

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: McGRAW-EDISON

Report Number: P198465

Luminaire Tested: **TT-C4-LED-E1-WQ-CG-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198465
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C4-LED-E1-WQ-CG-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5341.6 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U4 - G1

Input Watts (W): 75.4
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



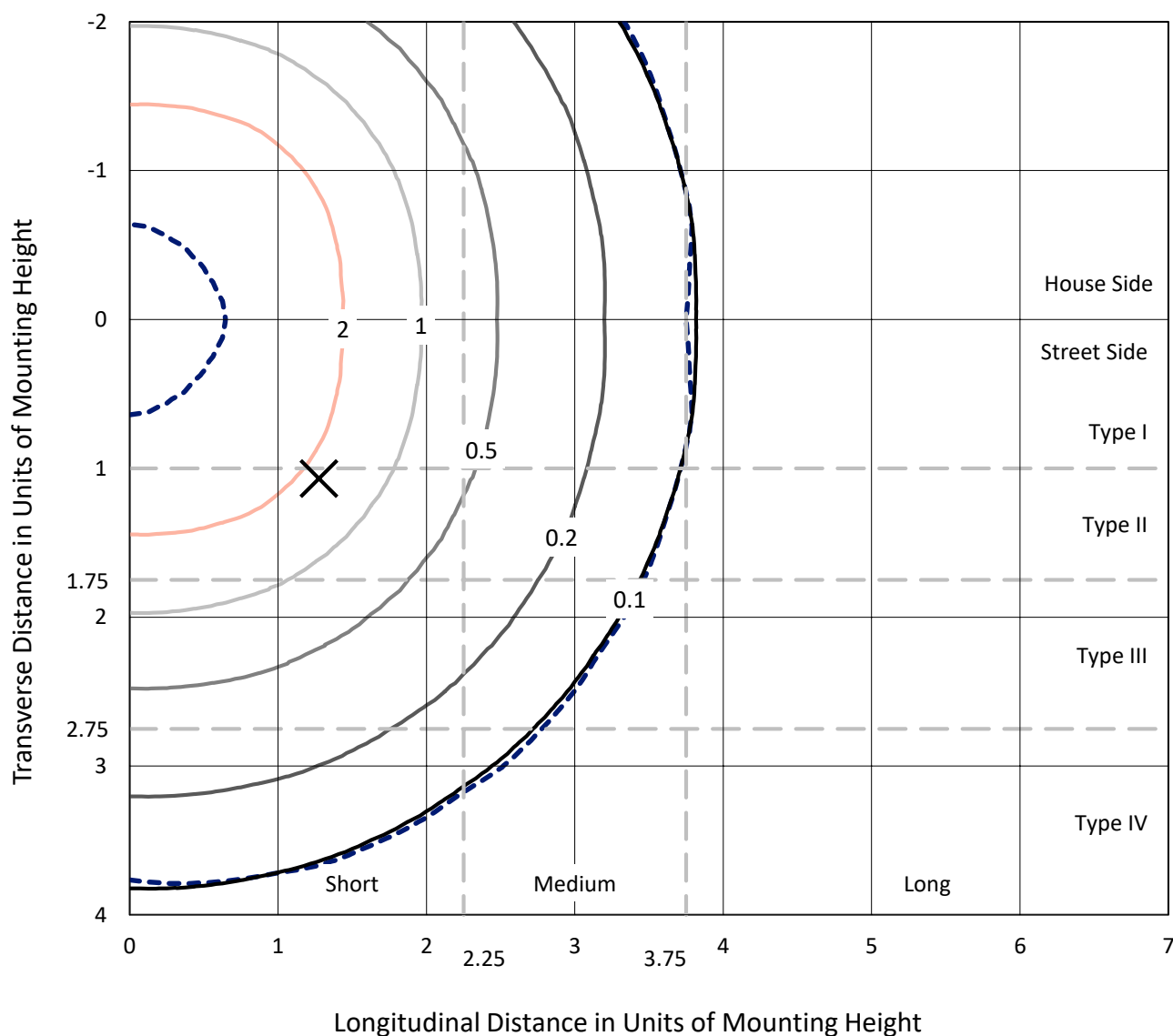
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

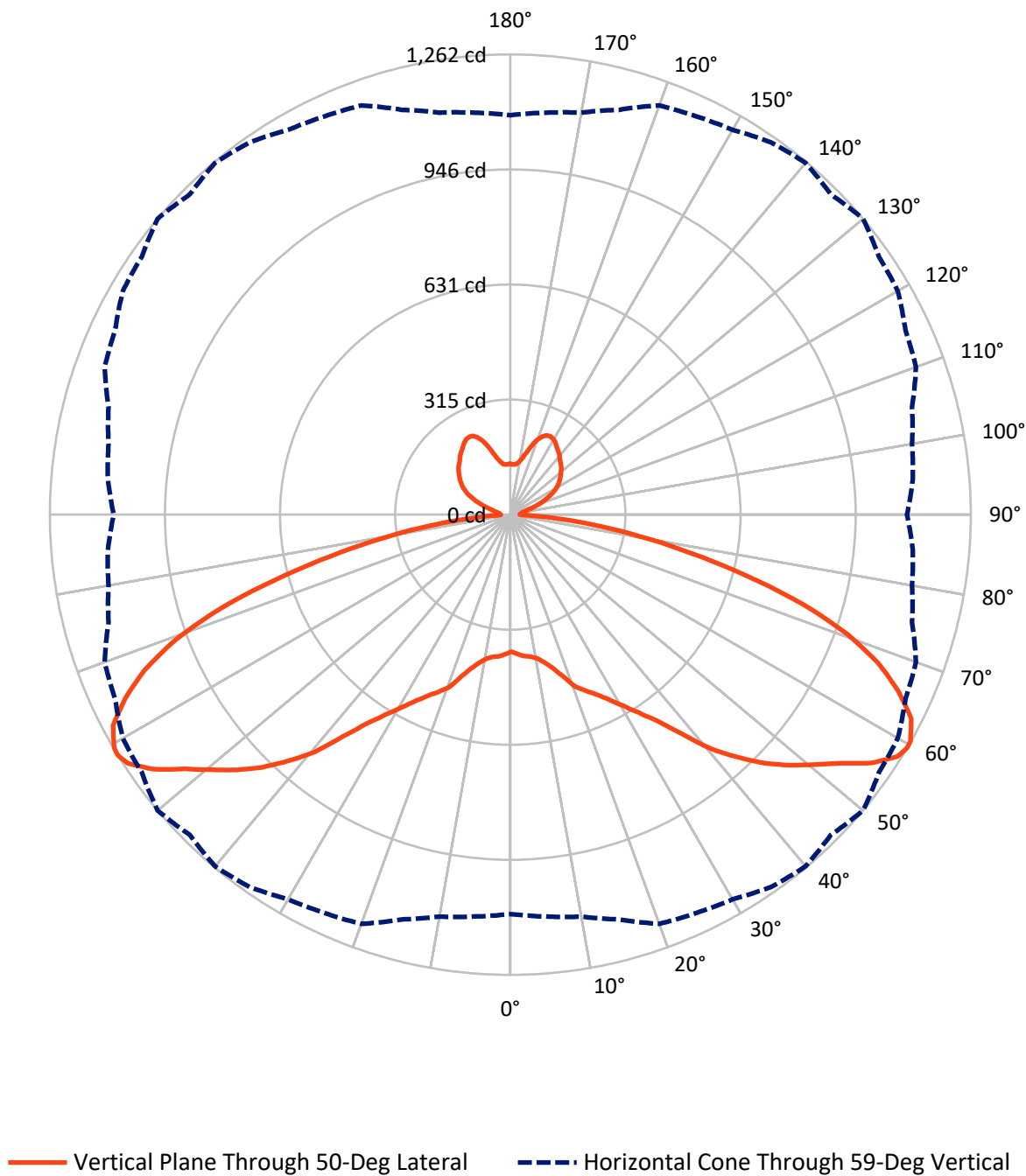


Based on 10 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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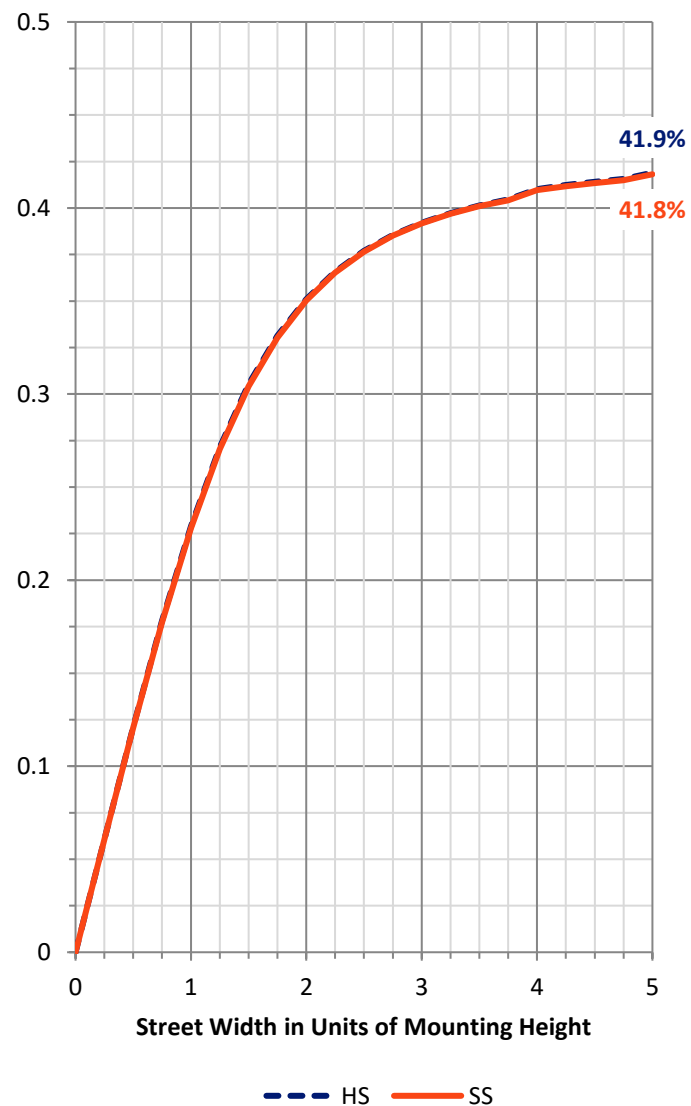
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2258.8	412.0	2670.8
	% Fixture	42.3	7.7	50.0
Street Side	Lumens	2258.8	412.0	2670.8
	% Fixture	42.3	7.7	50.0
Total	Lumens	4517.7	824.0	5341.6
	% Fixture	84.6	15.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.3	0.7
10°-20°	126.0	2.4
20°-30°	253.7	4.7
30°-40°	436.5	8.2
40°-50°	720.7	13.5
50°-60°	1014.8	19.0
60°-70°	1085.6	20.3
70°-80°	689.6	12.9
80°-90°	153.4	2.9
90°-100°	38.3	0.7
100°-110°	59.4	1.1
110°-120°	119.3	2.2
120°-130°	148.7	2.8
130°-140°	153.2	2.9
140°-150°	136.0	2.5
150°-160°	103.7	1.9
160°-170°	51.8	1.0
170°-180°	13.6	0.3
0°-90°	4517.7	84.6
0°-180°	5341.6	100.0

Coefficient of Utilization



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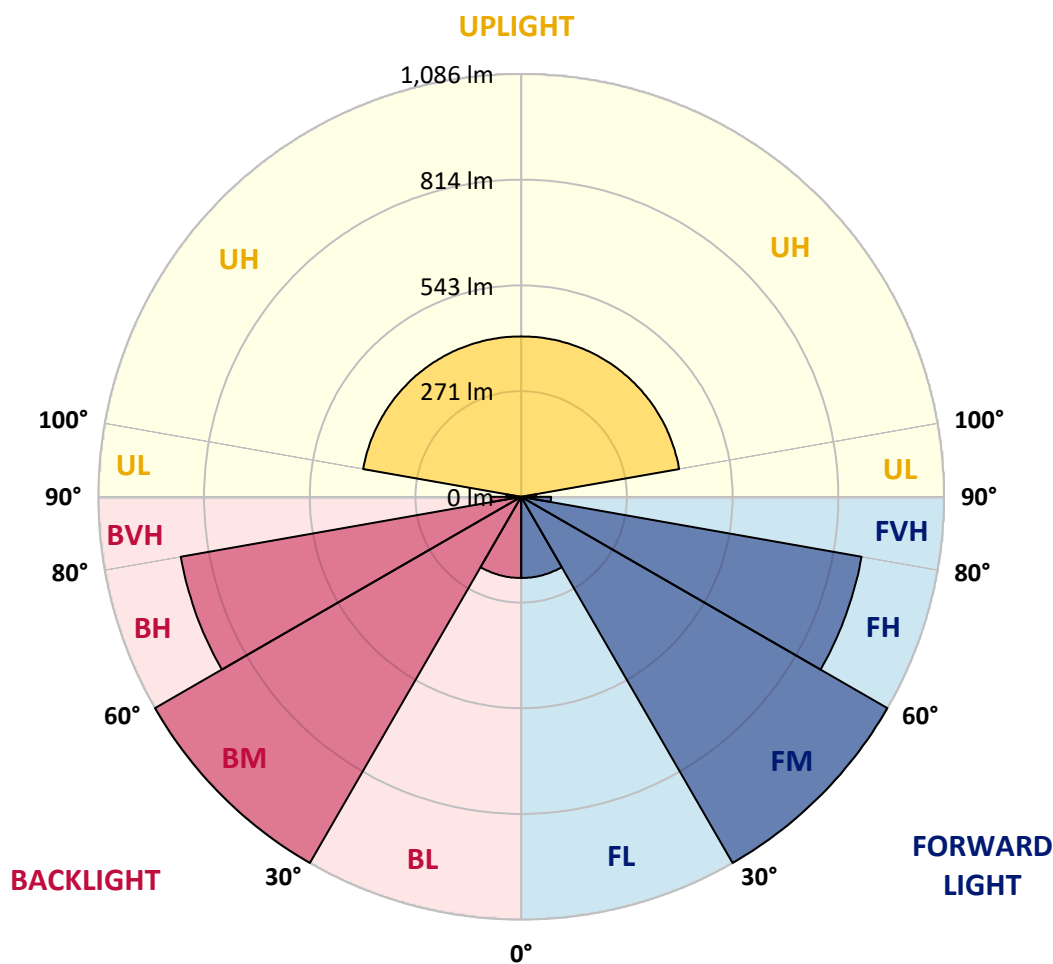
CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-LWR-LW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	208.5	3.9			
FM	(30°-60°)	1086.0	20.3			
FH	(60°-80°)	887.6	16.6			G1/1800
FVH	(80°-90°)	76.7	1.4			G1/100
BL	(0°-30°)	208.5	3.9	B1/500		
BM	(30°-60°)	1086.0	20.3	B2/2500		
BH	(60°-80°)	887.6	16.6	B2/1000		G1/1800
BVH	(80°-90°)	76.7	1.4			G1/100
UL	(90°-100°)	38.3	0.7		U2/50	
UH	(100°-180°)	412.0	7.7		U3/500	

BUG Rating: B2-U4-G1

Type V Short



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CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	375.6	375.6	375.6	375.6	375.6	375.6	375.6	375.6	375.6	375.6	375.6
2.5°	383.6	382.6	382.6	382.6	382.6	382.6	382.6	382.6	382.6	382.6	382.6
5°	385.6	385.6	386.6	386.6	387.6	387.6	387.6	388.6	388.6	388.6	389.6
7.5°	389.6	388.6	389.6	389.6	389.6	390.6	390.6	390.6	391.6	392.6	392.6
10°	402.6	401.6	402.6	402.6	402.6	400.6	400.6	401.6	400.6	400.6	400.6
12.5°	417.6	417.6	418.6	419.6	419.6	418.6	417.6	416.6	415.6	415.6	415.6
15°	431.6	432.6	433.6	435.6	436.6	436.6	437.6	438.6	437.6	437.6	436.6
17.5°	453.5	455.5	456.5	457.5	457.5	457.5	459.5	462.5	465.5	467.5	465.5
20°	490.5	491.5	493.5	493.5	492.5	493.5	495.5	496.5	498.5	500.5	501.5
22.5°	515.5	517.5	520.5	520.5	519.5	520.5	522.5	522.5	520.5	521.5	523.5
25°	536.5	537.5	539.5	540.5	541.5	546.4	550.4	549.4	545.4	546.4	545.4
27.5°	561.4	563.4	565.4	565.4	565.4	568.4	572.4	574.4	577.4	576.4	573.4
30°	594.4	597.4	598.4	597.4	599.4	602.4	601.4	603.4	608.4	613.4	607.4
32.5°	620.4	623.4	626.4	630.4	637.4	641.3	639.4	640.4	643.3	647.3	647.3
35°	659.3	664.3	666.3	667.3	674.3	682.3	688.3	693.3	692.3	689.3	694.3
37.5°	718.3	723.3	725.3	729.3	738.3	740.2	749.2	761.2	765.2	761.2	761.2
40°	781.2	786.2	796.2	805.2	819.2	822.2	833.2	838.2	848.1	849.1	843.1
42.5°	833.2	839.1	841.1	856.1	875.1	889.1	901.1	902.1	909.1	915.1	908.1
45°	889.1	894.1	897.1	911.1	921.1	938.0	957.0	965.0	968.0	967.0	971.0
47.5°	941.0	948.0	951.0	962.0	974.0	988.0	999.0	1022.0	1027.0	1017.0	1026.0
50°	973.0	981.0	988.0	1012.0	1033.0	1043.9	1052.9	1071.9	1082.9	1073.9	1076.9
52.5°	1023.0	1025.0	1031.0	1040.9	1071.9	1108.9	1118.9	1124.9	1140.8	1145.8	1131.9
55°	1090.9	1097.9	1102.9	1115.9	1128.9	1154.8	1198.8	1206.8	1202.8	1226.8	1201.8
57.5°	1100.9	1113.9	1128.9	1157.8	1183.8	1191.8	1217.8	1248.7	1245.7	1248.7	1250.7
59°	1094.9	1105.9	1118.9	1148.8	1193.8	1204.8	1217.8	1245.7	1258.7	1241.7	1261.7
60°	1096.9	1104.9	1111.9	1135.8	1183.8	1208.8	1216.8	1233.7	1258.7	1235.7	1259.7
62.5°	1088.9	1098.9	1106.9	1120.9	1143.8	1178.8	1209.8	1201.8	1237.7	1219.8	1232.8
65°	1045.9	1056.9	1072.9	1092.9	1119.9	1129.9	1160.8	1177.8	1169.8	1189.8	1168.8
67.5°	974.0	984.0	994.0	1018.0	1047.9	1060.9	1068.9	1099.9	1088.9	1111.9	1087.9
70°	878.1	889.1	903.1	916.1	943.0	954.0	963.0	977.0	981.0	981.0	979.0
72.5°	763.2	772.2	781.2	794.2	810.2	820.2	824.2	827.2	843.1	837.2	838.2
75°	633.4	642.3	646.3	651.3	662.3	661.3	665.3	663.3	673.3	669.3	667.3
77.5°	495.5	498.5	509.5	509.5	506.5	511.5	506.5	503.5	501.5	503.5	503.5
80°	343.7	352.6	359.6	364.6	366.6	364.6	365.6	361.6	361.6	358.6	359.6
82.5°	211.8	220.8	223.8	228.8	229.8	229.8	229.8	226.8	227.8	224.8	226.8
85°	103.9	103.9	107.9	112.9	113.9	115.9	115.9	115.9	115.9	115.9	116.9
87.5°	26.0	26.0	28.0	31.0	31.0	32.0	33.0	34.0	34.0	35.0	35.0
90°	36.0	36.0	36.0	36.0	35.0	34.0	31.0	29.0	27.0	26.0	26.0
92.5°	40.0	39.0	39.0	38.0	36.0	34.0	32.0	29.0	27.0	27.0	27.0
95°	44.0	43.0	42.0	41.0	38.0	36.0	34.0	32.0	31.0	30.0	30.0
97.5°	42.0	42.0	41.0	40.0	38.0	37.0	36.0	35.0	34.0	33.0	32.0
100°	45.0	45.0	45.0	44.0	42.0	40.0	39.0	38.0	36.0	36.0	35.0
102.5°	51.0	51.0	50.0	49.0	47.0	46.0	45.0	44.0	42.0	42.0	42.0
105°	60.0	60.0	59.0	57.0	55.0	54.0	53.0	53.0	51.0	52.0	52.0
107.5°	72.0	72.0	72.0	70.0	68.0	67.0	66.0	66.0	66.0	68.0	68.0

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CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.0
112.5°	101.0	102.0	104.0	108.0	106.0	107.0	107.0	110.0	108.0	107.0	103.0
115°	121.0	122.0	123.0	128.0	126.0	128.0	127.0	129.0	126.0	124.0	120.0
117.5°	140.0	141.0	141.0	144.0	141.0	141.0	140.0	141.0	138.0	136.0	135.0
120°	152.0	153.0	154.0	155.0	151.0	149.0	147.0	149.0	147.0	147.0	148.0
122.5°	161.0	162.0	163.0	164.0	159.0	154.0	153.0	155.0	156.0	158.0	158.0
125°	169.0	169.0	170.0	172.0	168.0	163.0	160.0	165.0	166.0	168.0	167.0
127.5°	177.0	177.0	179.0	181.0	177.0	171.0	170.0	176.0	177.0	178.0	175.0
130°	187.0	188.0	190.0	191.0	185.0	179.0	179.0	186.0	187.0	186.0	183.0
132.5°	198.0	199.0	200.0	201.0	193.0	186.0	187.0	193.0	195.0	195.0	191.0
135°	210.0	210.0	211.0	209.0	199.0	192.0	193.0	199.0	202.0	201.0	197.0
137.5°	221.0	219.0	217.0	213.0	203.0	197.0	198.0	205.0	207.0	208.0	203.0
140°	229.0	226.0	222.0	216.0	205.0	200.0	201.0	207.0	210.0	213.0	212.0
142.5°	235.0	231.0	225.0	218.0	206.0	201.0	202.0	208.0	212.0	218.0	218.0
145°	235.0	230.0	225.0	218.0	207.0	202.0	204.0	211.0	215.0	223.0	225.0
147.5°	230.0	227.0	223.0	219.0	210.0	207.0	209.0	216.0	220.0	229.0	233.0
150°	224.0	221.0	219.0	220.0	215.0	214.0	216.0	222.0	227.0	235.0	239.0
152.5°	216.0	214.0	216.0	221.0	220.0	220.0	224.0	230.0	234.0	241.0	241.0
155°	208.0	207.0	211.0	219.0	222.0	224.0	229.0	237.0	239.0	243.0	239.0
157.5°	203.0	203.0	207.0	216.0	220.0	224.0	229.0	234.0	232.0	235.0	230.0
160°	199.0	198.0	203.0	210.0	212.0	213.0	216.0	219.0	216.0	219.0	216.0
162.5°	185.0	184.0	188.0	193.0	194.0	193.0	196.0	198.0	195.0	198.0	196.0
165°	169.0	167.0	169.0	173.0	173.0	173.0	175.0	176.0	174.0	177.0	175.0
167.5°	154.0	152.0	153.0	156.0	156.0	155.0	157.0	159.0	157.0	159.0	158.0
170°	142.0	141.0	142.0	145.0	144.0	144.0	146.0	147.0	146.0	147.0	147.0
172.5°	137.0	135.0	136.0	139.0	139.0	138.0	140.0	141.0	140.0	141.0	140.0
175°	136.0	134.0	135.0	137.0	137.0	137.0	138.0	139.0	138.0	139.0	138.0
177.5°	137.0	136.0	136.0	139.0	138.0	138.0	139.0	140.0	139.0	139.0	138.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	375.6	375.6	375.6	375.6	375.6	375.6	375.6	375.6
2.5°	382.6	382.6	382.6	382.6	382.6	382.6	382.6	382.6
5°	389.6	388.6	388.6	387.6	387.6	386.6	386.6	386.6
7.5°	393.6	393.6	392.6	391.6	390.6	390.6	391.6	391.6
10°	401.6	403.6	404.6	404.6	403.6	403.6	402.6	402.6
12.5°	414.6	416.6	418.6	420.6	420.6	419.6	417.6	416.6
15°	434.6	434.6	435.6	436.6	436.6	434.6	430.6	430.6
17.5°	461.5	459.5	456.5	457.5	458.5	457.5	453.5	455.5
20°	498.5	494.5	492.5	490.5	494.5	494.5	488.5	488.5
22.5°	525.5	522.5	517.5	516.5	519.5	521.5	516.5	513.5
25°	548.4	549.4	543.4	540.5	541.5	542.5	535.5	536.5
27.5°	573.4	574.4	571.4	566.4	564.4	567.4	562.4	560.4
30°	603.4	602.4	604.4	598.4	593.4	596.4	596.4	591.4
32.5°	642.3	639.4	640.4	633.4	627.4	626.4	622.4	616.4
35°	695.3	687.3	681.3	677.3	666.3	664.3	664.3	657.3
37.5°	764.2	752.2	741.2	741.2	724.3	719.3	722.3	713.3
40°	841.1	837.2	820.2	817.2	799.2	787.2	787.2	776.2
42.5°	897.1	902.1	882.1	870.1	858.1	839.1	841.1	827.2
45°	958.0	955.0	938.0	917.1	913.1	893.1	895.1	881.1
47.5°	1016.0	998.0	990.0	969.0	960.0	937.1	944.0	933.1
50°	1071.9	1051.9	1043.9	1019.0	1007.0	982.0	983.0	963.0
52.5°	1129.9	1111.9	1099.9	1067.9	1046.9	1029.0	1025.0	1016.0
55°	1204.8	1185.8	1156.8	1126.9	1110.9	1084.9	1087.9	1073.9
57.5°	1233.7	1221.8	1190.8	1172.8	1142.8	1116.9	1110.9	1085.9
59°	1232.8	1225.8	1194.8	1182.8	1139.8	1117.9	1106.9	1086.9
60°	1225.8	1223.8	1192.8	1177.8	1132.9	1112.9	1102.9	1089.9
62.5°	1204.8	1203.8	1168.8	1150.8	1113.9	1097.9	1091.9	1074.9
65°	1173.8	1156.8	1129.9	1117.9	1079.9	1067.9	1050.9	1034.0
67.5°	1099.9	1061.9	1057.9	1042.9	1010.0	995.0	984.0	968.0
70°	978.0	953.0	953.0	934.1	911.1	904.1	889.1	871.1
72.5°	826.2	820.2	823.2	801.2	790.2	786.2	773.2	757.2
75°	660.3	661.3	658.3	653.3	650.3	651.3	637.4	630.4
77.5°	500.5	509.5	507.5	500.5	507.5	506.5	494.5	491.5
80°	356.6	360.6	362.6	358.6	362.6	359.6	349.6	348.6
82.5°	224.8	225.8	227.8	223.8	224.8	223.8	216.8	216.8
85°	114.9	118.9	113.9	109.9	109.9	105.9	103.9	104.9
87.5°	34.0	36.0	32.0	32.0	30.0	28.0	27.0	27.0
90°	28.0	30.0	32.0	33.0	34.0	34.0	34.0	34.0
92.5°	28.0	30.0	32.0	33.0	35.0	36.0	36.0	36.0
95°	30.0	32.0	34.0	35.0	37.0	38.0	39.0	38.0
97.5°	33.0	34.0	34.0	35.0	36.0	36.0	36.0	36.0
100°	36.0	37.0	38.0	38.0	38.0	38.0	37.0	37.0
102.5°	43.0	44.0	44.0	42.0	42.0	41.0	41.0	41.0
105°	54.0	54.0	53.0	51.0	49.0	48.0	48.0	49.0
107.5°	68.0	68.0	66.0	63.0	60.0	59.0	59.0	60.0

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CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0
112.5°	102.0	102.0	105.0	103.0	100.0	98.0	95.0	94.0
115°	121.0	123.0	125.0	124.0	123.0	121.0	116.0	113.0
117.5°	138.0	140.0	141.0	139.0	139.0	139.0	133.0	129.0
120°	150.0	151.0	153.0	148.0	148.0	148.0	145.0	142.0
122.5°	159.0	160.0	162.0	156.0	155.0	156.0	153.0	150.0
125°	167.0	167.0	168.0	164.0	163.0	164.0	160.0	158.0
127.5°	176.0	175.0	175.0	173.0	173.0	173.0	166.0	163.0
130°	183.0	182.0	183.0	181.0	184.0	181.0	171.0	169.0
132.5°	190.0	189.0	192.0	189.0	192.0	190.0	179.0	176.0
135°	196.0	197.0	201.0	199.0	199.0	195.0	185.0	184.0
137.5°	203.0	205.0	210.0	207.0	204.0	198.0	191.0	190.0
140°	212.0	214.0	217.0	214.0	209.0	202.0	195.0	195.0
142.5°	220.0	222.0	223.0	217.0	211.0	204.0	198.0	198.0
145°	230.0	230.0	227.0	217.0	211.0	205.0	201.0	202.0
147.5°	239.0	236.0	229.0	218.0	212.0	207.0	204.0	206.0
150°	242.0	240.0	232.0	220.0	214.0	211.0	210.0	211.0
152.5°	242.0	241.0	235.0	223.0	219.0	217.0	215.0	216.0
155°	238.0	237.0	234.0	227.0	224.0	223.0	220.0	219.0
157.5°	228.0	229.0	229.0	226.0	226.0	225.0	222.0	219.0
160°	215.0	217.0	219.0	219.0	221.0	222.0	218.0	215.0
162.5°	196.0	199.0	200.0	201.0	204.0	208.0	207.0	207.0
165°	176.0	179.0	181.0	181.0	185.0	189.0	190.0	192.0
167.5°	160.0	163.0	165.0	164.0	168.0	171.0	172.0	174.0
170°	148.0	150.0	152.0	152.0	155.0	158.0	159.0	160.0
172.5°	141.0	144.0	145.0	144.0	146.0	149.0	149.0	151.0
175°	138.0	140.0	141.0	140.0	141.0	143.0	143.0	144.0
177.5°	138.0	140.0	140.0	138.0	140.0	141.0	141.0	141.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)