

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: P299995

Luminaire Tested: **GLNA-AF-04-LED-E1-SL3-7030-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-04-LED-E1-SL3-7030-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11873.5 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 129
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

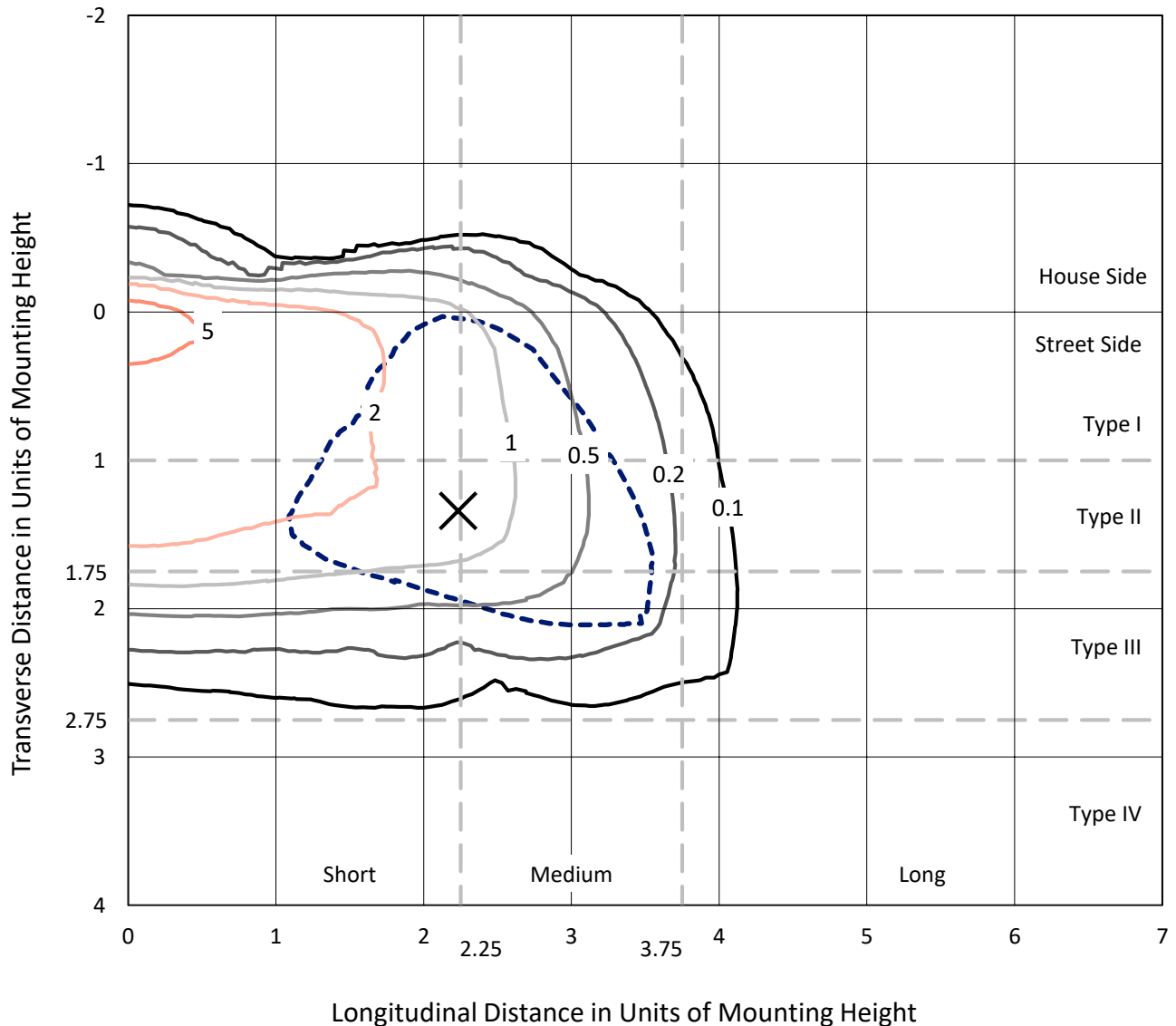


REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-04-LED-E1-SL3-7030-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

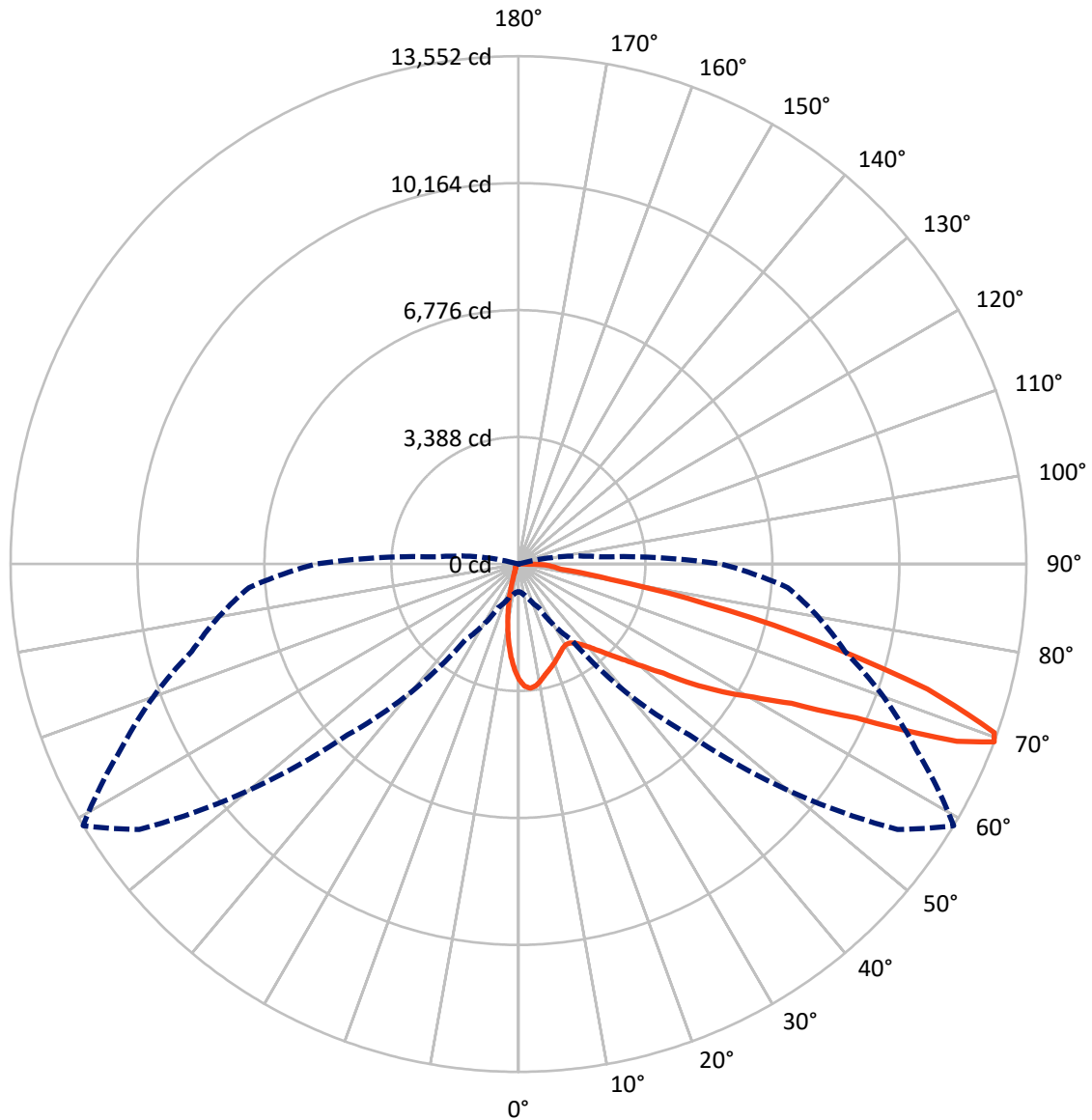


Based on 20 foot mounting height. Maximum calculated value = 7.8 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-04-LED-E1-SL3-7030-600-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-04-LED-E1-SL3-7030-600-HSS

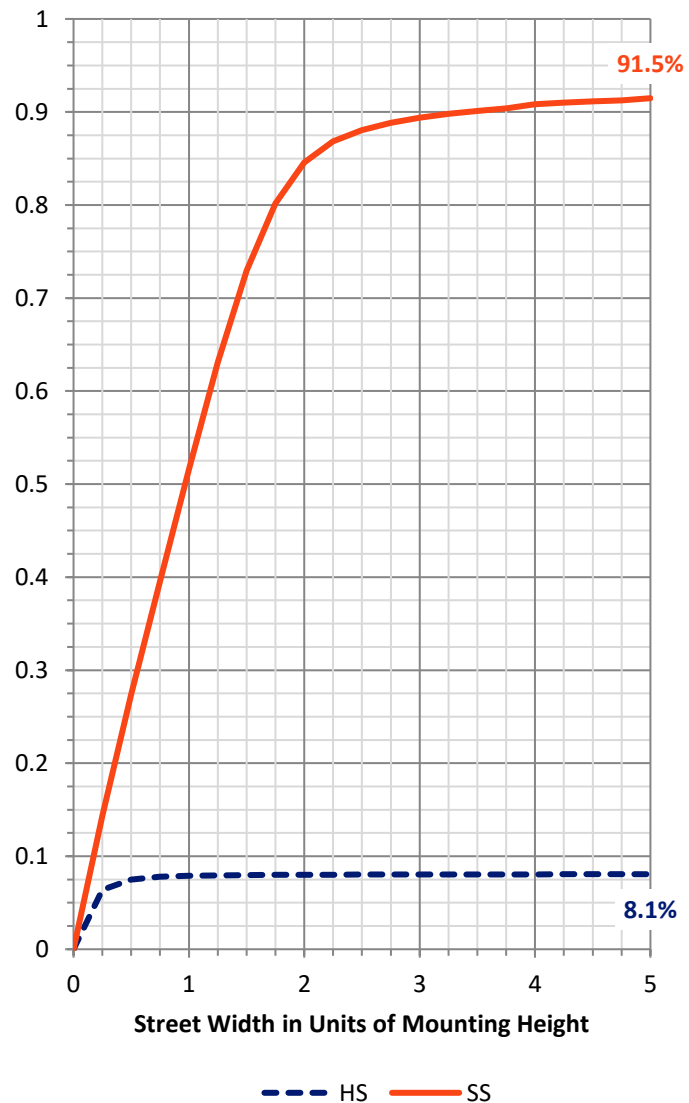
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	966.9	0.0	966.9
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	10906.6	0.0	10906.6
	% Fixture	91.9	0.0	91.9
Total	Lumens	11873.5	0.0	11873.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.9	2.1
10°-20°	518.3	4.4
20°-30°	697.5	5.9
30°-40°	1012.7	8.5
40°-50°	1686.2	14.2
50°-60°	2630.5	22.2
60°-70°	3255.1	27.4
70°-80°	1649.6	13.9
80°-90°	172.6	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	11873.5	100.0
0°-180°	11873.5	100.0



REPORT NUMBER: P299995

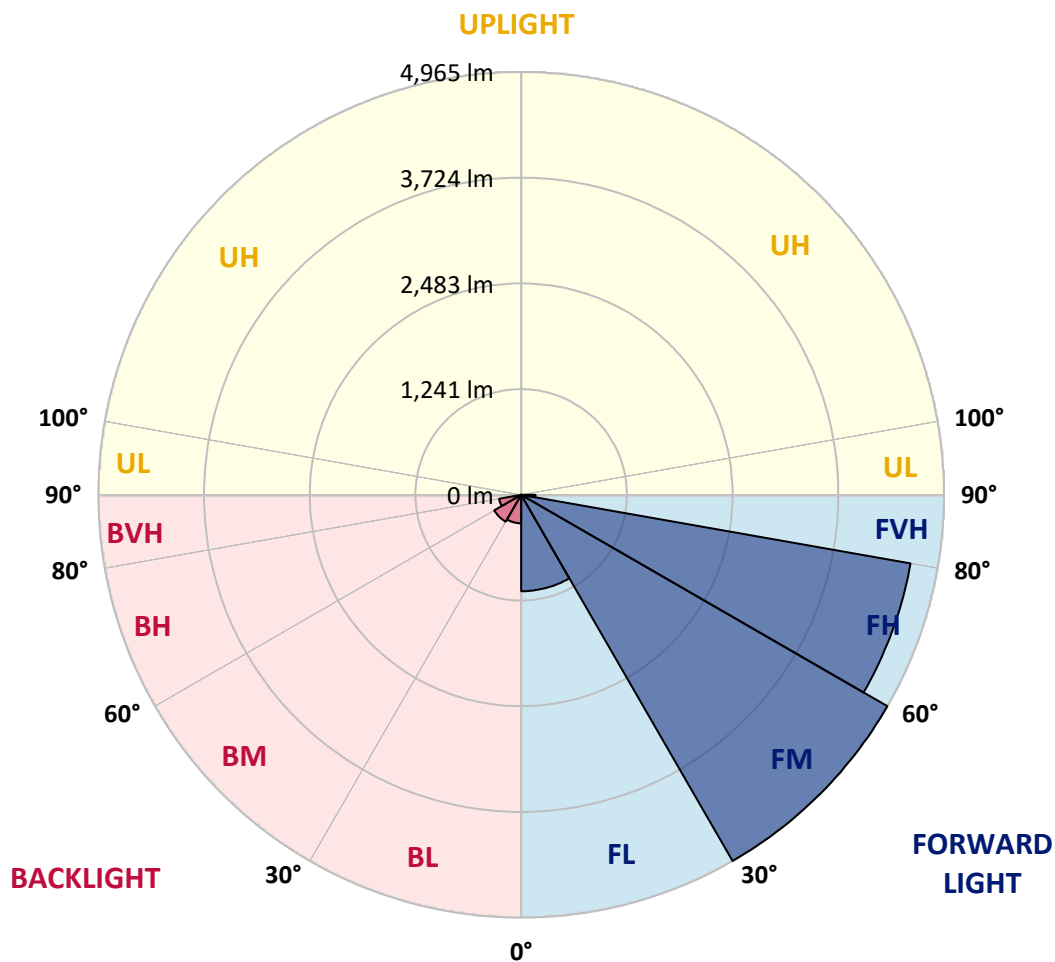
CATALOG NUMBER: GLNA-AF-04-LED-E1-SL3-7030-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1132.0	9.5			
FM	(30°-60°)	4965.2	41.8			
FH	(60°-80°)	4642.1	39.1			G2/5000
FVH	(80°-90°)	167.3	1.4			G2/225
BL	(0°-30°)	334.7	2.8	B1/500		
BM	(30°-60°)	364.3	3.1	B1/1000		
BH	(60°-80°)	262.6	2.2	B1/500		G1/500
BVH	(80°-90°)	5.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-04-LED-E1-SL3-7030-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5
2.5°	3387.2	3386.0	3371.2	3364.5	3352.3	3326.9	3287.2	3266.5	3233.0	3174.4	3095.9
5°	3356.3	3372.6	3381.1	3382.0	3390.7	3381.1	3345.6	3328.3	3281.9	3187.8	3047.0
7.5°	3147.0	3152.9	3177.9	3199.2	3240.9	3280.5	3293.3	3285.8	3258.4	3157.7	2970.3
10°	2922.8	2928.6	2958.3	2986.4	3042.9	3103.9	3168.3	3181.9	3193.3	3114.6	2896.5
12.5°	2729.2	2735.3	2765.6	2802.4	2868.3	2943.5	3043.5	3065.7	3116.1	3073.8	2837.4
15°	2562.7	2565.4	2595.1	2640.6	2719.3	2815.8	2929.5	2965.0	3042.3	3044.9	2785.7
17.5°	2421.1	2427.8	2446.1	2489.6	2575.5	2695.1	2827.4	2878.4	2968.9	3020.7	2735.3
20°	2334.5	2341.2	2340.6	2364.7	2442.0	2569.5	2725.4	2786.3	2896.5	2995.9	2690.4
22.5°	2317.8	2317.8	2300.3	2296.9	2342.6	2449.3	2619.3	2693.7	2831.3	2985.2	2658.9
25°	2377.6	2374.7	2331.2	2295.6	2297.7	2361.3	2516.4	2605.0	2776.4	2992.5	2642.0
27.5°	2503.8	2500.3	2445.2	2377.6	2323.1	2322.5	2438.5	2533.9	2732.7	3027.4	2648.7
30°	2678.2	2677.0	2617.2	2531.8	2433.3	2342.6	2411.7	2498.3	2704.4	3090.5	2664.2
32.5°	2868.9	2866.8	2821.9	2732.1	2607.1	2433.3	2440.0	2512.5	2712.6	3174.4	2701.8
35°	3071.1	3067.7	3048.2	2969.7	2832.1	2600.3	2532.7	2589.0	2763.6	3300.0	2775.6
37.5°	3289.9	3293.3	3307.4	3232.1	3087.8	2834.7	2687.8	2726.0	2866.2	3470.6	2895.7
40°	3612.9	3612.3	3616.9	3518.2	3379.3	3121.4	2904.5	2916.7	3038.2	3696.8	3078.5
42.5°	4198.9	4158.1	4033.9	3832.4	3692.8	3449.0	3177.9	3165.1	3248.4	3976.8	3334.2
45°	4986.6	4899.2	4577.0	4191.0	4012.3	3818.4	3514.1	3473.2	3526.3	4313.2	3649.9
47.5°	5664.0	5573.3	5117.6	4564.2	4351.4	4168.9	3908.2	3834.5	3851.9	4689.9	4049.9
50°	5894.3	5850.0	5452.0	4889.3	4679.7	4610.0	4365.6	4275.6	4250.8	5125.5	4513.8
52.5°	5814.4	5811.1	5545.9	5100.1	4980.5	5066.5	4940.9	4836.8	4745.6	5584.9	4985.8
55°	5686.1	5703.0	5584.1	5284.7	5280.6	5483.5	5727.8	5641.2	5376.7	6083.7	5392.8
57.5°	5332.4	5404.2	5562.7	5633.9	5798.9	6006.5	6383.2	6434.2	6121.4	6465.7	5730.4
60°	4326.6	4484.3	5002.7	5684.1	6467.1	6984.1	7174.1	7217.6	6732.2	6783.2	6186.4
62.5°	3071.1	3232.1	3889.5	5042.3	6477.1	8268.4	8352.3	8181.2	7405.1	7254.0	6972.7
65°	1630.1	1754.5	2291.6	3639.7	5615.8	8566.6	10413.0	9902.8	8592.0	8179.8	7988.5
67.5°	833.9	871.5	1085.1	1781.3	3860.7	7609.2	12260.0	12619.2	10637.8	9098.4	7939.5
69°	737.9	760.1	901.7	1287.8	2472.1	6445.0	12350.0	13551.8	11708.9	9021.7	7215.0
70°	714.3	733.8	862.7	1165.6	1932.4	5404.8	12005.5	13469.9	11982.7	8730.4	6673.9
72.5°	606.4	623.1	768.2	1030.0	1570.5	2682.9	9752.3	11414.1	10752.7	7272.7	4830.7
75°	405.5	460.6	737.3	965.6	1461.0	1524.2	6429.5	8248.3	7662.2	4905.3	2516.4
77.5°	97.4	104.7	208.2	768.2	1336.2	1341.4	3306.7	5127.5	4182.3	1748.4	594.8
80°	52.4	50.4	58.3	152.5	1244.1	1258.9	1488.6	2489.0	1493.3	290.1	196.0
82.5°	37.0	35.0	37.6	63.8	391.5	1146.7	1077.0	1126.6	619.0	111.4	88.0
85°	13.4	12.8	20.7	57.7	122.8	659.2	1106.4	929.2	501.5	51.0	64.4
87.5°	4.7	4.1	8.1	31.5	37.6	280.7	682.8	702.3	197.4	30.9	30.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-04-LED-E1-SL3-7030-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5	3090.5
2.5°	3063.0	3021.3	2944.9	2866.2	2793.7	2706.5	2662.8	2619.9	2601.8	2595.1	2563.6
5°	2974.4	2903.8	2741.4	2578.2	2427.8	2268.0	2162.7	2078.1	2028.3	2004.1	1965.9
7.5°	2861.0	2745.5	2498.9	2247.3	2012.9	1781.9	1610.8	1479.1	1388.4	1344.9	1305.3
10°	2750.8	2597.1	2246.6	1903.5	1585.2	1279.0	1042.6	871.5	762.1	711.7	679.6
12.5°	2652.2	2452.8	2002.9	1568.5	1168.9	810.5	570.0	433.8	365.9	342.3	330.9
15°	2564.2	2319.8	1772.6	1250.2	791.6	463.3	311.6	265.3	254.5	254.5	253.1
17.5°	2480.8	2189.5	1550.2	951.3	496.8	283.4	237.0	230.9	230.9	233.6	233.6
20°	2400.9	2065.3	1335.3	682.8	312.8	224.8	214.3	212.8	214.3	217.5	217.5
22.5°	2332.4	1952.5	1134.7	468.6	232.3	202.7	197.4	195.4	196.0	198.0	199.4
25°	2281.4	1857.2	945.5	317.5	200.0	184.6	178.7	175.2	172.6	172.6	173.8
27.5°	2249.3	1776.7	762.1	230.9	179.9	167.9	158.4	153.1	147.0	143.7	144.9
30°	2225.7	1700.0	590.1	188.6	161.2	149.0	137.0	128.3	119.5	115.5	116.9
32.5°	2217.0	1638.2	441.1	166.5	144.3	130.9	116.1	104.7	95.3	91.9	92.7
35°	2240.5	1589.2	323.0	150.4	130.9	114.0	97.4	84.6	77.2	75.2	75.8
37.5°	2302.3	1563.0	241.7	137.0	118.9	100.0	81.3	69.1	64.4	64.4	65.0
40°	2419.0	1562.4	194.1	127.7	108.1	86.6	67.1	58.3	55.7	57.1	57.7
42.5°	2589.6	1598.0	169.1	118.9	98.8	73.8	55.7	49.6	49.0	50.4	51.0
45°	2822.5	1663.0	155.7	111.4	88.6	61.8	47.0	42.9	42.9	44.9	45.7
47.5°	3107.9	1758.4	144.3	104.1	78.5	51.6	40.2	37.6	38.2	40.2	40.9
50°	3451.7	1878.7	132.9	95.9	71.1	42.9	35.0	32.9	33.5	36.2	37.0
52.5°	3843.2	2040.5	123.6	88.6	61.8	35.6	29.5	28.3	29.5	32.3	32.9
55°	4178.8	2185.5	112.2	82.5	49.6	29.5	24.2	24.2	25.6	28.9	29.5
57.5°	4501.8	2337.1	102.0	71.1	39.0	23.6	20.1	20.7	22.8	26.2	26.8
60°	4975.9	2594.3	90.1	59.8	29.5	18.7	16.9	17.5	20.1	23.6	24.2
62.5°	5780.9	2985.8	77.9	49.6	22.8	14.8	13.4	14.8	18.1	22.2	22.8
65°	6507.4	3144.9	63.8	41.7	17.5	11.4	11.4	13.4	17.5	21.5	22.2
67.5°	6102.4	2647.3	49.6	32.9	13.4	8.7	9.4	12.8	16.9	21.5	22.2
69°	5396.9	2164.7	42.3	26.2	11.4	8.1	8.7	12.8	16.9	20.7	21.5
70°	4847.0	1827.7	37.6	22.2	10.2	8.1	8.7	12.0	16.9	20.7	21.5
72.5°	3246.4	986.9	30.3	16.1	9.4	7.3	7.3	12.0	16.1	20.1	20.7
75°	1395.1	272.6	24.2	11.4	8.1	6.7	6.7	11.4	15.4	19.5	20.7
77.5°	255.1	69.1	19.5	10.2	8.1	6.7	6.1	10.8	14.8	18.7	19.5
80°	101.4	34.2	15.4	8.7	7.3	6.1	5.3	10.2	14.0	18.1	18.7
82.5°	61.2	19.5	12.8	8.1	7.3	5.3	4.7	8.7	13.4	17.5	18.1
85°	49.6	13.4	10.2	8.1	6.7	5.3	4.1	8.1	12.0	16.9	17.5
87.5°	24.2	9.4	9.4	7.3	6.7	5.3	4.1	7.3	11.4	16.1	16.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)