

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: P321101

Luminaire Tested: **GAN-SA7D-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321101
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-SA7D-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 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: 41389 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

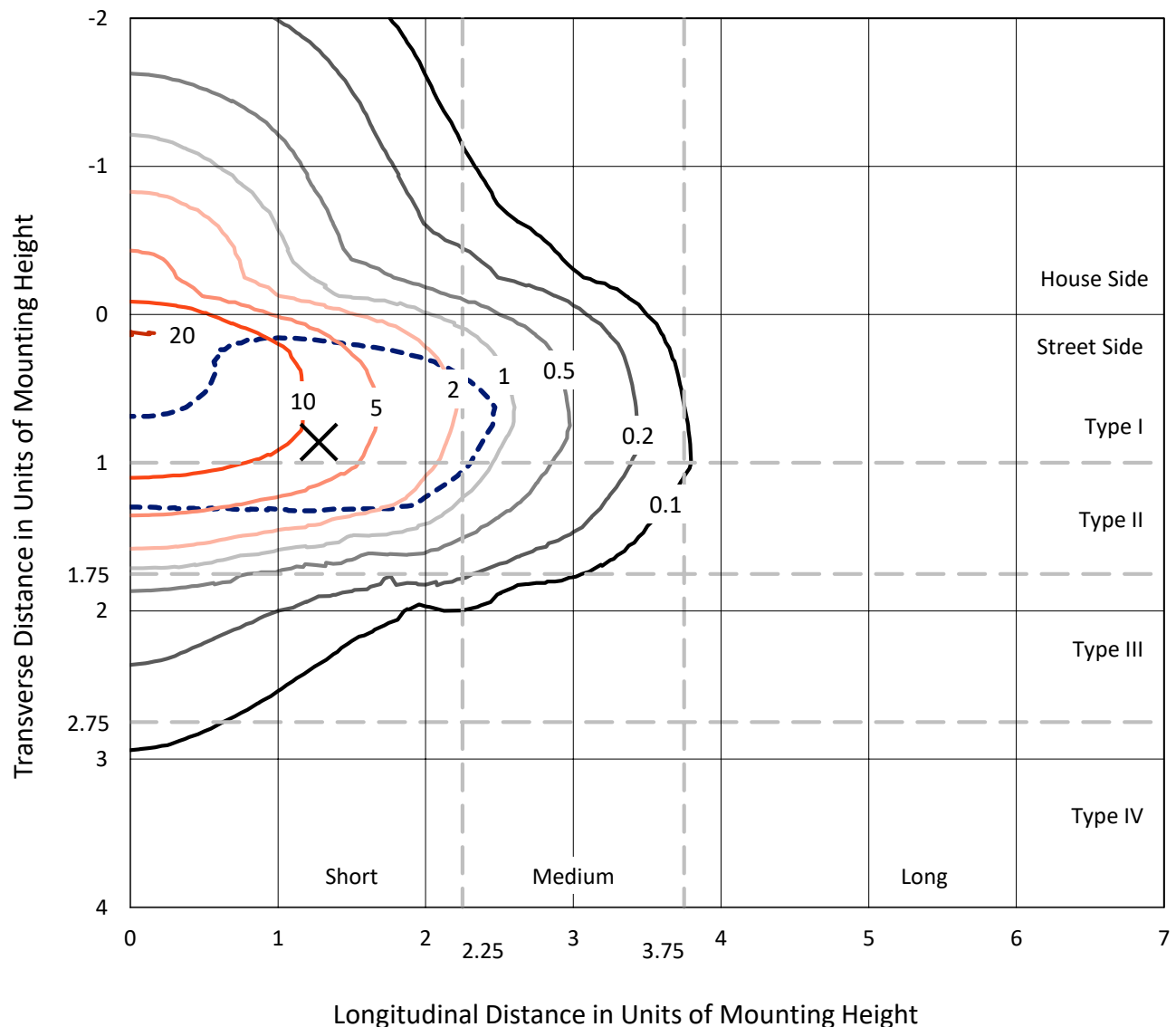
Input Watts (W): 448
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P321101
 CATALOG NUMBER: GAN-SA7D-827-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

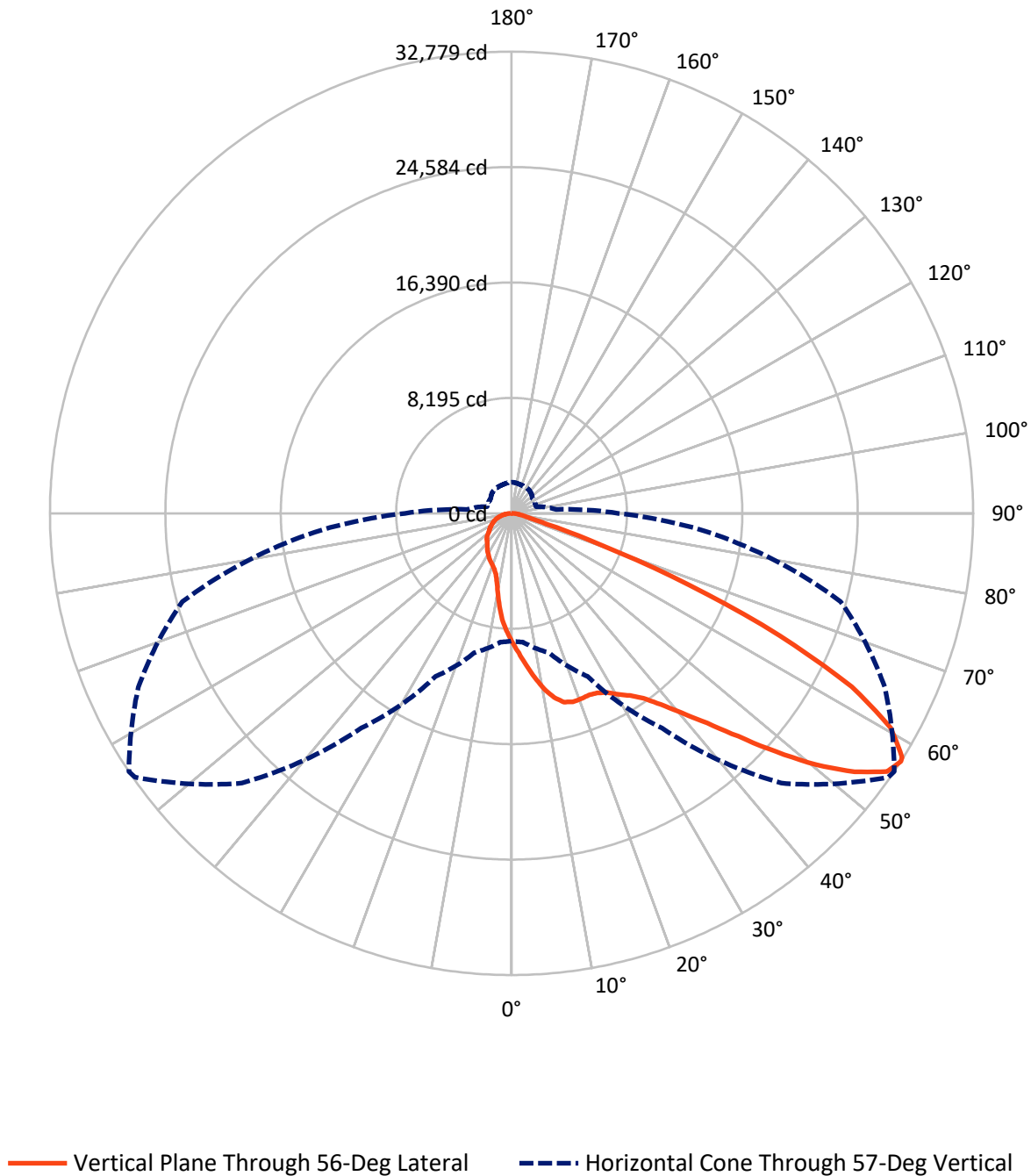
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.3 fc
 Type II - Short - N/A

REPORT NUMBER: P321101
CATALOG NUMBER: GAN-SA7D-827-U-AFL

Luminous Intensity Polar Plot



REPORT NUMBER: P321101

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7134.6	0.0	7134.6
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	34254.4	0.0	34254.4
	% Fixture	82.8	0.0	82.8
Total	Lumens	41389.0	0.0	41389.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	876.9	2.1
10°-20°	2479.3	6.0
20°-30°	4038.3	9.8
30°-40°	6036.8	14.6
40°-50°	9156.5	22.1
50°-60°	10262.8	24.8
60°-70°	6061.6	14.6
70°-80°	1986.0	4.8
80°-90°	490.7	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°	41389.0	100.0
0°-180°	41389.0	100.0

Coefficient of Utilization



REPORT NUMBER: P321101

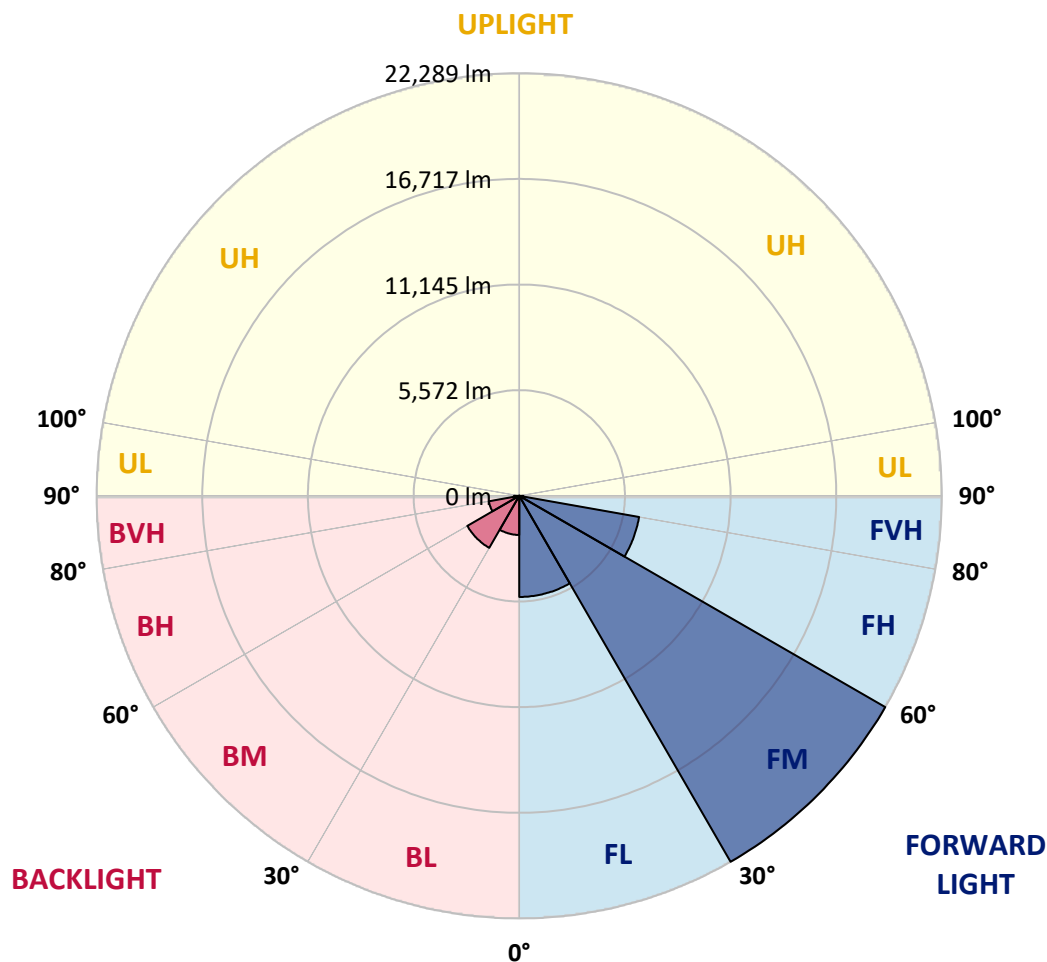
CATALOG NUMBER: GAN-SA7D-827-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5331.5	12.9			
FM	(30°-60°)	22289.3	53.9			
FH	(60°-80°)	6417.5	15.5			G3/7500
FVH	(80°-90°)	216.0	0.5			G2/225
BL	(0°-30°)	2063.0	5.0	B3/2500		
BM	(30°-60°)	3166.8	7.7	B3/5000		
BH	(60°-80°)	1630.2	3.9	B3/2500		G3/2500
BVH	(80°-90°)	274.6	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P321101

CATALOG NUMBER: GAN-SA7D-827-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1
2.5°	10541.3	10638.1	10595.4	10447.5	10333.7	10172.9	9993.7	9939.7	9750.5	9538.6	9284.0
5°	12209.8	12161.5	12091.8	11861.3	11618.1	11335.0	10885.6	10814.4	10393.4	9914.1	9407.7
7.5°	13160.0	13155.7	13114.5	12979.3	12757.4	12387.6	11845.7	11761.8	11126.0	10355.0	9569.9
10°	13022.0	13012.0	13080.3	13221.1	13288.0	13211.2	12754.6	12670.7	11889.8	10842.9	9757.6
12.5°	12238.3	12244.0	12353.5	12649.3	13051.9	13535.5	13461.5	13420.3	12682.0	11394.8	9985.2
15°	11628.1	11640.9	11727.6	11985.1	12460.2	13337.8	13891.1	13905.3	13448.7	12003.6	10251.2
17.5°	11360.6	11387.7	11427.5	11608.1	12043.4	12943.8	13993.5	14070.3	14120.1	12635.1	10507.2
20°	11446.0	11471.6	11483.0	11598.2	11955.2	12704.8	13922.4	14060.3	14635.0	13229.7	10763.2
22.5°	11828.6	11844.3	11851.4	11881.2	12158.6	12773.1	13875.4	14020.5	15007.7	13763.1	10956.7
25°	12463.0	12451.6	12406.1	12367.7	12554.0	13043.3	13983.5	14121.5	15310.6	14246.7	11083.3
27.5°	13222.6	13208.3	13120.1	13014.9	13121.6	13464.4	14295.0	14404.6	15582.3	14699.0	11147.3
30°	14134.3	14097.3	13930.9	13805.7	13847.0	14095.9	14808.5	14908.1	16001.9	15212.5	11209.9
32.5°	15188.3	15148.5	14908.1	14700.4	14700.4	14908.1	15337.7	15420.2	16357.5	15792.8	11310.9
35°	16508.3	16458.5	16145.6	15797.1	15698.9	15804.2	16058.8	16117.1	16997.6	16523.9	11494.3
37.5°	18064.4	17997.5	17592.1	17125.6	16910.8	16905.1	17088.6	17208.1	18020.3	17484.0	11805.9
40°	19624.7	19577.8	19223.6	18856.7	18435.6	18300.5	18583.6	18620.5	19357.3	18676.0	12204.1
42.5°	20830.9	20822.4	20757.0	20805.3	20374.3	20101.2	20323.1	20353.0	20990.2	19966.1	12628.0
45°	21468.2	21482.4	21799.6	22502.2	22661.5	22462.4	22571.9	22580.5	22856.4	21267.6	13016.3
47.5°	20957.5	21031.5	21833.7	23405.5	24709.8	25371.2	25189.1	25294.4	24665.7	22385.6	13320.7
50°	18967.6	19058.6	20424.1	23002.9	25665.6	28186.1	28090.8	28066.6	26125.1	23204.9	13485.7
52.5°	16502.6	16573.7	17700.2	20910.6	24964.4	29742.2	30617.0	30491.8	27422.3	23818.0	13517.0
55°	12748.9	12859.8	13939.4	16734.4	22128.2	29147.7	32474.6	32362.3	28604.3	24139.4	13480.0
57°	9063.5	9180.1	10252.6	12771.7	18614.8	27089.5	32659.5	32779.0	29243.0	24193.5	13521.3
57.5°	8087.7	8207.2	9269.7	11716.2	17519.6	26345.5	32500.2	32699.4	29358.2	24184.9	13544.0
60°	4072.3	4117.8	4794.9	6540.2	11074.7	21298.9	30422.1	30935.6	29462.0	23766.7	13642.2
62.5°	2531.9	2499.1	2477.8	3012.6	5388.0	14124.4	26133.6	27122.2	27474.9	22754.0	13404.6
65°	2226.0	2164.9	1930.2	1887.5	2379.7	6860.2	19680.2	20910.6	23229.1	21158.1	12838.5
67.5°	2090.9	2031.2	1766.6	1607.3	1608.7	2719.6	12218.3	13603.8	18095.7	18459.8	11502.9
70°	1951.5	1897.5	1650.0	1462.2	1369.8	1506.3	5621.3	6672.4	11795.9	14509.8	9613.9
72.5°	1772.3	1735.3	1500.6	1307.2	1209.0	1128.0	2152.1	2541.8	6828.9	9744.8	6676.7
75°	1584.5	1550.4	1349.8	1164.9	1045.5	887.6	1211.9	1305.8	3469.2	4985.5	3287.1
77.5°	1378.3	1358.4	1200.5	1029.8	934.5	735.4	857.7	903.2	1487.8	2137.9	1648.6
80°	1096.7	1135.1	1049.7	917.4	829.3	588.9	607.4	637.2	866.2	1044.0	935.9
82.5°	714.0	780.9	822.1	745.3	682.7	463.7	436.7	449.5	564.7	637.2	406.8
85°	297.3	334.3	540.5	487.9	453.7	338.5	293.0	298.7	349.9	362.7	166.4
87.5°	132.3	140.8	237.5	223.3	192.0	116.6	125.2	136.5	186.3	176.4	64.0
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: P321101

CATALOG NUMBER: GAN-SA7D-827-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1	9180.1
2.5°	9188.7	9069.2	8864.3	8638.2	8453.3	8305.3	8156.0	8053.6	7934.1	7870.1	7837.4
5°	9195.8	8961.1	8530.1	8087.7	7692.3	7331.0	6986.8	6722.2	6474.7	6341.0	6304.0
7.5°	9225.6	8872.9	8175.9	7447.6	6745.0	6103.5	5608.5	5298.4	5075.1	4975.5	4947.1
10°	9249.8	8769.0	7737.8	6659.6	5703.8	5053.8	4669.7	4496.2	4419.4	4406.6	4393.8
12.5°	9306.7	8662.4	7277.0	5837.5	4894.5	4445.0	4311.3	4299.9	4321.2	4352.5	4352.5
15°	9396.3	8557.1	6750.7	5132.0	4379.5	4221.7	4248.7	4311.3	4369.6	4417.9	4425.1
17.5°	9461.8	8427.7	6184.6	4567.3	4105.0	4147.7	4244.4	4332.6	4392.3	4439.3	4443.6
20°	9508.7	8227.1	5580.0	4136.3	3947.1	4079.4	4200.3	4278.6	4319.8	4366.7	4373.9
22.5°	9484.5	7958.3	5043.8	3827.7	3819.1	3979.9	4095.1	4188.9	4157.7	4112.1	4142.0
25°	9367.9	7588.5	4491.9	3597.2	3684.0	3846.1	3988.4	3925.8	3820.5	3800.6	3812.0
27.5°	9160.2	7116.2	3981.3	3383.9	3527.5	3722.4	3713.9	3651.3	3614.3	3588.7	3604.3
30°	8936.9	6604.2	3534.6	3197.5	3354.0	3514.7	3482.0	3480.6	3443.6	3402.4	3422.3
32.5°	8716.4	6089.3	3180.5	3043.9	3223.1	3244.5	3315.6	3336.9	3264.4	3177.6	3171.9
35°	8524.4	5602.8	2911.6	2904.5	3065.3	3068.1	3171.9	3142.1	2961.4	2871.8	2871.8
37.5°	8380.7	5117.8	2706.8	2779.4	2857.6	2931.5	2984.2	2860.4	2830.6	2780.8	2779.4
40°	8318.1	4691.0	2578.8	2684.1	2711.1	2805.0	2669.8	2718.2	2732.4	2706.8	2706.8
42.5°	8252.7	4319.8	2467.9	2611.5	2607.2	2594.4	2526.2	2588.8	2645.6	2647.1	2642.8
45°	8187.3	3999.8	2369.7	2456.5	2516.2	2378.2	2391.0	2457.9	2537.5	2566.0	2566.0
47.5°	8114.7	3746.6	2280.1	2292.9	2385.4	2292.9	2282.9	2334.1	2428.0	2473.5	2483.5
50°	7955.4	3519.0	2177.7	2149.2	2174.8	2206.1	2214.7	2238.8	2342.7	2415.2	2432.3
52.5°	7735.0	3315.6	2046.8	2017.0	2017.0	2135.0	2174.8	2181.9	2270.1	2356.9	2374.0
55°	7551.5	3186.2	1911.7	1906.0	1900.3	2059.6	2127.9	2139.3	2200.4	2268.7	2277.2
57°	7564.3	3176.2	1807.9	1813.5	1812.1	1982.8	2083.8	2108.0	2139.3	2197.6	2207.6
57.5°	7571.4	3183.3	1785.1	1787.9	1786.5	1961.5	2071.0	2098.0	2122.2	2183.4	2193.3
60°	7678.1	3201.8	1692.6	1661.4	1668.5	1847.7	1998.5	2032.6	2048.2	2129.3	2142.1
62.5°	7520.2	3119.3	1618.7	1543.3	1543.3	1728.2	1897.5	1951.5	1975.7	2085.2	2106.6
65°	7062.2	2887.5	1531.9	1409.6	1423.8	1608.7	1776.6	1864.8	1901.7	2038.3	2061.0
67.5°	6355.2	2618.6	1439.5	1290.1	1304.3	1483.6	1651.4	1746.7	1805.0	1987.1	2005.6
70°	5435.0	2290.1	1314.3	1163.5	1180.6	1347.0	1503.5	1611.6	1698.3	1938.7	1944.4
72.5°	4006.9	1877.6	1139.3	1024.1	1042.6	1187.7	1354.1	1479.3	1595.9	1817.8	1815.0
75°	2382.5	1467.9	945.9	883.3	896.1	1031.2	1219.0	1371.2	1546.1	1770.9	1797.9
77.5°	1445.2	1105.2	770.9	739.6	755.3	893.3	1122.3	1284.4	1524.8	1669.9	1661.4
80°	873.3	789.4	615.9	596.0	611.6	763.8	1038.3	1219.0	1332.8	1426.7	1426.7
82.5°	456.6	482.2	452.3	436.7	458.0	620.2	944.5	1063.9	1177.7	1011.3	944.5
85°	186.3	251.8	274.5	273.1	285.9	429.6	815.0	910.3	759.6	721.2	738.2
87.5°	62.6	106.7	133.7	115.2	120.9	270.3	564.7	439.5	522.0	364.1	345.6
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)