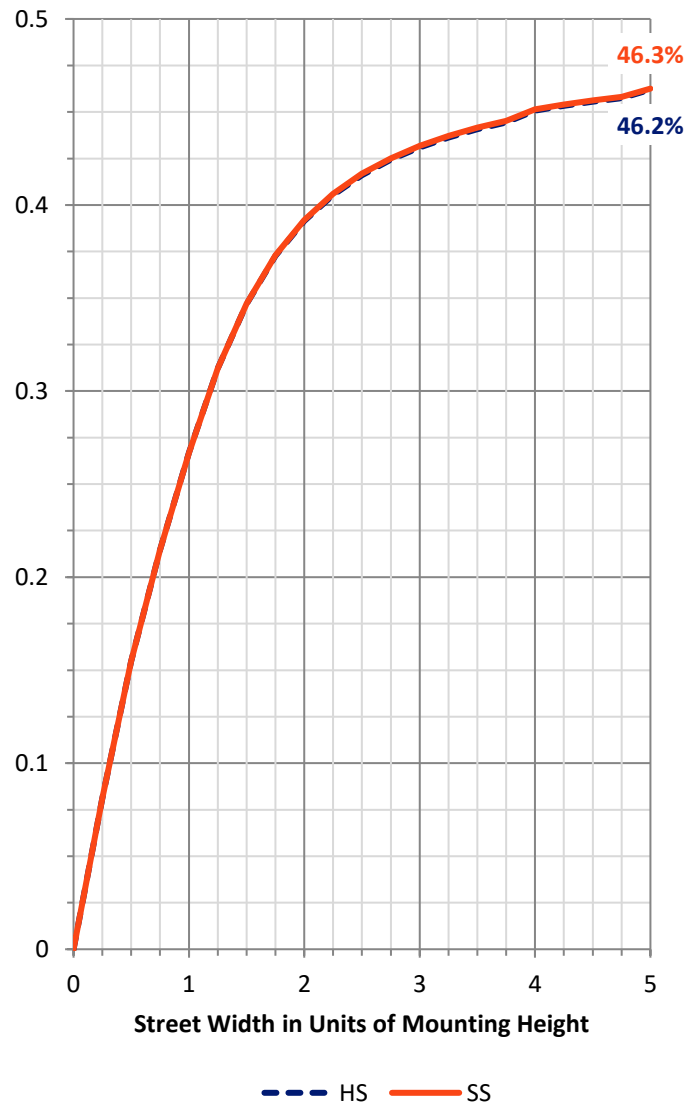
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2483.4	108.7	2592.1
	% Fixture	47.9	2.1	50.0
Street Side	Lumens	2483.4	108.7	2592.1
	% Fixture	47.9	2.1	50.0
Total	Lumens	4966.7	217.4	5184.2
	% Fixture	95.8	4.2	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	1.4
10°-20°	220.7	4.3
20°-30°	334.0	6.4
30°-40°	455.4	8.8
40°-50°	757.2	14.6
50°-60°	1080.9	20.8
60°-70°	944.2	18.2
70°-80°	681.7	13.2
80°-90°	421.5	8.1
90°-100°	121.6	2.3
100°-110°	34.8	0.7
110°-120°	18.0	0.3
120°-130°	12.3	0.2
130°-140°	10.5	0.2
140°-150°	8.3	0.2
150°-160°	6.8	0.1
160°-170°	4.1	0.1
170°-180°	1.2	0.0
0°-90°	4966.7	95.8
0°-180°	5184.2	100.0



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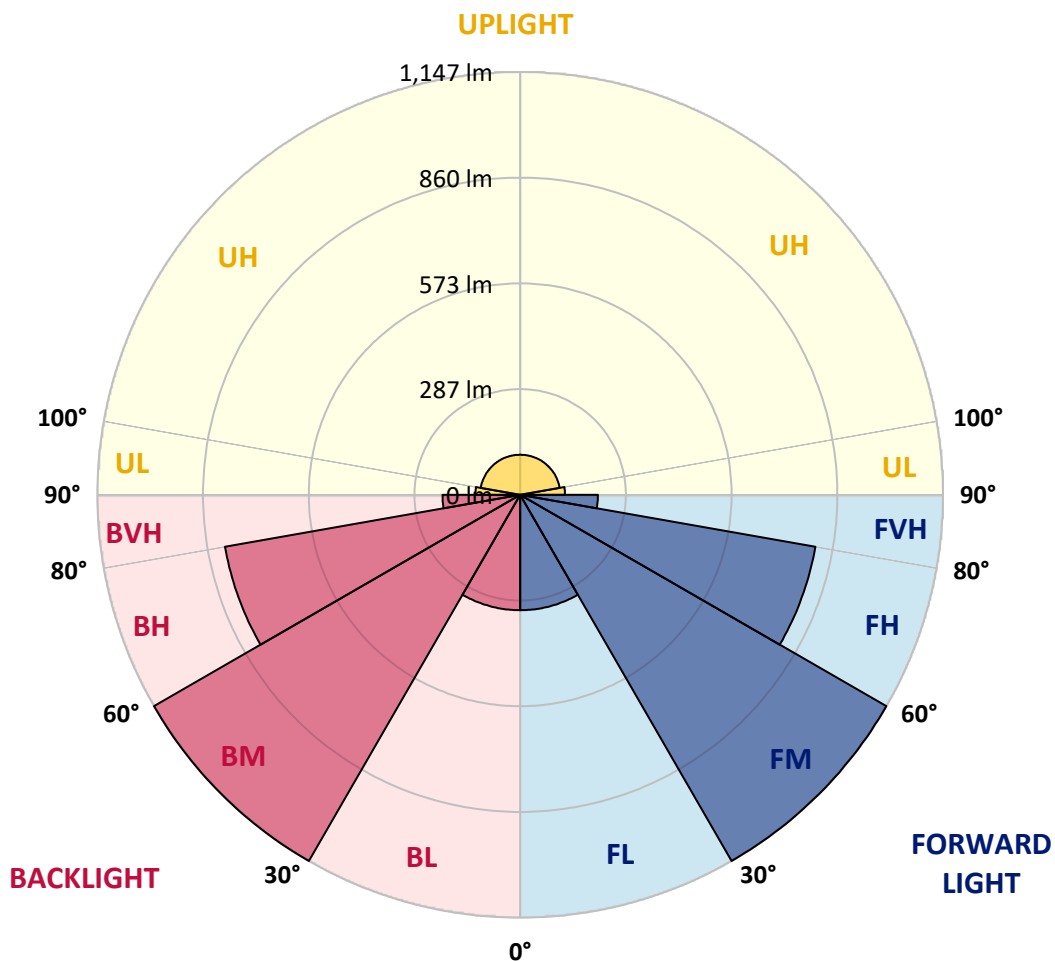
CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	312.9	6.0			
FM (30°-60°)	1146.8	22.1			
FH (60°-80°)	813.0	15.7			G1/1800
FVH (80°-90°)	210.7	4.1			G2/225
BL (0°-30°)	312.9	6.0	B1/500		
BM (30°-60°)	1146.8	22.1	B2/2500		
BH (60°-80°)	812.9	15.7	B2/1000		G1/1800
BVH (80°-90°)	210.7	4.1			G2/225
UL (90°-100°)	121.6	2.3		U3/500	
UH (100°-180°)	108.7	2.1		U3/500	

BUG Rating: B2-U3-G2

Type V Short





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CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1
2.5°	735.3	734.1	732.9	734.1	732.9	732.9	734.1	731.8	731.8	731.8	730.6
5°	770.3	768.0	765.7	766.8	764.5	764.5	764.5	762.1	761.0	758.6	756.3
7.5°	804.2	803.1	801.9	800.7	799.6	797.2	796.0	792.5	790.2	784.4	780.9
10°	851.0	849.8	847.5	845.1	844.0	840.5	835.8	829.9	822.9	817.1	810.1
12.5°	877.9	875.5	874.4	873.2	869.7	867.4	863.8	856.8	849.8	844.0	837.0
15°	881.4	882.5	883.7	881.4	877.9	873.2	870.9	866.2	862.7	858.0	854.5
17.5°	882.5	880.2	880.2	877.9	875.5	873.2	869.7	868.5	867.4	867.4	866.2
20°	877.9	875.5	870.9	867.4	867.4	862.7	858.0	861.5	859.2	856.8	854.5
22.5°	870.9	869.7	866.2	862.7	856.8	852.2	847.5	847.5	846.3	841.6	838.1
25°	868.5	867.4	863.8	858.0	852.2	844.0	833.5	828.8	822.9	817.1	812.4
27.5°	862.7	859.2	855.7	851.0	844.0	835.8	824.1	817.1	810.1	800.7	792.5
30°	847.5	848.7	844.0	838.1	833.5	824.1	812.4	804.2	798.4	790.2	780.9
32.5°	835.8	835.8	832.3	828.8	820.6	811.2	800.7	796.0	787.9	779.7	771.5
35°	826.4	825.3	821.8	817.1	811.2	803.1	793.7	789.0	785.5	780.9	772.7
37.5°	838.1	832.3	828.8	822.9	819.4	813.6	808.9	807.7	804.2	798.4	789.0
40°	903.6	900.1	887.2	873.2	870.9	872.0	867.4	858.0	847.5	833.5	818.3
42.5°	1043.9	1033.3	1018.1	1011.1	1001.8	994.8	979.6	956.2	931.6	908.3	882.5
45°	1133.9	1130.4	1147.9	1159.6	1170.1	1170.1	1161.9	1129.2	1089.5	1052.0	1012.3
47.5°	1101.1	1124.5	1151.4	1186.5	1215.7	1237.9	1249.6	1242.6	1229.7	1204.0	1173.6
50°	1048.5	1053.2	1087.1	1140.9	1191.1	1240.2	1269.5	1288.2	1291.7	1284.7	1254.3
52.5°	992.4	999.4	1011.1	1068.4	1137.4	1208.7	1261.3	1310.4	1327.9	1317.4	1295.2
55°	945.7	953.9	970.2	1006.5	1080.1	1153.7	1226.2	1294.0	1331.4	1338.4	1316.2
57.5°	860.3	867.4	889.6	941.0	1006.5	1089.5	1176.0	1241.4	1296.4	1316.2	1317.4
60°	706.0	722.4	757.5	813.6	881.4	959.7	1042.7	1126.9	1199.3	1244.9	1278.8
62.5°	582.1	595.0	625.4	683.8	752.8	829.9	909.4	1001.8	1056.7	1109.3	1154.9
65°	431.3	444.2	480.4	547.1	624.2	710.7	797.2	875.5	928.1	978.4	1026.3
67.5°	316.8	328.5	367.0	425.5	506.2	596.2	675.6	755.1	820.6	879.0	927.0
70°	231.5	240.8	265.3	318.0	389.3	479.3	563.4	642.9	722.4	784.4	835.8
72.5°	163.7	176.5	188.2	223.3	273.5	344.8	416.1	512.0	611.4	690.8	766.8
75°	140.3	140.3	143.8	159.0	184.7	231.5	288.7	378.7	475.8	570.4	658.1
77.5°	127.4	126.2	123.9	121.6	130.9	148.5	195.2	260.7	343.7	430.2	527.2
80°	111.0	111.0	108.7	106.4	105.2	106.4	133.3	166.0	229.1	300.4	396.3
82.5°	88.8	90.0	91.2	91.2	91.2	91.2	98.2	112.2	147.3	199.9	282.9
85°	77.2	77.2	78.3	81.8	83.0	85.3	86.5	91.2	104.0	137.9	196.4
87.5°	53.8	54.9	58.4	63.1	70.1	72.5	74.8	76.0	79.5	98.2	128.6
90°	22.2	28.1	30.4	37.4	44.4	50.3	54.9	56.1	58.4	64.3	79.5
92.5°	15.2	16.4	17.5	22.2	29.2	35.1	38.6	42.1	44.4	46.8	54.9
95°	12.9	14.0	15.2	18.7	22.2	25.7	30.4	33.9	37.4	40.9	45.6
97.5°	11.7	12.9	14.0	16.4	18.7	19.9	22.2	26.9	31.6	35.1	38.6
100°	11.7	11.7	12.9	14.0	15.2	15.2	18.7	22.2	24.5	26.9	30.4
102.5°	10.5	11.7	12.9	11.7	14.0	14.0	15.2	16.4	21.0	23.4	25.7
105°	12.9	11.7	11.7	11.7	11.7	12.9	14.0	14.0	15.2	16.4	19.9
107.5°	11.7	10.5	10.5	9.4	10.5	10.5	10.5	10.5	12.9	14.0	15.2
110°	11.7	11.7	11.7	10.5	11.7	11.7	11.7	11.7	11.7	12.9	14.0



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CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
112.5°	11.7	10.5	10.5	10.5	10.5	10.5	10.5	10.5	11.7	11.7	12.9
115°	11.7	10.5	10.5	10.5	11.7	11.7	11.7	11.7	11.7	11.7	11.7
117.5°	11.7	10.5	10.5	10.5	10.5	12.9	12.9	12.9	12.9	11.7	11.7
120°	10.5	12.9	12.9	12.9	12.9	12.9	14.0	14.0	14.0	12.9	12.9
122.5°	17.5	16.4	15.2	15.2	15.2	12.9	14.0	14.0	14.0	12.9	12.9
125°	21.0	19.9	17.5	16.4	16.4	16.4	14.0	14.0	14.0	12.9	12.9
127.5°	21.0	19.9	21.0	18.7	17.5	16.4	15.2	14.0	14.0	14.0	14.0
130°	21.0	18.7	18.7	18.7	19.9	19.9	19.9	18.7	16.4	15.2	14.0
132.5°	22.2	22.2	21.0	21.0	21.0	18.7	18.7	17.5	16.4	16.4	15.2
135°	21.0	19.9	21.0	21.0	18.7	17.5	16.4	16.4	16.4	16.4	16.4
137.5°	19.9	21.0	19.9	19.9	21.0	21.0	18.7	18.7	17.5	16.4	16.4
140°	19.9	21.0	19.9	19.9	19.9	19.9	18.7	18.7	17.5	16.4	16.4
142.5°	18.7	18.7	18.7	19.9	19.9	19.9	19.9	19.9	17.5	17.5	16.4
145°	17.5	18.7	19.9	18.7	18.7	17.5	17.5	17.5	17.5	17.5	15.2
147.5°	18.7	18.7	18.7	18.7	17.5	17.5	16.4	16.4	17.5	16.4	16.4
150°	21.0	19.9	18.7	17.5	18.7	18.7	18.7	18.7	17.5	17.5	17.5
152.5°	21.0	21.0	19.9	19.9	19.9	18.7	18.7	17.5	16.4	16.4	16.4
155°	17.5	18.7	19.9	19.9	19.9	18.7	17.5	17.5	18.7	17.5	17.5
157.5°	18.7	18.7	17.5	18.7	17.5	17.5	17.5	17.5	17.5	18.7	17.5
160°	17.5	17.5	17.5	16.4	16.4	17.5	16.4	17.5	17.5	17.5	16.4
162.5°	17.5	16.4	16.4	16.4	17.5	16.4	16.4	16.4	17.5	17.5	17.5
165°	14.0	15.2	15.2	15.2	15.2	15.2	16.4	15.2	15.2	15.2	15.2
167.5°	14.0	14.0	14.0	15.2	15.2	15.2	15.2	14.0	14.0	15.2	15.2
170°	14.0	14.0	12.9	12.9	12.9	12.9	14.0	12.9	12.9	12.9	12.9
172.5°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	11.7	11.7	11.7	12.9
175°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	11.7	11.7	11.7
177.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	11.7	11.7
180°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7



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CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1
2.5°	728.2	728.2	728.2	727.1	724.7	724.7	723.6	722.4	723.6	722.4	721.2
5°	755.1	751.6	749.3	745.8	743.4	739.9	737.6	735.3	731.8	730.6	728.2
7.5°	776.2	769.2	764.5	759.8	755.1	751.6	748.1	742.3	738.8	734.1	731.8
10°	800.7	794.9	787.9	779.7	772.7	766.8	759.8	752.8	745.8	738.8	731.8
12.5°	829.9	821.8	814.8	805.4	797.2	789.0	779.7	772.7	763.3	755.1	743.4
15°	848.7	846.3	840.5	833.5	822.9	812.4	800.7	787.9	776.2	765.7	752.8
17.5°	862.7	859.2	855.7	851.0	838.1	825.3	812.4	799.6	786.7	773.8	758.6
20°	853.3	851.0	851.0	847.5	833.5	822.9	805.4	790.2	773.8	755.1	737.6
22.5°	833.5	828.8	826.4	820.6	810.1	800.7	785.5	771.5	751.6	729.4	709.5
25°	807.7	801.9	796.0	789.0	777.3	768.0	754.0	739.9	720.1	700.2	680.3
27.5°	786.7	780.9	771.5	765.7	754.0	741.1	727.1	713.1	696.7	679.2	665.1
30°	770.3	762.1	752.8	745.8	737.6	728.2	718.9	709.5	696.7	682.7	666.3
32.5°	763.3	754.0	745.8	737.6	729.4	723.6	714.2	709.5	701.4	692.0	681.5
35°	762.1	750.5	738.8	728.2	723.6	721.2	717.7	714.2	707.2	700.2	693.2
37.5°	776.2	759.8	747.0	732.9	728.2	724.7	722.4	720.1	715.4	710.7	709.5
40°	805.4	790.2	772.7	755.1	745.8	739.9	735.3	730.6	728.2	727.1	723.6
42.5°	863.8	840.5	814.8	789.0	772.7	762.1	752.8	745.8	743.4	743.4	739.9
45°	976.1	935.2	891.9	851.0	829.9	806.6	790.2	773.8	773.8	771.5	770.3
47.5°	1123.4	1067.2	1017.0	965.5	932.8	900.1	868.5	842.8	841.6	842.8	844.0
50°	1205.2	1165.4	1131.5	1103.5	1061.4	1024.0	992.4	960.9	959.7	958.5	957.4
52.5°	1261.3	1212.2	1166.6	1137.4	1114.0	1096.5	1083.6	1071.9	1067.2	1067.2	1064.9
55°	1283.5	1244.9	1192.3	1143.2	1123.4	1114.0	1110.5	1110.5	1117.5	1128.0	1137.4
57.5°	1285.8	1246.1	1199.3	1150.2	1125.7	1096.5	1101.1	1104.6	1112.8	1126.9	1140.9
60°	1278.8	1254.3	1211.0	1165.4	1125.7	1085.9	1062.6	1048.5	1057.9	1069.6	1084.8
62.5°	1199.3	1216.9	1213.4	1186.5	1153.7	1110.5	1057.9	1022.8	1015.8	1013.5	1024.0
65°	1085.9	1135.0	1177.1	1161.9	1129.2	1103.5	1073.1	1033.3	1000.6	983.1	988.9
67.5°	978.4	1025.2	1064.9	1088.3	1100.0	1071.9	1041.5	1017.0	978.4	946.8	935.2
70°	887.2	934.0	974.9	1006.5	1029.8	1029.8	1012.3	976.1	938.7	907.1	880.2
72.5°	818.3	859.2	891.9	925.8	959.7	979.6	976.1	952.7	922.3	894.2	867.4
75°	730.6	790.2	824.1	855.7	884.9	910.6	921.1	925.8	910.6	881.4	862.7
77.5°	623.0	699.0	751.6	790.2	804.2	825.3	841.6	861.5	851.0	837.0	822.9
80°	494.5	582.1	659.3	702.5	721.2	736.4	750.5	762.1	759.8	758.6	752.8
82.5°	365.9	458.2	540.1	592.7	634.7	658.1	666.3	661.6	660.5	658.1	651.1
85°	264.2	343.7	409.1	467.6	523.7	564.6	585.6	586.8	577.5	569.3	562.3
87.5°	178.8	238.5	286.4	340.2	391.6	441.9	469.9	482.8	486.3	486.3	478.1
90°	111.0	146.1	184.7	226.8	270.0	307.4	329.6	349.5	367.0	376.4	369.4
92.5°	71.3	88.8	115.7	146.1	181.2	205.7	220.9	236.1	249.0	253.7	258.3
95°	51.4	60.8	76.0	93.5	115.7	130.9	140.3	153.1	161.3	167.2	167.2
97.5°	42.1	45.6	52.6	60.8	72.5	80.7	87.7	97.0	102.9	108.7	109.9
100°	33.9	37.4	38.6	43.3	49.1	52.6	58.4	64.3	67.8	73.6	73.6
102.5°	28.1	30.4	32.7	36.2	40.9	43.3	44.4	45.6	47.9	51.4	52.6
105°	22.2	23.4	24.5	28.1	32.7	37.4	37.4	38.6	39.7	40.9	42.1
107.5°	16.4	17.5	19.9	22.2	25.7	29.2	31.6	32.7	35.1	35.1	35.1
110°	14.0	16.4	17.5	18.7	21.0	23.4	23.4	25.7	26.9	30.4	31.6



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
112.5°	12.9	14.0	15.2	15.2	16.4	17.5	17.5	19.9	21.0	22.2	24.5
115°	11.7	12.9	14.0	15.2	15.2	15.2	16.4	15.2	16.4	16.4	18.7
117.5°	11.7	11.7	12.9	14.0	14.0	15.2	14.0	14.0	14.0	15.2	15.2
120°	12.9	12.9	11.7	12.9	12.9	12.9	12.9	12.9	12.9	15.2	15.2
122.5°	12.9	12.9	12.9	12.9	12.9	14.0	11.7	11.7	11.7	12.9	12.9
125°	12.9	12.9	12.9	12.9	12.9	14.0	12.9	12.9	12.9	12.9	12.9
127.5°	14.0	14.0	14.0	14.0	14.0	12.9	11.7	12.9	14.0	14.0	14.0
130°	14.0	14.0	14.0	14.0	15.2	14.0	11.7	11.7	11.7	12.9	12.9
132.5°	15.2	15.2	14.0	14.0	15.2	15.2	12.9	12.9	11.7	11.7	10.5
135°	16.4	16.4	15.2	15.2	15.2	15.2	14.0	15.2	15.2	14.0	11.7
137.5°	16.4	16.4	15.2	15.2	15.2	15.2	12.9	12.9	12.9	12.9	11.7
140°	16.4	16.4	15.2	15.2	15.2	15.2	14.0	14.0	14.0	11.7	11.7
142.5°	16.4	16.4	14.0	12.9	12.9	14.0	12.9	12.9	12.9	12.9	10.5
145°	15.2	15.2	15.2	15.2	15.2	16.4	15.2	15.2	15.2	15.2	12.9
147.5°	16.4	17.5	15.2	15.2	15.2	15.2	12.9	12.9	12.9	12.9	11.7
150°	16.4	17.5	15.2	15.2	15.2	14.0	12.9	12.9	12.9	12.9	11.7
152.5°	16.4	16.4	16.4	16.4	15.2	15.2	12.9	12.9	12.9	12.9	11.7
155°	16.4	16.4	15.2	15.2	14.0	12.9	12.9	14.0	14.0	14.0	12.9
157.5°	17.5	17.5	17.5	16.4	15.2	16.4	15.2	15.2	15.2	15.2	14.0
160°	16.4	16.4	15.2	15.2	14.0	14.0	14.0	14.0	14.0	15.2	14.0
162.5°	17.5	16.4	15.2	15.2	16.4	16.4	15.2	12.9	12.9	12.9	12.9
165°	16.4	16.4	15.2	14.0	14.0	14.0	15.2	15.2	15.2	14.0	14.0
167.5°	15.2	15.2	14.0	14.0	15.2	15.2	14.0	14.0	14.0	14.0	14.0
170°	12.9	12.9	12.9	12.9	12.9	11.7	11.7	11.7	11.7	12.9	12.9
172.5°	12.9	12.9	11.7	11.7	10.5	10.5	10.5	10.5	10.5	11.7	11.7
175°	11.7	11.7	10.5	10.5	10.5	10.5	10.5	10.5	11.7	11.7	10.5
177.5°	11.7	11.7	10.5	10.5	10.5	10.5	10.5	10.5	10.5	11.7	11.7
180°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1
2.5°	720.1	720.1	720.1	718.9	717.7	718.9	717.7	716.6	715.4	716.6	716.6
5°	724.7	723.6	722.4	720.1	718.9	717.7	715.4	715.4	713.1	710.7	711.9
7.5°	725.9	723.6	720.1	717.7	714.2	714.2	713.1	710.7	709.5	709.5	710.7
10°	723.6	720.1	715.4	713.1	709.5	709.5	707.2	707.2	704.9	706.0	708.4
12.5°	732.9	725.9	720.1	711.9	704.9	701.4	699.0	697.9	696.7	697.9	696.7
15°	741.1	730.6	723.6	714.2	706.0	700.2	696.7	693.2	689.7	690.8	692.0
17.5°	742.3	730.6	717.7	703.7	692.0	687.3	682.7	678.0	676.8	678.0	679.2
20°	721.2	706.0	693.2	679.2	667.5	660.5	653.4	651.1	648.8	649.9	654.6
22.5°	688.5	671.0	655.8	640.6	626.6	619.5	617.2	613.7	611.4	616.0	619.5
25°	661.6	642.9	626.6	610.2	593.8	588.0	583.3	581.0	578.6	583.3	584.5
27.5°	648.8	632.4	616.0	599.7	585.6	576.3	566.9	561.1	556.4	556.4	556.4
30°	653.4	639.4	624.2	611.4	596.2	589.1	577.5	569.3	559.9	556.4	552.9
32.5°	671.0	658.1	644.1	632.4	619.5	613.7	606.7	598.5	590.3	588.0	584.5
35°	686.2	675.6	668.6	659.3	652.3	648.8	642.9	638.2	632.4	631.2	630.1
37.5°	704.9	699.0	693.2	686.2	681.5	681.5	681.5	682.7	681.5	685.0	688.5
40°	722.4	717.7	715.4	710.7	707.2	717.7	727.1	734.1	739.9	754.0	770.3
42.5°	738.8	739.9	742.3	744.6	748.1	768.0	790.2	811.2	832.3	858.0	883.7
45°	768.0	780.9	794.9	810.1	825.3	866.2	911.8	953.9	999.4	1041.5	1085.9
47.5°	844.0	873.2	902.4	934.0	965.5	1024.0	1083.6	1132.7	1184.1	1232.1	1278.8
50°	955.0	981.9	1008.8	1040.4	1069.6	1133.9	1200.5	1263.6	1330.3	1386.4	1441.3
52.5°	1061.4	1090.6	1121.0	1151.4	1181.8	1246.1	1310.4	1358.3	1409.7	1456.5	1506.8
55°	1149.1	1164.3	1177.1	1188.8	1205.2	1254.3	1302.2	1339.6	1377.0	1422.6	1470.5
57.5°	1158.4	1158.4	1160.8	1161.9	1170.1	1212.2	1254.3	1291.7	1326.7	1372.3	1416.8
60°	1105.8	1104.6	1107.0	1109.3	1117.5	1152.6	1187.6	1225.0	1261.3	1302.2	1344.3
62.5°	1040.4	1041.5	1045.0	1052.0	1061.4	1090.6	1119.8	1145.6	1171.3	1206.3	1240.2
65°	999.4	993.6	991.3	991.3	990.1	1004.1	1018.1	1025.2	1033.3	1057.9	1082.4
67.5°	931.6	911.8	903.6	894.2	888.4	884.9	877.9	872.0	868.5	876.7	884.9
70°	858.0	827.6	811.2	798.4	786.7	776.2	759.8	745.8	737.6	734.1	728.2
72.5°	837.0	798.4	773.8	755.1	739.9	724.7	711.9	697.9	687.3	683.8	680.3
75°	832.3	800.7	789.0	764.5	742.3	729.4	727.1	710.7	695.5	700.2	707.2
77.5°	799.6	776.2	759.8	744.6	729.4	716.6	703.7	693.2	683.8	687.3	690.8
80°	732.9	714.2	697.9	682.7	675.6	667.5	654.6	651.1	645.3	642.9	641.7
82.5°	642.9	631.2	614.9	606.7	605.5	602.0	596.2	591.5	585.6	579.8	578.6
85°	554.1	541.2	528.4	529.5	529.5	523.7	521.3	521.3	516.7	512.0	507.3
87.5°	471.1	468.7	460.6	452.4	453.5	459.4	448.9	437.2	430.2	426.7	422.0
90°	367.0	368.2	361.2	353.0	344.8	336.7	332.0	322.6	312.1	301.6	296.9
92.5°	253.7	239.6	245.5	244.3	235.0	219.8	216.3	209.2	197.6	187.0	184.7
95°	162.5	153.1	156.6	155.5	149.6	141.4	135.6	127.4	114.6	106.4	101.7
97.5°	104.0	100.5	102.9	98.2	91.2	85.3	84.2	78.3	66.6	62.0	60.8
100°	72.5	73.6	74.8	72.5	67.8	65.5	63.1	57.3	51.4	49.1	50.3
102.5°	53.8	57.3	58.4	58.4	56.1	53.8	52.6	49.1	44.4	43.3	44.4
105°	42.1	44.4	49.1	49.1	49.1	47.9	46.8	44.4	42.1	40.9	39.7
107.5°	35.1	37.4	40.9	40.9	40.9	42.1	40.9	39.7	37.4	36.2	36.2
110°	33.9	35.1	35.1	33.9	33.9	33.9	35.1	35.1	33.9	33.9	31.6



REPORT NUMBER: P188109
 CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°	
112.5°	28.1	29.2	29.2	30.4	31.6	31.6	31.6	31.6	30.4	30.4	28.1	0°
115°	19.9	19.9	23.4	23.4	24.5	24.5	25.7	26.9	26.9	26.9	26.9	2.5°
117.5°	15.2	16.4	17.5	17.5	17.5	18.7	19.9	21.0	19.9	21.0	21.0	5°
120°	15.2	15.2	16.4	15.2	15.2	16.4	16.4	17.5	15.2	15.2	15.2	7.5°
122.5°	12.9	12.9	15.2	12.9	12.9	14.0	12.9	14.0	12.9	12.9	11.7	10°
125°	12.9	14.0	15.2	14.0	14.0	15.2	12.9	14.0	11.7	11.7	11.7	12.5°
127.5°	14.0	12.9	14.0	12.9	12.9	12.9	11.7	11.7	10.5	11.7	11.7	15°
130°	12.9	14.0	14.0	14.0	12.9	11.7	11.7	11.7	10.5	10.5	10.5	17.5°
132.5°	10.5	12.9	12.9	12.9	12.9	12.9	11.7	9.4	9.4	10.5	9.4	20°
135°	9.4	9.4	10.5	10.5	9.4	9.4	9.4	8.2	7.0	7.0	8.2	22.5°
137.5°	11.7	11.7	10.5	10.5	9.4	9.4	7.0	7.0	5.8	5.8	7.0	25°
140°	10.5	10.5	10.5	9.4	8.2	8.2	8.2	8.2	7.0	5.8	5.8	27.5°
142.5°	10.5	10.5	9.4	9.4	8.2	8.2	7.0	5.8	4.7	4.7	5.8	30°
145°	11.7	12.9	11.7	11.7	10.5	9.4	7.0	7.0	7.0	5.8	5.8	32.5°
147.5°	12.9	12.9	12.9	11.7	11.7	11.7	8.2	8.2	7.0	7.0	7.0	35°
150°	12.9	12.9	12.9	11.7	11.7	11.7	10.5	10.5	10.5	9.4	9.4	37.5°
152.5°	11.7	11.7	11.7	10.5	10.5	11.7	11.7	11.7	11.7	11.7	10.5	40°
155°	11.7	11.7	11.7	9.4	10.5	11.7	11.7	11.7	10.5	11.7	11.7	42.5°
157.5°	14.0	14.0	14.0	12.9	12.9	12.9	12.9	12.9	12.9	12.9	14.0	45°
160°	14.0	14.0	12.9	12.9	14.0	14.0	14.0	12.9	12.9	12.9	11.7	47.5°
162.5°	12.9	12.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	50°
165°	14.0	14.0	14.0	14.0	14.0	14.0	12.9	14.0	12.9	12.9	14.0	52.5°
167.5°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	55°
170°	12.9	14.0	14.0	14.0	14.0	12.9	12.9	12.9	12.9	12.9	12.9	57.5°
172.5°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	14.0	60°
175°	10.5	10.5	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	12.9	62.5°
177.5°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	12.9	65°
180°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°
												110°

NUMBER: P188109
 NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):											CANDELA DISTRIBUTION	
82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°	112.5°	82.5°
720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	112.5°	26.9
716.6	715.4	714.2	713.1	714.2	715.4	716.6	716.6	716.6	715.4	716.6	115°	25.7
709.5	709.5	709.5	708.4	709.5	709.5	709.5	711.9	710.7	713.1	715.4	117.5°	19.9
710.7	709.5	711.9	710.7	711.9	709.5	710.7	710.7	709.5	709.5	710.7	120°	14.0
708.4	708.4	708.4	708.4	708.4	708.4	708.4	708.4	706.0	704.9	707.2	122.5°	10.5
699.0	697.9	699.0	699.0	699.0	697.9	699.0	696.7	697.9	696.7	697.9	125°	10.5
694.4	694.4	693.2	690.8	693.2	694.4	694.4	692.0	690.8	689.7	693.2	127.5°	10.5
679.2	679.2	681.5	680.3	681.5	679.2	679.2	679.2	678.0	676.8	678.0	130°	9.4
656.9	658.1	660.5	661.6	660.5	658.1	656.9	654.6	649.9	648.8	651.1	132.5°	8.2
623.0	626.6	625.4	626.6	625.4	626.6	623.0	619.5	616.0	611.4	613.7	135°	8.2
589.1	592.7	592.7	592.7	592.7	592.7	589.1	584.5	583.3	578.6	581.0	137.5°	7.0
558.8	557.6	561.1	559.9	561.1	557.6	558.8	556.4	556.4	556.4	561.1	140°	7.0
551.7	548.2	548.2	547.1	548.2	548.2	551.7	552.9	556.4	559.9	569.3	142.5°	5.8
579.8	577.5	573.9	570.4	573.9	577.5	579.8	584.5	588.0	590.3	598.5	145°	5.8
630.1	630.1	627.7	625.4	627.7	630.1	630.1	630.1	631.2	632.4	638.2	147.5°	5.8
693.2	697.9	699.0	699.0	699.0	697.9	693.2	688.5	685.0	681.5	682.7	150°	9.4
784.4	799.6	801.9	804.2	801.9	799.6	784.4	770.3	754.0	739.9	734.1	152.5°	10.5
910.6	939.8	948.0	953.9	948.0	939.8	910.6	883.7	858.0	832.3	811.2	155°	12.9
1129.2	1173.6	1188.8	1202.8	1188.8	1173.6	1129.2	1085.9	1041.5	999.4	953.9	157.5°	14.0
1327.9	1378.2	1393.4	1408.6	1393.4	1378.2	1327.9	1278.8	1232.1	1184.1	1132.7	160°	11.7
1500.9	1558.2	1581.6	1607.3	1581.6	1558.2	1500.9	1441.3	1386.4	1330.3	1263.6	162.5°	14.0
1554.7	1602.6	1626.0	1651.7	1626.0	1602.6	1554.7	1506.8	1456.5	1409.7	1358.3	165°	14.0
1517.3	1562.9	1593.3	1624.8	1593.3	1562.9	1517.3	1470.5	1422.6	1377.0	1339.6	167.5°	12.9
1463.5	1507.9	1544.2	1582.7	1544.2	1507.9	1463.5	1416.8	1372.3	1326.7	1291.7	170°	12.9
1385.2	1428.4	1465.9	1503.3	1465.9	1428.4	1385.2	1344.3	1302.2	1261.3	1225.0	172.5°	14.0
1274.1	1310.4	1345.4	1382.9	1345.4	1310.4	1274.1	1240.2	1206.3	1171.3	1145.6	175°	12.9
1105.8	1131.5	1164.3	1199.3	1164.3	1131.5	1105.8	1082.4	1057.9	1033.3	1025.2	177.5°	12.9
889.6	895.4	912.9	935.2	912.9	895.4	889.6	884.9	876.7	868.5	872.0	180°	11.7
721.2	711.9	720.1	734.1	720.1	711.9	721.2	728.2	734.1	737.6	745.8		
672.1	671.0	680.3	689.7	680.3	671.0	672.1	680.3	685.0	687.3	697.9		
701.4	700.2	704.9	706.0	704.9	700.2	701.4	707.2	700.2	695.5	710.7		
688.5	688.5	690.8	692.0	690.8	688.5	688.5	690.8	687.3	683.8	693.2		
638.2	635.9	635.9	633.6	635.9	635.9	638.2	641.7	642.9	645.3	651.1		
573.9	566.9	565.8	565.8	565.8	566.9	573.9	577.5	579.8	585.6	591.5		
505.0	499.1	500.3	496.8	500.3	499.1	505.0	507.3	512.0	516.7	521.3		
415.0	404.5	405.6	405.6	405.6	404.5	415.0	422.0	426.7	430.2	437.2		
285.2	273.5	270.0	264.2	270.0	273.5	285.2	296.9	301.6	312.1	322.6		
178.8	170.7	174.2	176.5	174.2	170.7	178.8	184.7	187.0	197.6	209.2		
94.7	85.3	85.3	86.5	85.3	85.3	94.7	101.7	106.4	114.6	127.4		
57.3	54.9	56.1	56.1	56.1	54.9	57.3	60.8	62.0	66.6	78.3		
49.1	47.9	49.1	50.3	49.1	47.9	49.1	50.3	49.1	51.4	57.3		
44.4	43.3	44.4	43.3	44.4	43.3	44.4	44.4	43.3	44.4	49.1		
39.7	37.4	39.7	39.7	39.7	37.4	39.7	39.7	40.9	42.1	44.4		
35.1	33.9	33.9	32.7	33.9	33.9	35.1	36.2	36.2	37.4	39.7		
30.4	29.2	29.2	28.1	29.2	29.2	30.4	31.6	33.9	33.9	35.1		

'188109
 QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

REPORT NUMBER: P188109
 CATALOG NUMBER: QDCAST1

TION (continued):

CANDELA DISTRIBUTION (con

85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°		110°	112.5°
24.5	24.5	24.5	24.5	24.5	26.9	28.1	30.4	30.4	31.6	0°	720.1	720.1
25.7	25.7	25.7	25.7	25.7	25.7	26.9	26.9	26.9	26.9	2.5°	717.7	718.9
19.9	19.9	18.7	19.9	19.9	19.9	21.0	21.0	19.9	21.0	5°	715.4	717.7
14.0	14.0	14.0	14.0	14.0	14.0	15.2	15.2	15.2	17.5	7.5°	713.1	714.2
11.7	11.7	11.7	11.7	11.7	10.5	11.7	12.9	12.9	14.0	10°	707.2	709.5
11.7	11.7	11.7	11.7	11.7	10.5	11.7	11.7	11.7	14.0	12.5°	699.0	701.4
10.5	10.5	9.4	10.5	10.5	10.5	11.7	11.7	10.5	11.7	15°	696.7	700.2
9.4	9.4	9.4	9.4	9.4	9.4	10.5	10.5	10.5	11.7	17.5°	682.7	687.3
8.2	8.2	8.2	8.2	8.2	8.2	9.4	10.5	9.4	9.4	20°	653.4	660.5
8.2	8.2	8.2	8.2	8.2	8.2	8.2	7.0	7.0	8.2	22.5°	617.2	619.5
7.0	7.0	7.0	7.0	7.0	7.0	7.0	5.8	5.8	7.0	25°	583.3	588.0
7.0	7.0	7.0	7.0	7.0	7.0	5.8	5.8	7.0	8.2	27.5°	566.9	576.3
7.0	7.0	7.0	7.0	7.0	5.8	5.8	4.7	4.7	5.8	30°	577.5	589.1
7.0	7.0	7.0	7.0	7.0	5.8	5.8	5.8	7.0	7.0	32.5°	606.7	613.7
5.8	7.0	7.0	7.0	5.8	5.8	7.0	7.0	7.0	8.2	35°	642.9	648.8
9.4	8.2	7.0	8.2	9.4	9.4	9.4	9.4	10.5	10.5	37.5°	681.5	681.5
11.7	11.7	11.7	11.7	11.7	10.5	10.5	11.7	11.7	11.7	40°	727.1	717.7
12.9	14.0	15.2	14.0	12.9	12.9	11.7	11.7	10.5	11.7	42.5°	790.2	768.0
14.0	15.2	15.2	15.2	14.0	14.0	14.0	12.9	12.9	12.9	45°	911.8	866.2
11.7	11.7	11.7	11.7	11.7	11.7	11.7	12.9	12.9	12.9	47.5°	1083.6	1024.0
14.0	15.2	15.2	15.2	14.0	14.0	14.0	14.0	14.0	14.0	50°	1200.5	1133.9
14.0	14.0	14.0	14.0	14.0	14.0	14.0	12.9	12.9	14.0	52.5°	1310.4	1246.1
12.9	14.0	14.0	14.0	12.9	12.9	12.9	12.9	12.9	12.9	55°	1302.2	1254.3
12.9	14.0	14.0	14.0	12.9	12.9	12.9	12.9	12.9	12.9	57.5°	1254.3	1212.2
14.0	14.0	14.0	14.0	14.0	14.0	14.0	12.9	12.9	12.9	60°	1187.6	1152.6
12.9	12.9	12.9	12.9	12.9	12.9	12.9	11.7	11.7	11.7	62.5°	1119.8	1090.6
12.9	12.9	12.9	12.9	12.9	12.9	12.9	11.7	11.7	11.7	65°	1018.1	1004.1
11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	67.5°	877.9	884.9
										70°	759.8	776.2
										72.5°	711.9	724.7
										75°	727.1	729.4
										77.5°	703.7	716.6
										80°	654.6	667.5
										82.5°	596.2	602.0
										85°	521.3	523.7
										87.5°	448.9	459.4
										90°	332.0	336.7
										92.5°	216.3	218.6
										95°	135.6	141.4
										97.5°	84.2	85.3
										100°	63.1	65.5
										102.5°	52.6	53.8
										105°	46.8	47.9
										107.5°	40.9	42.1
										110°	35.1	33.9

REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANEL)

B (2PANELS 0°TILT; 2PANELS 30°TILT)

tinued):									CANDELA DISTRIBUTION (continued):			
115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°	112.5°	110°	112.5°	115°
720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	112.5°	31.6	31.6	31.6
717.7	718.9	720.1	720.1	720.1	721.2	722.4	723.6	722.4	115°	25.7	24.5	24.5
718.9	720.1	722.4	723.6	724.7	728.2	730.6	731.8	735.3	117.5°	19.9	18.7	17.5
714.2	717.7	720.1	723.6	725.9	731.8	734.1	738.8	742.3	120°	16.4	16.4	15.2
709.5	713.1	715.4	720.1	723.6	731.8	738.8	745.8	752.8	122.5°	12.9	14.0	12.9
704.9	711.9	720.1	725.9	732.9	743.4	755.1	763.3	772.7	125°	12.9	15.2	14.0
706.0	714.2	723.6	730.6	741.1	752.8	765.7	776.2	787.9	127.5°	11.7	12.9	12.9
692.0	703.7	717.7	730.6	742.3	758.6	773.8	786.7	799.6	130°	11.7	11.7	12.9
667.5	679.2	693.2	706.0	721.2	737.6	755.1	773.8	790.2	132.5°	11.7	12.9	12.9
625.4	640.6	655.8	671.0	688.5	709.5	729.4	751.6	771.5	135°	9.4	9.4	9.4
593.8	610.2	626.6	642.9	661.6	680.3	700.2	720.1	739.9	137.5°	7.0	9.4	9.4
585.6	599.7	616.0	632.4	648.8	665.1	679.2	696.7	713.1	140°	8.2	8.2	8.2
596.2	611.4	624.2	639.4	653.4	666.3	682.7	696.7	709.5	142.5°	7.0	8.2	8.2
619.5	632.4	644.1	658.1	671.0	681.5	692.0	701.4	709.5	145°	7.0	9.4	10.5
652.3	659.3	668.6	675.6	686.2	693.2	700.2	707.2	714.2	147.5°	8.2	11.7	11.7
681.5	686.2	693.2	699.0	704.9	709.5	710.7	715.4	720.1	150°	10.5	11.7	11.7
707.2	710.7	715.4	717.7	722.4	723.6	727.1	728.2	730.6	152.5°	11.7	11.7	10.5
748.1	744.6	742.3	739.9	738.8	739.9	743.4	743.4	745.8	155°	11.7	11.7	10.5
825.3	810.1	794.9	780.9	768.0	770.3	771.5	773.8	773.8	157.5°	12.9	12.9	12.9
965.5	934.0	902.4	873.2	844.0	844.0	842.8	842.8	842.8	160°	14.0	14.0	14.0
1069.6	1040.4	1008.8	981.9	955.0	957.4	958.5	959.7	960.9	162.5°	14.0	14.0	14.0
1181.8	1151.4	1121.0	1090.6	1061.4	1064.9	1067.2	1067.2	1071.9	165°	12.9	14.0	14.0
1205.2	1188.8	1177.1	1164.3	1149.1	1137.4	1128.0	1117.5	1110.5	167.5°	12.9	12.9	12.9
1170.1	1161.9	1160.8	1158.4	1158.4	1140.9	1126.9	1112.8	1104.6	170°	12.9	12.9	14.0
1117.5	1109.3	1107.0	1104.6	1105.8	1084.8	1069.6	1057.9	1048.5	172.5°	12.9	12.9	12.9
1061.4	1052.0	1045.0	1041.5	1040.4	1024.0	1013.5	1015.8	1022.8	175°	11.7	11.7	11.7
991.3	991.3	991.3	993.6	999.4	988.9	983.1	1000.6	1033.3	177.5°	11.7	11.7	11.7
888.4	894.2	903.6	911.8	931.6	935.2	946.8	977.2	1017.0	180°	11.7	11.7	11.7
786.7	798.4	811.2	827.6	858.0	880.2	907.1	938.7	976.1				
739.9	755.1	773.8	798.4	837.0	867.4	894.2	922.3	952.7				
742.3	764.5	789.0	800.7	832.3	862.7	881.4	910.6	925.8				
729.4	744.6	759.8	776.2	799.6	822.9	837.0	851.0	861.5				
675.6	682.7	697.9	714.2	732.9	752.8	758.6	759.8	762.1				
605.5	606.7	614.9	631.2	642.9	651.1	658.1	660.5	661.6				
529.5	529.5	528.4	541.2	554.1	562.3	569.3	577.5	586.8				
453.5	452.4	460.6	468.7	471.1	478.1	486.3	486.3	482.8				
344.8	353.0	361.2	368.2	367.0	369.4	376.4	367.0	349.5				
235.0	244.3	245.5	239.6	253.7	258.3	253.7	249.0	236.1				
149.6	155.5	156.6	153.1	162.5	167.2	167.2	161.3	153.1				
91.2	98.2	102.9	100.5	104.0	109.9	108.7	102.9	97.0				
67.8	72.5	74.8	73.6	72.5	73.6	73.6	67.8	64.3				
56.1	58.4	58.4	57.3	53.8	52.6	51.4	47.9	45.6				
49.1	49.1	49.1	44.4	42.1	42.1	40.9	39.7	38.6				
40.9	40.9	40.9	37.4	35.1	35.1	35.1	35.1	32.7				
33.9	33.9	35.1	35.1	33.9	31.6	30.4	26.9	25.7				



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2

S 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°		137.5°	140°	142.5°	145°
30.4	29.2	29.2	28.1	24.5	22.2	21.0	19.9	0°	720.1	720.1	720.1	720.1
23.4	23.4	19.9	19.9	18.7	16.4	16.4	15.2	2.5°	723.6	724.7	724.7	727.1
17.5	17.5	16.4	15.2	15.2	15.2	14.0	14.0	5°	737.6	739.9	743.4	745.8
15.2	16.4	15.2	15.2	15.2	15.2	12.9	12.9	7.5°	748.1	751.6	755.1	759.8
12.9	15.2	12.9	12.9	12.9	12.9	11.7	11.7	10°	759.8	766.8	772.7	779.7
14.0	15.2	14.0	12.9	12.9	12.9	12.9	12.9	12.5°	779.7	789.0	797.2	805.4
12.9	14.0	12.9	14.0	14.0	14.0	14.0	12.9	15°	800.7	812.4	822.9	833.5
14.0	14.0	14.0	12.9	12.9	12.9	11.7	11.7	17.5°	812.4	825.3	838.1	851.0
12.9	12.9	12.9	10.5	10.5	11.7	11.7	12.9	20°	805.4	822.9	833.5	847.5
10.5	10.5	9.4	9.4	11.7	14.0	15.2	15.2	22.5°	785.5	800.7	810.1	820.6
10.5	10.5	11.7	11.7	11.7	12.9	12.9	12.9	25°	754.0	768.0	777.3	789.0
9.4	10.5	10.5	10.5	11.7	11.7	14.0	14.0	27.5°	727.1	741.1	754.0	765.7
9.4	9.4	10.5	10.5	10.5	12.9	12.9	12.9	30°	718.9	728.2	737.6	745.8
11.7	11.7	12.9	11.7	12.9	15.2	15.2	15.2	32.5°	714.2	723.6	729.4	737.6
11.7	12.9	12.9	12.9	11.7	12.9	12.9	12.9	35°	717.7	721.2	723.6	728.2
11.7	12.9	12.9	12.9	11.7	12.9	12.9	12.9	37.5°	722.4	724.7	728.2	732.9
10.5	11.7	11.7	11.7	11.7	12.9	12.9	12.9	40°	735.3	739.9	745.8	755.1
9.4	11.7	11.7	11.7	12.9	14.0	14.0	14.0	42.5°	752.8	762.1	772.7	789.0
12.9	14.0	14.0	14.0	14.0	15.2	15.2	15.2	45°	790.2	806.6	829.9	851.0
12.9	12.9	14.0	14.0	14.0	15.2	14.0	14.0	47.5°	868.5	900.1	932.8	965.5
14.0	14.0	12.9	12.9	12.9	12.9	12.9	12.9	50°	992.4	1024.0	1061.4	1103.5
14.0	14.0	14.0	14.0	14.0	14.0	15.2	15.2	52.5°	1083.6	1096.5	1114.0	1137.4
12.9	12.9	12.9	12.9	14.0	14.0	14.0	14.0	55°	1110.5	1112.8	1123.4	1143.2
14.0	14.0	14.0	12.9	12.9	12.9	11.7	11.7	57.5°	1101.1	1096.5	1125.7	1150.2
12.9	12.9	12.9	12.9	11.7	11.7	10.5	10.5	60°	1062.6	1085.9	1125.7	1165.4
11.7	11.7	10.5	10.5	10.5	11.7	11.7	10.5	62.5°	1057.9	1110.5	1153.7	1186.5
11.7	11.7	11.7	11.7	11.7	11.7	10.5	10.5	65°	1073.1	1103.5	1129.2	1161.9
11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	67.5°	1041.5	1071.9	1100.0	1088.3
								70°	1012.3	1029.8	1029.8	1006.5
								72.5°	976.1	979.6	959.7	925.8
								75°	921.1	910.6	884.9	855.7
								77.5°	841.6	825.3	804.2	790.2
								80°	750.5	736.4	721.2	702.5
								82.5°	666.3	658.1	634.7	592.7
								85°	585.6	564.6	523.7	467.6
								87.5°	469.9	441.9	391.6	340.2
								90°	329.6	307.4	270.0	226.8
								92.5°	220.9	205.7	181.2	146.1
								95°	140.3	130.9	115.7	93.5
								97.5°	87.7	80.7	72.5	60.8
								100°	58.4	52.6	49.1	43.3
								102.5°	44.4	43.3	40.9	36.2
								105°	37.4	37.4	32.7	29.2
								107.5°	31.6	29.2	25.7	22.2
								110°	23.4	23.4	21.0	18.7



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

147.5°	150°	152.5°	155°	157.5°	160°	162.5°		137.5°	140°	142.5°	145°	147.5°
720.1	720.1	720.1	720.1	720.1	720.1	720.1	112.5°	17.5	17.5	16.4	15.2	15.2
728.2	728.2	728.2	730.6	731.8	731.8	731.8	115°	16.4	15.2	15.2	15.2	14.0
749.3	751.6	755.1	756.3	758.6	761.0	762.1	117.5°	14.0	15.2	14.0	14.0	12.9
764.5	769.2	776.2	780.9	784.4	790.2	792.5	120°	12.9	12.9	12.9	12.9	11.7
787.9	794.9	801.9	810.1	817.1	822.9	829.9	122.5°	11.7	14.0	12.9	12.9	12.9
814.8	821.8	829.9	837.0	844.0	849.8	856.8	125°	12.9	14.0	12.9	12.9	12.9
840.5	846.3	848.7	854.5	858.0	862.7	866.2	127.5°	11.7	12.9	14.0	14.0	14.0
855.7	859.2	862.7	866.2	867.4	867.4	868.5	130°	11.7	14.0	15.2	14.0	14.0
851.0	851.0	853.3	854.5	856.8	859.2	861.5	132.5°	12.9	15.2	15.2	14.0	14.0
826.4	828.8	833.5	838.1	841.6	846.3	847.5	135°	14.0	15.2	15.2	15.2	15.2
796.0	801.9	807.7	812.4	817.1	822.9	828.8	137.5°	12.9	15.2	15.2	15.2	15.2
771.5	780.9	786.7	792.5	800.7	810.1	817.1	140°	14.0	15.2	15.2	15.2	15.2
752.8	762.1	770.3	780.9	789.0	798.4	804.2	142.5°	12.9	14.0	12.9	12.9	14.0
745.8	754.0	763.3	771.5	779.7	787.9	796.0	145°	15.2	16.4	15.2	15.2	15.2
738.8	750.5	762.1	772.7	780.9	785.5	789.0	147.5°	12.9	15.2	15.2	15.2	15.2
747.0	759.8	776.2	789.0	798.4	804.2	807.7	150°	12.9	14.0	15.2	15.2	15.2
772.7	790.2	805.4	818.3	833.5	847.5	858.0	152.5°	12.9	15.2	15.2	16.4	16.4
814.8	840.5	863.8	882.5	908.3	931.6	956.2	155°	12.9	12.9	14.0	15.2	15.2
891.9	935.2	976.1	1012.3	1052.0	1089.5	1129.2	157.5°	15.2	16.4	15.2	16.4	17.5
1017.0	1067.2	1123.4	1173.6	1204.0	1229.7	1242.6	160°	14.0	14.0	14.0	15.2	15.2
1131.5	1165.4	1205.2	1254.3	1284.7	1291.7	1288.2	162.5°	15.2	16.4	16.4	15.2	15.2
1166.6	1212.2	1261.3	1295.2	1317.4	1327.9	1310.4	165°	15.2	14.0	14.0	14.0	15.2
1192.3	1244.9	1283.5	1316.2	1338.4	1331.4	1294.0	167.5°	14.0	15.2	15.2	14.0	14.0
1199.3	1246.1	1285.8	1317.4	1316.2	1296.4	1241.4	170°	11.7	11.7	12.9	12.9	12.9
1211.0	1254.3	1278.8	1278.8	1244.9	1199.3	1126.9	172.5°	10.5	10.5	10.5	11.7	11.7
1213.4	1216.9	1199.3	1154.9	1109.3	1056.7	1001.8	175°	10.5	10.5	10.5	10.5	10.5
1177.1	1135.0	1085.9	1026.3	978.4	928.1	875.5	177.5°	10.5	10.5	10.5	10.5	10.5
1064.9	1025.2	978.4	927.0	879.0	820.6	755.1	180°	11.7	11.7	11.7	11.7	11.7
974.9	934.0	887.2	835.8	784.4	722.4	642.9						
891.9	859.2	818.3	766.8	690.8	611.4	512.0						
824.1	790.2	730.6	658.1	570.4	475.8	379.9						
751.6	699.0	623.0	527.2	430.2	343.7	260.7						
659.3	582.1	494.5	396.3	300.4	229.1	166.0						
540.1	458.2	365.9	282.9	199.9	147.3	112.2						
409.1	343.7	264.2	196.4	137.9	104.0	91.2						
286.4	238.5	178.8	128.6	98.2	79.5	76.0						
184.7	146.1	111.0	79.5	64.3	58.4	56.1						
115.7	88.8	71.3	54.9	46.8	44.4	42.1						
76.0	60.8	51.4	45.6	40.9	37.4	33.9						
52.6	45.6	42.1	38.6	35.1	31.6	26.9						
38.6	37.4	33.9	30.4	26.9	24.5	22.2						
32.7	30.4	28.1	25.7	23.4	21.0	16.4						
24.5	23.4	22.2	19.9	16.4	15.2	14.0						
19.9	17.5	16.4	15.2	14.0	12.9	10.5						
17.5	16.4	14.0	14.0	12.9	11.7	11.7						



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

0°TILT)

CANDELA DISTRIBUTION (continued):

150°	152.5°	155°	157.5°	160°	162.5°		165°	167.5°	170°	172.5°	175°	177.5°
14.0	12.9	12.9	11.7	11.7	10.5	0°	720.1	720.1	720.1	720.1	720.1	720.1
12.9	11.7	11.7	11.7	11.7	11.7	2.5°	734.1	732.9	732.9	734.1	732.9	734.1
11.7	11.7	11.7	11.7	12.9	12.9	5°	764.5	764.5	764.5	766.8	765.7	768.0
12.9	12.9	12.9	12.9	14.0	14.0	7.5°	796.0	797.2	799.6	800.7	801.9	803.1
12.9	12.9	12.9	12.9	14.0	14.0	10°	835.8	840.5	844.0	845.1	847.5	849.8
12.9	12.9	12.9	12.9	14.0	14.0	12.5°	863.8	867.4	869.7	873.2	874.4	875.5
14.0	14.0	14.0	14.0	14.0	14.0	15°	870.9	873.2	877.9	881.4	883.7	882.5
14.0	14.0	14.0	15.2	16.4	18.7	17.5°	869.7	873.2	875.5	877.9	880.2	880.2
15.2	15.2	15.2	16.4	16.4	17.5	20°	858.0	862.7	867.4	867.4	870.9	875.5
16.4	16.4	16.4	16.4	16.4	16.4	22.5°	847.5	852.2	856.8	862.7	866.2	869.7
16.4	16.4	16.4	16.4	17.5	18.7	25°	833.5	844.0	852.2	858.0	863.8	867.4
16.4	16.4	16.4	16.4	17.5	18.7	27.5°	824.1	835.8	844.0	851.0	855.7	859.2
16.4	16.4	16.4	17.5	17.5	19.9	30°	812.4	824.1	833.5	838.1	844.0	848.7
15.2	15.2	15.2	17.5	17.5	17.5	32.5°	800.7	811.2	820.6	828.8	832.3	835.8
17.5	16.4	16.4	16.4	17.5	16.4	35°	793.7	803.1	811.2	817.1	821.8	825.3
17.5	16.4	17.5	17.5	17.5	18.7	37.5°	808.9	813.6	819.4	822.9	828.8	832.3
16.4	16.4	16.4	16.4	16.4	17.5	40°	867.4	872.0	870.9	873.2	887.2	900.1
16.4	16.4	17.5	17.5	18.7	17.5	42.5°	979.6	994.8	1001.8	1011.1	1018.1	1033.3
17.5	17.5	17.5	18.7	17.5	17.5	45°	1161.9	1170.1	1170.1	1159.6	1147.9	1130.4
16.4	16.4	16.4	17.5	17.5	17.5	47.5°	1249.6	1237.9	1215.7	1186.5	1151.4	1124.5
16.4	17.5	17.5	17.5	17.5	16.4	50°	1269.5	1240.2	1191.1	1140.9	1087.1	1053.2
16.4	16.4	15.2	15.2	15.2	15.2	52.5°	1261.3	1208.7	1137.4	1068.4	1011.1	999.4
15.2	15.2	15.2	15.2	14.0	14.0	55°	1228.6	1153.7	1080.1	1006.5	970.2	953.9
12.9	12.9	12.9	12.9	12.9	12.9	57.5°	1176.0	1089.5	1006.5	941.0	889.6	867.4
12.9	12.9	12.9	11.7	11.7	11.7	60°	1042.7	959.7	881.4	814.8	756.3	722.4
11.7	11.7	11.7	11.7	11.7	12.9	62.5°	909.4	829.9	752.8	683.8	625.4	595.0
11.7	11.7	11.7	11.7	10.5	10.5	65°	797.2	710.7	624.2	547.1	480.4	444.2
11.7	11.7	11.7	11.7	11.7	11.7	67.5°	675.6	596.2	506.2	425.5	367.0	328.5
						70°	563.4	479.3	389.3	318.0	265.3	240.8
						72.5°	416.1	344.8	273.5	224.4	188.2	176.5
						75°	288.7	231.5	184.7	159.0	143.8	140.3
						77.5°	195.2	148.5	130.9	121.6	123.9	126.2
						80°	133.3	106.4	105.2	106.4	108.7	111.0
						82.5°	98.2	91.2	91.2	91.2	91.2	90.0
						85°	86.5	85.3	83.0	81.8	78.3	77.2
						87.5°	74.8	72.5	70.1	63.1	58.4	54.9
						90°	54.9	50.3	44.4	37.4	30.4	28.1
						92.5°	38.6	35.1	29.2	22.2	17.5	16.4
						95°	30.4	25.7	22.2	18.7	15.2	14.0
						97.5°	22.2	19.9	18.7	16.4	14.0	12.9
						100°	18.7	15.2	15.2	14.0	12.9	11.7
						102.5°	15.2	14.0	14.0	11.7	12.9	11.7
						105°	14.0	12.9	11.7	11.7	11.7	11.7
						107.5°	10.5	10.5	10.5	9.4	10.5	10.5
						110°	11.7	11.7	11.7	10.5	11.7	11.7



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

180°	182.5°	185°	187.5°	190°		165°	167.5°	170°	172.5°	175°	177.5°	180°
720.1	720.1	720.1	720.1	720.1	112.5°	10.5	10.5	10.5	10.5	10.5	10.5	11.7
735.3	734.1	732.9	734.1	732.9	115°	11.7	11.7	11.7	10.5	10.5	10.5	11.7
770.3	768.0	765.7	766.8	764.5	117.5°	12.9	12.9	10.5	10.5	10.5	10.5	11.7
804.2	803.1	801.9	800.7	799.6	120°	14.0	12.9	12.9	12.9	12.9	12.9	10.5
851.0	849.8	847.5	845.1	844.0	122.5°	14.0	12.9	15.2	15.2	15.2	16.4	17.5
877.9	875.5	874.4	873.2	869.7	125°	14.0	16.4	16.4	16.4	17.5	19.9	21.0
881.4	882.5	883.7	881.4	877.9	127.5°	15.2	16.4	17.5	18.7	21.0	19.9	21.0
882.5	880.2	880.2	877.9	875.5	130°	19.9	19.9	19.9	18.7	18.7	18.7	21.0
877.9	875.5	870.9	867.4	867.4	132.5°	18.7	18.7	21.0	21.0	21.0	22.2	22.2
870.9	869.7	866.2	862.7	856.8	135°	16.4	17.5	18.7	21.0	21.0	19.9	21.0
868.5	867.4	863.8	858.0	852.2	137.5°	18.7	21.0	21.0	19.9	19.9	21.0	19.9
862.7	859.2	855.7	851.0	844.0	140°	18.7	19.9	19.9	19.9	19.9	21.0	19.9
847.5	848.7	844.0	838.1	833.5	142.5°	19.9	19.9	19.9	19.9	18.7	18.7	18.7
835.8	835.8	832.3	828.8	820.6	145°	17.5	17.5	18.7	18.7	19.9	18.7	17.5
826.4	825.3	821.8	817.1	811.2	147.5°	16.4	17.5	17.5	18.7	18.7	18.7	18.7
838.1	832.3	828.8	822.9	819.4	150°	18.7	18.7	18.7	17.5	18.7	19.9	21.0
903.6	900.1	887.2	873.2	870.9	152.5°	18.7	18.7	19.9	19.9	19.9	21.0	21.0
1043.9	1032.2	1018.1	1011.1	1001.8	155°	17.5	18.7	19.9	19.9	19.9	18.7	17.5
1133.9	1130.4	1147.9	1159.6	1170.1	157.5°	17.5	17.5	17.5	18.7	17.5	18.7	18.7
1101.1	1124.5	1151.4	1186.5	1215.7	160°	16.4	17.5	16.4	16.4	17.5	17.5	17.5
1048.5	1053.2	1087.1	1140.9	1191.1	162.5°	16.4	16.4	17.5	16.4	16.4	16.4	17.5
992.4	999.4	1011.1	1068.4	1137.4	165°	16.4	15.2	15.2	15.2	15.2	15.2	14.0
945.7	953.9	970.2	1006.5	1080.1	167.5°	15.2	15.2	15.2	15.2	14.0	14.0	14.0
860.3	867.4	889.6	941.0	1006.5	170°	14.0	12.9	12.9	12.9	12.9	14.0	14.0
706.0	722.4	757.5	813.6	881.4	172.5°	12.9	12.9	12.9	12.9	12.9	12.9	12.9
582.1	595.0	625.4	683.8	752.8	175°	12.9	12.9	12.9	12.9	12.9	12.9	12.9
431.3	444.2	480.4	547.1	624.2	177.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.5
316.8	328.5	367.0	425.5	506.2	180°	11.7	11.7	11.7	11.7	11.7	11.7	11.7
231.5	240.8	265.3	318.0	389.3								
163.7	176.5	188.2	223.3	273.5								
140.3	140.3	143.8	159.0	184.7								
127.4	126.2	123.9	121.6	130.9								
111.0	111.0	108.7	106.4	105.2								
88.8	90.0	91.2	91.2	91.2								
77.2	77.2	78.3	81.8	83.0								
53.8	54.9	58.4	63.1	70.1								
22.2	28.1	30.4	37.4	44.4								
15.2	16.4	17.5	22.2	29.2								
12.9	14.0	15.2	18.7	22.2								
11.7	12.9	14.0	16.4	18.7								
11.7	11.7	12.9	14.0	15.2								
10.5	11.7	12.9	11.7	14.0								
12.9	11.7	11.7	11.7	11.7								
11.7	10.5	10.5	9.4	10.5								
11.7	11.7	11.7	10.5	11.7								



REPORT NUMBER: P188109
 CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

182.5°	185°	187.5°	190°		192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°
10.5	10.5	10.5	10.5	0°	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1
10.5	10.5	10.5	11.7	2.5°	732.9	734.1	731.8	731.8	731.8	730.6	728.2	728.2
10.5	10.5	10.5	10.5	5°	764.5	764.5	762.1	761.0	758.6	756.3	755.1	751.6
12.9	12.9	12.9	12.9	7.5°	797.2	796.0	792.5	790.2	784.4	780.9	776.2	769.2
16.4	15.2	15.2	15.2	10°	840.5	835.8	829.9	822.9	817.1	810.1	800.7	794.9
19.9	17.5	16.4	16.4	12.5°	867.4	863.8	856.8	849.8	844.0	837.0	829.9	821.8
19.9	21.0	18.7	17.5	15°	873.2	870.9	866.2	862.7	858.0	854.5	848.7	846.3
18.7	18.7	18.7	19.9	17.5°	873.2	869.7	868.5	867.4	867.4	866.2	862.7	859.2
22.2	21.0	21.0	21.0	20°	862.7	858.0	861.5	859.2	856.8	854.5	853.3	851.0
19.9	21.0	21.0	18.7	22.5°	852.2	847.5	847.5	846.3	841.6	838.1	833.5	828.8
21.0	19.9	19.9	21.0	25°	844.0	833.5	828.8	822.9	817.1	812.4	807.7	801.9
21.0	19.9	19.9	19.9	27.5°	835.8	824.1	817.1	810.1	800.7	792.5	786.7	780.9
18.7	18.7	19.9	19.9	30°	824.1	812.4	804.2	798.4	790.2	780.9	770.3	762.1
18.7	19.9	18.7	18.7	32.5°	811.2	800.7	796.0	787.9	779.7	771.5	763.3	754.0
18.7	18.7	18.7	17.5	35°	803.1	793.7	789.0	785.5	780.9	772.7	762.1	750.5
19.9	18.7	17.5	18.7	37.5°	813.6	808.9	807.7	804.2	798.4	789.0	776.2	759.8
21.0	19.9	19.9	19.9	40°	872.0	867.4	858.0	847.5	833.5	818.3	805.4	790.2
18.7	19.9	19.9	19.9	42.5°	994.8	979.6	956.2	931.6	908.3	882.5	863.8	840.5
18.7	17.5	18.7	17.5	45°	1170.1	1161.9	1129.2	1089.5	1052.0	1012.3	976.1	935.2
17.5	17.5	16.4	16.4	47.5°	1237.9	1249.6	1242.6	1229.7	1204.0	1173.6	1123.4	1067.2
16.4	16.4	16.4	17.5	50°	1240.2	1269.5	1288.2	1291.7	1284.7	1254.3	1205.2	1165.4
15.2	15.2	15.2	15.2	52.5°	1208.7	1261.3	1310.4	1327.9	1317.4	1295.2	1261.3	1212.2
14.0	14.0	15.2	15.2	55°	1153.7	1226.2	1294.0	1331.4	1338.4	1316.2	1283.5	1244.9
14.0	12.9	12.9	12.9	57.5°	1089.5	1176.0	1241.4	1296.4	1316.2	1317.4	1285.8	1246.1
12.9	12.9	12.9	12.9	60°	959.7	1042.7	1126.9	1199.3	1244.9	1278.8	1278.8	1254.3
12.9	12.9	12.9	12.9	62.5°	829.9	909.4	1001.8	1056.7	1109.3	1154.9	1199.3	1216.9
10.5	10.5	10.5	10.5	65°	710.7	797.2	875.5	928.1	978.4	1026.3	1085.9	1135.0
11.7	11.7	11.7	11.7	67.5°	596.2	675.6	755.1	820.6	879.0	927.0	978.4	1025.2
				70°	479.3	563.4	642.9	722.4	784.4	835.8	887.2	934.0
				72.5°	344.8	416.1	512.0	611.4	690.8	766.8	818.3	859.2
				75°	231.5	288.7	378.7	475.8	570.4	658.1	730.6	790.2
				77.5°	148.5	195.2	260.7	343.7	430.2	527.2	623.0	699.0
				80°	106.4	133.3	166.0	229.1	300.4	396.3	494.5	582.1
				82.5°	91.2	98.2	112.2	147.3	199.9	282.9	365.9	458.2
				85°	85.3	86.5	91.2	104.0	137.9	196.4	264.2	343.7
				87.5°	72.5	74.8	76.0	79.5	98.2	128.6	178.8	238.5
				90°	50.3	54.9	56.1	58.4	64.3	79.5	111.0	146.1
				92.5°	35.1	38.6	42.1	44.4	46.8	54.9	71.3	88.8
				95°	25.7	30.4	33.9	37.4	40.9	45.6	51.4	60.8
				97.5°	19.9	22.2	26.9	31.6	35.1	38.6	42.1	45.6
				100°	15.2	18.7	22.2	24.5	26.9	30.4	33.9	37.4
				102.5°	14.0	15.2	16.4	21.0	23.4	25.7	28.1	30.4
				105°	12.9	14.0	14.0	15.2	16.4	19.9	22.2	23.4
				107.5°	10.5	10.5	10.5	12.9	14.0	15.2	16.4	17.5
				110°	11.7	11.7	11.7	11.7	12.9	14.0	14.0	16.4



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

212.5°	215°	217.5°		192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°
720.1	720.1	720.1	112.5°	10.5	10.5	10.5	11.7	11.7	12.9	12.9	14.0	15.2
728.2	727.1	724.7	115°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	12.9	14.0
749.3	745.8	743.4	117.5°	12.9	12.9	12.9	12.9	11.7	11.7	11.7	11.7	12.9
764.5	759.8	755.1	120°	12.9	14.0	14.0	14.0	12.9	12.9	12.9	12.9	11.7
787.9	779.7	772.7	122.5°	12.9	14.0	14.0	14.0	12.9	12.9	12.9	12.9	12.9
814.8	805.4	797.2	125°	16.4	14.0	14.0	14.0	12.9	12.9	12.9	12.9	12.9
840.5	833.5	822.9	127.5°	16.4	15.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0
855.7	851.0	838.1	130°	19.9	19.9	18.7	16.4	15.2	14.0	14.0	14.0	14.0
851.0	847.5	833.5	132.5°	18.7	18.7	17.5	16.4	16.4	15.2	15.2	15.2	14.0
826.4	820.6	810.1	135°	17.5	16.4	16.4	16.4	16.4	16.4	16.4	16.4	15.2
796.0	789.0	777.3	137.5°	21.0	18.7	18.7	17.5	16.4	16.4	16.4	16.4	15.2
771.5	765.7	754.0	140°	19.9	18.7	18.7	17.5	16.4	16.4	16.4	16.4	15.2
752.8	745.8	737.6	142.5°	19.9	19.9	19.9	17.5	17.5	16.4	16.4	16.4	14.0
745.8	737.6	729.4	145°	17.5	17.5	17.5	17.5	17.5	15.2	15.2	15.2	15.2
738.8	728.2	723.6	147.5°	17.5	16.4	16.4	17.5	16.4	16.4	16.4	17.5	15.2
747.0	732.9	728.2	150°	18.7	18.7	18.7	17.5	17.5	17.5	16.4	17.5	15.2
772.7	755.1	745.8	152.5°	18.7	18.7	17.5	16.4	16.4	16.4	16.4	16.4	16.4
814.8	789.0	772.7	155°	18.7	17.5	17.5	18.7	17.5	17.5	16.4	16.4	15.2
891.9	851.0	829.9	157.5°	17.5	17.5	17.5	17.5	18.7	17.5	17.5	17.5	17.5
1017.0	965.5	932.8	160°	17.5	16.4	17.5	17.5	17.5	16.4	16.4	16.4	15.2
1131.5	1103.5	1061.4	162.5°	16.4	16.4	16.4	17.5	17.5	17.5	17.5	16.4	15.2
1166.6	1137.4	1112.8	165°	15.2	16.4	15.2	15.2	15.2	15.2	16.4	16.4	15.2
1192.3	1143.2	1122.2	167.5°	15.2	15.2	14.0	14.0	15.2	15.2	15.2	15.2	14.0
1199.3	1150.2	1124.5	170°	12.9	14.0	12.9	12.9	12.9	12.9	12.9	12.9	12.9
1211.0	1165.4	1125.7	172.5°	12.9	12.9	11.7	11.7	11.7	12.9	12.9	12.9	11.7
1213.4	1186.5	1153.7	175°	12.9	12.9	12.9	11.7	11.7	11.7	11.7	11.7	10.5
1177.1	1161.9	1129.2	177.5°	10.5	10.5	10.5	10.5	11.7	11.7	11.7	11.7	10.5
1064.9	1088.3	1100.0	180°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
974.9	1006.5	1029.8										
891.9	925.8	958.5										
824.1	855.7	884.9										
751.6	790.2	804.2										
659.3	702.5	721.2										
540.1	592.7	634.7										
409.1	467.6	523.7										
286.4	340.2	391.6										
184.7	226.8	270.0										
115.7	146.1	181.2										
76.0	93.5	115.7										
52.6	60.8	72.5										
38.6	43.3	49.1										
32.7	36.2	40.9										
24.5	28.1	32.7										
19.9	22.2	25.7										
17.5	18.7	21.0										



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

215°	217.5°		220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°
15.2	16.4	0°	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1
15.2	15.2	2.5°	724.7	723.6	722.4	723.6	722.4	721.2	720.1	720.1	720.1	718.9
14.0	14.0	5°	739.9	737.6	735.3	731.8	730.6	728.2	724.7	723.6	722.4	720.1
12.9	12.9	7.5°	751.6	748.1	742.3	738.8	734.1	731.8	725.9	723.6	720.1	717.7
12.9	12.9	10°	766.8	759.8	752.8	745.8	738.8	731.8	723.6	720.1	715.4	713.1
12.9	12.9	12.5°	789.0	779.7	772.7	763.3	755.1	743.4	732.9	725.9	720.1	711.9
14.0	14.0	15°	812.4	800.7	787.9	776.2	765.7	752.8	741.1	730.6	723.6	714.2
14.0	15.2	17.5°	825.3	812.4	799.6	786.7	773.8	758.6	742.3	730.6	717.7	703.7
14.0	15.2	20°	822.9	805.4	790.2	773.8	755.1	737.6	721.2	706.0	693.2	679.2
15.2	15.2	22.5°	800.7	785.5	771.5	751.6	729.4	709.5	688.5	671.0	655.8	640.6
15.2	15.2	25°	768.0	754.0	739.9	720.1	700.2	680.3	661.6	642.9	626.6	610.2
15.2	15.2	27.5°	741.1	727.1	713.1	696.7	679.2	665.1	648.8	632.4	616.0	599.7
12.9	12.9	30°	728.2	718.9	709.5	696.7	682.7	666.3	653.4	639.4	624.2	611.4
15.2	15.2	32.5°	723.6	714.2	709.5	701.4	692.0	681.5	671.0	658.1	644.1	632.4
15.2	15.2	35°	721.2	717.7	714.2	707.2	700.2	693.2	686.2	675.6	668.6	659.3
15.2	15.2	37.5°	724.7	722.4	720.1	715.4	710.7	709.5	704.9	699.0	693.2	686.2
16.4	15.2	40°	739.9	735.3	730.6	728.2	727.1	723.6	722.4	717.7	715.4	710.7
15.2	14.0	42.5°	762.1	752.8	745.8	743.4	743.4	739.9	738.8	739.9	742.3	744.6
16.4	15.2	45°	806.6	790.2	773.8	773.8	771.5	770.3	768.0	780.9	794.9	810.1
15.2	14.0	47.5°	900.1	868.5	842.8	841.6	842.8	844.0	844.0	873.2	902.4	934.0
15.2	16.4	50°	1024.0	992.4	960.9	959.7	958.5	957.4	955.0	981.9	1008.8	1040.4
14.0	14.0	52.5°	1096.5	1082.4	1071.9	1067.2	1067.2	1064.9	1061.4	1090.6	1121.0	1151.4
14.0	15.2	55°	1114.0	1109.3	1110.5	1117.5	1128.0	1137.4	1149.1	1164.3	1177.1	1188.8
12.9	12.9	57.5°	1096.5	1100.0	1104.6	1112.8	1126.9	1140.9	1158.4	1158.4	1160.8	1161.9
11.7	10.5	60°	1084.8	1062.6	1048.5	1057.9	1069.6	1084.8	1105.8	1104.6	1107.0	1109.3
10.5	10.5	62.5°	1109.3	1057.9	1022.8	1014.6	1013.5	1022.8	1040.4	1041.5	1045.0	1052.0
10.5	10.5	65°	1103.5	1073.1	1033.3	999.4	983.1	987.8	999.4	992.4	991.3	990.1
11.7	11.7	67.5°	1070.7	1041.5	1017.0	978.4	946.8	935.2	931.6	911.8	903.6	894.2
		70°	1028.7	1012.3	976.1	938.7	907.1	880.2	858.0	827.6	811.2	798.4
		72.5°	979.6	974.9	952.7	922.3	894.2	867.4	837.0	798.4	773.8	755.1
		75°	909.4	921.1	925.8	910.6	881.4	862.7	832.3	800.7	787.9	764.5
		77.5°	825.3	841.6	861.5	851.0	837.0	822.9	799.6	776.2	759.8	744.6
		80°	736.4	750.5	762.1	759.8	758.6	752.8	732.9	714.2	697.9	682.7
		82.5°	658.1	666.3	661.6	660.5	658.1	651.1	642.9	631.2	614.9	606.7
		85°	564.6	585.6	586.8	577.5	569.3	562.3	554.1	541.2	528.4	529.5
		87.5°	441.9	469.9	482.8	486.3	486.3	478.1	471.1	468.7	460.6	452.4
		90°	307.4	329.6	349.5	367.0	376.4	369.4	367.0	368.2	361.2	353.0
		92.5°	205.7	220.9	236.1	249.0	253.7	258.3	253.7	239.6	245.5	244.3
		95°	130.9	140.3	153.1	161.3	167.2	167.2	162.5	153.1	156.6	155.5
		97.5°	80.7	87.7	97.0	102.9	108.7	109.9	104.0	100.5	102.9	98.2
		100°	52.6	58.4	64.3	67.8	73.6	73.6	72.5	73.6	74.8	72.5
		102.5°	43.3	44.4	45.6	47.9	51.4	52.6	53.8	57.3	58.4	58.4
		105°	37.4	37.4	38.6	39.7	40.9	42.1	42.1	44.4	49.1	49.1
		107.5°	29.2	31.6	32.7	35.1	35.1	35.1	35.1	37.4	40.9	40.9
		110°	23.4	23.4	25.7	26.9	30.4	31.6	33.9	35.1	35.1	33.9



REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

245°		220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
720.1	112.5°	17.5	17.5	19.9	21.0	22.2	24.5	28.1	29.2	29.2	30.4	31.6
717.7	115°	15.2	16.4	15.2	16.4	16.4	18.7	19.9	19.9	23.4	23.4	24.5
718.9	117.5°	15.2	14.0	14.0	14.0	15.2	15.2	15.2	16.4	17.5	17.5	17.5
714.2	120°	12.9	12.9	12.9	12.9	15.2	15.2	15.2	15.2	16.4	15.2	15.2
709.5	122.5°	14.0	11.7	11.7	11.7	12.9	12.9	12.9	12.9	15.2	12.9	12.9
704.9	125°	14.0	12.9	12.9	12.9	12.9	12.9	12.9	14.0	15.2	14.0	14.0
706.0	127.5°	12.9	11.7	12.9	14.0	14.0	14.0	14.0	12.9	14.0	12.9	12.9
692.0	130°	14.0	11.7	11.7	11.7	12.9	12.9	12.9	14.0	14.0	14.0	12.9
667.5	132.5°	15.2	12.9	12.9	11.7	11.7	10.5	10.5	12.9	12.9	12.9	12.9
626.6	135°	15.2	14.0	15.2	15.2	14.0	11.7	9.4	9.4	10.5	10.5	9.4
593.8	137.5°	15.2	12.9	12.9	12.9	12.9	11.7	11.7	11.7	10.5	10.5	9.4
585.6	140°	15.2	14.0	14.0	14.0	11.7	11.7	10.5	10.5	10.5	9.4	8.2
596.2	142.5°	14.0	12.9	12.9	12.9	12.9	10.5	10.5	10.5	9.4	9.4	8.2
619.5	145°	16.4	15.2	15.2	15.2	15.2	12.9	11.7	12.9	11.7	11.7	10.5
652.3	147.5°	15.2	12.9	12.9	12.9	12.9	11.7	12.9	12.9	12.9	11.7	11.7
681.5	150°	14.0	12.9	12.9	12.9	12.9	11.7	12.9	12.9	12.9	11.7	11.7
707.2	152.5°	15.2	12.9	12.9	12.9	12.9	11.7	11.7	11.7	11.7	10.5	10.5
748.1	155°	12.9	12.9	14.0	14.0	14.0	12.9	11.7	11.7	11.7	9.4	10.5
825.3	157.5°	16.4	15.2	15.2	15.2	15.2	14.0	14.0	14.0	14.0	12.9	12.9
965.5	160°	14.0	14.0	14.0	14.0	15.2	14.0	14.0	14.0	12.9	12.9	14.0
1069.6	162.5°	16.4	15.2	12.9	12.9	12.9	12.9	12.9	12.9	14.0	14.0	14.0
1181.8	165°	14.0	15.2	15.2	15.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0
1205.2	167.5°	15.2	14.0	14.0	14.0	14.0	14.0	12.9	12.9	12.9	12.9	12.9
1170.1	170°	11.7	11.7	11.7	11.7	12.9	12.9	12.9	14.0	14.0	14.0	14.0
1117.5	172.5°	10.5	10.5	10.5	10.5	11.7	11.7	12.9	12.9	12.9	12.9	12.9
1061.4	175°	10.5	10.5	10.5	11.7	11.7	10.5	10.5	10.5	11.7	11.7	11.7
990.1	177.5°	10.5	10.5	10.5	10.5	11.7	11.7	11.7	11.7	11.7	11.7	11.7
888.4	180°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
786.7												
739.9												
742.3												
729.4												
675.6												
605.5												
529.5												
453.5												
344.8												
235.0												
149.6												
91.2												
67.8												
56.1												
49.1												
40.9												
33.9												



REPORT NUMBER: P188109
 CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°	
0°	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	112.5°
2.5°	718.9	717.7	716.6	715.4	716.6	716.6	716.6	715.4	714.2	713.1	714.2	115°
5°	717.7	715.4	715.4	713.1	710.7	711.9	709.5	709.5	709.5	708.4	709.5	117.5°
7.5°	714.2	713.1	710.7	709.5	709.5	710.7	710.7	709.5	711.9	710.7	711.9	120°
10°	709.5	707.2	707.2	704.9	706.0	708.4	708.4	708.4	708.4	708.4	708.4	122.5°
12.5°	701.4	699.0	697.9	696.7	697.9	696.7	699.0	697.9	699.0	699.0	699.0	125°
15°	700.2	696.7	693.2	689.7	690.8	692.0	694.4	694.4	693.2	690.8	693.2	127.5°
17.5°	687.3	682.7	678.0	676.8	678.0	679.2	679.2	679.2	681.5	680.3	681.5	130°
20°	660.5	653.4	651.1	648.8	649.9	654.6	656.9	658.1	660.5	661.6	660.5	132.5°
22.5°	619.5	617.2	613.7	611.4	616.0	619.5	623.0	626.6	625.4	626.6	625.4	135°
25°	588.0	583.3	581.0	578.6	583.3	584.5	589.1	592.7	592.7	592.7	592.7	137.5°
27.5°	576.3	566.9	561.1	556.4	556.4	556.4	558.8	557.6	561.1	559.9	561.1	140°
30°	589.1	577.5	569.3	559.9	556.4	552.9	551.7	548.2	548.2	547.1	548.2	142.5°
32.5°	613.7	606.7	598.5	590.3	588.0	584.5	579.8	577.5	573.9	570.4	573.9	145°
35°	648.8	642.9	638.2	632.4	631.2	630.1	630.1	630.1	627.7	625.4	627.7	147.5°
37.5°	681.5	681.5	682.7	681.5	685.0	688.5	693.2	697.9	699.0	699.0	699.0	150°
40°	716.6	727.1	734.1	739.9	754.0	770.3	784.4	799.6	801.9	804.2	801.9	152.5°
42.5°	766.8	790.2	811.2	832.3	858.0	883.7	910.6	939.8	948.0	953.9	948.0	155°
45°	866.2	911.8	953.9	999.4	1041.5	1085.9	1129.2	1173.6	1188.8	1202.8	1188.8	157.5°
47.5°	1024.0	1083.6	1132.7	1184.1	1232.1	1278.8	1327.9	1378.2	1393.4	1408.6	1393.4	160°
50°	1133.9	1200.5	1262.5	1330.3	1386.4	1441.3	1500.9	1558.2	1581.6	1607.3	1581.6	162.5°
52.5°	1244.9	1310.4	1358.3	1409.7	1456.5	1506.8	1554.7	1602.6	1626.0	1651.7	1626.0	165°
55°	1254.3	1302.2	1339.6	1377.0	1422.6	1470.5	1517.3	1562.9	1593.3	1624.8	1593.3	167.5°
57.5°	1212.2	1254.3	1291.7	1326.7	1372.3	1416.8	1463.5	1507.9	1544.2	1582.7	1544.2	170°
60°	1152.6	1187.6	1225.0	1261.3	1302.2	1344.3	1385.2	1428.4	1465.9	1503.3	1465.9	172.5°
62.5°	1090.6	1119.8	1145.6	1171.3	1206.3	1240.2	1274.1	1310.4	1345.4	1382.9	1345.4	175°
65°	1004.1	1018.1	1025.2	1033.3	1057.9	1082.4	1105.8	1131.5	1164.3	1199.3	1164.3	177.5°
67.5°	884.9	877.9	872.0	868.5	876.7	884.9	889.6	895.4	912.9	935.2	912.9	180°
70°	776.2	759.8	745.8	737.6	734.1	728.2	721.2	711.9	720.1	734.1	720.1	
72.5°	724.7	711.9	697.9	687.3	683.8	680.3	672.1	671.0	680.3	689.7	680.3	
75°	729.4	727.1	710.7	695.5	700.2	707.2	701.4	700.2	704.9	706.0	704.9	
77.5°	716.6	703.7	693.2	683.8	687.3	690.8	688.5	688.5	690.8	692.0	690.8	
80°	667.5	654.6	651.1	645.3	642.9	641.7	638.2	635.9	635.9	633.6	635.9	
82.5°	602.0	596.2	591.5	585.6	579.8	578.6	573.9	566.9	565.8	565.8	565.8	
85°	523.7	521.3	521.3	516.7	512.0	507.3	505.0	499.1	500.3	496.8	500.3	
87.5°	459.4	448.9	437.2	430.2	426.7	422.0	415.0	404.5	405.6	405.6	405.6	
90°	336.7	332.0	322.6	312.1	301.6	296.9	285.2	273.5	270.0	264.2	270.0	
92.5°	219.8	216.3	209.2	197.6	187.0	184.7	178.8	170.7	174.2	176.5	174.2	
95°	141.4	135.6	127.4	114.6	106.4	101.7	94.7	85.3	85.3	86.5	85.3	
97.5°	85.3	84.2	78.3	66.6	62.0	60.8	57.3	54.9	56.1	56.1	56.1	
100°	65.5	63.1	57.3	51.4	49.1	50.3	49.1	47.9	49.1	50.3	49.1	
102.5°	53.8	52.6	49.1	44.4	43.3	44.4	44.4	43.3	44.4	43.3	44.4	
105°	47.9	46.8	44.4	42.1	40.9	39.7	39.7	37.4	39.7	39.7	39.7	
107.5°	42.1	40.9	39.7	37.4	36.2	36.2	35.1	33.9	33.9	32.7	33.9	
110°	33.9	35.1	35.1	33.9	33.9	31.6	30.4	29.2	29.2	28.1	29.2	



NUMBER: P188109
 NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):											CANDELA DISTRIBUTION	
247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°		275°
31.6	31.6	31.6	30.4	30.4	28.1	26.9	24.5	24.5	24.5	24.5	0°	720.1
24.5	25.7	26.9	26.9	26.9	26.9	25.7	25.7	25.7	25.7	25.7	2.5°	715.4
18.7	19.9	21.0	19.9	21.0	21.0	19.9	19.9	19.9	18.7	19.9	5°	709.5
16.4	16.4	17.5	15.2	15.2	15.2	14.0	14.0	14.0	14.0	14.0	7.5°	709.5
14.0	12.9	14.0	12.9	12.9	11.7	10.5	11.7	11.7	11.7	11.7	10°	708.4
15.2	12.9	14.0	11.7	11.7	11.7	10.5	11.7	11.7	11.7	11.7	12.5°	697.9
12.9	11.7	11.7	10.5	11.7	11.7	10.5	10.5	10.5	9.4	10.5	15°	694.4
11.7	11.7	11.7	10.5	10.5	10.5	9.4	9.4	9.4	9.4	9.4	17.5°	679.2
12.9	11.7	9.4	9.4	10.5	9.4	8.2	8.2	8.2	8.2	8.2	20°	658.1
9.4	9.4	8.2	7.0	7.0	8.2	8.2	8.2	8.2	8.2	8.2	22.5°	626.6
9.4	7.0	7.0	5.8	5.8	7.0	7.0	7.0	7.0	7.0	7.0	25°	592.7
8.2	8.2	8.2	7.0	5.8	5.8	7.0	7.0	7.0	7.0	7.0	27.5°	557.6
8.2	7.0	5.8	4.7	4.7	5.8	5.8	7.0	7.0	7.0	7.0	30°	548.2
9.4	7.0	7.0	7.0	5.8	5.8	5.8	7.0	7.0	7.0	7.0	32.5°	577.5
11.7	8.2	8.2	7.0	7.0	7.0	5.8	5.8	7.0	7.0	7.0	35°	630.1
11.7	10.5	10.5	10.5	9.4	9.4	9.4	9.4	8.2	7.0	8.2	37.5°	697.9
11.7	11.7	11.7	11.7	11.7	10.5	10.5	11.7	11.7	11.7	11.7	40°	799.6
11.7	11.7	11.7	10.5	11.7	11.7	12.9	12.9	14.0	15.2	14.0	42.5°	939.8
12.9	12.9	12.9	12.9	12.9	14.0	14.0	14.0	15.2	15.2	15.2	45°	1173.6
14.0	14.0	12.9	12.9	12.9	11.7	11.7	11.7	11.7	11.7	11.7	47.5°	1378.2
14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	15.2	15.2	15.2	50°	1558.2
14.0	12.9	14.0	12.9	12.9	14.0	14.0	14.0	14.0	14.0	14.0	52.5°	1602.6
12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	14.0	14.0	14.0	55°	1562.9
12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	14.0	14.0	14.0	57.5°	1507.9
12.9	12.9	12.9	12.9	12.9	14.0	14.0	14.0	14.0	14.0	14.0	60°	1428.4
11.7	11.7	11.7	11.7	11.7	12.9	12.9	12.9	12.9	12.9	12.9	62.5°	1310.4
11.7	11.7	11.7	11.7	11.7	12.9	12.9	12.9	12.9	12.9	12.9	65°	1131.5
11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	67.5°	895.4
											70°	711.9
											72.5°	671.0
											75°	700.2
											77.5°	688.5
											80°	635.9
											82.5°	566.9
											85°	499.1
											87.5°	404.5
											90°	273.5
											92.5°	170.7
											95°	85.3
											97.5°	54.9
											100°	47.9
											102.5°	43.3
											105°	37.4
											107.5°	33.9
											110°	29.2

'188109
 QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

REPORT NUMBER: P188109
 CATALOG NUMBER: QDCAST1

TION (continued):

CANDELA DISTRIBUTION (con

277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°		275°	277.5°
720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	112.5°	24.5	26.9
716.6	716.6	716.6	715.4	716.6	717.7	718.9	717.7	718.9	720.1	115°	25.7	25.7
709.5	711.9	710.7	713.1	715.4	715.4	717.7	718.9	720.1	722.4	117.5°	19.9	19.9
710.7	710.7	709.5	709.5	710.7	713.1	714.2	714.2	717.7	720.1	120°	14.0	14.0
708.4	708.4	706.0	704.9	707.2	707.2	709.5	709.5	713.1	715.4	122.5°	11.7	10.5
699.0	696.7	697.9	696.7	697.9	699.0	701.4	704.9	711.9	720.1	125°	11.7	10.5
694.4	692.0	690.8	689.7	693.2	696.7	700.2	706.0	714.2	723.6	127.5°	10.5	10.5
679.2	679.2	678.0	676.8	678.0	682.7	687.3	692.0	703.7	717.7	130°	9.4	9.4
656.9	654.6	649.9	648.8	651.1	653.4	660.5	667.5	679.2	693.2	132.5°	8.2	8.2
623.0	619.5	616.0	611.4	613.7	617.2	619.5	625.4	640.6	655.8	135°	8.2	8.2
589.1	584.5	583.3	578.6	581.0	583.3	588.0	593.8	610.2	626.6	137.5°	7.0	7.0
558.8	556.4	556.4	556.4	561.1	566.9	576.3	585.6	599.7	616.0	140°	7.0	7.0
551.7	552.9	556.4	559.9	569.3	577.5	589.1	596.2	611.4	624.2	142.5°	7.0	5.8
579.8	584.5	588.0	590.3	598.5	606.7	613.7	619.5	632.4	644.1	145°	7.0	5.8
630.1	630.1	631.2	632.4	638.2	642.9	648.8	652.3	659.3	668.6	147.5°	5.8	5.8
693.2	688.5	685.0	681.5	682.7	681.5	681.5	681.5	686.2	693.2	150°	9.4	9.4
784.4	770.3	754.0	739.9	734.1	727.1	717.7	707.2	710.7	715.4	152.5°	11.7	10.5
910.6	883.7	858.0	832.3	811.2	790.2	768.0	748.1	744.6	742.3	155°	12.9	12.9
1129.2	1085.9	1041.5	999.4	953.9	911.8	866.2	825.3	810.1	794.9	157.5°	14.0	14.0
1327.9	1278.8	1232.1	1184.1	1132.7	1083.6	1024.0	965.5	932.8	902.4	160°	11.7	11.7
1500.9	1441.3	1386.4	1330.3	1263.6	1200.5	1133.9	1069.6	1039.2	1008.8	162.5°	14.0	14.0
1554.7	1506.8	1456.5	1409.7	1358.3	1310.4	1246.1	1181.8	1151.4	1121.0	165°	14.0	14.0
1517.3	1470.5	1422.6	1377.0	1339.6	1302.2	1254.3	1205.2	1188.8	1177.1	167.5°	12.9	12.9
1462.3	1416.8	1371.2	1326.7	1291.7	1254.3	1212.2	1170.1	1161.9	1160.8	170°	12.9	12.9
1385.2	1344.3	1302.2	1261.3	1225.0	1187.6	1152.6	1117.5	1109.3	1107.0	172.5°	14.0	14.0
1274.1	1240.2	1206.3	1171.3	1145.6	1119.8	1090.6	1061.4	1052.0	1045.0	175°	12.9	12.9
1105.8	1082.4	1057.9	1033.3	1025.2	1018.1	1004.1	991.3	991.3	991.3	177.5°	12.9	12.9
889.6	884.9	876.7	868.5	872.0	877.9	884.9	888.4	894.2	903.6	180°	11.7	11.7
720.1	728.2	732.9	737.6	744.6	759.8	775.0	786.7	798.4	811.2			
672.1	680.3	685.0	687.3	697.9	711.9	724.7	739.9	755.1	773.8			
701.4	707.2	700.2	695.5	710.7	727.1	729.4	742.3	764.5	789.0			
688.5	690.8	687.3	683.8	693.2	703.7	716.6	729.4	744.6	759.8			
638.2	641.7	642.9	645.3	651.1	654.6	667.5	675.6	682.7	697.9			
573.9	577.5	579.8	585.6	591.5	596.2	602.0	605.5	606.7	614.9			
505.0	507.3	512.0	516.7	521.3	521.3	523.7	529.5	529.5	528.4			
415.0	422.0	426.7	430.2	437.2	448.9	459.4	453.5	452.4	460.6			
285.2	296.9	301.6	312.1	322.6	332.0	336.7	344.8	353.0	361.2			
178.8	184.7	187.0	197.6	209.2	216.3	218.6	235.0	244.3	245.5			
94.7	101.7	106.4	114.6	127.4	135.6	141.4	149.6	155.5	156.6			
57.3	60.8	62.0	66.6	78.3	84.2	85.3	91.2	98.2	102.9			
49.1	50.3	49.1	51.4	57.3	63.1	65.5	67.8	72.5	74.8			
44.4	44.4	43.3	44.4	49.1	52.6	53.8	56.1	58.4	58.4			
39.7	39.7	40.9	42.1	44.4	46.8	47.9	49.1	49.1	49.1			
35.1	36.2	36.2	37.4	39.7	40.9	42.1	40.9	40.9	40.9			
30.4	31.6	33.9	33.9	35.1	35.1	33.9	33.9	33.9	35.1			

REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANEL)

B (2PANELS 0°TILT; 2PANELS 30°TILT)

tinued):

CANDELA DISTRIBUTION (continued):

280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°		302.5°	305°	307.5°
28.1	30.4	30.4	31.6	31.6	31.6	31.6	30.4	29.2	0°	720.1	720.1	720.1
26.9	26.9	26.9	26.9	25.7	24.5	24.5	23.4	23.4	2.5°	720.1	720.1	721.2
21.0	21.0	19.9	21.0	19.9	18.7	17.5	17.5	17.5	5°	723.6	724.7	728.2
15.2	15.2	15.2	17.5	16.4	16.4	15.2	15.2	16.4	7.5°	723.6	725.9	731.8
11.7	12.9	12.9	14.0	12.9	14.0	12.9	12.9	15.2	10°	720.1	723.6	731.8
11.7	11.7	11.7	14.0	12.9	15.2	14.0	14.0	15.2	12.5°	725.9	732.9	743.4
11.7	11.7	10.5	11.7	11.7	12.9	12.9	12.9	14.0	15°	730.6	741.1	752.8
10.5	10.5	10.5	11.7	11.7	11.7	12.9	14.0	14.0	17.5°	730.6	742.3	758.6
9.4	10.5	9.4	9.4	11.7	12.9	12.9	12.9	12.9	20°	706.0	721.2	737.6
8.2	7.0	7.0	8.2	9.4	9.4	9.4	10.5	10.5	22.5°	671.0	688.5	709.5
7.0	5.8	5.8	7.0	7.0	9.4	9.4	10.5	10.5	25°	642.9	661.6	680.3
5.8	5.8	7.0	8.2	8.2	8.2	8.2	9.4	10.5	27.5°	632.4	648.8	665.1
5.8	4.7	4.7	5.8	7.0	8.2	8.2	9.4	9.4	30°	639.4	653.4	666.3
5.8	5.8	7.0	7.0	7.0	9.4	10.5	11.7	11.7	32.5°	658.1	671.0	681.5
7.0	7.0	7.0	8.2	8.2	11.7	11.7	11.7	12.9	35°	675.6	686.2	693.2
9.4	9.4	10.5	10.5	10.5	11.7	11.7	11.7	12.9	37.5°	699.0	704.9	709.5
10.5	11.7	11.7	11.7	11.7	11.7	10.5	10.5	11.7	40°	717.7	722.4	723.6
11.7	11.7	10.5	11.7	11.7	11.7	10.5	9.4	11.7	42.5°	739.9	738.8	739.9
14.0	12.9	12.9	12.9	12.9	12.9	12.9	12.9	14.0	45°	780.9	768.0	770.3
11.7	12.9	12.9	12.9	14.0	14.0	14.0	12.9	12.9	47.5°	872.0	844.0	844.0
14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	50°	980.7	955.0	957.4
14.0	12.9	12.9	14.0	12.9	14.0	14.0	14.0	14.0	52.5°	1090.6	1061.4	1064.9
12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	55°	1164.3	1149.1	1137.4
12.9	12.9	12.9	12.9	12.9	12.9	14.0	14.0	14.0	57.5°	1158.4	1158.4	1140.9
14.0	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	60°	1104.6	1105.8	1084.8
12.9	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	62.5°	1041.5	1040.4	1024.0
12.9	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	65°	993.6	999.4	987.8
11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	67.5°	911.8	931.6	934.0
									70°	827.6	858.0	880.2
									72.5°	798.4	837.0	867.4
									75°	800.7	832.3	862.7
									77.5°	776.2	799.6	822.9
									80°	714.2	732.9	752.8
									82.5°	631.2	642.9	651.1
									85°	541.2	554.1	562.3
									87.5°	468.7	471.1	478.1
									90°	368.2	367.0	369.4
									92.5°	239.6	253.7	258.3
									95°	153.1	162.5	167.2
									97.5°	100.5	104.0	109.9
									100°	73.6	72.5	73.6
									102.5°	57.3	53.8	52.6
									105°	44.4	42.1	42.1
									107.5°	37.4	35.1	35.1
									110°	35.1	33.9	31.6



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CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2

S 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°		302.5°	305°	307.5°	310°
720.1	720.1	720.1	720.1	720.1	720.1	720.1	720.1	112.5°	29.2	28.1	24.5	22.2
722.4	723.6	722.4	723.6	724.7	724.7	727.1	728.2	115°	19.9	19.9	18.7	16.4
730.6	731.8	735.3	737.6	739.9	743.4	745.8	749.3	117.5°	16.4	15.2	15.2	15.2
734.1	738.8	742.3	748.1	751.6	755.1	759.8	764.5	120°	15.2	15.2	15.2	15.2
738.8	745.8	752.8	759.8	766.8	772.7	779.7	787.9	122.5°	12.9	12.9	12.9	12.9
755.1	763.3	772.7	779.7	789.0	797.2	805.4	814.8	125°	14.0	12.9	12.9	12.9
765.7	776.2	787.9	800.7	812.4	822.9	833.5	840.5	127.5°	12.9	14.0	14.0	14.0
773.8	786.7	799.6	812.4	825.3	838.1	851.0	855.7	130°	14.0	12.9	12.9	12.9
755.1	773.8	790.2	805.4	822.9	833.5	847.5	851.0	132.5°	12.9	10.5	10.5	11.7
729.4	751.6	771.5	785.5	800.7	810.1	820.6	826.4	135°	9.4	9.4	11.7	14.0
700.2	720.1	739.9	754.0	768.0	777.3	789.0	796.0	137.5°	11.7	11.7	11.7	12.9
679.2	696.7	713.1	727.1	741.1	754.0	765.7	771.5	140°	10.5	10.5	11.7	11.7
682.7	696.7	709.5	718.9	728.2	737.6	745.8	752.8	142.5°	10.5	10.5	10.5	12.9
692.0	701.4	709.5	714.2	723.6	729.4	737.6	745.8	145°	12.9	11.7	12.9	15.2
700.2	707.2	714.2	717.7	721.2	723.6	728.2	738.8	147.5°	12.9	12.9	11.7	12.9
710.7	715.4	720.1	722.4	724.7	728.2	732.9	747.0	150°	12.9	12.9	11.7	12.9
727.1	728.2	730.6	735.3	739.9	745.8	755.1	772.7	152.5°	11.7	11.7	11.7	12.9
743.4	743.4	745.8	752.8	762.1	772.7	789.0	814.8	155°	11.7	11.7	12.9	14.0
771.5	773.8	773.8	790.2	806.6	829.9	851.0	891.9	157.5°	14.0	14.0	14.0	15.2
842.8	842.8	842.8	868.5	900.1	932.8	965.5	1017.0	160°	14.0	14.0	14.0	15.2
958.5	959.7	960.9	992.4	1024.0	1061.4	1103.5	1131.5	162.5°	12.9	12.9	12.9	12.9
1067.2	1067.2	1071.9	1083.6	1096.5	1114.0	1137.4	1166.6	165°	14.0	14.0	14.0	14.0
1128.0	1117.5	1110.5	1110.5	1112.8	1123.4	1143.2	1192.3	167.5°	12.9	12.9	14.0	14.0
1126.9	1112.8	1104.6	1101.1	1096.5	1125.7	1150.2	1199.3	170°	14.0	12.9	12.9	12.9
1069.6	1057.9	1048.5	1062.6	1085.9	1125.7	1165.4	1211.0	172.5°	12.9	12.9	11.7	11.7
1013.5	1015.8	1022.8	1057.9	1110.5	1153.7	1186.5	1213.4	175°	10.5	10.5	10.5	11.7
983.1	1000.6	1033.3	1073.1	1103.5	1129.2	1161.9	1177.1	177.5°	11.7	11.7	11.7	11.7
946.8	977.2	1017.0	1041.5	1071.9	1100.0	1088.3	1064.9	180°	11.7	11.7	11.7	11.7
907.1	938.7	976.1	1012.3	1029.8	1029.8	1006.5	974.9					
894.2	922.3	952.7	976.1	979.6	959.7	925.8	891.9					
881.4	910.6	925.8	921.1	910.6	884.9	855.7	824.1					
837.0	851.0	861.5	841.6	825.3	804.2	790.2	751.6					
758.6	759.8	762.1	750.5	736.4	721.2	702.5	659.3					
658.1	660.5	661.6	666.3	658.1	634.7	592.7	540.1					
569.3	577.5	586.8	585.6	564.6	523.7	467.6	409.1					
486.3	486.3	482.8	469.9	441.9	391.6	340.2	286.4					
376.4	367.0	349.5	329.6	307.4	270.0	226.8	184.7					
253.7	249.0	236.1	220.9	205.7	181.2	146.1	115.7					
167.2	161.3	153.1	140.3	130.9	115.7	93.5	76.0					
108.7	102.9	97.0	87.7	80.7	72.5	60.8	52.6					
73.6	67.8	64.3	58.4	52.6	49.1	43.3	38.6					
51.4	47.9	45.6	44.4	43.3	40.9	36.2	32.7					
40.9	39.7	38.6	37.4	37.4	32.7	29.2	24.5					
35.1	35.1	32.7	31.6	29.2	25.7	22.2	19.9					
30.4	26.9	25.7	23.4	23.4	21.0	18.7	17.5					



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CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

312.5°	315°	317.5°	320°	322.5°	325°	327.5°		330°	332.5°	335°	337.5°	340°
21.0	19.9	17.5	17.5	16.4	15.2	15.2	0°	720.1	720.1	720.1	720.1	720.1
16.4	15.2	16.4	15.2	15.2	15.2	14.0	2.5°	728.2	728.2	730.6	731.8	731.8
14.0	14.0	14.0	15.2	14.0	14.0	12.9	5°	751.6	755.1	756.3	758.6	761.0
12.9	12.9	12.9	12.9	12.9	12.9	11.7	7.5°	769.2	776.2	780.9	784.4	789.0
11.7	11.7	11.7	14.0	12.9	12.9	12.9	10°	793.7	801.9	810.1	817.1	822.9
12.9	12.9	12.9	14.0	12.9	12.9	12.9	12.5°	821.8	829.9	837.0	844.0	849.8
14.0	12.9	11.7	12.9	14.0	14.0	14.0	15°	845.1	848.7	854.5	858.0	861.5
11.7	11.7	11.7	14.0	15.2	14.0	14.0	17.5°	859.2	862.7	866.2	867.4	867.4
11.7	12.9	12.9	15.2	15.2	14.0	14.0	20°	851.0	853.3	854.5	856.8	859.2
15.2	15.2	14.0	15.2	15.2	15.2	15.2	22.5°	828.8	833.5	838.1	841.6	846.3
12.9	12.9	12.9	15.2	15.2	15.2	15.2	25°	801.9	807.7	812.4	817.1	822.9
14.0	14.0	14.0	15.2	15.2	15.2	15.2	27.5°	780.9	786.7	792.5	800.7	810.1
12.9	12.9	12.9	14.0	12.9	12.9	14.0	30°	762.1	770.3	780.9	789.0	798.4
15.2	15.2	15.2	16.4	15.2	15.2	15.2	32.5°	754.0	763.3	771.5	779.7	787.9
12.9	12.9	12.9	15.2	15.2	15.2	15.2	35°	750.5	762.1	772.7	780.9	785.5
12.9	12.9	12.9	14.0	15.2	15.2	15.2	37.5°	759.8	776.2	789.0	798.4	804.2
12.9	12.9	12.9	15.2	15.2	16.4	16.4	40°	790.2	805.4	818.3	833.5	847.5
14.0	14.0	12.9	12.9	14.0	15.2	15.2	42.5°	840.5	863.8	882.5	908.3	931.6
15.2	15.2	15.2	16.4	15.2	16.4	17.5	45°	935.2	976.1	1012.3	1052.0	1089.5
14.0	14.0	14.0	14.0	14.0	15.2	15.2	47.5°	1067.2	1123.4	1173.6	1204.0	1229.7
12.9	12.9	15.2	16.4	16.4	15.2	15.2	50°	1165.4	1205.2	1254.3	1284.7	1291.7
15.2	15.2	15.2	14.0	14.0	14.0	15.2	52.5°	1212.2	1261.3	1295.2	1317.4	1327.9
14.0	14.0	14.0	15.2	15.2	14.0	14.0	55°	1244.9	1283.5	1316.2	1338.4	1331.4
11.7	11.7	11.7	11.7	12.9	12.9	12.9	57.5°	1246.1	1285.8	1317.4	1316.2	1296.4
10.5	10.5	10.5	10.5	10.5	11.7	11.7	60°	1254.3	1278.8	1278.8	1244.9	1199.3
11.7	10.5	10.5	10.5	10.5	10.5	10.5	62.5°	1216.9	1199.3	1154.9	1109.3	1056.7
10.5	10.5	10.5	10.5	10.5	10.5	10.5	65°	1135.0	1085.9	1026.3	978.4	928.1
11.7	11.7	11.7	11.7	11.7	11.7	11.7	67.5°	1025.2	978.4	927.0	879.0	820.6
							70°	934.0	887.2	835.8	784.4	722.4
							72.5°	859.2	818.3	766.8	690.8	611.4
							75°	790.2	730.6	658.1	570.4	475.8
							77.5°	699.0	623.0	527.2	430.2	343.7
							80°	582.1	494.5	396.3	300.4	229.1
							82.5°	458.2	365.9	282.9	199.9	147.3
							85°	343.7	264.2	196.4	137.9	104.0
							87.5°	238.5	178.8	128.6	98.2	79.5
							90°	146.1	111.0	79.5	64.3	58.4
							92.5°	88.8	71.3	54.9	46.8	44.4
							95°	60.8	51.4	45.6	40.9	37.4
							97.5°	45.6	42.1	38.6	35.1	31.6
							100°	37.4	33.9	30.4	26.9	24.5
							102.5°	30.4	28.1	25.7	23.4	21.0
							105°	23.4	22.2	19.9	16.4	15.2
							107.5°	17.5	16.4	15.2	14.0	12.9
							110°	16.4	14.0	14.0	12.9	11.7

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CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

0°TILT)

CANDELA DISTRIBUTION (continued):

342.5°	345°	347.5°	350°	352.5°	355°		330°	332.5°	335°	337.5°	340°	342.5°
720.1	720.1	720.1	720.1	720.1	720.1	112.5°	14.0	12.9	12.9	11.7	11.7	10.5
731.8	734.1	732.9	732.9	734.1	732.9	115°	12.9	11.7	11.7	11.7	11.7	11.7
762.1	764.5	764.5	764.5	766.8	765.7	117.5°	11.7	11.7	11.7	11.7	12.9	12.9
792.5	796.0	797.2	799.6	800.7	801.9	120°	12.9	12.9	12.9	12.9	14.0	14.0
829.9	835.8	840.5	844.0	845.1	847.5	122.5°	12.9	12.9	12.9	12.9	14.0	14.0
856.8	863.8	867.4	869.7	873.2	874.4	125°	12.9	12.9	12.9	12.9	14.0	14.0
866.2	870.9	873.2	877.9	881.4	883.7	127.5°	14.0	14.0	14.0	14.0	14.0	14.0
868.5	869.7	873.2	875.5	877.9	880.2	130°	14.0	14.0	14.0	15.2	16.4	18.7
861.5	858.0	862.7	867.4	867.4	870.9	132.5°	15.2	15.2	15.2	16.4	16.4	17.5
847.5	847.5	852.2	856.8	862.7	866.2	135°	16.4	16.4	16.4	16.4	16.4	16.4
828.8	833.5	844.0	852.2	858.0	863.8	137.5°	16.4	16.4	16.4	16.4	17.5	18.7
817.1	824.1	835.8	844.0	851.0	855.7	140°	16.4	16.4	16.4	16.4	17.5	18.7
804.2	812.4	824.1	833.5	838.1	844.0	142.5°	16.4	16.4	16.4	17.5	17.5	19.9
796.0	800.7	811.2	820.6	828.8	832.3	145°	15.2	15.2	15.2	17.5	17.5	17.5
789.0	793.7	803.1	811.2	817.1	821.8	147.5°	17.5	16.4	16.4	16.4	17.5	16.4
807.7	808.9	813.6	819.4	822.9	828.8	150°	17.5	16.4	17.5	17.5	17.5	18.7
858.0	867.4	872.0	870.9	873.2	887.2	152.5°	16.4	16.4	16.4	16.4	16.4	17.5
956.2	979.6	994.8	1001.8	1011.1	1018.1	155°	16.4	16.4	17.5	17.5	18.7	17.5
1129.2	1161.9	1170.1	1170.1	1159.6	1147.9	157.5°	17.5	17.5	17.5	18.7	17.5	17.5
1242.6	1249.6	1237.9	1215.7	1186.5	1151.4	160°	16.4	16.4	16.4	17.5	17.5	17.5
1288.2	1269.5	1240.2	1191.1	1140.9	1087.1	162.5°	16.4	17.5	17.5	17.5	17.5	16.4
1310.4	1261.3	1208.7	1137.4	1068.4	1011.1	165°	16.4	16.4	15.2	15.2	15.2	15.2
1294.0	1228.6	1153.7	1080.1	1006.5	970.2	167.5°	15.2	15.2	15.2	15.2	14.0	14.0
1241.4	1176.0	1089.5	1006.5	941.0	889.6	170°	12.9	12.9	12.9	12.9	12.9	12.9
1126.9	1042.7	959.7	881.4	814.8	756.3	172.5°	12.9	12.9	12.9	11.7	11.7	11.7
1001.8	909.4	829.9	752.8	683.8	625.4	175°	11.7	11.7	11.7	11.7	11.7	12.9
875.5	797.2	710.7	624.2	547.1	480.4	177.5°	11.7	11.7	11.7	11.7	10.5	10.5
755.1	675.6	596.2	506.2	425.5	367.0	180°	11.7	11.7	11.7	11.7	11.7	11.7
642.9	563.4	479.3	389.3	318.0	265.3							
512.0	416.1	344.8	273.5	224.4	188.2							
379.9	288.7	231.5	184.7	159.0	143.8							
260.7	195.2	148.5	130.9	121.6	123.9							
166.0	133.3	106.4	105.2	106.4	108.7							
112.2	98.2	91.2	91.2	91.2	91.2							
91.2	86.5	85.3	83.0	81.8	78.3							
76.0	74.8	72.5	70.1	63.1	58.4							
56.1	54.9	50.3	44.4	37.4	30.4							
42.1	38.6	35.1	29.2	22.2	17.5							
33.9	30.4	25.7	22.2	18.7	15.2							
26.9	22.2	19.9	18.7	16.4	14.0							
22.2	18.7	15.2	15.2	14.0	12.9							
16.4	15.2	14.0	14.0	11.7	12.9							
14.0	14.0	12.9	11.7	11.7	11.7							
10.5	10.5	10.5	10.5	9.4	10.5							
11.7	11.7	11.7	11.7	10.5	11.7							

REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

345°	347.5°	350°	352.5°	355°		357.5°	360°
10.5	10.5	10.5	10.5	10.5	0°	720.1	720.1
11.7	11.7	11.7	10.5	10.5	2.5°	734.1	735.3
12.9	12.9	10.5	10.5	10.5	5°	768.0	770.3
14.0	12.9	12.9	12.9	12.9	7.5°	803.1	804.2
14.0	12.9	15.2	15.2	15.2	10°	849.8	851.0
14.0	16.4	16.4	16.4	17.5	12.5°	875.5	877.9
15.2	16.4	17.5	18.7	21.0	15°	882.5	881.4
19.9	19.9	19.9	18.7	18.7	17.5°	880.2	882.5
18.7	18.7	21.0	21.0	21.0	20°	875.5	877.9
16.4	17.5	18.7	21.0	21.0	22.5°	869.7	870.9
18.7	21.0	21.0	19.9	19.9	25°	867.4	868.5
18.7	19.9	19.9	19.9	19.9	27.5°	859.2	862.7
19.9	19.9	19.9	19.9	18.7	30°	848.7	847.5
17.5	17.5	18.7	18.7	19.9	32.5°	835.8	835.8
16.4	17.5	17.5	18.7	18.7	35°	825.3	826.4
18.7	18.7	18.7	17.5	18.7	37.5°	832.3	838.1
18.7	18.7	19.9	19.9	19.9	40°	900.1	903.6
17.5	18.7	19.9	19.9	19.9	42.5°	1033.3	1043.9
17.5	17.5	17.5	18.7	17.5	45°	1130.4	1133.9
16.4	17.5	16.4	16.4	17.5	47.5°	1124.5	1101.1
16.4	16.4	17.5	16.4	16.4	50°	1053.2	1048.5
16.4	15.2	15.2	15.2	15.2	52.5°	999.4	992.4
15.2	15.2	15.2	15.2	14.0	55°	953.9	945.7
14.0	12.9	12.9	12.9	12.9	57.5°	867.4	860.3
12.9	12.9	12.9	12.9	12.9	60°	722.4	706.0
12.9	12.9	12.9	12.9	12.9	62.5°	595.0	582.1
10.5	10.5	10.5	10.5	10.5	65°	444.2	431.3
11.7	11.7	11.7	11.7	11.7	67.5°	328.5	316.8
					70°	240.8	231.5
					72.5°	176.5	163.7
					75°	140.3	140.3
					77.5°	126.2	127.4
					80°	111.0	111.0
					82.5°	90.0	88.8
					85°	77.2	77.2
					87.5°	54.9	53.8
					90°	28.1	22.2
					92.5°	16.4	15.2
					95°	14.0	12.9
					97.5°	12.9	11.7
					100°	11.7	11.7
					102.5°	11.7	10.5
					105°	11.7	12.9
					107.5°	10.5	11.7
					110°	11.7	11.7

REPORT NUMBER: P188109

CATALOG NUMBER: QDCAST1B (2PANELS 0°TILT; 2PANELS 30°TILT)

CANDELA DISTRIBUTION (continued):

	357.5°	360°
112.5°	10.5	11.7
115°	10.5	11.7
117.5°	10.5	11.7
120°	12.9	10.5
122.5°	16.4	17.5
125°	19.9	21.0
127.5°	19.9	21.0
130°	18.7	21.0
132.5°	22.2	22.2
135°	19.9	21.0
137.5°	21.0	19.9
140°	21.0	19.9
142.5°	18.7	18.7
145°	18.7	17.5
147.5°	18.7	18.7
150°	19.9	21.0
152.5°	21.0	21.0
155°	18.7	17.5
157.5°	18.7	18.7
160°	17.5	17.5
162.5°	16.4	17.5
165°	15.2	14.0
167.5°	14.0	14.0
170°	14.0	14.0
172.5°	12.9	12.9
175°	12.9	12.9
177.5°	10.5	10.5
180°	11.7	11.7

(END OF REPORT)