

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: P835814

Luminaire Tested: **ARCH3-100-727-U-T2U**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P835814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-100-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 805mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15364 lumens
Efficiency: N/A
Efficacy: 149.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 102.6
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

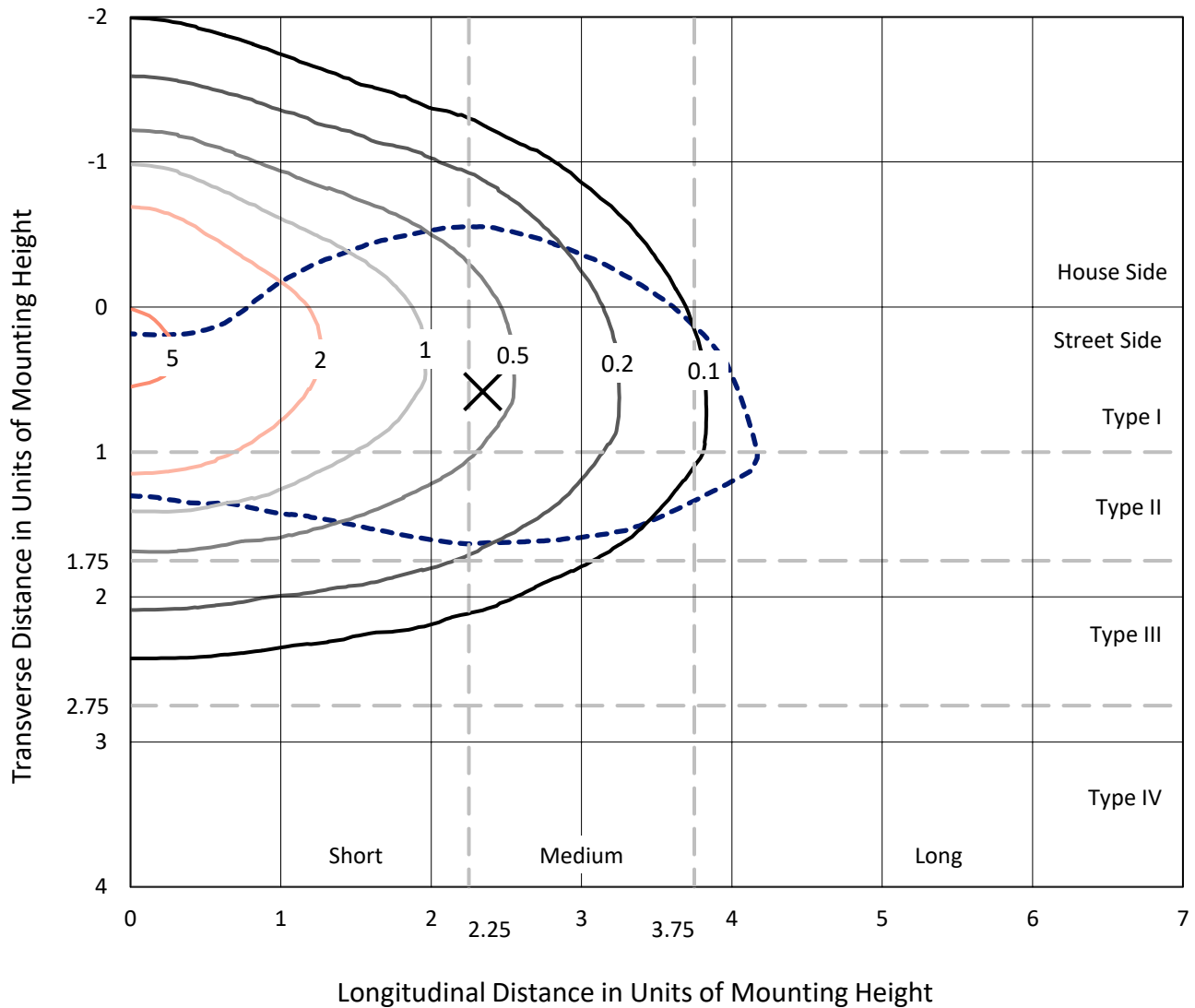


REPORT NUMBER: P835814

CATALOG NUMBER: ARCH3-100-727-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

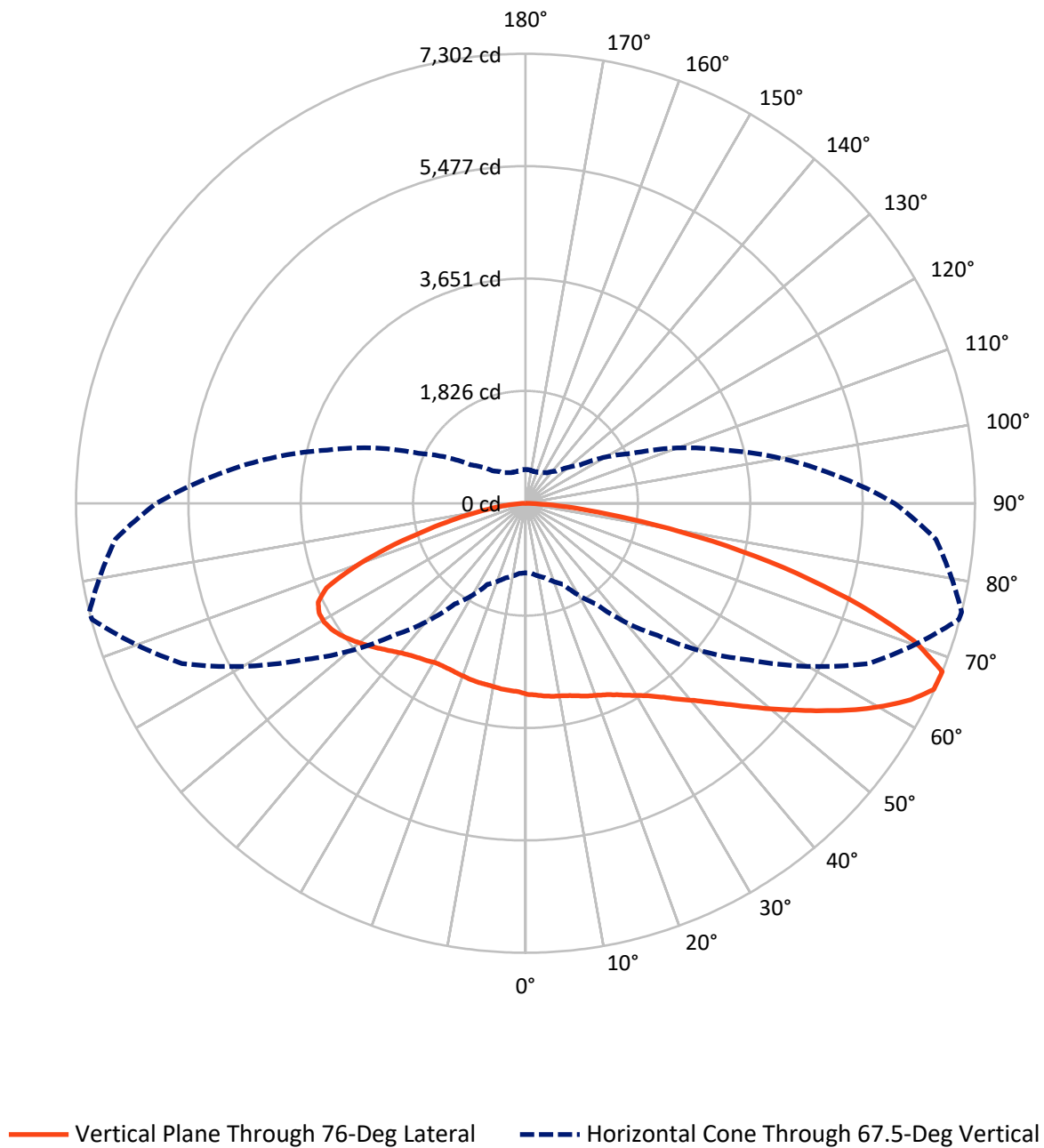


Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
Type II - Medium - N/A

REPORT NUMBER: P835814

CATALOG NUMBER: ARCH3-100-727-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P835814

CATALOG NUMBER: ARCH3-100-727-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5191.6	0.0	5191.6
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	10172.4	0.0	10172.4
	% Fixture	66.2	0.0	66.2
Total	Lumens	15364.0	0.0	15364.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.3	1.9
10°-20°	914.9	6.0
20°-30°	1554.4	10.1
30°-40°	2211.8	14.4
40°-50°	2793.4	18.2
50°-60°	3024.4	19.7
60°-70°	2813.0	18.3
70°-80°	1510.8	9.8
80°-90°	242.1	1.6
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°	15364.0	100.0
0°-180°	15364.0	100.0

Coefficient of Utilization



REPORT NUMBER: P835814

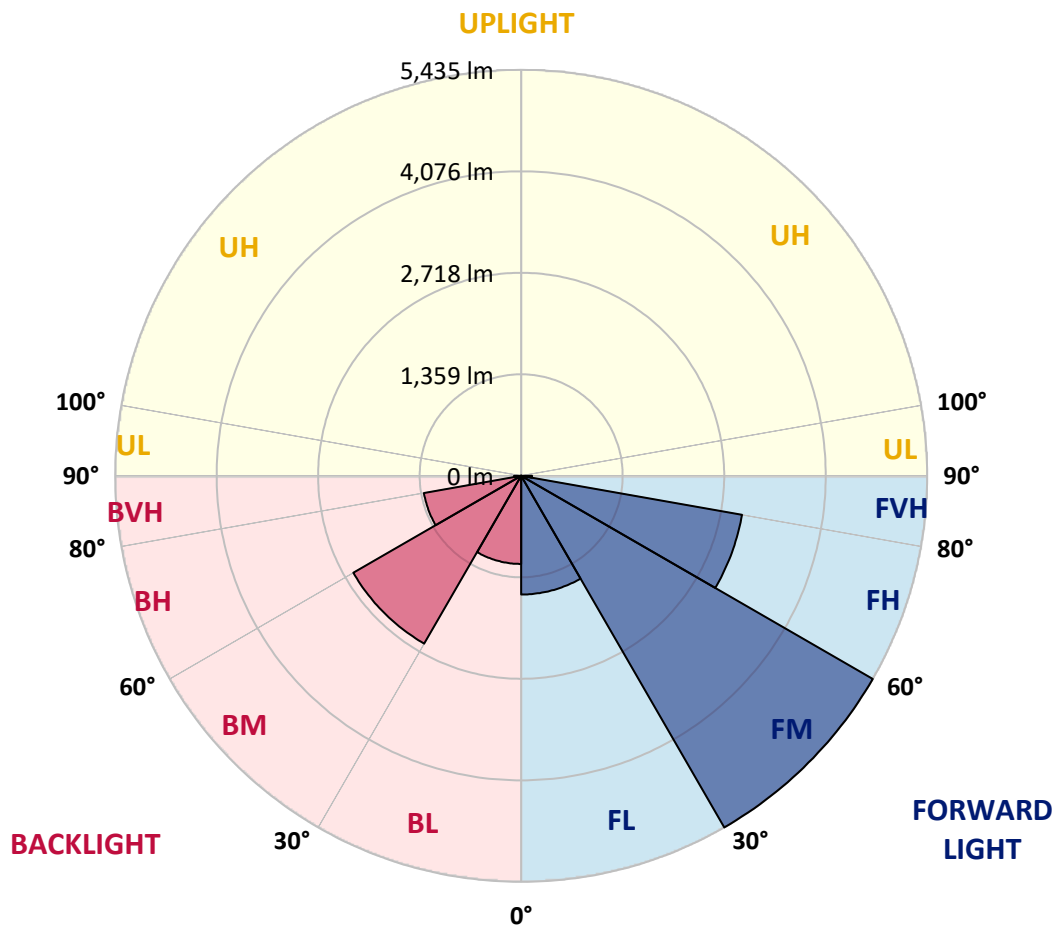
CATALOG NUMBER: ARCH3-100-727-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1588.8	10.3			
FM	(30°-60°)	5435.2	35.4			
FH	(60°-80°)	3002.0	19.5			G2/5000
FVH	(80°-90°)	146.4	1.0			G2/225
BL	(0°-30°)	1179.8	7.7	B3/2500		
BM	(30°-60°)	2594.3	16.9	B3/5000		
BH	(60°-80°)	1321.8	8.6	B3/2500		G3/2500
BVH	(80°-90°)	95.7	0.6			G1/100
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 Medium



REPORT NUMBER: P835814

CATALOG NUMBER: ARCH3-100-727-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5
2.5°	3197.6	3191.9	3169.1	3172.0	3172.0	3169.1	3134.9	3120.6	3120.6	3117.8	3086.4
5°	3311.7	3303.2	3277.5	3271.8	3260.4	3246.1	3191.9	3160.5	3146.3	3143.4	3100.6
7.5°	3445.8	3434.4	3403.0	3385.9	3357.4	3320.3	3251.8	3203.3	3169.1	3166.2	3106.3
10°	3579.9	3568.4	3531.4	3500.0	3460.1	3400.2	3311.7	3240.4	3186.2	3180.5	3109.2
12.5°	3739.6	3728.2	3682.5	3642.6	3582.7	3502.8	3385.9	3288.9	3214.7	3206.2	3117.8
15°	3907.9	3890.8	3845.1	3799.5	3725.3	3622.6	3482.9	3354.5	3260.4	3246.1	3143.4
17.5°	4047.7	4024.8	3987.8	3942.1	3859.4	3739.6	3579.9	3420.1	3303.2	3291.8	3169.1
20°	4167.5	4150.4	4110.4	4067.6	3979.2	3848.0	3671.1	3485.7	3343.1	3328.8	3189.1
22.5°	4281.6	4258.7	4235.9	4204.5	4107.6	3962.1	3776.7	3565.6	3394.4	3377.3	3214.7
25°	4412.8	4387.1	4378.6	4361.4	4247.3	4099.0	3905.0	3665.4	3465.8	3445.8	3260.4
27.5°	4575.4	4546.8	4529.7	4529.7	4392.8	4238.8	4042.0	3782.4	3548.5	3531.4	3317.4
30°	4746.5	4712.3	4686.6	4686.6	4532.6	4378.6	4176.0	3899.3	3642.6	3622.6	3391.6
32.5°	4897.7	4863.5	4834.9	4832.1	4672.4	4518.3	4315.8	4027.7	3756.7	3731.0	3482.9
35°	5014.7	4983.3	4957.6	4963.3	4812.1	4660.9	4472.7	4198.8	3899.3	3870.8	3602.7
37.5°	5086.0	5074.6	5060.3	5080.3	4940.5	4797.9	4635.3	4364.3	4061.9	4036.3	3751.0
40°	5123.0	5114.5	5171.5	5197.2	5048.9	4920.5	4797.9	4535.4	4238.8	4210.3	3922.2
42.5°	5177.2	5248.6	5271.4	5265.7	5128.8	5014.7	4946.2	4720.8	4447.0	4421.3	4127.5
45°	4983.3	4966.2	5091.7	5160.1	5134.5	5074.6	5086.0	4943.3	4689.5	4663.8	4364.3
47.5°	4723.7	4700.9	4772.2	4940.5	5040.3	5097.4	5211.5	5174.4	4969.0	4946.2	4641.0
50°	4176.0	4207.4	4472.7	4698.0	4894.8	5091.7	5317.0	5422.6	5277.1	5254.3	4937.6
52.5°	3568.4	3599.8	3876.5	4395.7	4718.0	5048.9	5394.0	5670.7	5610.8	5585.1	5254.3
55°	3126.3	3194.8	3508.5	3885.1	4467.0	4914.8	5439.7	5924.6	5970.2	5947.4	5599.4
57.5°	2687.0	2738.4	2975.1	3308.9	4124.7	4680.9	5436.8	6161.3	6346.8	6323.9	5950.3
60°	2170.7	2236.3	2424.6	2784.0	3668.3	4401.4	5357.0	6346.8	6709.0	6691.9	6289.7
62.5°	1817.0	1837.0	1971.1	2282.0	3080.7	4047.7	5177.2	6446.6	7037.1	7025.6	6594.9
65°	1463.3	1466.2	1588.8	1848.4	2513.0	3608.4	4872.0	6409.5	7285.2	7290.9	6814.6
67.5°	1129.6	1143.8	1255.1	1451.9	1996.7	3037.9	4435.6	6158.5	7288.1	7302.3	6689.1
70°	781.6	793.0	961.3	1152.4	1543.2	2421.8	3845.1	5493.9	6689.1	6700.5	5995.9
72.5°	550.5	556.2	735.9	921.3	1206.6	1825.6	2901.0	4544.0	5702.1	5710.7	5043.2
75°	410.8	416.5	519.2	698.9	924.2	1263.6	1982.5	3480.0	4555.4	4555.4	3982.1
77.5°	291.0	293.8	336.6	482.1	616.1	852.9	1192.3	2279.1	3343.1	3348.8	2901.0
80°	196.8	199.7	219.6	325.2	385.1	462.1	647.5	1195.2	2108.0	2116.5	1842.7
82.5°	102.7	108.4	122.7	165.4	194.0	256.7	333.7	607.6	1166.7	1189.5	1106.8
85°	39.9	39.9	45.6	54.2	71.3	99.8	154.0	231.1	527.7	544.8	487.8
87.5°	14.3	14.3	17.1	17.1	20.0	22.8	25.7	34.2	59.9	59.9	57.0
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: P835814

CATALOG NUMBER: ARCH3-100-727-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5	3103.5
2.5°	3075.0	3075.0	3060.7	3066.4	3063.6	3057.9	3052.1	3060.7	3052.1	3032.2	3029.3
5°	3080.7	3075.0	3052.1	3049.3	3040.7	3029.3	3015.1	3020.8	3006.5	2989.4	2986.5
7.5°	3083.5	3072.1	3040.7	3029.3	3012.2	2989.4	2966.6	2966.6	2946.6	2929.5	2926.6
10°	3077.8	3063.6	3020.8	2998.0	2966.6	2932.3	2901.0	2892.4	2869.6	2849.6	2849.6
12.5°	3080.7	3060.7	3006.5	2969.4	2926.6	2883.9	2843.9	2832.5	2812.5	2792.6	2789.7
15°	3097.8	3069.3	3000.8	2952.3	2889.6	2841.1	2798.3	2789.7	2772.6	2758.3	2758.3
17.5°	3114.9	3077.8	2992.2	2923.8	2846.8	2792.6	2752.6	2752.6	2741.2	2732.7	2732.7
20°	3123.5	3080.7	2975.1	2883.9	2795.4	2738.4	2701.3	2707.0	2704.1	2701.3	2701.3
22.5°	3143.4	3086.4	2960.9	2846.8	2741.2	2681.3	2647.1	2655.7	2652.8	2652.8	2655.7
25°	3174.8	3100.6	2949.5	2812.5	2689.9	2624.3	2587.2	2592.9	2592.9	2592.9	2592.9
27.5°	3217.6	3129.2	2946.6	2781.2	2638.5	2564.4	2518.7	2518.7	2507.3	2510.2	2513.0
30°	3283.2	3183.4	2952.3	2752.6	2584.3	2490.2	2436.0	2427.5	2424.6	2430.3	2433.2
32.5°	3363.1	3257.5	2986.5	2732.7	2527.3	2407.5	2339.0	2336.2	2327.6	2327.6	2327.6
35°	3462.9	3328.8	3017.9	2729.8	2470.2	2319.1	2244.9	2236.3	2216.4	2207.8	2207.8
37.5°	3591.3	3440.1	3055.0	2709.9	2421.8	2233.5	2145.1	2116.5	2093.7	2090.9	2090.9
40°	3748.2	3565.6	3109.2	2687.0	2370.4	2145.1	2028.1	1979.6	1982.5	1993.9	1993.9
42.5°	3933.6	3719.6	3177.7	2675.6	2296.2	2053.8	1891.2	1834.1	1854.1	1865.5	1868.4
45°	4150.4	3902.2	3254.7	2661.4	2227.8	1951.1	1745.7	1674.4	1683.0	1685.8	1688.7
47.5°	4401.4	4104.7	3334.5	2650.0	2150.8	1822.7	1586.0	1491.8	1489.0	1471.9	1477.6
50°	4663.8	4318.6	3417.3	2630.0	2056.6	1671.6	1417.7	1306.4	1283.6	1257.9	1260.8
52.5°	4943.3	4538.3	3494.3	2598.6	1939.7	1517.5	1257.9	1138.1	1092.5	1064.0	1069.7
55°	5251.4	4763.6	3568.4	2550.1	1817.0	1363.5	1115.3	992.7	935.6	912.8	915.6
57.5°	5533.8	4980.4	3622.6	2490.2	1683.0	1223.7	989.8	870.0	832.9	830.1	832.9
60°	5807.6	5163.0	3645.5	2407.5	1546.0	1095.4	872.9	781.6	755.9	770.2	773.0
62.5°	6038.7	5279.9	3634.1	2296.2	1406.3	972.7	778.7	713.1	696.0	724.5	727.4
65°	6172.8	5317.0	3554.2	2136.5	1255.1	852.9	690.3	619.0	610.4	627.5	636.1
67.5°	5995.9	5086.0	3337.4	1916.9	1086.8	741.6	604.7	547.7	533.4	547.7	547.7
70°	5314.2	4407.1	2824.0	1568.9	901.4	633.2	524.9	484.9	473.5	484.9	482.1
72.5°	4427.0	3665.4	2224.9	1223.7	710.3	533.4	456.4	419.3	407.9	396.5	390.8
75°	3434.4	2784.0	1614.5	898.5	536.3	427.9	382.2	348.0	319.5	330.9	325.2
77.5°	2515.9	1953.9	1143.8	621.8	385.1	330.9	299.5	273.8	253.9	276.7	273.8
80°	1620.2	1263.6	764.5	416.5	265.3	231.1	219.6	205.4	225.3	293.8	299.5
82.5°	989.8	801.5	456.4	271.0	174.0	154.0	142.6	142.6	231.1	253.9	256.7
85°	442.1	425.0	248.2	139.8	97.0	88.4	79.9	102.7	94.1	68.5	71.3
87.5°	71.3	74.2	54.2	48.5	37.1	37.1	28.5	20.0	14.3	8.6	8.6
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)