

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: P322993

Luminaire Tested: **GAN-SA9A-827-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA9A-827-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22198 lumens
Efficiency: N/A
Efficacy: 76.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 290
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

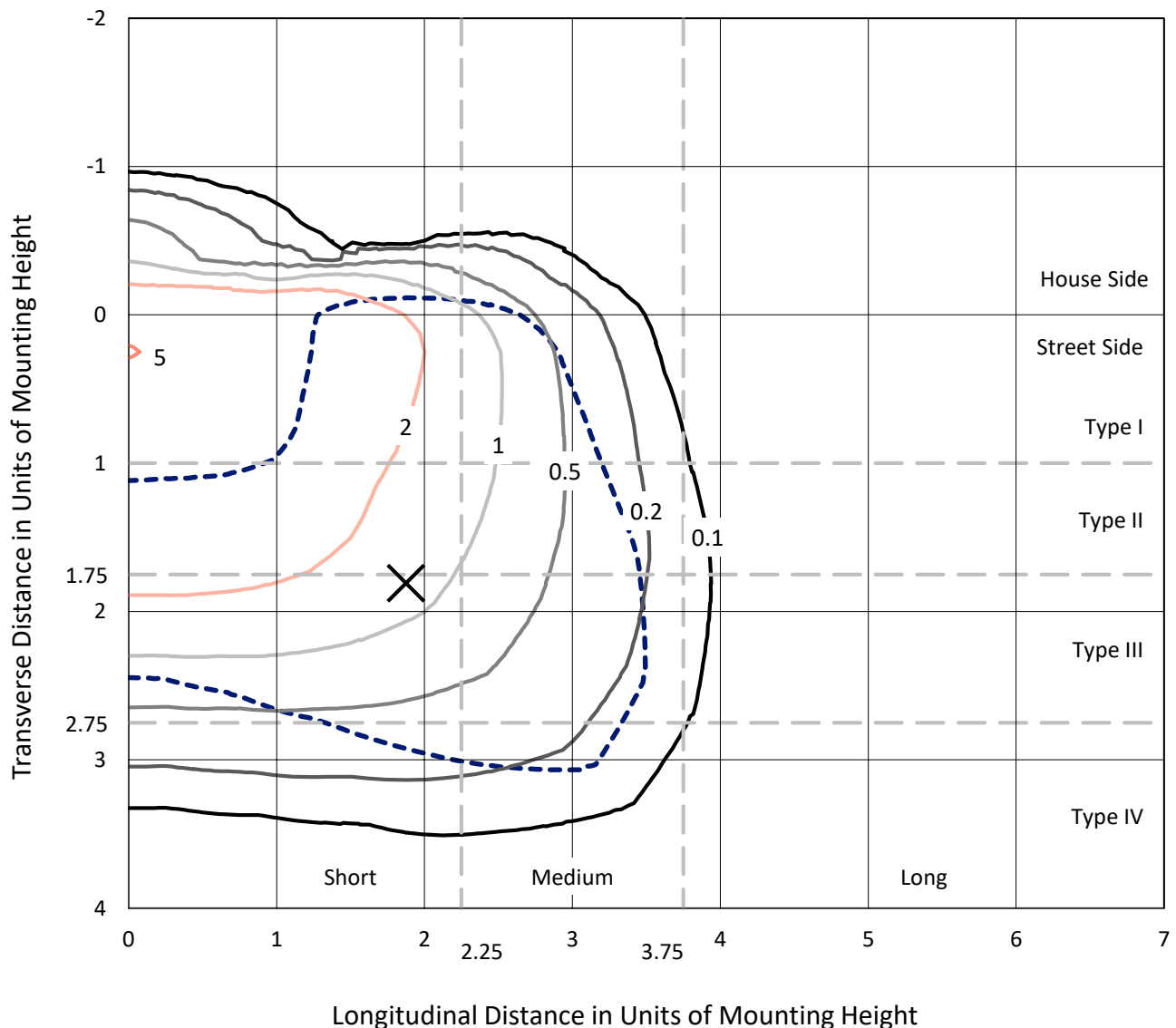


REPORT NUMBER: P322993
CATALOG NUMBER: GAN-SA9A-827-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

✗ Max cd

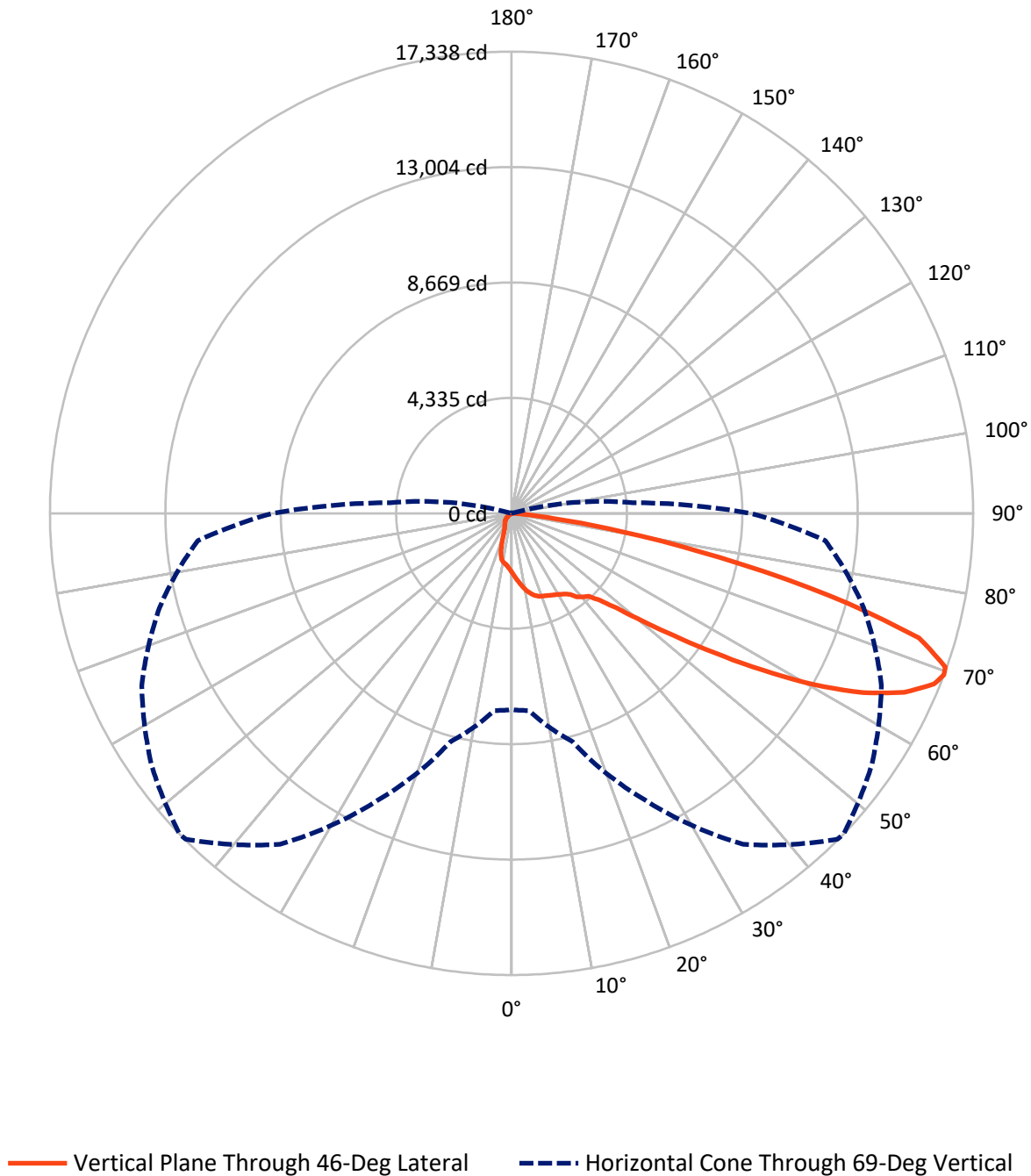
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
Type IV - Short - N/A

REPORT NUMBER: P322993
CATALOG NUMBER: GAN-SA9A-827-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P322993

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2278.1	0.0	2278.1
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	19919.9	0.0	19919.9
	% Fixture	89.7	0.0	89.7
Total	Lumens	22198.0	0.0	22198.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.4	1.0
10°-20°	671.6	3.0
20°-30°	1056.2	4.8
30°-40°	1514.6	6.8
40°-50°	2617.9	11.8
50°-60°	5171.8	23.3
60°-70°	7228.1	32.6
70°-80°	3491.9	15.7
80°-90°	224.4	1.0
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°	22198.0	100.0
0°-180°	22198.0	100.0

Coefficient of Utilization



REPORT NUMBER: P322993

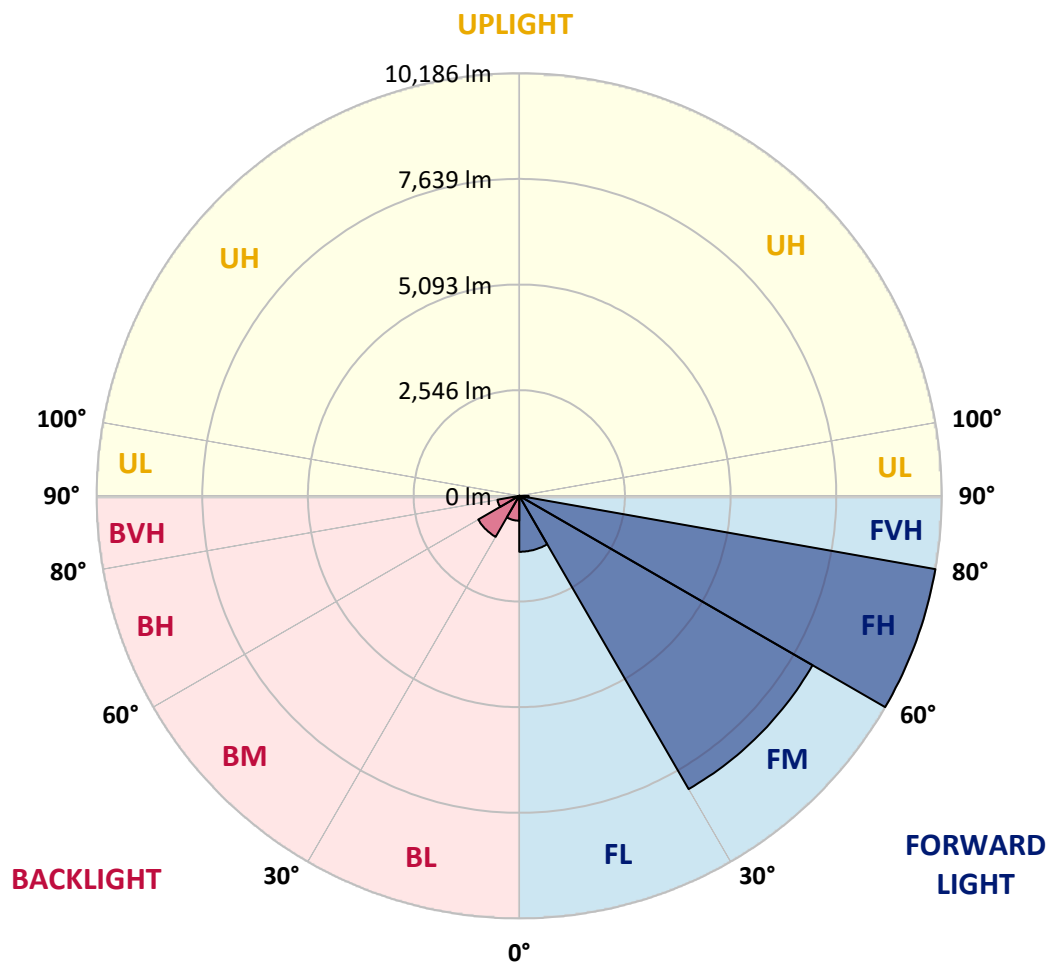
CATALOG NUMBER: GAN-SA9A-827-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1348.8	6.1			
FM	(30°-60°)	8162.7	36.8			
FH	(60°-80°)	10185.8	45.9			G4/12000
FVH	(80°-90°)	222.6	1.0			G2/225
BL	(0°-30°)	600.4	2.7	B2/1000		
BM	(30°-60°)	1141.6	5.1	B2/2500		
BH	(60°-80°)	534.2	2.4	B2/1000		G2/1000
BVH	(80°-90°)	1.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





REPORT NUMBER: P322993

CATALOG NUMBER: GAN-SA9A-827-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2
2.5°	2470.8	2467.7	2453.1	2446.9	2411.5	2390.7	2382.4	2356.3	2318.9	2281.4	2239.8
5°	2751.8	2750.8	2723.7	2697.7	2631.1	2568.7	2557.2	2496.8	2412.5	2333.4	2254.3
7.5°	3039.1	3025.6	2998.5	2948.5	2851.7	2751.8	2742.5	2657.1	2537.4	2422.9	2309.5
10°	3282.6	3274.3	3238.9	3162.9	3049.5	2936.1	2924.6	2819.5	2684.2	2543.7	2399.0
12.5°	3472.1	3465.8	3419.0	3324.3	3203.5	3085.9	3070.3	2976.6	2832.0	2674.8	2504.1
15°	3587.6	3584.5	3527.2	3426.3	3307.6	3205.6	3192.1	3109.9	2975.6	2811.2	2618.6
17.5°	3614.6	3615.7	3556.4	3454.4	3356.5	3283.7	3273.3	3210.8	3098.4	2935.0	2733.1
20°	3554.3	3566.8	3513.7	3425.2	3364.9	3326.3	3318.0	3280.6	3185.8	3031.8	2824.7
22.5°	3468.9	3475.2	3438.8	3379.4	3354.4	3361.7	3357.6	3336.8	3256.6	3115.1	2915.2
25°	3416.9	3416.9	3395.0	3345.1	3361.7	3406.5	3407.5	3403.4	3339.9	3217.1	3025.6
27.5°	3414.8	3408.6	3383.6	3346.1	3391.9	3460.6	3464.8	3492.9	3453.3	3340.9	3162.9
30°	3498.1	3490.8	3437.7	3388.8	3447.1	3521.0	3531.4	3592.8	3573.0	3475.2	3315.9
32.5°	3692.7	3666.7	3549.1	3468.9	3512.6	3601.1	3614.6	3712.5	3743.7	3640.7	3463.7
35°	3959.1	3876.9	3707.3	3620.9	3625.1	3717.7	3730.2	3873.8	3966.4	3792.6	3578.2
37.5°	4326.5	4286.0	4010.1	3779.1	3797.8	3938.3	3974.8	4130.9	4104.9	3875.9	3708.3
40°	5132.1	5068.6	4775.1	4222.5	3963.3	4117.3	4128.8	4212.1	4214.1	4064.3	3978.9
42.5°	6229.1	6203.1	5894.0	5027.0	4289.1	4237.0	4257.8	4398.4	4555.5	4461.8	4457.7
45°	7443.7	7430.2	7102.3	6094.8	4947.9	4629.4	4655.4	4843.8	5144.6	5165.4	5297.6
47.5°	8421.0	8414.7	8226.4	7286.5	5956.4	5294.5	5302.8	5502.6	6031.3	6292.6	6503.9
50°	9311.9	9342.1	9193.3	8576.1	7330.2	6336.3	6316.5	6449.7	7299.0	7726.8	7989.1
52.5°	10550.4	10593.1	10175.8	9779.2	8771.7	7629.0	7613.3	7752.8	8822.7	9143.3	9190.1
55°	11644.3	11571.4	11241.5	11127.0	10529.6	9225.5	9221.4	9344.2	10296.5	10432.8	10519.2
57.5°	12127.2	12099.1	12258.4	12520.6	12370.8	11112.5	11103.1	11009.4	11615.2	11629.7	11895.1
60°	12432.2	12466.5	12954.6	13763.3	14137.0	13143.0	13082.7	12511.3	12874.5	12842.2	13126.4
62.5°	12203.2	12270.9	13149.3	14497.1	15458.8	14915.5	14830.1	13887.2	13950.7	13839.3	14103.7
65°	10987.6	11092.7	12532.1	14358.7	16114.5	16300.8	16214.4	15101.8	14805.2	14622.0	14475.2
67.5°	8921.6	8984.1	10486.9	13154.5	15818.9	17127.2	17109.5	16166.5	15450.4	14489.8	13351.2
69°	7372.9	7434.3	8881.0	11886.8	15168.4	17304.1	17338.4	16507.9	15327.6	13686.3	11829.6
70°	6244.7	6310.3	7658.1	10800.2	14413.8	17221.9	17283.3	16475.6	14975.8	12755.9	10494.2
72.5°	3275.3	3331.6	4714.8	7440.6	11750.5	15813.7	16000.0	15083.1	12694.4	9264.0	6205.2
75°	1029.3	1061.6	1841.1	3889.4	8045.3	12295.8	12338.5	11831.6	9014.2	5095.7	2584.3
77.5°	392.4	383.0	613.0	1433.2	4067.4	7742.4	8003.6	7393.7	4730.4	1801.6	596.4
80°	211.3	212.3	318.5	593.2	1740.2	3978.9	4199.6	3583.4	1680.9	562.0	137.4
82.5°	91.6	95.8	179.0	314.3	799.3	1467.5	1577.8	1313.5	642.2	377.8	51.0
85°	19.8	21.9	86.4	170.7	325.8	412.2	431.9	425.7	409.0	293.5	19.8
87.5°	0.0	0.0	38.5	61.4	82.2	93.7	82.2	107.2	225.9	197.7	10.4
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: P322993

CATALOG NUMBER: GAN-SA9A-827-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2	2224.2
2.5°	2226.2	2207.5	2175.2	2139.9	2114.9	2088.9	2068.0	2058.7	2048.3	2041.0	2050.3
5°	2222.1	2185.6	2123.2	2062.8	2019.1	1983.7	1954.6	1943.1	1931.7	1923.4	1922.3
7.5°	2258.5	2207.5	2111.8	2023.3	1955.6	1907.8	1868.2	1851.6	1838.0	1831.8	1826.6
10°	2328.2	2262.7	2134.6	2019.1	1931.7	1850.5	1765.2	1699.6	1656.9	1637.2	1629.9
12.5°	2418.8	2336.6	2178.4	2041.0	1914.0	1757.9	1576.8	1420.7	1319.7	1286.4	1266.6
15°	2524.9	2422.9	2235.6	2069.1	1849.5	1564.3	1257.3	1053.3	959.6	940.9	920.1
17.5°	2626.9	2514.5	2304.3	2074.3	1707.9	1250.0	921.1	782.7	746.2	758.7	761.9
20°	2716.4	2605.1	2371.9	2028.5	1450.9	937.7	712.9	678.6	692.1	716.1	720.2
22.5°	2807.0	2692.5	2434.4	1907.8	1122.0	711.9	642.2	650.5	664.0	688.0	692.1
25°	2917.3	2798.7	2492.7	1686.1	842.0	605.7	609.9	622.4	635.9	657.8	659.9
27.5°	3044.3	2932.9	2531.2	1397.8	624.5	556.8	570.3	589.1	602.6	623.4	627.6
30°	3212.9	3109.9	2543.7	1099.1	523.5	513.1	519.4	542.2	562.0	580.8	583.9
32.5°	3371.1	3284.7	2502.0	829.5	485.0	472.5	472.5	486.0	508.9	526.6	530.8
35°	3516.8	3460.6	2368.8	606.8	455.9	435.0	424.6	424.6	439.2	453.8	457.9
37.5°	3709.4	3707.3	2153.4	484.0	427.8	403.8	382.0	365.3	360.1	363.2	365.3
40°	4039.3	4042.4	1872.4	434.0	403.8	371.6	338.3	308.1	280.0	270.6	269.6
42.5°	4554.5	4507.6	1577.8	410.1	383.0	338.3	288.3	247.7	204.0	190.5	189.4
45°	5372.5	5094.6	1265.6	388.2	361.2	300.8	238.3	183.2	147.8	137.4	137.4
47.5°	6564.2	5865.9	980.4	364.3	332.0	258.1	180.1	132.2	108.2	103.0	104.1
50°	7796.5	6621.5	751.4	334.1	296.6	213.4	133.2	95.8	82.2	82.2	83.3
52.5°	8889.3	7175.2	586.0	301.8	252.9	167.6	101.0	74.9	68.7	67.7	68.7
55°	9912.4	7532.2	448.6	264.4	200.9	124.9	77.0	61.4	57.2	55.2	54.1
57.5°	10899.1	7709.1	336.2	213.4	145.7	90.5	61.4	52.0	47.9	44.8	43.7
60°	11555.8	7565.5	231.1	157.2	101.0	65.6	51.0	44.8	39.5	36.4	35.4
62.5°	11926.4	7173.1	148.8	113.4	71.8	48.9	40.6	37.5	30.2	27.1	27.1
65°	11776.5	6525.7	104.1	81.2	52.0	36.4	30.2	30.2	21.9	17.7	16.7
67.5°	10435.9	5513.0	79.1	60.4	37.5	27.1	22.9	26.0	13.5	8.3	8.3
69°	8978.8	4569.0	67.7	50.0	31.2	21.9	19.8	23.9	9.4	6.2	5.2
70°	7803.8	3941.5	61.4	43.7	26.0	18.7	17.7	22.9	9.4	5.2	4.2
72.5°	4669.0	2198.1	46.8	31.2	16.7	14.6	14.6	26.0	9.4	5.2	4.2
75°	1886.9	774.3	34.3	21.9	12.5	12.5	17.7	33.3	8.3	4.2	3.1
77.5°	427.8	169.6	19.8	13.5	8.3	12.5	20.8	26.0	5.2	2.1	0.0
80°	104.1	41.6	12.5	8.3	5.2	9.4	15.6	14.6	1.0	0.0	0.0
82.5°	34.3	14.6	5.2	4.2	1.0	3.1	7.3	4.2	0.0	0.0	0.0
85°	14.6	8.3	2.1	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
87.5°	9.4	3.1	0.0	0.0	0.0	0.0	0.0	0.0	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)