

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: P198256

Luminaire Tested: **TT-C1-LED-E1-MQ-MS/DIM-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198256
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-MQ-MS/DIM-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4110.2 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U4 - G1

Input Watts (W): 45.4
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

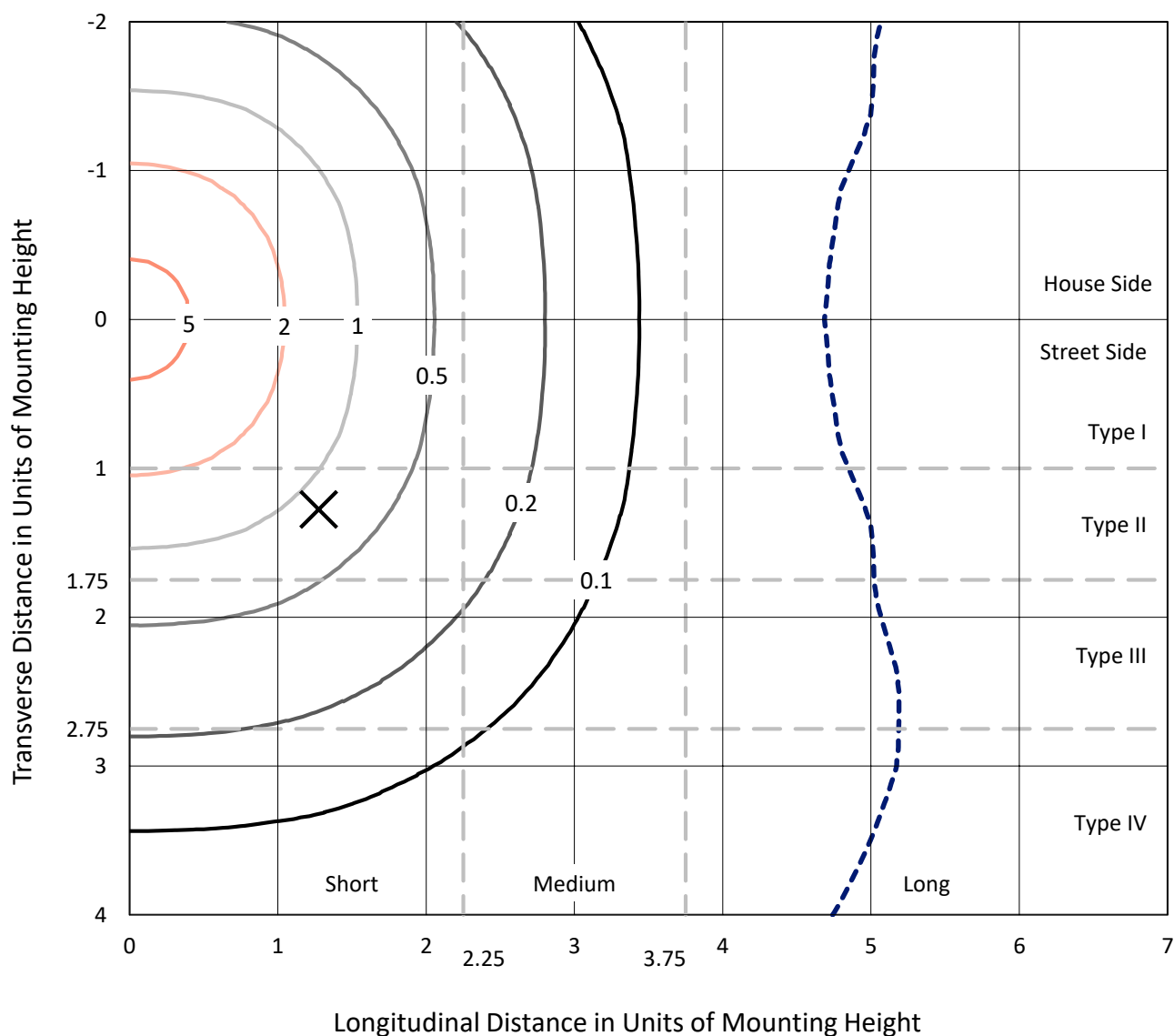


REPORT NUMBER: P198256

CATALOG NUMBER: TT-C1-LED-E1-MQ-MS/DIM-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

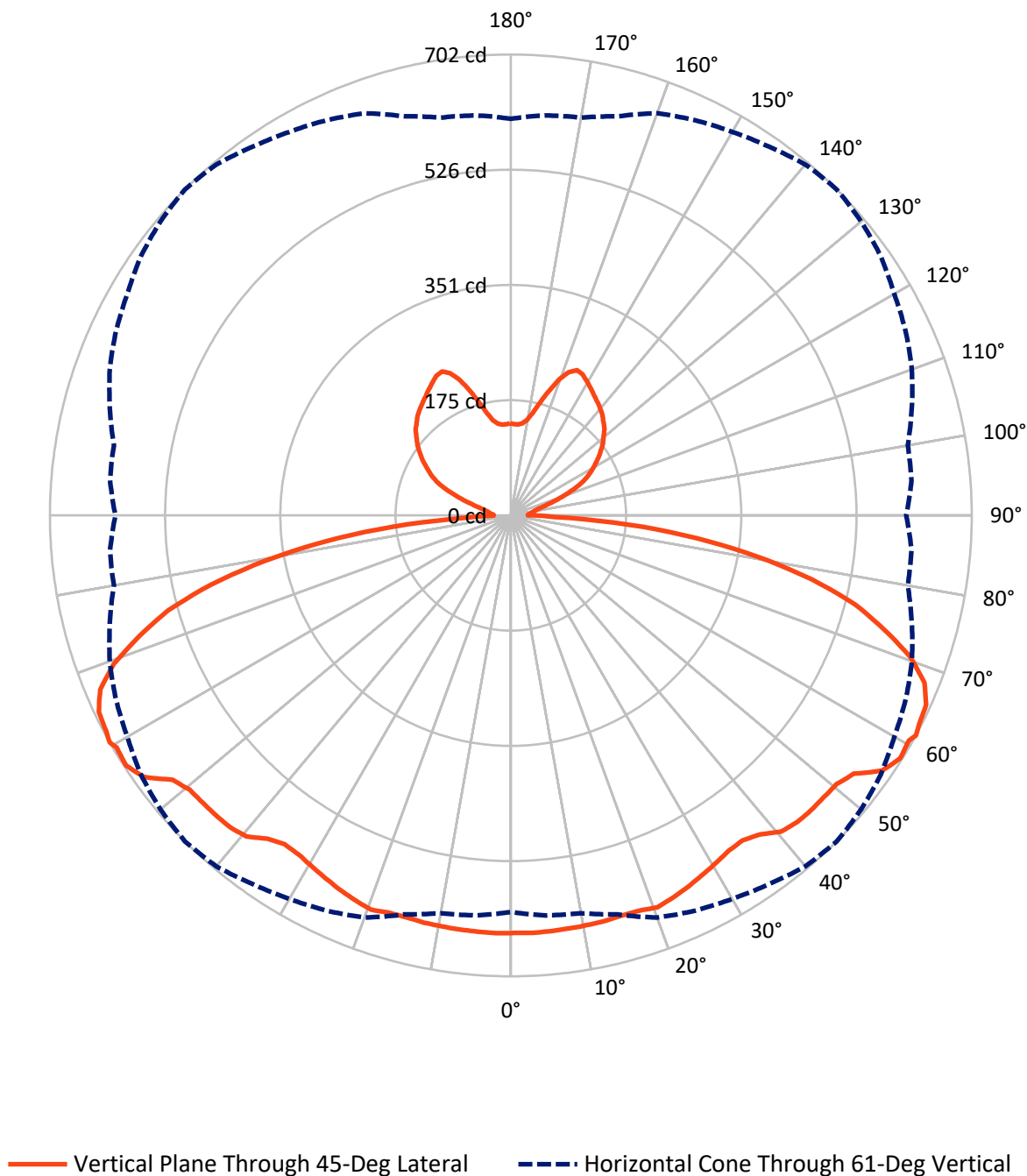


Based on 10 foot mounting height. Maximum calculated value = 6.4 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P198256

CATALOG NUMBER: TT-C1-LED-E1-MQ-MS/DIM-8030-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198256

CATALOG NUMBER: TT-C1-LED-E1-MQ-MS/DIM-8030-UPL

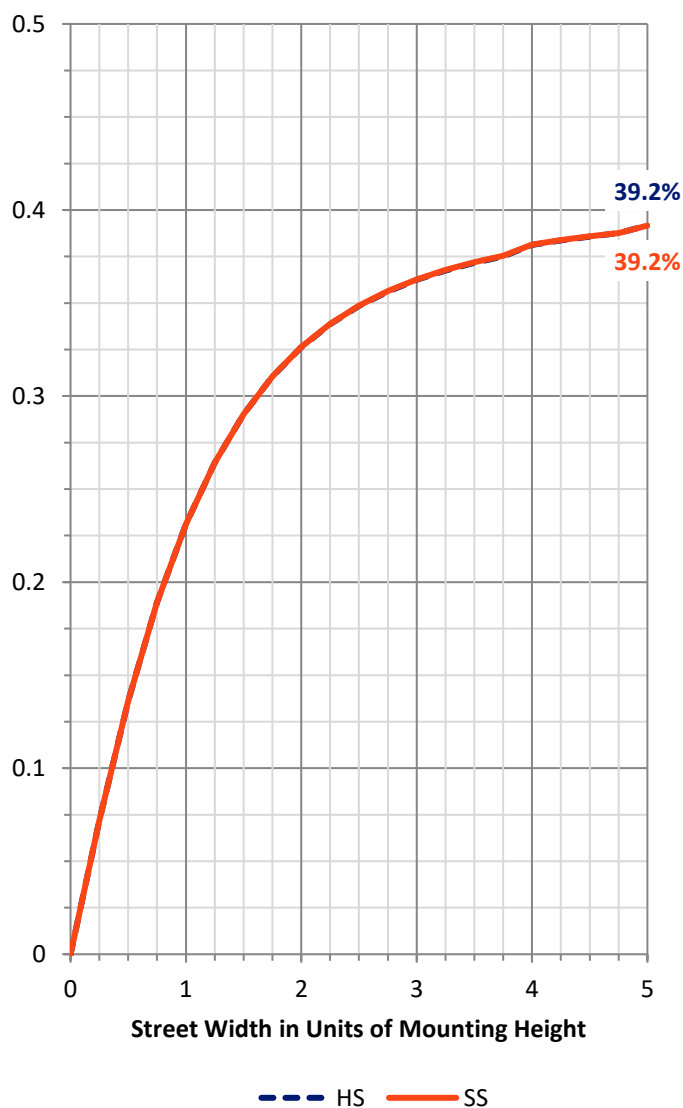
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1643.1	412.0	2055.1
	% Fixture	40.0	10.0	50.0
Street Side	Lumens	1643.1	412.0	2055.1
	% Fixture	40.0	10.0	50.0
Total	Lumens	3286.3	824.0	4110.2
	% Fixture	80.0	20.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	1.5
10°-20°	179.3	4.4
20°-30°	288.6	7.0
30°-40°	382.2	9.3
40°-50°	482.7	11.7
50°-60°	578.4	14.1
60°-70°	632.4	15.4
70°-80°	506.3	12.3
80°-90°	175.7	4.3
90°-100°	38.3	0.9
100°-110°	59.4	1.4
110°-120°	119.3	2.9
120°-130°	148.7	3.6
130°-140°	153.2	3.7
140°-150°	136.0	3.3
150°-160°	103.7	2.5
160°-170°	51.8	1.3
170°-180°	13.6	0.3
0°-90°	3286.3	80.0
0°-180°	4110.2	100.0

Coefficient of Utilization



REPORT NUMBER: P198256

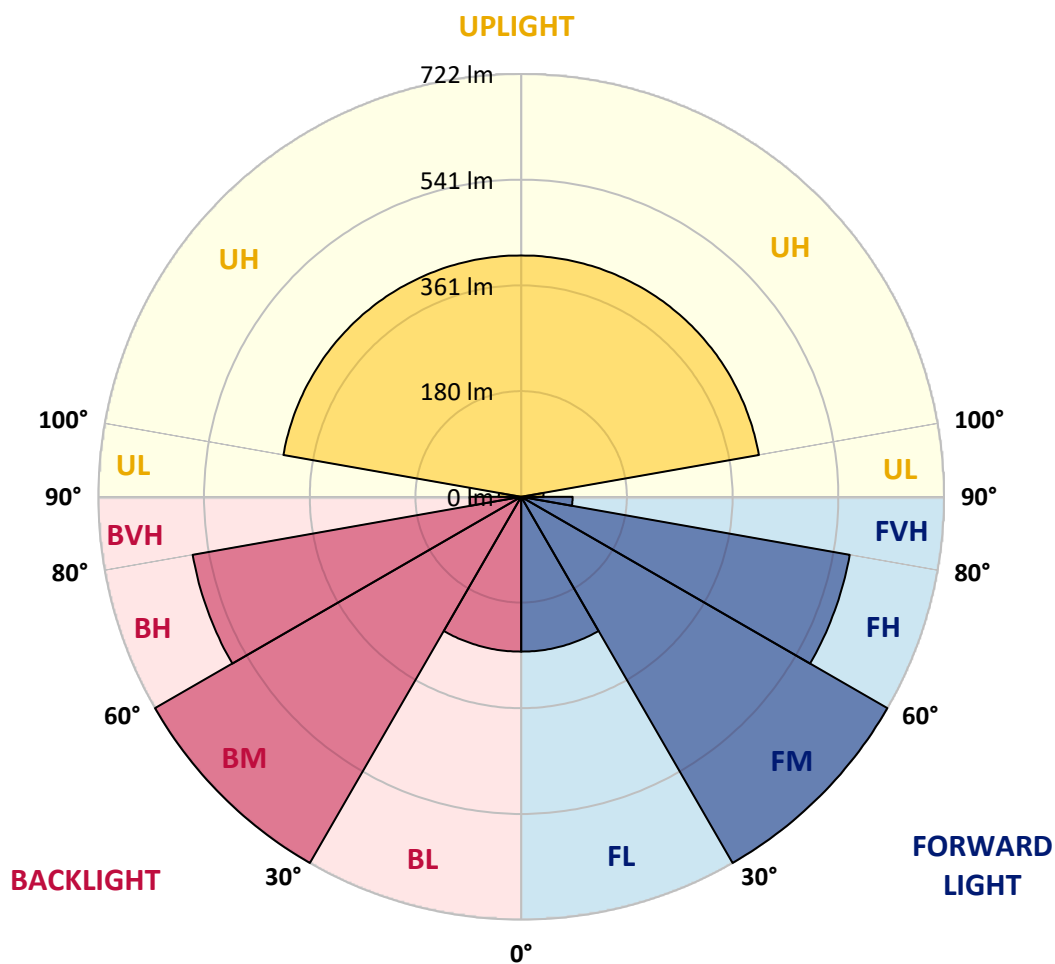
CATALOG NUMBER: TT-C1-LED-E1-MQ-MS/DIM-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	264.3	6.4			
FM	(30°-60°)	721.7	17.6			
FH	(60°-80°)	569.4	13.9			G0/660
FVH	(80°-90°)	87.8	2.1			G1/100
BL	(0°-30°)	264.3	6.4	B1/500		
BM	(30°-60°)	721.7	17.6	B1/1000		
BH	(60°-80°)	569.4	13.9	B2/1000		G0/660
BVH	(80°-90°)	87.8	2.1			G1/100
UL	(90°-100°)	38.3	0.9		U2/50	
UH	(100°-180°)	412.0	10.0		U3/500	

BUG Rating: B2-U4-G1

Type V Short



REPORT NUMBER: P198256

CATALOG NUMBER: TT-C1-LED-E1-MQ-MS/DIM-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9
2.5°	636.5	635.9	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5
5°	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9
7.5°	635.2	635.2	635.2	635.2	635.2	635.2	635.2	635.2	635.9	635.2	635.9
10°	634.0	634.0	634.0	634.0	634.6	634.6	634.6	634.6	634.6	634.6	634.6
12.5°	632.8	632.8	632.8	632.8	633.4	633.4	633.4	633.4	634.0	634.0	633.4
15°	631.5	631.0	631.0	631.5	631.5	632.2	632.2	632.2	632.8	632.2	632.2
17.5°	630.4	629.7	630.4	631.0	631.0	631.5	632.2	632.2	632.8	632.8	632.8
20°	632.2	631.5	632.2	632.8	633.4	634.6	635.2	635.9	636.5	637.0	637.0
22.5°	628.5	627.9	628.5	628.5	629.1	629.7	631.0	631.5	632.2	632.2	632.2
25°	623.0	623.0	623.6	623.6	624.2	624.8	625.5	626.0	626.0	626.7	626.0
27.5°	616.9	616.9	617.5	617.5	618.7	618.7	619.3	620.0	620.5	620.5	620.5
30°	609.5	609.5	610.2	610.8	612.0	612.6	613.2	613.8	614.5	614.5	614.5
32.5°	602.8	602.2	602.8	604.0	605.9	607.1	608.3	609.0	609.0	609.0	609.5
35°	597.3	598.0	599.1	600.4	602.8	604.0	605.3	607.1	607.7	607.7	607.7
37.5°	598.5	599.1	601.0	603.5	606.5	610.2	612.6	615.0	616.9	616.3	615.7
40°	606.5	607.7	610.8	614.5	619.3	624.2	627.9	631.0	632.8	633.4	632.8
42.5°	607.7	609.0	611.4	616.9	622.4	627.9	632.8	635.9	638.3	638.9	638.3
45°	607.1	607.1	610.8	616.9	622.4	627.9	634.0	638.3	640.7	640.7	640.7
47.5°	602.8	604.7	607.1	613.2	620.5	626.0	632.2	636.5	639.5	641.4	639.5
50°	602.8	602.8	607.1	611.4	618.1	627.9	636.5	640.7	643.8	643.2	643.8
52.5°	601.6	605.3	607.7	613.8	626.0	635.9	642.5	648.7	653.0	653.6	652.4
55°	612.6	613.2	618.7	630.4	642.0	653.0	665.2	674.4	681.7	686.0	679.9
57.5°	621.2	618.1	629.1	638.9	652.4	668.9	687.2	694.5	700.0	698.8	700.6
60°	609.5	613.8	621.8	632.2	653.6	670.1	679.9	687.8	694.5	696.4	694.0
61°	604.0	611.4	615.0	629.1	651.7	664.0	674.4	685.4	697.6	701.9	696.4
62.5°	594.9	606.5	605.3	627.9	642.0	656.0	675.6	688.4	697.0	698.2	697.0
65°	595.5	593.6	607.7	624.2	638.3	663.4	679.9	687.8	692.7	695.1	694.0
67.5°	575.9	569.8	587.0	598.5	622.4	642.0	657.9	669.5	676.8	679.3	676.2
70°	530.7	535.0	547.2	564.9	584.5	608.3	623.0	638.3	644.4	645.0	645.0
72.5°	487.3	489.7	502.0	518.5	541.1	561.9	576.5	588.8	594.3	594.9	596.1
75°	429.8	432.2	446.3	461.6	484.2	502.0	512.3	527.0	535.0	541.7	536.2
77.5°	363.1	367.5	378.5	395.0	415.7	425.6	443.9	461.0	466.5	468.3	466.5
80°	288.0	293.5	303.2	325.2	334.4	350.3	368.1	375.4	380.3	381.5	382.1
82.5°	207.2	211.6	221.9	237.2	247.6	260.5	272.7	281.8	287.3	286.2	285.5
85°	122.3	123.5	134.5	144.9	152.8	160.8	170.6	177.3	178.5	181.0	180.4
87.5°	36.7	37.3	42.2	47.7	51.3	55.0	61.2	69.1	70.9	66.0	66.7
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: P198256

CATALOG NUMBER: TT-C1-LED-E1-MQ-MS/DIM-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

REPORT NUMBER: P198256

CATALOG NUMBER: TT-C1-LED-E1-MQ-MS/DIM-8030-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9
2.5°	636.5	636.5	636.5	636.5	636.5	636.5	635.9	636.5
5°	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9
7.5°	635.9	635.2	635.2	635.2	635.2	635.2	635.2	635.2
10°	634.6	634.6	634.6	634.6	634.0	634.0	634.0	634.0
12.5°	633.4	633.4	633.4	633.4	632.8	632.8	632.8	632.8
15°	632.2	632.2	632.2	632.2	631.5	631.5	631.5	631.5
17.5°	632.8	632.2	631.5	631.5	631.0	630.4	630.4	630.4
20°	636.5	635.9	634.6	633.4	632.8	632.2	632.2	632.2
22.5°	631.5	631.0	629.7	629.1	629.1	628.5	627.9	627.9
25°	626.0	624.8	624.8	624.2	624.2	623.0	623.0	622.4
27.5°	620.0	619.3	618.7	618.1	618.1	617.5	616.9	616.3
30°	614.5	613.2	612.0	611.4	610.8	610.2	610.2	610.2
32.5°	609.0	607.7	607.1	605.3	604.0	603.5	602.8	602.8
35°	607.1	605.3	604.0	602.2	600.4	599.1	598.5	597.3
37.5°	614.5	612.0	610.2	607.1	602.8	601.0	599.1	598.5
40°	630.4	627.9	624.2	619.3	614.5	610.8	607.7	606.5
42.5°	635.9	632.8	627.9	623.0	616.9	611.4	609.0	607.7
45°	637.7	634.6	627.9	621.8	616.3	611.4	607.7	606.5
47.5°	635.9	631.5	625.5	620.5	612.6	606.5	604.0	602.2
50°	640.1	636.5	628.5	617.5	610.8	607.1	602.8	602.2
52.5°	648.7	642.0	634.6	626.7	613.8	606.5	604.0	601.0
55°	674.4	665.2	652.4	639.5	631.5	620.0	612.6	612.6
57.5°	694.0	686.6	670.1	653.0	638.3	629.7	618.7	619.3
60°	688.4	678.6	670.7	653.6	632.8	621.2	616.9	609.0
61°	687.8	674.4	663.4	649.9	632.2	613.8	612.6	602.2
62.5°	689.0	676.8	656.0	642.0	628.5	604.7	604.0	594.3
65°	687.8	676.2	665.8	639.5	621.2	611.4	590.6	598.5
67.5°	668.9	658.5	639.5	624.8	596.7	584.5	572.9	572.9
70°	638.9	623.6	605.3	587.0	568.0	547.2	536.8	530.7
72.5°	588.8	575.9	561.3	541.7	518.5	499.5	489.7	485.5
75°	525.8	511.7	498.9	484.2	459.8	443.9	433.5	430.4
77.5°	459.8	447.6	424.9	410.9	394.3	376.0	366.8	363.1
80°	375.4	368.6	352.8	330.1	322.2	299.6	293.5	288.0
82.5°	281.8	274.5	259.8	243.9	234.2	221.3	210.3	209.1
85°	177.3	172.4	163.2	151.6	139.4	132.1	122.3	124.7
87.5°	66.0	63.0	57.5	50.2	44.6	39.7	34.8	36.7
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: P198256

CATALOG NUMBER: TT-C1-LED-E1-MQ-MS/DIM-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)