

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: P321104

Luminaire Tested: **GAN-SA0D-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321104
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-SA0D-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 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: 57920 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

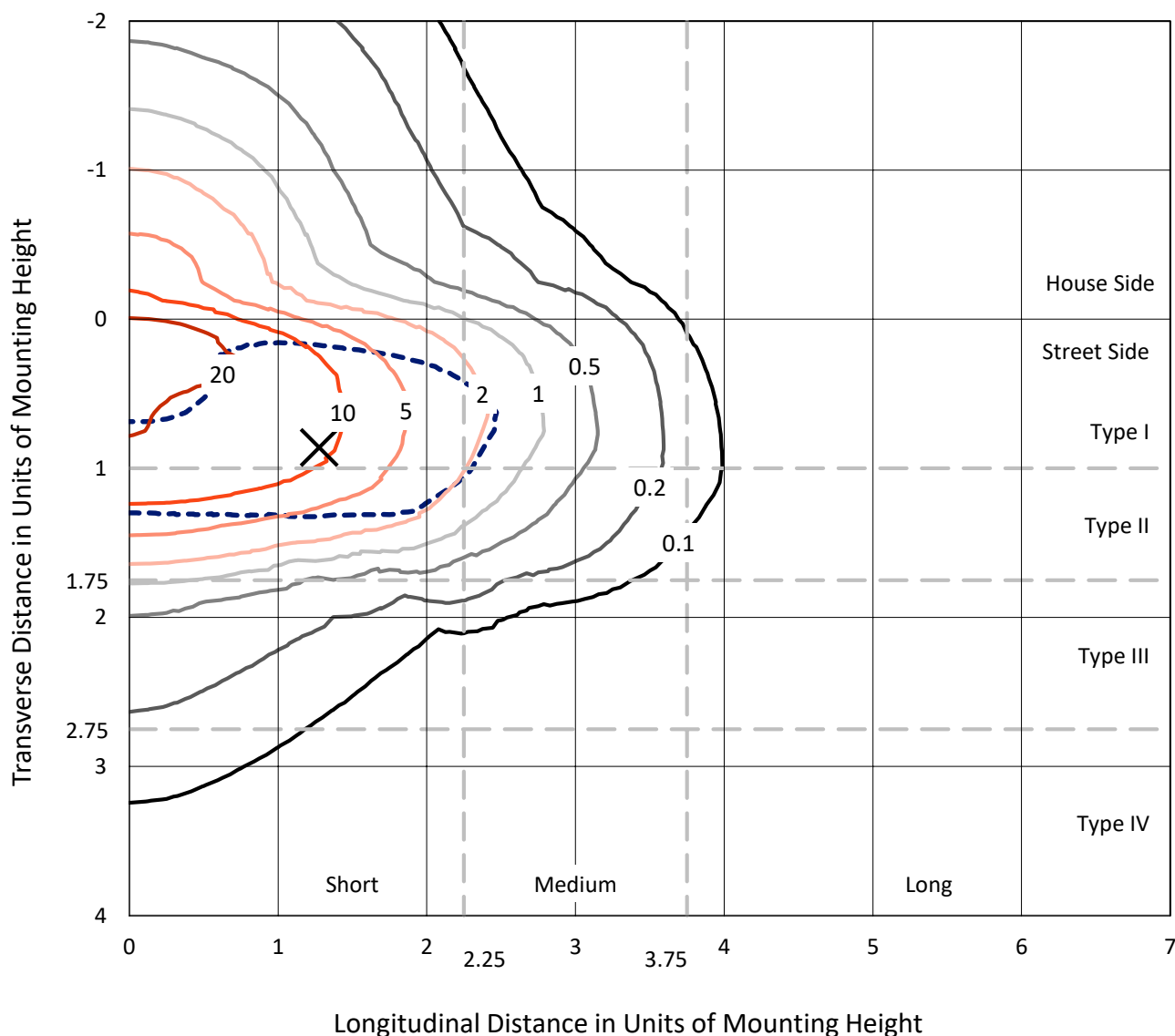
Input Watts (W): 640
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P321104
 CATALOG NUMBER: GAN-SA0D-827-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

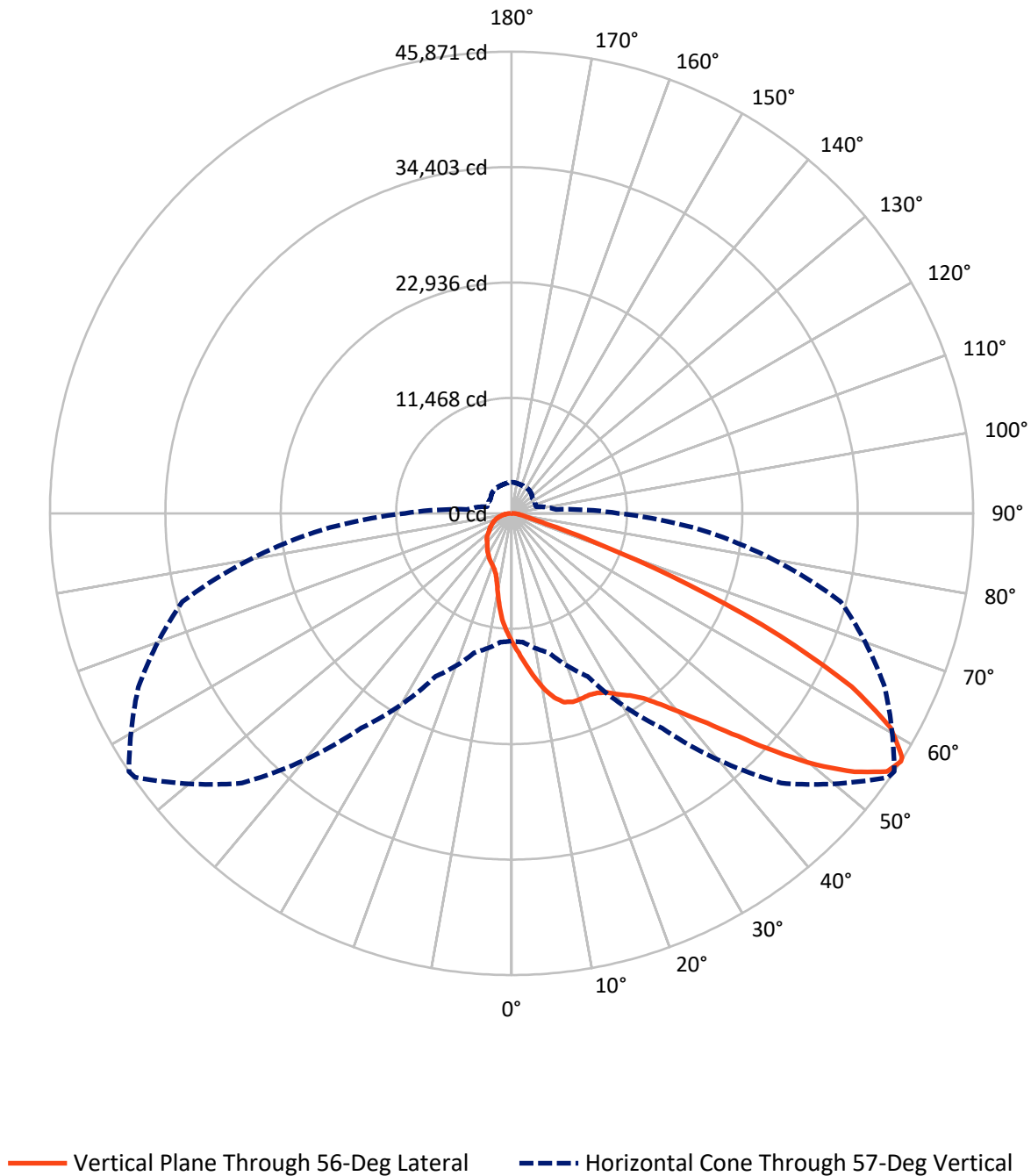
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 28.5 fc
 Type II - Short - N/A

REPORT NUMBER: P321104
CATALOG NUMBER: GAN-SA0D-827-U-AFL

Luminous Intensity Polar Plot



REPORT NUMBER: P321104

CATALOG NUMBER: GAN-SA0D-827-U-AFL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9984.2	0.0	9984.2
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	47935.8	0.0	47935.8
	% Fixture	82.8	0.0	82.8
Total	Lumens	57920.0	0.0	57920.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1227.2	2.1
10°-20°	3469.5	6.0
20°-30°	5651.2	9.8
30°-40°	8447.9	14.6
40°-50°	12813.7	22.1
50°-60°	14361.9	24.8
60°-70°	8482.7	14.6
70°-80°	2779.3	4.8
80°-90°	686.6	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°	57920.0	100.0
0°-180°	57920.0	100.0

Coefficient of Utilization



REPORT NUMBER: P321104

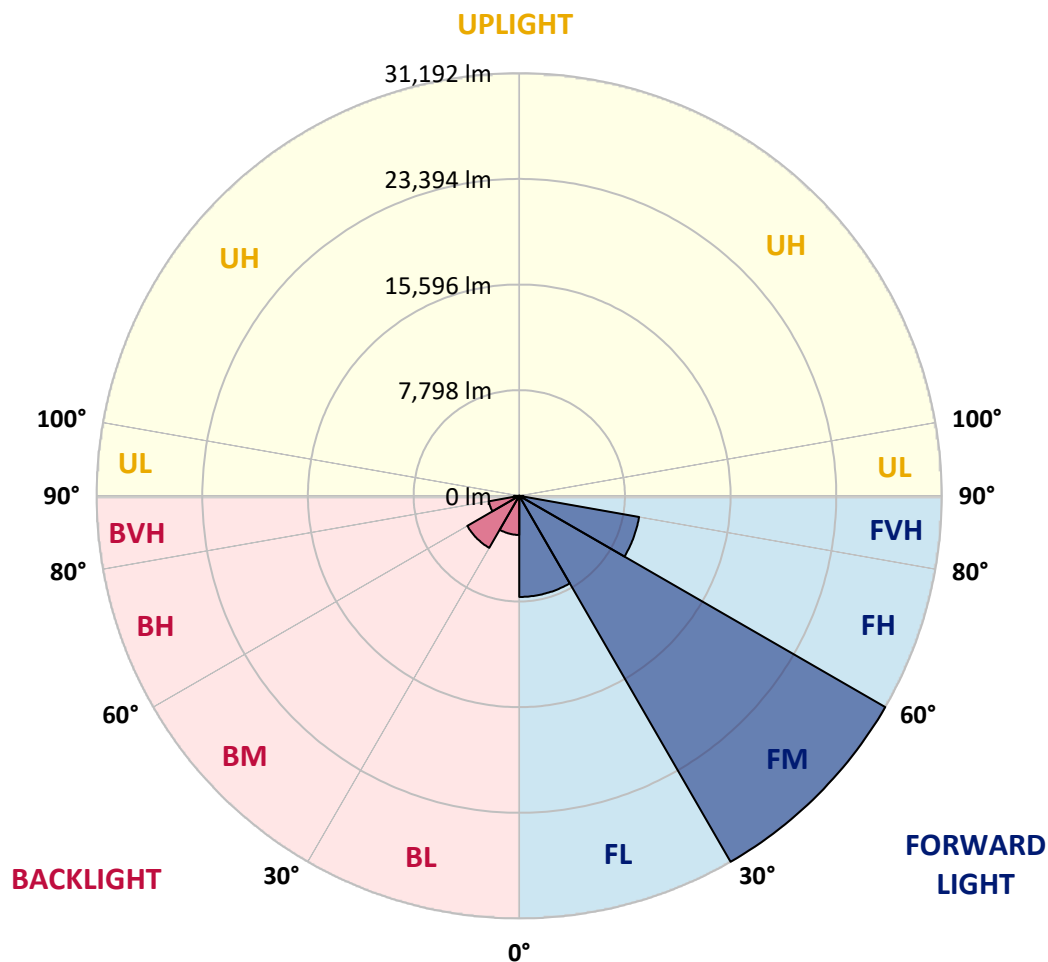
CATALOG NUMBER: GAN-SA0D-827-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	7461.0	12.9			
FM	(30°-60°)	31191.8	53.9			
FH	(60°-80°)	8980.7	15.5			G4/12000
FVH	(80°-90°)	302.3	0.5			G3/500
BL	(0°-30°)	2887.0	5.0	B4/5000		
BM	(30°-60°)	4431.6	7.7	B3/5000		
BH	(60°-80°)	2281.3	3.9	B3/2500		G3/2500
BVH	(80°-90°)	384.3	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





REPORT NUMBER: P321104

CATALOG NUMBER: GAN-SA0D-827-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7
2.5°	14751.6	14887.0	14827.3	14620.2	14461.0	14236.1	13985.3	13909.6	13644.9	13348.3	12992.0
5°	17086.5	17018.8	16921.3	16598.8	16258.4	15862.3	15233.3	15133.8	14544.6	13873.8	13165.2
7.5°	18416.1	18410.2	18352.4	18163.3	17852.8	17335.3	16576.9	16459.5	15569.7	14490.9	13392.1
10°	18223.1	18209.1	18304.7	18501.7	18595.3	18487.8	17848.8	17731.4	16638.6	15173.6	13654.9
12.5°	17126.3	17134.3	17287.5	17701.5	18264.9	18941.6	18838.1	18780.4	17747.3	15945.9	13973.3
15°	16272.4	16290.3	16411.7	16772.0	17436.8	18665.0	19439.3	19459.2	18820.2	16797.9	14345.6
17.5°	15898.2	15936.0	15991.7	16244.5	16853.6	18113.6	19582.6	19690.1	19759.7	17681.6	14703.8
20°	16017.6	16053.4	16069.3	16230.6	16730.2	17779.2	19483.0	19676.1	20480.3	18513.7	15062.1
22.5°	16553.0	16574.9	16584.9	16626.7	17014.8	17874.7	19417.4	19620.4	21001.8	19260.1	15332.8
25°	17440.8	17424.9	17361.2	17307.4	17568.2	18252.9	19568.6	19761.7	21425.8	19936.9	15510.0
27.5°	18503.7	18483.8	18360.4	18213.1	18362.4	18842.1	20004.6	20157.8	21806.0	20569.9	15599.6
30°	19779.6	19727.9	19495.0	19319.8	19377.6	19725.9	20723.1	20862.5	22393.2	21288.4	15687.2
32.5°	21254.6	21198.9	20862.5	20571.9	20571.9	20862.5	21463.6	21579.0	22890.8	22100.6	15828.5
35°	23101.8	23032.1	22594.2	22106.5	21969.2	22116.5	22472.8	22554.4	23786.5	23123.7	16085.3
37.5°	25279.4	25185.8	24618.5	23965.7	23665.1	23657.1	23913.9	24081.1	25217.7	24467.3	16521.2
40°	27463.0	27397.3	26901.7	26388.1	25798.9	25609.8	26005.9	26057.7	27088.8	26135.3	17078.5
42.5°	29150.9	29139.0	29047.4	29115.1	28512.0	28129.8	28440.3	28482.1	29373.9	27940.7	17671.7
45°	30042.7	30062.6	30506.5	31489.8	31712.7	31434.0	31587.3	31599.2	31985.4	29762.0	18215.1
47.5°	29328.1	29431.6	30554.2	32753.7	34579.0	35504.6	35249.8	35397.1	34517.3	31326.5	18641.1
50°	26543.4	26670.8	28581.6	32190.4	35916.6	39443.8	39310.5	39276.6	36559.6	32473.1	18872.0
52.5°	23093.8	23193.3	24769.8	29262.4	34935.3	41621.4	42845.6	42670.4	38374.9	33331.0	18915.8
55°	17840.9	17996.1	19506.9	23418.3	30966.3	40789.4	45445.2	45287.9	40029.0	33780.8	18864.0
57°	12683.5	12846.7	14347.5	17872.7	26049.7	37909.1	45703.9	45871.2	40922.8	33856.5	18921.7
57.5°	11318.0	11485.2	12972.1	16395.8	24517.0	36868.1	45481.0	45759.7	41084.0	33844.5	18953.6
60°	5698.8	5762.5	6710.0	9152.3	15498.1	29805.8	42572.9	43291.5	41229.3	33259.3	19090.9
62.5°	3543.1	3497.3	3467.5	4215.9	7540.0	19765.7	36571.5	37954.9	38448.6	31842.1	18758.5
65°	3115.1	3029.5	2701.1	2641.4	3330.1	9600.2	27540.6	29262.4	32506.9	29608.7	17966.3
67.5°	2926.0	2842.4	2472.2	2249.3	2251.3	3805.8	17098.4	19037.2	25323.2	25832.8	16097.2
70°	2731.0	2655.3	2309.0	2046.2	1916.9	2107.9	7866.5	9337.5	16507.2	20305.1	13453.8
72.5°	2480.2	2428.4	2100.0	1829.3	1691.9	1578.5	3011.6	3557.0	9556.4	13636.9	9343.4
75°	2217.4	2169.6	1889.0	1630.2	1463.0	1242.1	1695.9	1827.3	4854.8	6976.7	4600.1
77.5°	1928.8	1900.9	1680.0	1441.1	1307.8	1029.1	1200.3	1264.0	2082.1	2991.7	2307.0
80°	1534.7	1588.4	1469.0	1283.9	1160.5	824.1	849.9	891.7	1212.2	1461.0	1309.8
82.5°	999.2	1092.8	1150.5	1043.0	955.4	648.9	611.1	629.0	790.2	891.7	569.3
85°	416.0	467.8	756.4	682.7	635.0	473.7	410.0	418.0	489.7	507.6	232.9
87.5°	185.1	197.1	332.4	312.5	268.7	163.2	175.2	191.1	260.8	246.8	89.6
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: P321104

CATALOG NUMBER: GAN-SA0D-827-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7	12846.7
2.5°	12858.7	12691.4	12404.8	12088.3	11829.6	11622.5	11413.5	11270.2	11103.0	11013.5	10967.7
5°	12868.6	12540.2	11937.0	11318.0	10764.6	10259.1	9777.4	9407.1	9060.8	8873.7	8821.9
7.5°	12910.4	12416.8	11441.4	10422.3	9439.0	8541.2	7848.6	7414.6	7102.1	6962.8	6923.0
10°	12944.2	12271.5	10828.3	9319.5	7981.9	7072.3	6534.8	6292.0	6184.5	6166.6	6148.7
12.5°	13023.9	12122.2	10183.4	8169.0	6849.3	6220.3	6033.2	6017.3	6047.1	6090.9	6090.9
15°	13149.3	11974.9	9446.9	7181.7	6128.8	5907.8	5945.6	6033.2	6114.8	6182.5	6192.5
17.5°	13240.8	11793.7	8654.7	6391.5	5744.6	5804.3	5939.7	6063.1	6146.7	6212.4	6218.3
20°	13306.5	11513.1	7808.7	5788.4	5523.6	5708.8	5878.0	5987.4	6045.2	6110.8	6120.8
22.5°	13272.7	11136.9	7058.3	5356.4	5344.5	5569.4	5730.7	5862.0	5818.2	5754.5	5796.3
25°	13109.5	10619.3	6286.0	5034.0	5155.4	5382.3	5581.4	5493.8	5346.5	5318.6	5334.5
27.5°	12818.8	9958.5	5571.4	4735.4	4936.4	5209.1	5197.2	5109.6	5057.9	5022.0	5043.9
30°	12506.3	9241.9	4946.4	4474.7	4693.6	4918.5	4872.8	4870.8	4819.0	4761.3	4789.2
32.5°	12197.8	8521.3	4450.8	4259.7	4510.5	4540.3	4639.9	4669.7	4568.2	4446.8	4438.8
35°	11929.1	7840.6	4074.6	4064.6	4289.5	4293.5	4438.8	4397.0	4144.2	4018.8	4018.8
37.5°	11728.0	7161.8	3787.9	3889.4	3998.9	4102.4	4176.1	4002.9	3961.1	3891.4	3889.4
40°	11640.5	6564.7	3608.8	3756.1	3793.9	3925.3	3736.2	3803.9	3823.8	3787.9	3787.9
42.5°	11548.9	6045.2	3453.5	3654.6	3648.6	3630.7	3535.1	3622.7	3702.3	3704.3	3698.4
45°	11457.3	5597.3	3316.2	3437.6	3521.2	3328.1	3346.0	3439.6	3551.1	3590.9	3590.9
47.5°	11355.8	5243.0	3190.8	3208.7	3338.1	3208.7	3194.8	3266.4	3397.8	3461.5	3475.4
50°	11132.9	4924.5	3047.5	3007.7	3043.5	3087.3	3099.2	3133.1	3278.4	3379.9	3403.8
52.5°	10824.4	4639.9	2864.3	2822.5	2822.5	2987.7	3043.5	3053.4	3176.8	3298.3	3322.2
55°	10567.6	4458.7	2675.2	2667.3	2659.3	2882.2	2977.8	2993.7	3079.3	3174.9	3186.8
57°	10585.5	4444.8	2529.9	2537.9	2535.9	2774.8	2916.1	2949.9	2993.7	3075.3	3089.3
57.5°	10595.4	4454.7	2498.1	2502.1	2500.1	2744.9	2898.2	2936.0	2969.8	3055.4	3069.4
60°	10744.7	4480.6	2368.7	2324.9	2334.9	2585.7	2796.7	2844.4	2866.3	2979.8	2997.7
62.5°	10523.8	4365.2	2265.2	2159.7	2159.7	2418.5	2655.3	2731.0	2764.8	2918.1	2947.9
65°	9882.8	4040.7	2143.8	1972.6	1992.5	2251.3	2486.1	2609.5	2661.3	2852.4	2884.2
67.5°	8893.6	3664.5	2014.4	1805.4	1825.3	2076.1	2311.0	2444.3	2525.9	2780.7	2806.6
70°	7605.7	3204.7	1839.2	1628.2	1652.1	1885.0	2104.0	2255.2	2376.7	2713.1	2721.0
72.5°	5607.2	2627.5	1594.4	1433.2	1459.0	1662.1	1895.0	2070.1	2233.3	2543.9	2539.9
75°	3334.1	2054.2	1323.7	1236.1	1254.0	1443.1	1705.9	1918.8	2163.7	2478.2	2516.0
77.5°	2022.4	1546.6	1078.9	1035.1	1057.0	1250.0	1570.5	1797.4	2133.8	2336.9	2324.9
80°	1222.2	1104.7	861.9	834.0	855.9	1068.9	1453.1	1705.9	1865.1	1996.5	1996.5
82.5°	639.0	674.8	633.0	611.1	640.9	867.9	1321.7	1488.9	1648.1	1415.2	1321.7
85°	260.8	352.3	384.2	382.2	400.1	601.1	1140.6	1273.9	1062.9	1009.2	1033.1
87.5°	87.6	149.3	187.1	161.2	169.2	378.2	790.2	615.1	730.5	509.6	483.7
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)