

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: STREETWORKS

Report Number: P321109

Luminaire Tested: **GAN-SA5A-830-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321109
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA5A-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18989 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

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: 24 FT

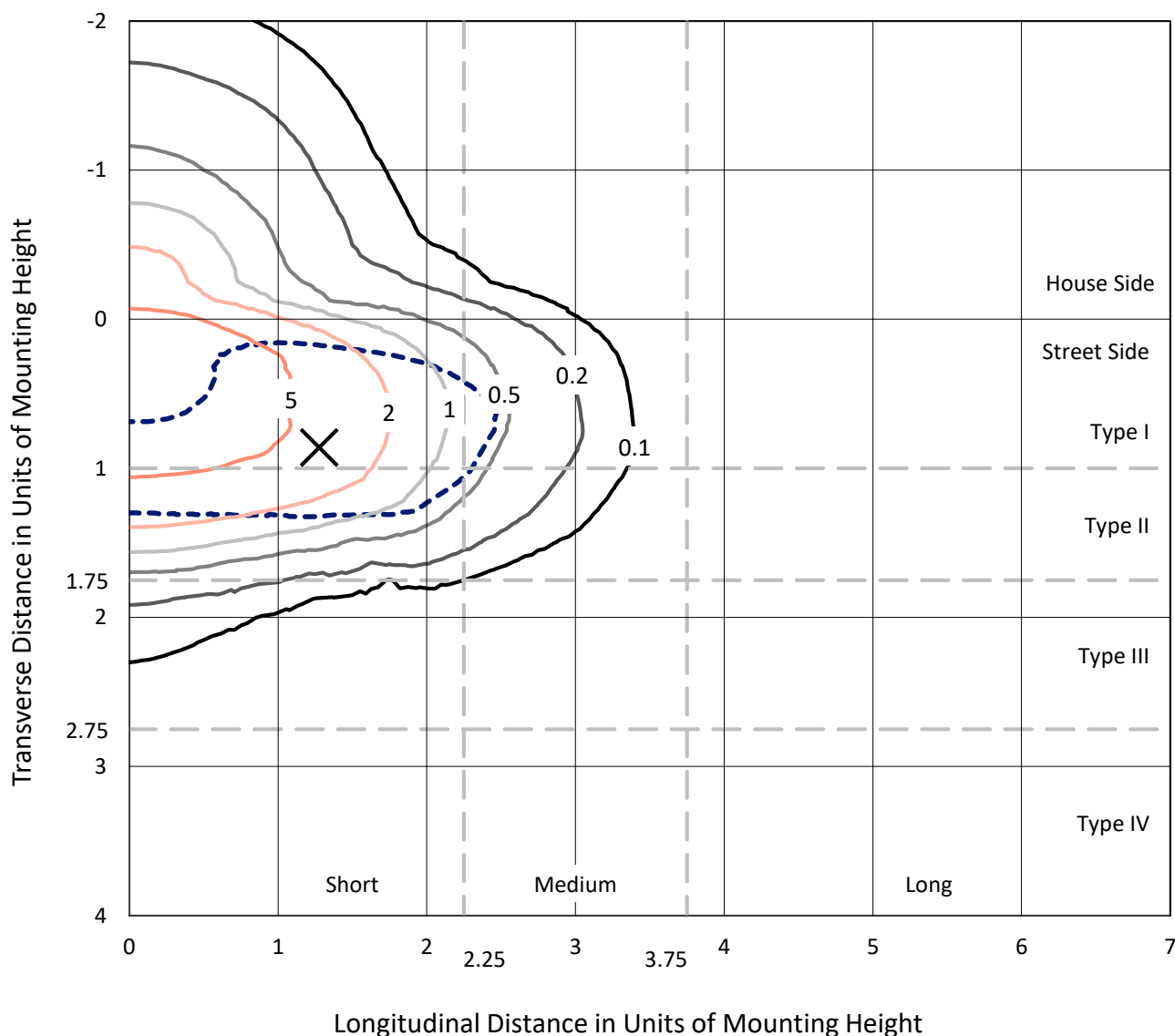


REPORT NUMBER: P321109
 CATALOG NUMBER: GAN-SA5A-830-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

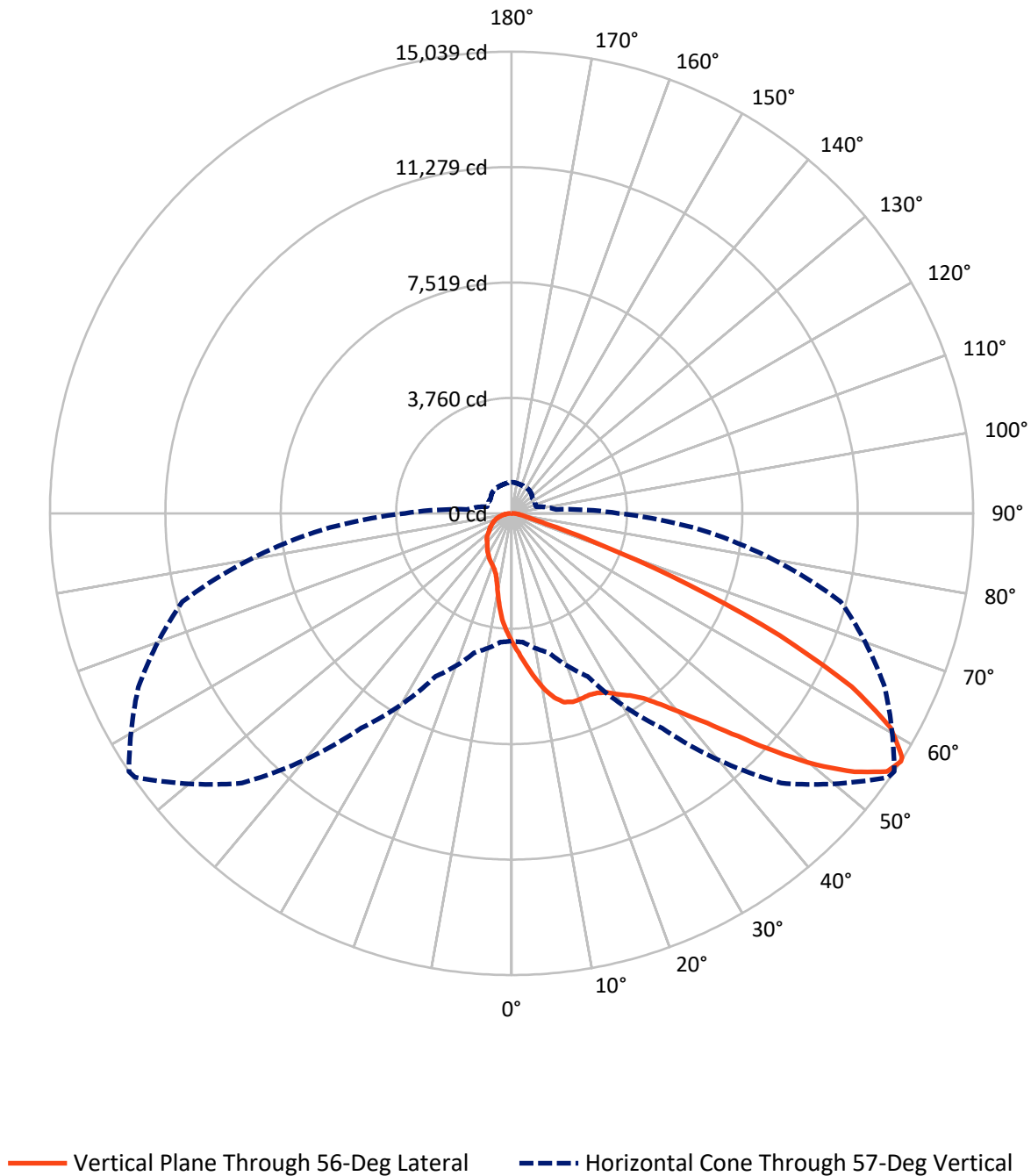
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 fc
 Type II - Short - N/A

REPORT NUMBER: P321109
CATALOG NUMBER: GAN-SA5A-830-U-AFL

Luminous Intensity Polar Plot



REPORT NUMBER: P321109

CATALOG NUMBER: GAN-SA5A-830-U-AFL

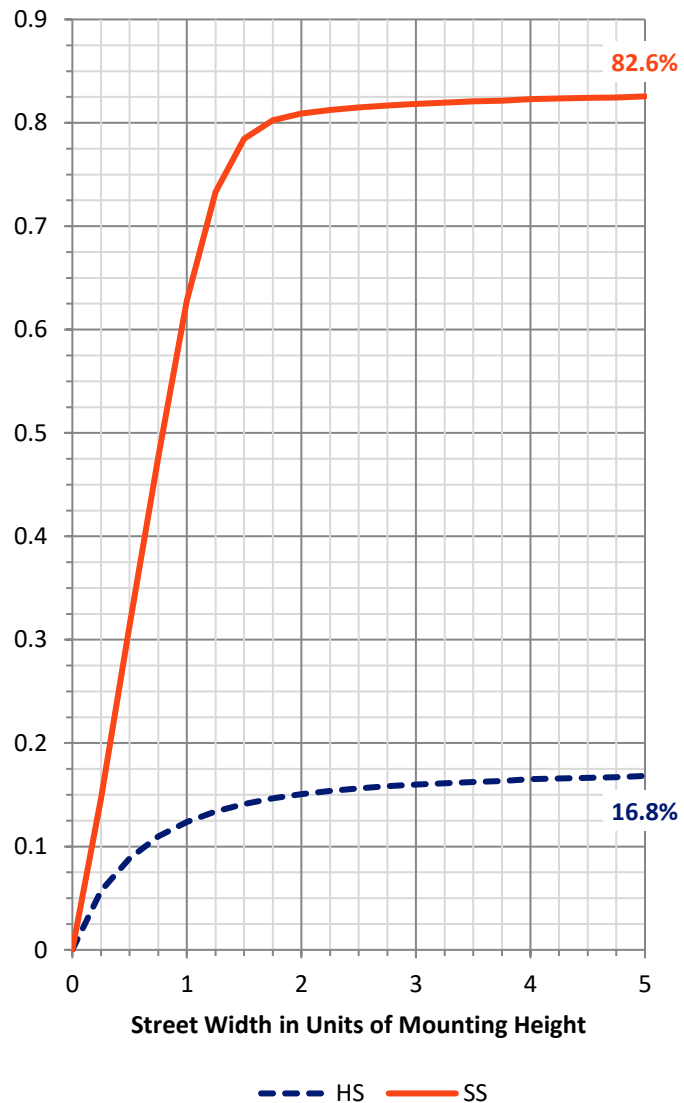
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3273.3	0.0	3273.3
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	15715.7	0.0	15715.7
	% Fixture	82.8	0.0	82.8
Total	Lumens	18989.0	0.0	18989.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	402.3	2.1
10°-20°	1137.5	6.0
20°-30°	1852.7	9.8
30°-40°	2769.6	14.6
40°-50°	4201.0	22.1
50°-60°	4708.5	24.8
60°-70°	2781.0	14.6
70°-80°	911.2	4.8
80°-90°	225.1	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°	18989.0	100.0
0°-180°	18989.0	100.0

Coefficient of Utilization



REPORT NUMBER: P321109

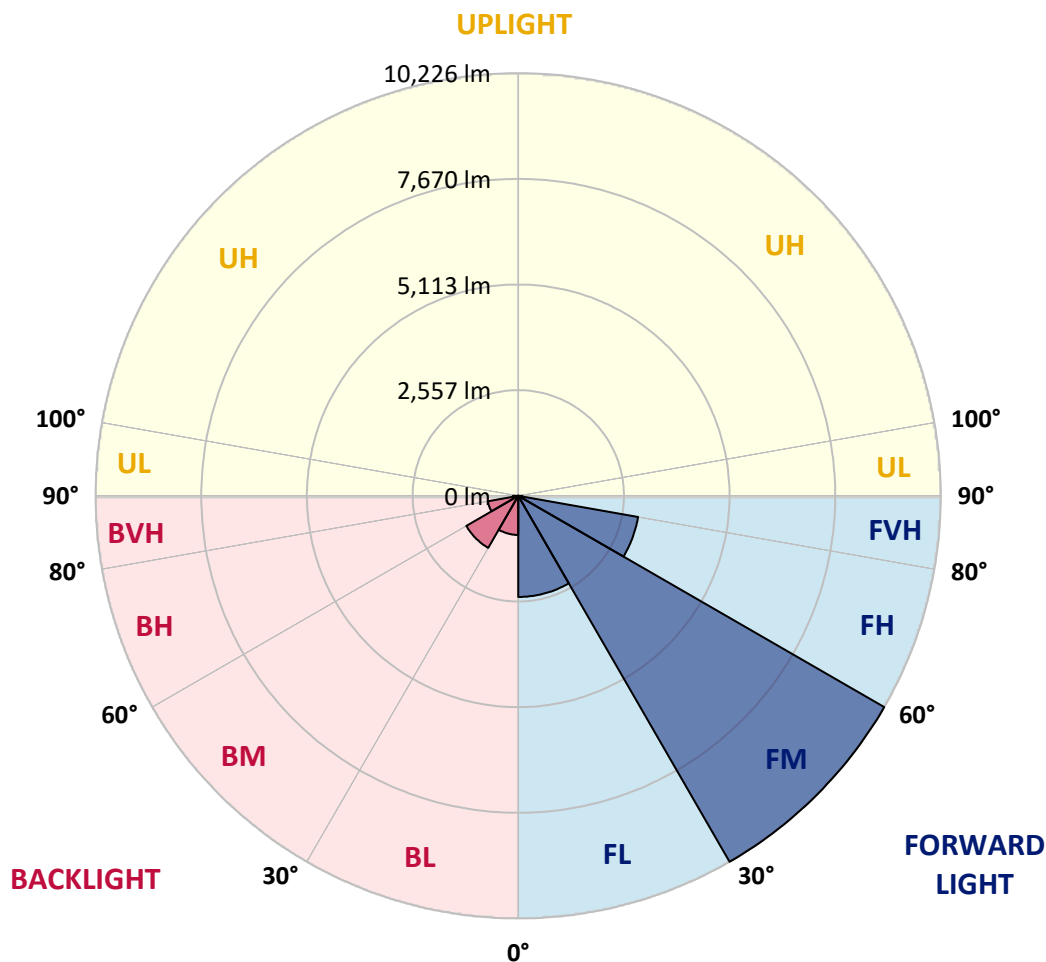
CATALOG NUMBER: GAN-SA5A-830-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2446.1	12.9			
FM	(30°-60°)	10226.2	53.9			
FH	(60°-80°)	2944.3	15.5			G2/5000
FVH	(80°-90°)	99.1	0.5			G1/100
BL	(0°-30°)	946.5	5.0	B2/1000		
BM	(30°-60°)	1452.9	7.7	B2/2500		
BH	(60°-80°)	747.9	3.9	B2/1000		G2/1000
BVH	(80°-90°)	126.0	0.7			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: P321109

CATALOG NUMBER: GAN-SA5A-830-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8
2.5°	4836.3	4880.7	4861.1	4793.2	4741.0	4667.3	4585.1	4560.3	4473.5	4376.2	4259.4
5°	5601.8	5579.6	5547.6	5441.9	5330.3	5200.4	4994.2	4961.6	4768.4	4548.5	4316.2
7.5°	6037.7	6035.7	6016.8	5954.8	5853.0	5683.4	5434.7	5396.2	5104.5	4750.8	4390.6
10°	5974.4	5969.8	6001.2	6065.8	6096.4	6061.2	5851.7	5813.2	5455.0	4974.6	4476.7
12.5°	5614.8	5617.4	5667.7	5803.4	5988.1	6210.0	6176.1	6157.1	5818.4	5227.9	4581.1
15°	5334.9	5340.7	5380.6	5498.7	5716.6	6119.3	6373.1	6379.7	6170.2	5507.2	4703.2
17.5°	5212.2	5224.6	5242.9	5325.7	5525.4	5938.5	6420.1	6455.4	6478.2	5796.9	4820.6
20°	5251.3	5263.1	5268.3	5321.2	5485.0	5828.9	6387.5	6450.8	6714.4	6069.7	4938.1
22.5°	5426.9	5434.1	5437.3	5451.0	5578.3	5860.2	6366.0	6432.5	6885.4	6314.4	5026.9
25°	5717.9	5712.7	5691.8	5674.2	5759.7	5984.2	6415.6	6478.9	7024.4	6536.3	5084.9
27.5°	6066.4	6059.9	6019.4	5971.1	6020.1	6177.4	6558.5	6608.7	7149.1	6743.8	5114.3
30°	6484.7	6467.8	6391.4	6334.0	6352.9	6467.1	6794.1	6839.7	7341.6	6979.4	5143.0
32.5°	6968.3	6950.0	6839.7	6744.5	6744.5	6839.7	7036.8	7074.7	7504.7	7245.6	5189.3
35°	7573.9	7551.1	7407.5	7247.6	7202.6	7250.9	7367.7	7394.4	7798.4	7581.1	5273.5
37.5°	8287.8	8257.1	8071.2	7857.1	7758.6	7756.0	7840.1	7895.0	8267.6	8021.6	5416.4
40°	9003.7	8982.2	8819.7	8651.3	8458.1	8396.1	8526.0	8543.0	8881.0	8568.4	5599.2
42.5°	9557.1	9553.2	9523.2	9545.3	9347.6	9222.3	9324.1	9337.8	9630.2	9160.3	5793.6
45°	9849.5	9856.0	10001.5	10323.9	10397.0	10305.6	10355.9	10359.8	10486.4	9757.4	5971.8
47.5°	9615.2	9649.1	10017.2	10738.3	11336.7	11640.1	11556.6	11604.9	11316.5	10270.4	6111.4
50°	8702.2	8744.0	9370.5	10553.6	11775.2	12931.6	12887.9	12876.8	11986.0	10646.3	6187.1
52.5°	7571.3	7603.9	8120.8	9593.6	11453.5	13645.5	14046.9	13989.4	12581.2	10927.5	6201.5
55°	5849.1	5900.0	6395.3	7677.7	10152.3	13372.8	14899.1	14847.6	13123.5	11075.0	6184.5
57°	4158.3	4211.8	4703.8	5859.6	8540.4	12428.5	14984.0	15038.8	13416.5	11099.8	6203.5
57.5°	3710.6	3765.4	4252.9	5375.3	8037.9	12087.2	14910.9	15002.3	13469.3	11095.9	6213.9
60°	1868.3	1889.2	2199.9	3000.6	5081.0	9771.8	13957.5	14193.1	13517.0	10904.0	6258.9
62.5°	1161.6	1146.6	1136.8	1382.2	2472.0	6480.2	11989.9	12443.5	12605.3	10439.4	6150.0
65°	1021.3	993.2	885.6	866.0	1091.8	3147.4	9029.2	9593.6	10657.4	9707.2	5890.2
67.5°	959.3	931.9	810.5	737.4	738.1	1247.7	5605.7	6241.3	8302.2	8469.2	5277.4
70°	895.3	870.5	757.0	670.9	628.4	691.1	2579.0	3061.3	5411.9	6657.0	4410.8
72.5°	813.1	796.2	688.5	599.7	554.7	517.5	987.4	1166.2	3133.1	4470.9	3063.2
75°	727.0	711.3	619.3	534.5	479.6	407.2	556.0	599.1	1591.7	2287.3	1508.1
77.5°	632.4	623.2	550.8	472.5	428.7	337.4	393.5	414.4	682.6	980.8	756.3
80°	503.1	520.8	481.6	420.9	380.5	270.2	278.7	292.4	397.4	479.0	429.4
82.5°	327.6	358.3	377.2	342.0	313.2	212.7	200.3	206.2	259.1	292.4	186.6
85°	136.4	153.4	248.0	223.8	208.2	155.3	134.4	137.0	160.5	166.4	76.4
87.5°	60.7	64.6	109.0	102.5	88.1	53.5	57.4	62.6	85.5	80.9	29.4
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: P321109

CATALOG NUMBER: GAN-SA5A-830-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8	4211.8
2.5°	4215.7	4160.9	4066.9	3963.1	3878.3	3810.4	3741.9	3694.9	3640.1	3610.7	3595.7
5°	4219.0	4111.3	3913.5	3710.6	3529.2	3363.4	3205.5	3084.1	2970.6	2909.2	2892.3
7.5°	4232.7	4070.8	3751.1	3416.9	3094.6	2800.2	2573.1	2430.9	2328.4	2282.7	2269.7
10°	4243.8	4023.2	3550.1	3055.4	2616.9	2318.6	2142.4	2062.8	2027.6	2021.7	2015.8
12.5°	4269.9	3974.2	3338.6	2678.2	2245.5	2039.3	1978.0	1972.8	1982.6	1996.9	1996.9
15°	4311.0	3925.9	3097.2	2354.5	2009.3	1936.9	1949.3	1978.0	2004.7	2026.9	2030.2
17.5°	4341.0	3866.6	2837.4	2095.4	1883.4	1902.9	1947.3	1987.8	2015.2	2036.7	2038.7
20°	4362.5	3774.5	2560.1	1897.7	1810.9	1871.6	1927.1	1963.0	1981.9	2003.4	2006.7
22.5°	4351.4	3651.2	2314.1	1756.1	1752.2	1825.9	1878.8	1921.9	1907.5	1886.6	1900.3
25°	4297.9	3481.5	2060.9	1650.4	1690.2	1764.6	1829.8	1801.1	1752.8	1743.7	1748.9
27.5°	4202.6	3264.9	1826.6	1552.5	1618.4	1707.8	1703.9	1675.2	1658.2	1646.5	1653.6
30°	4100.2	3029.9	1621.7	1467.0	1538.8	1612.5	1597.5	1596.9	1579.9	1561.0	1570.1
32.5°	3999.0	2793.7	1459.2	1396.5	1478.8	1488.5	1521.2	1531.0	1497.7	1457.9	1455.3
35°	3910.9	2570.5	1335.8	1332.6	1406.3	1407.6	1455.3	1441.6	1358.7	1317.6	1317.6
37.5°	3845.0	2348.0	1241.9	1275.1	1311.0	1345.0	1369.1	1312.3	1298.6	1275.8	1275.1
40°	3816.3	2152.2	1183.1	1231.4	1243.8	1286.9	1224.9	1247.1	1253.6	1241.9	1241.9
42.5°	3786.3	1981.9	1132.2	1198.1	1196.2	1190.3	1159.0	1187.7	1213.8	1214.5	1212.5
45°	3756.3	1835.1	1087.2	1127.0	1154.4	1091.1	1097.0	1127.7	1164.2	1177.3	1177.3
47.5°	3723.0	1718.9	1046.1	1052.0	1094.4	1052.0	1047.4	1070.9	1114.0	1134.8	1139.4
50°	3649.9	1614.5	999.1	986.1	997.8	1012.2	1016.1	1027.2	1074.8	1108.1	1115.9
52.5°	3548.8	1521.2	939.1	925.4	925.4	979.5	997.8	1001.1	1041.5	1081.3	1089.2
55°	3464.6	1461.8	877.1	874.5	871.9	944.9	976.3	981.5	1009.5	1040.9	1044.8
57°	3470.4	1457.2	829.4	832.0	831.4	909.7	956.0	967.1	981.5	1008.2	1012.8
57.5°	3473.7	1460.5	819.0	820.3	819.6	899.9	950.2	962.6	973.7	1001.7	1006.3
60°	3522.6	1469.0	776.6	762.2	765.5	847.7	916.9	932.5	939.7	976.9	982.8
62.5°	3450.2	1431.1	742.6	708.1	708.1	792.9	870.5	895.3	906.4	956.7	966.5
65°	3240.1	1324.7	702.8	646.7	653.2	738.1	815.1	855.5	872.5	935.2	945.6
67.5°	2915.7	1201.4	660.4	591.9	598.4	680.6	757.7	801.4	828.1	911.7	920.1
70°	2493.5	1050.7	603.0	533.8	541.6	618.0	689.8	739.4	779.2	889.5	892.1
72.5°	1838.3	861.4	522.7	469.9	478.3	544.9	621.3	678.7	732.2	834.0	832.7
75°	1093.1	673.5	434.0	405.3	411.1	473.1	559.3	629.1	709.4	812.5	824.9
77.5°	663.0	507.1	353.7	339.3	346.5	409.8	514.9	589.3	699.6	766.1	762.2
80°	400.7	362.2	282.6	273.4	280.6	350.4	476.4	559.3	611.5	654.5	654.5
82.5°	209.5	221.2	207.5	200.3	210.1	284.5	433.3	488.1	540.3	464.0	433.3
85°	85.5	115.5	125.9	125.3	131.2	197.1	373.9	417.7	348.5	330.9	338.7
87.5°	28.7	48.9	61.3	52.9	55.5	124.0	259.1	201.6	239.5	167.1	158.6
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)