

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: P321097

Luminaire Tested: **GAN-SA3D-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321097
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-SA3D-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17865 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 191
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



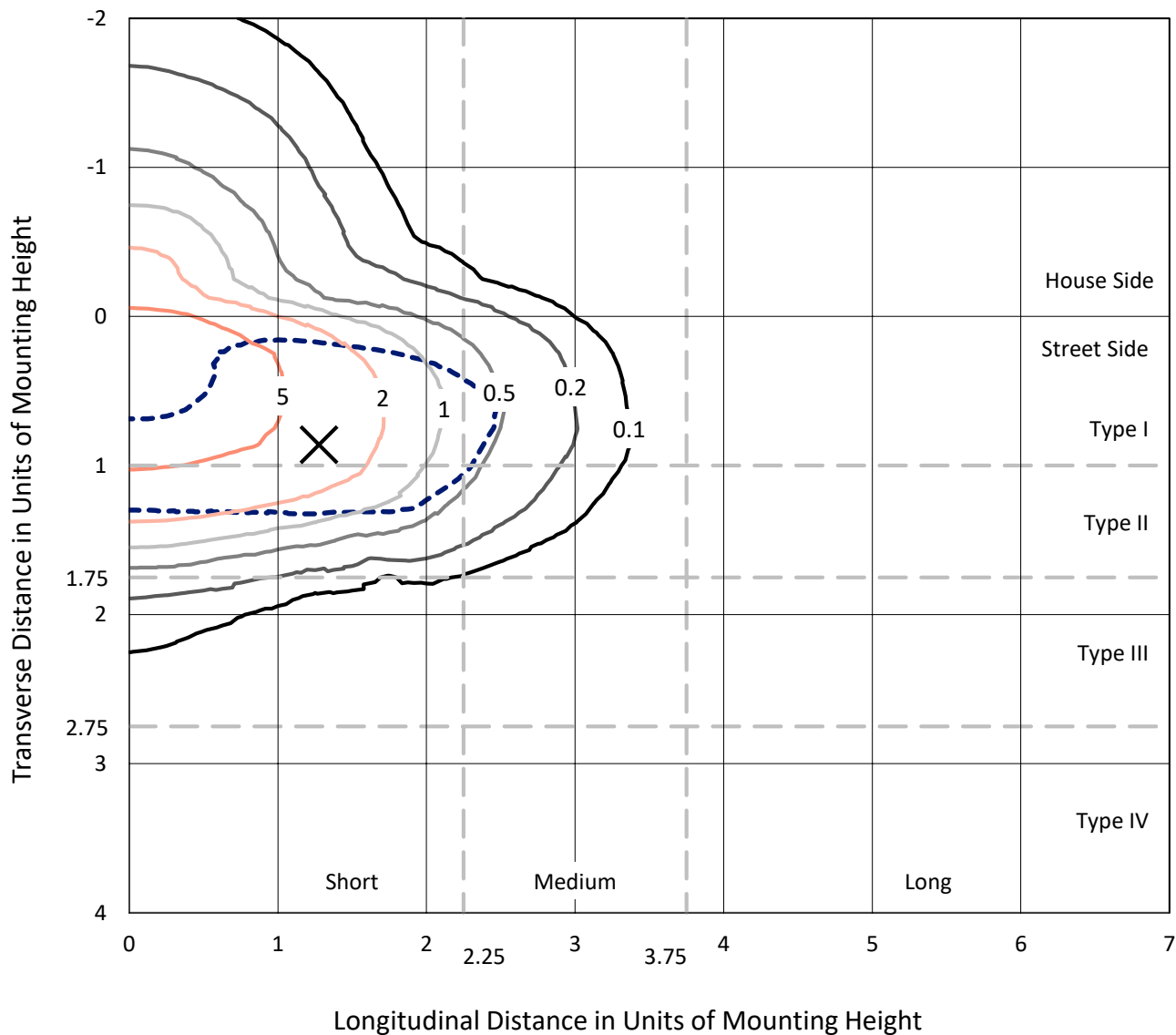
REPORT NUMBER: P321097

CATALOG NUMBER: GAN-SA3D-827-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

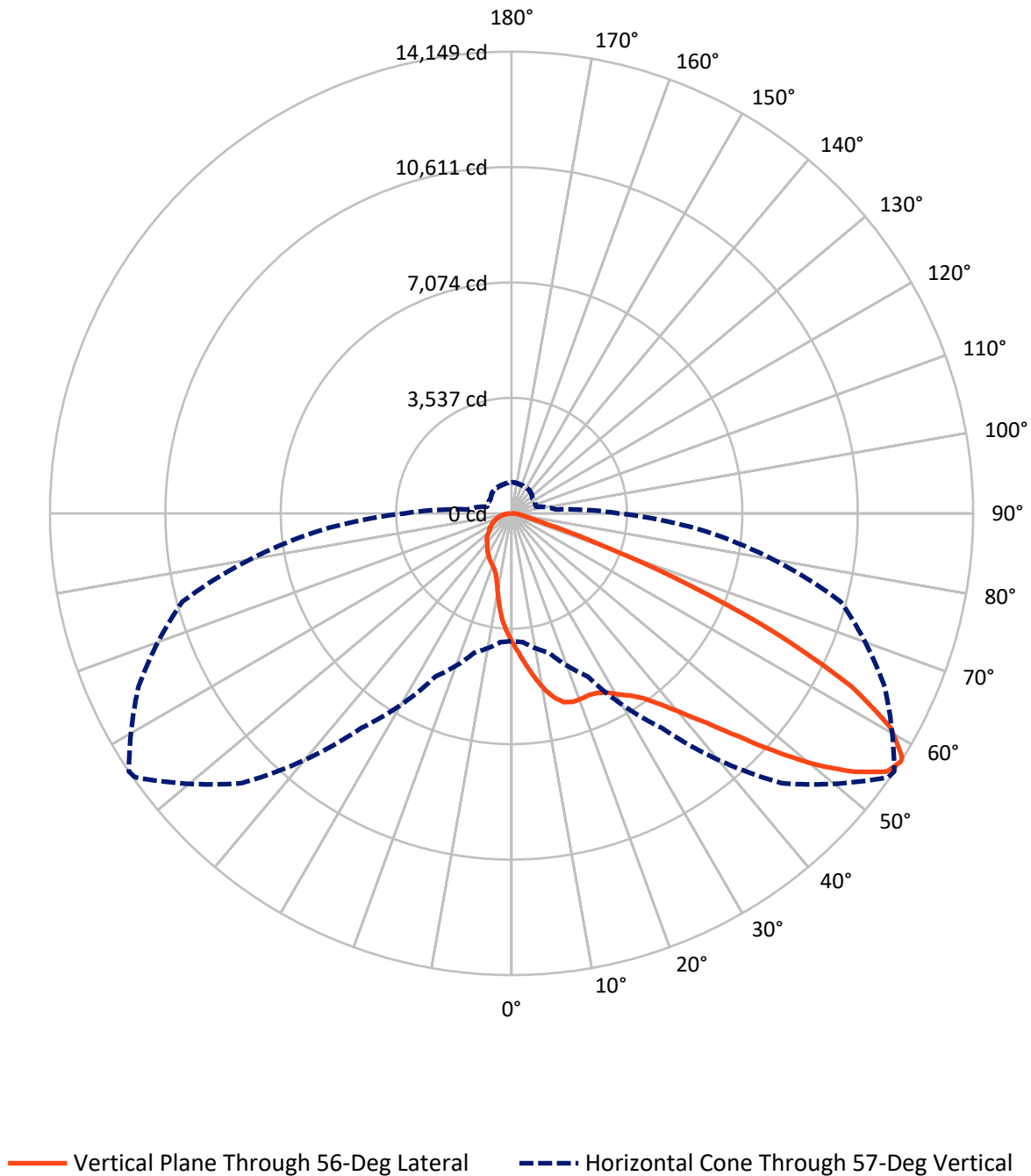
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
Type II - Short - N/A

REPORT NUMBER: P321097
CATALOG NUMBER: GAN-SA3D-827-U-AFL

Luminous Intensity Polar Plot



REPORT NUMBER: P321097

CATALOG NUMBER: GAN-SA3D-827-U-AFL

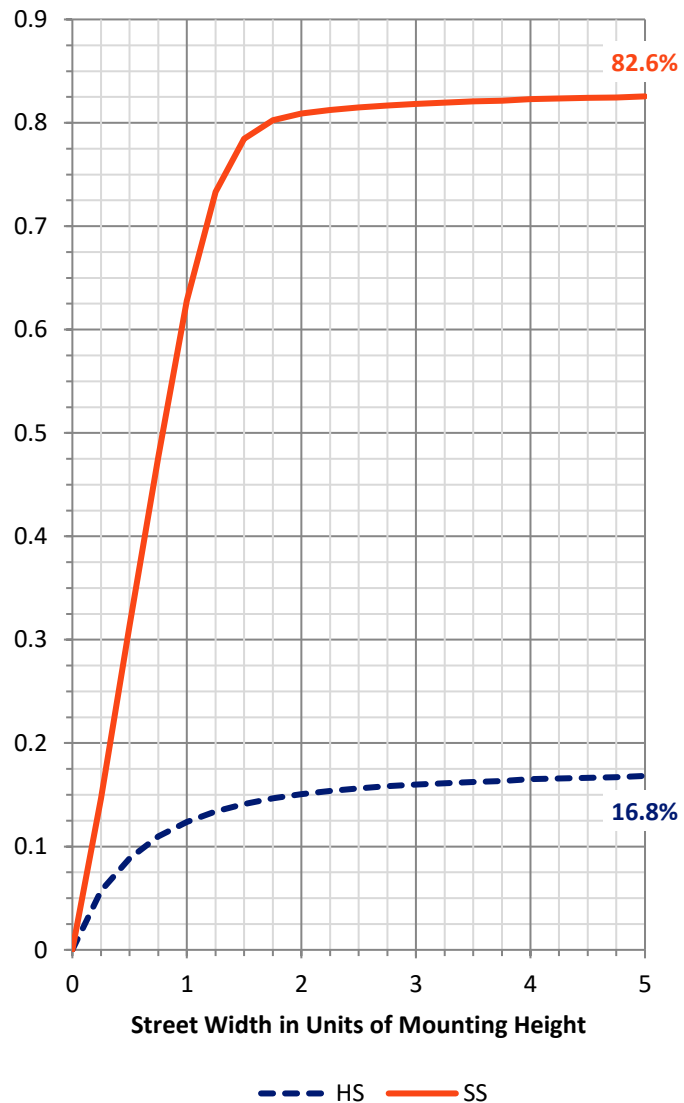
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3079.5	0.0	3079.5
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	14785.5	0.0	14785.5
	% Fixture	82.8	0.0	82.8
Total	Lumens	17865.0	0.0	17865.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	378.5	2.1
10°-20°	1070.2	6.0
20°-30°	1743.1	9.8
30°-40°	2605.7	14.6
40°-50°	3952.3	22.1
50°-60°	4429.8	24.8
60°-70°	2616.4	14.6
70°-80°	857.2	4.8
80°-90°	211.8	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°	17865.0	100.0
0°-180°	17865.0	100.0

Coefficient of Utilization



REPORT NUMBER: P321097

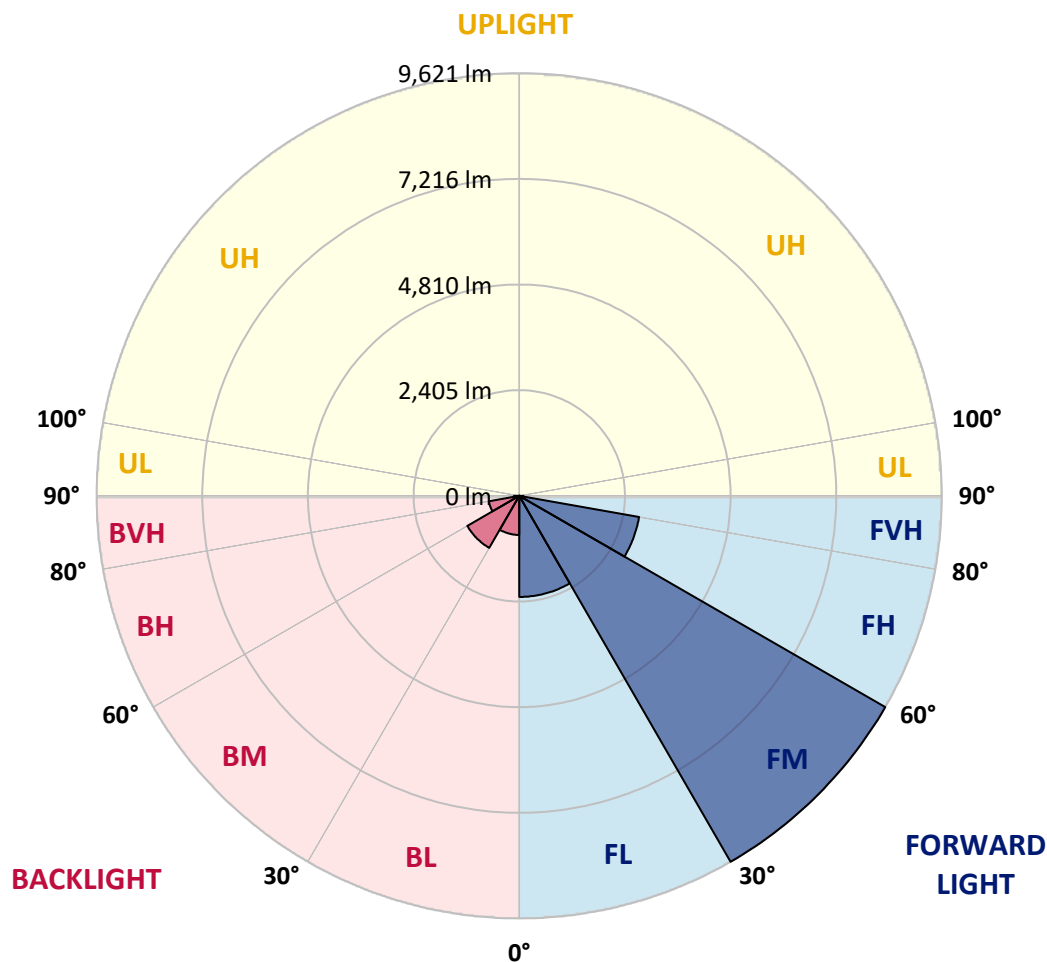
CATALOG NUMBER: GAN-SA3D-827-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2301.3	12.9			
FM	(30°-60°)	9620.9	53.9			
FH	(60°-80°)	2770.0	15.5			G2/5000
FVH	(80°-90°)	93.3	0.5			G1/100
BL	(0°-30°)	890.5	5.0	B2/1000		
BM	(30°-60°)	1366.9	7.7	B2/2500		
BH	(60°-80°)	703.6	3.9	B2/1000		G2/1000
BVH	(80°-90°)	118.5	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: P321097

CATALOG NUMBER: GAN-SA3D-827-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5
2.5°	4550.0	4591.8	4573.4	4509.5	4460.4	4391.0	4313.7	4290.3	4208.7	4117.2	4007.3
5°	5270.2	5249.3	5219.2	5119.8	5014.8	4892.6	4698.6	4667.9	4486.2	4279.3	4060.7
7.5°	5680.3	5678.5	5660.7	5602.4	5506.6	5346.9	5113.0	5076.8	4802.4	4469.6	4130.7
10°	5620.8	5616.5	5645.9	5706.7	5735.6	5702.4	5505.3	5469.1	5132.1	4680.2	4211.7
12.5°	5282.5	5284.9	5332.2	5459.9	5633.7	5842.4	5810.5	5792.7	5474.0	4918.4	4310.0
15°	5019.1	5024.6	5062.1	5173.2	5378.3	5757.1	5995.9	6002.0	5805.0	5181.2	4424.8
17.5°	4903.7	4915.3	4932.5	5010.5	5198.4	5587.0	6040.1	6073.3	6094.7	5453.8	4535.3
20°	4940.5	4951.6	4956.5	5006.2	5160.3	5483.9	6009.4	6069.0	6317.0	5710.4	4645.8
22.5°	5105.7	5112.4	5115.5	5128.4	5248.1	5513.3	5989.1	6051.8	6477.9	5940.6	4729.3
25°	5379.5	5374.6	5354.9	5338.3	5418.8	5630.0	6035.8	6095.4	6608.6	6149.4	4783.9
27.5°	5707.3	5701.2	5663.1	5617.7	5663.7	5811.7	6170.3	6217.5	6725.9	6344.6	4811.6
30°	6100.9	6084.9	6013.1	5959.1	5976.9	6084.3	6391.9	6434.9	6907.0	6566.3	4838.6
32.5°	6555.8	6538.6	6434.9	6345.2	6345.2	6434.9	6620.3	6655.9	7060.5	6816.8	4882.2
35°	7125.6	7104.1	6969.0	6818.6	6776.2	6821.7	6931.6	6956.7	7336.8	7132.3	4961.4
37.5°	7797.2	7768.4	7593.4	7392.0	7299.3	7296.9	7376.1	7427.6	7778.2	7546.7	5095.8
40°	8470.8	8450.5	8297.6	8139.2	7957.5	7899.2	8021.3	8037.3	8355.3	8061.2	5267.7
42.5°	8991.4	8987.7	8959.5	8980.3	8794.3	8676.4	8772.2	8785.1	9060.2	8618.1	5450.7
45°	9266.4	9272.6	9409.5	9712.8	9781.6	9695.6	9742.9	9746.6	9865.7	9179.9	5618.3
47.5°	9046.0	9078.0	9424.2	10102.6	10665.6	10951.1	10872.6	10918.0	10646.6	9662.4	5749.7
50°	8187.1	8226.4	8815.8	9928.9	11078.2	12166.2	12125.0	12114.6	11276.5	10016.1	5820.9
52.5°	7123.1	7153.8	7640.1	9025.8	10775.5	12837.8	13215.4	13161.4	11836.5	10280.7	5834.4
55°	5502.9	5550.8	6016.8	7223.2	9551.3	12581.2	14017.2	13968.7	12346.7	10419.5	5818.5
57°	3912.1	3962.5	4425.4	5512.7	8034.8	11692.8	14097.0	14148.6	12622.3	10442.8	5836.3
57.5°	3491.0	3542.5	4001.2	5057.2	7562.1	11371.7	14028.3	14114.2	12672.1	10439.1	5846.1
60°	1757.8	1777.4	2069.6	2823.0	4780.3	9193.4	13131.3	13352.9	12716.9	10258.6	5888.5
62.5°	1092.8	1078.7	1069.5	1300.4	2325.7	6096.6	11280.2	11706.9	11859.2	9821.5	5785.9
65°	960.8	934.4	833.1	814.7	1027.1	2961.1	8494.7	9025.8	10026.5	9132.6	5541.6
67.5°	902.5	876.7	762.5	693.8	694.4	1173.9	5273.9	5871.9	7810.8	7967.9	4965.1
70°	842.3	819.0	712.2	631.1	591.2	650.2	2426.4	2880.1	5091.5	6263.0	4149.7
72.5°	765.0	749.0	647.7	564.2	521.9	486.9	928.9	1097.1	2947.6	4206.2	2881.9
75°	683.9	669.2	582.6	502.8	451.3	383.1	523.1	563.6	1497.4	2151.9	1418.9
77.5°	594.9	586.3	518.2	444.5	403.4	317.4	370.2	389.9	642.2	922.8	711.6
80°	473.4	489.9	453.1	396.0	357.9	254.2	262.2	275.1	373.9	450.6	404.0
82.5°	308.2	337.1	354.9	321.7	294.7	200.1	188.5	194.0	243.7	275.1	175.6
85°	128.3	144.3	233.3	210.6	195.9	146.1	126.5	128.9	151.0	156.6	71.8
87.5°	57.1	60.8	102.5	96.4	82.9	50.3	54.0	58.9	80.4	76.1	27.6
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: P321097

CATALOG NUMBER: GAN-SA3D-827-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5	3962.5
2.5°	3966.2	3914.6	3826.2	3728.6	3648.7	3584.9	3520.4	3476.2	3424.6	3397.0	3382.9
5°	3969.2	3867.9	3681.9	3491.0	3320.3	3164.3	3015.8	2901.6	2794.7	2737.0	2721.1
7.5°	3982.1	3829.9	3529.0	3214.7	2911.4	2634.5	2420.8	2287.0	2190.6	2147.6	2135.3
10°	3992.6	3785.0	3339.9	2874.5	2462.0	2181.4	2015.6	1940.7	1907.6	1902.0	1896.5
12.5°	4017.1	3739.0	3141.0	2519.7	2112.6	1918.6	1860.9	1856.0	1865.2	1878.7	1878.7
15°	4055.8	3693.6	2913.8	2215.2	1890.4	1822.2	1833.9	1860.9	1886.1	1906.9	1910.0
17.5°	4084.0	3637.7	2669.5	1971.4	1771.9	1790.3	1832.0	1870.1	1895.9	1916.2	1918.0
20°	4104.3	3551.1	2408.6	1785.4	1703.7	1760.8	1813.0	1846.8	1864.6	1884.8	1887.9
22.5°	4093.9	3435.1	2177.1	1652.2	1648.5	1717.8	1767.6	1808.1	1794.6	1774.9	1787.8
25°	4043.5	3275.5	1938.9	1552.7	1590.1	1660.1	1721.5	1694.5	1649.1	1640.5	1645.4
27.5°	3953.9	3071.6	1718.5	1460.6	1522.6	1606.7	1603.0	1576.0	1560.1	1549.0	1555.8
30°	3857.5	2850.6	1525.7	1380.2	1447.7	1517.1	1503.0	1502.4	1486.4	1468.6	1477.2
32.5°	3762.3	2628.3	1372.8	1313.9	1391.2	1400.4	1431.1	1440.3	1409.0	1371.6	1369.1
35°	3679.4	2418.4	1256.8	1253.7	1323.1	1324.3	1369.1	1356.2	1278.3	1239.6	1239.6
37.5°	3617.4	2209.0	1168.4	1199.7	1233.4	1265.4	1288.1	1234.7	1221.8	1200.3	1199.7
40°	3590.4	2024.8	1113.1	1158.5	1170.2	1210.7	1152.4	1173.3	1179.4	1168.4	1168.4
42.5°	3562.2	1864.6	1065.2	1127.2	1125.4	1119.9	1090.4	1117.4	1142.0	1142.6	1140.7
45°	3533.9	1726.4	1022.9	1060.3	1086.1	1026.5	1032.1	1060.9	1095.3	1107.6	1107.6
47.5°	3502.6	1617.2	984.2	989.7	1029.6	989.7	985.4	1007.5	1048.0	1067.7	1072.0
50°	3433.9	1518.9	940.0	927.7	938.7	952.2	955.9	966.4	1011.2	1042.5	1049.9
52.5°	3338.7	1431.1	883.5	870.6	870.6	921.5	938.7	941.8	979.9	1017.3	1024.7
55°	3259.5	1375.3	825.2	822.7	820.2	889.0	918.5	923.4	949.8	979.3	982.9
57°	3265.0	1371.0	780.3	782.8	782.2	855.9	899.4	909.9	923.4	948.6	952.9
57.5°	3268.1	1374.0	770.5	771.7	771.1	846.6	893.9	905.6	916.0	942.4	946.7
60°	3314.1	1382.0	730.6	717.1	720.2	797.5	862.6	877.3	884.1	919.1	924.6
62.5°	3246.0	1346.4	698.7	666.1	666.1	746.0	819.0	842.3	852.8	900.1	909.3
65°	3048.3	1246.3	661.2	608.4	614.6	694.4	766.8	804.9	820.9	879.8	889.6
67.5°	2743.2	1130.3	621.3	556.9	563.0	640.4	712.8	753.9	779.1	857.7	865.7
70°	2345.9	988.5	567.3	502.2	509.6	581.4	649.0	695.6	733.1	836.8	839.3
72.5°	1729.5	810.4	491.8	442.0	450.0	512.7	584.5	638.5	688.9	784.6	783.4
75°	1028.4	633.6	408.3	381.3	386.8	445.1	526.2	591.9	667.4	764.4	776.0
77.5°	623.8	477.0	332.8	319.3	326.0	385.6	484.4	554.4	658.2	720.8	717.1
80°	377.0	340.7	265.8	257.2	264.0	329.7	448.2	526.2	575.3	615.8	615.8
82.5°	197.1	208.1	195.2	188.5	197.7	267.7	407.7	459.2	508.4	436.5	407.7
85°	80.4	108.7	118.5	117.9	123.4	185.4	351.8	392.9	327.9	311.3	318.6
87.5°	27.0	46.0	57.7	49.7	52.2	116.7	243.7	189.7	225.3	157.2	149.2
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)