

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: P299504

Luminaire Tested: **GLNA-AF-09-LED-E1-SLR-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299504
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194679)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-SLR-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Right OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29701.6 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 290
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

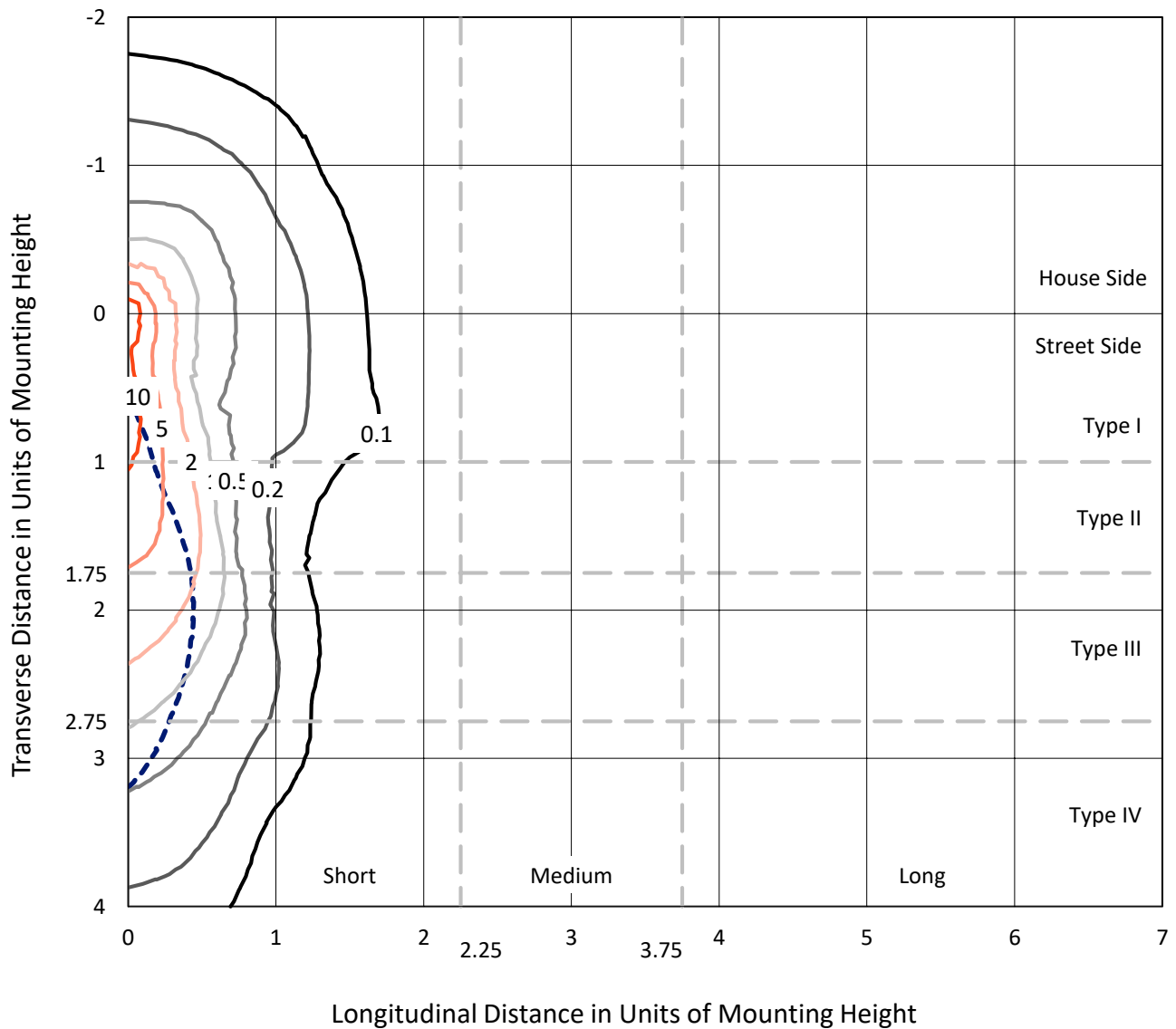


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Iso-Footcandle Lines of Horizontal Illumination

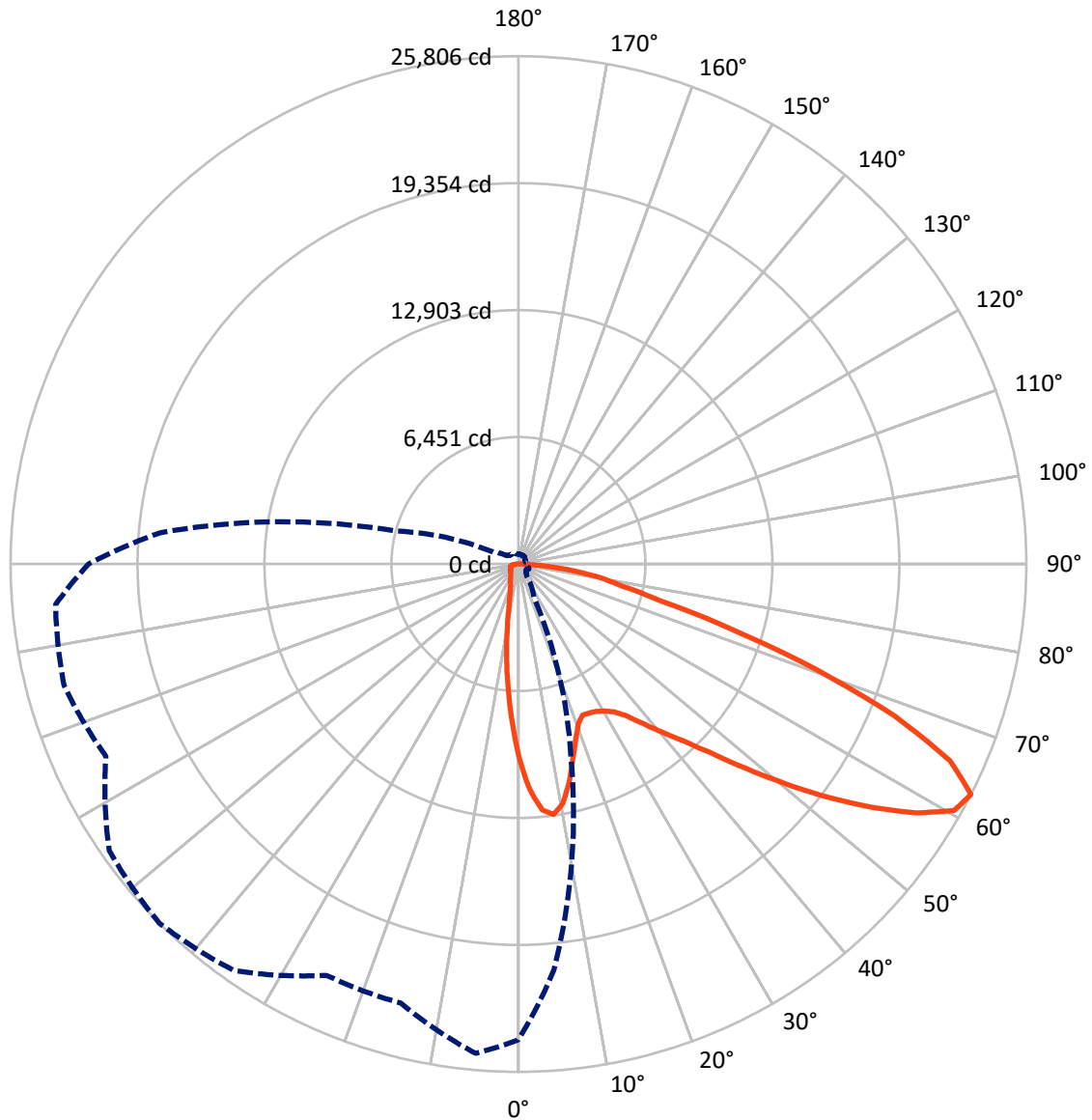
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4915.2	0.0	4915.2
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	24786.4	0.0	24786.4
	% Fixture	83.5	0.0	83.5
Total	Lumens	29701.6	0.0	29701.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	730.5	2.5
10°-20°	1339.5	4.5
20°-30°	1953.0	6.6
30°-40°	3007.9	10.1
40°-50°	4426.9	14.9
50°-60°	6493.3	21.9
60°-70°	7258.6	24.4
70°-80°	3553.7	12.0
80°-90°	938.3	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°	29701.6	100.0
0°-180°	29701.6	100.0



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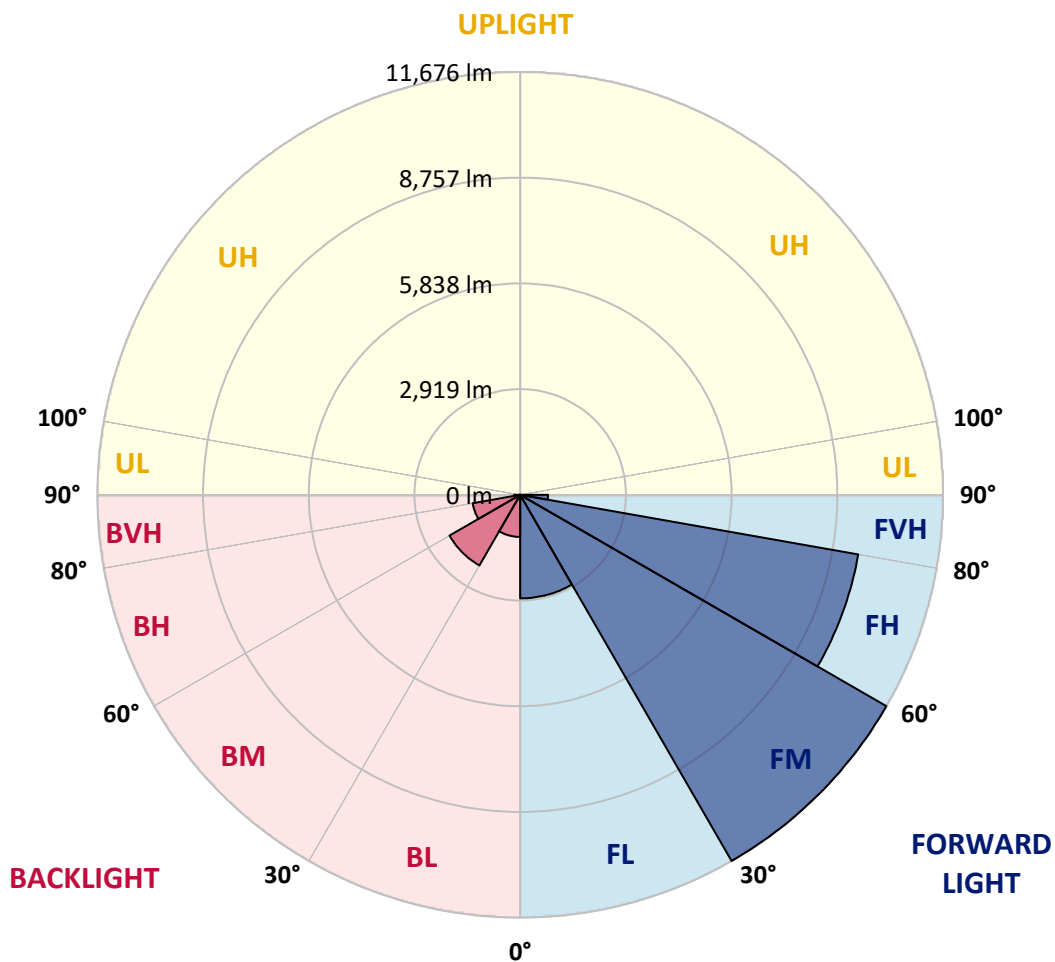
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2860.2	9.6			
FM	(30°-60°)	11676.0	39.3			
FH	(60°-80°)	9479.7	31.9			G4/12000
FVH	(80°-90°)	770.5	2.6			G5
BL	(0°-30°)	1162.9	3.9	B3/2500		
BM	(30°-60°)	2252.1	7.6	B2/2500		
BH	(60°-80°)	1332.5	4.5	B3/2500		G3/2500
BVH	(80°-90°)	167.7	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0
2.5°	10426.5	10214.4	9861.5	9494.2	9270.8	9009.3	8805.2	8625.8	8266.4	8196.2	8260.0
5°	9804.7	9378.6	8713.8	8044.5	7598.7	7120.2	6748.0	6449.4	5993.7	5913.6	6010.0
7.5°	8807.2	8297.6	7419.2	6565.1	5934.9	5337.3	4935.9	4615.6	4259.8	4106.5	4115.9
10°	7946.6	7371.8	6333.3	5404.5	4888.5	4485.1	4147.1	3818.9	3458.0	3221.3	3156.0
12.5°	7464.7	6803.8	5606.7	4777.3	4298.8	3874.7	3510.4	3159.5	2773.9	2532.2	2464.0
15°	7381.7	6663.0	5334.3	4375.9	3776.3	3239.5	2810.0	2418.0	2021.1	1825.4	1784.4
17.5°	7742.5	6914.6	5245.9	4018.0	3285.0	2622.2	2094.8	1657.3	1334.1	1236.2	1227.8
20°	8434.5	7398.0	5234.5	3681.9	2800.1	2023.1	1459.6	1141.3	999.4	971.3	973.2
22.5°	9406.3	8147.3	5374.9	3428.9	2354.3	1508.6	1097.3	955.0	899.6	873.4	873.4
25°	10663.2	9179.4	5698.1	3244.5	1967.3	1205.1	968.3	883.3	830.9	813.1	816.6
27.5°	11881.6	10183.3	6073.8	3099.2	1714.2	1093.9	917.4	840.8	795.3	777.0	785.4
30°	12831.7	11075.0	6387.2	2901.5	1585.2	1062.7	935.7	857.1	791.8	764.2	765.6
32.5°	13618.6	11855.4	6650.1	2759.1	1471.0	911.0	806.7	772.1	764.2	731.5	715.2
35°	14624.4	12706.1	6826.6	2762.6	1417.1	813.1	718.2	657.9	613.9	576.3	576.3
37.5°	15803.3	13682.3	7014.4	2800.1	1397.8	755.8	687.6	626.8	586.2	550.1	543.7
40°	16968.8	14639.3	7185.9	2836.2	1386.0	721.7	662.8	607.5	569.9	533.8	523.9
42.5°	17960.4	15426.2	7339.2	2854.0	1346.9	718.2	645.0	594.1	558.5	519.0	509.6
45°	18693.4	16085.5	7504.2	2881.7	1307.9	731.5	645.0	592.6	548.7	511.1	501.2
47.5°	19347.8	16859.6	7780.1	2881.7	1260.4	706.8	666.3	594.1	547.2	507.6	499.7
50°	20224.7	17920.8	8302.5	2815.0	1193.7	680.6	701.9	587.7	532.3	501.2	491.3
52.5°	21432.7	19281.1	9131.9	2698.8	1090.9	630.2	696.9	584.7	517.5	484.9	473.5
55°	22861.7	20737.3	10036.5	2563.4	937.2	594.1	672.7	576.3	501.2	465.1	453.8
57.5°	23976.8	21739.7	10673.1	2354.3	803.2	574.9	596.1	568.4	481.4	443.9	434.5
60°	24420.7	21700.6	10848.1	2075.0	738.0	558.5	521.0	636.6	465.1	427.6	416.2
62.5°	24181.0	20698.2	10358.3	1879.3	723.1	537.3	488.4	589.2	452.3	416.2	399.9
65°	23072.3	18921.8	9060.3	1826.9	765.6	516.0	467.1	462.2	434.5	399.9	383.6
67.5°	20657.2	16266.9	7254.1	1831.8	819.5	494.8	445.8	423.1	409.8	382.1	367.3
70°	16825.5	12861.3	5407.5	1845.2	847.2	470.1	423.1	398.4	383.6	355.9	346.0
72.5°	12371.5	9912.4	3928.6	1760.2	852.1	442.4	392.0	370.7	355.9	326.7	318.3
75°	8464.1	7582.3	2725.0	1458.1	742.9	403.3	357.4	338.1	328.2	292.1	287.2
77.5°	6183.0	5691.7	1743.8	1082.5	572.9	354.4	315.4	300.5	294.1	254.6	248.1
80°	4962.1	4502.9	1090.9	741.4	419.6	297.1	264.4	256.5	249.6	210.6	205.6
82.5°	3441.7	3015.6	700.4	481.4	315.4	230.3	209.1	205.6	195.7	160.1	155.2
85°	1815.5	1637.6	443.9	328.2	228.4	158.2	145.3	145.3	140.4	106.3	102.8
87.5°	231.8	377.1	225.4	171.5	125.5	70.2	70.2	68.7	73.6	60.3	52.4
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°	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0
2.5°	8109.7	8188.3	8113.2	8118.1	8201.2	8449.3	8562.0	8654.9	8754.8	8820.0	8849.2
5°	5878.0	6060.9	6122.7	6253.2	6446.0	6762.8	6888.4	6979.8	7040.6	7076.2	7091.0
7.5°	4020.0	4130.7	4254.8	4465.4	4885.0	5071.4	5154.4	5133.2	5064.9	5040.2	5016.0
10°	3030.5	2986.5	2963.2	3079.4	3419.0	3606.8	3665.6	3608.3	3570.7	3579.1	3619.7
12.5°	2347.9	2271.2	2178.3	2165.0	2388.9	2556.9	2594.5	2597.5	2666.2	2726.5	2816.4
15°	1711.2	1702.8	1657.3	1629.7	1756.7	1894.1	1910.4	1939.6	2001.9	2045.8	2123.9
17.5°	1206.6	1250.5	1286.6	1304.4	1400.8	1498.7	1480.9	1466.1	1454.7	1454.7	1492.2
20°	973.2	1002.4	1048.4	1100.3	1198.6	1266.9	1222.9	1164.0	1121.5	1108.7	1113.6
22.5°	876.9	899.6	925.8	971.3	1059.7	1107.2	1059.7	1017.2	974.7	959.9	955.0
25°	827.9	857.1	881.8	915.9	981.2	1013.8	968.3	937.2	911.0	893.2	879.8
27.5°	800.2	826.0	832.9	849.2	904.5	933.7	911.0	898.1	881.8	865.5	849.2
30°	770.6	765.6	754.3	755.8	800.2	829.4	827.9	830.9	829.4	824.5	821.5
32.5°	703.9	694.0	684.1	694.0	734.5	760.7	762.7	769.1	769.1	767.6	780.5
35°	586.2	604.0	615.4	645.0	694.0	716.7	706.8	690.5	661.4	643.1	641.6
37.5°	542.2	545.2	565.0	605.5	659.9	680.6	666.3	628.7	609.0	605.5	610.4
40°	521.0	523.9	535.3	572.9	626.8	648.0	635.2	607.5	589.2	587.7	596.1
42.5°	506.1	509.6	516.0	542.2	586.2	612.4	613.9	594.1	572.9	574.9	582.8
45°	497.7	499.7	497.7	511.1	551.6	582.8	596.1	582.8	565.0	568.4	577.8
47.5°	496.3	491.3	484.9	488.4	530.9	561.5	577.8	572.9	565.0	568.4	576.3
50°	489.8	478.5	470.1	468.6	511.1	543.7	558.5	558.5	561.5	568.4	576.3
52.5°	470.1	457.2	457.2	452.3	497.7	528.9	538.8	540.3	545.2	556.6	568.4
55°	445.8	440.9	445.8	437.4	488.4	517.5	522.5	525.9	528.9	538.8	555.1
57.5°	424.6	418.2	429.5	426.1	480.0	506.1	506.1	512.6	512.6	525.9	538.8
60°	413.2	399.9	404.8	408.3	468.6	496.3	493.3	499.7	502.7	514.6	523.9
62.5°	398.4	387.0	387.0	394.9	455.7	481.4	480.0	484.9	497.7	501.2	511.1
65°	380.6	375.7	370.7	380.6	442.4	465.1	467.1	473.5	484.9	488.4	496.3
67.5°	362.3	364.3	354.4	364.3	431.0	448.8	448.8	462.2	467.1	473.5	481.4
70°	343.0	344.5	336.1	348.0	423.1	431.0	429.5	447.3	450.8	455.7	463.6
72.5°	318.3	318.3	315.4	331.7	409.8	413.2	409.8	424.6	426.1	431.0	434.5
75°	292.1	292.1	289.2	311.9	401.9	393.5	383.6	394.9	398.4	401.9	401.9
77.5°	258.0	261.5	261.5	289.2	373.7	385.5	352.4	359.3	364.3	365.8	360.8
80°	215.5	223.9	226.9	263.0	313.4	355.9	315.4	319.8	321.8	321.8	315.4
82.5°	165.1	179.4	187.8	226.9	240.2	298.5	274.3	279.3	274.3	264.4	261.5
85°	114.2	134.0	143.8	173.0	181.4	230.3	228.4	228.4	219.0	205.6	204.1
87.5°	62.3	73.6	80.1	102.8	124.1	155.2	168.1	163.1	155.2	146.8	148.8
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°	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0
2.5°	9002.9	9224.9	9579.3	9850.1	10123.0	10385.9	10670.1	10887.1	11071.5	11143.7	11362.1
5°	7239.8	7517.1	7851.7	8455.7	8883.8	9355.3	9901.0	10622.7	10900.0	11284.0	11912.3
7.5°	5118.8	5369.9	5908.7	6397.0	7003.0	7670.8	8406.8	9402.8	9767.1	10382.5	11406.1
10°	3822.3	4114.4	4546.9	4958.7	5492.5	6175.1	7020.8	8134.5	8576.8	9244.6	10423.5
12.5°	3079.4	3423.9	3882.6	4269.6	4682.9	5164.3	5985.8	7206.7	7799.8	8384.1	9575.8
15°	2365.7	2726.5	3153.0	3644.4	4099.6	4619.1	5479.7	6815.2	7497.3	8106.8	9123.5
17.5°	1637.6	1946.0	2483.3	2995.9	3579.1	4243.4	5339.3	6898.3	7712.8	8415.2	9202.1
20°	1161.1	1337.0	1777.9	2372.6	3099.2	3933.0	5313.1	7335.7	8395.4	9197.2	9704.8
22.5°	976.2	1041.5	1298.0	1843.2	2682.5	3701.2	5404.5	7949.6	9316.3	10340.0	10506.5
25°	889.7	929.3	1062.7	1446.8	2311.8	3533.2	5713.0	8864.0	10456.1	11483.2	11453.6
27.5°	842.3	883.3	971.3	1221.4	2033.0	3428.9	6021.4	9948.5	11759.1	12723.9	12358.1
30°	827.9	883.3	976.2	1151.2	1833.8	3263.8	6274.5	10900.0	12761.5	13561.7	12769.9
32.5°	816.6	824.5	867.0	992.5	1644.0	3071.0	6446.0	11754.1	13742.6	14358.5	13362.5
35°	659.9	700.4	769.1	889.7	1533.3	2955.3	6446.0	12490.6	14709.4	15163.2	13927.5
37.5°	635.2	671.2	731.5	834.4	1471.0	2898.0	6317.0	13200.9	15697.0	16076.1	14392.6
40°	622.3	651.5	708.8	791.8	1444.8	2832.8	6129.1	13827.6	16661.9	16990.1	14827.1
42.5°	612.4	638.6	692.5	765.6	1410.7	2761.1	5977.4	14330.3	17499.7	17770.6	15241.8
45°	607.5	635.2	694.0	779.0	1342.0	2666.2	5927.0	14874.0	18188.7	18422.0	15690.6
47.5°	607.5	640.1	701.9	806.7	1260.4	2568.3	6085.2	15591.3	18840.2	18954.4	16219.5
50°	602.5	638.6	725.1	779.0	1141.3	2444.2	6457.3	16493.8	19545.5	19558.4	16889.2
52.5°	592.6	635.2	780.5	762.7	1003.9	2281.1	6960.5	17653.4	20589.0	20667.1	17937.1
55°	581.3	630.2	765.6	725.1	891.7	2086.9	7371.8	19062.1	22055.0	22272.0	19478.8
57.5°	566.5	623.8	741.4	672.7	818.0	1836.8	7520.6	20094.2	23078.7	23623.9	21215.7
60°	553.6	618.8	669.3	641.6	772.1	1626.2	7232.9	19890.1	23008.5	24183.9	22755.4
62.5°	540.3	623.8	610.4	622.3	750.8	1490.8	6482.1	18255.5	21844.5	23606.1	23896.7
65°	525.9	579.8	576.3	605.5	746.4	1436.9	5373.4	15804.8	19594.5	21779.2	24166.1
67.5°	506.1	535.3	551.6	584.7	762.7	1389.4	4336.4	13037.3	16467.6	19040.9	22761.9
70°	484.9	509.6	527.4	558.5	752.8	1368.2	3606.8	10281.1	13066.9	15605.6	19991.4
72.5°	457.2	478.5	494.8	523.9	742.9	1356.8	3046.8	8279.8	9755.7	11592.5	16254.1
75°	424.6	443.9	455.7	484.9	711.8	1242.6	2395.3	7006.0	7300.1	8064.3	12945.8
77.5°	387.0	401.9	411.2	443.9	630.2	1033.6	1732.5	5404.5	5669.0	5854.8	9925.3
80°	343.0	357.4	362.3	393.5	522.5	808.2	1129.9	3991.9	4240.0	4282.5	6482.1
82.5°	292.1	307.0	307.0	336.1	427.6	581.3	741.4	2734.9	2783.8	2927.7	4581.5
85°	235.3	246.6	246.6	261.5	331.7	434.5	509.6	1373.1	1358.3	1551.1	3969.1
87.5°	168.1	176.5	184.4	187.8	236.8	287.2	307.0	418.2	275.8	316.8	2548.5
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-09-LED-E1-SLR-7030-600

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0	10035.0
2.5°	11527.2	11620.2	11525.3	11457.0	11161.5	10918.3	10593.0	10426.5
5°	12390.8	12627.5	12547.4	12260.3	11642.9	10948.9	10160.5	9804.7
7.5°	12286.5	12836.6	12849.5	12312.7	11403.2	10381.0	9313.3	8807.2
10°	11473.4	12176.7	12377.9	11856.9	10892.1	9749.3	8524.5	7946.6
12.5°	10565.4	11254.4	11408.1	11228.2	10422.0	9273.8	8031.6	7464.7
15°	9822.4	10131.4	10313.8	10470.9	10018.7	9084.5	8003.5	7381.7
17.5°	9370.2	9336.1	9388.5	9660.8	9737.4	9301.5	8428.1	7742.5
20°	9207.1	8683.1	8669.8	9045.4	9605.5	9819.5	9257.5	8434.5
22.5°	9297.0	8447.8	8340.1	8785.9	9675.6	10565.4	10344.9	9406.3
25°	9606.9	8467.6	8380.6	8812.1	9930.2	11360.7	11518.8	10663.2
27.5°	10095.3	8591.7	8477.0	8919.9	10268.3	12028.4	12675.0	11881.6
30°	10558.9	8807.2	8664.8	9131.9	10576.7	12292.9	13383.8	12831.7
32.5°	11122.4	9210.5	8960.4	9521.9	10958.8	12714.0	14015.5	13618.6
35°	11674.0	9784.9	9475.0	10124.5	11384.9	13238.5	14737.1	14624.4
37.5°	12280.0	10536.2	10279.7	10903.4	11968.1	13732.7	15658.0	15803.3
40°	12926.6	11532.2	11228.2	12039.8	12872.7	14353.6	16619.9	16968.8
42.5°	13578.0	12637.4	12275.1	13097.6	13866.7	14965.5	17442.4	17960.4
45°	14323.9	13837.5	13666.0	14555.7	14822.1	15548.7	18049.8	18693.4
47.5°	15192.9	15199.3	15475.1	15831.0	15785.5	16208.1	18660.8	19347.8
50°	16206.6	16898.6	17508.1	17744.4	16778.0	16916.9	19508.0	20224.7
52.5°	17424.6	18931.6	19685.9	19530.7	17847.7	17781.9	20850.0	21432.7
55°	18947.9	21083.8	21833.1	21721.9	19077.0	18960.8	22522.1	22861.7
57.5°	20711.1	23168.7	23857.7	23358.0	20552.9	20254.3	23905.1	23976.8
60°	22260.7	24821.1	25425.1	24871.5	22042.2	21630.4	24768.7	24420.7
62.5°	23122.7	25381.1	25805.7	25209.6	23062.4	23096.5	24958.0	24181.0
65°	22737.6	23965.4	24102.4	24053.4	22799.4	23947.2	24277.3	23072.3
67.5°	20628.0	20386.3	20616.7	20935.0	20546.5	22827.1	22391.1	20657.2
70°	16912.0	15584.3	16043.5	16257.1	16433.5	19643.4	19434.3	16825.5
72.5°	12745.2	10918.3	11280.6	11236.6	12052.7	15755.9	15114.3	12371.5
75°	9030.6	7402.9	7448.4	7430.6	8410.3	12327.0	10944.5	8464.1
77.5°	6318.5	5363.5	5388.2	5489.0	5654.1	9297.0	7819.1	6183.0
80°	4344.8	4070.4	4205.9	4214.3	3918.7	6245.3	5776.7	4962.1
82.5°	3236.1	2829.3	2796.7	2844.1	3071.0	5060.0	4439.2	3441.7
85°	2649.9	1675.1	1346.9	1688.5	2721.5	5011.1	2948.9	1815.5
87.5°	1492.2	795.3	359.3	666.3	1085.9	3317.6	852.1	231.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)