

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: P198282

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198282
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-WQ-CG-MS/DIM-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

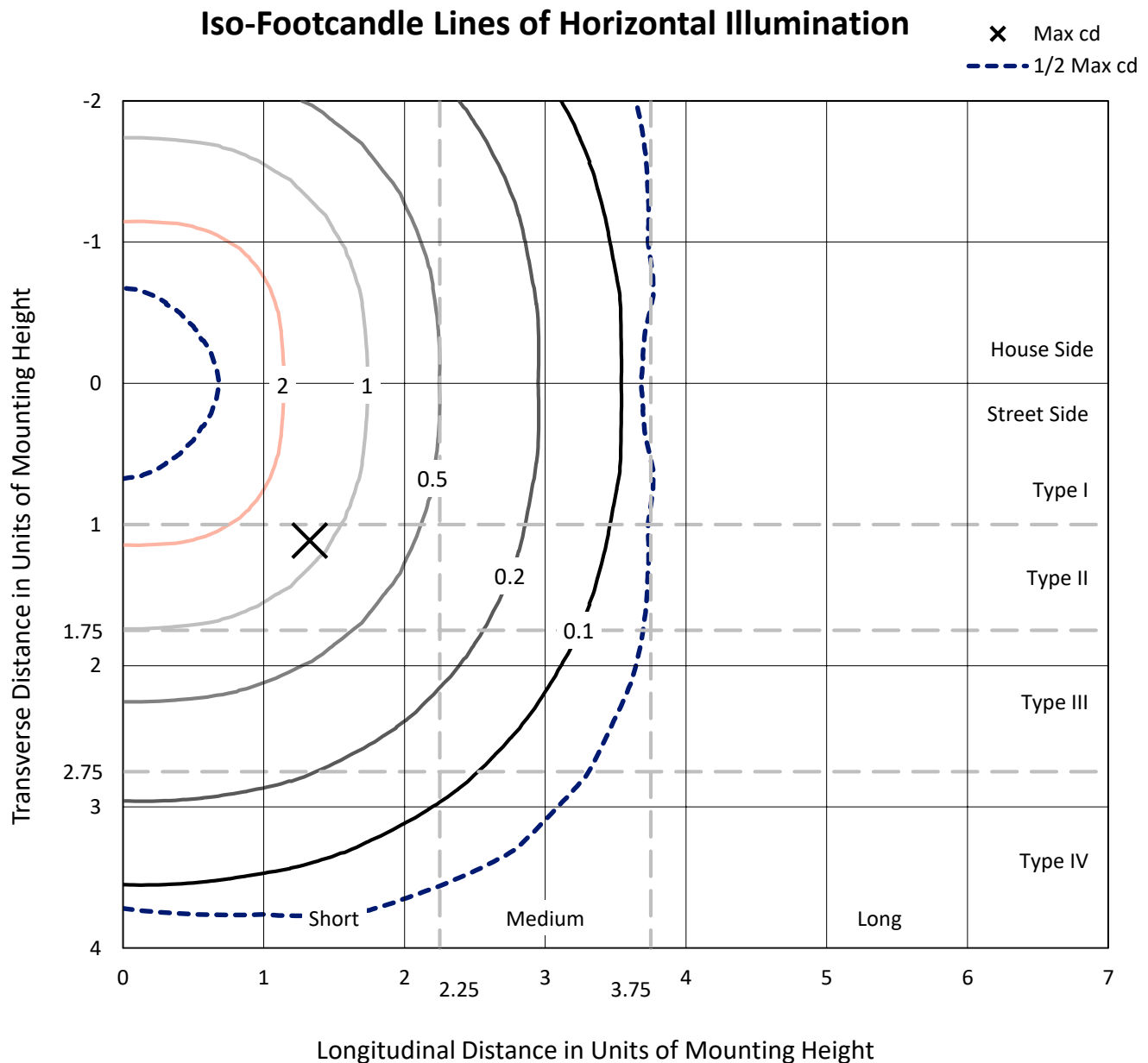
Lumens per Lamp: N/A
Luminaire Lumens: 4217.5 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U4 - G1

Input Watts (W): 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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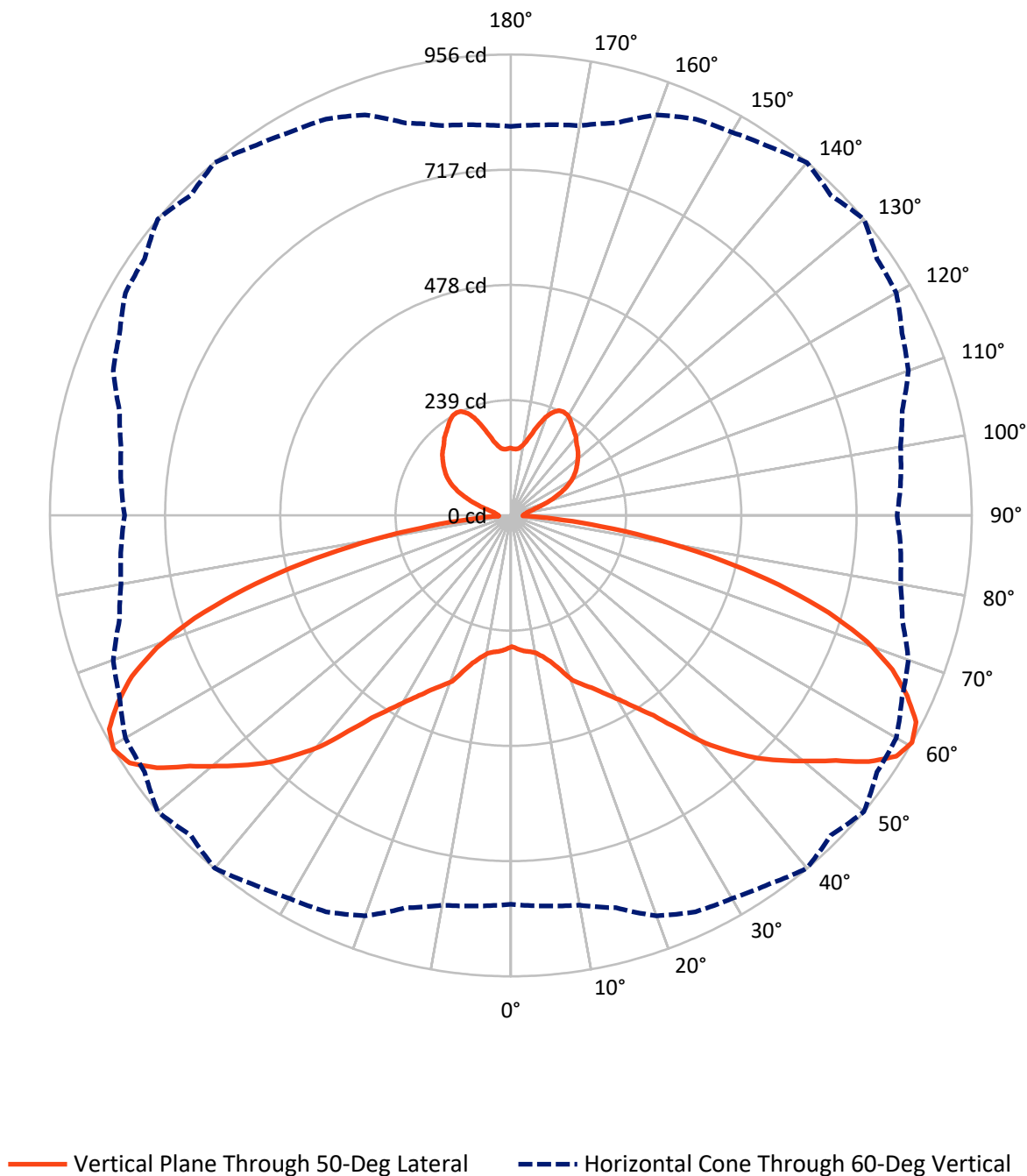


Based on 10 foot mounting height. Maximum calculated value = 3 fc
Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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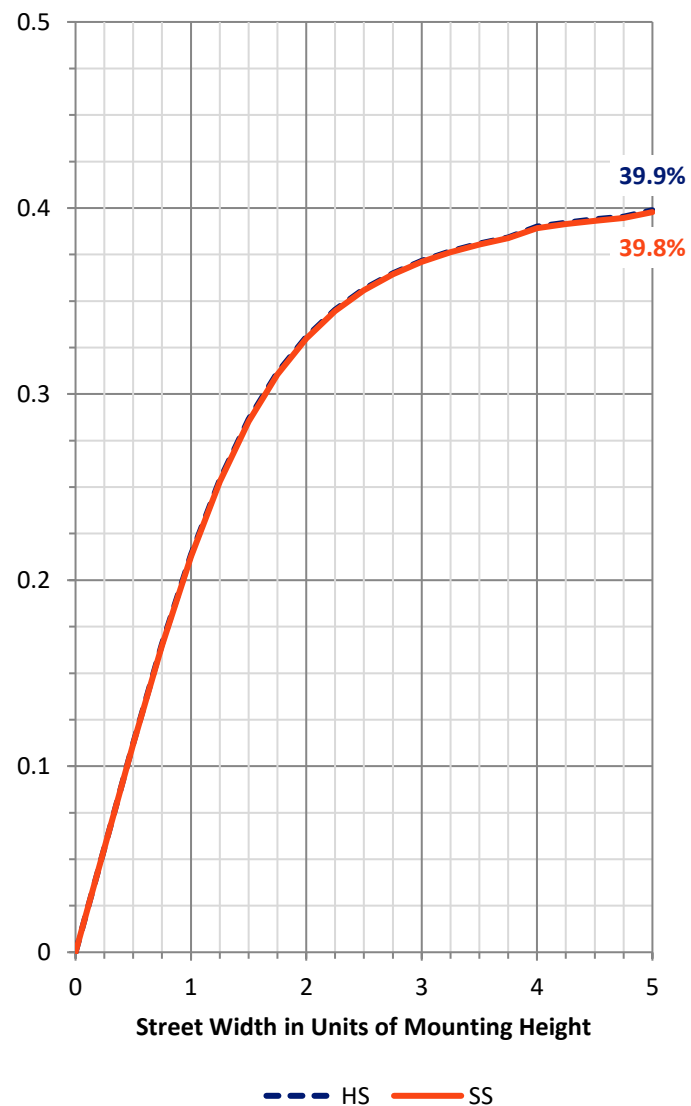
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1696.7	412.0	2108.7
	% Fixture	40.2	9.8	50.0
Street Side	Lumens	1696.7	412.0	2108.7
	% Fixture	40.2	9.8	50.0
Total	Lumens	3393.5	824.0	4217.5
	% Fixture	80.5	19.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.1	0.6
10°-20°	91.4	2.2
20°-30°	184.6	4.4
30°-40°	319.1	7.6
40°-50°	529.9	12.6
50°-60°	753.1	17.9
60°-70°	822.6	19.5
70°-80°	546.5	13.0
80°-90°	119.1	2.8
90°-100°	38.3	0.9
100°-110°	59.4	1.4
110°-120°	119.3	2.8
120°-130°	148.7	3.5
130°-140°	153.2	3.6
140°-150°	136.0	3.2
150°-160°	103.7	2.5
160°-170°	51.8	1.2
170°-180°	13.6	0.3
0°-90°	3393.5	80.5
0°-180°	4217.5	100.0

Coefficient of Utilization



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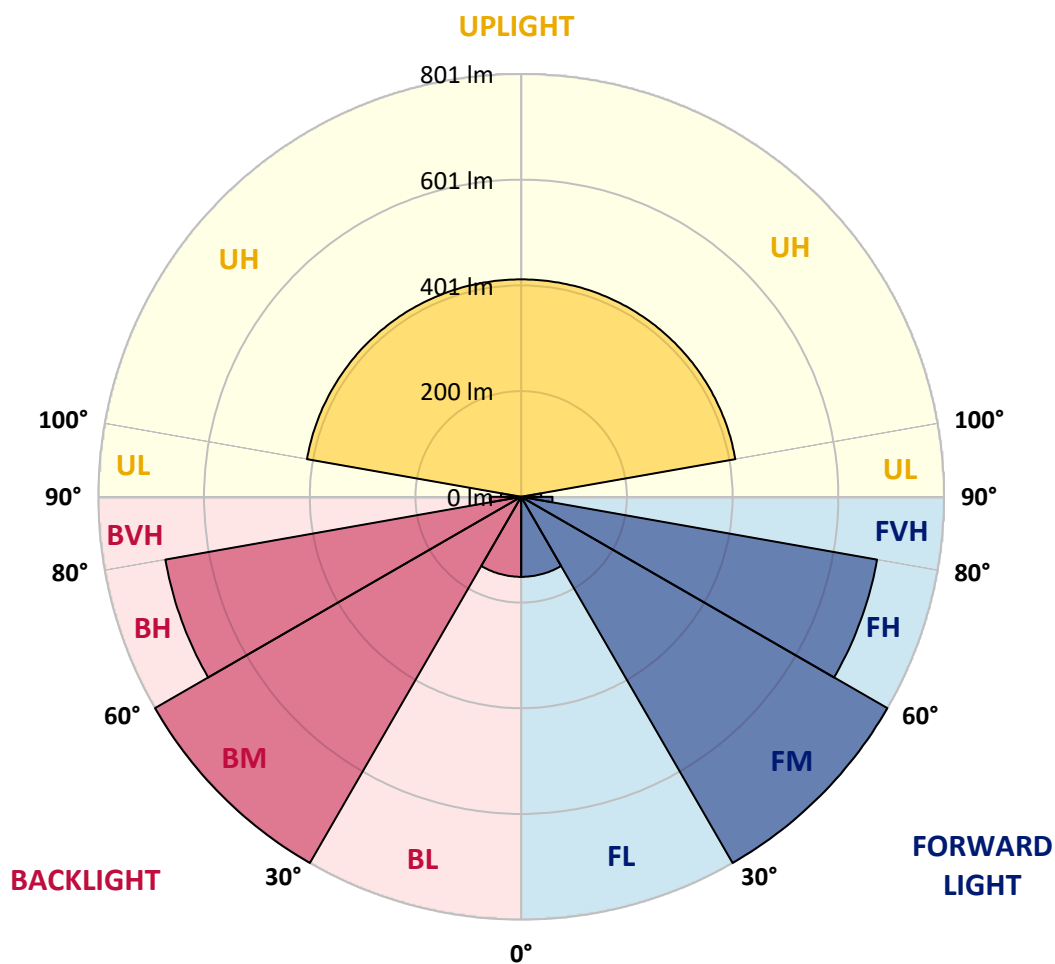
CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-MS/DIM-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	151.6	3.6			
FM	(30°-60°)	801.1	19.0			
FH	(60°-80°)	684.6	16.2			G1/1800
FVH	(80°-90°)	59.5	1.4			G1/100
BL	(0°-30°)	151.6	3.6	B1/500		
BM	(30°-60°)	801.1	19.0	B1/1000		
BH	(60°-80°)	684.6	16.2	B2/1000		G1/1800
BVH	(80°-90°)	59.5	1.4			G1/100
UL	(90°-100°)	38.3	0.9		U2/50	
UH	(100°-180°)	412.0	9.8		U3/500	

BUG Rating: B2-U4-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9
2.5°	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	276.8	277.5	277.5
5°	280.3	280.3	280.3	281.0	281.0	281.0	281.7	281.7	281.7	282.4	282.4
7.5°	282.4	282.4	282.4	282.4	283.1	283.1	283.1	283.8	283.8	284.5	285.2
10°	291.5	291.5	291.5	291.5	291.5	290.8	290.8	290.8	290.1	290.1	290.1
12.5°	302.8	303.5	304.2	304.2	304.2	304.2	302.8	301.4	301.4	301.4	301.4
15°	313.3	314.0	314.7	316.1	316.8	317.5	317.5	317.5	317.5	317.5	316.1
17.5°	330.1	330.8	330.8	331.5	332.2	332.2	332.9	335.0	337.8	339.2	337.8
20°	356.0	357.4	358.1	358.1	358.8	358.1	359.5	360.9	363.0	364.4	365.1
22.5°	374.9	376.4	378.5	378.5	378.5	377.8	379.2	379.9	379.2	379.2	380.6
25°	389.7	391.1	392.5	393.2	394.6	397.4	400.2	400.2	398.1	397.4	397.4
27.5°	408.6	410.7	410.7	411.4	412.8	414.9	417.7	419.8	421.2	419.8	419.1
30°	433.1	434.5	435.2	434.5	437.3	438.0	438.7	440.1	444.3	447.1	443.6
32.5°	452.0	454.1	456.2	459.0	465.4	468.2	467.5	468.9	470.3	473.1	473.8
35°	480.8	484.3	485.0	487.1	494.8	499.0	505.3	508.8	508.1	504.6	509.5
37.5°	524.2	528.4	529.1	532.6	540.3	543.9	550.9	560.0	562.1	557.2	560.0
40°	569.8	575.4	580.3	588.0	600.6	604.8	613.2	618.1	625.1	625.8	620.9
42.5°	608.3	614.6	614.6	628.0	642.0	653.9	664.4	665.1	670.0	677.0	670.0
45°	649.7	654.6	656.7	667.9	676.3	691.7	707.1	712.8	714.9	716.3	718.4
47.5°	687.5	693.8	695.9	705.7	714.9	728.9	738.7	755.5	759.7	754.1	759.7
50°	711.4	718.4	724.0	744.3	760.4	772.3	780.7	795.5	803.9	799.7	800.4
52.5°	748.5	750.6	756.2	767.4	790.5	822.8	832.6	837.5	849.4	855.7	844.5
55°	799.0	806.0	810.2	823.5	835.4	858.5	895.7	903.4	900.6	920.2	901.3
57.5°	807.4	817.9	831.2	856.4	877.4	890.1	913.2	939.8	939.1	941.9	942.6
60°	806.7	813.0	820.7	842.4	883.8	906.9	917.4	933.5	955.2	938.4	955.9
62.5°	801.8	810.9	819.3	834.7	857.1	890.1	919.5	917.4	946.8	933.5	943.3
65°	772.3	780.7	796.2	816.5	843.8	859.2	888.7	907.6	903.4	921.6	903.4
67.5°	721.2	728.9	741.5	765.3	794.0	816.5	827.0	858.5	855.0	875.3	853.6
70°	651.1	660.9	675.6	692.4	720.5	744.3	756.2	776.5	786.3	784.9	783.5
72.5°	567.0	575.4	587.3	605.5	629.4	652.5	661.6	677.0	693.1	688.2	689.6
75°	473.1	480.1	489.2	500.4	522.8	541.0	551.6	565.6	578.2	574.7	573.3
77.5°	364.4	372.8	382.7	393.2	402.3	419.1	426.8	436.6	447.1	445.0	445.7
80°	255.1	262.1	268.4	279.6	286.6	292.2	300.7	304.9	312.6	311.2	313.3
82.5°	155.6	160.5	164.7	170.3	176.6	175.2	175.9	180.8	187.1	183.6	189.2
85°	76.4	75.7	79.9	81.3	85.5	84.8	84.1	86.9	90.4	88.3	88.3
87.5°	19.6	19.6	19.6	20.3	22.4	24.5	22.4	23.8	25.2	25.9	25.2
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
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
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

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9
2.5°	276.8	277.5	276.8	277.5	277.5	277.5	277.5	276.8
5°	282.4	281.7	281.7	281.7	281.0	280.3	280.3	280.3
7.5°	285.2	285.2	284.5	283.8	283.1	283.1	284.5	283.8
10°	291.5	292.2	293.0	293.7	293.0	292.2	292.2	291.5
12.5°	301.4	302.1	303.5	304.9	304.9	304.2	302.8	302.1
15°	315.4	314.7	315.4	316.8	316.8	314.7	312.6	311.9
17.5°	335.0	332.9	331.5	331.5	332.9	330.8	328.7	329.4
20°	362.3	358.8	358.1	356.0	358.1	358.1	354.6	354.6
22.5°	382.0	379.2	376.4	374.2	377.1	378.5	374.9	372.1
25°	400.2	399.5	395.3	393.2	393.2	393.9	389.0	389.7
27.5°	418.4	418.4	415.6	412.1	410.7	412.8	408.6	407.2
30°	440.1	438.0	440.1	435.2	431.7	433.8	433.8	431.0
32.5°	468.2	465.4	467.5	461.9	456.9	456.2	452.7	448.5
35°	508.1	501.1	497.6	494.8	485.0	484.3	483.6	480.1
37.5°	558.6	549.5	541.7	542.4	528.4	524.9	524.9	520.0
40°	618.8	613.2	602.0	597.8	583.8	574.7	574.0	564.9
42.5°	660.9	663.0	648.3	638.5	627.3	613.2	613.9	604.1
45°	707.1	702.9	689.6	673.5	668.6	653.2	653.9	644.1
47.5°	751.3	735.9	728.9	711.4	703.6	686.1	688.2	681.2
50°	794.8	777.9	770.2	751.3	738.7	720.5	718.4	703.6
52.5°	841.0	824.9	814.4	787.0	770.2	756.2	750.6	743.6
55°	901.3	885.2	859.2	832.6	820.0	798.3	796.2	787.0
57.5°	927.9	915.3	888.0	870.4	845.2	822.8	814.4	796.9
60°	927.2	923.0	895.0	877.4	840.3	820.7	811.6	801.1
62.5°	919.5	914.6	881.7	862.0	828.4	811.6	804.6	791.2
65°	904.1	887.3	857.8	841.7	805.3	790.5	775.1	763.2
67.5°	860.6	825.6	812.3	791.9	756.2	740.8	726.1	714.2
70°	779.3	753.4	741.5	716.3	685.4	675.6	657.4	644.1
72.5°	675.6	661.6	649.0	621.6	599.9	590.1	571.9	560.7
75°	560.7	552.3	534.7	514.4	494.8	491.3	471.7	467.5
77.5°	435.2	427.5	413.5	398.8	389.7	382.7	365.1	363.7
80°	304.9	300.0	288.7	282.4	276.1	269.8	257.9	256.5
82.5°	180.1	176.6	177.3	171.0	167.5	166.1	157.0	157.7
85°	86.9	84.1	84.1	84.1	80.6	79.9	74.3	75.0
87.5°	25.2	22.4	22.4	22.4	21.0	21.0	18.2	18.9
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
110°	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
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)