

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P252470

Luminaire Tested: **LE_6B20D010 EC6B10208050 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252470
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B20D010 EC6B10208050 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2240.0 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

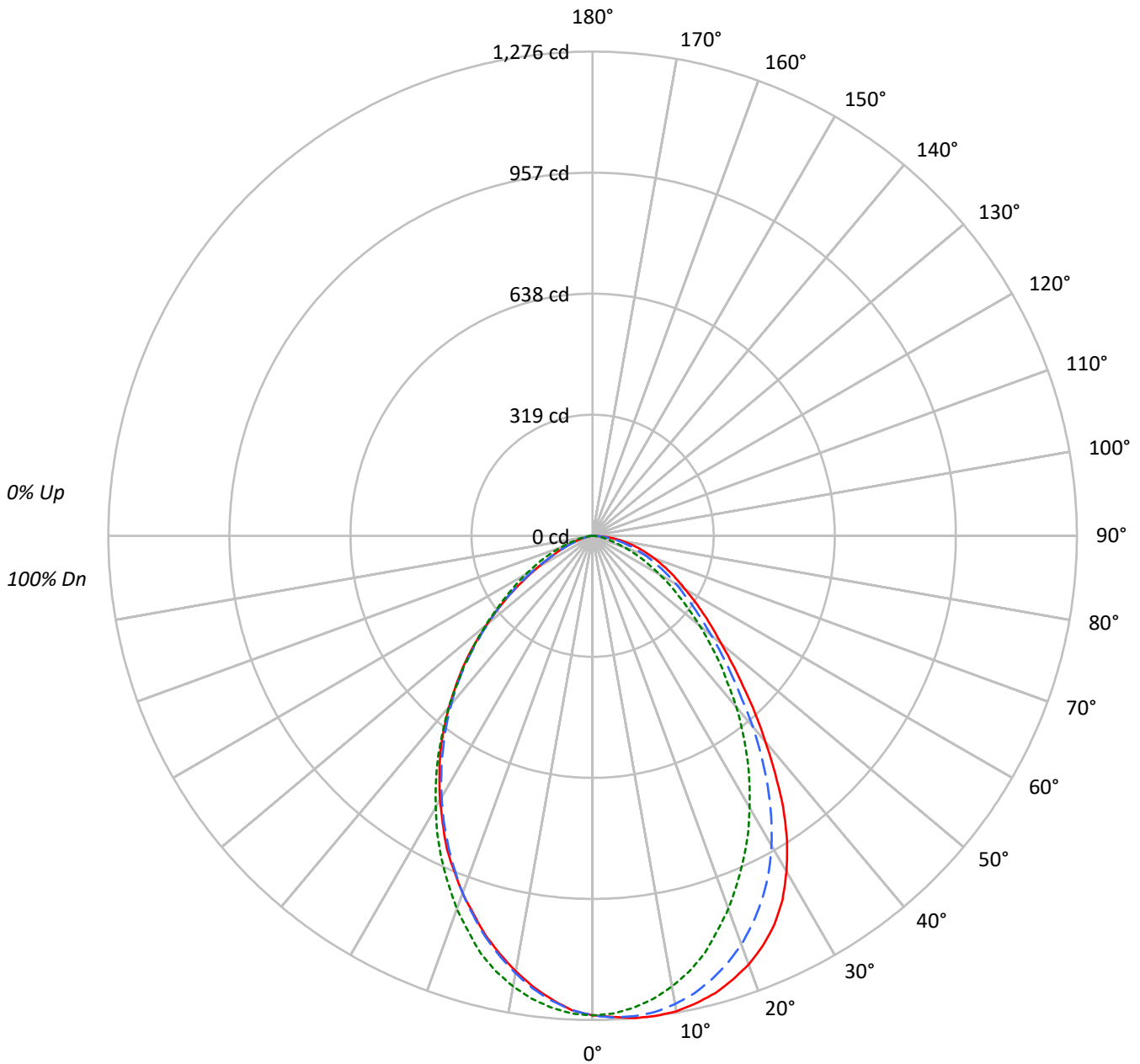
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88			88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			77
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67			67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47			47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43			43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39			39
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35			35
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33			33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	82451	82451	82451
5°	83565	81725	80349
10°	84299	79881	77204
15°	84286	76937	73614
20°	83466	72621	69573
25°	81487	67724	65442
30°	76953	62271	60561
35°	69752	56476	55767
40°	60246	50231	50077
45°	51659	43724	44047
50°	44882	37412	36863
55°	40322	31530	29551
60°	36652	26566	21764
65°	34410	21936	15978
70°	32809	17072	11712
75°	31408	12377	7965
80°	29681	8604	5260
85°	26274	5240	2620



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	5.3
10°-20°	323.8	14.5
20°-30°	449.5	20.1
30°-40°	465.5	20.8
40°-50°	382.6	17.1
50°-60°	262.9	11.7
60°-70°	151.1	6.7
70°-80°	69.5	3.1
80°-90°	16.9	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	891.4	39.8
0°-40°	1357.0	60.6
0°-60°	2002.4	89.4
0°-90°	2240.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2240.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1264	1264	1264	1264	1264	
5°	1276	1271	1248	1230	1227	122
15°	1248	1211	1139	1094	1090	351
25°	1132	1057	941	900	909	518
35°	876	804	709	688	700	543
45°	560	518	474	469	477	436
55°	354	321	277	262	260	319
65°	223	195	142	100	104	222
75°	125	98	49	32	32	132
85°	35	25	7	4	4	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8
2.5°	1269.0	1279.5	1272.5	1270.8	1274.2	1274.2	1274.2	1269.0	1272.5	1267.2	1270.8
5°	1276.0	1284.8	1277.8	1274.2	1277.8	1279.5	1274.2	1270.8	1276.0	1269.0	1270.8
7.5°	1276.0	1284.8	1277.8	1276.0	1277.8	1277.8	1276.0	1269.0	1272.5	1265.5	1265.5
10°	1272.5	1279.5	1272.5	1269.0	1270.8	1269.0	1269.0	1260.1	1261.9	1253.1	1253.1
12.5°	1261.9	1270.8	1261.9	1258.4	1258.4	1258.4	1253.1	1246.1	1247.9	1237.4	1235.6
15°	1247.9	1254.9	1246.1	1242.6	1242.6	1240.9	1237.4	1226.9	1226.9	1216.2	1211.0
17.5°	1226.9	1233.9	1226.9	1221.6	1219.9	1216.2	1212.8	1202.2	1198.8	1186.5	1181.2
20°	1202.2	1207.5	1200.5	1195.2	1191.8	1188.2	1181.2	1170.6	1167.1	1154.9	1146.1
22.5°	1170.6	1177.8	1167.1	1161.9	1158.4	1153.1	1146.1	1135.6	1130.2	1114.5	1104.0
25°	1132.0	1135.6	1126.8	1121.5	1114.5	1111.0	1105.8	1091.8	1086.4	1068.9	1056.6
27.5°	1082.9	1086.4	1075.9	1072.4	1063.6	1060.1	1053.1	1040.8	1033.8	1016.2	1003.9
30°	1021.5	1025.0	1018.0	1012.8	1005.8	998.6	993.4	981.1	970.6	953.0	942.5
32.5°	953.0	958.2	951.2	944.2	932.0	933.8	925.0	912.6	903.9	888.1	875.8
35°	875.8	879.4	870.5	868.8	861.8	854.8	846.0	837.2	831.9	814.4	803.9
37.5°	789.8	798.6	789.8	782.8	779.2	774.0	768.8	756.5	753.0	742.4	728.4
40°	707.4	712.6	707.4	700.2	695.0	695.0	688.0	681.0	672.2	661.6	656.4
42.5°	633.6	630.1	628.4	624.9	617.8	616.0	614.2	605.5	600.2	589.8	581.0
45°	559.9	561.6	558.1	556.4	551.1	547.6	544.1	537.1	535.4	524.8	517.8
47.5°	498.5	496.8	493.2	493.2	489.6	486.1	482.6	477.4	475.6	466.9	459.9
50°	442.2	444.0	442.2	440.5	435.2	433.5	430.0	426.5	423.0	414.2	407.2
52.5°	396.6	394.9	393.1	393.1	387.9	386.1	382.6	379.1	375.6	366.9	361.5
55°	354.5	354.5	352.8	351.0	345.8	344.0	342.2	338.8	333.5	326.5	321.2
57.5°	315.9	315.9	314.1	312.4	308.9	308.9	305.4	301.9	298.4	291.4	284.4
60°	280.9	282.6	280.9	279.1	275.5	275.5	273.8	268.5	266.8	258.0	252.8
62.5°	251.0	251.0	251.0	249.2	247.5	244.0	244.0	238.8	235.1	229.9	222.9
65°	222.9	222.9	222.9	221.1	217.6	215.9	214.1	210.6	207.1	201.9	194.9
67.5°	196.6	196.6	196.6	194.9	191.2	189.5	187.8	186.0	180.8	175.5	168.5
70°	172.0	172.0	170.2	168.5	166.8	165.0	163.2	159.8	156.2	149.1	143.9
72.5°	147.4	147.4	147.4	143.9	142.1	142.1	138.6	136.9	133.4	126.4	121.1
75°	124.6	122.9	122.9	121.1	119.4	117.6	115.9	114.1	108.9	105.2	98.2
77.5°	101.8	101.8	100.0	98.2	98.2	96.5	94.8	91.2	89.5	84.2	79.0
80°	79.0	79.0	79.0	79.0	77.2	75.5	75.5	72.0	70.2	65.0	61.4
82.5°	59.6	57.9	57.9	57.9	56.1	54.4	54.4	52.6	50.9	47.4	43.9
85°	35.1	33.4	33.4	33.4	31.6	31.6	29.9	29.9	28.1	24.6	24.6
87.5°	10.5	10.5	12.2	12.2	10.5	10.5	10.5	10.5	10.5	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8
2.5°	1267.2	1272.5	1265.5	1263.8	1270.8	1267.2	1265.5	1261.9	1263.8	1260.1	1254.9
5°	1265.5	1272.5	1263.8	1258.4	1267.2	1261.9	1258.4	1254.9	1254.9	1247.9	1244.4
7.5°	1260.1	1263.8	1254.9	1249.6	1254.9	1249.6	1246.1	1240.9	1239.1	1230.4	1225.1
10°	1246.1	1249.6	1239.1	1232.1	1237.4	1230.4	1225.1	1219.9	1216.2	1205.8	1198.8
12.5°	1226.9	1228.6	1216.2	1207.5	1211.0	1205.8	1197.0	1190.0	1186.5	1175.9	1167.1
15°	1200.5	1202.2	1188.2	1175.9	1179.5	1172.4	1161.9	1154.9	1149.6	1139.1	1126.8
17.5°	1168.9	1167.1	1151.4	1139.1	1140.9	1132.0	1121.5	1111.0	1104.0	1091.8	1082.9
20°	1133.8	1128.5	1111.0	1097.0	1098.8	1088.1	1075.9	1065.4	1056.6	1046.0	1033.8
22.5°	1089.9	1082.9	1067.1	1049.6	1051.4	1042.5	1025.0	1016.2	1007.5	993.4	982.9
25°	1042.5	1032.0	1016.2	998.6	998.6	988.1	974.1	963.6	954.8	940.8	928.5
27.5°	986.4	981.1	960.0	946.0	944.2	933.8	921.5	909.1	898.6	886.4	874.0
30°	925.0	916.1	900.4	884.6	881.1	872.2	860.0	846.0	839.0	826.6	816.1
32.5°	860.0	851.2	833.6	817.9	816.1	809.1	798.6	784.5	777.5	768.8	761.8
35°	786.2	782.8	765.2	753.0	753.0	745.9	735.4	723.1	717.9	709.1	700.2
37.5°	716.1	710.9	695.0	684.5	684.5	675.8	665.2	659.9	654.6	647.6	642.4
40°	642.4	638.9	626.6	616.0	617.8	610.8	603.8	596.8	593.2	589.8	584.5
42.5°	573.9	570.4	561.6	552.9	552.9	547.6	540.6	535.4	531.8	526.5	524.8
45°	512.5	507.2	500.2	491.4	491.4	486.1	482.6	479.1	477.4	473.9	468.6
47.5°	452.9	449.4	442.2	433.5	433.5	433.5	426.5	421.2	421.2	417.8	416.0
50°	401.9	396.6	391.4	384.4	384.4	380.9	375.6	370.4	370.4	368.6	365.1
52.5°	354.5	351.0	344.0	337.0	337.0	333.5	328.2	326.5	324.8	319.4	317.6
55°	314.1	310.6	305.4	296.6	294.9	293.1	287.9	284.4	282.6	277.2	277.2
57.5°	277.2	273.8	265.0	259.8	258.0	254.5	249.2	245.8	244.0	240.5	237.0
60°	245.8	240.5	233.4	226.4	224.6	221.1	215.9	212.4	210.6	203.6	200.1
62.5°	215.9	210.6	203.6	196.6	194.9	191.2	184.2	180.8	177.2	170.2	166.8
65°	187.8	182.5	175.5	168.5	165.0	163.2	156.2	151.0	147.4	142.1	135.1
67.5°	161.5	156.2	149.1	140.4	140.4	135.1	129.9	124.6	119.4	114.1	108.9
70°	136.9	131.6	124.6	117.6	115.9	112.4	107.1	100.0	96.5	89.5	84.2
72.5°	114.1	108.9	101.8	94.8	93.0	89.5	84.2	77.2	72.0	66.8	61.4
75°	93.0	87.8	80.8	75.5	73.8	70.2	65.0	57.9	52.6	49.1	43.9
77.5°	73.8	68.5	63.1	57.9	56.1	52.6	47.4	43.9	38.6	35.1	29.9
80°	56.1	52.6	47.4	43.9	42.1	38.6	35.1	29.9	26.4	22.9	21.0
82.5°	40.4	36.9	33.4	28.1	28.1	24.6	22.9	19.2	15.8	14.0	12.2
85°	22.9	19.2	17.5	15.8	14.0	14.0	12.2	10.5	8.8	7.0	7.0
87.5°	7.0	7.0	5.2	5.2	5.2	5.2	3.5	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8
2.5°	1254.9	1256.6	1253.1	1256.6	1253.1	1254.9	1251.4	1254.9	1251.4	1254.9	1247.9
5°	1242.6	1242.6	1237.4	1240.9	1237.4	1239.1	1232.1	1233.9	1230.4	1233.9	1226.9
7.5°	1221.6	1223.4	1214.5	1218.0	1212.8	1212.8	1207.5	1209.2	1204.0	1205.8	1200.5
10°	1197.0	1195.2	1186.5	1190.0	1183.0	1183.0	1177.8	1177.8	1170.6	1172.4	1165.4
12.5°	1161.9	1160.1	1149.6	1153.1	1146.1	1146.1	1140.9	1140.9	1133.8	1137.4	1130.2
15°	1121.5	1119.8	1109.2	1111.0	1104.0	1104.0	1097.0	1098.8	1093.5	1097.0	1089.9
17.5°	1075.9	1074.1	1063.6	1065.4	1056.6	1058.4	1053.1	1051.4	1047.8	1049.6	1044.2
20°	1028.5	1025.0	1014.5	1016.2	1012.8	1007.5	1003.9	1005.8	1002.1	1005.8	1000.4
22.5°	979.4	972.4	963.6	963.6	960.0	960.0	954.8	958.2	951.2	956.5	953.0
25°	923.2	917.9	910.9	914.4	907.4	907.4	902.1	903.9	900.4	903.9	900.4
27.5°	868.8	865.2	854.8	858.2	853.0	854.8	849.5	851.2	849.5	853.0	849.5
30°	810.9	809.1	802.1	802.1	800.4	798.6	796.9	796.9	795.1	800.4	796.9
32.5°	756.5	751.2	744.1	749.5	740.6	745.9	742.4	745.9	742.4	745.9	744.1
35°	700.2	698.5	689.8	691.5	689.8	689.8	688.0	688.0	688.0	693.2	693.2
37.5°	640.6	638.9	633.6	635.4	631.9	630.1	630.1	633.6	633.6	637.1	637.1
40°	582.8	584.5	579.2	579.2	577.4	577.4	577.4	581.0	579.2	582.8	581.0
42.5°	524.8	524.8	519.5	521.2	519.5	521.2	521.2	524.8	524.8	526.5	524.8
45°	470.4	470.4	468.6	470.4	466.9	468.6	466.9	470.4	468.6	470.4	470.4
47.5°	416.0	416.0	416.0	414.2	414.2	414.2	414.2	414.2	412.5	416.0	414.2
50°	365.1	366.9	365.1	365.1	363.2	365.1	363.2	363.2	359.8	361.5	361.5
52.5°	319.4	319.4	315.9	315.9	315.9	314.1	314.1	314.1	312.4	312.4	308.9
55°	275.5	275.5	272.0	272.0	270.2	268.5	266.8	266.8	261.5	261.5	256.2
57.5°	235.1	233.4	228.1	228.1	224.6	222.9	221.1	219.4	215.9	212.4	210.6
60°	198.4	194.9	191.2	189.5	186.0	182.5	179.0	175.5	172.0	170.2	168.5
62.5°	163.2	158.0	154.5	152.8	149.1	143.9	140.4	136.9	133.4	131.6	128.1
65°	131.6	126.4	121.1	119.4	115.9	112.4	107.1	103.5	100.0	98.2	98.2
67.5°	103.5	98.2	91.2	91.2	87.8	84.2	80.8	77.2	75.5	77.2	77.2
70°	77.2	73.8	68.5	66.8	63.1	59.6	57.9	57.9	57.9	59.6	57.9
72.5°	57.9	52.6	49.1	47.4	45.6	43.9	43.9	43.9	42.1	43.9	43.9
75°	40.4	36.9	33.4	33.4	31.6	31.6	31.6	31.6	31.6	31.6	31.6
77.5°	28.1	24.6	22.9	22.9	22.9	21.0	21.0	21.0	21.0	21.0	21.0
80°	17.5	17.5	15.8	15.8	14.0	14.0	14.0	14.0	14.0	14.0	14.0
82.5°	10.5	10.5	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
85°	5.2	5.2	5.2	5.2	5.2	3.5	3.5	3.5	3.5	3.5	3.5
87.5°	1.8	1.8	1.8	1.8	1.8	3.5	3.5	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252470

CATALOG NUMBER: LE_6B20D010 EC6B10208050 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8	1263.8
2.5°	1247.9	1253.1	1246.1	1251.4	1249.6	1247.9	1244.4	1251.4
5°	1226.9	1228.6	1221.6	1228.6	1226.9	1223.4	1219.9	1226.9
7.5°	1197.0	1202.2	1193.5	1200.5	1198.8	1195.2	1191.8	1198.8
10°	1163.6	1168.9	1161.9	1167.1	1167.1	1163.6	1158.4	1165.4
12.5°	1126.8	1130.2	1123.2	1130.2	1128.5	1125.0	1123.2	1128.5
15°	1086.4	1091.8	1084.6	1089.9	1088.1	1086.4	1084.6	1089.9
17.5°	1042.5	1047.8	1042.5	1047.8	1047.8	1042.5	1040.8	1044.2
20°	998.6	1002.1	996.9	1002.1	1000.4	1000.4	996.9	1002.1
22.5°	949.5	954.8	951.2	954.8	953.0	953.0	951.2	954.8
25°	900.4	905.6	900.4	905.6	903.9	903.9	900.4	909.1
27.5°	851.2	854.8	849.5	856.5	854.8	851.2	853.0	854.8
30°	798.6	802.1	798.6	803.9	803.9	803.9	800.4	803.9
32.5°	745.9	751.2	745.9	751.2	749.5	749.5	747.6	751.2
35°	693.2	695.0	691.5	696.8	696.8	698.5	695.0	700.2
37.5°	638.9	640.6	638.9	640.6	644.1	638.9	642.4	644.1
40°	582.8	586.2	584.5	586.2	586.2	588.0	586.2	588.0
42.5°	526.5	530.0	526.5	531.8	530.0	530.0	531.8	531.8
45°	468.6	473.9	470.4	473.9	475.6	473.9	473.9	477.4
47.5°	414.2	417.8	416.0	417.8	417.8	417.8	417.8	421.2
50°	359.8	361.5	361.5	363.2	363.2	365.1	361.5	363.2
52.5°	305.4	308.9	308.9	308.9	307.1	308.9	308.9	308.9
55°	256.2	258.0	254.5	258.0	258.0	256.2	256.2	259.8
57.5°	208.9	208.9	208.9	208.9	208.9	207.1	208.9	208.9
60°	165.0	166.8	165.0	165.0	165.0	165.0	163.2	166.8
62.5°	128.1	128.1	126.4	128.1	128.1	128.1	129.9	129.9
65°	100.0	101.8	100.0	101.8	101.8	101.8	101.8	103.5
67.5°	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
70°	59.6	59.6	59.6	61.4	59.6	59.6	59.6	61.4
72.5°	43.9	43.9	43.9	43.9	43.9	43.9	45.6	45.6
75°	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6
77.5°	21.0	21.0	21.0	22.9	21.0	22.9	21.0	21.0
80°	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
82.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
85°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
87.5°	3.5	3.5	3.5	3.5	1.8	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)