

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: P453173

Luminaire Tested: **GALN-SA4A-830-U-T4FT-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453173
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-830-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10352 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

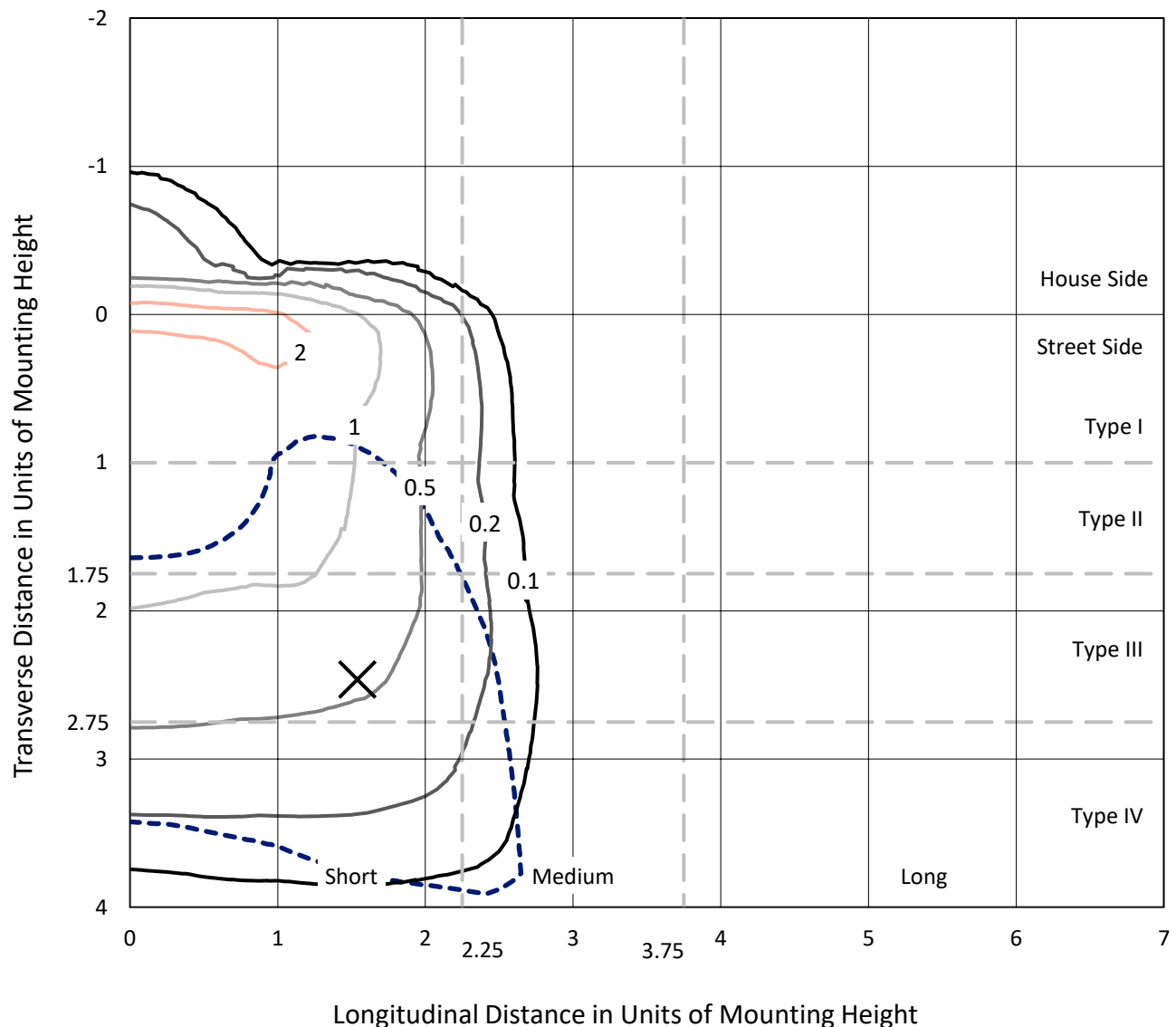
Input Watts (W): 121
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P453173
 CATALOG NUMBER: GALN-SA4A-830-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

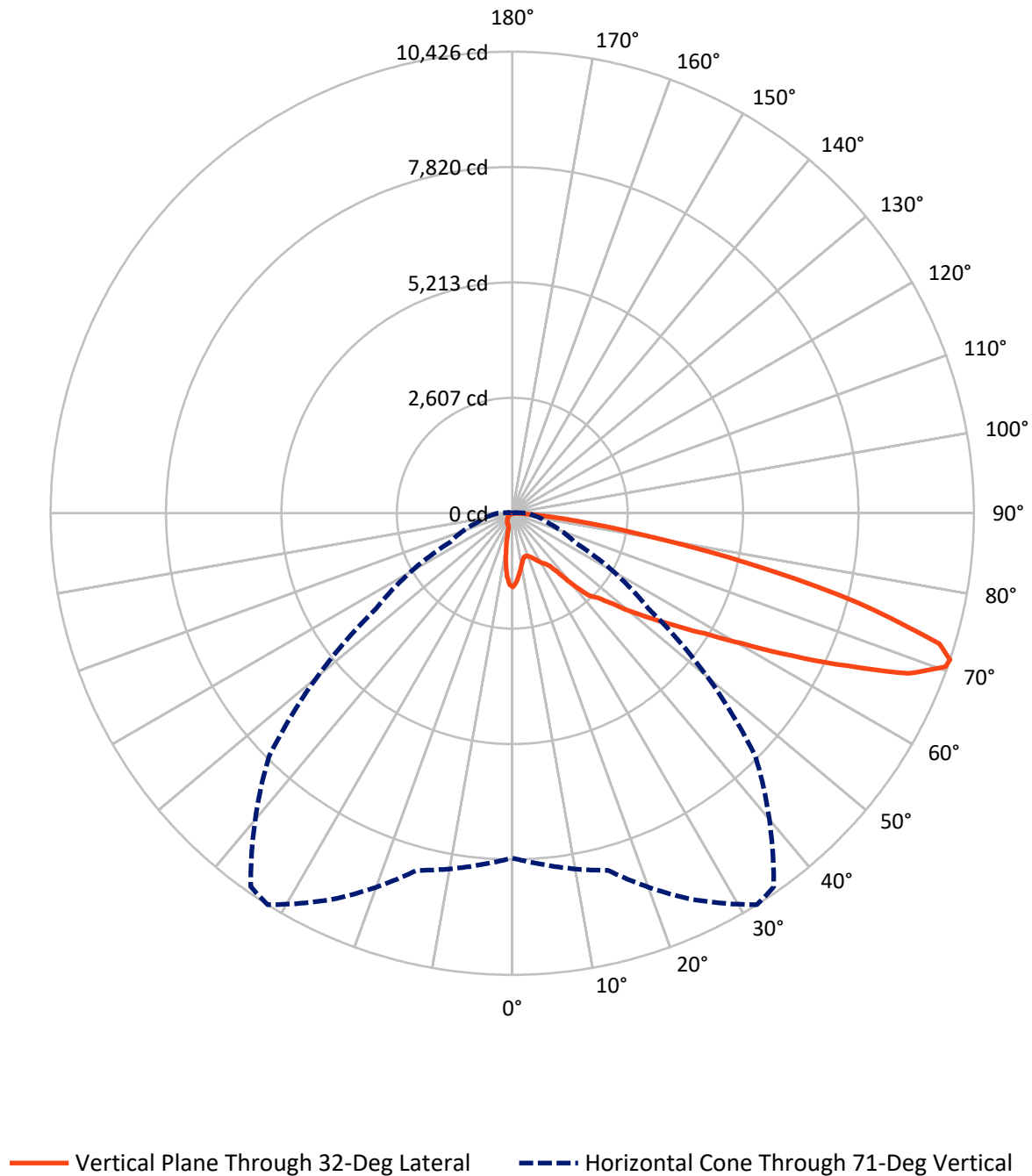
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P453173
CATALOG NUMBER: GALN-SA4A-830-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P453173

CATALOG NUMBER: GALN-SA4A-830-U-T4FT-HSS

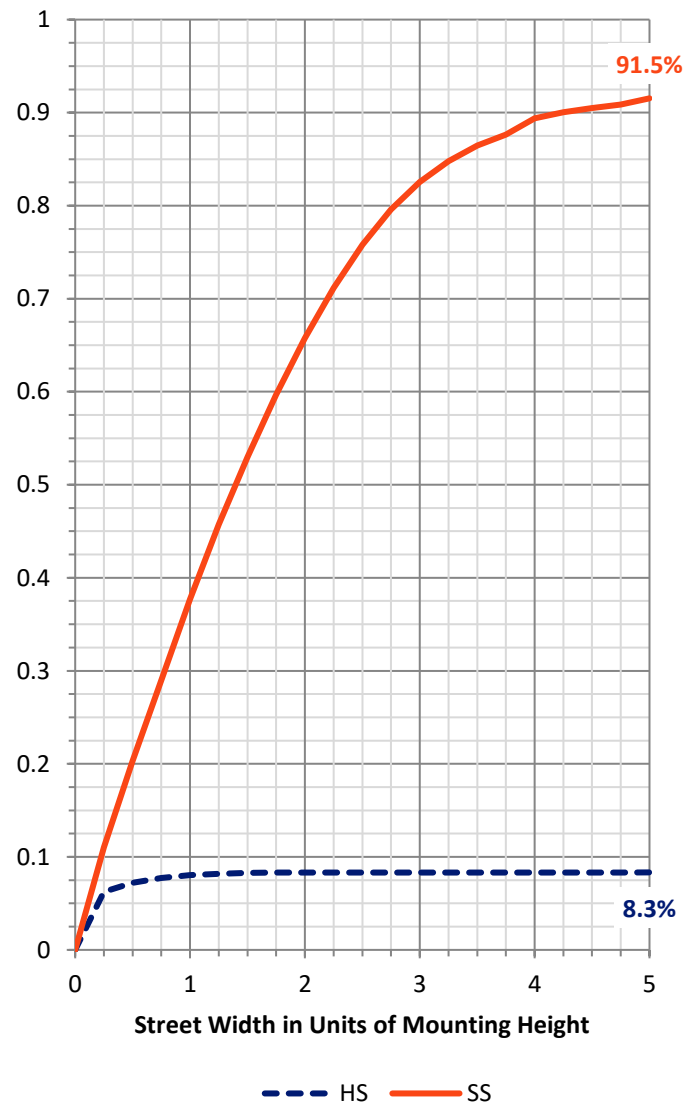
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	867.1	0.0	867.1
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	9484.9	0.0	9484.9
	% Fixture	91.6	0.0	91.6
Total	Lumens	10352.0	0.0	10352.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	1.3
10°-20°	293.8	2.8
20°-30°	457.0	4.4
30°-40°	761.4	7.4
40°-50°	1416.4	13.7
50°-60°	2274.1	22.0
60°-70°	3058.8	29.5
70°-80°	1814.8	17.5
80°-90°	140.3	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°	10352.0	100.0
0°-180°	10352.0	100.0

Coefficient of Utilization



REPORT NUMBER: P453173

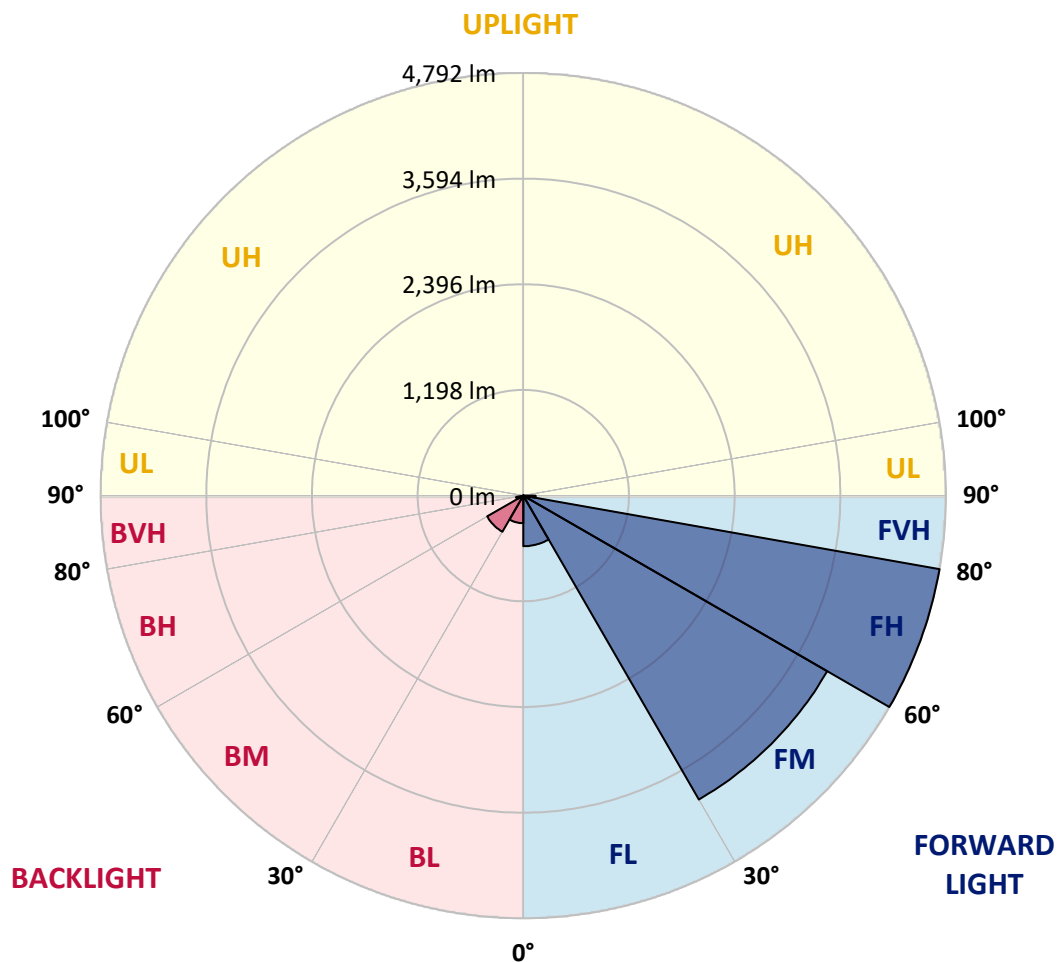
CATALOG NUMBER: GALN-SA4A-830-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	573.8	5.5			
FM	(30°-60°)	3978.9	38.4			
FH	(60°-80°)	4792.5	46.3			G2/5000
FVH	(80°-90°)	139.7	1.3			G2/225
BL	(0°-30°)	312.4	3.0	B1/500		
BM	(30°-60°)	473.0	4.6	B1/1000		
BH	(60°-80°)	81.1	0.8	B0/110		G0/110
BVH	(80°-90°)	0.5	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 IV Short





REPORT NUMBER: P453173

CATALOG NUMBER: GALN-SA4A-830-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8
2.5°	1544.0	1559.9	1557.5	1563.0	1576.6	1582.1	1597.2	1613.9	1637.0	1652.8	1663.2
5°	1382.7	1394.6	1396.2	1424.0	1437.5	1452.6	1497.1	1545.6	1599.6	1642.5	1671.1
7.5°	1210.2	1216.6	1229.3	1265.9	1300.0	1315.1	1382.7	1466.9	1551.9	1632.2	1683.8
10°	1068.0	1075.1	1098.2	1137.1	1168.9	1188.8	1282.5	1388.2	1507.4	1626.6	1702.1
12.5°	986.9	990.9	999.7	1034.6	1075.1	1096.6	1197.5	1318.3	1471.7	1629.0	1733.1
15°	981.4	979.8	969.5	983.8	1020.3	1042.6	1141.1	1270.6	1439.9	1637.0	1769.7
17.5°	1010.8	1006.8	982.2	982.2	1012.4	1030.6	1117.3	1245.2	1424.0	1655.2	1821.3
20°	1056.1	1049.7	1009.2	1006.0	1035.4	1054.5	1131.6	1246.8	1427.2	1689.4	1890.4
22.5°	1113.3	1106.1	1044.9	1046.5	1078.3	1097.4	1172.9	1275.4	1447.0	1731.5	1964.3
25°	1188.0	1180.0	1107.7	1104.5	1137.9	1154.6	1234.1	1326.2	1474.8	1784.0	2061.3
27.5°	1287.3	1270.6	1184.0	1179.2	1215.0	1236.5	1308.0	1394.6	1524.1	1856.3	2191.6
30°	1369.2	1350.9	1268.2	1255.5	1293.7	1310.4	1384.3	1486.8	1621.1	1982.6	2372.0
32.5°	1476.4	1449.4	1352.5	1319.1	1359.6	1381.1	1494.7	1658.4	1764.9	2116.1	2586.5
35°	1718.0	1701.3	1582.9	1466.1	1463.7	1490.7	1657.6	1831.6	1912.7	2324.3	2879.0
37.5°	2063.7	2051.8	1926.2	1769.7	1724.4	1711.6	1855.5	2022.3	2148.7	2610.4	3219.1
40°	2465.0	2437.1	2321.9	2189.2	2130.4	2093.1	2089.1	2306.0	2457.0	2999.0	3573.5
42.5°	2752.6	2701.8	2561.9	2552.4	2539.7	2500.7	2387.9	2720.8	2855.1	3416.9	3952.5
45°	3054.6	2977.5	2769.3	2733.5	2728.8	2726.4	2839.2	3211.9	3289.0	3869.9	4341.9
47.5°	3289.0	3227.8	3057.0	3041.1	3060.9	3115.0	3436.0	3733.2	3717.3	4273.6	4668.5
50°	3601.3	3555.2	3365.3	3395.5	3498.0	3586.2	4109.1	4301.4	4069.3	4591.4	4906.1
52.5°	3970.0	3885.0	3708.6	3790.4	3947.8	4094.8	4823.4	4798.8	4316.5	4830.6	5083.3
55°	4289.4	4229.1	4168.7	4253.7	4488.9	4672.5	5468.7	5171.5	4496.1	5022.9	5161.2
57.5°	4829.8	4815.5	4753.5	4840.1	5125.4	5316.1	6046.4	5460.7	4611.3	5123.0	5069.8
60°	5629.2	5606.2	5490.9	5601.4	5973.3	6272.9	6578.8	5720.6	4637.5	5084.1	4806.8
62.5°	6590.7	6512.0	6413.5	6576.4	7086.6	7218.5	7080.2	5874.7	4539.8	4774.2	4172.6
65°	7488.7	7407.6	7410.0	7753.3	8308.7	8398.5	7665.1	5851.7	4253.7	3997.8	3077.6
67.5°	8176.0	8162.5	8259.5	8929.3	9655.6	9593.6	8187.9	5506.8	3405.8	2591.3	1635.4
70°	8211.0	8237.2	8515.3	9646.1	10383.5	10285.0	8143.4	4476.2	2123.3	1192.0	644.5
71°	7788.2	7964.6	8349.2	9623.8	10426.4	10298.5	7768.4	3749.1	1557.5	831.2	464.9
72.5°	6636.8	6729.8	7561.0	9057.3	10087.1	9813.8	6817.2	2627.9	997.3	508.6	267.0
75°	3655.3	3884.2	5063.4	7105.6	8067.9	7828.0	4442.8	1248.4	497.4	278.1	110.5
77.5°	1740.3	1695.8	2470.5	4225.9	5470.3	5457.6	2238.5	554.7	290.0	188.3	55.6
80°	497.4	559.4	945.6	2008.8	3037.1	3070.5	859.8	267.8	201.0	147.0	28.6
82.5°	150.2	153.4	347.3	888.4	1510.6	1424.0	322.6	136.7	144.6	116.8	16.7
85°	26.2	32.6	102.5	313.1	576.1	437.1	81.1	65.2	95.4	77.1	9.5
87.5°	1.6	2.4	34.2	35.8	50.9	29.4	14.3	9.5	20.7	20.7	5.6
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: P453173

CATALOG NUMBER: GALN-SA4A-830-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8	1664.8
2.5°	1670.3	1675.1	1671.9	1664.8	1652.8	1638.5	1619.5	1603.6	1590.1	1582.9	1591.7
5°	1680.7	1687.0	1671.1	1635.4	1581.3	1522.5	1455.8	1404.1	1363.6	1350.9	1346.1
7.5°	1696.5	1700.5	1657.6	1578.1	1463.7	1324.7	1203.1	1100.6	1021.1	997.3	962.3
10°	1717.2	1714.8	1633.8	1486.0	1284.9	1075.9	887.6	747.8	642.1	603.9	600.7
12.5°	1749.0	1736.3	1603.6	1360.4	1072.0	798.6	565.8	442.6	375.9	353.6	348.8
15°	1788.7	1758.5	1555.9	1213.4	820.9	515.7	348.8	311.5	302.8	301.2	299.6
17.5°	1835.6	1787.9	1493.1	1033.0	576.9	334.5	291.6	290.8	291.6	290.0	289.2
20°	1899.2	1818.9	1418.4	819.3	381.4	282.1	278.1	278.1	278.9	278.1	278.1
22.5°	1966.7	1855.5	1326.2	625.4	287.7	267.8	267.0	268.6	270.2	269.4	269.4
25°	2050.2	1903.2	1204.7	428.3	257.5	255.9	256.7	259.8	263.0	263.8	263.0
27.5°	2170.9	1962.0	1074.3	294.8	236.0	237.6	245.5	253.5	258.3	259.1	259.1
30°	2306.8	2027.1	904.3	239.2	218.5	218.5	228.1	243.2	253.5	255.1	255.9
32.5°	2481.6	2102.6	716.0	215.3	201.8	200.2	209.0	227.3	246.3	251.9	251.9
35°	2697.8	2191.6	532.4	200.2	189.9	185.9	190.7	205.8	230.4	246.3	247.9
37.5°	2951.3	2275.8	389.4	186.7	178.8	173.2	176.4	188.3	208.2	232.0	238.4
40°	3185.7	2350.5	290.8	175.6	167.7	163.7	166.1	171.6	188.3	210.6	214.6
42.5°	3441.6	2408.5	231.2	163.7	156.5	155.0	155.0	157.3	168.5	181.2	182.0
45°	3696.6	2429.2	193.9	149.4	144.6	146.2	145.4	143.8	148.6	147.0	147.0
47.5°	3878.6	2404.6	160.5	135.9	135.9	138.3	134.3	128.7	126.3	116.8	117.6
50°	4003.4	2314.8	131.9	120.0	126.3	129.5	121.6	112.8	104.1	93.8	91.4
52.5°	4055.0	2155.1	108.1	99.3	112.0	116.0	106.5	96.2	82.6	73.9	71.5
55°	4021.7	1958.0	89.8	81.1	94.6	99.3	89.8	77.9	62.8	53.2	51.7
57.5°	3874.6	1722.8	76.3	64.4	75.5	78.7	72.3	59.6	44.5	35.0	35.0
60°	3620.4	1479.6	62.0	50.9	56.4	61.2	54.8	42.9	30.2	21.5	19.9
62.5°	3104.6	1201.5	50.1	39.7	39.7	43.7	38.1	31.0	19.1	11.1	10.3
65°	2241.7	824.0	39.7	29.4	28.6	28.6	23.8	20.7	11.1	4.8	3.2
67.5°	1218.2	464.9	31.8	22.2	19.9	19.1	15.1	11.9	4.8	0.8	0.0
70°	479.2	178.8	24.6	15.1	12.7	11.9	7.9	5.6	3.2	0.0	0.0
71°	325.0	123.2	21.5	12.7	10.3	8.7	6.4	4.8	2.4	0.0	0.0
72.5°	185.9	76.3	16.7	9.5	7.9	6.4	4.8	3.2	2.4	0.0	0.0
75°	81.1	38.9	10.3	7.2	5.6	4.0	3.2	2.4	0.8	0.0	0.0
77.5°	41.3	21.5	7.2	5.6	3.2	2.4	1.6	0.8	0.0	0.0	0.0
80°	23.0	11.1	4.8	3.2	2.4	1.6	0.8	0.8	0.0	0.0	0.0
82.5°	12.7	6.4	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.9	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	1.6	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0
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)