

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: P198387

Luminaire Tested: **TT-C3-LED-E1-MQ-LWR-LW-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198387
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-C3-LED-E1-MQ-LWR-LW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6395.9 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 62.4
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



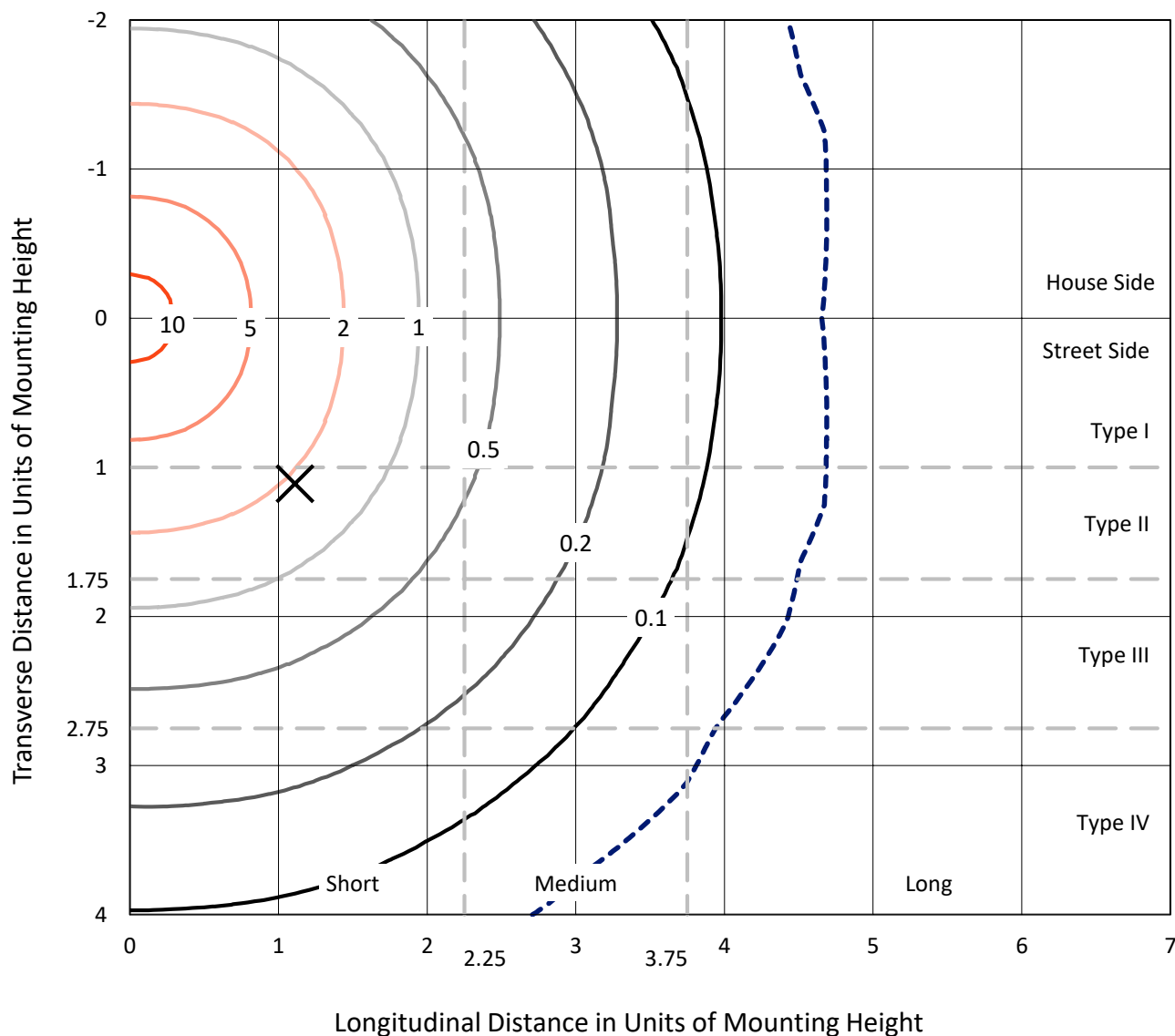
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

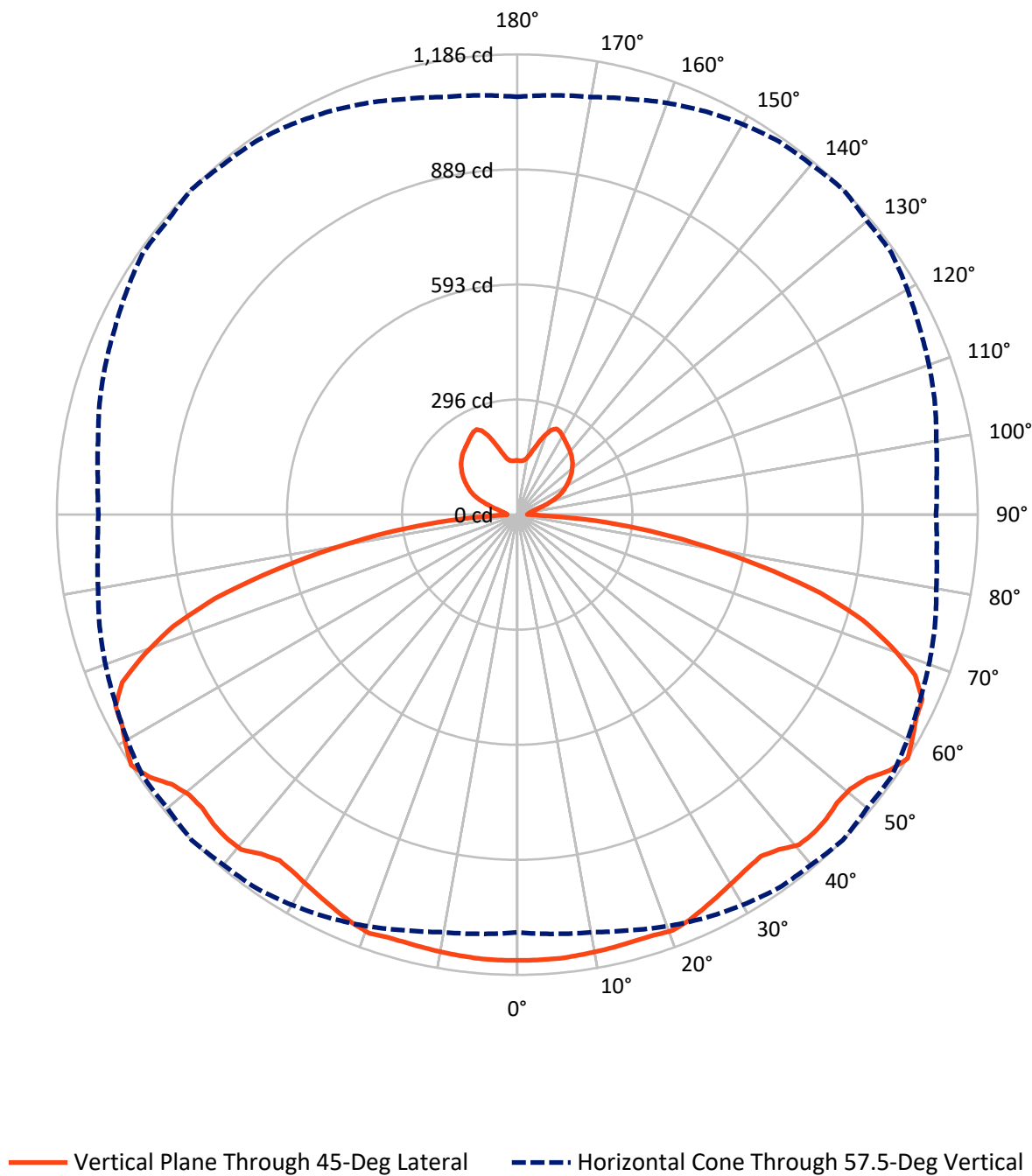


Based on 10 foot mounting height. Maximum calculated value = 11.5 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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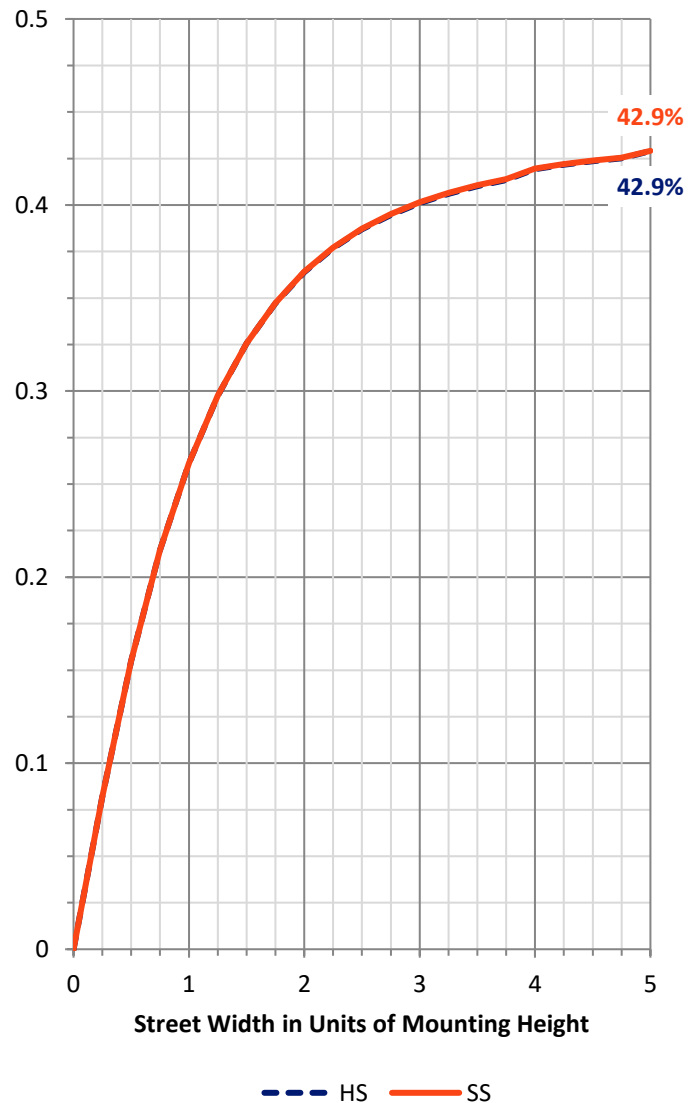
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2786.0	412.0	3198.0
	% Fixture	43.6	6.4	50.0
Street Side	Lumens	2786.0	412.0	3198.0
	% Fixture	43.6	6.4	50.0
Total	Lumens	5571.9	824.0	6395.9
	% Fixture	87.1	12.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.4	1.7
10°-20°	322.8	5.0
20°-30°	517.0	8.1
30°-40°	680.6	10.6
40°-50°	847.7	13.3
50°-60°	998.6	15.6
60°-70°	1061.6	16.6
70°-80°	796.1	12.4
80°-90°	238.2	3.7
90°-100°	38.3	0.6
100°-110°	59.4	0.9
110°-120°	119.3	1.9
120°-130°	148.7	2.3
130°-140°	153.2	2.4
140°-150°	136.0	2.1
150°-160°	103.7	1.6
160°-170°	51.8	0.8
170°-180°	13.6	0.2
0°-90°	5571.9	87.1
0°-180°	6395.9	100.0

Coefficient of Utilization



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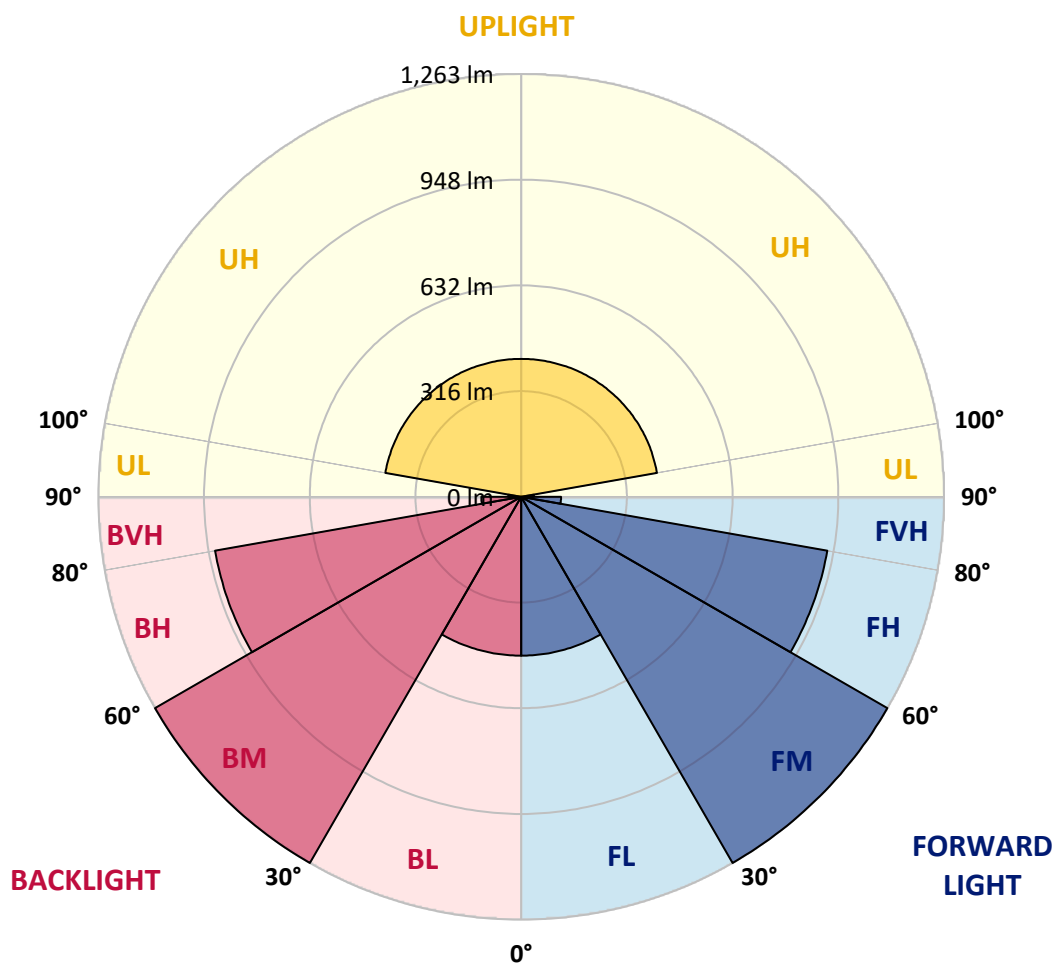
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	474.6	7.4			
FM	(30°-60°)	1263.4	19.8			
FH	(60°-80°)	928.8	14.5			G1/1800
FVH	(80°-90°)	119.1	1.9			G2/225
BL	(0°-30°)	474.6	7.4	B1/500		
BM	(30°-60°)	1263.4	19.8	B2/2500		
BH	(60°-80°)	928.8	14.5	B2/1000		G1/1800
BVH	(80°-90°)	119.1	1.9			G2/225
UL	(90°-100°)	38.3	0.6		U2/50	
UH	(100°-180°)	412.0	6.4		U3/500	

BUG Rating: B2-U4-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4
2.5°	1147.3	1147.3	1147.3	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4
5°	1147.3	1147.3	1147.3	1147.3	1147.3	1147.3	1148.4	1148.4	1148.4	1148.4	1148.4
7.5°	1144.9	1144.9	1144.9	1144.9	1144.9	1146.1	1146.1	1146.1	1146.1	1146.1	1146.1
10°	1142.6	1142.6	1142.6	1142.6	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8
12.5°	1140.3	1140.3	1139.1	1140.3	1140.3	1140.3	1141.5	1141.5	1141.5	1141.5	1141.5
15°	1135.6	1135.6	1136.8	1136.8	1138.0	1138.0	1138.0	1138.0	1139.1	1139.1	1139.1
17.5°	1133.3	1133.3	1134.5	1135.6	1135.6	1136.8	1138.0	1138.0	1139.1	1139.1	1139.1
20°	1136.8	1136.8	1136.8	1138.0	1139.1	1140.3	1141.5	1142.6	1142.6	1143.8	1142.6
22.5°	1129.8	1129.8	1129.8	1131.0	1131.0	1131.0	1132.1	1133.3	1133.3	1134.5	1133.3
25°	1117.0	1117.0	1118.1	1118.1	1119.3	1119.3	1120.5	1120.5	1120.5	1121.6	1121.6
27.5°	1104.1	1103.0	1105.3	1105.3	1106.5	1106.5	1107.6	1108.8	1108.8	1108.8	1110.0
30°	1090.1	1090.1	1091.3	1091.3	1092.5	1093.6	1094.8	1096.0	1096.0	1097.1	1097.1
32.5°	1075.0	1076.2	1077.3	1078.5	1079.7	1082.0	1083.2	1084.3	1085.5	1086.7	1085.5
35°	1064.5	1065.7	1066.8	1069.2	1072.7	1075.0	1077.3	1079.7	1080.8	1080.8	1080.8
37.5°	1066.8	1068.0	1070.3	1075.0	1080.8	1084.3	1089.0	1092.5	1093.6	1094.8	1094.8
40°	1079.7	1082.0	1085.5	1091.3	1098.3	1104.1	1111.1	1114.6	1117.0	1118.1	1117.0
42.5°	1078.5	1082.0	1085.5	1092.5	1100.6	1106.5	1113.5	1117.0	1119.3	1120.5	1119.3
45°	1075.0	1077.3	1080.8	1087.8	1093.6	1101.8	1108.8	1112.3	1115.8	1117.0	1115.8
47.5°	1066.8	1066.8	1068.0	1075.0	1083.2	1093.6	1099.5	1105.3	1108.8	1108.8	1108.8
50°	1056.3	1061.0	1063.3	1072.7	1080.8	1090.1	1100.6	1108.8	1110.0	1111.1	1110.0
52.5°	1056.3	1057.5	1065.7	1071.5	1087.8	1101.8	1112.3	1120.5	1127.5	1128.6	1128.6
55°	1075.0	1077.3	1082.0	1096.0	1108.8	1129.8	1147.3	1154.3	1158.9	1163.6	1158.9
57.5°	1076.2	1084.3	1092.5	1108.8	1128.6	1146.1	1161.3	1174.1	1177.6	1185.8	1176.4
60°	1062.2	1064.5	1072.7	1092.5	1118.1	1136.8	1150.8	1162.4	1174.1	1169.4	1174.1
62.5°	1040.0	1045.8	1057.5	1072.7	1093.6	1115.8	1136.8	1140.3	1157.8	1153.1	1160.1
65°	1022.5	1027.2	1038.8	1061.0	1086.7	1100.6	1124.0	1138.0	1136.8	1146.1	1135.6
67.5°	979.4	982.9	993.4	1015.5	1040.0	1061.0	1068.0	1090.1	1092.5	1105.3	1093.6
70°	908.3	916.4	931.6	952.6	972.4	989.9	1002.7	1014.4	1021.4	1023.7	1021.4
72.5°	819.7	832.5	844.1	864.0	883.8	895.4	903.6	919.9	924.6	931.6	929.3
75°	728.7	728.7	740.4	755.5	770.7	777.7	782.3	792.8	798.7	806.8	799.8
77.5°	604.0	610.9	621.4	634.3	631.9	635.4	635.4	641.3	638.9	644.8	649.4
80°	473.4	480.4	489.7	499.0	497.9	489.7	495.5	488.5	486.2	487.4	490.9
82.5°	338.1	342.8	350.9	356.8	356.8	350.9	353.3	346.3	348.6	342.8	347.4
85°	193.5	199.4	205.2	211.0	211.0	207.5	211.0	201.7	202.9	202.9	202.9
87.5°	47.8	52.5	54.8	58.3	56.0	61.8	65.3	59.5	60.6	58.3	61.8
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
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
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°	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4	1148.4
2.5°	1148.4	1147.3	1148.4	1148.4	1148.4	1148.4	1147.3	1147.3
5°	1148.4	1148.4	1148.4	1147.3	1147.3	1147.3	1147.3	1147.3
7.5°	1146.1	1146.1	1146.1	1144.9	1144.9	1144.9	1144.9	1144.9
10°	1143.8	1143.8	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6
12.5°	1141.5	1141.5	1140.3	1140.3	1140.3	1140.3	1140.3	1139.1
15°	1139.1	1139.1	1138.0	1138.0	1136.8	1136.8	1135.6	1135.6
17.5°	1139.1	1138.0	1136.8	1135.6	1135.6	1134.5	1133.3	1133.3
20°	1142.6	1141.5	1140.3	1139.1	1138.0	1136.8	1136.8	1135.6
22.5°	1133.3	1132.1	1131.0	1131.0	1129.8	1129.8	1129.8	1128.6
25°	1121.6	1120.5	1120.5	1118.1	1118.1	1117.0	1117.0	1115.8
27.5°	1108.8	1107.6	1107.6	1106.5	1105.3	1104.1	1103.0	1103.0
30°	1096.0	1094.8	1094.8	1093.6	1091.3	1091.3	1090.1	1089.0
32.5°	1084.3	1084.3	1083.2	1080.8	1078.5	1077.3	1075.0	1075.0
35°	1080.8	1078.5	1076.2	1072.7	1069.2	1066.8	1065.7	1064.5
37.5°	1093.6	1090.1	1084.3	1080.8	1076.2	1071.5	1069.2	1066.8
40°	1115.8	1110.0	1104.1	1098.3	1091.3	1085.5	1080.8	1079.7
42.5°	1117.0	1113.5	1107.6	1100.6	1092.5	1085.5	1080.8	1079.7
45°	1113.5	1108.8	1101.8	1093.6	1087.8	1079.7	1076.2	1075.0
47.5°	1105.3	1100.6	1093.6	1082.0	1073.8	1068.0	1066.8	1066.8
50°	1110.0	1100.6	1089.0	1082.0	1073.8	1064.5	1061.0	1058.7
52.5°	1120.5	1111.1	1104.1	1089.0	1071.5	1063.3	1058.7	1055.2
55°	1154.3	1149.6	1128.6	1107.6	1094.8	1084.3	1079.7	1077.3
57.5°	1176.4	1160.1	1142.6	1128.6	1113.5	1096.0	1084.3	1078.5
60°	1164.8	1147.3	1139.1	1120.5	1089.0	1070.3	1063.3	1059.8
62.5°	1139.1	1139.1	1117.0	1087.8	1076.2	1059.8	1047.0	1042.3
65°	1138.0	1122.8	1100.6	1090.1	1062.2	1037.7	1024.9	1022.5
67.5°	1089.0	1068.0	1062.2	1038.8	1015.5	993.4	984.0	979.4
70°	1014.4	1007.4	989.9	974.7	953.7	930.4	917.6	912.9
72.5°	919.9	908.3	900.1	887.3	867.5	838.3	827.8	822.0
75°	791.7	785.8	785.8	771.8	753.2	735.7	734.5	732.2
77.5°	636.6	638.9	644.8	629.6	635.4	626.1	617.9	612.1
80°	483.9	494.4	495.5	499.0	502.5	489.7	483.9	476.9
82.5°	344.0	349.8	356.8	357.9	360.3	350.9	346.3	339.3
85°	202.9	206.4	212.2	212.2	212.2	204.0	201.7	195.9
87.5°	59.5	59.5	63.0	59.5	59.5	59.5	53.6	57.1
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
110°	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0

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CATALOG NUMBER: TT-C3-LED-E1-MQ-LWR-LW-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
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)