

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: P198415

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198415
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-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6360 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U4 - 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



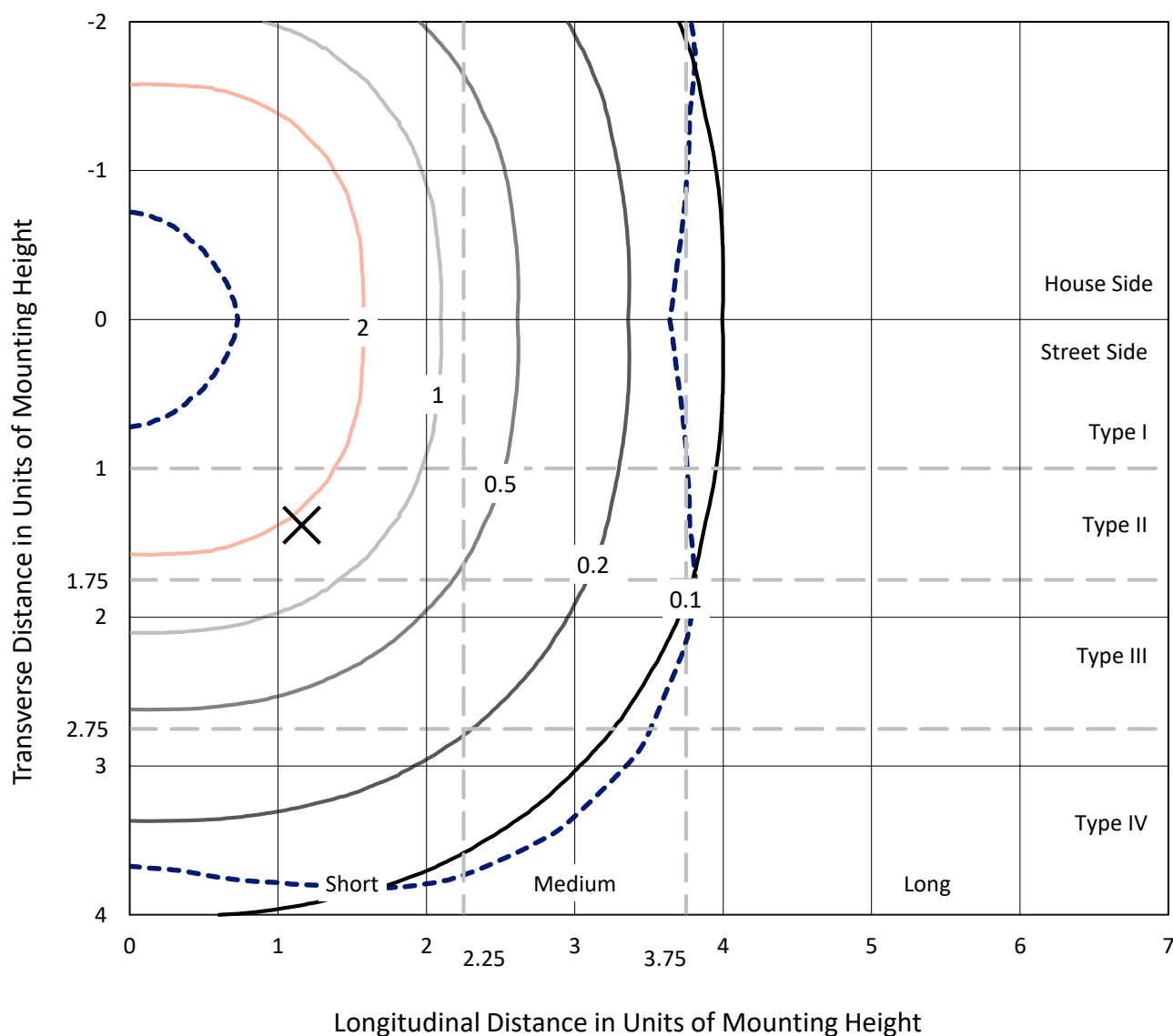
REPORT NUMBER: P198415

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

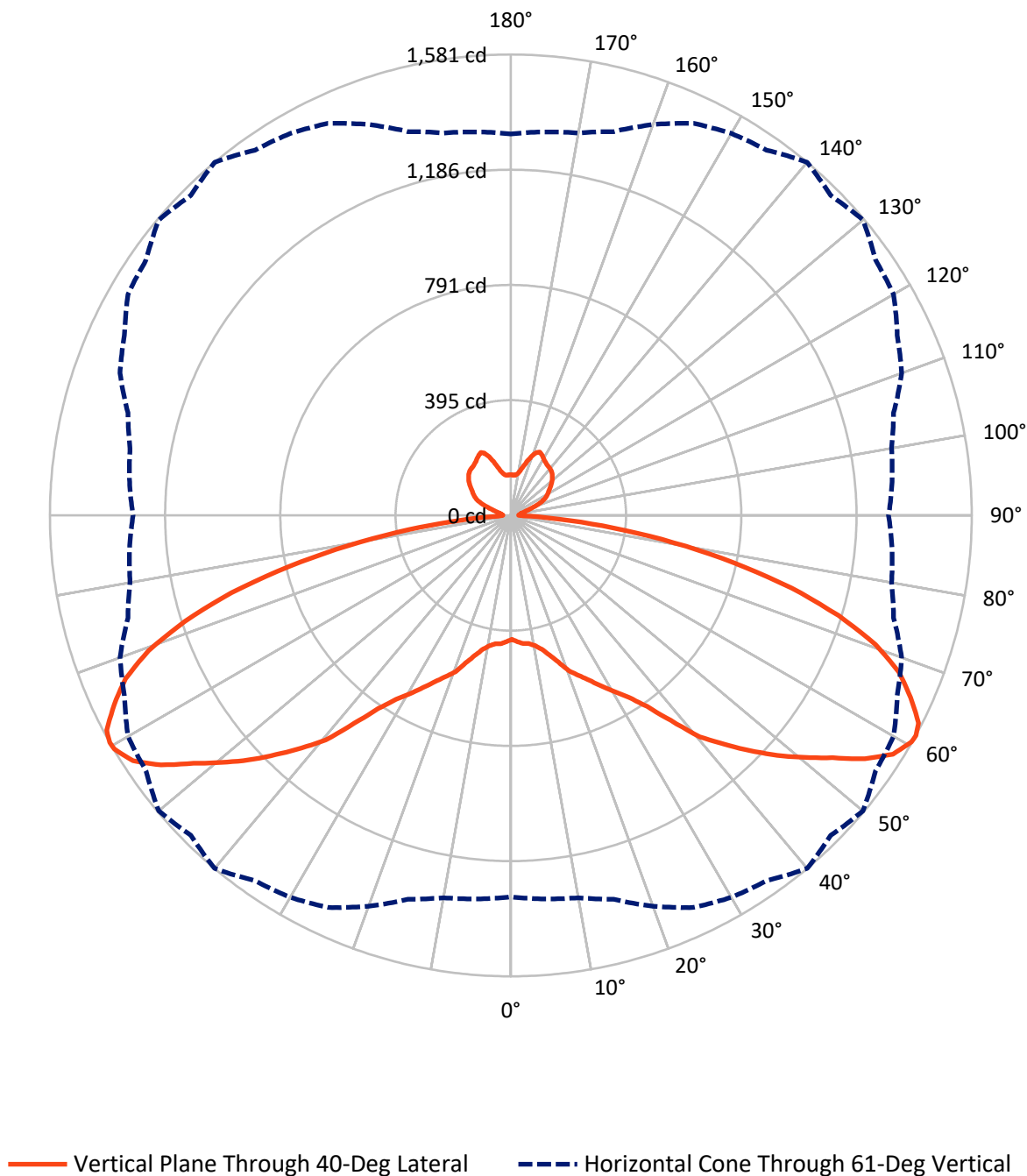


Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P198415

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198415

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-UPL

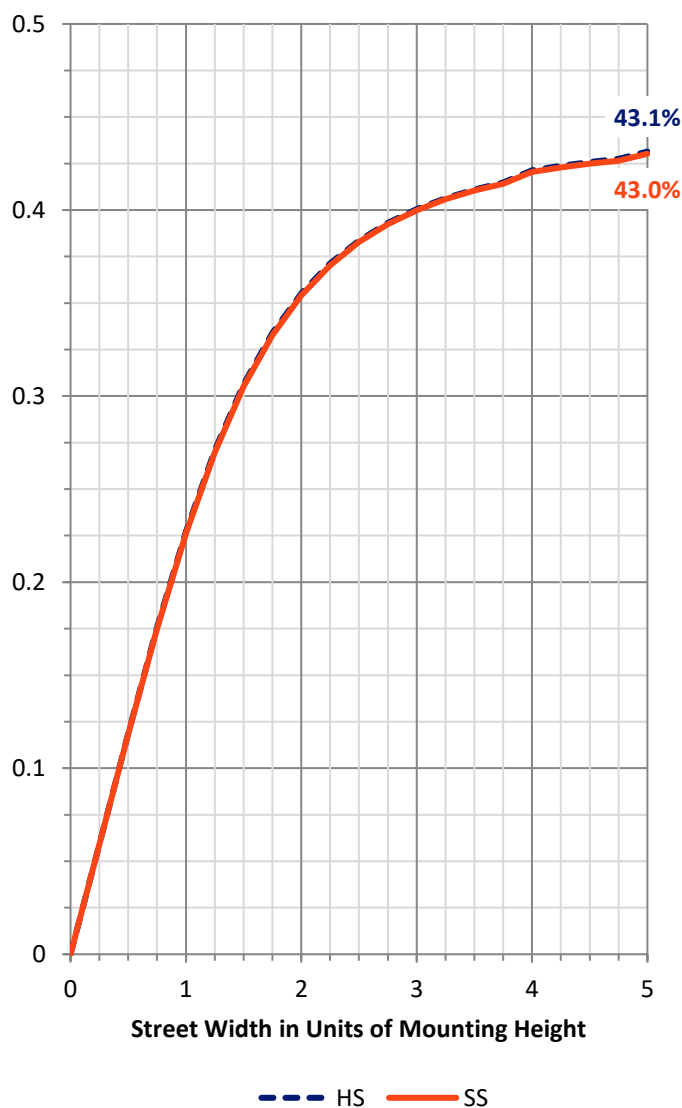
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2768.0	412.0	3180.0
	% Fixture	43.5	6.5	50.0
Street Side	Lumens	2768.0	412.0	3180.0
	% Fixture	43.5	6.5	50.0
Total	Lumens	5536.0	824.0	6360.0
	% Fixture	87.0	13.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.4	0.7
10°-20°	143.0	2.2
20°-30°	290.1	4.6
30°-40°	504.5	7.9
40°-50°	849.2	13.4
50°-60°	1223.4	19.2
60°-70°	1357.6	21.3
70°-80°	922.0	14.5
80°-90°	204.1	3.2
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°	5536.0	87.0
0°-180°	6360.0	100.0

Coefficient of Utilization



REPORT NUMBER: P198415

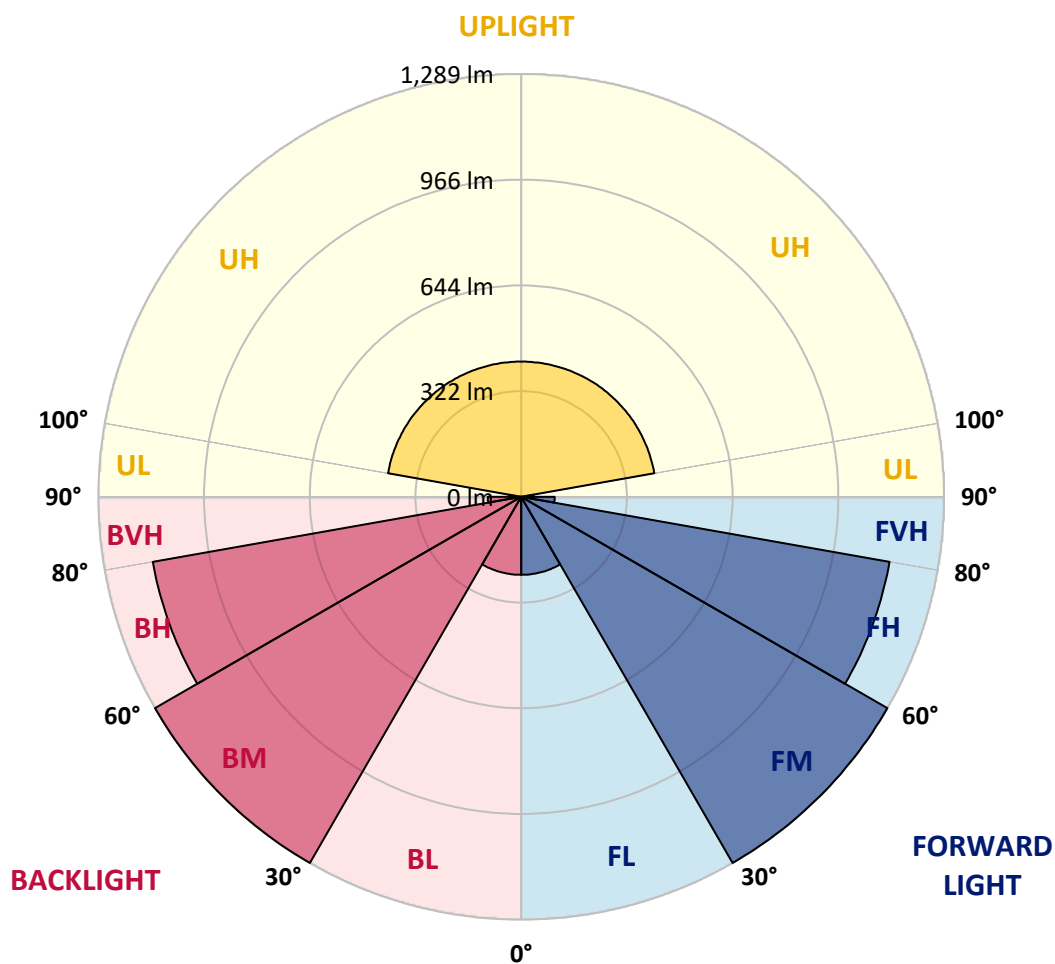
CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	237.7	3.7			
FM	(30°-60°)	1288.5	20.3			
FH	(60°-80°)	1139.8	17.9			G1/1800
FVH	(80°-90°)	102.0	1.6			G2/225
BL	(0°-30°)	237.7	3.7	B1/500		
BM	(30°-60°)	1288.5	20.3	B2/2500		
BH	(60°-80°)	1139.8	17.9	B3/2500		G1/1800
BVH	(80°-90°)	102.0	1.6			G2/225
UL	(90°-100°)	38.3	0.6		U2/50	
UH	(100°-180°)	412.0	6.5		U3/500	

BUG Rating: B3-U4-G2

Type V Short



REPORT NUMBER: P198415

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0
2.5°	435.0	435.0	435.0	435.0	435.0	433.9	435.0	433.9	433.9	433.9	433.9
5°	438.4	439.5	439.5	439.5	439.5	440.6	440.6	441.8	441.8	441.8	441.8
7.5°	441.8	441.8	441.8	441.8	441.8	441.8	442.9	442.9	444.0	444.0	445.1
10°	455.2	455.2	456.3	456.3	455.2	455.2	455.2	454.1	454.1	452.9	452.9
12.5°	474.2	474.2	475.3	476.4	476.4	475.3	474.2	471.9	470.8	470.8	470.8
15°	488.7	489.8	492.1	494.3	495.4	495.4	496.6	496.6	496.6	495.4	494.3
17.5°	516.7	516.7	517.8	518.9	518.9	520.0	522.3	524.5	529.0	530.1	526.7
20°	556.9	558.1	561.4	560.3	560.3	562.5	564.8	565.9	569.2	571.5	571.5
22.5°	587.1	589.4	593.9	593.9	592.7	593.9	596.1	596.1	596.1	595.0	597.2
25°	610.6	612.9	616.2	616.2	618.5	624.0	630.8	629.6	626.3	626.3	625.2
27.5°	641.9	643.1	645.3	645.3	648.7	652.0	656.5	661.0	663.2	662.1	659.8
30°	681.1	683.3	685.6	682.2	687.8	691.1	693.4	693.4	702.3	706.8	699.0
32.5°	710.2	714.6	719.1	722.5	733.6	739.2	735.9	739.2	743.7	748.2	748.2
35°	758.3	762.7	766.1	768.3	779.5	787.3	796.3	805.2	804.1	800.7	807.5
37.5°	827.6	832.1	835.4	839.9	854.4	860.0	866.7	885.7	892.5	883.5	888.0
40°	901.4	909.2	920.4	933.8	955.1	961.8	973.0	986.4	998.7	1003.2	992.0
42.5°	965.1	974.1	976.3	997.6	1023.3	1043.4	1059.1	1062.4	1073.6	1083.7	1075.9
45°	1033.4	1041.2	1046.8	1064.7	1079.2	1107.2	1132.9	1145.2	1150.8	1149.7	1158.6
47.5°	1097.1	1106.1	1113.9	1132.9	1150.8	1174.3	1191.1	1220.1	1230.2	1216.8	1231.3
50°	1136.3	1147.4	1157.5	1193.3	1224.6	1249.2	1262.6	1287.2	1305.1	1296.2	1299.5
52.5°	1201.1	1205.6	1213.4	1233.6	1274.9	1332.0	1345.4	1358.8	1381.2	1392.4	1372.2
55°	1283.9	1296.2	1307.4	1333.1	1354.3	1396.8	1458.3	1475.1	1474.0	1508.7	1477.4
57.5°	1301.8	1319.7	1342.0	1389.0	1430.4	1455.0	1494.1	1541.1	1545.6	1547.8	1552.3
60°	1304.0	1315.2	1329.7	1368.9	1441.6	1486.3	1508.7	1538.9	1579.1	1550.1	1580.2
61°	1308.5	1320.8	1332.0	1363.3	1427.0	1484.1	1513.1	1529.9	1581.4	1552.3	1576.9
62.5°	1300.7	1315.2	1332.0	1362.2	1404.7	1462.8	1518.7	1518.7	1570.2	1551.2	1564.6
65°	1253.7	1267.1	1299.5	1338.7	1390.1	1420.3	1478.5	1515.4	1507.6	1541.1	1507.6
67.5°	1174.3	1185.5	1213.4	1259.3	1315.2	1357.7	1384.5	1443.8	1436.0	1470.6	1432.6
70°	1062.4	1077.0	1111.7	1143.0	1195.5	1240.3	1276.1	1311.8	1327.5	1324.1	1326.4
72.5°	928.2	938.3	969.6	1004.3	1045.7	1096.0	1128.4	1150.8	1175.4	1174.3	1178.8
75°	772.8	781.7	808.6	834.3	874.6	913.7	950.6	974.1	994.2	993.1	988.6
77.5°	596.1	606.2	636.3	658.7	677.7	721.3	749.3	765.0	781.7	781.7	784.0
80°	416.0	422.7	446.2	469.7	487.6	508.9	544.6	548.0	567.0	562.5	567.0
82.5°	250.5	255.0	272.9	286.3	298.6	318.7	335.5	342.2	353.4	348.9	355.6
85°	113.0	115.2	126.4	134.2	139.8	151.0	159.9	163.3	168.9	167.8	172.2
87.5°	23.5	25.7	29.1	31.3	32.4	36.9	40.3	40.3	42.5	42.5	43.6
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

REPORT NUMBER: P198415

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-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

REPORT NUMBER: P198415

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0
2.5°	433.9	435.0	433.9	433.9	433.9	435.0	433.9	435.0
5°	441.8	441.8	441.8	440.6	439.5	439.5	439.5	438.4
7.5°	446.2	446.2	445.1	444.0	442.9	444.0	444.0	444.0
10°	455.2	457.4	458.5	458.5	457.4	457.4	457.4	456.3
12.5°	470.8	471.9	475.3	476.4	477.5	476.4	473.1	471.9
15°	492.1	492.1	493.2	495.4	495.4	491.0	487.6	486.5
17.5°	522.3	521.2	518.9	518.9	520.0	517.8	514.4	514.4
20°	568.1	563.7	561.4	558.1	561.4	561.4	554.7	551.4
22.5°	600.6	596.1	590.5	587.1	591.6	595.0	587.1	582.7
25°	628.5	629.6	620.7	616.2	617.3	619.6	609.5	608.4
27.5°	657.6	659.8	655.4	647.5	645.3	649.8	641.9	639.7
30°	693.4	692.3	694.5	684.4	680.0	683.3	682.2	676.6
32.5°	740.4	734.8	737.0	728.1	719.1	719.1	712.4	705.7
35°	805.2	792.9	787.3	781.7	765.0	766.1	760.5	754.9
37.5°	890.2	871.2	855.5	858.9	834.3	832.1	828.7	820.9
40°	987.5	978.6	960.7	950.6	924.9	912.6	908.1	893.6
42.5°	1060.2	1062.4	1035.6	1017.7	997.6	976.3	974.1	959.6
45°	1138.5	1130.7	1106.1	1077.0	1068.0	1042.3	1039.0	1024.4
47.5°	1216.8	1189.9	1175.4	1145.2	1130.7	1098.2	1100.5	1087.1
50°	1290.6	1259.3	1245.9	1210.1	1187.7	1155.3	1147.4	1125.1
52.5°	1368.9	1339.8	1318.6	1272.7	1240.3	1215.7	1202.2	1193.3
55°	1474.0	1444.9	1396.8	1354.3	1327.5	1287.2	1282.8	1267.1
57.5°	1523.2	1502.0	1449.4	1419.2	1371.1	1329.7	1316.3	1285.0
60°	1528.8	1519.9	1463.9	1434.9	1364.4	1330.9	1314.1	1295.1
61°	1527.7	1516.5	1462.8	1427.0	1359.9	1326.4	1313.0	1296.2
62.5°	1523.2	1509.8	1450.5	1413.6	1351.0	1318.6	1307.4	1282.8
65°	1508.7	1471.8	1420.3	1386.8	1318.6	1289.5	1262.6	1238.0
67.5°	1444.9	1375.6	1354.3	1311.8	1242.5	1210.1	1185.5	1164.2
70°	1308.5	1262.6	1240.3	1187.7	1131.8	1104.9	1077.0	1050.1
72.5°	1148.6	1118.4	1099.4	1035.6	994.2	967.4	941.7	915.9
75°	969.6	947.3	912.6	864.5	827.6	800.7	777.3	765.0
77.5°	761.6	747.1	720.2	672.1	652.0	628.5	605.0	586.0
80°	548.0	536.8	515.6	480.9	464.1	440.6	423.9	408.2
82.5°	341.1	332.2	319.9	294.1	287.4	272.9	257.2	246.0
85°	163.3	157.7	153.2	136.4	135.3	123.0	117.4	110.7
87.5°	42.5	41.4	39.1	33.6	32.4	29.1	26.8	23.5
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

REPORT NUMBER: P198415

CATALOG NUMBER: TT-C3-LED-E1-WQ-CG-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)