

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: P198382

Luminaire Tested: **TT-C3-LED-E1-MQ-CG-LWR-LW-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198382
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-C3-LED-E1-MQ-CG-LWR-LW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5789.2 lumens
Efficiency: N/A
Efficacy: 92.8 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): 62.4
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

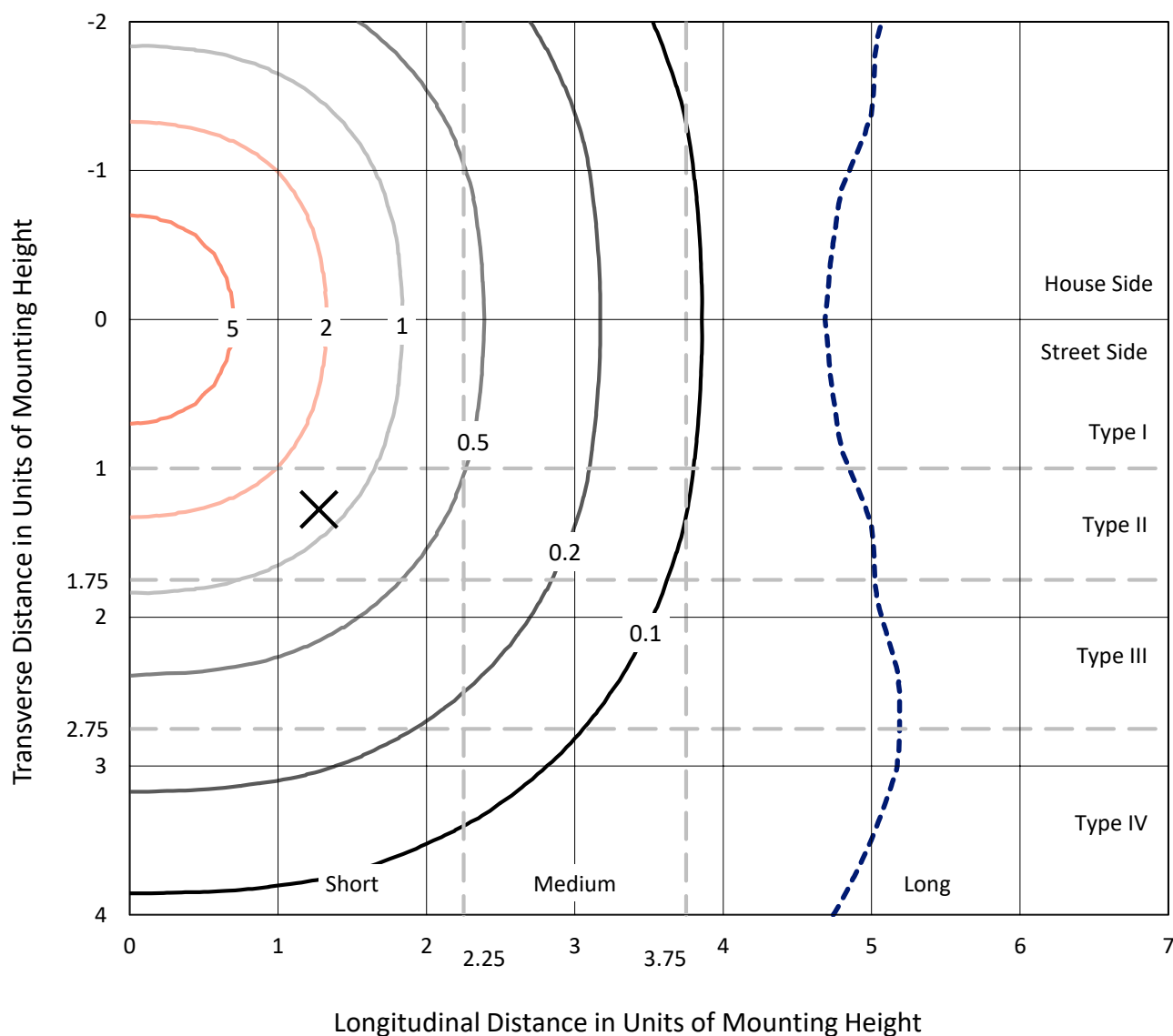


REPORT NUMBER: P198382

CATALOG NUMBER: TT-C3-LED-E1-MQ-CG-LWR-LW-UPL

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

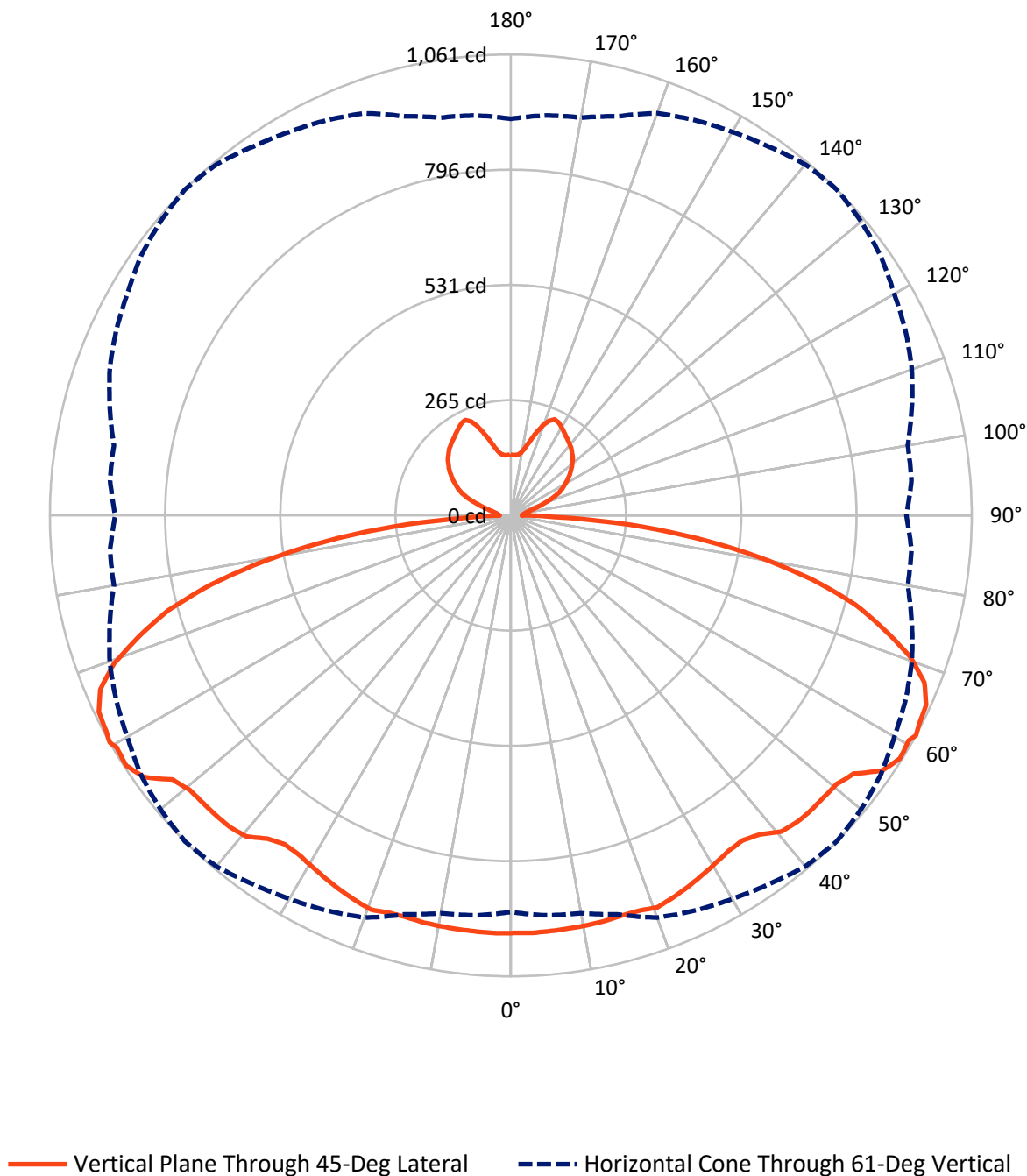


Based on 10 foot mounting height. Maximum calculated value = 9.6 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P198382

CATALOG NUMBER: TT-C3-LED-E1-MQ-CG-LWR-LW-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198382

CATALOG NUMBER: TT-C3-LED-E1-MQ-CG-LWR-LW-UPL

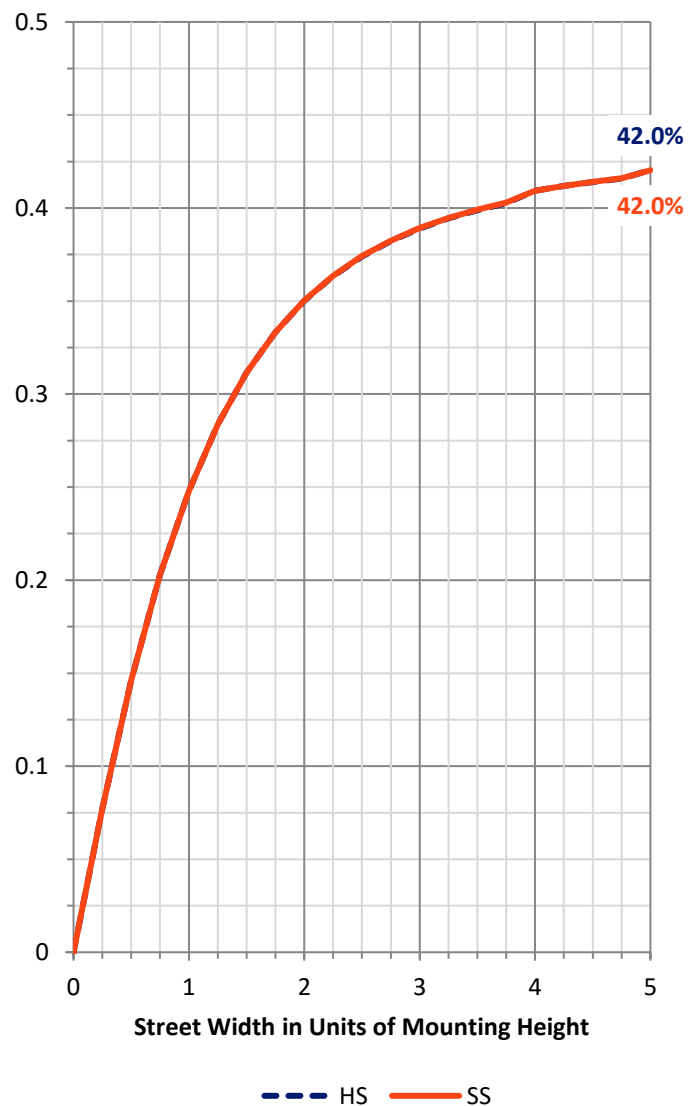
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2482.6	412.0	2894.6
	% Fixture	42.9	7.1	50.0
Street Side	Lumens	2482.6	412.0	2894.6
	% Fixture	42.9	7.1	50.0
Total	Lumens	4965.3	824.0	5789.2
	% Fixture	85.8	14.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	1.6
10°-20°	271.1	4.7
20°-30°	436.2	7.5
30°-40°	577.8	10.0
40°-50°	729.7	12.6
50°-60°	874.3	15.1
60°-70°	956.0	16.5
70°-80°	765.3	13.2
80°-90°	263.3	4.5
90°-100°	38.3	0.7
100°-110°	59.4	1.0
110°-120°	119.3	2.1
120°-130°	148.7	2.6
130°-140°	153.2	2.6
140°-150°	136.0	2.3
150°-160°	103.7	1.8
160°-170°	51.8	0.9
170°-180°	13.6	0.2
0°-90°	4965.3	85.8
0°-180°	5789.2	100.0

Coefficient of Utilization



REPORT NUMBER: P198382

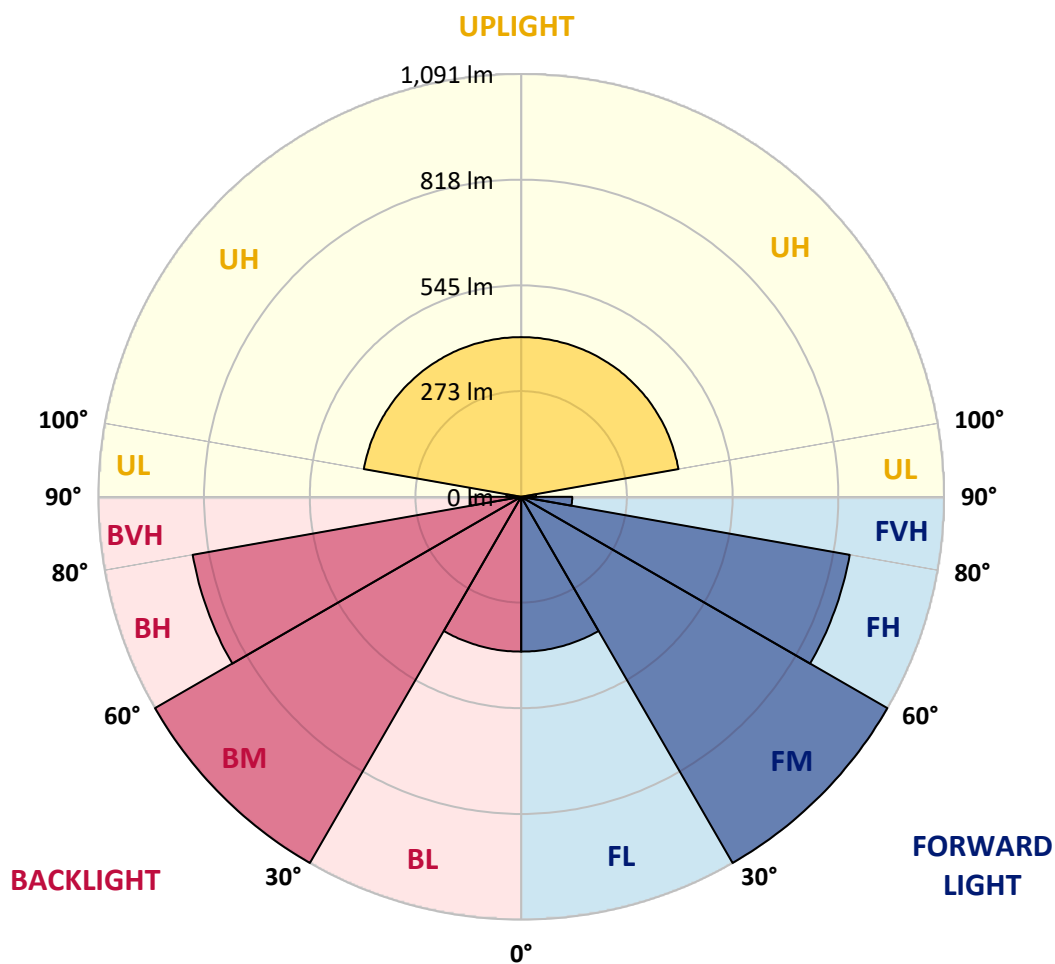
CATALOG NUMBER: TT-C3-LED-E1-MQ-CG-LWR-LW-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	399.5	6.9			
FM	(30°-60°)	1090.9	18.8			
FH	(60°-80°)	860.6	14.9			G1/1800
FVH	(80°-90°)	131.6	2.3			G2/225
BL	(0°-30°)	399.5	6.9	B1/500		
BM	(30°-60°)	1090.9	18.8	B2/2500		
BH	(60°-80°)	860.6	14.9	B2/1000		G1/1800
BVH	(80°-90°)	131.6	2.3			G2/225
UL	(90°-100°)	38.3	0.7		U2/50	
UH	(100°-180°)	412.0	7.1		U3/500	

BUG Rating: B2-U4-G2

Type V Short



REPORT NUMBER: P198382

CATALOG NUMBER: TT-C3-LED-E1-MQ-CG-LWR-LW-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2
2.5°	962.0	961.2	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0	962.0
5°	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2
7.5°	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	961.2	960.3	961.2
10°	958.4	958.4	958.4	958.4	959.3	959.3	959.3	959.3	959.3	959.3	959.3
12.5°	956.5	956.5	956.5	956.5	957.5	957.5	957.5	957.5	958.4	958.4	957.5
15°	954.7	953.7	953.7	954.7	954.7	955.6	955.6	955.6	956.5	955.6	955.6
17.5°	952.8	951.9	952.8	953.7	953.7	954.7	955.6	955.6	956.5	956.5	956.5
20°	955.6	954.7	955.6	956.5	957.5	959.3	960.3	961.2	962.0	962.9	962.9
22.5°	950.0	949.1	950.0	950.0	950.9	951.9	953.7	954.7	955.6	955.6	955.6
25°	941.7	941.7	942.7	942.7	943.6	944.5	945.5	946.4	946.4	947.3	946.4
27.5°	932.5	932.5	933.4	933.4	935.3	935.3	936.2	937.1	938.0	938.0	938.0
30°	921.4	921.4	922.4	923.3	925.1	926.0	926.9	927.8	928.8	928.8	928.8
32.5°	911.3	910.4	911.3	913.0	915.8	917.7	919.6	920.5	920.5	920.5	921.4
35°	902.9	903.8	905.7	907.6	911.3	913.0	914.9	917.7	918.6	918.6	918.6
37.5°	904.8	905.7	908.5	912.1	916.8	922.4	926.0	929.7	932.5	931.6	930.6
40°	916.8	918.6	923.3	928.8	936.2	943.6	949.1	953.7	956.5	957.5	956.5
42.5°	918.6	920.5	924.1	932.5	940.8	949.1	956.5	961.2	964.8	965.7	964.8
45°	917.7	917.7	923.3	932.5	940.8	949.1	958.4	964.8	968.5	968.5	968.5
47.5°	911.3	914.0	917.7	926.9	938.0	946.4	955.6	962.0	966.7	969.5	966.7
50°	911.3	911.3	917.7	924.1	934.4	949.1	962.0	968.5	973.2	972.3	973.2
52.5°	909.4	914.9	918.6	927.8	946.4	961.2	971.3	980.6	987.0	987.9	986.1
55°	926.0	926.9	935.3	952.8	970.4	987.0	1005.5	1019.4	1030.5	1037.0	1027.7
57.5°	938.9	934.4	950.9	965.7	986.1	1011.1	1038.7	1049.8	1058.2	1056.3	1059.1
60°	921.4	927.8	939.9	955.6	987.9	1012.8	1027.7	1039.7	1049.8	1052.6	1049.0
61°	913.0	924.1	929.7	950.9	985.2	1003.6	1019.4	1036.0	1054.5	1061.0	1052.6
62.5°	899.2	916.8	914.9	949.1	970.4	991.6	1021.2	1040.6	1053.5	1055.4	1053.5
65°	900.1	897.4	918.6	943.6	964.8	1002.7	1027.7	1039.7	1047.1	1050.7	1049.0
67.5°	870.6	861.3	887.2	904.8	940.8	970.4	994.4	1011.9	1023.1	1026.7	1022.2
70°	802.2	808.7	827.1	853.9	883.5	919.6	941.7	964.8	974.1	975.0	975.0
72.5°	736.5	740.3	758.8	783.7	817.9	849.3	871.5	890.0	898.4	899.2	901.0
75°	649.7	653.4	674.6	697.7	732.0	758.8	774.4	796.7	808.7	818.8	810.6
77.5°	548.9	555.5	572.0	597.1	628.4	643.2	671.0	696.9	705.2	708.0	705.2
80°	435.2	443.6	458.4	491.7	505.5	529.6	556.4	567.5	574.8	576.7	577.6
82.5°	313.3	319.8	335.4	358.5	374.3	393.7	412.2	426.0	434.3	432.6	431.6
85°	184.8	186.7	203.3	219.1	231.1	243.1	257.8	268.0	269.9	273.5	272.6
87.5°	55.5	56.4	63.8	72.1	77.7	83.1	92.5	104.5	107.1	99.8	100.7
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: P198382

CATALOG NUMBER: TT-C3-LED-E1-MQ-CG-LWR-LW-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: P198382

CATALOG NUMBER: TT-C3-LED-E1-MQ-CG-LWR-LW-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2
2.5°	962.0	962.0	962.0	962.0	962.0	962.0	961.2	962.0
5°	961.2	961.2	961.2	961.2	961.2	961.2	961.2	961.2
7.5°	961.2	960.3	960.3	960.3	960.3	960.3	960.3	960.3
10°	959.3	959.3	959.3	959.3	958.4	958.4	958.4	958.4
12.5°	957.5	957.5	957.5	957.5	956.5	956.5	956.5	956.5
15°	955.6	955.6	955.6	955.6	954.7	954.7	954.7	954.7
17.5°	956.5	955.6	954.7	954.7	953.7	952.8	952.8	952.8
20°	962.0	961.2	959.3	957.5	956.5	955.6	955.6	955.6
22.5°	954.7	953.7	951.9	950.9	950.9	950.0	949.1	949.1
25°	946.4	944.5	944.5	943.6	943.6	941.7	941.7	940.8
27.5°	937.1	936.2	935.3	934.4	934.4	933.4	932.5	931.6
30°	928.8	926.9	925.1	924.1	923.3	922.4	922.4	922.4
32.5°	920.5	918.6	917.7	914.9	913.0	912.1	911.3	911.3
35°	917.7	914.9	913.0	910.4	907.6	905.7	904.8	902.9
37.5°	928.8	925.1	922.4	917.7	911.3	908.5	905.7	904.8
40°	952.8	949.1	943.6	936.2	928.8	923.3	918.6	916.8
42.5°	961.2	956.5	949.1	941.7	932.5	924.1	920.5	918.6
45°	963.9	959.3	949.1	939.9	931.6	924.1	918.6	916.8
47.5°	961.2	954.7	945.5	938.0	926.0	916.8	913.0	910.4
50°	967.6	962.0	950.0	933.4	923.3	917.7	911.3	910.4
52.5°	980.6	970.4	959.3	947.3	927.8	916.8	913.0	908.5
55°	1019.4	1005.5	986.1	966.7	954.7	937.1	926.0	926.0
57.5°	1049.0	1037.8	1012.8	987.0	964.8	951.9	935.3	936.2
60°	1040.6	1025.8	1013.8	987.9	956.5	938.9	932.5	920.5
61°	1039.7	1019.4	1002.7	982.4	955.6	927.8	926.0	910.4
62.5°	1041.5	1023.1	991.6	970.4	950.0	914.0	913.0	898.4
65°	1039.7	1022.2	1006.4	966.7	938.9	924.1	892.8	904.8
67.5°	1011.1	995.4	966.7	944.5	902.0	883.5	865.9	865.9
70°	965.7	942.7	914.9	887.2	858.6	827.1	811.4	802.2
72.5°	890.0	870.6	848.4	818.8	783.7	755.1	740.3	733.8
75°	794.8	773.5	754.1	732.0	695.0	671.0	655.3	650.6
77.5°	695.0	676.5	642.3	621.1	596.1	568.4	554.5	548.9
80°	567.5	557.3	533.3	499.0	487.0	452.8	443.6	435.2
82.5°	426.0	415.0	392.8	368.8	354.0	334.5	318.0	316.1
85°	268.0	260.6	246.7	229.2	210.7	199.6	184.8	188.5
87.5°	99.8	95.1	86.9	75.8	67.5	60.0	52.7	55.5
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: P198382

CATALOG NUMBER: TT-C3-LED-E1-MQ-CG-LWR-LW-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)