

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: P198239

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198239
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-C1-LED-E1-DL-CG-MS/DIM-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
DRIVE LANE DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3008.4 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: B1 - U4 - G1

Input Watts (W): 50.9
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

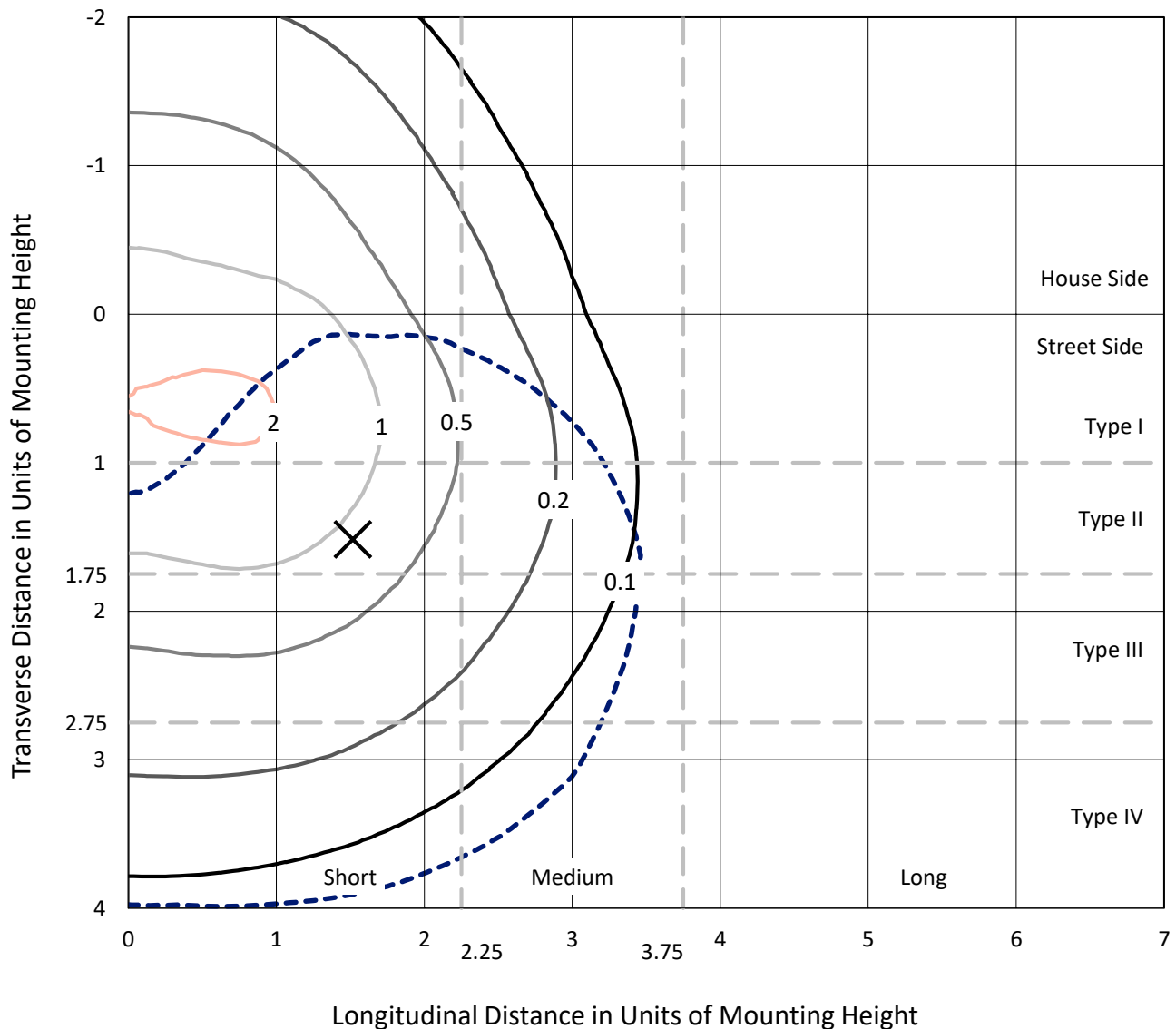


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

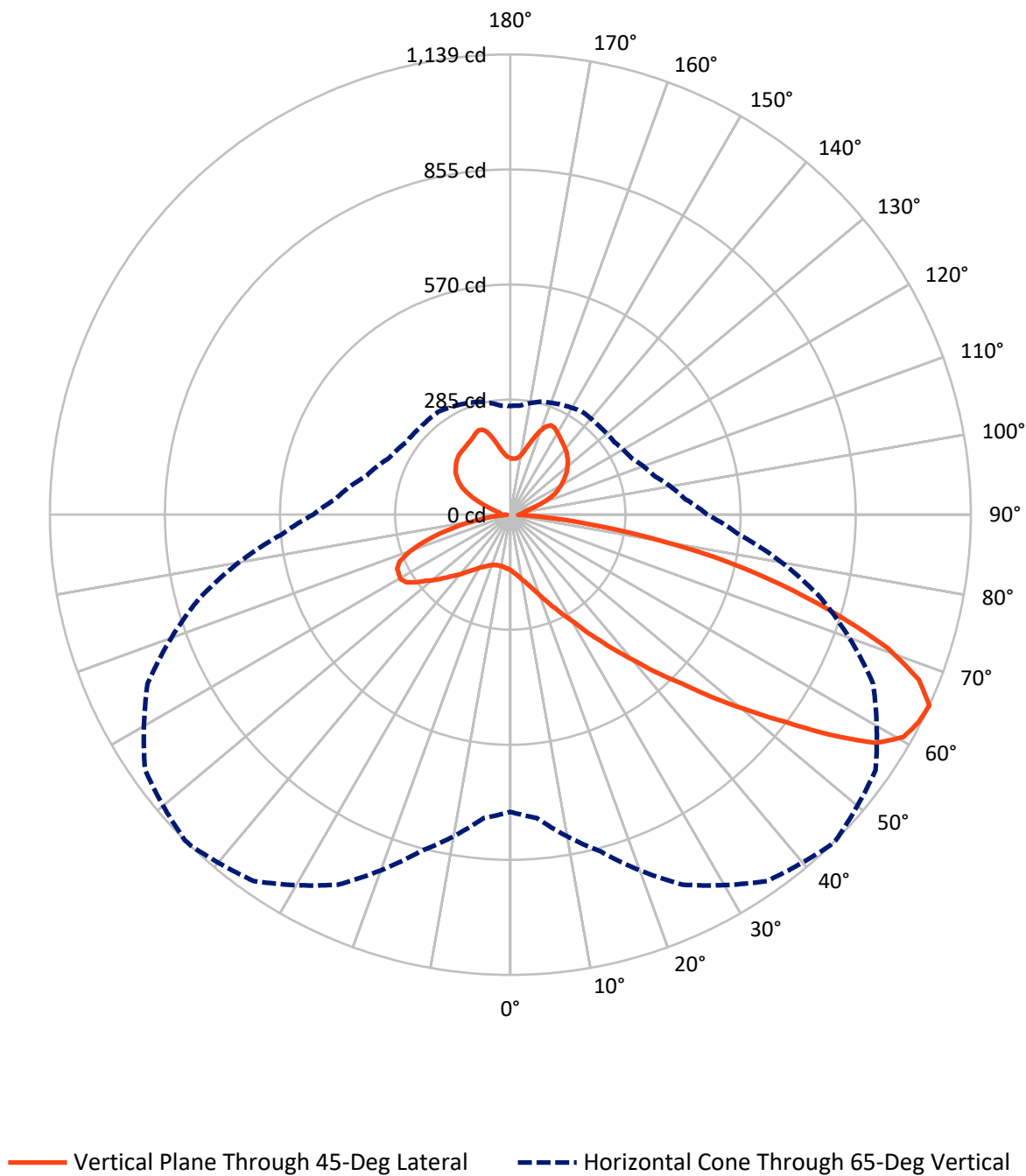


Based on 10 foot mounting height. Maximum calculated value = 2.2 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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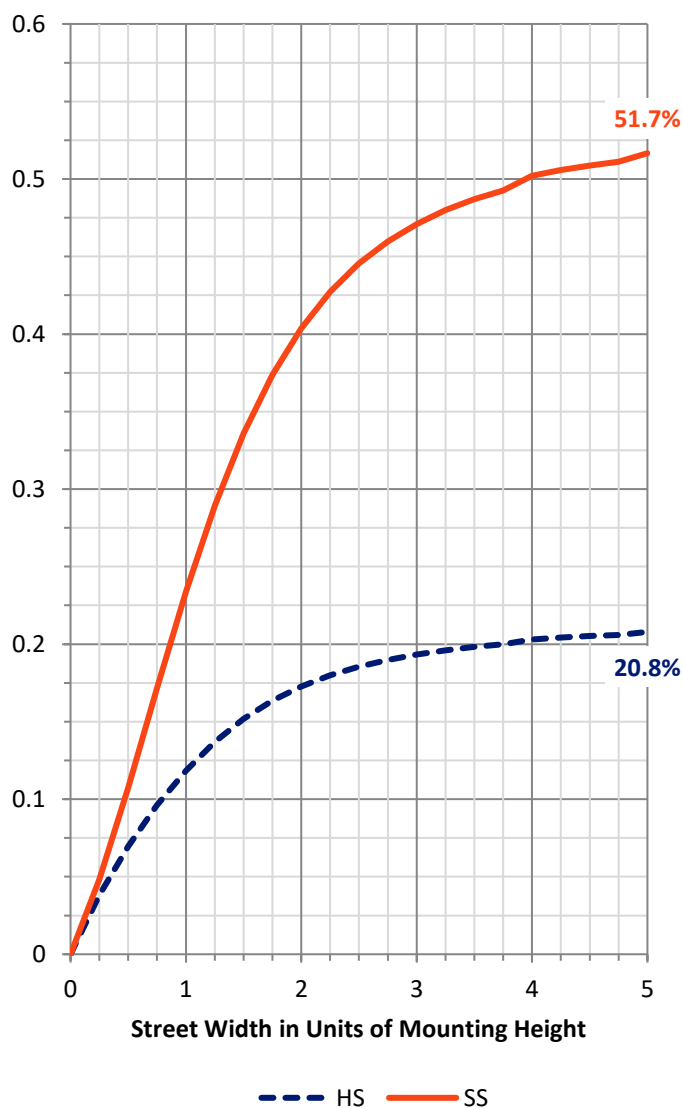
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	633.2	387.3	1020.5
	% Fixture	21.0	12.9	33.9
Street Side	Lumens	1575.2	412.6	1987.9
	% Fixture	52.4	13.7	66.1
Total	Lumens	2208.5	800.0	3008.4
	% Fixture	73.4	26.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.6	0.5
10°-20°	45.1	1.5
20°-30°	91.6	3.0
30°-40°	168.6	5.6
40°-50°	298.6	9.9
50°-60°	489.8	16.3
60°-70°	601.9	20.0
70°-80°	414.1	13.8
80°-90°	85.1	2.8
90°-100°	36.3	1.2
100°-110°	55.2	1.8
110°-120°	110.8	3.7
120°-130°	144.2	4.8
130°-140°	148.0	4.9
140°-150°	133.4	4.4
150°-160°	102.6	3.4
160°-170°	55.1	1.8
170°-180°	14.3	0.5
0°-90°	2208.5	73.4
0°-180°	3008.4	100.0

Coefficient of Utilization



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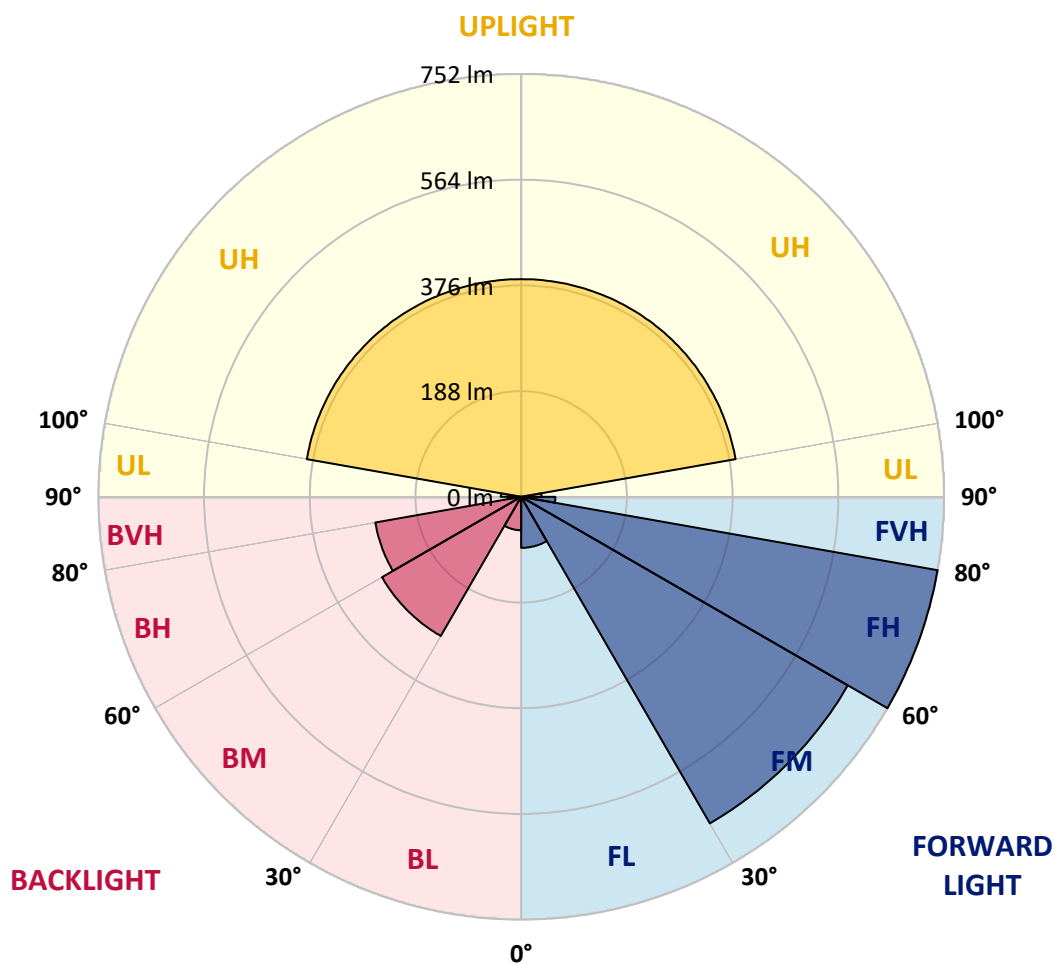
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	90.9	3.0			
FM	(30°-60°)	671.0	22.3			
FH	(60°-80°)	752.4	25.0			G1/1800
FVH	(80°-90°)	60.9	2.0			G1/100
BL	(0°-30°)	59.5	2.0	B0/110		
BM	(30°-60°)	286.0	9.5	B1/1000		
BH	(60°-80°)	263.6	8.8	B1/500		G1/500
BVH	(80°-90°)	24.2	0.8			G1/100
UL	(90°-100°)	36.3	1.2		U2/50	
UH	(100°-180°)	387.3	12.9		U3/500	

BUG Rating: B1-U4-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4
2.5°	144.9	144.9	144.5	144.0	143.6	143.1	143.1	142.3	141.4	140.5	139.6
5°	152.5	152.0	152.0	151.6	150.7	148.9	148.5	147.6	145.8	143.6	141.8
7.5°	160.4	160.4	160.4	159.1	157.3	156.0	155.1	153.3	150.7	147.6	144.5
10°	169.7	170.2	169.3	168.4	166.6	164.0	164.0	160.4	156.4	152.5	148.5
12.5°	180.8	181.3	181.3	179.5	175.9	173.7	172.8	168.9	164.0	158.7	152.9
15°	192.3	194.1	193.2	192.3	188.4	185.2	184.4	178.2	172.8	165.7	158.7
17.5°	210.5	209.6	207.9	205.6	203.4	199.0	198.1	191.5	183.5	174.6	165.3
20°	227.4	227.4	225.6	223.8	221.1	214.9	215.8	207.0	196.3	185.7	173.3
22.5°	246.0	246.4	245.1	243.3	241.1	236.2	234.9	225.6	211.8	197.7	183.0
25°	264.6	265.5	266.3	266.3	263.2	257.5	256.6	244.6	230.5	211.8	194.1
27.5°	286.7	289.0	288.1	289.0	287.6	281.0	281.0	268.6	252.6	229.6	206.5
30°	307.6	310.2	311.6	315.1	315.1	311.1	308.0	296.5	277.4	250.4	222.5
32.5°	335.0	335.0	337.7	345.2	349.2	343.5	345.2	332.4	307.1	275.2	240.6
35°	363.0	363.0	367.8	378.0	382.0	383.3	383.3	367.4	342.1	304.0	262.8
37.5°	392.2	393.1	402.4	416.1	427.7	426.3	428.1	415.3	385.6	338.1	288.5
40°	421.5	424.1	438.7	454.7	474.2	480.4	477.7	469.8	432.5	378.5	317.3
42.5°	453.4	458.2	474.6	499.5	520.3	537.1	537.6	524.7	487.9	425.5	351.9
45°	486.6	494.1	511.4	543.8	577.5	597.4	597.0	598.3	561.5	484.0	396.2
47.5°	524.7	529.6	554.0	593.4	638.6	678.5	678.1	676.7	629.3	538.0	431.2
50°	562.8	565.5	598.7	655.9	716.6	755.6	760.5	765.4	701.1	605.8	474.2
52.5°	602.3	604.1	645.3	714.0	800.8	858.4	852.2	854.4	805.7	694.0	542.4
55°	640.4	640.8	692.7	789.3	894.3	953.7	963.0	973.2	891.2	741.9	562.8
57.5°	673.2	676.7	745.9	864.6	990.1	1071.2	1066.7	1053.9	938.7	760.9	565.9
60°	701.6	710.0	798.6	934.7	1063.2	1112.8	1117.7	1074.3	953.7	768.9	562.4
62.5°	722.4	736.1	844.7	987.8	1105.7	1136.3	1133.2	1083.1	979.0	800.4	584.1
65°	735.7	753.8	863.3	1010.9	1107.1	1138.5	1139.4	1103.1	990.5	795.1	568.6
67.5°	737.0	762.7	857.5	994.9	1086.2	1094.6	1089.8	1036.1	937.3	746.3	524.3
70°	726.8	745.9	829.2	934.7	998.9	994.0	990.9	935.1	841.6	674.5	467.1
72.5°	686.9	700.7	757.8	831.8	860.7	858.0	845.1	802.6	727.3	577.5	395.3
75°	607.6	616.9	642.2	682.5	709.1	699.8	691.8	650.6	588.1	471.5	313.8
77.5°	499.9	489.7	502.6	518.5	531.8	534.9	533.1	491.0	445.8	355.0	238.9
80°	350.1	347.0	345.7	352.8	364.7	360.3	353.2	336.8	301.4	242.0	167.5
82.5°	207.9	204.3	203.0	206.5	200.3	201.2	201.6	184.8	175.5	147.6	96.2
85°	91.7	91.7	89.5	89.5	89.1	89.5	91.7	86.0	80.2	66.9	46.1
87.5°	13.7	12.4	17.3	16.0	18.6	21.3	19.5	18.6	15.5	12.0	9.3
90°	36.0	36.0	36.0	34.0	29.0	26.2	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	30.2	30.0	30.0	34.0	37.0	39.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.2	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	51.8	52.0	54.0	53.0	49.0	48.0
107.5°	72.0	72.0	70.0	67.0	66.0	67.6	68.0	68.0	66.0	60.0	59.0
110°	86.0	86.0	89.0	85.0	86.0	86.8	87.0	84.0	84.0	78.0	74.0

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

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
112.5°	101.0	102.0	108.0	107.0	110.0	107.2	107.0	102.0	105.0	100.0	95.0
115°	121.0	122.0	128.0	128.0	129.0	124.4	124.0	121.0	125.0	123.0	116.0
117.5°	140.0	141.0	144.0	141.0	141.0	136.4	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	157.6	158.0	159.0	162.0	155.0	153.0
125°	169.0	169.0	172.0	163.0	165.0	167.6	168.0	167.0	168.0	163.0	160.0
127.5°	177.0	177.0	181.0	171.0	176.0	177.8	178.0	176.0	175.0	173.0	166.0
130°	187.0	188.0	191.0	179.0	186.0	186.2	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	201.2	201.0	196.0	201.0	199.0	185.0
137.5°	221.0	219.0	213.0	197.0	205.0	207.8	208.0	203.0	210.0	204.0	191.0
140°	229.0	226.0	216.0	200.0	207.0	212.4	213.0	212.0	217.0	209.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	216.8	218.0	220.0	223.0	211.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	221.4	223.0	230.0	227.0	211.0	201.0
147.5°	230.0	227.0	219.0	207.0	216.0	227.2	229.0	239.0	229.0	212.0	204.0
150°	224.0	221.0	220.0	214.0	222.0	233.4	235.0	242.0	232.0	214.0	210.0
152.5°	216.0	214.0	221.0	220.0	230.0	239.6	241.0	242.0	235.0	219.0	215.0
155°	208.0	207.0	219.0	224.0	237.0	242.2	243.0	238.0	234.0	224.0	220.0
157.5°	203.0	203.0	216.0	224.0	234.0	234.4	235.0	228.0	229.0	226.0	222.0
160°	199.0	198.0	210.0	213.0	219.0	218.4	219.0	215.0	219.0	221.0	218.0
162.5°	185.0	184.0	193.0	193.0	198.0	197.4	198.0	196.0	200.0	204.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	176.4	177.0	176.0	181.0	185.0	190.0
167.5°	154.0	152.0	156.0	155.0	159.0	158.6	159.0	160.0	165.0	168.0	172.0
170°	142.0	141.0	145.0	144.0	147.0	146.8	147.0	148.0	152.0	155.0	159.0
172.5°	137.0	135.0	139.0	138.0	141.0	140.8	141.0	141.0	145.0	146.0	149.0
175°	136.0	134.0	137.0	137.0	139.0	138.8	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4
2.5°	139.2	138.7	137.4	136.5	135.2	134.3	133.4	133.0	133.0	132.5	133.0
5°	140.9	140.0	137.8	136.1	134.3	133.0	131.6	130.3	129.4	129.0	129.0
7.5°	142.7	141.4	138.3	135.6	133.0	130.7	129.0	128.1	126.7	126.3	125.9
10°	145.8	144.0	139.6	135.6	132.5	129.4	127.2	125.9	125.0	124.5	124.5
12.5°	150.2	147.1	141.8	136.9	132.5	129.0	126.3	124.5	123.6	122.8	123.2
15°	154.7	151.1	144.5	137.8	133.0	129.4	126.3	124.5	123.2	122.8	122.3
17.5°	160.4	156.4	148.5	140.9	134.7	130.3	127.2	125.4	124.1	123.6	123.6
20°	168.0	162.6	152.5	144.0	137.4	132.5	129.0	127.2	125.9	125.9	125.9
22.5°	175.5	168.9	156.9	147.6	140.5	135.2	132.1	130.3	129.0	128.5	129.0
25°	184.4	176.8	163.1	152.0	144.5	139.6	136.5	134.3	133.0	133.0	133.0
27.5°	196.3	187.5	169.7	158.7	149.8	144.5	140.9	139.6	138.7	138.3	137.8
30°	209.6	198.1	179.5	165.3	156.4	150.7	147.6	146.2	144.9	144.0	143.6
32.5°	225.6	212.3	188.8	174.2	164.0	158.2	155.1	153.3	152.0	151.6	151.6
35°	245.5	229.1	202.1	184.8	173.3	167.1	164.0	162.2	160.9	160.4	160.9
37.5°	265.5	246.4	216.3	196.3	184.4	176.8	173.7	171.5	170.6	169.7	170.2
40°	289.8	266.3	232.7	210.5	196.3	190.1	185.2	182.6	181.3	179.9	179.0
42.5°	319.5	292.9	253.1	225.6	210.5	202.1	197.2	194.1	191.5	190.6	189.2
45°	357.2	324.8	279.6	244.6	226.5	215.8	210.1	206.1	202.1	201.2	199.9
47.5°	388.2	353.2	301.8	266.8	246.0	231.8	223.8	218.0	213.2	212.3	211.0
50°	422.8	383.3	322.6	285.4	261.9	250.0	239.8	231.8	226.5	223.8	224.7
52.5°	481.7	432.1	359.9	311.1	281.4	265.9	257.9	247.3	238.9	234.9	235.8
55°	494.6	447.6	379.8	335.9	306.7	288.5	274.3	263.7	253.1	246.0	245.5
57.5°	494.1	445.8	378.5	339.5	319.1	307.1	294.7	277.4	264.6	255.3	254.8
60°	488.4	439.2	371.8	333.3	318.6	315.1	308.5	295.6	274.8	264.6	262.4
62.5°	502.6	451.2	377.1	332.4	314.2	312.4	310.7	302.7	284.1	269.9	267.7
65°	487.5	435.2	369.2	331.1	313.8	310.2	310.7	300.0	289.4	271.2	269.0
67.5°	443.6	398.9	337.7	304.9	296.5	297.4	300.5	295.6	283.6	268.6	266.8
70°	394.9	353.7	299.6	270.3	264.1	269.0	277.4	277.9	269.9	257.9	258.4
72.5°	332.4	297.4	253.9	230.5	228.2	232.2	238.9	246.8	244.6	241.1	241.5
75°	269.5	241.1	201.6	186.1	185.7	188.8	197.7	203.9	208.3	209.6	212.7
77.5°	199.9	183.5	153.3	140.5	139.2	143.1	152.9	158.2	164.4	169.3	173.7
80°	140.0	125.0	105.5	95.7	97.5	100.2	106.4	113.0	117.4	121.4	121.4
82.5°	82.0	74.0	62.9	58.5	59.4	63.4	64.7	70.5	70.9	73.6	75.3
85°	38.6	33.2	30.1	29.7	29.7	30.1	32.8	33.2	33.7	34.6	38.1
87.5°	8.0	8.0	8.0	8.0	8.0	9.3	9.7	10.6	10.2	10.6	10.2
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

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