

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: P299000

Luminaire Tested: **GLNA-AF-05-LED-E1-SLL-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299000  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191289)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-05-LED-E1-SLL-7030-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Left OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16605.2 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 162  
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

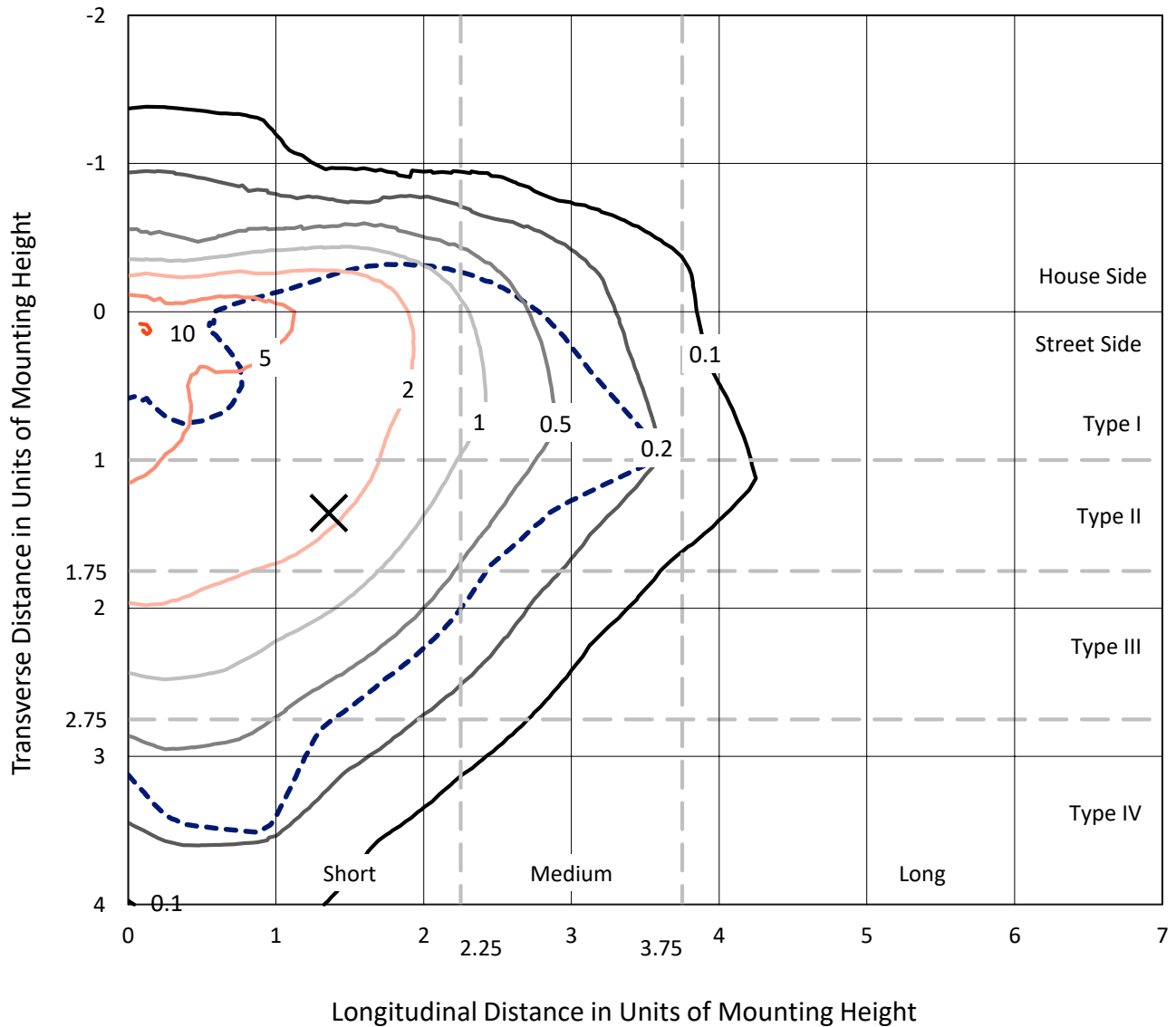


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### Iso-Footcandle Lines of Horizontal Illumination

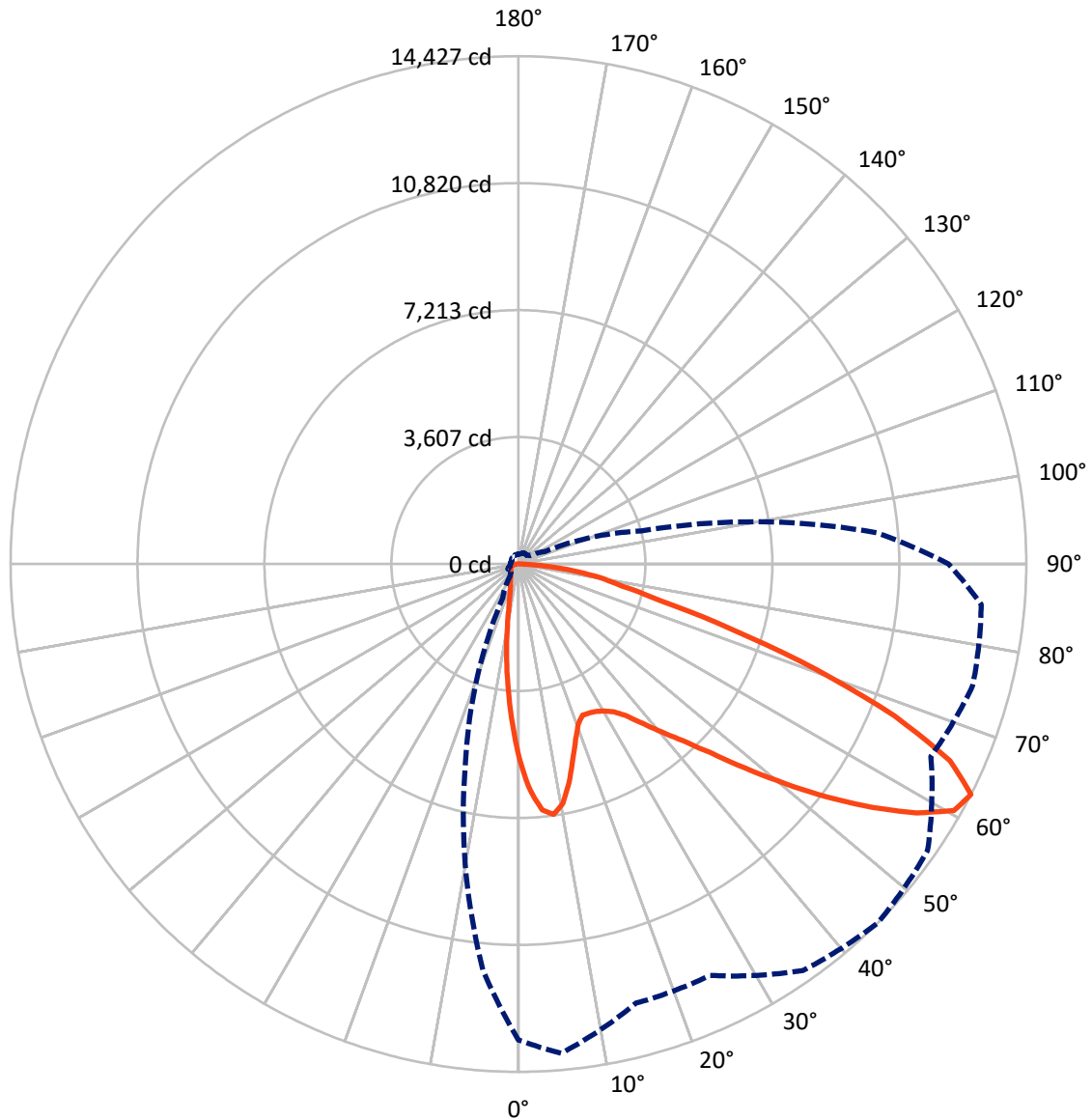
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2747.9	0.0	2747.9
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	13857.3	0.0	13857.3
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	16605.2	0.0	16605.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	408.4	2.5
10°-20°	748.9	4.5
20°-30°	1091.9	6.6
30°-40°	1681.6	10.1
40°-50°	2474.9	14.9
50°-60°	3630.2	21.9
60°-70°	4058.0	24.4
70°-80°	1986.7	12.0
80°-90°	524.6	3.2
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°	16605.2	100.0
0°-180°	16605.2	100.0

**Coefficient of Utilization**



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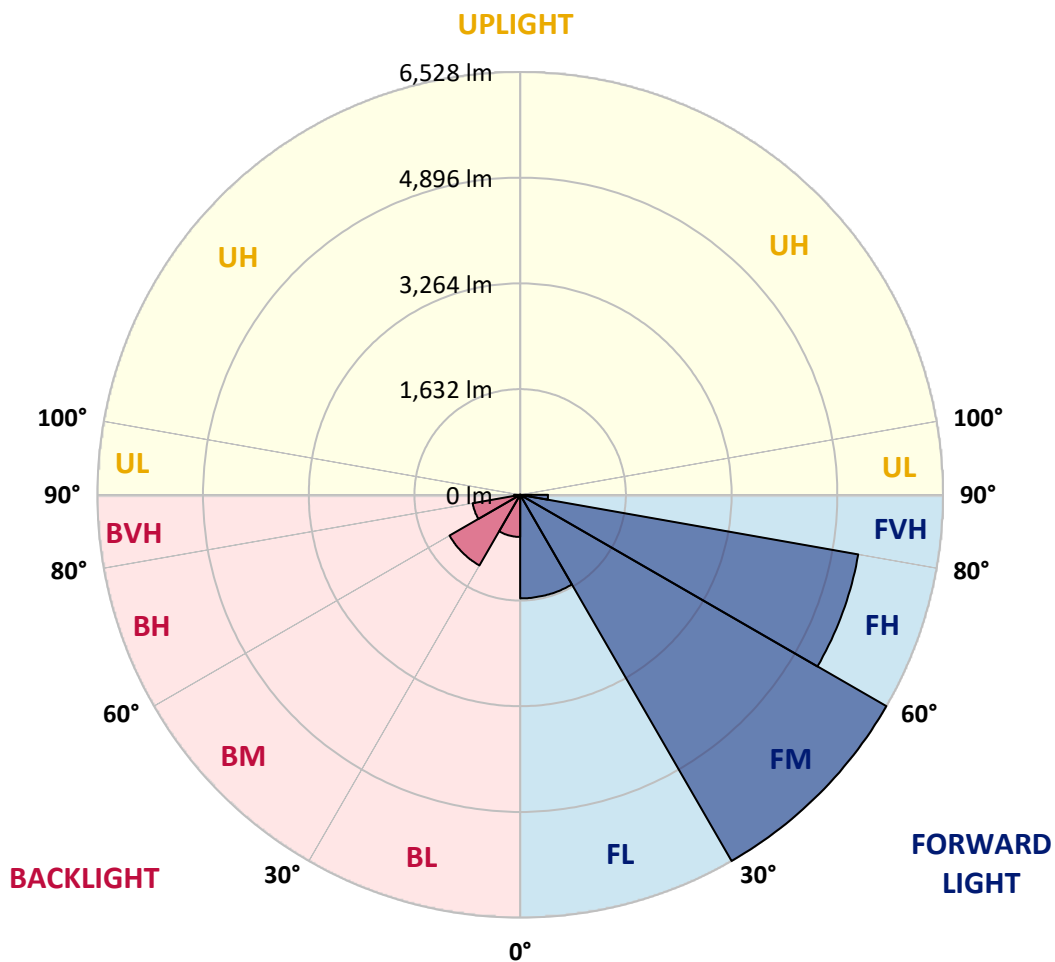
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1599.0	9.6			
FM	(30°-60°)	6527.7	39.3			
FH	(60°-80°)	5299.8	31.9			G3/7500
FVH	(80°-90°)	430.8	2.6			G3/500
BL	(0°-30°)	650.1	3.9	B2/1000		
BM	(30°-60°)	1259.1	7.6	B2/2500		
BH	(60°-80°)	745.0	4.5	B2/1000		G2/1000
BVH	(80°-90°)	93.8	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3
2.5°	5829.0	5922.3	6104.0	6239.7	6405.3	6443.6	6496.6	6444.5	6352.3	6229.9	6189.9
5°	5481.4	5680.5	6121.2	6509.4	6854.3	7014.9	7059.9	6927.2	6659.9	6308.5	6093.9
7.5°	4923.7	5206.7	5803.5	6375.1	6883.3	7183.8	7176.4	6868.8	6376.9	5804.4	5460.4
10°	4442.5	4765.8	5450.6	6089.5	6628.8	6920.1	6807.5	6414.5	5827.2	5168.2	4795.1
12.5°	4173.4	4490.2	5184.8	5826.3	6277.3	6377.8	6291.9	5906.6	5353.4	4687.3	4360.4
15°	4126.6	4474.8	5079.0	5601.1	5853.9	5766.5	5663.9	5491.5	5100.6	4532.0	4191.5
17.5°	4328.7	4711.9	5200.5	5444.1	5401.1	5248.5	5219.5	5238.7	5144.8	4704.4	4312.1
20°	4715.7	5175.6	5489.7	5370.3	5057.1	4847.0	4854.4	5147.5	5425.7	5141.8	4693.5
22.5°	5258.6	5783.7	5906.6	5409.4	4911.9	4662.7	4723.1	5197.8	5874.0	5781.0	5208.5
25°	5961.5	6440.0	6351.4	5551.6	4926.4	4685.5	4733.8	5371.2	6403.3	6419.9	5845.9
27.5°	6642.4	7086.3	6724.5	5740.7	4986.8	4739.4	4803.4	5643.8	6909.1	7113.6	6574.3
30°	7173.7	7482.5	6872.4	5913.2	5105.4	4844.3	4923.7	5903.1	7139.3	7581.8	7134.6
32.5°	7613.8	7835.4	7107.9	6126.8	5323.5	5009.4	5149.2	6218.1	7470.6	8027.4	7683.1
35°	8175.9	8239.0	7401.0	6365.0	5660.4	5297.1	5470.4	6526.5	7786.5	8477.2	8223.6
37.5°	8835.2	8754.0	7677.5	6691.0	6096.0	5746.9	5890.3	6865.2	8046.4	8987.5	8775.6
40°	9486.8	9291.3	8024.8	7196.5	6731.3	6277.3	6447.1	7226.8	8289.4	9498.7	9315.3
42.5°	10041.0	9751.4	8366.7	7752.4	7322.5	6862.6	7065.3	7590.9	8521.1	9934.9	9783.4
45°	10450.8	10091.0	8692.7	8286.4	8137.7	7640.1	7736.1	8007.9	8772.1	10299.3	10168.7
47.5°	10816.7	10432.4	9061.3	8825.1	8850.6	8651.5	8497.1	8493.5	9068.1	10596.9	10532.9
50°	11306.9	10906.2	9457.5	9379.9	9920.3	9787.9	9447.4	9060.4	9442.1	10934.7	10927.3
52.5°	11982.5	11656.8	9941.4	9977.8	10919.3	11005.8	10583.8	9741.7	10027.9	11554.3	11510.7
55°	12781.4	12591.1	10600.7	10665.3	12144.0	12206.2	11786.9	10593.0	10889.9	12451.8	12330.4
57.5°	13404.5	13364.5	11323.4	11490.6	13058.7	13338.2	12952.9	11579.2	11861.0	13207.5	12902.6
60°	13652.9	13847.2	12093.0	12322.9	13905.0	14214.1	13876.6	12445.0	12721.8	13520.7	12863.4
62.5°	13518.9	13953.0	12912.6	12893.4	14093.8	14426.8	14189.5	12927.2	13360.1	13197.4	12212.7
65°	12899.0	13572.5	13388.2	12746.4	13447.5	13474.8	13398.0	12711.7	13510.6	12176.0	10954.5
67.5°	11548.7	12518.2	12761.8	11487.0	11703.9	11526.1	11397.2	11532.4	12725.4	10645.2	9206.5
70°	9406.5	10865.3	10981.8	9187.5	9088.9	8969.1	8712.8	9454.8	11176.5	8724.7	7305.3
72.5°	6916.5	8450.0	8808.5	6738.4	6282.1	6306.4	6104.0	7125.1	9087.1	6480.9	5454.1
75°	4732.0	6118.5	6891.9	4701.8	4154.5	4164.2	4138.5	5048.8	7237.7	4508.3	4081.3
77.5°	3456.9	4371.4	5197.8	3160.9	3068.7	3012.1	2998.5	3532.5	5549.0	3273.5	3169.2
80°	2773.9	3229.6	3491.3	2190.7	2355.8	2351.3	2275.5	2429.0	3623.8	2394.3	2370.3
82.5°	1924.3	2482.0	2828.7	1716.9	1590.1	1563.4	1582.1	1809.1	2561.4	1636.6	1556.3
85°	1015.2	1648.5	2801.5	1521.6	943.8	753.0	936.7	1481.3	2219.2	867.3	759.2
87.5°	129.8	476.5	1854.7	607.2	372.5	200.6	444.8	834.2	1425.0	176.9	154.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3
2.5°	6086.8	5965.3	5806.5	5659.2	5506.9	5355.2	5157.2	5033.1	4947.4	4930.8	4894.7
5°	5938.9	5535.3	5230.4	4966.7	4727.6	4389.5	4202.5	4047.2	3964.2	3956.2	3936.1
7.5°	5256.8	4700.0	4288.4	3915.0	3576.3	3303.4	3002.1	2861.9	2804.1	2817.7	2831.4
10°	4547.4	3925.1	3452.2	3070.5	2772.1	2542.2	2300.4	2137.1	2023.6	2000.8	1996.3
12.5°	4029.1	3346.4	2887.4	2617.7	2387.2	2170.6	1914.3	1721.3	1574.7	1524.3	1490.8
15°	3809.8	3063.4	2582.5	2292.1	2037.2	1762.5	1524.3	1322.5	1187.7	1143.8	1119.2
17.5°	3856.7	2984.9	2372.4	2000.8	1675.1	1388.3	1088.1	915.3	834.2	813.4	813.4
20°	4101.4	2970.4	2198.7	1732.6	1326.1	993.9	747.6	649.0	622.6	619.9	627.0
22.5°	4444.6	3021.6	2069.5	1500.0	1030.6	725.7	582.3	545.8	534.0	536.9	544.9
25°	4955.7	3194.1	1975.6	1292.6	808.7	594.1	519.2	497.5	491.9	499.3	509.4
27.5°	5561.7	3366.5	1916.9	1136.4	682.7	543.2	493.7	471.2	474.7	483.9	492.8
30°	6093.9	3508.2	1824.8	1025.3	643.6	545.8	493.7	462.9	459.3	461.1	463.7
32.5°	6571.6	3603.9	1716.9	919.2	555.0	484.8	461.1	456.6	436.2	428.8	430.0
35°	6983.2	3603.9	1652.3	857.3	497.5	430.0	391.7	368.9	358.6	359.4	369.8
37.5°	7380.3	3531.6	1620.3	822.3	466.4	408.9	375.1	355.0	341.4	338.7	340.5
40°	7730.5	3426.7	1583.9	807.8	442.7	396.2	364.5	347.6	333.1	328.6	329.5
42.5°	8011.7	3341.7	1543.6	788.8	427.9	387.0	356.8	342.3	326.0	321.2	320.3
45°	8315.8	3313.5	1490.8	750.3	435.3	387.9	355.0	339.6	323.0	317.7	315.9
47.5°	8716.4	3402.1	1436.0	704.7	451.0	392.6	357.7	339.6	322.1	317.7	315.9
50°	9221.0	3610.1	1366.4	638.0	435.3	405.4	356.8	336.6	322.1	317.7	314.1
52.5°	9869.4	3891.3	1275.4	561.5	426.1	436.2	355.0	331.3	317.7	311.4	304.9
55°	10657.0	4121.3	1166.3	498.4	405.4	427.9	352.3	325.1	310.5	301.4	295.7
57.5°	11234.0	4204.3	1027.1	457.5	376.0	414.3	348.5	316.8	301.4	294.0	286.8
60°	11119.9	4043.6	909.1	431.7	358.6	374.3	345.8	309.4	293.1	287.7	280.9
62.5°	10206.3	3623.8	833.3	419.9	347.6	341.4	348.5	302.3	286.0	280.0	278.2
65°	8836.1	3003.8	803.3	417.2	338.7	322.1	324.2	294.0	277.4	272.9	271.1
67.5°	7288.7	2424.5	777.0	426.1	326.8	308.5	299.6	283.0	269.1	264.6	261.1
70°	5747.8	2016.5	764.8	420.8	312.3	294.8	285.1	271.1	259.3	254.5	251.9
72.5°	4628.6	1703.3	758.3	415.2	293.1	276.5	267.3	255.4	242.7	240.9	238.2
75°	3917.1	1339.1	694.9	398.0	271.1	254.5	248.3	237.4	224.6	224.6	222.8
77.5°	3021.6	968.4	577.8	352.3	248.3	229.9	224.6	216.3	201.8	204.5	203.6
80°	2231.9	631.8	451.9	292.2	220.2	202.7	199.7	191.7	176.0	179.9	179.9
82.5°	1529.0	414.3	325.1	239.1	187.9	171.6	171.6	163.3	146.1	147.9	153.5
85°	767.8	285.1	242.7	185.2	146.1	137.8	137.8	131.6	114.1	115.0	122.4
87.5°	233.8	171.6	160.6	132.5	104.9	103.1	98.4	93.9	83.0	82.1	86.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3
2.5°	4838.7	4786.5	4724.0	4585.0	4538.5	4535.5	4577.9	4533.8	4617.9	4582.4	4621.5
5°	3902.0	3851.3	3780.8	3603.9	3496.0	3422.8	3388.5	3286.2	3360.0	3306.1	3351.1
7.5°	2869.9	2881.8	2835.2	2731.2	2496.5	2378.9	2309.6	2247.3	2301.3	2295.6	2381.6
10°	2017.4	2049.1	2016.5	1911.6	1721.3	1656.7	1669.5	1694.1	1764.6	1800.8	1933.2
12.5°	1452.3	1450.5	1429.5	1335.5	1210.5	1217.6	1269.8	1312.4	1377.3	1415.8	1550.7
15°	1084.3	1068.0	1058.8	982.0	910.9	926.6	952.1	956.5	997.7	1020.5	1130.2
17.5°	819.6	827.9	837.7	783.2	729.3	719.2	699.3	674.4	686.6	691.0	745.6
20°	650.7	683.6	708.5	670.0	615.5	585.8	560.3	544.1	544.1	543.2	558.6
22.5°	568.6	592.4	619.0	592.4	543.2	517.4	502.9	490.1	488.3	488.3	502.9
25°	524.2	541.4	566.9	548.8	512.0	492.8	479.2	462.9	456.6	454.6	464.6
27.5°	502.0	509.4	522.1	505.5	474.7	465.5	462.0	447.4	438.9	434.4	444.8
30°	464.6	462.9	463.7	447.4	422.6	421.7	427.9	430.9	427.9	427.0	442.7
32.5°	430.0	426.1	425.2	410.7	387.9	382.6	387.9	393.5	399.7	408.9	427.0
35°	386.1	395.3	400.6	387.9	360.3	344.0	337.8	327.7	322.1	322.1	343.1
37.5°	351.4	372.5	380.8	368.9	338.7	315.9	304.9	303.1	304.0	307.6	327.7
40°	339.6	355.0	362.1	350.6	320.3	299.6	293.1	291.3	293.1	298.7	318.5
42.5°	332.2	343.1	342.3	327.7	303.1	288.6	285.1	283.0	285.1	290.4	312.3
45°	326.0	333.1	326.0	308.5	286.0	278.2	279.1	278.2	280.0	286.0	306.7
47.5°	320.3	323.0	314.1	296.6	272.9	271.1	274.7	277.4	279.1	284.2	305.8
50°	312.3	312.3	304.0	286.0	262.0	262.8	267.3	273.8	274.7	280.0	297.8
52.5°	302.3	301.4	295.7	278.2	252.8	255.4	255.4	262.8	264.6	271.1	289.5
55°	294.0	292.2	289.5	272.9	244.8	249.2	246.5	249.2	253.7	260.2	280.0
57.5°	286.8	283.0	283.0	268.2	238.2	240.0	233.8	237.4	242.7	248.3	269.1
60°	279.1	275.6	277.4	262.0	228.2	226.4	223.7	230.8	232.9	239.1	260.2
62.5°	271.1	268.2	269.1	254.5	221.1	216.3	216.3	222.8	223.7	232.9	252.8
65°	264.6	261.1	260.2	247.4	212.8	207.4	210.1	212.8	214.5	223.7	242.7
67.5°	258.4	251.0	251.0	240.9	203.6	197.9	203.6	202.7	205.6	213.6	229.1
70°	250.1	240.0	240.9	236.5	194.4	187.9	192.6	191.7	193.5	198.8	214.5
72.5°	237.4	229.1	230.8	229.1	185.2	176.0	177.8	177.8	177.8	182.5	198.8
75°	221.1	214.5	220.2	224.6	174.2	161.5	163.3	163.3	160.6	163.3	183.4
77.5°	200.6	197.1	215.4	209.2	161.5	146.1	146.1	144.3	139.0	142.5	164.2
80°	179.0	176.0	198.8	175.1	147.0	127.1	125.0	120.3	115.0	117.6	139.9
82.5°	156.2	153.5	167.1	134.2	127.1	104.9	100.5	92.2	86.8	89.5	109.3
85°	128.0	128.0	128.9	101.3	96.6	80.3	75.0	64.0	57.5	59.3	78.5
87.5°	91.3	93.9	86.8	69.3	57.5	44.7	41.2	34.7	29.0	33.8	41.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: GLNA-AF-05-LED-E1-SLL-7030-600

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3	5610.3
2.5°	4822.4	4922.8	5036.9	5182.7	5308.1	5513.1	5710.5	5829.0
5°	3605.7	3772.8	3980.5	4248.4	4497.6	4871.6	5243.2	5481.4
7.5°	2580.4	2759.4	2984.0	3317.9	3670.6	4147.7	4639.0	4923.7
10°	2135.3	2318.7	2507.5	2733.0	3021.6	3540.8	4121.3	4442.5
12.5°	1766.4	1962.6	2166.1	2403.5	2670.8	3134.5	3803.6	4173.4
15°	1351.8	1570.8	1810.8	2111.3	2446.2	2982.2	3725.1	4126.6
17.5°	926.6	1171.4	1465.9	1836.6	2246.4	2932.7	3865.8	4328.7
20°	638.0	816.1	1131.1	1565.5	2058.6	2926.5	4135.8	4715.7
22.5°	534.0	613.4	843.3	1316.3	1916.9	3005.0	4555.1	5258.6
25°	493.7	541.4	673.5	1100.0	1813.8	3185.8	5132.0	5961.5
27.5°	470.3	512.9	611.6	958.6	1732.6	3395.6	5693.3	6642.4
30°	479.2	523.0	594.1	886.3	1622.1	3570.7	6191.7	7173.7
32.5°	431.7	451.0	509.4	822.3	1542.7	3717.7	6627.9	7613.8
35°	368.0	401.5	454.6	792.4	1544.4	3816.4	7103.5	8175.9
37.5°	350.6	384.3	422.6	781.4	1565.5	3921.6	7649.3	8835.2
40°	339.6	370.7	403.6	775.2	1585.6	4017.3	8184.5	9486.8
42.5°	332.2	360.3	401.5	753.0	1595.7	4103.2	8624.2	10041.0
45°	331.3	360.3	408.9	731.0	1611.1	4195.4	8993.1	10450.8
47.5°	332.2	372.5	395.3	704.7	1611.1	4349.4	9425.8	10816.7
50°	328.6	392.6	380.8	667.3	1573.8	4641.6	10019.0	11306.9
52.5°	326.8	390.0	352.3	609.8	1508.9	5105.4	10779.4	11982.5
55°	322.1	376.0	332.2	524.2	1433.3	5611.2	11593.7	12781.4
57.5°	317.7	333.1	321.2	449.2	1316.3	5967.1	12154.0	13404.5
60°	355.9	291.3	312.3	412.5	1160.1	6064.6	12132.4	13652.9
62.5°	329.5	272.9	300.5	404.5	1050.8	5790.8	11571.8	13518.9
65°	258.4	261.1	288.6	427.9	1021.4	5065.4	10578.5	12899.0
67.5°	236.5	249.2	276.5	458.4	1024.4	4055.5	9094.5	11548.7
70°	222.8	236.5	262.8	473.8	1031.5	3023.4	7190.0	9406.5
72.5°	207.4	219.3	247.4	476.5	983.8	2196.1	5541.9	6916.5
75°	188.8	199.7	225.5	415.2	815.2	1523.4	4239.2	4732.0
77.5°	168.0	176.0	197.9	320.3	605.4	974.9	3181.9	3456.9
80°	143.4	147.9	166.2	234.7	414.3	609.8	2517.6	2773.9
82.5°	115.0	116.8	128.9	176.0	269.1	391.7	1686.1	1924.3
85°	81.2	81.2	88.6	128.0	183.4	248.3	915.3	1015.2
87.5°	38.2	39.1	39.1	70.2	95.7	126.2	211.0	129.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)