

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: P299709

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-8030-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-SL2-8030-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7350.3 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 96
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

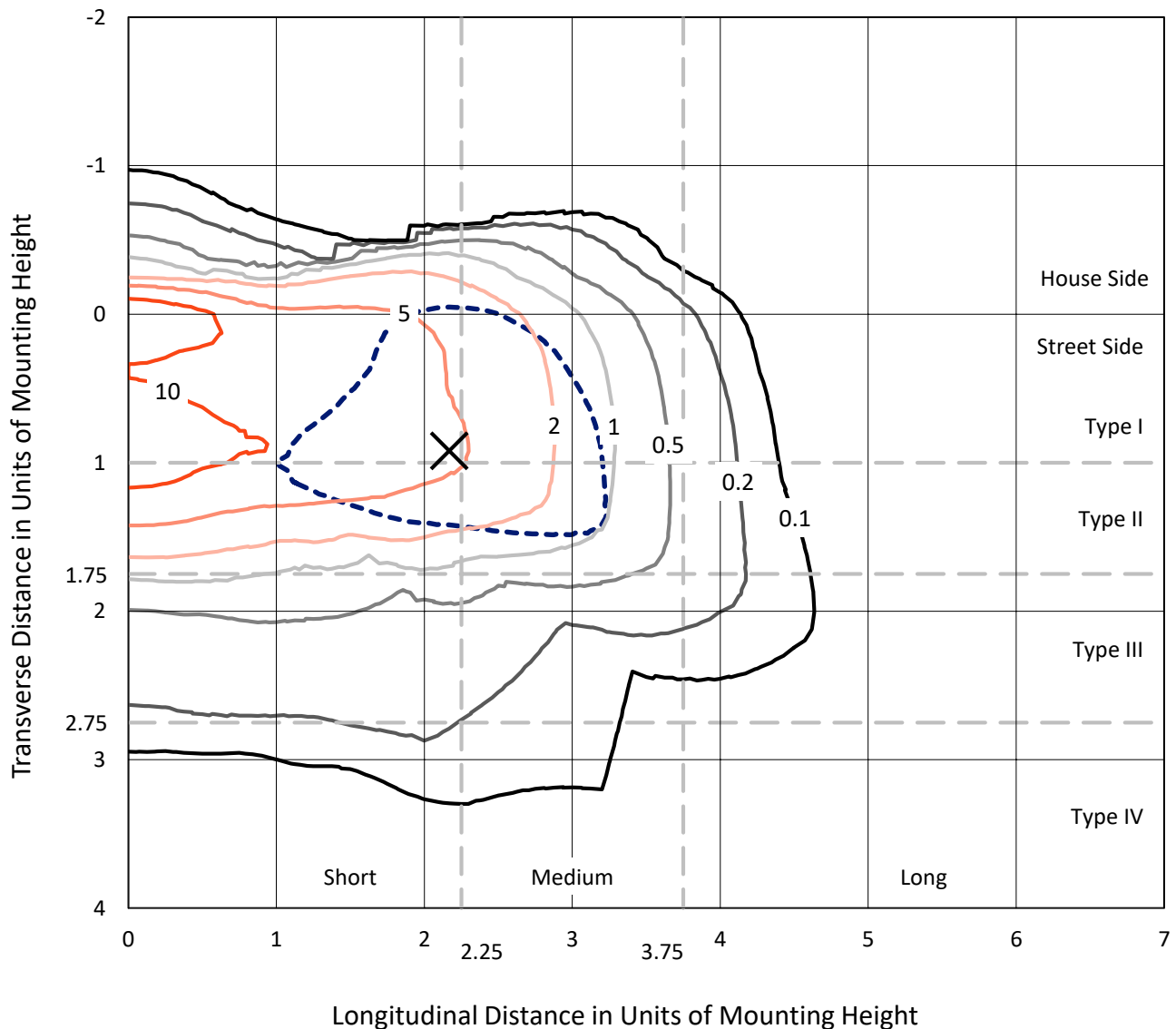


REPORT NUMBER: P299709

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-8030-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

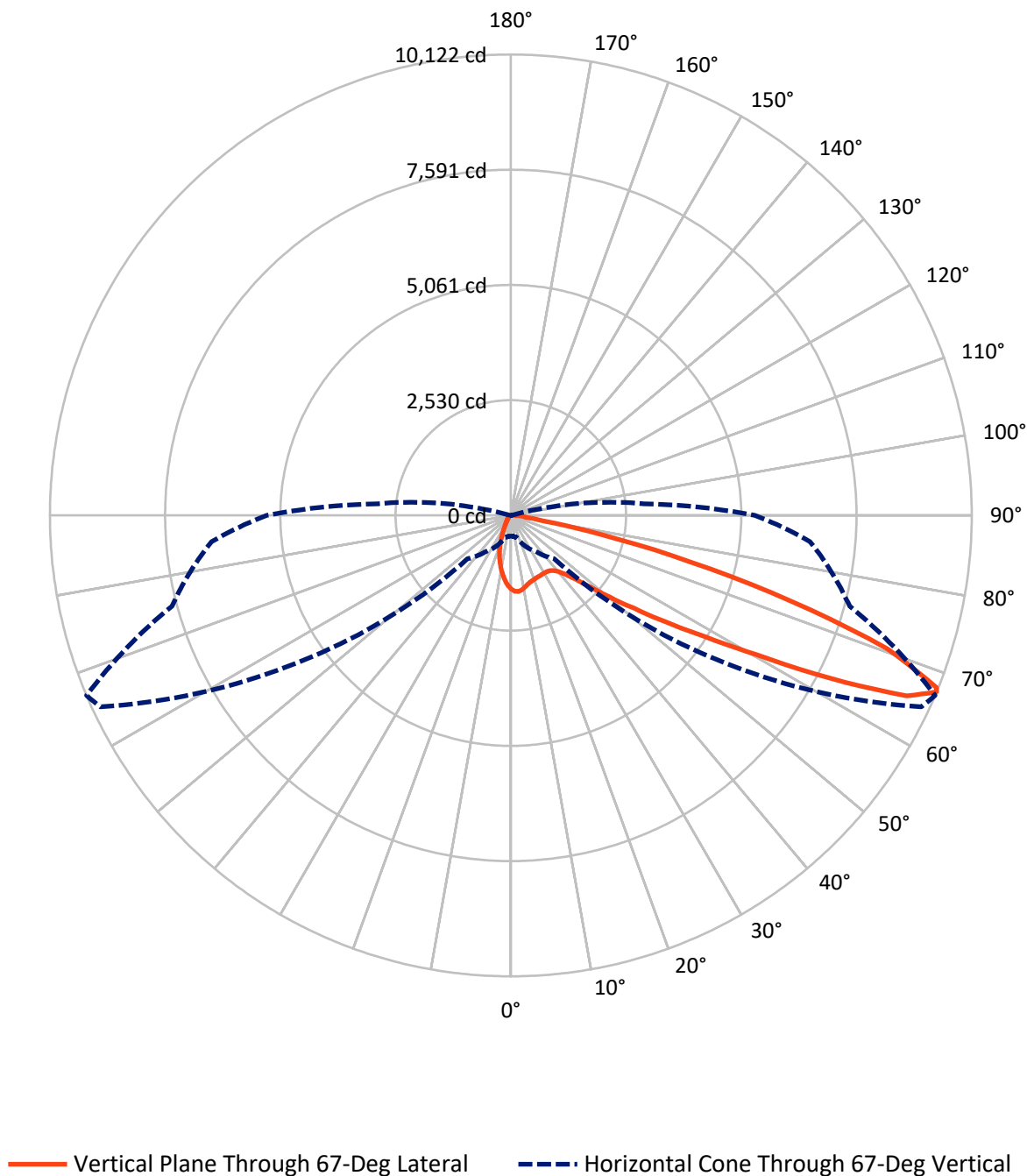


Based on 10 foot mounting height. Maximum calculated value = 16.2 fc
Type II - Short - Semi-Cutoff

REPORT NUMBER: P299709

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-8030-600-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P299709

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-8030-600-HSS

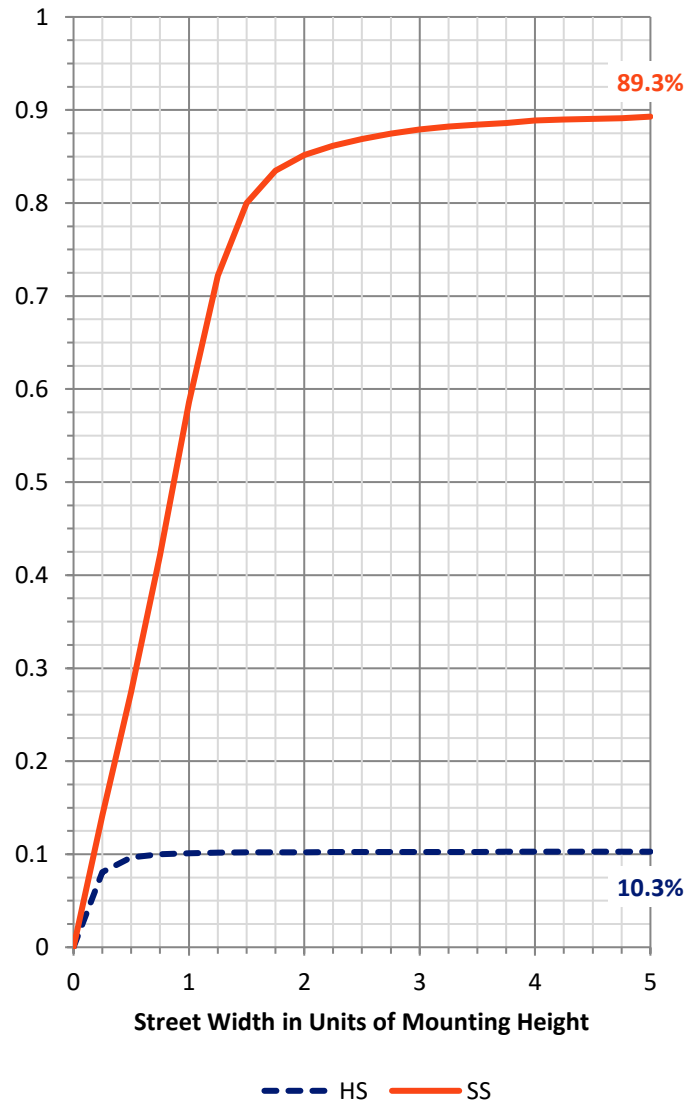
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	763.2	0.0	763.2
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	6587.1	0.0	6587.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	7350.3	0.0	7350.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.8
10°-20°	280.7	3.8
20°-30°	408.2	5.6
30°-40°	636.7	8.7
40°-50°	1128.0	15.3
50°-60°	1784.9	24.3
60°-70°	2044.3	27.8
70°-80°	848.0	11.5
80°-90°	87.6	1.2
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°	7350.3	100.0
0°-180°	7350.3	100.0

Coefficient of Utilization



REPORT NUMBER: P299709

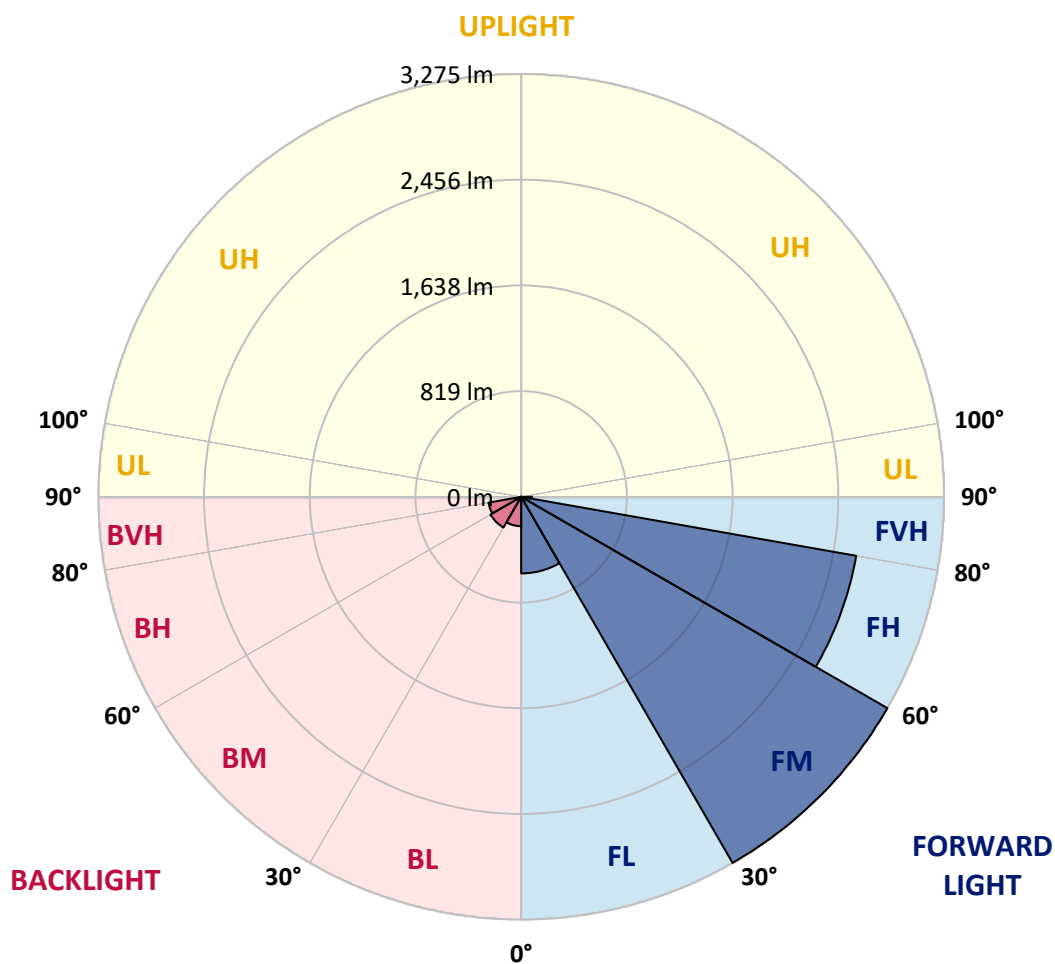
CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-8030-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	593.1	8.1			
FM	(30°-60°)	3275.3	44.6			
FH	(60°-80°)	2635.1	35.9			G2/5000
FVH	(80°-90°)	83.6	1.1			G1/100
BL	(0°-30°)	227.7	3.1	B1/500		
BM	(30°-60°)	274.3	3.7	B1/1000		
BH	(60°-80°)	257.2	3.5	B1/500		G1/500
BVH	(80°-90°)	3.9	0.1			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 II Short



REPORT NUMBER: P299709

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-8030-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0
2.5°	1675.9	1679.3	1678.9	1681.5	1687.5	1687.9	1681.9	1670.3	1667.7	1652.7	1626.6
5°	1545.6	1555.4	1561.4	1585.9	1613.3	1646.3	1671.2	1680.2	1678.9	1668.2	1628.7
7.5°	1396.8	1406.6	1413.5	1442.2	1478.7	1535.3	1600.0	1653.2	1657.9	1669.5	1627.0
10°	1297.8	1299.5	1308.9	1336.3	1374.5	1432.4	1509.5	1602.6	1616.7	1659.2	1622.7
12.5°	1216.3	1217.6	1230.0	1259.6	1300.3	1358.6	1439.7	1547.3	1569.1	1646.3	1621.9
15°	1158.4	1163.1	1174.3	1205.1	1248.4	1306.3	1389.5	1506.5	1532.7	1641.6	1629.6
17.5°	1139.1	1144.3	1147.7	1170.0	1209.4	1266.0	1351.3	1480.0	1509.5	1644.2	1644.6
20°	1159.3	1163.1	1155.4	1161.0	1185.4	1236.0	1319.2	1457.2	1492.4	1647.2	1663.9
22.5°	1234.3	1236.0	1215.0	1190.6	1186.3	1214.2	1293.9	1439.2	1477.0	1655.3	1686.6
25°	1362.9	1359.9	1325.6	1272.9	1223.2	1210.3	1278.9	1428.1	1469.2	1663.9	1710.2
27.5°	1518.1	1522.4	1475.2	1398.5	1303.8	1236.0	1276.7	1423.4	1465.8	1669.9	1730.8
30°	1706.8	1712.8	1658.7	1562.3	1426.4	1299.5	1296.5	1422.5	1463.7	1666.0	1732.5
32.5°	1899.3	1906.5	1864.1	1764.6	1590.1	1405.8	1341.1	1431.9	1468.0	1652.7	1722.6
35°	2100.8	2111.0	2082.7	1997.4	1812.2	1559.3	1419.5	1460.7	1488.1	1651.5	1712.8
37.5°	2379.0	2388.4	2335.3	2244.8	2081.0	1765.1	1545.6	1514.7	1535.7	1672.0	1715.3
40°	2794.4	2793.1	2656.0	2517.5	2376.4	2026.6	1722.6	1612.4	1623.2	1734.2	1747.1
42.5°	3247.2	3245.0	3042.2	2831.7	2704.4	2348.6	1955.4	1781.4	1774.1	1848.7	1829.4
45°	3596.2	3595.7	3430.2	3193.1	3099.3	2718.1	2256.4	2016.3	2005.1	2034.7	1981.1
47.5°	3744.9	3747.5	3664.3	3497.5	3537.0	3218.0	2635.8	2356.7	2340.0	2328.0	2246.5
50°	3629.2	3634.3	3641.2	3608.6	3858.1	3889.8	3144.7	2836.4	2828.3	2774.7	2647.4
52.5°	3251.0	3277.2	3357.8	3461.1	3969.6	4534.6	3942.6	3432.4	3388.6	3331.6	3191.4
55°	2613.9	2642.7	2795.7	3046.5	3803.7	4958.2	5060.7	4200.7	4127.8	3957.6	3755.2
57.5°	1729.9	1774.5	1996.6	2315.5	3321.8	5026.4	6176.2	5266.9	5013.1	4547.1	4319.0
60°	953.1	995.9	1236.9	1525.8	2399.1	4689.4	6926.5	6655.1	6206.7	5206.0	5003.7
62.5°	586.9	610.1	788.0	1056.8	1438.8	3701.2	7081.7	8399.6	7880.4	6054.5	5830.7
65°	467.3	477.2	564.2	863.9	1031.5	2201.5	6580.5	9729.5	9556.3	7081.7	6571.1
67°	453.6	457.5	498.6	741.7	972.3	1349.6	5513.0	9946.0	10121.8	7703.3	6594.2
67.5°	456.6	460.9	499.9	707.8	970.6	1240.3	5145.1	9860.7	10082.8	7752.6	6491.8
70°	440.3	453.6	572.3	707.4	923.0	1030.7	3081.3	8543.6	8774.7	7203.4	5508.3
72.5°	156.1	156.9	247.4	572.3	1003.6	1041.8	1547.3	6263.3	6434.3	5510.4	3971.3
75°	92.6	78.9	82.3	162.9	959.1	1011.8	892.6	4002.2	4066.0	3157.6	2011.2
77.5°	63.9	55.7	57.4	72.0	365.3	997.6	709.1	2087.0	2018.9	1107.4	428.3
80°	36.4	32.2	34.3	63.0	132.9	930.8	668.8	846.3	721.5	187.8	118.3
82.5°	19.3	16.3	19.7	51.9	92.6	580.1	670.1	409.0	324.1	63.5	80.6
85°	6.9	5.6	9.4	35.6	61.7	177.9	621.2	343.8	270.1	30.9	61.3
87.5°	1.3	1.3	3.9	14.6	24.9	54.4	367.4	204.1	136.8	18.4	42.0
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: P299709

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-8030-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0	1621.0
2.5°	1615.9	1597.4	1572.6	1542.1	1506.1	1474.4	1450.8	1426.4	1421.2	1412.7	1411.4
5°	1605.1	1573.4	1511.7	1440.9	1365.5	1297.3	1242.0	1192.7	1170.8	1152.0	1149.8
7.5°	1589.3	1541.7	1436.7	1322.6	1204.7	1097.5	1006.6	942.3	883.2	854.9	850.6
10°	1570.9	1502.7	1352.2	1194.0	1031.1	879.7	744.7	631.5	562.9	522.2	517.0
12.5°	1553.7	1464.5	1266.0	1060.7	844.2	641.8	468.2	360.1	288.1	259.0	255.5
15°	1545.6	1433.7	1185.4	924.3	648.7	408.6	255.9	198.1	174.5	167.6	167.2
17.5°	1544.7	1407.5	1106.5	783.3	454.4	237.5	166.8	152.2	147.5	145.8	145.8
20°	1544.3	1382.6	1027.7	637.1	288.5	158.2	138.9	135.5	132.0	129.9	129.9
22.5°	1549.0	1360.3	945.3	487.9	181.8	128.2	122.2	118.8	114.5	111.5	111.0
25°	1553.7	1343.2	861.3	347.3	131.6	111.5	105.5	100.8	94.7	90.9	90.5
27.5°	1554.6	1321.8	771.3	232.4	110.2	97.3	89.6	82.3	75.5	71.6	71.2
30°	1541.7	1285.7	671.4	156.9	97.3	84.5	74.2	66.5	60.0	57.0	57.0
32.5°	1516.4	1241.2	561.6	118.3	86.6	72.5	61.3	54.0	49.7	48.4	48.0
35°	1493.7	1193.1	448.9	100.3	77.6	61.3	50.2	45.4	42.9	42.4	42.0
37.5°	1480.4	1154.6	343.0	90.9	69.0	51.4	42.4	39.0	37.7	36.9	37.3
40°	1490.7	1122.4	253.4	83.2	60.5	42.9	36.0	34.3	33.0	32.6	32.6
42.5°	1535.7	1116.8	188.2	76.3	52.3	35.6	31.3	30.0	29.2	28.7	29.2
45°	1654.0	1151.1	146.2	69.9	44.2	30.0	26.6	26.2	25.7	25.7	25.7
47.5°	1831.9	1221.9	121.8	62.6	36.9	25.7	23.2	22.7	22.3	22.7	22.7
50°	2133.3	1351.3	108.9	55.3	30.4	21.9	19.7	19.7	19.7	19.7	20.2
52.5°	2591.6	1606.0	100.3	48.0	24.9	18.4	16.7	16.7	17.1	17.1	17.6
55°	3102.3	1943.8	92.6	40.7	21.0	15.4	13.7	14.1	14.6	15.0	15.0
57.5°	3656.2	2318.1	86.2	33.4	18.0	12.4	11.6	12.0	12.4	13.3	13.3
60°	4324.6	2723.3	76.7	26.2	15.0	9.9	9.0	9.9	11.1	12.0	12.4
62.5°	5058.5	3115.1	64.7	20.6	12.4	7.7	7.3	9.0	10.7	11.6	12.0
65°	5560.1	3238.2	49.7	16.7	9.4	5.6	6.0	8.1	10.3	11.6	11.6
67°	5356.9	2935.9	40.7	14.1	7.7	4.3	5.6	8.1	10.3	11.1	11.6
67.5°	5215.9	2817.6	39.0	13.7	7.3	4.3	5.6	8.1	10.3	11.6	11.6
70°	4244.0	2116.6	32.6	10.3	6.0	3.9	4.7	7.7	9.9	11.1	11.1
72.5°	2948.8	1305.0	29.2	7.3	5.1	3.4	4.3	7.3	9.4	10.7	11.1
75°	1401.9	472.5	24.9	5.6	4.7	3.0	3.9	7.3	9.4	10.7	10.7
77.5°	286.0	109.8	20.2	4.7	3.9	3.0	3.4	6.9	9.0	10.3	10.3
80°	93.9	42.4	15.0	4.3	3.9	3.0	3.4	6.4	9.0	9.9	10.3
82.5°	67.7	21.4	9.9	4.3	3.9	3.0	3.0	6.4	8.6	9.9	9.9
85°	51.9	15.0	6.4	4.3	3.9	3.0	3.0	6.0	8.1	9.4	9.4
87.5°	34.3	6.0	5.1	4.3	3.9	3.0	3.0	6.0	7.7	9.0	9.4
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)