

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: P821154

Luminaire Tested: **TT-D3-830-24VDC-RW-UPL**

Issue Date: 10/29/2020



Test Information

Test Method: LM-79-08
Report Number: P821154
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G2-2002-677-2) AND
Test Lab: INNOVATION CENTER
Issue Date: 10/29/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-D3-830-24VDC-RW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

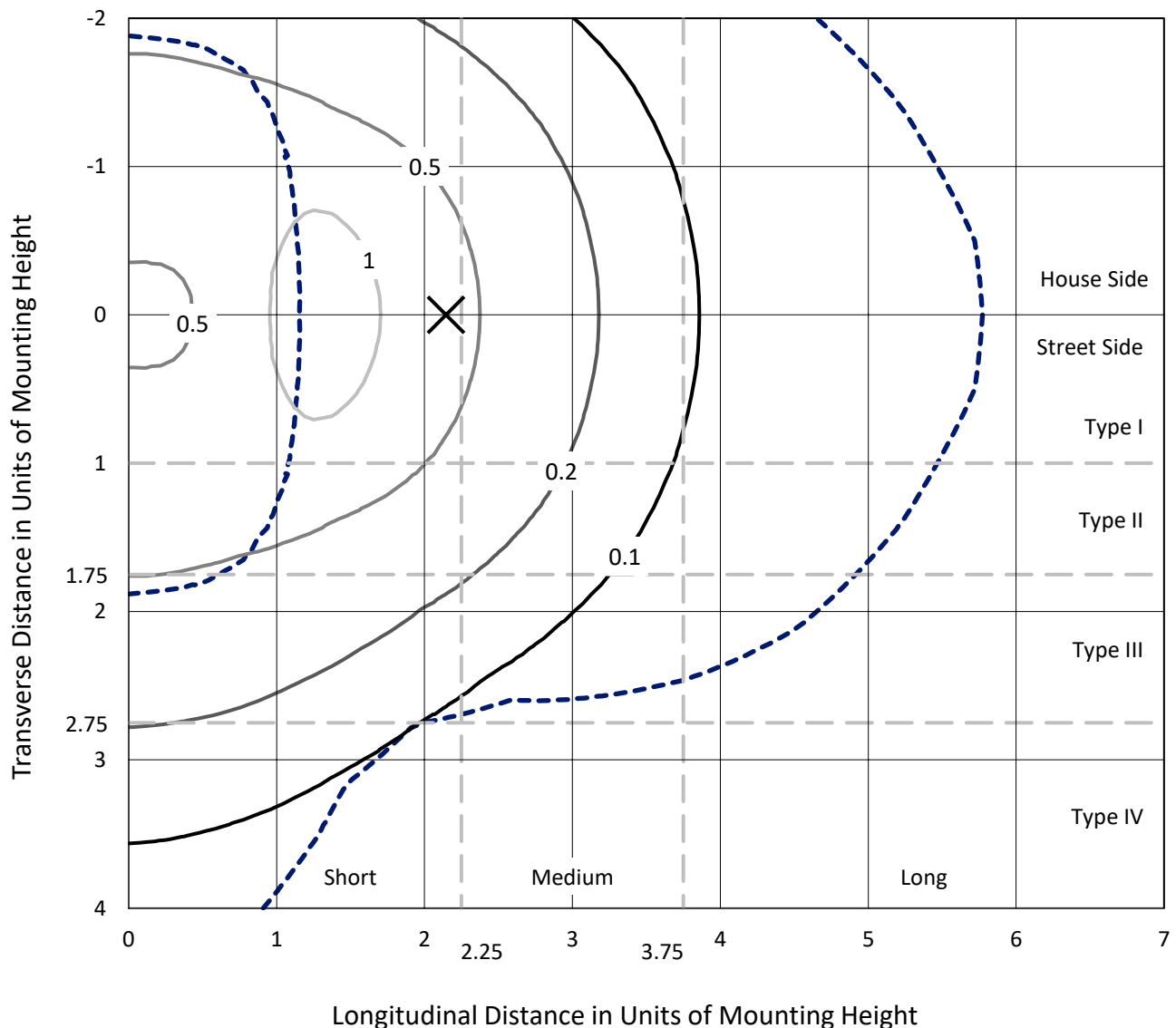
Lumens per Lamp: N/A
Luminaire Lumens: 5361.7 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short
BUG Rating: B3 - U4 - G3

Input Watts (W): 46
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: P821154
 CATALOG NUMBER: TT-D3-830-24VDC-RW-UPL

Iso-Footcandle Lines of Horizontal Illumination

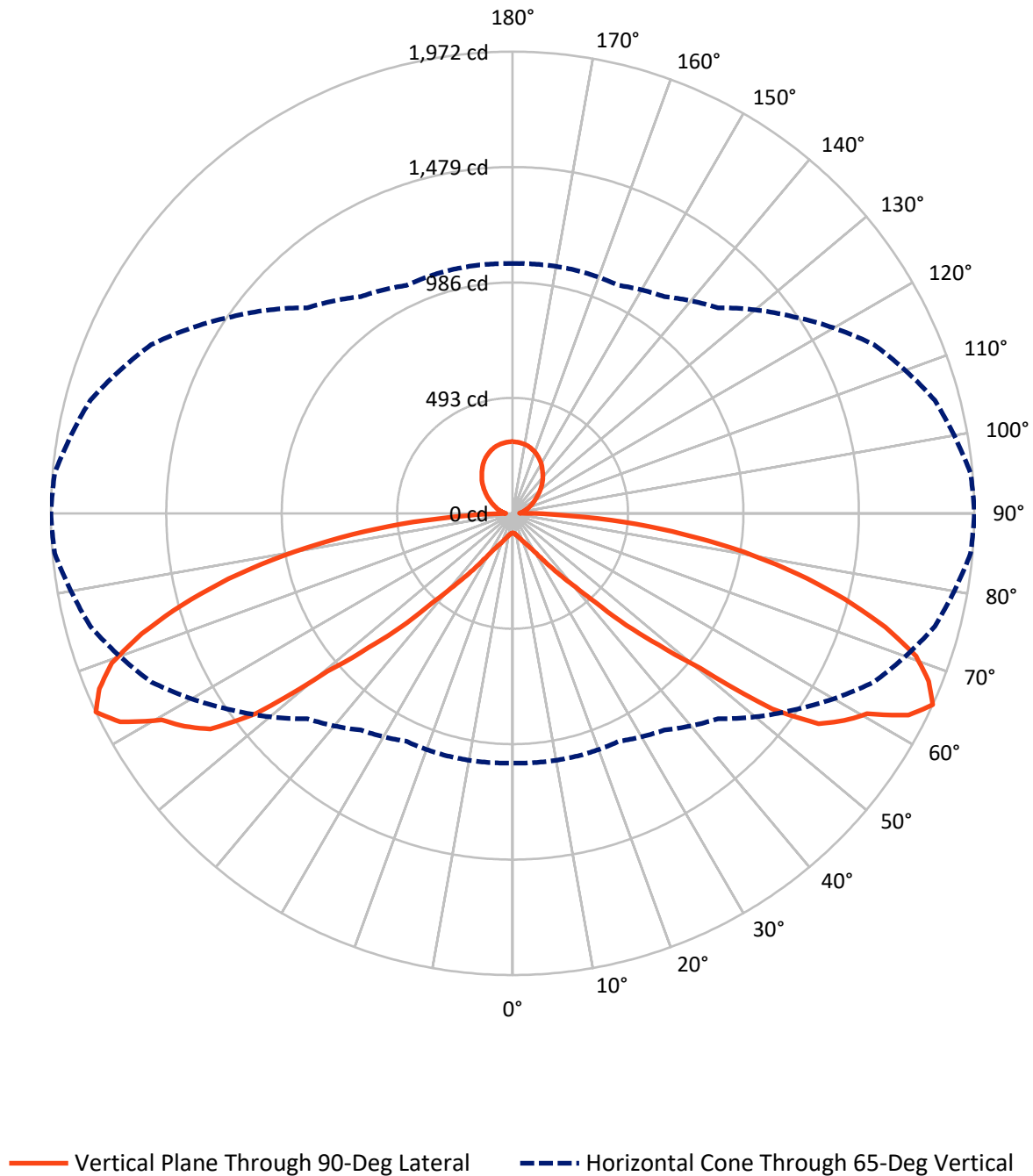
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P821154
CATALOG NUMBER: TT-D3-830-24VDC-RW-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P821154

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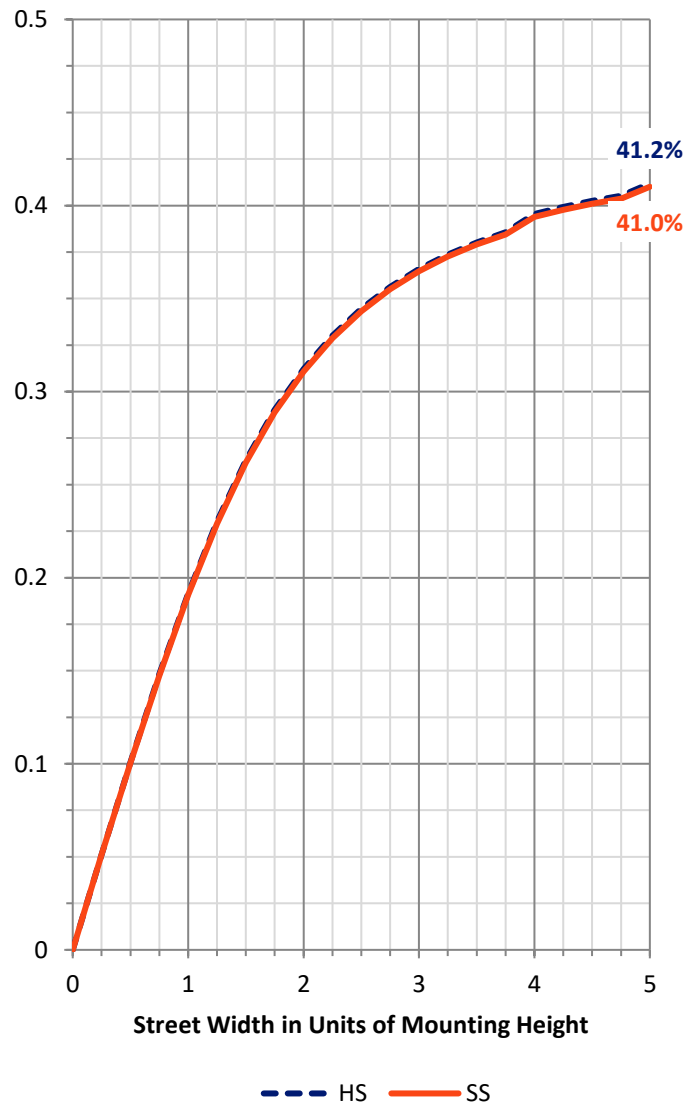
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2265.0	415.9	2680.9
	% Fixture	42.2	7.8	50.0
Street Side	Lumens	2265.0	415.9	2680.9
	% Fixture	42.2	7.8	50.0
Total	Lumens	4530.0	831.7	5361.7
	% Fixture	84.5	15.5	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.6	0.2
10°-20°	32.3	0.6
20°-30°	74.6	1.4
30°-40°	168.6	3.1
40°-50°	410.8	7.7
50°-60°	923.7	17.2
60°-70°	1350.0	25.2
70°-80°	1176.3	21.9
80°-90°	385.0	7.2
90°-100°	42.6	0.8
100°-110°	66.0	1.2
110°-120°	91.9	1.7
120°-130°	119.0	2.2
130°-140°	138.7	2.6
140°-150°	140.5	2.6
150°-160°	121.9	2.3
160°-170°	82.2	1.5
170°-180°	28.9	0.5
0°-90°	4530.0	84.5
0°-180°	5361.7	100.0



REPORT NUMBER: P821154

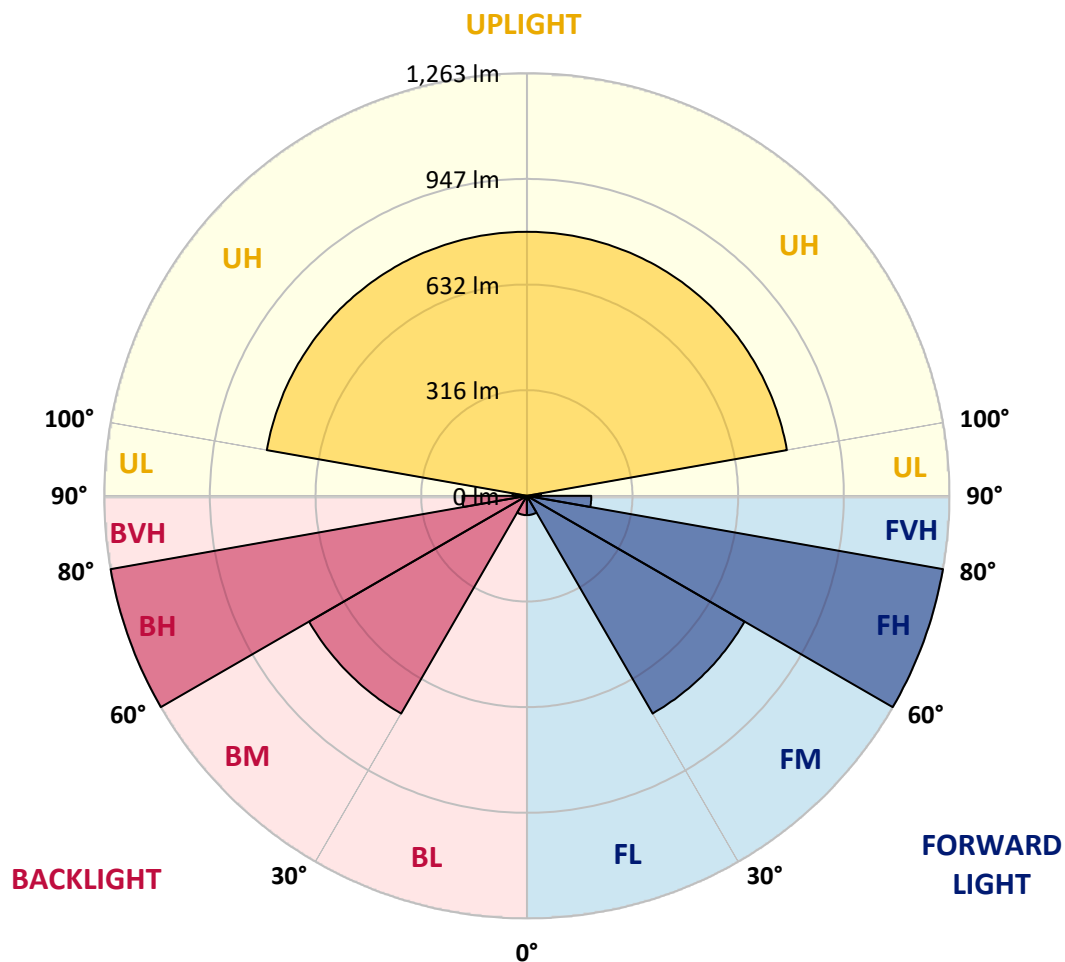
CATALOG NUMBER: TT-D3-830-24VDC-RW-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	57.8	1.1			
FM	(30°-60°)	751.6	14.0			
FH	(60°-80°)	1263.2	23.6			G1/1800
FVH	(80°-90°)	192.5	3.6			G2/225
BL	(0°-30°)	57.8	1.1	B0/110		
BM	(30°-60°)	751.6	14.0	B1/1000		
BH	(60°-80°)	1263.2	23.6	B3/2500		G3/2500
BVH	(80°-90°)	192.5	3.6			G2/225
UL	(90°-100°)	42.6	0.8		U2/50	
UH	(100°-180°)	789.1	14.7		U4/1000	

BUG Rating: B3-U4-G3

Type IV Short





REPORT NUMBER: P821154

CATALOG NUMBER: TT-D3-830-24VDC-RW-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
2.5°	83.8	83.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
5°	87.0	87.0	87.0	87.0	88.1	88.1	87.0	87.0	87.0	87.0	87.0
7.5°	92.4	91.3	92.4	92.4	92.4	91.3	91.3	91.3	90.2	90.2	90.2
10°	97.7	97.7	98.8	97.7	97.7	96.7	96.7	96.7	95.6	95.6	95.6
12.5°	105.2	105.2	105.2	105.2	104.2	104.2	103.1	102.0	100.9	100.9	100.9
15°	114.9	113.8	113.8	112.8	111.7	110.6	109.5	109.5	108.5	108.5	108.5
17.5°	124.6	124.6	123.5	122.4	120.3	119.2	119.2	118.1	117.1	117.1	117.1
20°	136.4	136.4	135.3	133.2	131.0	129.9	128.9	128.9	127.8	127.8	127.8
22.5°	150.3	149.3	147.1	145.0	142.8	141.8	140.7	139.6	139.6	139.6	139.6
25°	165.4	164.3	163.2	160.0	156.8	155.7	153.6	153.6	152.5	153.6	153.6
27.5°	183.6	182.6	180.4	177.2	172.9	170.8	169.7	169.7	170.8	170.8	171.8
30°	206.2	204.0	201.9	197.6	193.3	190.1	190.1	191.2	194.4	196.5	196.5
32.5°	233.0	232.0	228.7	224.4	216.9	214.8	216.9	223.4	227.7	230.9	233.0
35°	264.2	263.1	258.8	251.3	245.9	244.9	251.3	262.0	276.0	280.3	282.4
37.5°	298.5	299.6	294.2	285.7	280.3	282.4	295.3	315.7	329.7	339.4	341.5
40°	341.5	343.6	337.2	327.5	322.2	330.8	351.2	374.8	399.5	411.3	414.5
42.5°	392.0	395.2	386.6	376.9	373.7	387.7	416.7	455.3	499.4	513.3	518.7
45°	454.3	456.4	445.7	437.1	434.9	459.6	509.0	573.5	643.3	675.5	680.9
47.5°	528.4	527.3	517.6	506.9	509.0	544.5	618.6	705.6	779.7	829.1	839.8
50°	613.2	607.8	600.3	587.4	601.4	652.9	746.4	851.6	976.2	1020.2	1039.5
52.5°	698.0	688.4	681.9	673.3	698.0	764.6	895.6	1079.3	1267.2	1368.2	1388.6
55°	774.3	766.8	763.5	764.6	803.3	898.9	1070.7	1305.9	1487.4	1571.1	1586.2
57.5°	849.5	845.2	841.9	848.4	909.6	1034.2	1227.5	1447.6	1596.9	1659.2	1669.9
60°	920.3	924.6	922.5	941.8	1015.9	1141.6	1309.1	1526.0	1669.9	1726.8	1738.7
62.5°	998.7	1002.0	1002.0	1023.4	1083.6	1194.2	1364.9	1618.4	1800.9	1884.7	1897.6
65°	1066.4	1068.5	1072.8	1073.9	1129.7	1240.4	1463.7	1703.2	1866.4	1963.1	1971.7
67.5°	1116.9	1119.0	1113.6	1108.3	1151.2	1251.1	1456.2	1692.5	1837.5	1910.5	1916.9
70°	1157.7	1148.0	1133.0	1106.1	1120.1	1195.3	1393.9	1606.6	1752.6	1818.1	1827.8
72.5°	1163.0	1154.4	1107.2	1047.1	1029.9	1095.4	1284.4	1475.5	1601.2	1663.5	1664.6
75°	1130.8	1108.3	1029.9	939.7	907.4	969.7	1131.9	1305.9	1406.8	1459.4	1464.8
77.5°	1022.4	1000.9	902.1	799.0	762.5	816.2	953.6	1094.3	1191.0	1242.5	1245.7
80°	830.1	822.6	732.4	637.9	593.9	625.0	745.3	855.9	934.3	995.5	1000.9
82.5°	612.1	605.7	537.0	454.3	418.8	444.6	530.5	612.1	685.2	734.6	737.8
85°	382.3	369.4	326.5	268.5	244.9	262.0	318.9	373.7	439.2	477.9	480.0
87.5°	127.8	122.4	105.2	87.0	73.0	76.2	93.4	113.8	166.5	183.6	194.4
90°	30.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
92.5°	34.8	34.2	34.2	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
95°	39.4	39.4	39.4	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
97.5°	44.6	44.6	44.6	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2
100°	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
102.5°	55.9	55.9	55.9	55.9	55.9	55.9	55.9	56.4	55.9	55.9	55.9
105°	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.9	62.0	62.0	62.0
107.5°	68.6	68.6	69.0	69.0	69.0	69.0	69.0	69.5	69.0	69.0	69.0
110°	75.1	75.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1

REPORT NUMBER: P821154

CATALOG NUMBER: TT-D3-830-24VDC-RW-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	83.1	83.1	84.0	84.0	84.0	84.0	84.6	84.6	84.0	84.0	84.0
115°	91.1	91.1	92.0	92.0	92.0	92.0	93.0	93.0	92.0	92.0	92.0
117.5°	100.5	100.5	101.0	101.4	101.4	101.4	102.4	102.4	101.4	101.4	101.4
120°	109.9	109.9	109.9	110.8	110.8	110.8	111.8	111.8	110.8	110.8	110.8
122.5°	120.7	120.7	121.2	121.6	121.6	121.6	122.6	122.6	122.1	122.1	121.6
125°	131.5	131.5	132.4	132.4	132.4	132.4	133.4	133.4	133.4	133.4	132.4
127.5°	143.2	143.2	144.2	144.2	144.2	144.2	145.1	145.1	145.1	145.1	144.2
130°	155.0	155.0	155.9	155.9	155.9	155.9	156.8	156.8	156.8	156.8	155.9
132.5°	167.2	167.2	167.6	167.6	167.6	168.1	168.6	168.6	168.6	168.6	168.1
135°	179.4	179.4	179.4	179.4	179.4	180.3	180.3	180.3	180.3	180.3	180.3
137.5°	191.2	190.6	191.2	190.6	191.2	191.6	191.6	191.6	191.6	191.6	191.6
140°	202.9	201.9	202.9	201.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9
142.5°	213.7	213.2	213.7	212.7	213.7	213.7	213.7	213.7	213.7	213.7	213.7
145°	224.5	224.5	224.5	223.5	224.5	224.5	224.5	224.5	224.5	224.5	224.5
147.5°	235.8	235.3	235.8	234.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8
150°	247.0	246.1	247.0	246.1	247.0	247.0	247.0	247.0	247.0	247.0	247.0
152.5°	256.0	255.5	256.4	255.5	256.0	256.0	256.4	256.0	256.0	256.0	256.0
155°	264.9	264.9	265.8	264.9	264.9	264.9	265.8	264.9	264.9	264.9	264.9
157.5°	272.4	272.4	273.3	272.4	272.4	272.4	273.3	272.4	272.4	272.4	272.4
160°	279.9	279.9	280.8	279.9	279.9	279.9	280.8	279.9	279.9	279.9	279.9
162.5°	286.0	286.0	286.9	286.0	286.0	286.0	286.9	286.0	286.0	286.0	286.0
165°	292.1	292.1	293.0	292.1	292.1	292.1	293.0	292.1	292.1	292.1	292.1
167.5°	295.8	295.8	296.8	295.8	295.8	295.8	296.8	295.8	295.8	295.8	295.8
170°	299.6	299.6	300.5	299.6	299.6	299.6	300.5	299.6	299.6	299.6	299.6
172.5°	302.0	302.0	302.8	302.0	302.4	302.0	302.8	302.0	302.0	302.0	302.0
175°	304.3	304.3	305.2	304.3	305.2	304.3	305.2	304.3	304.3	304.3	304.3
177.5°	305.2	305.2	305.7	305.2	305.7	305.2	305.7	305.2	305.2	305.2	305.2
180°	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2

(END OF REPORT)