

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: P198289

Luminaire Tested: **TT-C1-LED-E1-WQ-SG-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198289
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-WQ-SG-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH SOFTENING 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: 3545.4 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B1 - 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



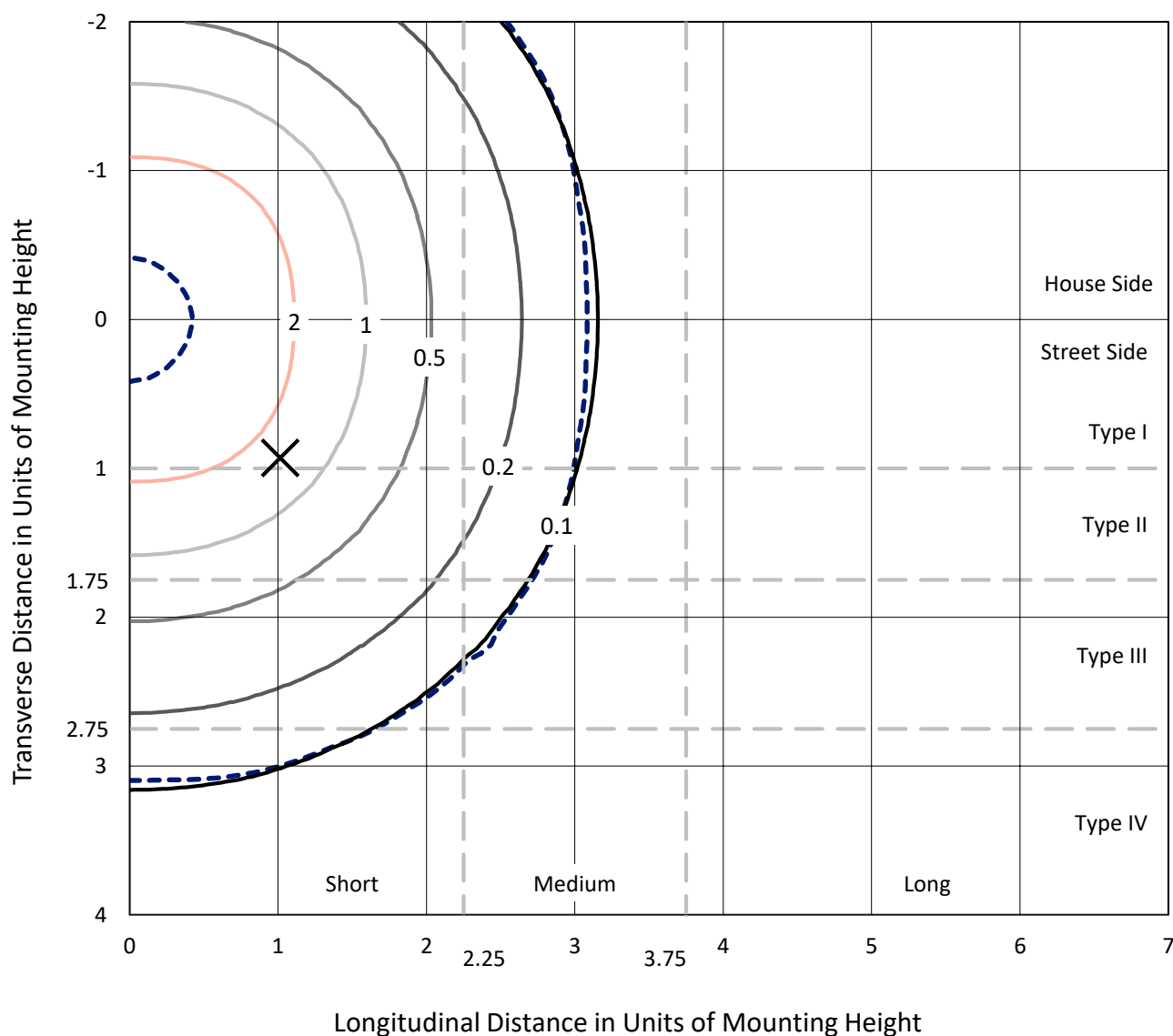
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

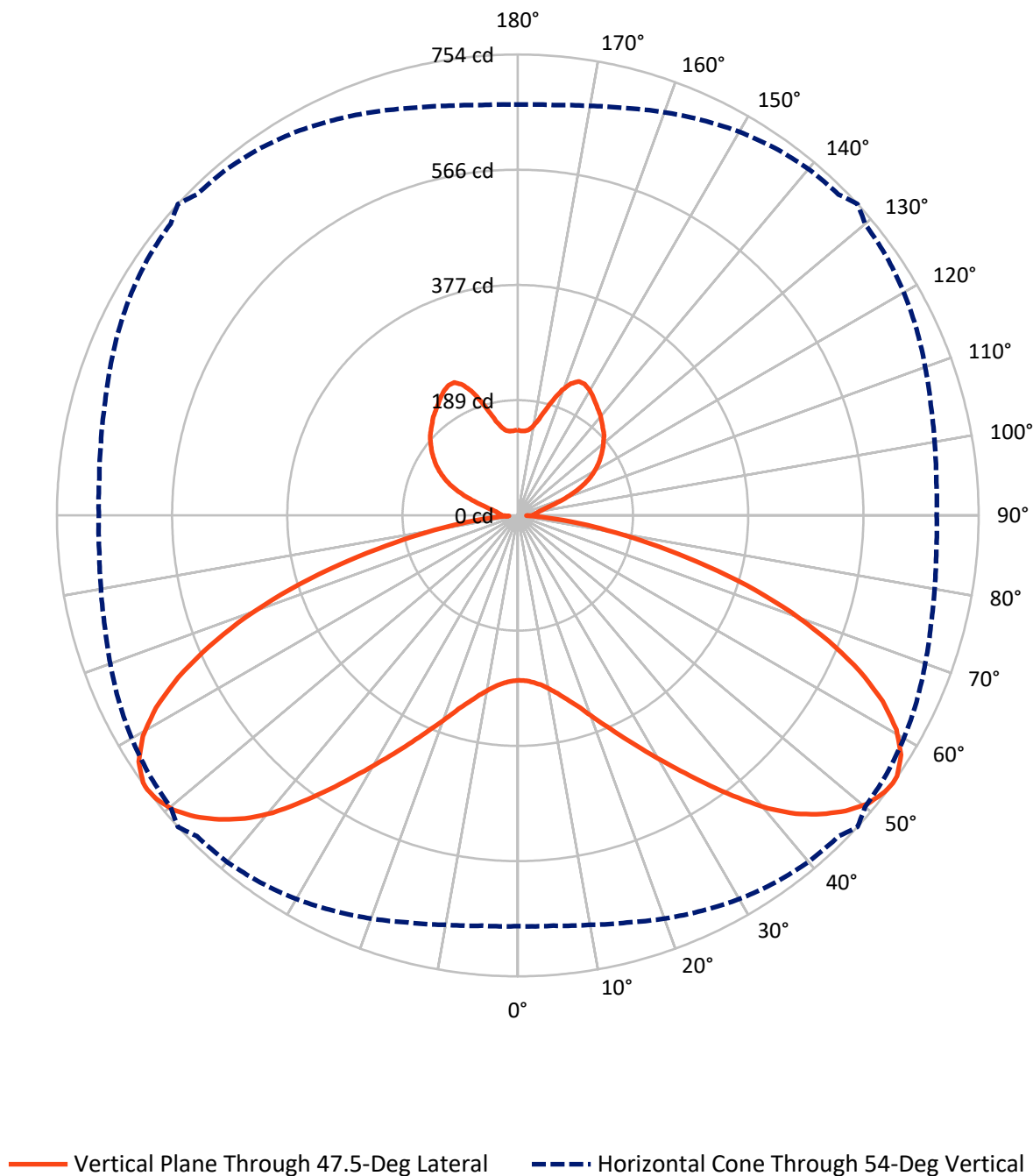


Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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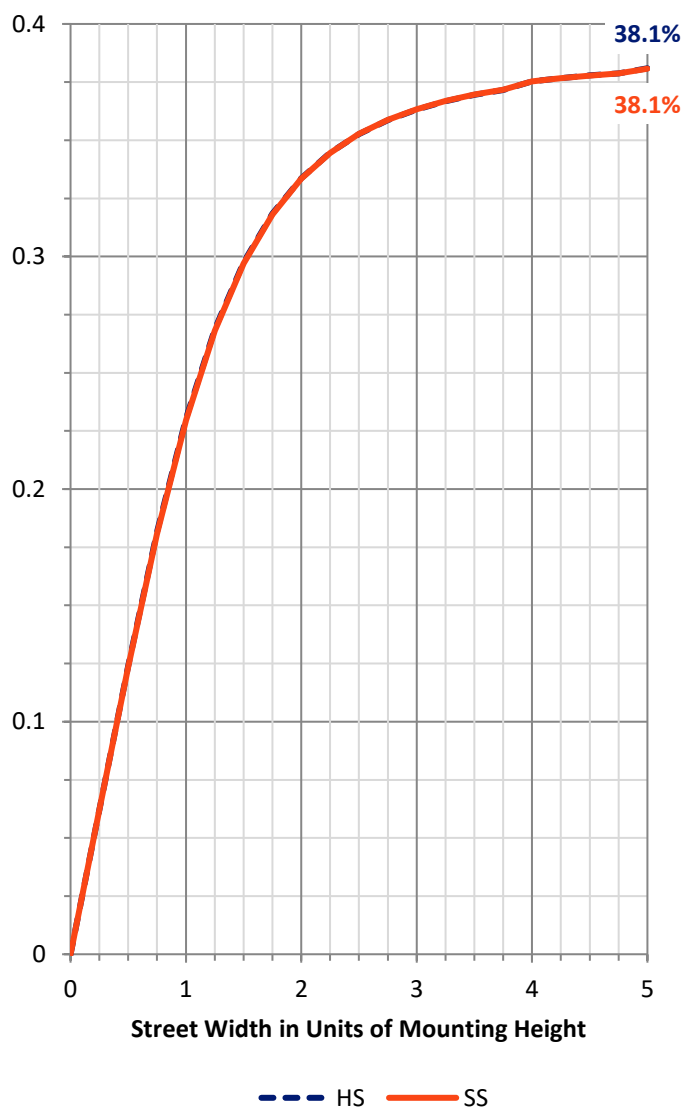
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1360.7	412.0	1772.7
	% Fixture	38.4	11.6	50.0
Street Side	Lumens	1360.7	412.0	1772.7
	% Fixture	38.4	11.6	50.0
Total	Lumens	2721.4	824.0	3545.4
	% Fixture	76.8	23.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.6	0.8
10°-20°	90.3	2.5
20°-30°	185.9	5.2
30°-40°	332.4	9.4
40°-50°	510.1	14.4
50°-60°	628.9	17.7
60°-70°	568.9	16.0
70°-80°	313.3	8.8
80°-90°	65.0	1.8
90°-100°	38.3	1.1
100°-110°	59.4	1.7
110°-120°	119.3	3.4
120°-130°	148.7	4.2
130°-140°	153.2	4.3
140°-150°	136.0	3.8
150°-160°	103.7	2.9
160°-170°	51.8	1.5
170°-180°	13.6	0.4
0°-90°	2721.4	76.8
0°-180°	3545.4	100.0

Coefficient of Utilization



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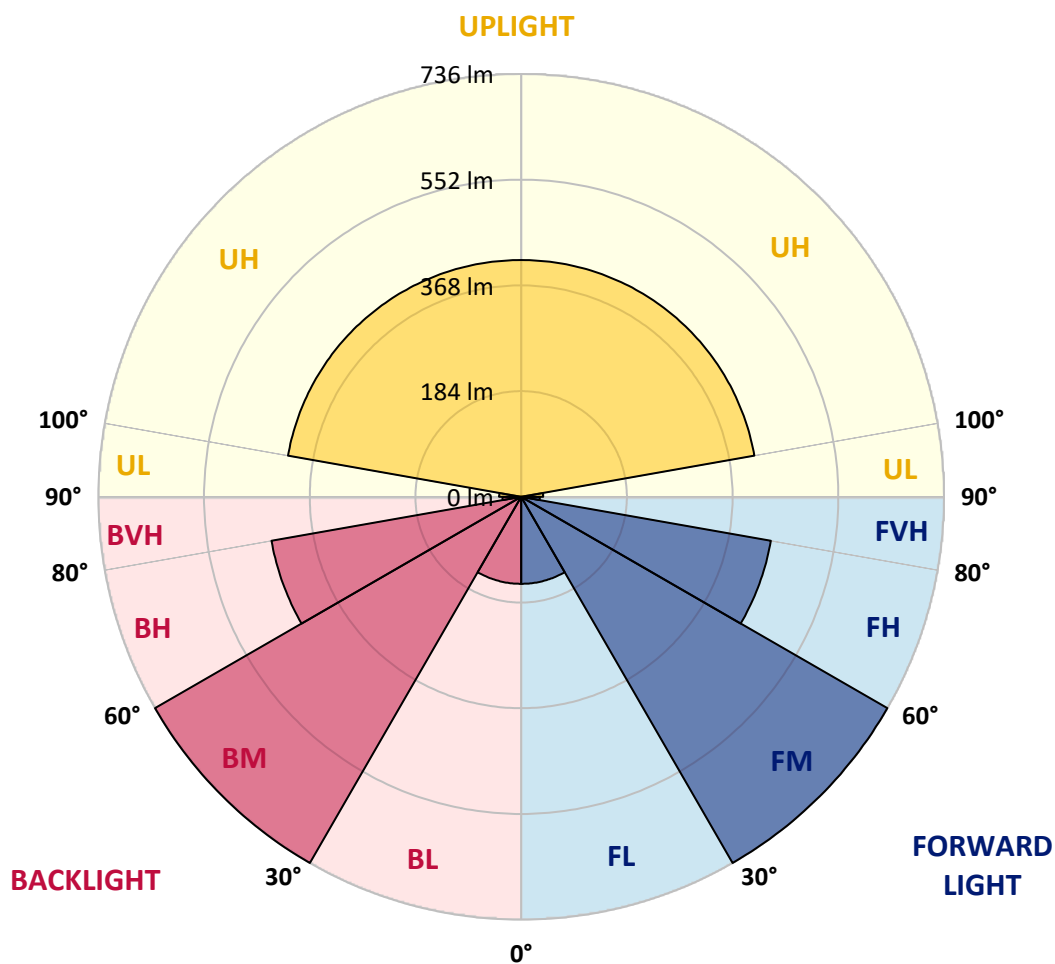
CATALOG NUMBER: TT-C1-LED-E1-WQ-SG-LWR-LW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	151.4	4.3			
FM	(30°-60°)	735.7	20.8			
FH	(60°-80°)	441.1	12.4			G0/660
FVH	(80°-90°)	32.5	0.9			G1/100
BL	(0°-30°)	151.4	4.3	B1/500		
BM	(30°-60°)	735.7	20.8	B1/1000		
BH	(60°-80°)	441.1	12.4	B1/500		G0/660
BVH	(80°-90°)	32.5	0.9			G1/100
UL	(90°-100°)	38.3	1.1		U2/50	
UH	(100°-180°)	412.0	11.6		U3/500	

BUG Rating: B1-U4-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8
2.5°	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0
5°	274.5	274.5	274.5	275.1	274.5	274.5	274.5	274.5	274.5	274.5	274.5
7.5°	280.3	280.3	280.3	280.3	280.3	280.3	279.8	279.8	280.3	279.8	280.3
10°	288.5	288.0	288.0	288.5	288.5	288.0	288.5	288.5	288.5	288.5	289.1
12.5°	299.1	299.1	299.7	299.7	299.7	300.3	300.3	299.7	300.3	300.3	300.3
15°	313.2	313.2	313.2	313.2	313.8	314.4	313.8	313.8	313.2	313.2	314.4
17.5°	329.6	329.6	329.6	329.6	330.8	330.8	330.2	330.8	331.4	331.4	330.8
20°	349.5	349.0	348.4	349.0	350.1	350.1	350.7	351.3	351.3	351.3	352.5
22.5°	370.7	370.1	371.2	371.8	372.4	373.0	373.0	373.6	374.8	374.2	375.9
25°	394.1	393.5	394.1	395.3	397.6	397.6	398.2	399.4	399.4	398.8	402.9
27.5°	420.5	420.5	421.1	423.4	424.0	424.6	426.4	427.5	429.3	429.3	432.8
30°	449.2	448.7	449.8	452.2	453.9	455.7	458.0	461.0	461.6	462.1	465.7
32.5°	478.6	478.6	479.7	483.8	486.8	489.7	493.2	496.2	497.3	497.3	502.6
35°	509.7	510.2	513.2	516.1	522.0	525.5	529.0	533.1	535.5	536.6	543.7
37.5°	542.5	544.3	546.6	550.7	556.6	562.4	567.7	574.2	577.7	578.9	586.5
40°	573.6	575.9	579.4	585.3	591.2	599.4	605.8	612.3	616.4	618.7	630.5
42.5°	604.1	605.3	609.4	615.8	623.4	631.1	639.9	646.9	651.0	654.5	667.4
45°	628.1	629.3	634.6	642.2	651.0	660.4	669.2	677.4	681.5	684.4	697.3
47.5°	648.1	650.4	656.3	663.9	672.7	683.8	693.8	702.0	707.3	709.1	722.5
50°	662.7	666.2	671.5	680.3	690.9	702.0	712.6	721.4	727.2	729.6	741.9
52.5°	670.9	673.9	679.7	688.5	700.8	712.0	723.1	731.9	738.4	740.7	751.9
54°	672.1	673.9	680.3	689.7	702.0	713.7	724.9	733.7	740.1	742.5	754.2
55°	670.9	672.1	679.1	687.9	700.8	712.6	723.7	732.5	739.6	741.9	753.0
57.5°	659.2	661.0	666.8	676.2	687.9	701.4	712.0	720.8	727.8	729.0	739.6
60°	635.2	637.5	642.8	652.8	664.5	676.2	686.8	694.4	700.8	704.4	712.0
62.5°	600.6	601.7	607.0	615.8	626.4	638.7	646.9	654.5	660.4	663.9	670.3
65°	551.3	556.6	560.7	567.7	575.9	585.9	596.5	602.3	605.3	611.1	615.8
67.5°	496.2	499.7	503.8	510.2	515.5	522.0	531.9	537.2	540.7	544.8	548.9
70°	434.6	433.4	438.1	441.6	447.5	451.6	458.0	461.0	465.1	467.4	474.5
72.5°	361.3	363.0	367.1	371.2	373.0	374.2	379.5	381.2	384.7	383.6	392.4
75°	295.0	292.1	293.2	293.8	295.0	293.8	297.3	299.1	300.9	299.1	303.8
77.5°	222.9	219.3	220.5	219.9	219.9	218.8	218.2	218.2	218.8	217.6	220.5
80°	153.7	151.9	152.5	153.7	150.7	151.3	147.8	147.8	147.8	147.8	149.0
82.5°	95.0	92.7	92.1	92.7	92.7	90.9	91.5	89.1	88.6	88.0	93.3
85°	46.3	45.2	46.3	45.2	44.6	44.6	43.4	44.0	42.8	42.2	45.7
87.5°	12.3	11.7	11.7	11.7	11.1	11.7	11.7	11.7	11.7	12.3	14.1
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	32.5
100°	45.0	45.0	45.0	44.0	42.0	40.0	39.0	38.0	36.0	36.0	35.5
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

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CATALOG NUMBER: TT-C1-LED-E1-WQ-SG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.5
112.5°	101.0	102.0	104.0	108.0	106.0	107.0	107.0	110.0	108.0	107.0	105.0
115°	121.0	122.0	123.0	128.0	126.0	128.0	127.0	129.0	126.0	124.0	122.0
117.5°	140.0	141.0	141.0	144.0	141.0	141.0	140.0	141.0	138.0	136.0	135.5
120°	152.0	153.0	154.0	155.0	151.0	149.0	147.0	149.0	147.0	147.0	147.5
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	167.5
127.5°	177.0	177.0	179.0	181.0	177.0	171.0	170.0	176.0	177.0	178.0	176.5
130°	187.0	188.0	190.0	191.0	185.0	179.0	179.0	186.0	187.0	186.0	184.5
132.5°	198.0	199.0	200.0	201.0	193.0	186.0	187.0	193.0	195.0	195.0	193.0
135°	210.0	210.0	211.0	209.0	199.0	192.0	193.0	199.0	202.0	201.0	199.0
137.5°	221.0	219.0	217.0	213.0	203.0	197.0	198.0	205.0	207.0	208.0	205.5
140°	229.0	226.0	222.0	216.0	205.0	200.0	201.0	207.0	210.0	213.0	212.5
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	224.0
147.5°	230.0	227.0	223.0	219.0	210.0	207.0	209.0	216.0	220.0	229.0	231.0
150°	224.0	221.0	219.0	220.0	215.0	214.0	216.0	222.0	227.0	235.0	237.0
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	241.0
157.5°	203.0	203.0	207.0	216.0	220.0	224.0	229.0	234.0	232.0	235.0	232.5
160°	199.0	198.0	203.0	210.0	212.0	213.0	216.0	219.0	216.0	219.0	217.5
162.5°	185.0	184.0	188.0	193.0	194.0	193.0	196.0	198.0	195.0	198.0	197.0
165°	169.0	167.0	169.0	173.0	173.0	173.0	175.0	176.0	174.0	177.0	176.0
167.5°	154.0	152.0	153.0	156.0	156.0	155.0	157.0	159.0	157.0	159.0	158.5
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	140.5
175°	136.0	134.0	135.0	137.0	137.0	137.0	138.0	139.0	138.0	139.0	138.5
177.5°	137.0	136.0	136.0	139.0	138.0	138.0	139.0	140.0	139.0	139.0	138.5
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8
2.5°	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	270.4
5°	274.5	274.5	274.5	274.5	274.5	274.5	274.5	274.5	274.5
7.5°	280.3	280.3	279.8	279.8	279.8	279.8	279.8	279.8	279.8
10°	288.5	289.1	288.0	288.0	288.5	288.0	288.0	287.4	287.4
12.5°	300.3	299.7	300.3	300.3	299.7	299.1	298.5	297.9	298.5
15°	313.8	313.2	313.2	313.2	312.6	312.6	312.0	312.6	312.0
17.5°	330.2	330.2	330.8	329.0	329.6	328.4	328.4	328.4	327.8
20°	351.3	350.7	350.1	348.4	349.0	347.8	347.2	346.6	346.0
22.5°	374.2	373.0	372.4	370.7	371.2	370.1	368.3	367.1	367.1
25°	399.4	398.2	397.0	396.5	395.9	393.5	392.4	390.6	391.8
27.5°	429.3	427.0	425.2	422.9	423.4	420.5	419.3	418.2	418.2
30°	461.6	459.8	456.9	455.1	454.5	451.6	449.2	448.1	447.5
32.5°	496.8	495.6	493.8	490.9	489.7	485.0	483.3	481.5	480.9
35°	538.4	535.5	533.7	529.6	525.5	522.6	518.5	517.3	516.1
37.5°	577.1	577.1	574.2	569.5	563.6	559.5	556.0	553.6	551.9
40°	618.2	617.0	612.3	608.2	602.3	596.5	590.0	587.7	586.5
42.5°	654.5	652.2	647.5	642.2	636.3	629.3	622.3	618.7	618.2
45°	685.0	682.1	677.4	670.3	662.7	655.7	649.2	645.7	644.0
47.5°	709.6	706.1	700.3	693.8	685.0	676.8	670.3	666.8	664.5
50°	727.8	724.9	718.4	710.2	701.4	692.0	685.6	681.5	679.7
52.5°	739.6	735.4	728.4	719.6	709.6	700.3	692.6	687.9	686.2
54°	741.9	737.2	729.6	720.2	709.6	699.7	692.6	687.4	685.6
55°	740.7	736.0	727.8	719.0	707.9	697.9	690.3	685.0	683.3
57.5°	728.4	723.1	715.5	706.1	694.4	684.4	677.4	671.5	669.8
60°	702.0	697.3	688.5	680.3	668.6	658.6	651.0	645.1	643.4
62.5°	661.6	657.4	649.8	641.6	629.3	620.5	612.9	609.4	604.7
65°	607.6	604.7	597.0	587.1	578.3	569.5	561.9	559.5	556.6
67.5°	543.1	539.0	536.0	526.1	519.0	510.8	503.2	498.5	497.3
70°	466.8	465.1	462.1	452.8	448.7	441.6	436.3	432.2	431.1
72.5°	384.7	383.0	382.4	377.7	372.4	366.0	363.6	360.1	359.5
75°	299.1	297.9	299.1	295.6	293.8	292.1	290.9	290.9	289.1
77.5°	216.4	218.2	218.8	218.8	219.9	219.9	221.1	219.3	217.6
80°	147.2	149.0	148.4	149.6	149.0	153.1	150.1	152.5	150.1
82.5°	88.6	90.9	90.9	90.9	93.3	92.7	92.7	93.8	93.3
85°	43.4	44.0	43.4	42.8	45.7	45.2	45.2	44.6	45.2
87.5°	12.9	11.7	12.3	11.1	12.3	10.6	11.7	11.7	12.3
90°	26.0	28.0	30.0	32.0	33.0	34.0	34.0	34.0	34.0
92.5°	27.0	28.0	30.0	32.0	33.0	35.0	36.0	36.0	36.0
95°	30.0	30.0	32.0	34.0	35.0	37.0	38.0	39.0	38.0
97.5°	32.0	33.0	34.0	34.0	35.0	36.0	36.0	36.0	36.0
100°	35.0	36.0	37.0	38.0	38.0	38.0	38.0	37.0	37.0
102.5°	42.0	43.0	44.0	44.0	42.0	42.0	41.0	41.0	41.0
105°	52.0	54.0	54.0	53.0	51.0	49.0	48.0	48.0	49.0
107.5°	68.0	68.0	68.0	66.0	63.0	60.0	59.0	59.0	60.0

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
110°	86.0	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0
112.5°	103.0	102.0	102.0	105.0	103.0	100.0	98.0	95.0	94.0
115°	120.0	121.0	123.0	125.0	124.0	123.0	121.0	116.0	113.0
117.5°	135.0	138.0	140.0	141.0	139.0	139.0	139.0	133.0	129.0
120°	148.0	150.0	151.0	153.0	148.0	148.0	148.0	145.0	142.0
122.5°	158.0	159.0	160.0	162.0	156.0	155.0	156.0	153.0	150.0
125°	167.0	167.0	167.0	168.0	164.0	163.0	164.0	160.0	158.0
127.5°	175.0	176.0	175.0	175.0	173.0	173.0	173.0	166.0	163.0
130°	183.0	183.0	182.0	183.0	181.0	184.0	181.0	171.0	169.0
132.5°	191.0	190.0	189.0	192.0	189.0	192.0	190.0	179.0	176.0
135°	197.0	196.0	197.0	201.0	199.0	199.0	195.0	185.0	184.0
137.5°	203.0	203.0	205.0	210.0	207.0	204.0	198.0	191.0	190.0
140°	212.0	212.0	214.0	217.0	214.0	209.0	202.0	195.0	195.0
142.5°	218.0	220.0	222.0	223.0	217.0	211.0	204.0	198.0	198.0
145°	225.0	230.0	230.0	227.0	217.0	211.0	205.0	201.0	202.0
147.5°	233.0	239.0	236.0	229.0	218.0	212.0	207.0	204.0	206.0
150°	239.0	242.0	240.0	232.0	220.0	214.0	211.0	210.0	211.0
152.5°	241.0	242.0	241.0	235.0	223.0	219.0	217.0	215.0	216.0
155°	239.0	238.0	237.0	234.0	227.0	224.0	223.0	220.0	219.0
157.5°	230.0	228.0	229.0	229.0	226.0	226.0	225.0	222.0	219.0
160°	216.0	215.0	217.0	219.0	219.0	221.0	222.0	218.0	215.0
162.5°	196.0	196.0	199.0	200.0	201.0	204.0	208.0	207.0	207.0
165°	175.0	176.0	179.0	181.0	181.0	185.0	189.0	190.0	192.0
167.5°	158.0	160.0	163.0	165.0	164.0	168.0	171.0	172.0	174.0
170°	147.0	148.0	150.0	152.0	152.0	155.0	158.0	159.0	160.0
172.5°	140.0	141.0	144.0	145.0	144.0	146.0	149.0	149.0	151.0
175°	138.0	138.0	140.0	141.0	140.0	141.0	143.0	143.0	144.0
177.5°	138.0	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	140.0

(END OF REPORT)