

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: P198237

Luminaire Tested: **TT-C1-LED-E1-DL-CG-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198237
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-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
DRIVE LANE DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2909.3 lumens
Efficiency: N/A
Efficacy: 57.2 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



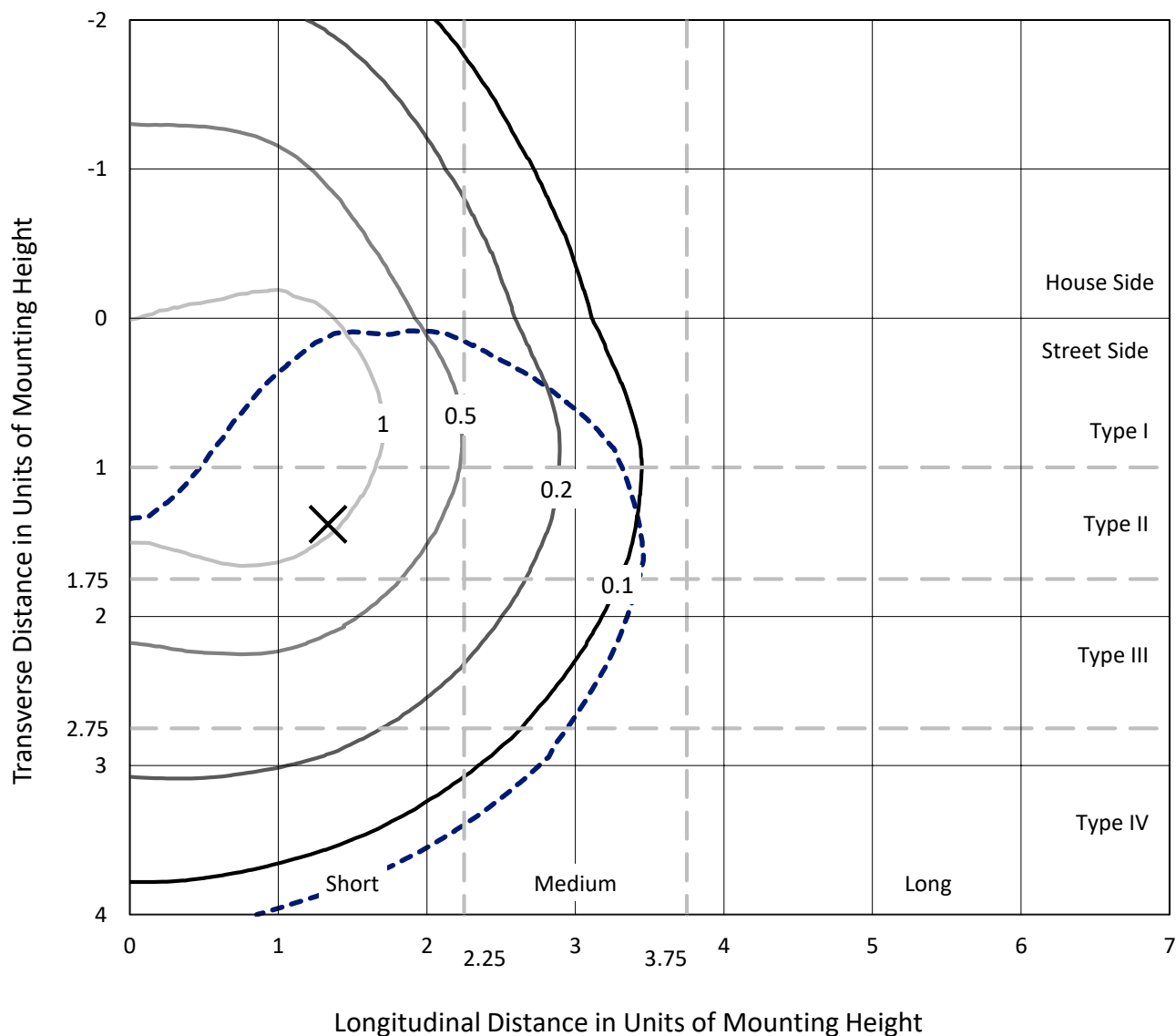
REPORT NUMBER: P198237

CATALOG NUMBER: TT-C1-LED-E1-DL-CG-LWR-LW-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

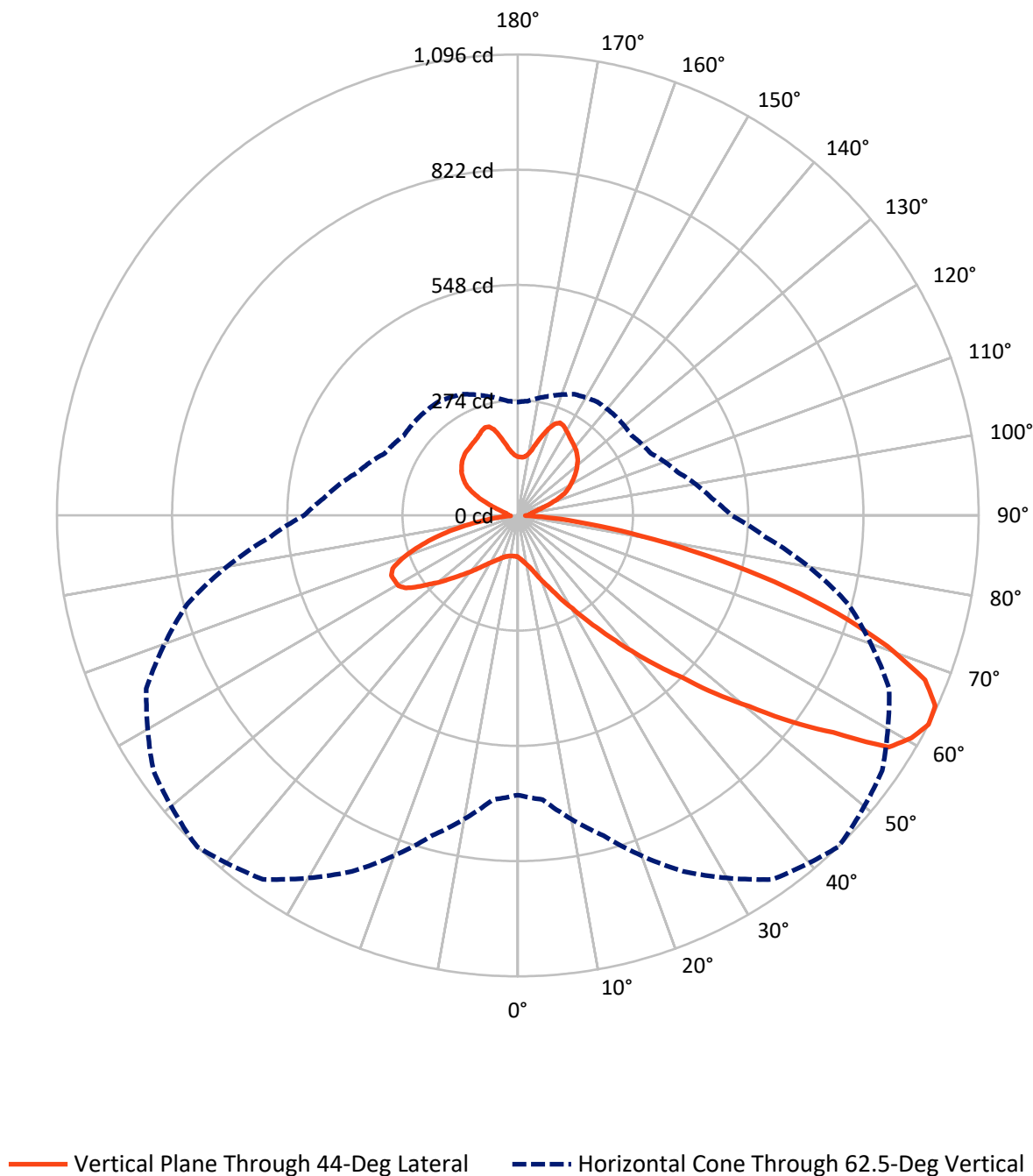


Based on 10 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198237

CATALOG NUMBER: TT-C1-LED-E1-DL-CG-LWR-LW-8030-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198237

CATALOG NUMBER: TT-C1-LED-E1-DL-CG-LWR-LW-8030-UPL

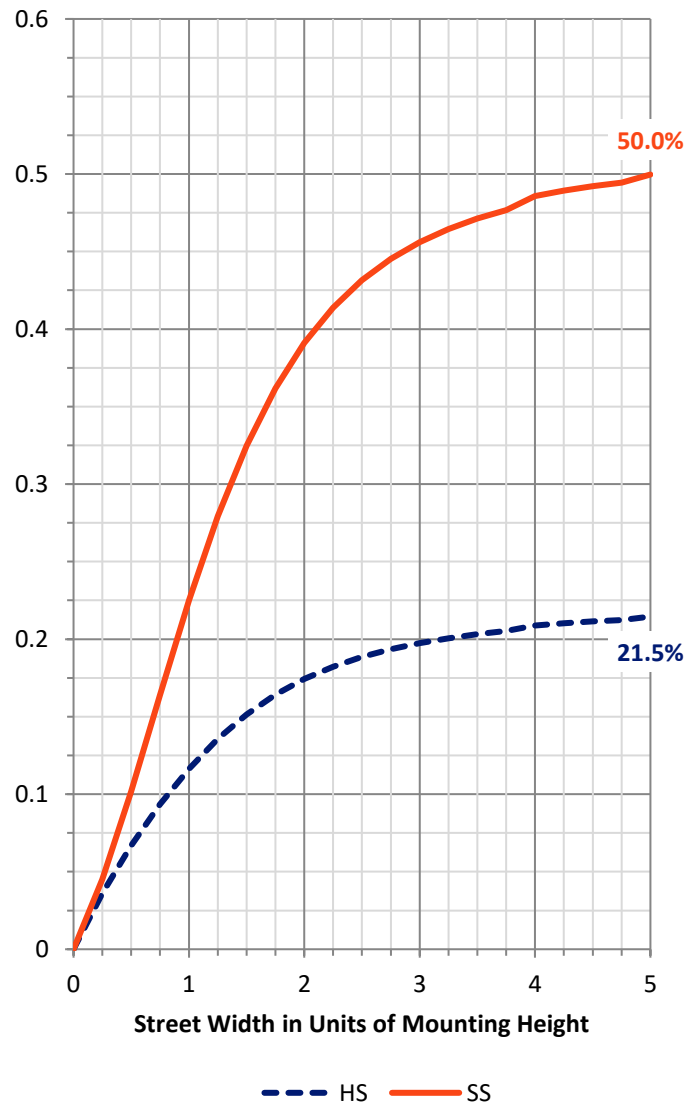
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	634.2	387.3	1021.5
	% Fixture	21.8	13.3	35.1
Street Side	Lumens	1475.2	412.6	1887.8
	% Fixture	50.7	14.2	64.9
Total	Lumens	2109.4	800.0	2909.3
	% Fixture	72.5	27.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.9	0.3
10°-20°	34.3	1.2
20°-30°	74.2	2.5
30°-40°	146.4	5.0
40°-50°	276.8	9.5
50°-60°	475.7	16.4
60°-70°	596.8	20.5
70°-80°	407.6	14.0
80°-90°	87.7	3.0
90°-100°	36.3	1.2
100°-110°	55.2	1.9
110°-120°	110.8	3.8
120°-130°	144.2	5.0
130°-140°	148.0	5.1
140°-150°	133.4	4.6
150°-160°	102.6	3.5
160°-170°	55.1	1.9
170°-180°	14.3	0.5
0°-90°	2109.4	72.5
0°-180°	2909.3	100.0

Coefficient of Utilization



REPORT NUMBER: P198237

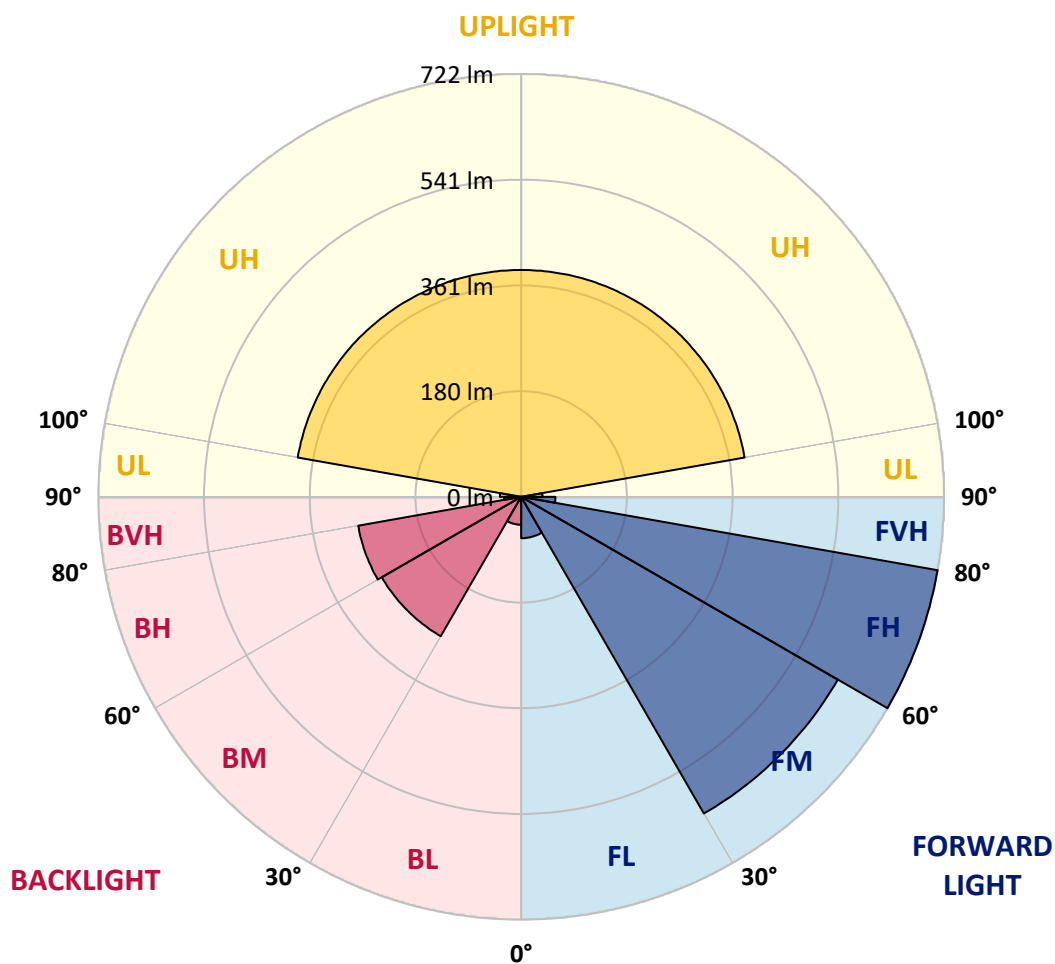
CATALOG NUMBER: TT-C1-LED-E1-DL-CG-LWR-LW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	70.7	2.4			
FM	(30°-60°)	624.1	21.5			
FH	(60°-80°)	721.9	24.8			G1/1800
FVH	(80°-90°)	58.5	2.0			G1/100
BL	(0°-30°)	47.7	1.6	B0/110		
BM	(30°-60°)	274.7	9.4	B1/1000		
BH	(60°-80°)	282.6	9.7	B1/500		G1/500
BVH	(80°-90°)	29.2	1.0			G1/100
UL	(90°-100°)	36.3	1.2		U2/50	
UH	(100°-180°)	387.3	13.3		U3/500	

BUG Rating: B1-U4-G1

Type IV Short



REPORT NUMBER: P198237

CATALOG NUMBER: TT-C1-LED-E1-DL-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
2.5°	103.7	103.7	103.7	103.7	102.8	102.8	102.8	102.4	101.9	101.0	100.6
5°	109.0	109.5	109.0	108.6	107.7	107.2	106.8	106.4	105.0	103.7	102.4
7.5°	115.7	115.2	115.2	114.8	113.5	112.6	112.6	110.8	109.0	107.2	105.0
10°	122.8	123.2	123.2	121.9	121.0	119.2	119.2	116.6	114.3	111.7	109.0
12.5°	131.6	131.2	132.1	131.2	129.9	126.7	126.7	124.5	120.5	117.0	113.5
15°	142.7	142.7	143.1	141.4	140.0	136.9	137.8	132.1	128.5	124.5	118.8
17.5°	156.9	156.9	155.6	154.7	152.5	150.7	148.9	144.0	138.7	132.1	125.4
20°	172.8	173.3	171.1	171.1	168.4	166.2	164.9	159.1	151.1	142.3	133.8
22.5°	192.3	191.5	189.7	187.9	186.6	182.6	183.9	176.4	165.7	153.8	142.7
25°	207.9	209.2	209.2	210.5	208.3	203.9	205.2	195.9	183.5	169.3	153.8
27.5°	226.9	229.6	231.8	234.4	233.6	230.5	229.6	221.1	205.2	188.4	167.5
30°	247.7	251.7	253.5	258.4	259.7	257.0	256.6	248.2	232.7	207.4	184.8
32.5°	274.8	274.3	279.6	288.1	293.4	292.1	291.6	282.3	261.5	234.9	203.9
35°	300.9	301.8	308.0	320.9	329.3	331.9	331.5	321.7	300.9	267.7	229.1
37.5°	329.3	330.6	342.6	358.1	371.8	378.5	378.5	374.0	346.1	301.4	257.0
40°	357.2	363.4	377.1	397.1	420.1	431.2	430.8	423.7	398.0	347.9	286.3
42.5°	390.9	397.1	412.2	440.5	469.3	490.6	490.6	488.4	456.0	402.4	328.8
45°	424.1	429.4	448.1	484.0	526.1	550.9	554.0	561.9	539.3	464.0	378.0
47.5°	459.6	464.0	487.9	533.1	585.9	634.2	637.3	643.5	607.2	524.3	416.6
50°	495.0	496.8	531.8	592.5	667.4	713.5	723.7	736.1	685.6	597.0	460.0
52.5°	535.8	536.7	577.5	655.0	748.5	815.9	817.7	826.5	798.6	686.0	541.1
55°	571.7	573.0	625.3	725.0	846.9	911.6	929.3	955.0	886.8	745.9	565.1
57.5°	604.9	610.3	682.1	809.7	942.2	1040.1	1037.0	1035.7	938.7	769.8	569.9
60°	637.3	647.0	738.8	878.4	1012.2	1075.6	1079.1	1053.9	952.4	779.5	565.1
62.5°	665.2	678.5	788.4	934.7	1057.0	1096.4	1094.2	1058.3	975.0	813.7	591.6
65°	685.2	703.3	811.0	958.6	1053.4	1091.5	1094.6	1075.6	994.5	815.4	583.7
67.5°	695.3	721.1	810.6	942.6	1026.8	1045.0	1046.3	1011.3	934.7	772.0	534.0
70°	698.0	714.8	788.9	884.1	934.7	932.9	930.7	904.5	831.0	688.7	474.6
72.5°	669.2	684.3	720.2	778.7	799.0	794.6	786.2	756.9	707.3	592.1	404.6
75°	605.8	611.1	612.5	628.9	629.8	631.1	621.3	602.3	567.3	478.6	323.1
77.5°	487.9	495.9	478.6	460.0	459.6	457.8	455.6	431.7	414.8	359.0	240.2
80°	355.4	351.9	337.7	316.4	302.2	297.8	295.2	288.5	278.3	246.0	167.1
82.5°	214.5	218.5	203.9	188.8	181.3	173.7	177.7	170.6	165.3	150.2	102.4
85°	96.2	96.2	93.1	89.1	82.9	83.3	84.2	81.5	78.0	70.5	49.2
87.5°	18.6	16.8	18.2	18.6	17.3	17.7	19.1	19.9	20.8	19.5	14.6
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

REPORT NUMBER: P198237

CATALOG NUMBER: TT-C1-LED-E1-DL-CG-LWR-LW-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

REPORT NUMBER: P198237

CATALOG NUMBER: TT-C1-LED-E1-DL-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
2.5°	100.6	100.2	99.7	98.8	97.9	97.5	97.1	96.6	96.6	96.2	96.2
5°	101.9	101.5	100.6	99.7	98.8	97.5	96.6	96.2	95.3	95.3	95.3
7.5°	104.1	103.3	101.5	100.2	98.8	97.5	96.6	95.7	95.3	94.4	94.4
10°	107.2	105.9	103.7	101.0	99.3	97.9	96.6	95.7	95.3	94.8	94.8
12.5°	111.7	109.5	105.9	103.3	100.6	98.8	97.5	96.6	96.2	95.7	95.7
15°	116.1	113.9	109.5	105.5	102.4	100.6	98.8	98.4	97.5	97.5	97.5
17.5°	122.3	118.8	113.5	109.0	105.5	102.8	101.5	100.2	100.2	100.6	100.6
20°	129.4	125.4	118.8	113.0	109.0	106.4	105.0	104.1	103.7	104.1	104.6
22.5°	137.8	132.1	123.6	118.3	113.9	110.8	109.5	108.6	108.1	109.0	108.6
25°	146.2	140.5	130.7	123.6	118.3	116.1	114.8	114.3	113.5	114.3	113.9
27.5°	160.4	152.5	139.2	129.9	125.0	122.3	120.5	119.7	119.7	119.7	119.2
30°	172.8	163.5	148.0	138.7	131.6	128.5	126.7	126.3	126.3	126.7	126.3
32.5°	190.1	178.6	160.4	148.0	141.4	136.5	134.7	134.3	134.3	133.8	134.3
35°	212.3	198.5	174.6	160.0	151.1	146.7	144.9	144.5	143.1	143.1	143.1
37.5°	236.2	218.0	191.5	175.5	164.4	158.7	156.0	154.2	153.3	152.5	152.5
40°	262.4	241.5	211.8	191.0	179.5	172.0	167.1	164.4	163.1	161.8	160.9
42.5°	296.5	273.4	235.3	210.1	195.4	187.0	179.9	177.3	173.7	172.4	169.7
45°	341.2	312.0	264.6	236.2	214.9	203.0	195.9	190.1	185.7	183.5	181.3
47.5°	376.3	341.7	292.9	258.8	238.0	222.5	212.7	203.4	198.1	194.1	193.2
50°	411.7	375.4	323.1	282.3	259.3	245.5	232.7	221.1	211.4	207.0	207.9
52.5°	480.4	436.5	363.4	314.2	281.9	266.3	253.1	238.9	227.8	220.7	221.1
55°	499.9	455.1	389.6	345.2	314.2	293.8	276.1	260.6	244.6	234.4	234.9
57.5°	498.6	454.3	391.8	353.7	333.3	318.6	302.2	281.0	262.4	249.1	247.3
60°	491.9	447.2	387.8	349.2	334.2	330.6	322.2	302.7	277.4	262.4	259.3
62.5°	508.3	464.0	394.9	349.2	331.1	331.5	329.7	317.8	293.8	273.0	269.5
65°	501.2	453.4	390.4	352.3	336.8	333.3	332.4	320.9	304.5	281.0	277.9
67.5°	459.1	417.5	360.3	326.6	320.0	323.1	327.5	320.0	303.6	285.8	281.9
70°	402.8	367.4	319.1	289.8	286.7	292.9	303.1	304.0	294.7	281.0	281.4
72.5°	339.9	311.6	270.8	250.8	247.3	253.1	265.9	272.1	272.6	267.7	267.2
75°	273.0	247.3	218.0	201.2	202.1	211.0	220.7	231.3	234.9	238.0	240.6
77.5°	203.4	189.7	164.9	153.8	156.0	165.7	172.0	178.6	186.1	189.7	192.3
80°	142.3	130.3	113.9	107.2	109.9	115.7	121.0	126.7	136.5	136.9	142.3
82.5°	89.1	81.1	72.7	70.5	70.9	73.1	79.3	82.9	87.3	88.6	87.7
85°	43.4	41.7	39.0	37.7	38.1	40.3	44.3	47.0	49.6	49.2	46.5
87.5°	13.7	14.2	14.6	15.1	15.1	16.4	17.7	17.7	18.6	18.2	18.2
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

REPORT NUMBER: P198237

CATALOG NUMBER: TT-C1-LED-E1-DL-CG-LWR-LW-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)