

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: P198315

Luminaire Tested: **TT-C2-LED-E1-MQ-CG-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198315
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-C2-LED-E1-MQ-CG-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4057.5 lumens
Efficiency: N/A
Efficacy: 78.9 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): 51.4
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



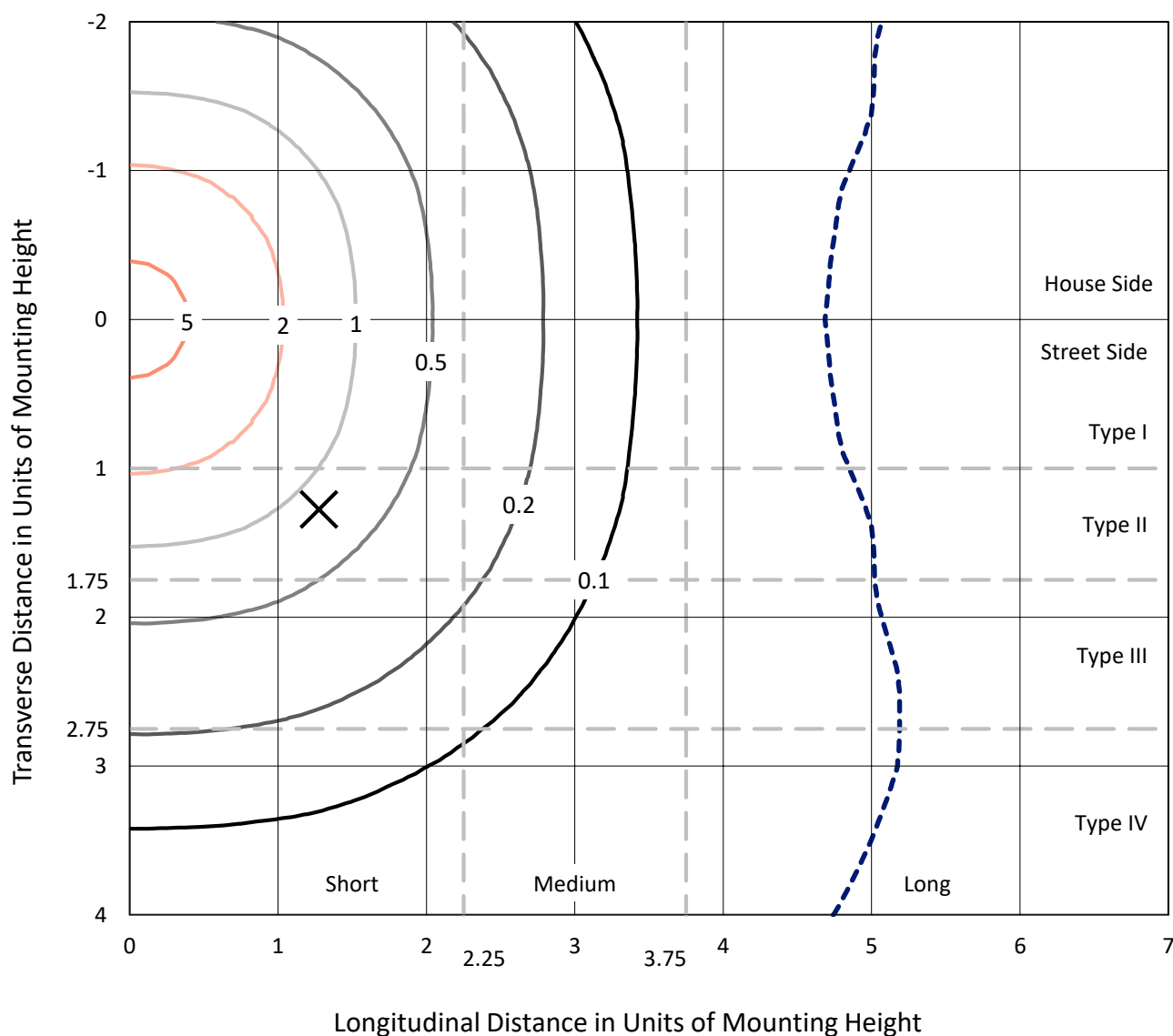
REPORT NUMBER: P198315

CATALOG NUMBER: TT-C2-LED-E1-MQ-CG-LWR-LW-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

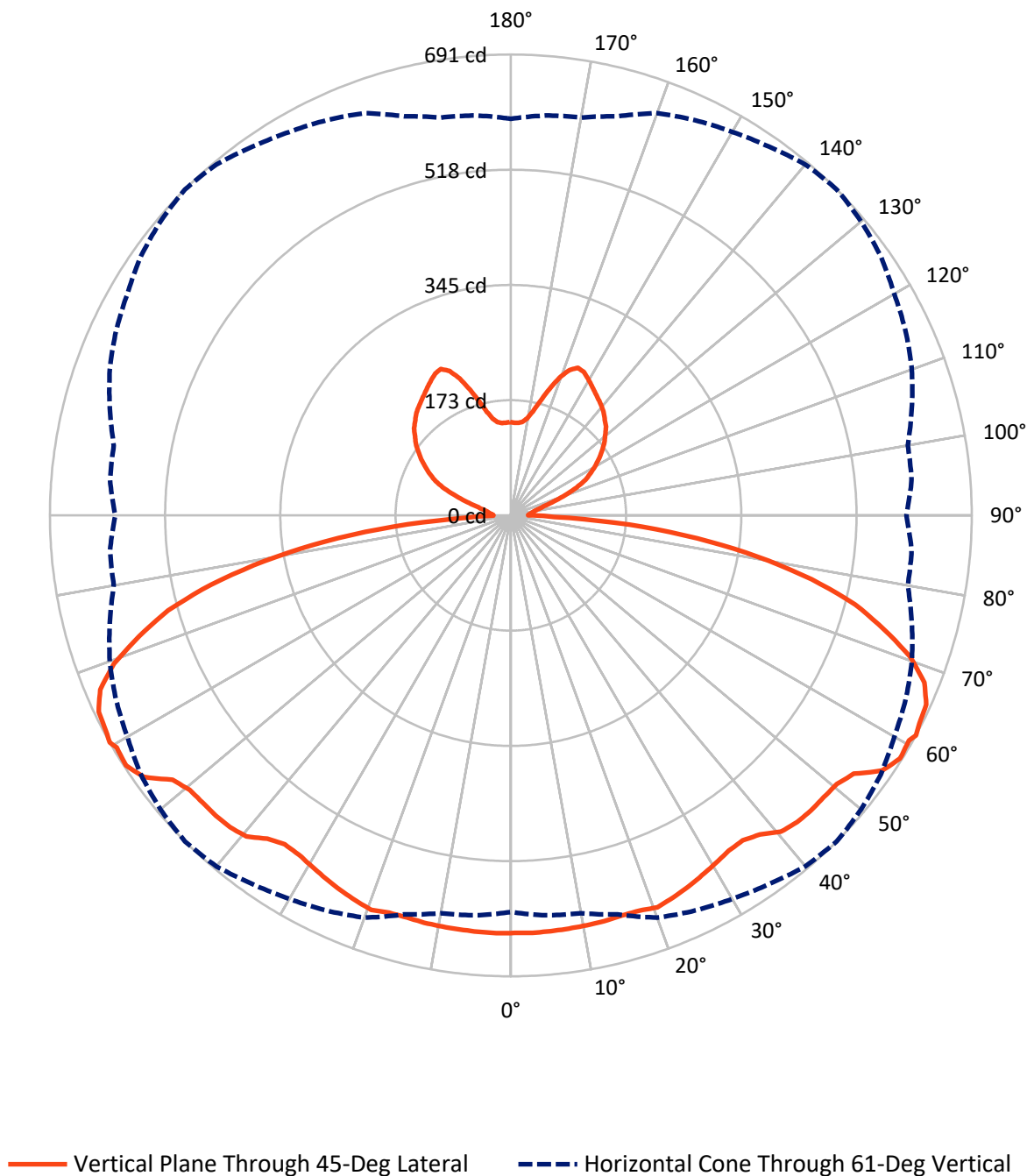


Based on 10 foot mounting height. Maximum calculated value = 6.3 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P198315

CATALOG NUMBER: TT-C2-LED-E1-MQ-CG-LWR-LW-8030-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198315

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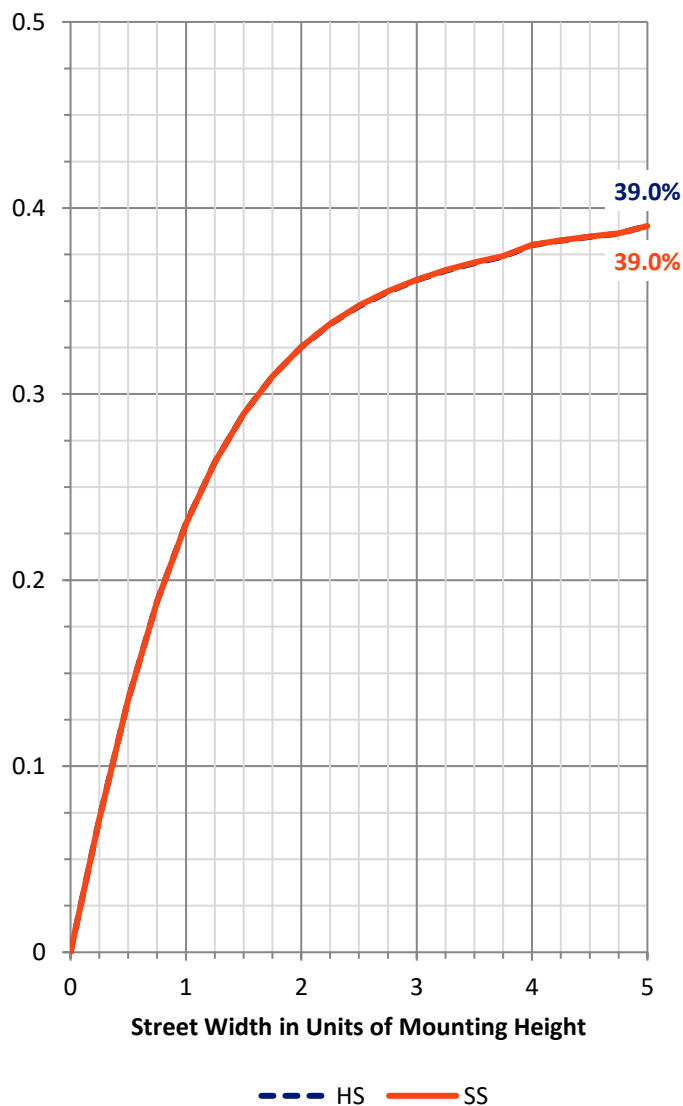
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1616.8	412.0	2028.8
	% Fixture	39.8	10.2	50.0
Street Side	Lumens	1616.8	412.0	2028.8
	% Fixture	39.8	10.2	50.0
Total	Lumens	3233.6	824.0	4057.5
	% Fixture	79.7	20.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.5
10°-20°	176.4	4.3
20°-30°	283.9	7.0
30°-40°	376.1	9.3
40°-50°	475.0	11.7
50°-60°	569.1	14.0
60°-70°	622.3	15.3
70°-80°	498.1	12.3
80°-90°	172.9	4.3
90°-100°	38.3	0.9
100°-110°	59.4	1.5
110°-120°	119.3	2.9
120°-130°	148.7	3.7
130°-140°	153.2	3.8
140°-150°	136.0	3.4
150°-160°	103.7	2.6
160°-170°	51.8	1.3
170°-180°	13.6	0.3
0°-90°	3233.6	79.7
0°-180°	4057.5	100.0

Coefficient of Utilization



REPORT NUMBER: P198315

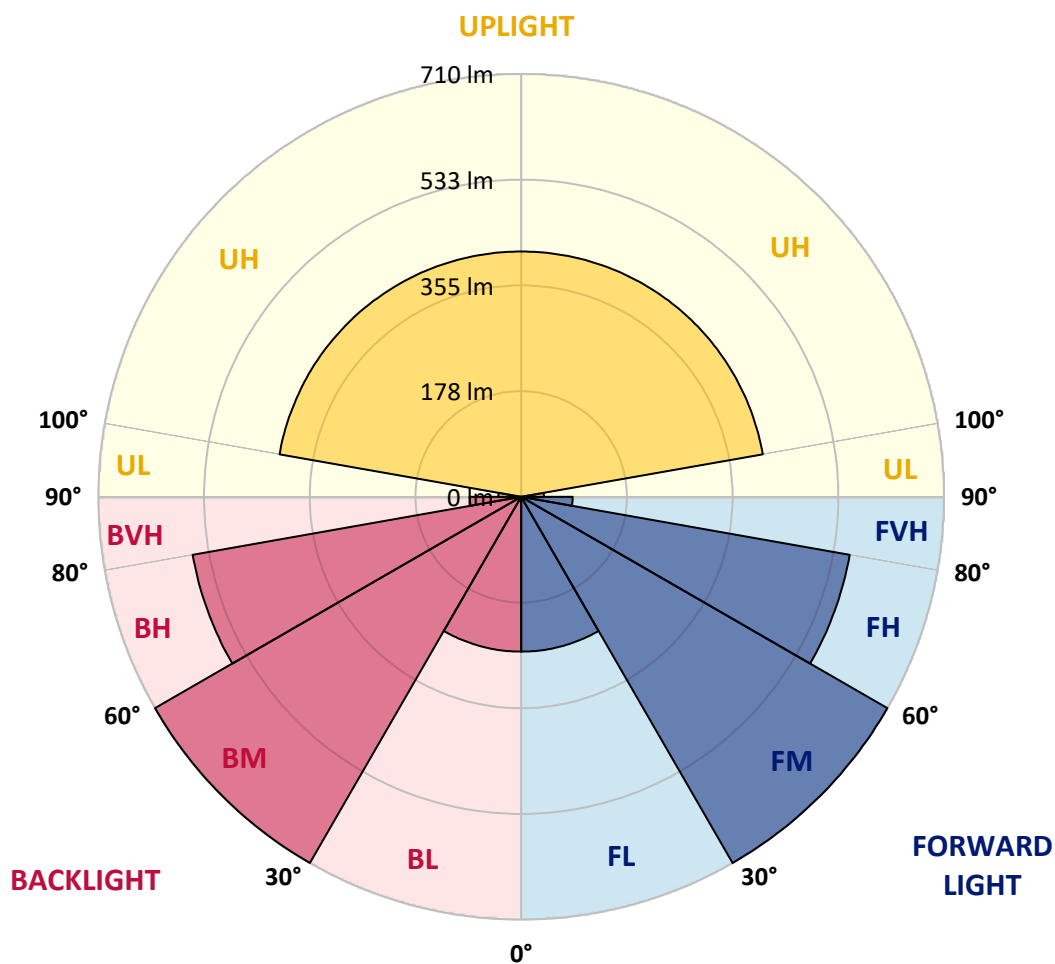
CATALOG NUMBER: TT-C2-LED-E1-MQ-CG-LWR-LW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	260.0	6.4			
FM	(30°-60°)	710.1	17.5			
FH	(60°-80°)	560.2	13.8			G0/660
FVH	(80°-90°)	86.5	2.1			G1/100
BL	(0°-30°)	260.0	6.4	B1/500		
BM	(30°-60°)	710.1	17.5	B1/1000		
BH	(60°-80°)	560.2	13.8	B2/1000		G0/660
BVH	(80°-90°)	86.5	2.1			G1/100
UL	(90°-100°)	38.3	0.9		U2/50	
UH	(100°-180°)	412.0	10.2		U3/500	

BUG Rating: B2-U4-G1

Type V Short



REPORT NUMBER: P198315

CATALOG NUMBER: TT-C2-LED-E1-MQ-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7
2.5°	626.2	625.7	626.2	626.2	626.2	626.2	626.2	626.2	626.2	626.2	626.2
5°	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7
7.5°	625.1	625.1	625.1	625.1	625.1	625.1	625.1	625.1	625.7	625.1	625.7
10°	623.9	623.9	623.9	623.9	624.5	624.5	624.5	624.5	624.5	624.5	624.5
12.5°	622.6	622.6	622.6	622.6	623.2	623.2	623.2	623.2	623.9	623.9	623.2
15°	621.4	620.8	620.8	621.4	621.4	622.0	622.0	622.0	622.6	622.0	622.0
17.5°	620.2	619.6	620.2	620.8	620.8	621.4	622.0	622.0	622.6	622.6	622.6
20°	622.0	621.4	622.0	622.6	623.2	624.5	625.1	625.7	626.2	626.8	626.8
22.5°	618.4	617.8	618.4	618.4	619.0	619.6	620.8	621.4	622.0	622.0	622.0
25°	613.0	613.0	613.6	613.6	614.2	614.8	615.4	616.0	616.0	616.6	616.0
27.5°	607.0	607.0	607.6	607.6	608.8	608.8	609.4	610.0	610.6	610.6	610.6
30°	599.8	599.8	600.4	601.0	602.1	602.8	603.4	604.0	604.6	604.6	604.6
32.5°	593.2	592.6	593.2	594.3	596.1	597.4	598.6	599.2	599.2	599.2	599.8
35°	587.7	588.3	589.5	590.8	593.2	594.3	595.5	597.4	598.0	598.0	598.0
37.5°	588.9	589.5	591.4	593.7	596.8	600.4	602.8	605.2	607.0	606.4	605.8
40°	596.8	598.0	601.0	604.6	609.4	614.2	617.8	620.8	622.6	623.2	622.6
42.5°	598.0	599.2	601.5	607.0	612.4	617.8	622.6	625.7	628.0	628.6	628.0
45°	597.4	597.4	601.0	607.0	612.4	617.8	623.9	628.0	630.5	630.5	630.5
47.5°	593.2	594.9	597.4	603.4	610.6	616.0	622.0	626.2	629.2	631.1	629.2
50°	593.2	593.2	597.4	601.5	608.2	617.8	626.2	630.5	633.5	632.9	633.5
52.5°	592.0	595.5	598.0	604.0	616.0	625.7	632.3	638.3	642.4	643.1	641.9
55°	602.8	603.4	608.8	620.2	631.7	642.4	654.5	663.5	670.8	675.0	668.9
57.5°	611.2	608.2	619.0	628.6	641.9	658.2	676.1	683.4	688.8	687.6	689.4
60°	599.8	604.0	611.8	622.0	643.1	659.3	668.9	676.7	683.4	685.2	682.8
61°	594.3	601.5	605.2	619.0	641.3	653.3	663.5	674.4	686.4	690.6	685.2
62.5°	585.3	596.8	595.5	617.8	631.7	645.5	664.8	677.4	685.8	687.0	685.8
65°	585.9	584.2	598.0	614.2	628.0	652.7	668.9	676.7	681.6	684.0	682.8
67.5°	566.7	560.6	577.5	588.9	612.4	631.7	647.3	658.7	666.0	668.3	665.4
70°	522.2	526.4	538.4	555.8	575.1	598.6	613.0	628.0	634.1	634.6	634.6
72.5°	479.4	481.9	493.9	510.2	532.4	552.8	567.3	579.3	584.8	585.3	586.5
75°	422.9	425.3	439.1	454.2	476.5	493.9	504.1	518.6	526.4	533.0	527.6
77.5°	357.3	361.6	372.3	388.7	409.1	418.7	436.8	453.6	459.0	460.8	459.0
80°	283.3	288.8	298.4	320.0	329.1	344.7	362.2	369.4	374.2	375.4	376.0
82.5°	203.9	208.2	218.3	233.4	243.6	256.3	268.3	277.3	282.7	281.6	281.0
85°	120.3	121.5	132.4	142.6	150.4	158.2	167.8	174.5	175.7	178.0	177.4
87.5°	36.1	36.7	41.5	46.9	50.5	54.1	60.2	68.0	69.7	65.0	65.6
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: P198315

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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: P198315

CATALOG NUMBER: TT-C2-LED-E1-MQ-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7
2.5°	626.2	626.2	626.2	626.2	626.2	626.2	625.7	626.2
5°	625.7	625.7	625.7	625.7	625.7	625.7	625.7	625.7
7.5°	625.7	625.1	625.1	625.1	625.1	625.1	625.1	625.1
10°	624.5	624.5	624.5	624.5	623.9	623.9	623.9	623.9
12.5°	623.2	623.2	623.2	623.2	622.6	622.6	622.6	622.6
15°	622.0	622.0	622.0	622.0	621.4	621.4	621.4	621.4
17.5°	622.6	622.0	621.4	621.4	620.8	620.2	620.2	620.2
20°	626.2	625.7	624.5	623.2	622.6	622.0	622.0	622.0
22.5°	621.4	620.8	619.6	619.0	619.0	618.4	617.8	617.8
25°	616.0	614.8	614.8	614.2	614.2	613.0	613.0	612.4
27.5°	610.0	609.4	608.8	608.2	608.2	607.6	607.0	606.4
30°	604.6	603.4	602.1	601.5	601.0	600.4	600.4	600.4
32.5°	599.2	598.0	597.4	595.5	594.3	593.7	593.2	593.2
35°	597.4	595.5	594.3	592.6	590.8	589.5	588.9	587.7
37.5°	604.6	602.1	600.4	597.4	593.2	591.4	589.5	588.9
40°	620.2	617.8	614.2	609.4	604.6	601.0	598.0	596.8
42.5°	625.7	622.6	617.8	613.0	607.0	601.5	599.2	598.0
45°	627.4	624.5	617.8	611.8	606.4	601.5	598.0	596.8
47.5°	625.7	621.4	615.4	610.6	602.8	596.8	594.3	592.6
50°	629.8	626.2	618.4	607.6	601.0	597.4	593.2	592.6
52.5°	638.3	631.7	624.5	616.6	604.0	596.8	594.3	591.4
55°	663.5	654.5	641.9	629.2	621.4	610.0	602.8	602.8
57.5°	682.8	675.5	659.3	642.4	628.0	619.6	608.8	609.4
60°	677.4	667.7	659.9	643.1	622.6	611.2	607.0	599.2
61°	676.7	663.5	652.7	639.5	622.0	604.0	602.8	592.6
62.5°	678.0	666.0	645.5	631.7	618.4	594.9	594.3	584.8
65°	676.7	665.4	655.1	629.2	611.2	601.5	581.1	588.9
67.5°	658.2	647.9	629.2	614.8	587.1	575.1	563.7	563.7
70°	628.6	613.6	595.5	577.5	558.9	538.4	528.1	522.2
72.5°	579.3	566.7	552.3	533.0	510.2	491.5	481.9	477.7
75°	517.4	503.5	490.9	476.5	452.4	436.8	426.5	423.5
77.5°	452.4	440.3	418.1	404.3	388.0	370.0	361.0	357.3
80°	369.4	362.8	347.1	324.8	317.0	294.8	288.8	283.3
82.5°	277.3	270.1	255.7	240.1	230.4	217.7	207.0	205.7
85°	174.5	169.6	160.6	149.2	137.1	129.9	120.3	122.7
87.5°	65.0	61.9	56.5	49.3	43.9	39.1	34.3	36.1
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

REPORT NUMBER: P198315

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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)