

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: P300379

Luminaire Tested: **GLNA-AF-05-LED-E1-AFL-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300379  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
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-AFL-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21350.5 lumens  
Efficiency: N/A  
Efficacy: 101.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

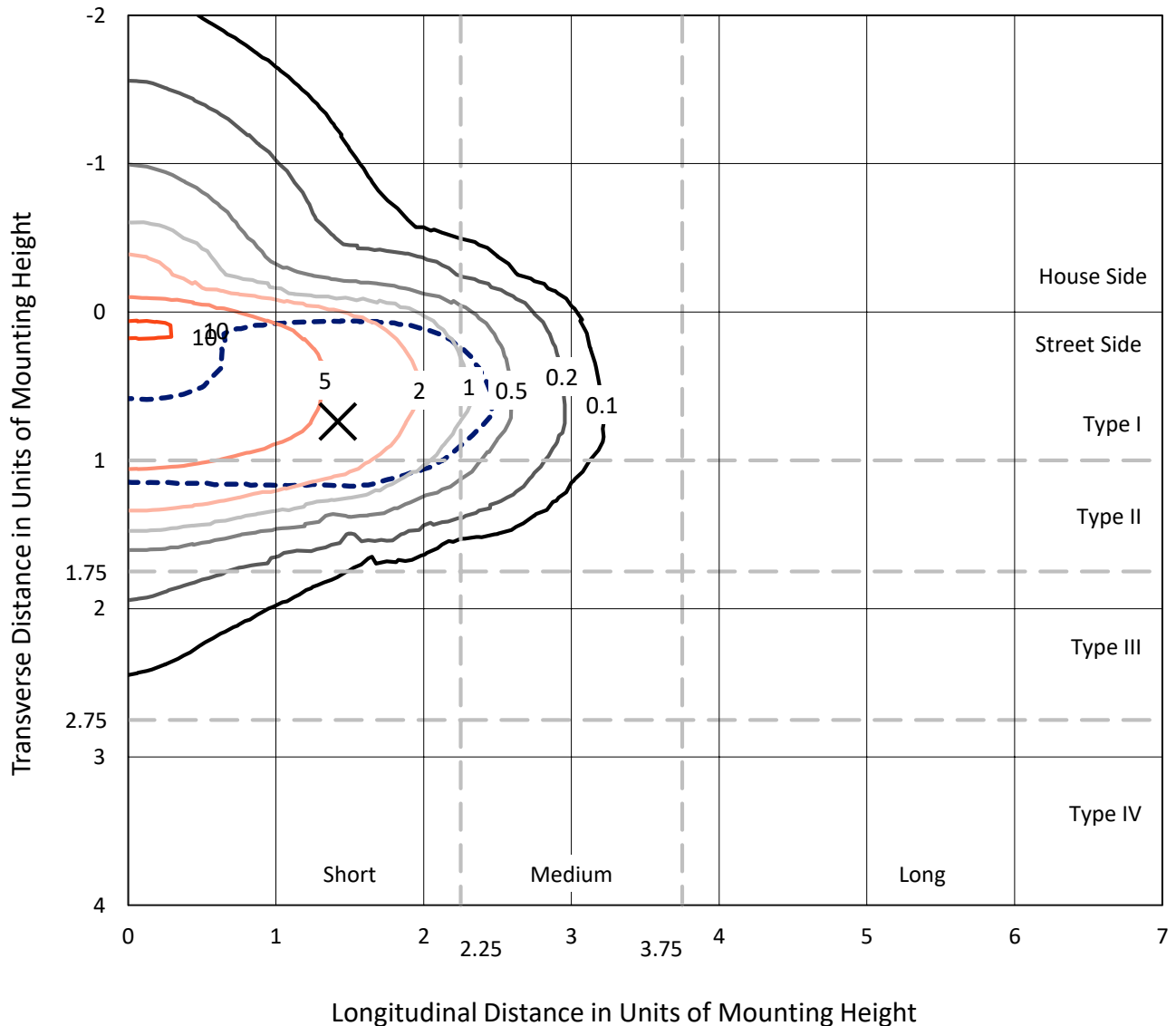
Input Watts (W): 210  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

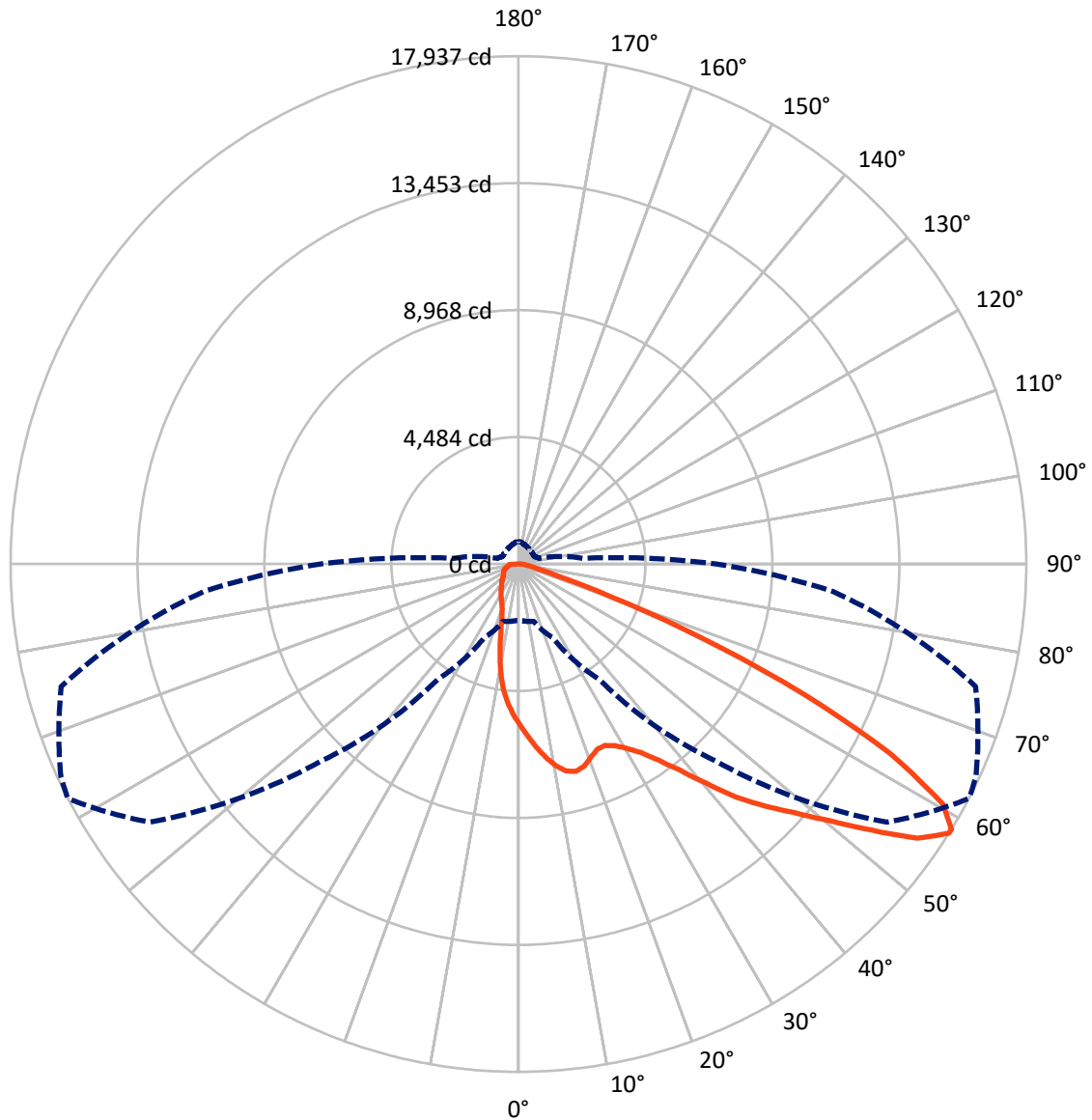
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P300379  
CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027-800

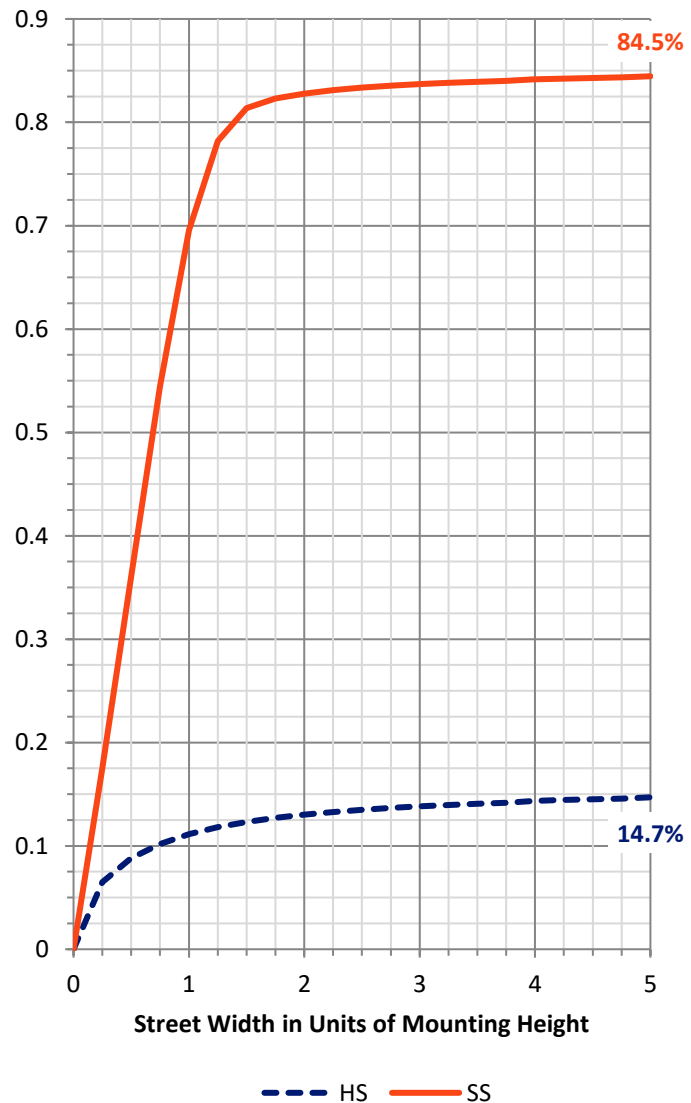
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3256.0	0.0	3256.0
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	18094.4	0.0	18094.4
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	21350.5	0.0	21350.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	507.2	2.4
10°-20°	1296.5	6.1
20°-30°	2095.9	9.8
30°-40°	3327.2	15.6
40°-50°	4868.4	22.8
50°-60°	5091.9	23.8
60°-70°	3008.3	14.1
70°-80°	847.5	4.0
80°-90°	307.7	1.4
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°	21350.5	100.0
0°-180°	21350.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P300379

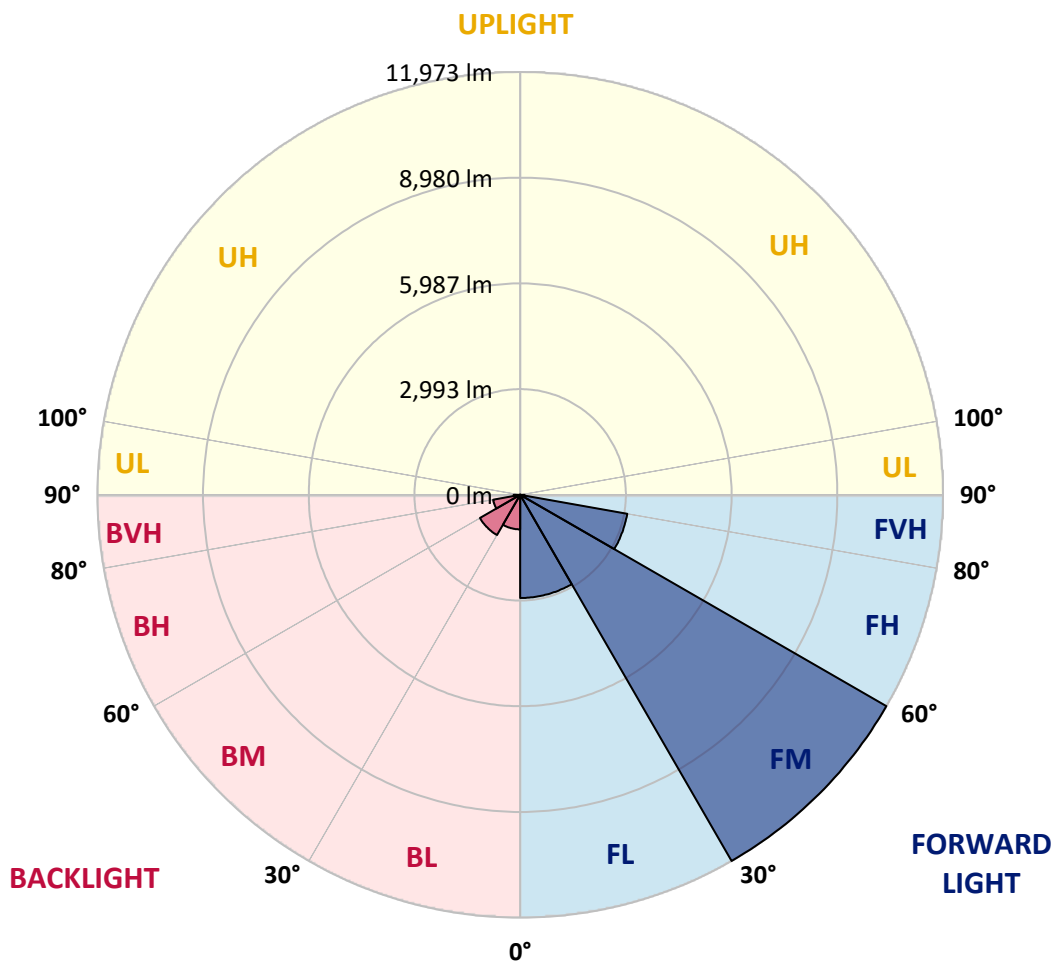
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2921.0	13.7			
FM (30°-60°)	11973.2	56.1			
FH (60°-80°)	3078.8	14.4			G2/5000
FVH (80°-90°)	121.4	0.6			G2/225
BL (0°-30°)	978.6	4.6	B2/1000		
BM (30°-60°)	1314.2	6.2	B2/2500		
BH (60°-80°)	776.9	3.6	B2/1000		G2/1000
BVH (80°-90°)	186.3	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P300379

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3
2.5°	6480.6	6428.4	6395.2	6366.0	6327.8	6246.4	6136.8	6067.4	6032.2	5912.6	5770.8
5°	7116.0	7069.8	7035.6	6996.4	6928.0	6800.4	6623.4	6482.7	6413.3	6174.0	5890.5
7.5°	6967.2	6986.3	7045.7	7149.2	7237.7	7220.6	7062.8	6883.8	6792.3	6459.5	6029.2
10°	6070.4	6103.6	6206.2	6448.5	6840.6	7242.7	7365.4	7241.7	7149.2	6742.0	6172.0
12.5°	5890.5	5889.5	5897.5	5961.9	6195.1	6761.1	7375.4	7500.1	7444.8	7011.5	6317.8
15°	5963.9	5965.9	5959.9	5987.0	6059.4	6283.6	7067.8	7599.6	7638.8	7282.9	6468.6
17.5°	6156.9	6151.9	6128.8	6128.8	6154.9	6242.4	6705.8	7507.1	7688.1	7523.2	6601.3
20°	6480.6	6457.5	6396.2	6339.9	6311.7	6359.0	6557.1	7294.0	7602.6	7733.3	6710.9
22.5°	6872.7	6854.6	6755.1	6634.5	6536.9	6535.9	6633.5	7108.0	7454.8	7931.4	6803.4
25°	7379.4	7350.3	7202.5	7009.5	6838.6	6773.2	6800.4	7098.9	7374.4	8146.5	6885.8
27.5°	7974.6	7921.3	7746.4	7467.9	7216.6	7084.9	7045.7	7262.8	7447.8	8413.0	7000.4
30°	8696.5	8635.2	8411.0	8048.0	7693.1	7477.0	7393.5	7553.4	7691.1	8737.7	7184.4
32.5°	9517.9	9429.4	9170.0	8769.9	8303.4	7973.6	7837.9	7937.4	8047.0	9128.8	7414.6
35°	10652.9	10547.4	10172.4	9620.4	9093.6	8640.2	8423.0	8495.4	8602.0	9711.9	7747.4
37.5°	11427.1	11379.8	11130.5	10611.7	10038.7	9516.9	9181.1	9223.3	9283.6	10440.8	8173.7
40°	11420.0	11439.1	11444.2	11449.2	11059.1	10559.4	10198.5	10154.3	10142.2	11241.1	8658.3
42.5°	10848.0	10926.4	11179.8	11693.5	11930.8	11701.5	11370.8	11243.1	11179.8	12184.1	9172.0
45°	9972.3	10014.5	10489.1	11492.4	12377.2	12832.6	12582.3	12180.1	12065.5	13050.8	9598.3
47.5°	9520.9	9567.1	9865.7	10959.6	12372.1	13746.5	13891.3	13125.2	12920.1	13804.8	9966.3
50°	8446.1	8542.7	8918.7	10032.6	11920.7	14166.7	15259.6	14251.2	13826.9	14538.7	10335.2
52.5°	6472.6	6621.4	7042.6	8508.5	10775.6	13958.6	16354.4	15616.5	15017.3	15298.8	10651.9
55°	4082.8	4193.4	4547.3	6009.1	8620.1	12875.8	16769.6	17093.4	16560.5	16018.6	10926.4
57.5°	2219.9	2269.1	2401.8	3317.7	5607.0	10482.0	16164.4	17933.9	17712.7	16629.9	11133.5
58°	1986.6	2019.8	2102.2	2875.4	4972.6	9827.5	15896.0	17936.9	17826.3	16719.4	11149.6
60°	1473.9	1456.8	1383.4	1640.8	2767.8	6789.3	14273.3	17219.0	17543.8	16829.0	11071.2
62.5°	1294.9	1253.7	1103.9	1086.8	1346.2	3127.7	10921.4	14749.8	15516.9	16203.6	10594.6
65°	1216.5	1172.3	979.2	916.9	971.2	1323.1	6433.4	11062.1	12024.3	14307.5	9376.1
67.5°	1158.2	1100.9	899.8	814.4	818.4	874.7	2578.8	6967.2	8050.0	10863.1	7293.0
70°	1101.9	1039.6	832.4	733.9	710.8	691.7	1025.5	3487.6	4469.9	6861.7	4649.9
72.5°	1041.6	980.2	773.1	670.6	625.3	562.0	669.6	1426.6	1992.7	3246.4	2109.3
75°	954.1	898.8	713.8	614.3	549.9	465.5	505.7	745.0	893.8	1292.9	1016.4
77.5°	846.5	801.3	647.5	568.0	487.6	378.0	389.1	516.8	573.1	740.0	604.2
80°	608.3	624.3	576.1	510.7	434.3	306.6	298.6	377.0	407.2	475.5	393.1
82.5°	427.3	436.3	476.5	417.2	358.9	241.3	220.2	265.4	283.5	312.7	212.1
85°	294.6	284.5	326.7	290.6	259.4	160.9	150.8	180.0	191.0	194.0	109.6
87.5°	176.9	176.9	189.0	155.8	139.7	83.4	81.4	102.5	109.6	104.6	60.3
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: P300379

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-7027-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3	5671.3
2.5°	5686.4	5615.0	5463.2	5341.6	5187.7	5027.9	4938.4	4842.9	4777.5	4730.3	4805.7
5°	5729.6	5583.8	5270.2	4972.6	4643.8	4302.0	4042.6	3801.3	3633.4	3528.9	3627.4
7.5°	5798.0	5573.8	5074.1	4565.4	3975.2	3406.2	2897.5	2578.8	2392.8	2301.3	2358.6
10°	5876.4	5557.7	4843.9	4013.5	3168.9	2452.1	2072.1	1943.4	1901.2	1884.1	1892.1
12.5°	5941.8	5523.5	4561.4	3345.9	2379.7	1936.4	1826.8	1823.7	1832.8	1834.8	1837.8
15°	5988.0	5473.3	4142.1	2650.2	1903.2	1764.4	1758.4	1776.5	1793.6	1800.6	1804.6
17.5°	6019.2	5369.7	3668.6	2095.2	1705.1	1681.0	1695.1	1718.2	1736.3	1741.3	1745.3
20°	6016.2	5217.9	3104.6	1747.3	1597.5	1597.5	1621.7	1639.8	1640.8	1634.7	1637.8
22.5°	5985.0	5009.8	2557.7	1562.4	1502.0	1519.1	1543.2	1526.2	1455.8	1409.5	1412.6
25°	5932.7	4761.5	2089.2	1444.7	1413.6	1443.7	1436.7	1308.0	1207.5	1162.2	1162.2
27.5°	5886.5	4467.9	1729.2	1342.2	1325.1	1362.3	1237.6	1121.0	1078.8	1057.7	1050.6
30°	5853.3	4151.2	1489.0	1243.6	1241.6	1214.5	1073.7	1041.6	1034.5	1017.4	1011.4
32.5°	5861.3	3830.5	1335.1	1157.2	1164.2	1039.6	995.3	1002.4	996.3	978.2	970.2
35°	5927.7	3525.8	1234.6	1078.8	1057.7	939.0	949.1	962.1	960.1	935.0	927.0
37.5°	6046.3	3237.3	1168.2	1013.4	922.9	888.8	904.8	924.9	919.9	902.8	896.8
40°	6171.0	2965.9	1114.0	962.1	843.5	854.6	868.6	879.7	884.7	889.8	885.7
42.5°	6292.6	2682.3	1047.6	909.9	810.3	822.4	828.4	839.5	866.6	885.7	884.7
45°	6365.0	2415.9	979.2	835.5	784.2	791.2	787.2	809.3	842.5	873.7	874.7
47.5°	6445.5	2208.8	924.9	767.1	759.1	764.1	752.0	774.1	804.3	842.5	846.5
50°	6543.0	2085.1	881.7	712.8	724.9	724.9	721.9	742.0	784.2	828.4	836.5
52.5°	6653.6	2061.0	845.5	673.6	690.7	689.7	692.7	722.9	769.1	812.3	819.4
55°	6788.3	2126.4	806.3	644.4	657.5	661.5	671.6	705.8	745.0	794.2	797.3
57.5°	6945.1	2259.1	775.1	621.3	627.4	640.4	656.5	687.7	729.9	784.2	787.2
58°	6971.3	2287.2	770.1	619.3	621.3	636.4	654.5	684.7	726.9	786.2	789.2
60°	6972.3	2380.7	759.1	610.3	598.2	623.3	643.4	673.6	721.9	793.2	800.3
62.5°	6724.9	2379.7	751.0	597.2	574.1	605.2	628.4	663.5	716.8	810.3	824.4
65°	5921.7	2162.6	712.8	577.1	555.0	589.1	615.3	656.5	730.9	884.7	893.8
67.5°	4631.8	1772.5	641.4	548.9	529.8	573.1	607.2	655.5	746.0	901.8	907.9
70°	3062.4	1326.1	563.0	516.8	503.7	554.0	611.3	689.7	728.9	865.6	849.5
72.5°	1589.5	931.0	499.7	476.5	473.5	536.9	669.6	685.7	711.8	814.4	794.2
75°	834.5	646.5	444.4	432.3	437.3	532.8	790.2	667.6	689.7	779.2	817.4
77.5°	510.7	521.8	397.1	392.1	402.1	520.8	789.2	644.4	657.5	716.8	759.1
80°	341.8	423.3	360.9	361.9	369.0	476.5	708.8	608.3	618.3	677.6	720.9
82.5°	216.2	250.3	327.8	344.8	335.8	393.1	602.2	554.0	568.0	775.1	819.4
85°	109.6	156.8	284.5	331.8	302.6	275.5	488.6	485.6	492.6	559.0	584.1
87.5°	50.3	86.5	222.2	289.5	228.2	171.9	354.9	359.9	388.1	397.1	397.1
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)