

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: P198367

Luminaire Tested: **TT-C3-LED-E1-DL-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198367
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C3-LED-E1-DL-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
DRIVE LANE DISTRIBUTION
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4956.5 lumens
Efficiency: N/A
Efficacy: 59.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U4 - G3

Input Watts (W): 83.9
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



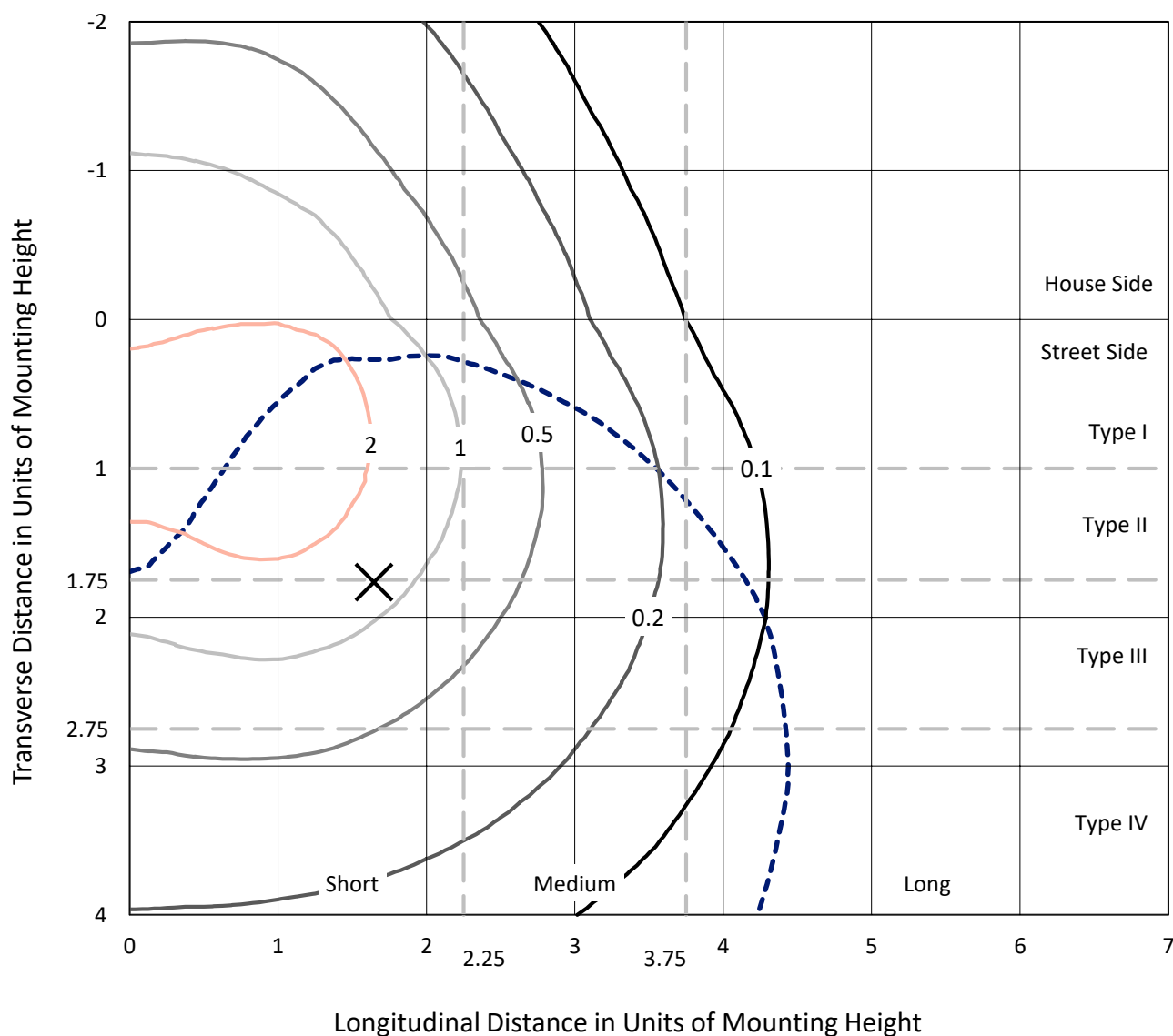
REPORT NUMBER: P198367

CATALOG NUMBER: TT-C3-LED-E1-DL-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

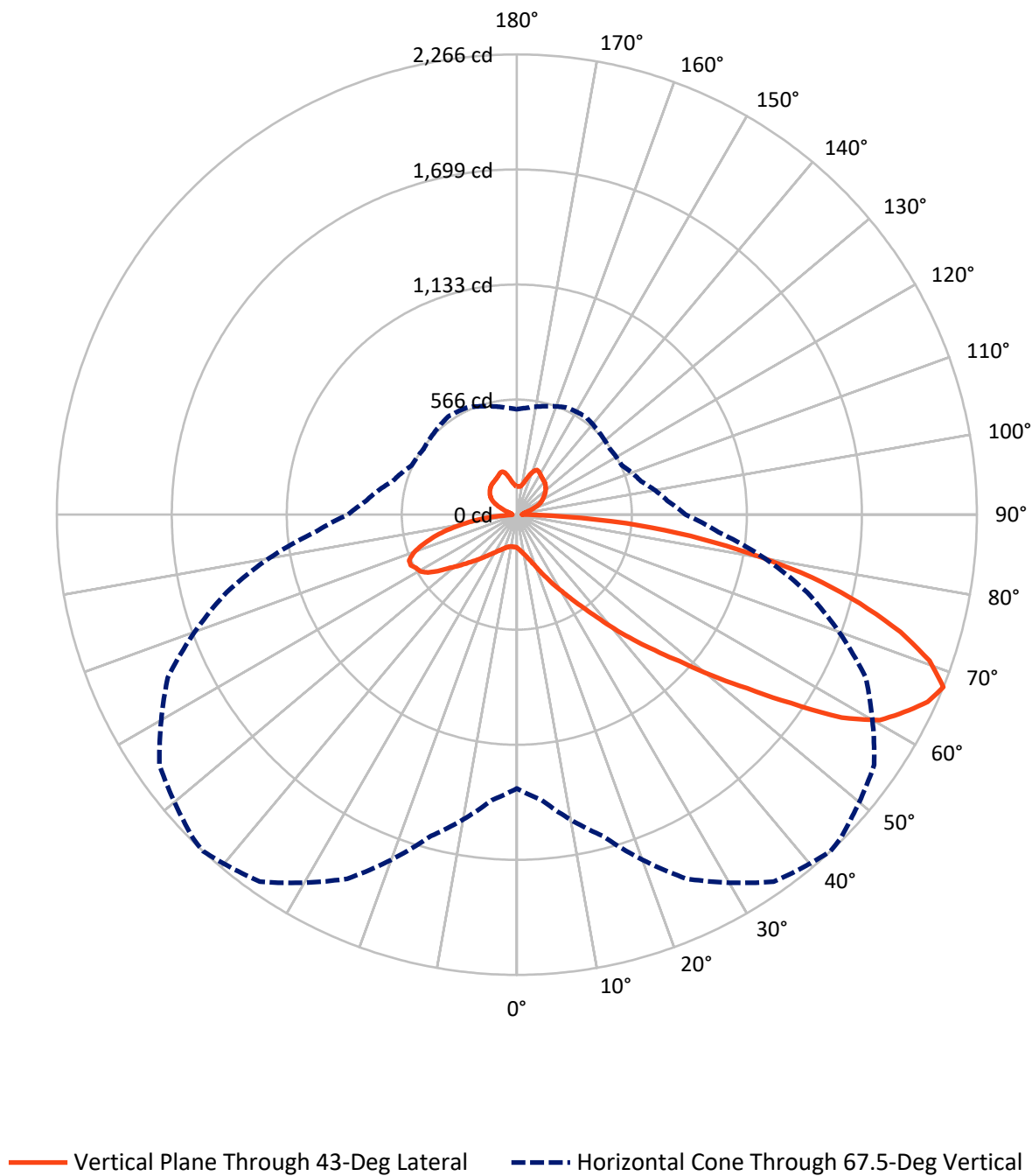


Based on 10 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198367

CATALOG NUMBER: TT-C3-LED-E1-DL-8030-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198367

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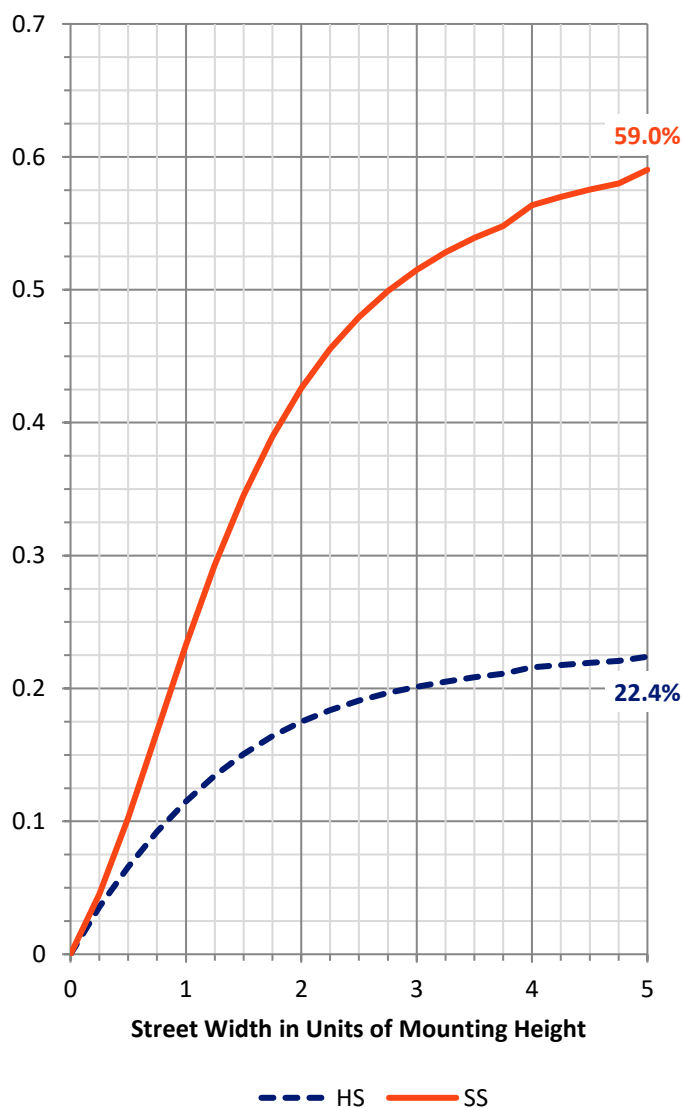
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1135.3	387.3	1522.6
	% Fixture	22.9	7.8	30.7
Street Side	Lumens	3021.2	412.6	3433.8
	% Fixture	61.0	8.3	69.3
Total	Lumens	4156.5	799.9	4956.5
	% Fixture	83.9	16.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.3	0.3
10°-20°	56.7	1.1
20°-30°	123.8	2.5
30°-40°	245.2	4.9
40°-50°	464.4	9.4
50°-60°	824.5	16.6
60°-70°	1141.8	23.0
70°-80°	979.4	19.8
80°-90°	304.4	6.1
90°-100°	36.3	0.7
100°-110°	55.2	1.1
110°-120°	110.8	2.2
120°-130°	144.2	2.9
130°-140°	148.0	3.0
140°-150°	133.4	2.7
150°-160°	102.6	2.1
160°-170°	55.1	1.1
170°-180°	14.3	0.3
0°-90°	4156.5	83.9
0°-180°	4956.5	100.0

Coefficient of Utilization



REPORT NUMBER: P198367

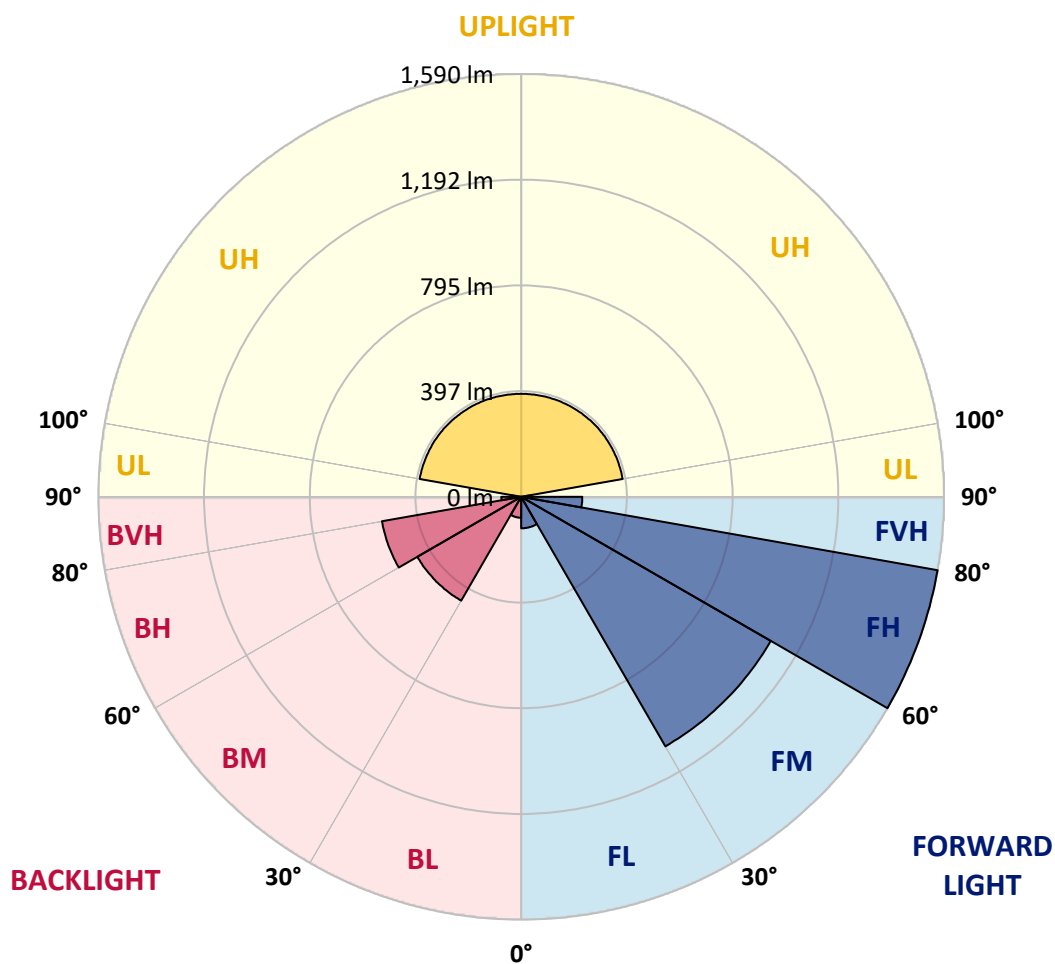
CATALOG NUMBER: TT-C3-LED-E1-DL-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	118.3	2.4			
FM	(30°-60°)	1083.4	21.9			
FH	(60°-80°)	1589.7	32.1			G1/1800
FVH	(80°-90°)	229.8	4.6			G3/500
BL	(0°-30°)	78.6	1.6	B0/110		
BM	(30°-60°)	450.7	9.1	B1/1000		
BH	(60°-80°)	531.5	10.7	B2/1000		G2/1000
BVH	(80°-90°)	74.5	1.5			G1/100
UL	(90°-100°)	36.3	0.7		U2/50	
UH	(100°-180°)	387.3	7.8		U3/500	

BUG Rating: B2-U4-G3

Type IV Short



REPORT NUMBER: P198367

CATALOG NUMBER: TT-C3-LED-E1-DL-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1
2.5°	171.2	170.4	170.4	170.4	169.7	168.9	168.9	168.2	167.4	166.7	165.2
5°	180.2	178.7	178.7	178.7	178.0	177.2	176.5	175.0	172.7	170.4	168.9
7.5°	190.8	191.6	191.6	189.3	187.8	186.3	185.5	182.5	179.5	175.7	172.7
10°	203.6	204.4	204.4	202.9	199.9	198.3	196.8	193.8	188.5	183.3	178.7
12.5°	218.0	219.5	220.2	218.0	214.2	211.2	211.9	206.6	199.9	193.1	186.3
15°	239.1	238.3	240.6	236.1	232.3	228.5	227.8	220.2	213.4	204.4	196.1
17.5°	264.7	261.7	261.7	259.4	257.2	251.1	248.1	240.6	229.3	218.7	205.9
20°	291.1	290.4	288.9	287.3	282.8	276.0	276.8	264.7	251.1	236.1	220.2
22.5°	322.0	325.1	320.5	320.5	316.8	311.5	309.2	293.4	275.3	254.2	236.1
25°	355.2	356.0	356.0	357.5	356.7	347.7	343.2	328.8	307.7	279.8	253.4
27.5°	389.2	392.2	391.4	395.2	397.5	391.4	387.6	371.1	340.9	310.0	276.8
30°	426.9	429.1	432.9	441.9	444.2	438.2	435.2	415.6	385.4	341.6	300.2
32.5°	469.9	472.9	476.6	494.0	502.3	495.5	491.0	473.6	435.9	387.6	334.9
35°	517.4	517.4	530.2	551.3	564.1	559.6	561.1	543.0	502.3	441.9	377.1
37.5°	570.2	570.2	586.8	613.1	638.0	639.5	647.8	626.7	576.9	499.3	418.6
40°	616.9	626.7	651.6	685.5	724.8	737.6	741.4	720.2	659.2	567.1	464.6
42.5°	671.2	682.5	713.5	764.0	813.8	841.7	843.2	822.8	759.5	653.1	530.9
45°	726.3	740.6	778.3	842.4	918.6	951.8	952.5	953.3	895.2	755.7	608.6
47.5°	788.9	800.2	850.0	926.1	1023.4	1077.7	1095.8	1098.1	1018.9	862.0	676.5
50°	856.7	860.5	929.1	1037.0	1168.2	1243.6	1254.2	1261.7	1150.1	982.7	748.1
52.5°	926.9	932.2	1012.1	1161.4	1326.6	1420.1	1438.2	1441.2	1351.5	1157.7	886.9
55°	999.3	1003.8	1107.1	1310.0	1515.1	1638.1	1670.5	1690.9	1549.8	1270.0	942.7
57.5°	1073.2	1084.5	1222.5	1464.6	1723.3	1886.2	1908.8	1877.9	1662.2	1327.4	958.6
60°	1147.1	1167.5	1347.7	1637.3	1928.4	2054.4	2060.4	1974.4	1716.5	1359.0	964.6
62.5°	1216.5	1250.4	1478.9	1797.2	2064.9	2141.1	2141.1	2027.2	1794.2	1461.6	1034.0
65°	1286.6	1327.4	1577.7	1911.1	2139.6	2223.3	2233.1	2169.0	1928.4	1524.2	1054.3
67.5°	1347.7	1410.3	1638.1	1977.5	2206.0	2265.6	2254.2	2148.7	1896.0	1480.5	997.8
70°	1415.6	1458.6	1681.1	1975.9	2146.4	2156.2	2150.2	2036.3	1793.4	1399.0	925.4
72.5°	1442.7	1477.4	1651.6	1873.4	1976.7	1975.2	1964.6	1864.3	1634.3	1272.3	825.8
75°	1414.8	1412.6	1515.9	1664.5	1744.4	1745.2	1736.9	1651.6	1429.2	1092.8	699.1
77.5°	1263.2	1258.7	1304.0	1394.5	1480.5	1488.0	1473.7	1378.6	1190.1	905.0	584.5
80°	1019.6	1000.8	1034.7	1108.6	1175.0	1168.2	1180.3	1076.2	924.6	698.4	441.9
82.5°	690.1	696.1	738.3	782.8	854.5	860.5	847.7	790.4	669.0	506.8	310.7
85°	356.7	365.0	418.6	488.0	512.8	541.5	538.5	498.5	404.2	294.1	184.8
87.5°	62.6	54.3	76.2	115.4	140.3	167.4	166.7	119.2	93.5	63.4	39.2
90°	36.0	36.0	36.0	34.0	29.0	26.4	26.0	28.0	32.0	34.0	34.0
92.5°	40.0	39.0	38.0	34.0	29.0	27.0	27.0	28.0	32.0	35.0	36.0
95°	44.0	43.0	41.0	36.0	32.0	30.4	30.0	30.0	34.0	37.0	39.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.4	33.0	33.0	34.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	36.0	36.0	38.0	38.0	37.0
102.5°	51.0	51.0	49.0	46.0	44.0	42.0	42.0	43.0	44.0	42.0	41.0
105°	60.0	60.0	57.0	54.0	53.0	51.6	52.0	54.0	53.0	49.0	48.0
107.5°	72.0	72.0	70.0	67.0	66.0	67.2	68.0	68.0	66.0	60.0	59.0
110°	86.0	86.0	89.0	85.0	86.0	86.6	87.0	84.0	84.0	78.0	74.0

REPORT NUMBER: P198367

CATALOG NUMBER: TT-C3-LED-E1-DL-8030-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
112.5°	101.0	102.0	108.0	107.0	110.0	107.4	107.0	102.0	105.0	100.0	95.0
115°	121.0	122.0	128.0	128.0	129.0	124.8	124.0	121.0	125.0	123.0	116.0
117.5°	140.0	141.0	144.0	141.0	141.0	136.8	136.0	138.0	141.0	139.0	133.0
120°	152.0	153.0	155.0	149.0	149.0	147.0	147.0	150.0	153.0	148.0	145.0
122.5°	161.0	162.0	164.0	154.0	155.0	157.2	158.0	159.0	162.0	155.0	153.0
125°	169.0	169.0	172.0	163.0	165.0	167.2	168.0	167.0	168.0	163.0	160.0
127.5°	177.0	177.0	181.0	171.0	176.0	177.6	178.0	176.0	175.0	173.0	166.0
130°	187.0	188.0	191.0	179.0	186.0	186.4	186.0	183.0	183.0	184.0	171.0
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	195.0	190.0	192.0	192.0	179.0
135°	210.0	210.0	209.0	192.0	199.0	201.4	201.0	196.0	201.0	199.0	185.0
137.5°	221.0	219.0	213.0	197.0	205.0	207.6	208.0	203.0	210.0	204.0	191.0
140°	229.0	226.0	216.0	200.0	207.0	211.8	213.0	212.0	217.0	209.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	215.6	218.0	220.0	223.0	211.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	219.8	223.0	230.0	227.0	211.0	201.0
147.5°	230.0	227.0	219.0	207.0	216.0	225.4	229.0	239.0	229.0	212.0	204.0
150°	224.0	221.0	220.0	214.0	222.0	231.8	235.0	242.0	232.0	214.0	210.0
152.5°	216.0	214.0	221.0	220.0	230.0	238.2	241.0	242.0	235.0	219.0	215.0
155°	208.0	207.0	219.0	224.0	237.0	241.4	243.0	238.0	234.0	224.0	220.0
157.5°	203.0	203.0	216.0	224.0	234.0	233.8	235.0	228.0	229.0	226.0	222.0
160°	199.0	198.0	210.0	213.0	219.0	217.8	219.0	215.0	219.0	221.0	218.0
162.5°	185.0	184.0	193.0	193.0	198.0	196.8	198.0	196.0	200.0	204.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	175.8	177.0	176.0	181.0	185.0	190.0
167.5°	154.0	152.0	156.0	155.0	159.0	158.2	159.0	160.0	165.0	168.0	172.0
170°	142.0	141.0	145.0	144.0	147.0	146.6	147.0	148.0	152.0	155.0	159.0
172.5°	137.0	135.0	139.0	138.0	141.0	140.6	141.0	141.0	145.0	146.0	149.0
175°	136.0	134.0	137.0	137.0	139.0	138.6	139.0	138.0	141.0	141.0	143.0
177.5°	137.0	136.0	139.0	138.0	140.0	139.0	139.0	138.0	140.0	140.0	141.0
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: P198367

CATALOG NUMBER: TT-C3-LED-E1-DL-8030-UPL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1
2.5°	165.2	164.4	163.7	162.1	160.6	159.9	159.1	158.4	158.4	157.6	157.6
5°	168.2	166.7	165.2	162.9	161.4	159.9	158.4	157.6	156.9	156.1	156.1
7.5°	171.2	169.7	166.7	163.7	160.6	159.1	158.4	156.9	156.1	155.4	155.4
10°	176.5	174.2	169.7	165.2	162.1	159.9	157.6	156.9	156.1	156.1	155.4
12.5°	182.5	178.7	173.5	168.2	163.7	160.6	159.1	158.4	157.6	157.6	156.9
15°	191.6	187.8	179.5	172.0	168.2	164.4	162.1	161.4	160.6	161.4	160.6
17.5°	200.6	196.1	185.5	178.0	172.0	168.9	166.7	165.9	165.2	166.7	166.7
20°	212.7	205.9	194.6	184.8	178.0	174.2	173.5	172.0	172.7	173.5	173.5
22.5°	225.5	217.2	203.6	192.3	186.3	181.8	181.0	181.0	181.0	181.8	182.5
25°	241.3	230.8	213.4	202.1	194.6	190.8	190.1	190.1	190.8	191.6	191.6
27.5°	260.9	247.4	226.3	211.9	203.6	199.9	199.1	199.9	201.4	202.1	202.1
30°	283.6	267.7	240.6	225.5	215.7	211.2	211.2	211.9	213.4	214.9	212.7
32.5°	310.7	290.4	260.2	239.8	229.3	224.7	224.7	226.3	225.5	226.3	228.5
35°	345.4	321.3	283.6	259.4	245.9	240.6	240.6	241.3	241.3	242.8	243.6
37.5°	382.4	353.0	308.5	282.1	267.0	259.4	257.2	257.9	259.4	258.7	260.2
40°	423.1	387.6	337.9	304.7	288.9	280.6	276.0	276.0	275.3	274.5	273.8
42.5°	477.4	435.9	374.1	333.3	313.7	304.7	297.1	294.9	293.4	294.1	288.9
45°	546.0	497.8	420.1	375.6	343.2	328.8	321.3	316.8	313.0	310.0	307.0
47.5°	604.1	543.0	462.3	411.8	377.8	360.5	348.4	340.9	333.3	330.3	330.3
50°	666.7	604.9	511.3	445.7	415.6	394.4	381.6	368.0	357.5	350.7	354.5
52.5°	788.1	709.7	585.2	510.6	454.8	431.4	416.3	398.2	383.9	374.8	375.6
55°	823.6	741.4	625.2	553.6	505.3	482.7	459.3	435.2	413.3	400.5	401.2
57.5°	828.8	745.1	632.8	570.2	542.3	527.2	506.8	475.1	447.2	426.9	424.6
60°	825.1	742.9	632.0	568.7	548.3	551.3	545.3	518.1	480.4	455.5	452.5
62.5°	880.1	784.3	664.4	581.5	555.1	559.6	567.1	551.3	514.3	480.4	475.1
65°	884.7	791.9	669.0	598.1	577.7	577.7	582.2	570.2	540.0	505.3	497.0
67.5°	831.1	748.1	633.5	571.7	561.1	573.2	589.0	581.5	552.1	527.2	518.9
70°	771.5	690.1	587.5	528.7	523.4	540.0	565.6	572.4	558.8	538.5	535.5
72.5°	678.0	616.2	520.4	474.4	472.9	489.5	515.9	534.7	538.5	539.2	537.7
75°	584.5	521.1	443.5	408.8	411.8	429.9	453.3	473.6	494.0	510.6	517.4
77.5°	478.9	432.1	370.3	337.1	343.2	363.5	382.4	402.7	423.8	452.5	456.3
80°	367.3	335.6	279.8	265.5	264.7	281.3	303.9	316.0	346.2	369.5	367.3
82.5°	259.4	234.5	202.9	190.1	193.1	204.4	218.7	227.0	248.9	261.7	265.5
85°	153.1	142.5	124.4	112.4	115.4	126.7	129.0	139.5	144.8	153.1	150.8
87.5°	32.4	27.9	24.9	25.6	22.6	23.4	26.4	25.6	25.6	30.2	28.7
90°	34.0	34.0	34.0	32.0	27.0	21.0	25.0	30.0	33.0	34.0	34.0
92.5°	36.0	35.0	33.0	31.0	27.0	23.0	25.0	29.0	34.0	36.0	36.0
95°	38.0	38.0	35.0	33.0	29.0	26.0	27.0	31.0	34.0	35.0	36.0
97.5°	36.0	35.0	35.0	34.0	30.0	25.0	26.0	30.0	33.0	35.0	35.0
100°	37.0	37.0	38.0	38.0	33.0	27.0	28.0	32.0	35.0	36.0	36.0
102.5°	41.0	42.0	43.0	45.0	39.0	32.0	33.0	35.0	38.0	40.0	41.0
105°	49.0	49.0	52.0	54.0	48.0	39.0	38.0	41.0	44.0	48.0	49.0
107.5°	60.0	61.0	65.0	65.0	58.0	50.0	47.0	50.0	54.0	60.0	61.0
110°	75.0	77.0	78.0	75.0	71.0	65.0	60.0	62.0	67.0	73.0	74.0

REPORT NUMBER: P198367

CATALOG NUMBER: TT-C3-LED-E1-DL-8030-UPL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	94.0	94.0	91.0	86.0	84.0	82.0	77.0	80.0	85.0	87.0	87.0
115°	113.0	111.0	104.0	100.0	99.0	102.0	99.0	103.0	106.0	102.0	102.0
117.5°	129.0	128.0	121.0	117.0	116.0	120.0	121.0	125.0	125.0	120.0	120.0
120°	142.0	142.0	137.0	134.0	134.0	137.0	137.0	139.0	139.0	134.0	136.0
122.5°	150.0	153.0	151.0	148.0	149.0	149.0	145.0	148.0	149.0	145.0	146.0
125°	158.0	162.0	162.0	159.0	160.0	159.0	149.0	154.0	156.0	154.0	154.0
127.5°	163.0	169.0	170.0	168.0	168.0	169.0	154.0	158.0	163.0	160.0	161.0
130°	169.0	176.0	178.0	174.0	175.0	175.0	159.0	164.0	169.0	164.0	167.0
132.5°	176.0	182.0	186.0	181.0	183.0	181.0	165.0	171.0	176.0	171.0	174.0
135°	184.0	190.0	195.0	190.0	191.0	187.0	170.0	177.0	184.0	179.0	179.0
137.5°	190.0	196.0	204.0	200.0	199.0	191.0	175.0	182.0	192.0	187.0	187.0
140°	195.0	201.0	213.0	212.0	206.0	195.0	180.0	186.0	200.0	195.0	196.0
142.5°	198.0	204.0	220.0	222.0	212.0	197.0	184.0	190.0	205.0	204.0	205.0
145°	202.0	208.0	225.0	230.0	216.0	199.0	187.0	193.0	208.0	211.0	214.0
147.5°	206.0	212.0	230.0	236.0	219.0	202.0	191.0	195.0	212.0	220.0	225.0
150°	211.0	216.0	231.0	235.0	219.0	205.0	194.0	199.0	215.0	227.0	233.0
152.5°	216.0	220.0	229.0	230.0	220.0	208.0	201.0	205.0	219.0	232.0	239.0
155°	219.0	221.0	224.0	222.0	220.0	213.0	208.0	212.0	224.0	234.0	240.0
157.5°	219.0	219.0	216.0	213.0	216.0	219.0	215.0	220.0	229.0	232.0	235.0
160°	215.0	214.0	210.0	208.0	213.0	223.0	224.0	228.0	233.0	229.0	232.0
162.5°	207.0	207.0	204.0	204.0	209.0	221.0	227.0	231.0	230.0	224.0	226.0
165°	192.0	194.0	196.0	198.0	203.0	212.0	216.0	219.0	220.0	215.0	217.0
167.5°	174.0	177.0	181.0	184.0	189.0	195.0	196.0	199.0	200.0	197.0	200.0
170°	160.0	163.0	166.0	168.0	172.0	177.0	178.0	180.0	181.0	178.0	181.0
172.5°	151.0	153.0	155.0	156.0	159.0	162.0	162.0	164.0	165.0	163.0	166.0
175°	144.0	146.0	147.0	148.0	149.0	151.0	151.0	152.0	153.0	151.0	153.0
177.5°	141.0	142.0	142.0	142.0	143.0	144.0	143.0	144.0	145.0	143.0	145.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)