

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: P198414

Luminaire Tested: **TT-C3-LED-E1-WQ-CG-MS/DIM-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198414
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-WQ-CG-MS/DIM-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6236.5 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U4 - G1

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

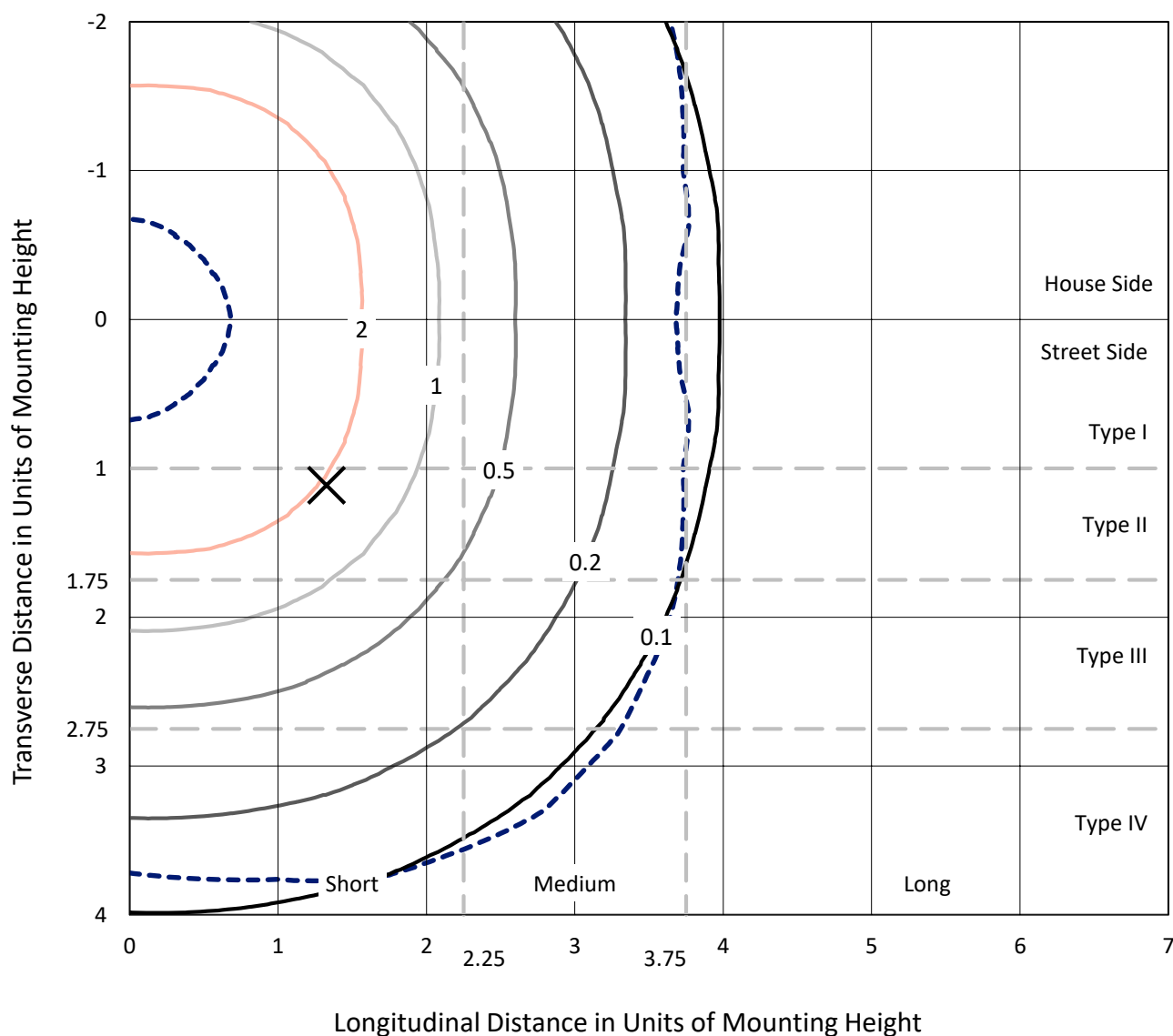


REPORT NUMBER: P198414

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-MS/DIM-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

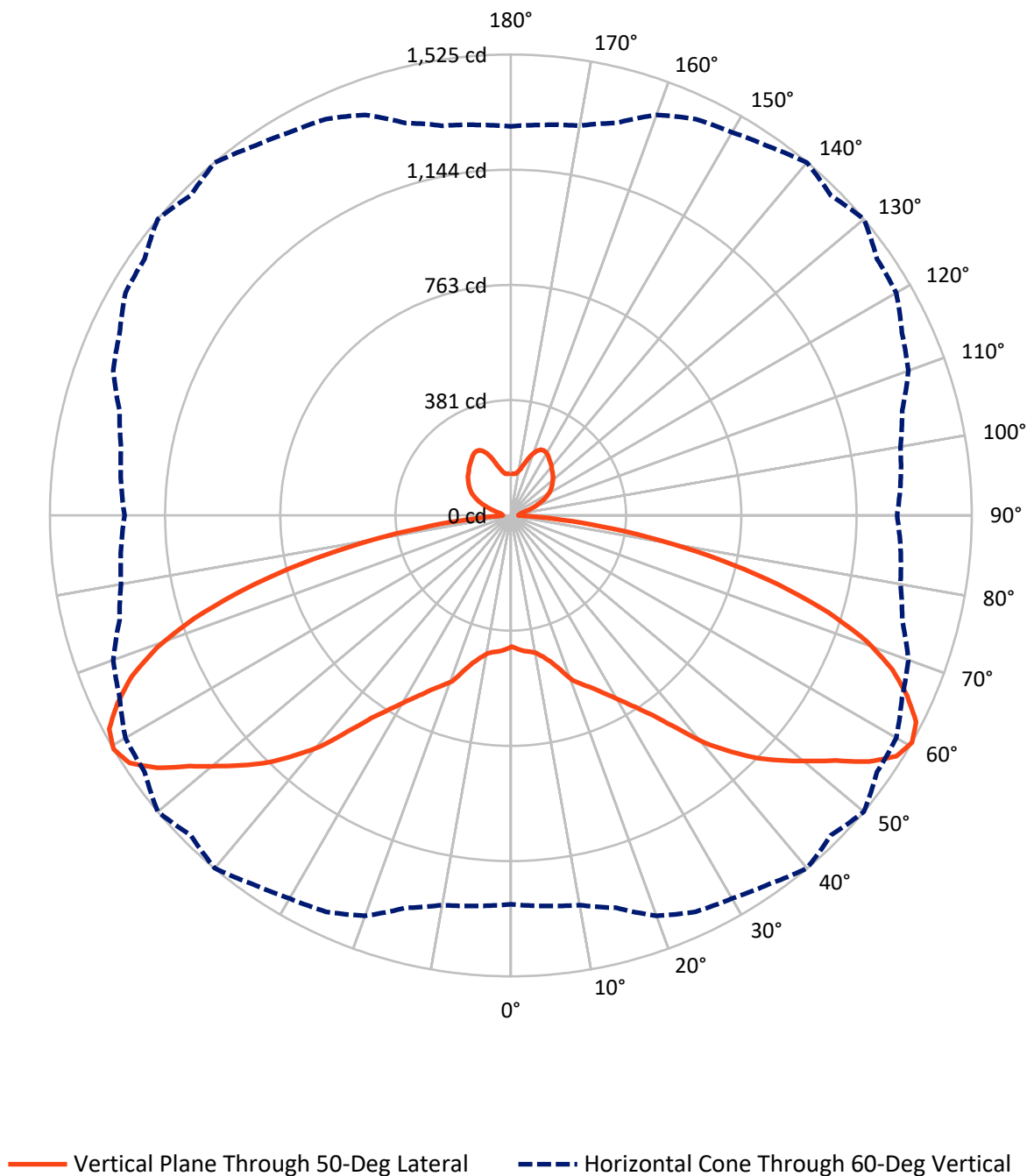


Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P198414

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-MS/DIM-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198414

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-MS/DIM-UPL

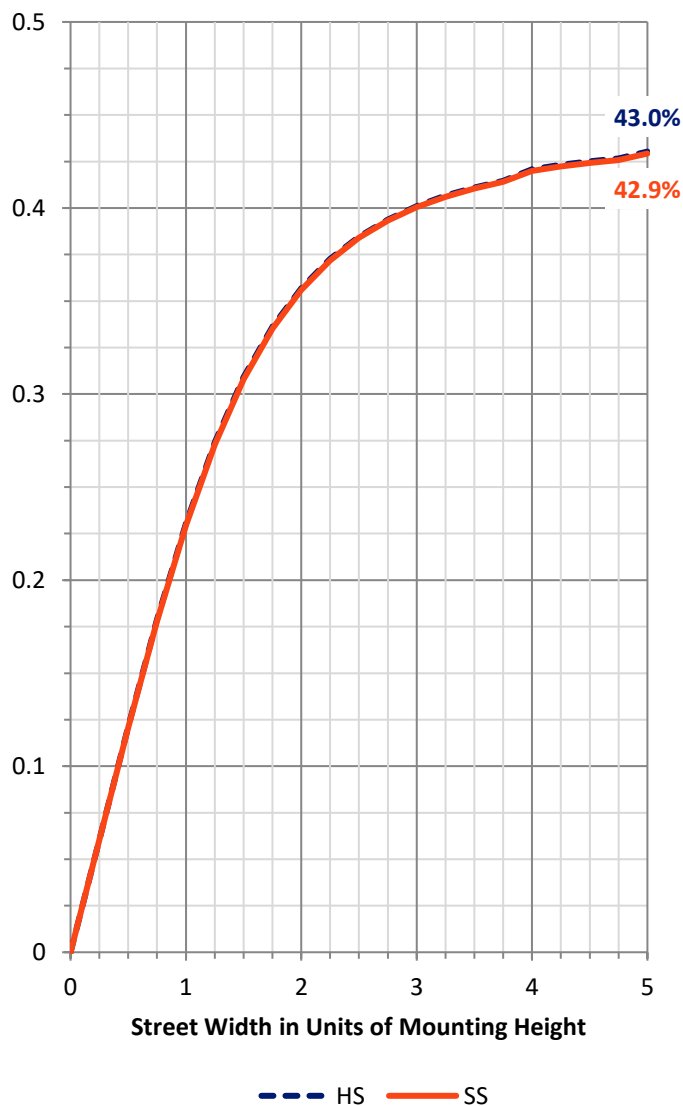
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2706.3	412.0	3118.3
	% Fixture	43.4	6.6	50.0
Street Side	Lumens	2706.3	412.0	3118.3
	% Fixture	43.4	6.6	50.0
Total	Lumens	5412.6	824.0	6236.5
	% Fixture	86.8	13.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	0.7
10°-20°	145.9	2.3
20°-30°	294.6	4.7
30°-40°	509.2	8.2
40°-50°	845.7	13.6
50°-60°	1201.8	19.3
60°-70°	1312.7	21.0
70°-80°	872.1	14.0
80°-90°	187.4	3.0
90°-100°	38.3	0.6
100°-110°	59.4	1.0
110°-120°	119.3	1.9
120°-130°	148.7	2.4
130°-140°	153.2	2.5
140°-150°	136.0	2.2
150°-160°	103.7	1.7
160°-170°	51.8	0.8
170°-180°	13.6	0.2
0°-90°	5412.6	86.8
0°-180°	6236.5	100.0

Coefficient of Utilization



REPORT NUMBER: P198414

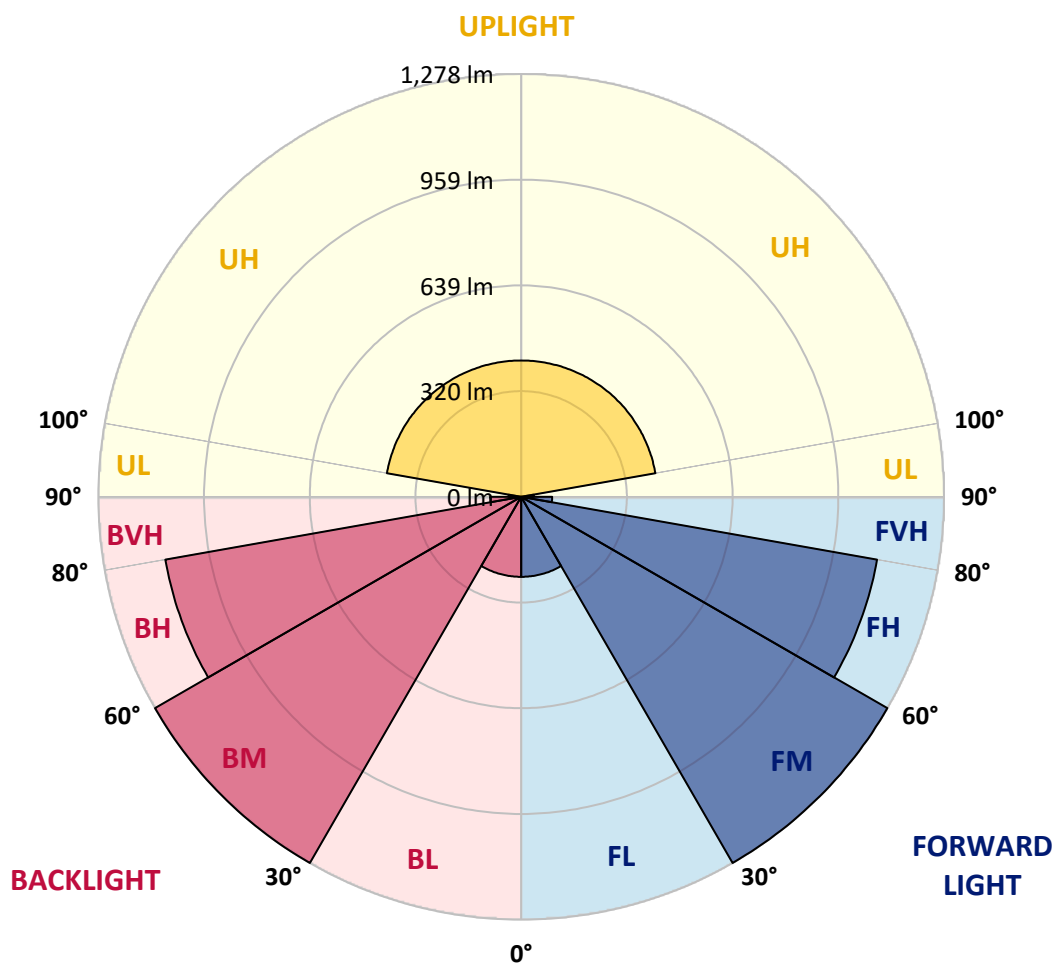
CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-MS/DIM-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	241.8	3.9			
FM	(30°-60°)	1278.3	20.5			
FH	(60°-80°)	1092.4	17.5			G1/1800
FVH	(80°-90°)	93.7	1.5			G1/100
BL	(0°-30°)	241.8	3.9	B1/500		
BM	(30°-60°)	1278.3	20.5	B2/2500		
BH	(60°-80°)	1092.4	17.5	B3/2500		G1/1800
BVH	(80°-90°)	93.7	1.5			G1/100
UL	(90°-100°)	38.3	0.6		U2/50	
UH	(100°-180°)	412.0	6.6		U3/500	

BUG Rating: B3-U4-G1

Type V Short



REPORT NUMBER: P198414

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-MS/DIM-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9
2.5°	442.9	442.9	442.9	442.9	442.9	442.9	442.9	442.9	441.8	442.9	442.9
5°	447.3	447.3	447.3	448.5	448.5	448.5	449.6	449.6	449.6	450.7	450.7
7.5°	450.7	450.7	450.7	450.7	451.8	451.8	451.8	452.9	452.9	454.1	455.2
10°	465.2	465.2	465.2	465.2	465.2	464.1	464.1	464.1	463.0	463.0	463.0
12.5°	483.1	484.3	485.4	485.4	485.4	485.4	483.1	480.9	480.9	480.9	480.9
15°	499.9	501.0	502.1	504.4	505.5	506.6	506.6	506.6	506.6	506.6	504.4
17.5°	526.7	527.9	527.9	529.0	530.1	530.1	531.2	534.6	539.1	541.3	539.1
20°	568.1	570.4	571.5	571.5	572.6	571.5	573.7	576.0	579.3	581.5	582.7
22.5°	598.3	600.6	603.9	603.9	603.9	602.8	605.0	606.2	605.0	605.0	607.3
25°	621.8	624.0	626.3	627.4	629.6	634.1	638.6	638.6	635.2	634.1	634.1
27.5°	652.0	655.4	655.4	656.5	658.7	662.1	666.5	669.9	672.1	669.9	668.8
30°	691.1	693.4	694.5	693.4	697.9	699.0	700.1	702.3	709.0	713.5	707.9
32.5°	721.3	724.7	728.1	732.5	742.6	747.1	745.9	748.2	750.4	754.9	756.0
35°	767.2	772.8	773.9	777.3	789.6	796.3	806.3	811.9	810.8	805.2	813.1
37.5°	836.5	843.2	844.4	850.0	862.3	867.9	879.0	893.6	896.9	889.1	893.6
40°	909.2	918.2	926.0	938.3	958.4	965.1	978.6	986.4	997.6	998.7	990.9
42.5°	970.7	980.8	980.8	1002.1	1024.4	1043.4	1060.2	1061.3	1069.2	1080.3	1069.2
45°	1036.7	1044.6	1047.9	1065.8	1079.2	1103.8	1128.4	1137.4	1140.7	1143.0	1146.3
47.5°	1097.1	1107.2	1110.5	1126.2	1140.7	1163.1	1178.8	1205.6	1212.3	1203.4	1212.3
50°	1135.1	1146.3	1155.3	1187.7	1213.4	1232.4	1245.9	1269.3	1282.8	1276.1	1277.2
52.5°	1194.4	1197.8	1206.7	1224.6	1261.5	1313.0	1328.6	1336.4	1355.5	1365.5	1347.6
55°	1274.9	1286.1	1292.8	1314.1	1333.1	1370.0	1429.3	1441.6	1437.1	1468.4	1438.2
57.5°	1288.4	1305.1	1326.4	1366.6	1400.2	1420.3	1457.2	1499.7	1498.6	1503.1	1504.2
60°	1287.2	1297.3	1309.6	1344.3	1410.3	1447.2	1463.9	1489.7	1524.3	1497.5	1525.4
62.5°	1279.4	1293.9	1307.4	1332.0	1367.8	1420.3	1467.3	1463.9	1510.9	1489.7	1505.3
65°	1232.4	1245.9	1270.5	1302.9	1346.5	1371.1	1418.1	1448.3	1441.6	1470.6	1441.6
67.5°	1150.8	1163.1	1183.2	1221.3	1267.1	1302.9	1319.7	1370.0	1364.4	1396.8	1362.2
70°	1039.0	1054.6	1078.1	1104.9	1149.7	1187.7	1206.7	1239.1	1254.8	1252.6	1250.3
72.5°	904.8	918.2	937.2	966.3	1004.3	1041.2	1055.7	1080.3	1106.1	1098.2	1100.5
75°	754.9	766.1	780.6	798.5	834.3	863.4	880.2	902.5	922.7	917.1	914.8
77.5°	581.5	595.0	610.6	627.4	641.9	668.8	681.1	696.7	713.5	710.2	711.3
80°	407.1	418.3	428.3	446.2	457.4	466.4	479.8	486.5	498.8	496.6	499.9
82.5°	248.3	256.1	262.8	271.8	281.8	279.6	280.7	288.5	298.6	293.0	302.0
85°	121.9	120.8	127.5	129.7	136.4	135.3	134.2	138.7	144.3	140.9	140.9
87.5°	31.3	31.3	31.3	32.4	35.8	39.1	35.8	38.0	40.3	41.4	40.3
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

REPORT NUMBER: P198414

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-MS/DIM-UPL

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

REPORT NUMBER: P198414

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-MS/DIM-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9
2.5°	441.8	442.9	441.8	442.9	442.9	442.9	442.9	441.8
5°	450.7	449.6	449.6	449.6	448.5	447.3	447.3	447.3
7.5°	455.2	455.2	454.1	452.9	451.8	451.8	454.1	452.9
10°	465.2	466.4	467.5	468.6	467.5	466.4	466.4	465.2
12.5°	480.9	482.0	484.3	486.5	486.5	485.4	483.1	482.0
15°	503.3	502.1	503.3	505.5	505.5	502.1	498.8	497.7
17.5°	534.6	531.2	529.0	529.0	531.2	527.9	524.5	525.6
20°	578.2	572.6	571.5	568.1	571.5	571.5	565.9	565.9
22.5°	609.5	605.0	600.6	597.2	601.7	603.9	598.3	593.9
25°	638.6	637.5	630.8	627.4	627.4	628.5	620.7	621.8
27.5°	667.7	667.7	663.2	657.6	655.4	658.7	652.0	649.8
30°	702.3	699.0	702.3	694.5	688.9	692.3	692.3	687.8
32.5°	747.1	742.6	745.9	737.0	729.2	728.1	722.5	715.8
35°	810.8	799.6	794.0	789.6	773.9	772.8	771.7	766.1
37.5°	891.3	876.8	864.5	865.6	843.2	837.7	837.7	829.8
40°	987.5	978.6	960.7	954.0	931.6	917.1	915.9	901.4
42.5°	1054.6	1058.0	1034.5	1018.8	1000.9	978.6	979.7	964.0
45°	1128.4	1121.7	1100.5	1074.7	1066.9	1042.3	1043.4	1027.8
47.5°	1198.9	1174.3	1163.1	1135.1	1122.8	1094.9	1098.2	1087.1
50°	1268.2	1241.4	1229.1	1198.9	1178.8	1149.7	1146.3	1122.8
52.5°	1342.0	1316.3	1299.5	1255.9	1229.1	1206.7	1197.8	1186.6
55°	1438.2	1412.5	1371.1	1328.6	1308.5	1273.8	1270.5	1255.9
57.5°	1480.7	1460.6	1417.0	1389.0	1348.7	1313.0	1299.5	1271.6
60°	1479.6	1472.9	1428.2	1400.2	1340.9	1309.6	1295.1	1278.3
62.5°	1467.3	1459.5	1406.9	1375.6	1321.9	1295.1	1283.9	1262.6
65°	1442.7	1415.8	1368.9	1343.2	1285.0	1261.5	1236.9	1217.9
67.5°	1373.4	1317.4	1296.2	1263.8	1206.7	1182.1	1158.6	1139.6
70°	1243.6	1202.2	1183.2	1143.0	1093.8	1078.1	1049.0	1027.8
72.5°	1078.1	1055.7	1035.6	992.0	957.3	941.7	912.6	894.7
75°	894.7	881.3	853.3	820.9	789.6	784.0	752.7	745.9
77.5°	694.5	682.2	659.8	636.3	621.8	610.6	582.7	580.4
80°	486.5	478.7	460.8	450.7	440.6	430.6	411.6	409.3
82.5°	287.4	281.8	282.9	272.9	267.3	265.1	250.5	251.6
85°	138.7	134.2	134.2	134.2	128.6	127.5	118.5	119.7
87.5°	40.3	35.8	35.8	35.8	33.6	33.6	29.1	30.2
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

REPORT NUMBER: P198414

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-MS/DIM-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)