

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: P198435

Luminaire Tested: **TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198435
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-C4-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: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5259.7 lumens
Efficiency: N/A
Efficacy: 69.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 75.4
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



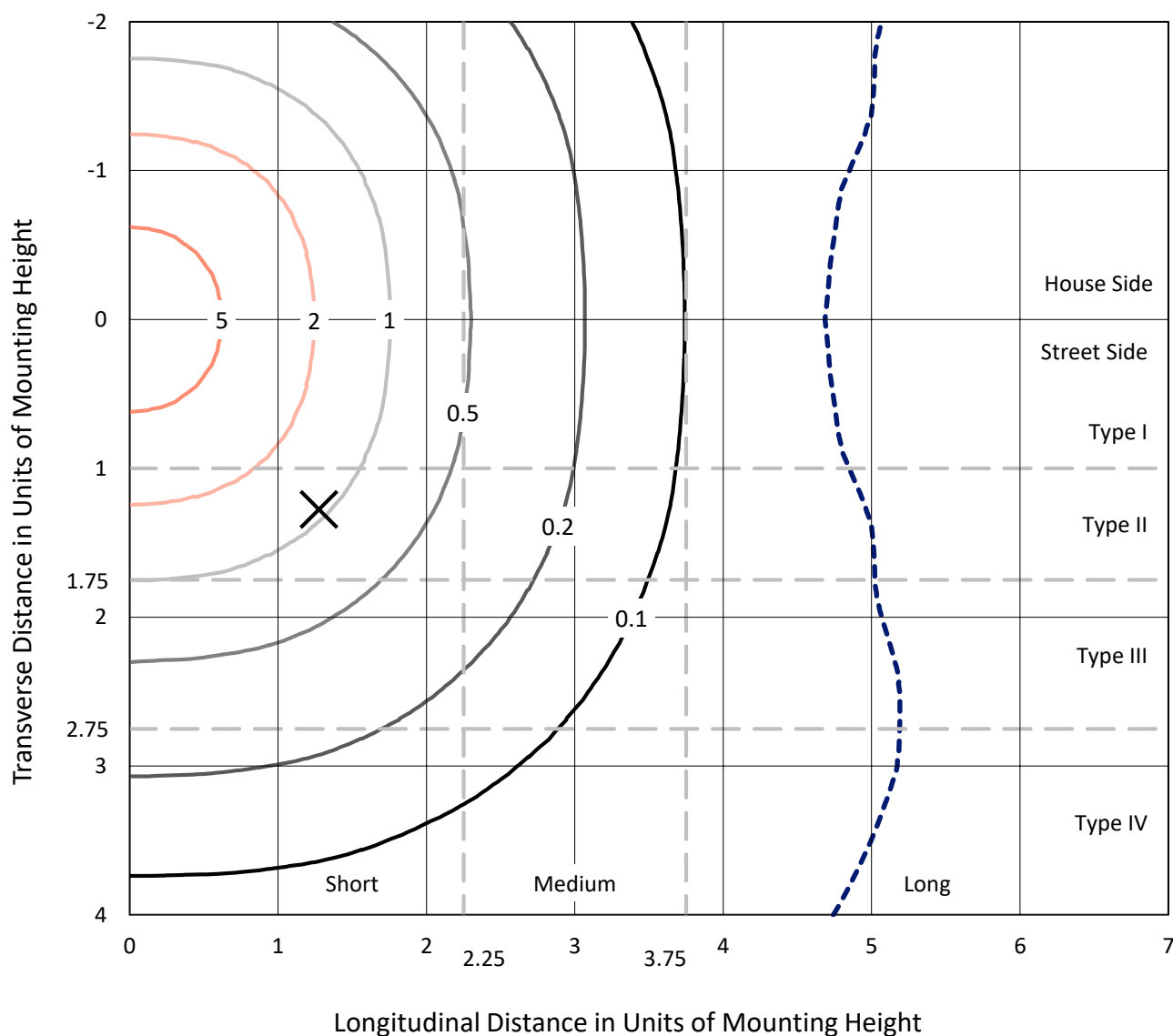
REPORT NUMBER: P198435

CATALOG NUMBER: TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

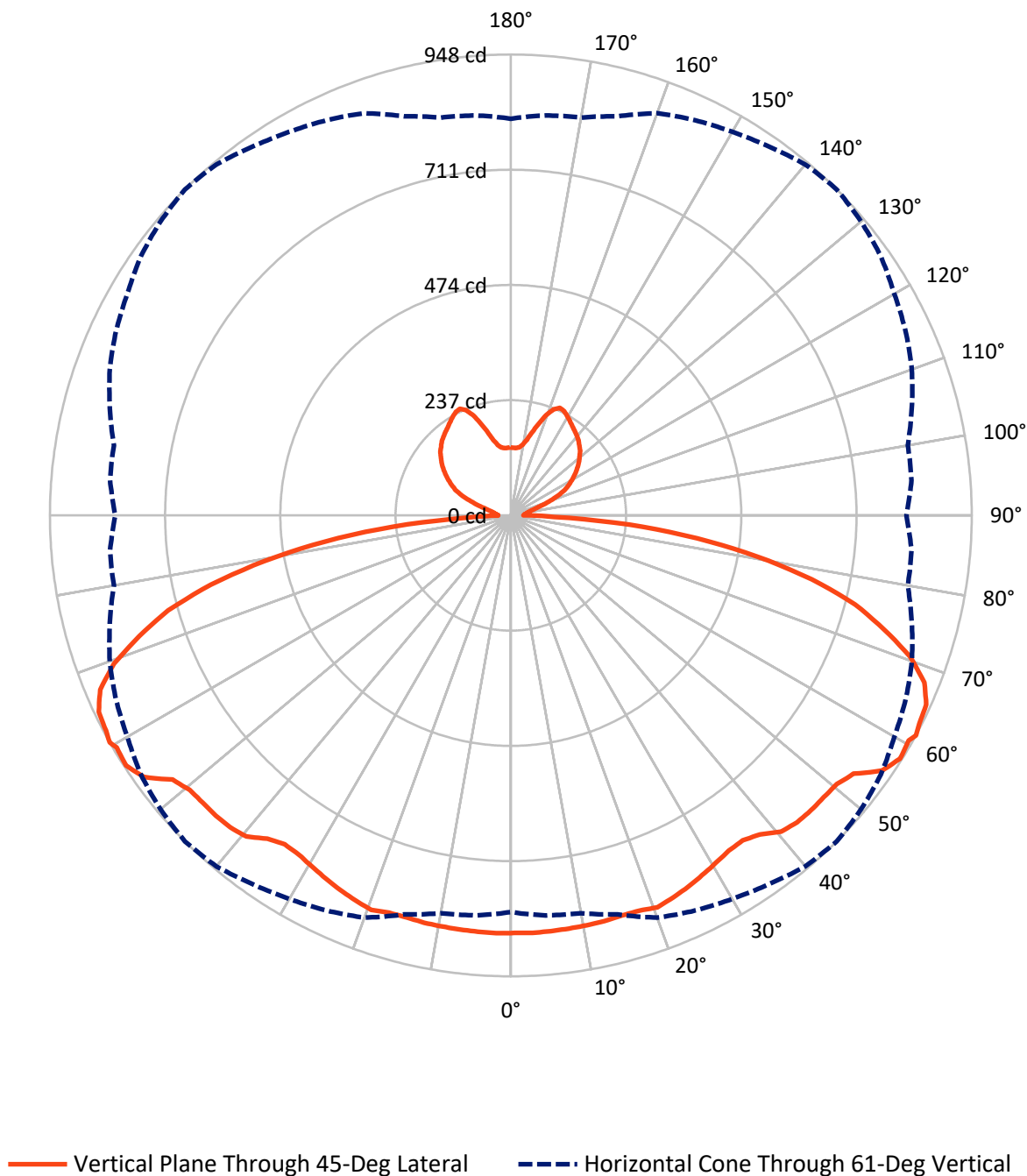


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P198435

CATALOG NUMBER: TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198435

CATALOG NUMBER: TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL

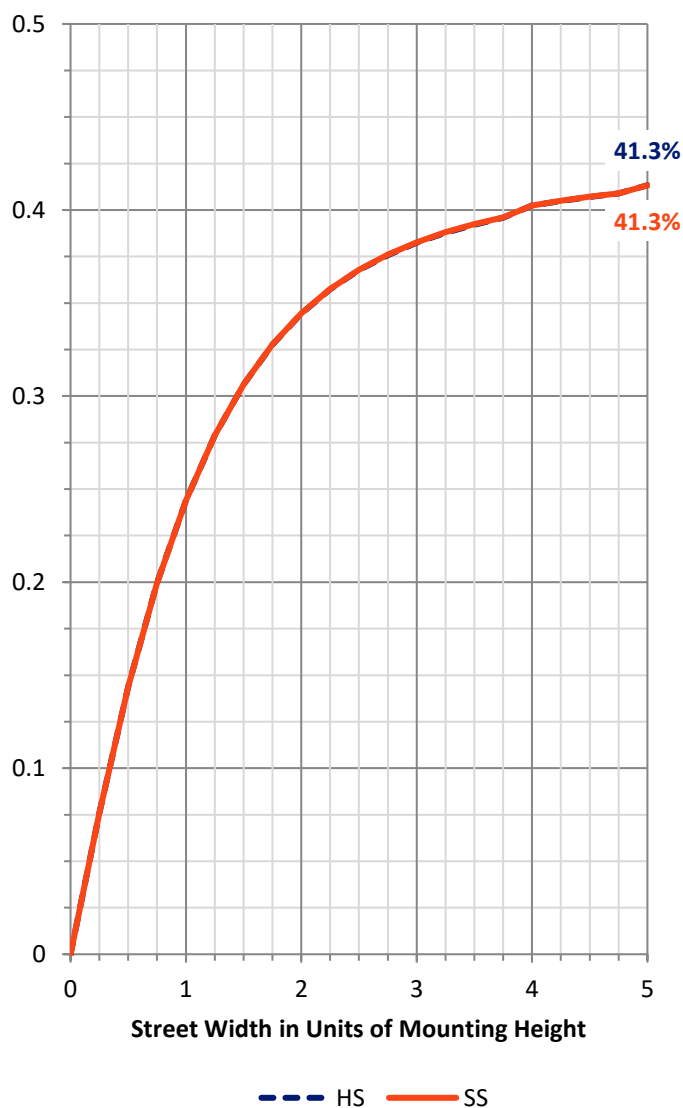
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2217.9	412.0	2629.9
	% Fixture	42.2	7.8	50.0
Street Side	Lumens	2217.9	412.0	2629.9
	% Fixture	42.2	7.8	50.0
Total	Lumens	4435.7	824.0	5259.7
	% Fixture	84.3	15.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	1.6
10°-20°	242.1	4.6
20°-30°	389.6	7.4
30°-40°	516.1	9.8
40°-50°	651.8	12.4
50°-60°	781.0	14.8
60°-70°	853.9	16.2
70°-80°	683.6	13.0
80°-90°	235.7	4.5
90°-100°	38.3	0.7
100°-110°	59.4	1.1
110°-120°	119.3	2.3
120°-130°	148.7	2.8
130°-140°	153.2	2.9
140°-150°	136.0	2.6
150°-160°	103.7	2.0
160°-170°	51.8	1.0
170°-180°	13.6	0.3
0°-90°	4435.7	84.3
0°-180°	5259.7	100.0

Coefficient of Utilization



REPORT NUMBER: P198435

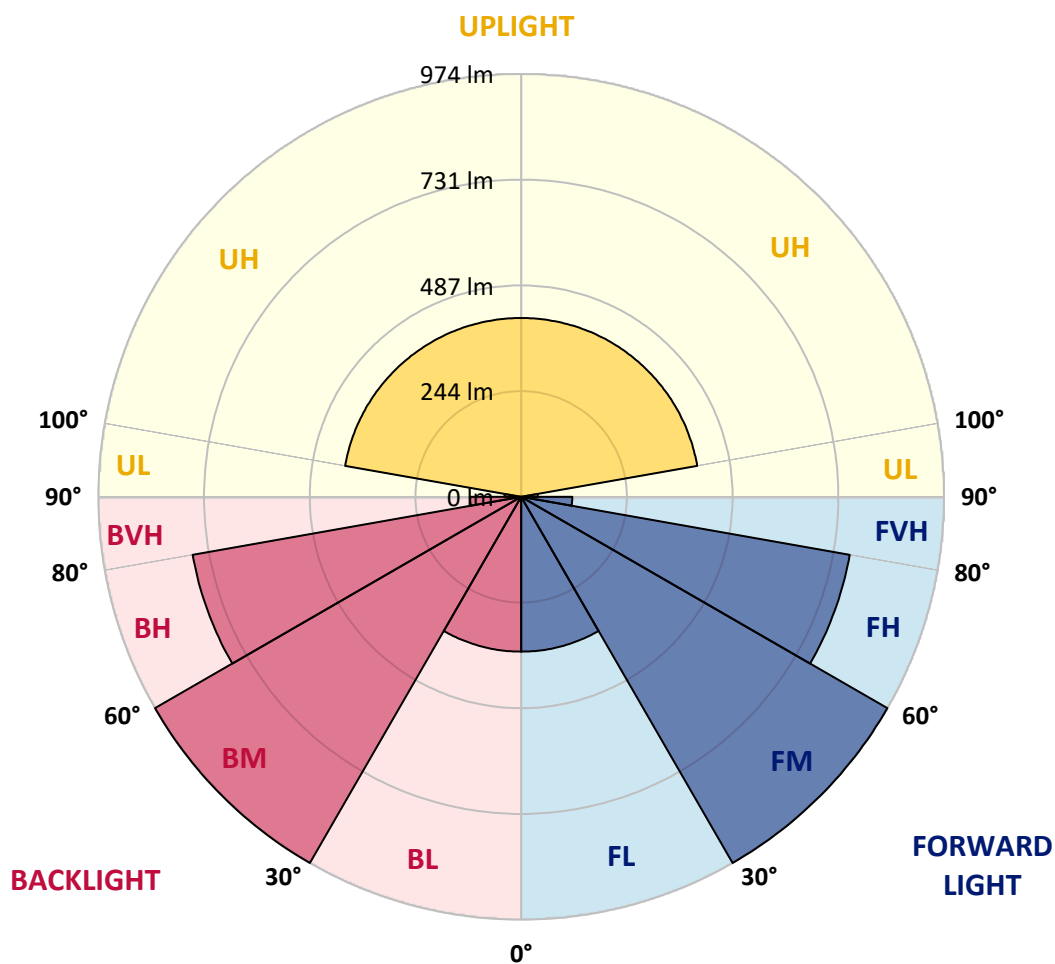
CATALOG NUMBER: TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	356.8	6.8			
FM	(30°-60°)	974.4	18.5			
FH	(60°-80°)	768.8	14.6			G1/1800
FVH	(80°-90°)	117.8	2.2			G2/225
BL	(0°-30°)	356.8	6.8	B1/500		
BM	(30°-60°)	974.4	18.5	B1/1000		
BH	(60°-80°)	768.8	14.6	B2/1000		G1/1800
BVH	(80°-90°)	117.8	2.2			G2/225
UL	(90°-100°)	38.3	0.7		U2/50	
UH	(100°-180°)	412.0	7.8		U3/500	

BUG Rating: B2-U4-G2

Type V Short



REPORT NUMBER: P198435

CATALOG NUMBER: TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6
2.5°	859.3	858.6	859.3	859.3	859.3	859.3	859.3	859.3	859.3	859.3	859.3
5°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6
7.5°	857.8	857.8	857.8	857.8	857.8	857.8	857.8	857.8	858.6	857.8	858.6
10°	856.1	856.1	856.1	856.1	856.9	856.9	856.9	856.9	856.9	856.9	856.9
12.5°	854.4	854.4	854.4	854.4	855.3	855.3	855.3	855.3	856.1	856.1	855.3
15°	852.8	851.9	851.9	852.8	852.8	853.6	853.6	853.6	854.4	853.6	853.6
17.5°	851.1	850.3	851.1	851.9	851.9	852.8	853.6	853.6	854.4	854.4	854.4
20°	853.6	852.8	853.6	854.4	855.3	856.9	857.8	858.6	859.3	860.2	860.2
22.5°	848.6	847.8	848.6	848.6	849.4	850.3	851.9	852.8	853.6	853.6	853.6
25°	841.2	841.2	842.0	842.0	842.9	843.7	844.5	845.4	845.4	846.2	845.4
27.5°	833.0	833.0	833.8	833.8	835.5	835.5	836.3	837.0	837.9	837.9	837.9
30°	823.1	823.1	823.9	824.7	826.3	827.1	828.0	828.8	829.6	829.6	829.6
32.5°	814.0	813.2	814.0	815.6	818.1	819.7	821.4	822.2	822.2	822.2	823.1
35°	806.5	807.4	809.0	810.7	814.0	815.6	817.2	819.7	820.6	820.6	820.6
37.5°	808.2	809.0	811.5	814.7	818.9	823.9	827.1	830.5	833.0	832.1	831.3
40°	818.9	820.6	824.7	829.6	836.3	842.9	847.8	851.9	854.4	855.3	854.4
42.5°	820.6	822.2	825.5	833.0	840.4	847.8	854.4	858.6	861.8	862.7	861.8
45°	819.7	819.7	824.7	833.0	840.4	847.8	856.1	861.8	865.2	865.2	865.2
47.5°	814.0	816.4	819.7	828.0	837.9	845.4	853.6	859.3	863.5	866.0	863.5
50°	814.0	814.0	819.7	825.5	834.6	847.8	859.3	865.2	869.3	868.5	869.3
52.5°	812.4	817.2	820.6	828.8	845.4	858.6	867.7	875.9	881.6	882.4	880.9
55°	827.1	828.0	835.5	851.1	866.8	881.6	898.2	910.6	920.5	926.3	918.0
57.5°	838.7	834.6	849.4	862.7	880.9	903.2	927.9	937.7	945.2	943.6	946.1
60°	823.1	828.8	839.5	853.6	882.4	904.7	918.0	928.7	937.7	940.2	937.0
61°	815.6	825.5	830.5	849.4	880.0	896.5	910.6	925.5	941.9	947.7	940.2
62.5°	803.2	818.9	817.2	847.8	866.8	885.8	912.2	929.5	941.1	942.7	941.1
65°	804.0	801.6	820.6	842.9	861.8	895.7	918.0	928.7	935.4	938.6	937.0
67.5°	777.7	769.3	792.5	808.2	840.4	866.8	888.3	903.9	913.9	917.1	913.1
70°	716.5	722.4	738.8	762.8	789.2	821.4	841.2	861.8	870.2	870.9	870.9
72.5°	657.9	661.2	677.8	700.1	730.6	758.6	778.5	795.0	802.5	803.2	804.9
75°	580.3	583.6	602.6	623.2	653.8	677.8	691.7	711.6	722.4	731.4	724.0
77.5°	490.3	496.2	510.9	533.3	561.4	574.6	599.4	622.5	629.9	632.4	629.9
80°	388.8	396.3	409.5	439.2	451.6	473.0	497.0	506.9	513.4	515.1	515.9
82.5°	279.8	285.7	299.6	320.3	334.3	351.7	368.2	380.6	388.0	386.4	385.6
85°	165.1	166.7	181.6	195.7	206.4	217.1	230.3	239.4	241.1	244.3	243.5
87.5°	49.6	50.4	57.0	64.4	69.4	74.3	82.6	93.3	95.7	89.2	90.0
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: P198435

CATALOG NUMBER: TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL

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: P198435

CATALOG NUMBER: TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6
2.5°	859.3	859.3	859.3	859.3	859.3	859.3	858.6	859.3
5°	858.6	858.6	858.6	858.6	858.6	858.6	858.6	858.6
7.5°	858.6	857.8	857.8	857.8	857.8	857.8	857.8	857.8
10°	856.9	856.9	856.9	856.9	856.1	856.1	856.1	856.1
12.5°	855.3	855.3	855.3	855.3	854.4	854.4	854.4	854.4
15°	853.6	853.6	853.6	853.6	852.8	852.8	852.8	852.8
17.5°	854.4	853.6	852.8	852.8	851.9	851.1	851.1	851.1
20°	859.3	858.6	856.9	855.3	854.4	853.6	853.6	853.6
22.5°	852.8	851.9	850.3	849.4	849.4	848.6	847.8	847.8
25°	845.4	843.7	843.7	842.9	842.9	841.2	841.2	840.4
27.5°	837.0	836.3	835.5	834.6	834.6	833.8	833.0	832.1
30°	829.6	828.0	826.3	825.5	824.7	823.9	823.9	823.9
32.5°	822.2	820.6	819.7	817.2	815.6	814.7	814.0	814.0
35°	819.7	817.2	815.6	813.2	810.7	809.0	808.2	806.5
37.5°	829.6	826.3	823.9	819.7	814.0	811.5	809.0	808.2
40°	851.1	847.8	842.9	836.3	829.6	824.7	820.6	818.9
42.5°	858.6	854.4	847.8	841.2	833.0	825.5	822.2	820.6
45°	861.0	856.9	847.8	839.5	832.1	825.5	820.6	818.9
47.5°	858.6	852.8	844.5	837.9	827.1	818.9	815.6	813.2
50°	864.3	859.3	848.6	833.8	824.7	819.7	814.0	813.2
52.5°	875.9	866.8	856.9	846.2	828.8	818.9	815.6	811.5
55°	910.6	898.2	880.9	863.5	852.8	837.0	827.1	827.1
57.5°	937.0	927.0	904.7	881.6	861.8	850.3	835.5	836.3
60°	929.5	916.3	905.6	882.4	854.4	838.7	833.0	822.2
61°	928.7	910.6	895.7	877.5	853.6	828.8	827.1	813.2
62.5°	930.4	913.9	885.8	866.8	848.6	816.4	815.6	802.5
65°	928.7	913.1	899.0	863.5	838.7	825.5	797.5	808.2
67.5°	903.2	889.1	863.5	843.7	805.7	789.2	773.5	773.5
70°	862.7	842.0	817.2	792.5	766.9	738.8	724.8	716.5
72.5°	795.0	777.7	757.9	731.4	700.1	674.5	661.2	655.5
75°	710.0	690.9	673.6	653.8	620.8	599.4	585.3	581.1
77.5°	620.8	604.3	573.8	554.8	532.5	507.7	495.3	490.3
80°	506.9	497.8	476.4	445.8	435.0	404.5	396.3	388.8
82.5°	380.6	370.7	350.9	329.4	316.2	298.8	284.0	282.3
85°	239.4	232.8	220.4	204.8	188.2	178.3	165.1	168.4
87.5°	89.2	85.0	77.6	67.7	60.3	53.6	47.1	49.6
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: P198435

CATALOG NUMBER: TT-C4-LED-E1-MQ-CG-LWR-LW-8030-UPL

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)