

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: P840876

Luminaire Tested: **ARCH4-100-730-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840876
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-730-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17622 lumens
Efficiency: N/A
Efficacy: 170.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 103.1
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



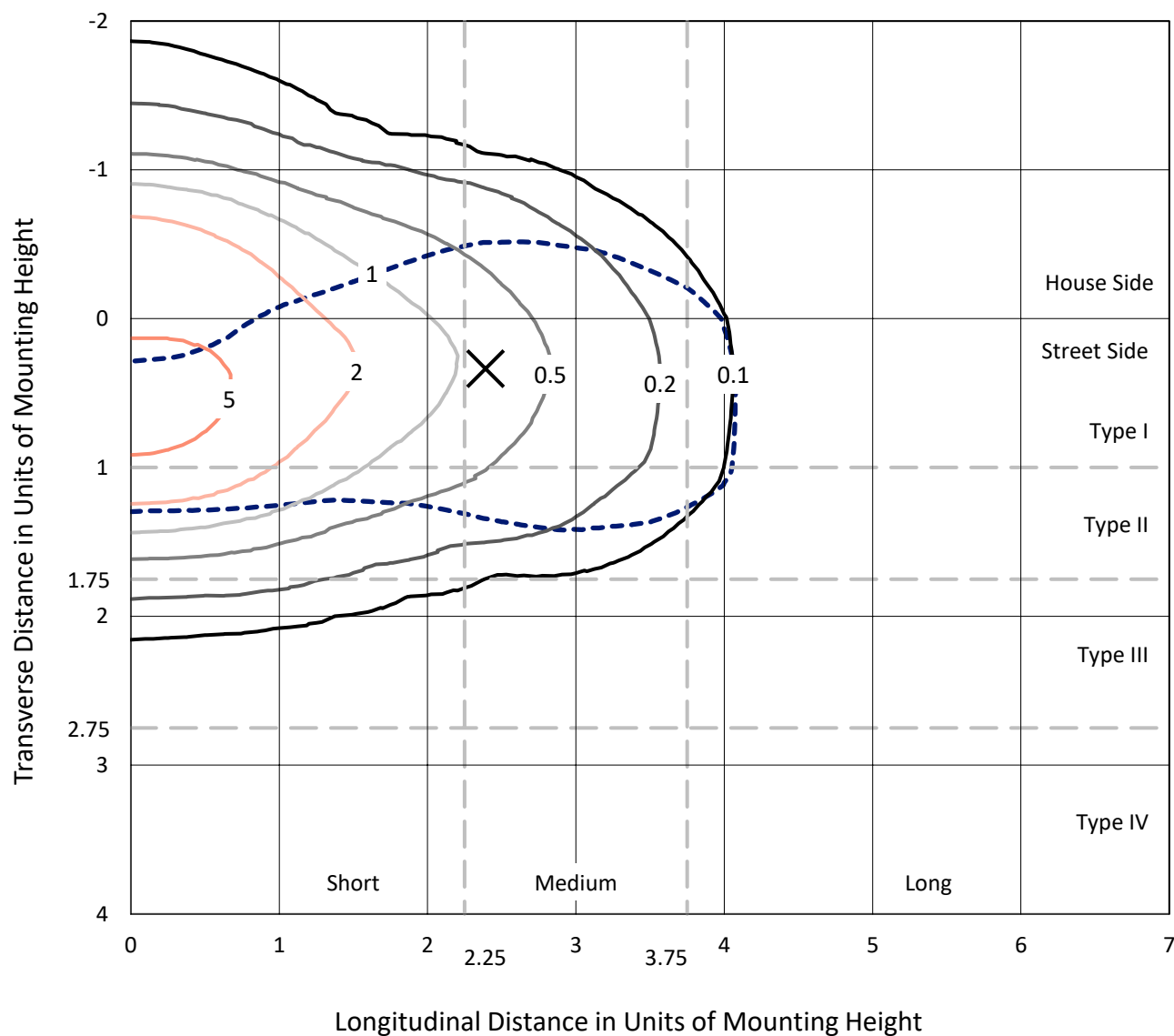
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

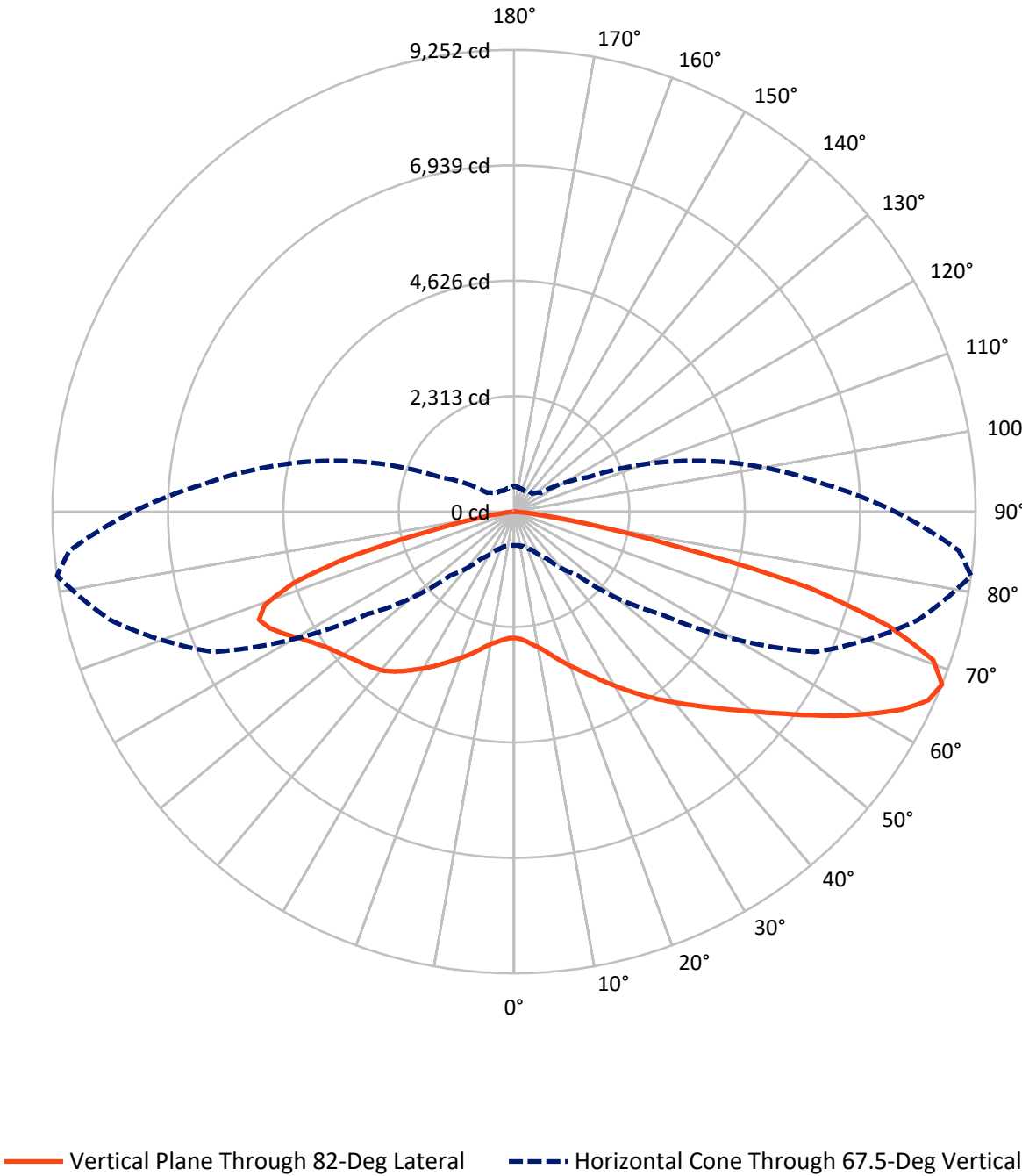
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5366.6	0.0	5366.6
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	12255.4	0.0	12255.4
	% Fixture	69.5	0.0	69.5
Total	Lumens	17622.0	0.0	17622.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.8	1.5
10°-20°	943.0	5.4
20°-30°	1895.2	10.8
30°-40°	2977.0	16.9
40°-50°	3626.6	20.6
50°-60°	3426.7	19.4
60°-70°	2829.7	16.1
70°-80°	1540.9	8.7
80°-90°	121.2	0.7
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°	17622.0	100.0
0°-180°	17622.0	100.0

Coefficient of Utilization



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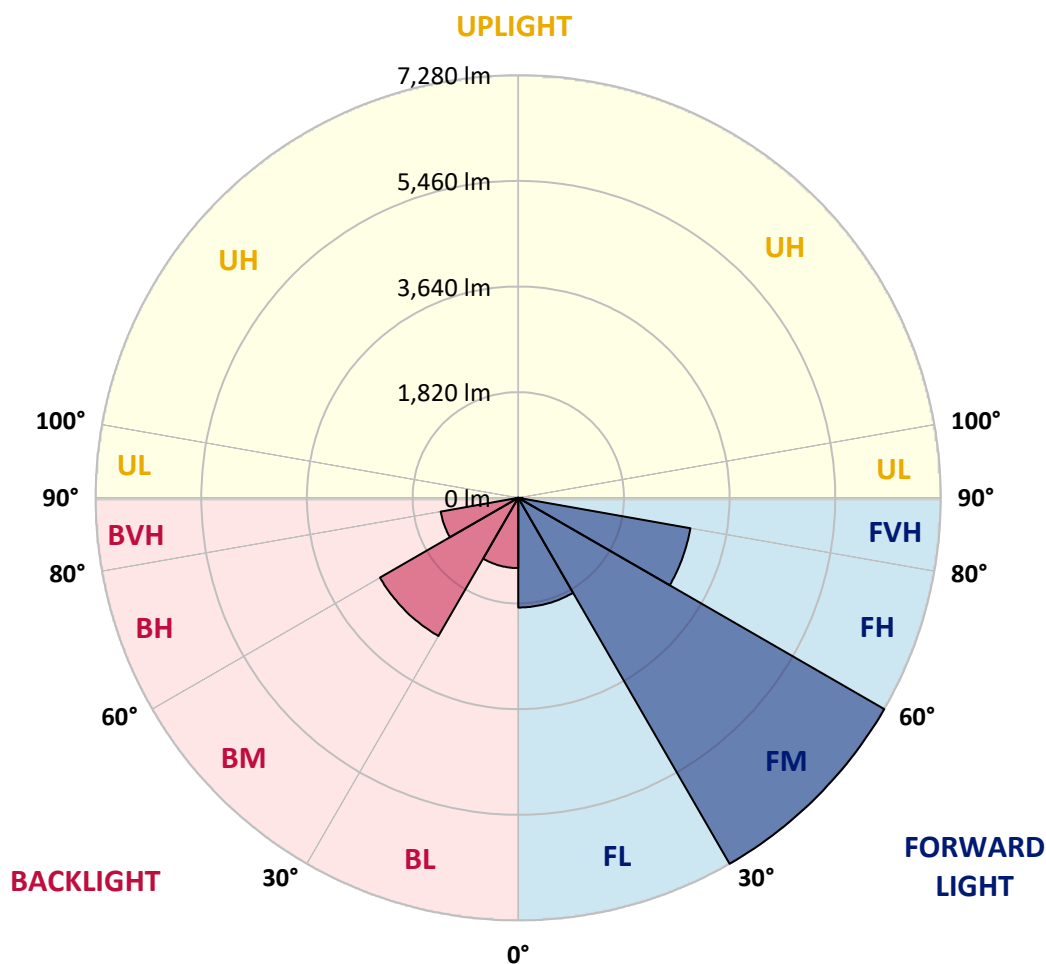
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1889.7	10.7			
FM	(30°-60°)	7280.4	41.3			
FH	(60°-80°)	3012.2	17.1			G2/5000
FVH	(80°-90°)	73.0	0.4			G1/100
BL	(0°-30°)	1210.2	6.9	B3/2500		
BM	(30°-60°)	2750.0	15.6	B3/5000		
BH	(60°-80°)	1358.3	7.7	B3/2500		G3/2500
BVH	(80°-90°)	48.1	0.3			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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2
2.5°	2648.3	2648.3	2668.8	2668.8	2650.9	2622.7	2615.0	2584.3	2556.2	2556.2	2558.7
5°	2901.6	2899.1	2914.4	2893.9	2850.4	2794.1	2755.8	2689.2	2632.9	2615.0	2612.5
7.5°	3211.2	3208.7	3216.3	3183.1	3101.2	3009.1	2932.3	2824.8	2732.7	2694.4	2684.1
10°	3556.6	3554.1	3546.4	3490.1	3380.1	3236.8	3121.7	2973.3	2835.1	2773.7	2760.9
12.5°	3953.3	3948.1	3930.2	3848.3	3697.4	3513.2	3346.8	3154.9	2970.7	2886.3	2858.1
15°	4395.9	4388.2	4355.0	4255.2	4053.0	3820.2	3605.3	3359.6	3134.5	3024.4	2986.1
17.5°	4861.6	4861.6	4810.4	4662.0	4436.9	4147.7	3881.6	3569.4	3305.9	3170.3	3124.2
20°	5335.0	5332.4	5268.4	5089.3	4823.2	4490.6	4152.8	3810.0	3482.4	3318.7	3262.4
22.5°	5833.9	5828.8	5749.5	5544.8	5227.5	4851.4	4457.3	4047.9	3676.9	3479.9	3408.2
25°	6407.1	6399.4	6302.2	6051.4	5675.3	5250.5	4800.2	4326.8	3899.5	3659.0	3574.6
27.5°	7016.1	7005.8	6890.7	6599.0	6187.0	5675.3	5178.9	4649.2	4145.2	3858.6	3763.9
30°	7558.5	7550.8	7425.5	7126.1	6652.7	6097.5	5539.7	4971.6	4403.6	4071.0	3953.3
32.5°	7967.9	7967.9	7855.3	7561.1	7069.8	6501.8	5903.0	5276.1	4672.3	4298.7	4160.5
35°	8216.1	8223.8	8126.6	7891.2	7428.0	6883.0	6279.1	5634.3	4958.8	4541.8	4393.4
37.5°	8251.9	8277.5	8221.2	8062.6	7676.2	7200.3	6647.6	5979.8	5255.7	4787.4	4621.1
40°	8085.6	8103.5	8106.1	8044.7	7778.6	7428.0	6972.6	6345.7	5570.4	5045.8	4853.9
42.5°	7753.0	7765.8	7788.8	7806.7	7704.4	7527.8	7220.8	6686.0	5905.6	5309.4	5084.2
45°	7323.1	7320.6	7358.9	7435.7	7430.6	7471.5	7358.9	6995.6	6253.6	5608.8	5340.1
47.5°	6680.9	6668.1	6803.7	6977.7	7064.7	7256.6	7361.5	7238.7	6632.3	5938.8	5631.8
50°	5675.3	5662.5	5959.3	6368.7	6624.6	6916.3	7220.8	7384.5	7028.9	6309.9	5949.1
52.5°	4452.2	4439.4	4815.6	5532.0	6089.8	6514.6	6936.7	7417.8	7405.0	6724.4	6307.3
55°	3311.0	3300.8	3666.7	4442.0	5345.2	6048.9	6588.8	7330.8	7758.1	7200.3	6742.3
57.5°	2333.6	2328.5	2645.7	3288.0	4388.2	5480.8	6253.6	7161.9	8083.1	7717.2	7233.6
60°	1637.6	1629.9	1860.2	2356.6	3318.7	4623.6	5920.9	6936.7	8326.1	8226.4	7755.5
62.5°	1102.8	1097.7	1261.5	1676.0	2356.6	3559.2	5416.9	6785.8	8464.3	8738.1	8282.6
65°	836.7	834.1	908.4	1136.1	1668.3	2556.2	4616.0	6767.9	8482.2	9121.9	8730.4
67.5°	675.5	678.1	719.0	849.5	1154.0	1816.7	3579.7	6655.3	8387.6	9252.4	8947.9
70°	552.7	552.7	570.6	657.6	852.1	1225.6	2499.9	6143.5	8124.0	8912.1	8689.5
72.5°	422.2	424.8	481.0	532.2	642.2	859.7	1601.8	5084.2	7502.2	7857.9	7689.0
75°	335.2	332.6	365.9	437.5	499.0	614.1	982.6	3646.2	6384.1	6141.0	6033.5
77.5°	240.5	238.0	263.6	325.0	378.7	435.0	586.0	1839.7	3472.2	3190.7	3111.4
80°	163.8	158.6	181.7	225.2	250.8	255.9	286.6	706.2	1514.8	1427.8	1409.9
82.5°	84.4	84.4	97.2	127.9	130.5	133.1	127.9	227.7	501.5	468.2	447.8
85°	33.3	33.3	35.8	43.5	43.5	46.1	46.1	58.9	53.7	51.2	48.6
87.5°	2.6	2.6	5.1	5.1	7.7	7.7	7.7	10.2	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2	2533.2
2.5°	2553.6	2543.4	2510.1	2502.4	2497.3	2489.7	2492.2	2474.3	2466.6	2469.2	2458.9
5°	2599.7	2581.8	2540.8	2522.9	2517.8	2510.1	2517.8	2505.0	2492.2	2497.3	2492.2
7.5°	2663.6	2638.1	2586.9	2569.0	2566.4	2558.7	2569.0	2558.7	2548.5	2553.6	2543.4
10°	2730.2	2696.9	2640.6	2622.7	2622.7	2620.2	2630.4	2615.0	2604.8	2607.4	2602.2
12.5°	2827.4	2783.9	2722.5	2707.1	2699.5	2707.1	2709.7	2689.2	2671.3	2673.9	2666.2
15°	2945.1	2896.5	2830.0	2806.9	2801.8	2799.3	2789.0	2763.4	2740.4	2737.9	2730.2
17.5°	3073.0	3011.6	2932.3	2909.3	2886.3	2878.6	2853.0	2819.7	2783.9	2783.9	2773.7
20°	3195.9	3126.8	3032.1	2998.8	2965.6	2934.9	2891.4	2837.6	2791.6	2783.9	2773.7
22.5°	3328.9	3247.0	3137.0	3088.4	3029.5	2968.1	2893.9	2822.3	2763.4	2750.6	2743.0
25°	3477.3	3375.0	3244.5	3172.8	3078.2	2983.5	2873.5	2781.4	2712.3	2691.8	2686.7
27.5°	3641.1	3518.3	3359.6	3254.7	3116.5	2968.1	2827.4	2717.4	2632.9	2607.4	2599.7
30°	3807.4	3661.6	3464.5	3311.0	3116.5	2919.5	2743.0	2615.0	2517.8	2482.0	2476.9
32.5°	3973.7	3810.0	3559.2	3341.7	3085.8	2837.6	2632.9	2482.0	2372.0	2328.5	2338.7
35°	4173.3	3973.7	3646.2	3354.5	3034.7	2737.9	2507.6	2331.0	2218.4	2180.0	2187.7
37.5°	4380.6	4137.5	3715.3	3344.3	2963.0	2625.3	2366.8	2195.4	2054.7	1988.1	1995.8
40°	4559.7	4285.9	3763.9	3308.5	2870.9	2497.3	2228.7	2003.5	1809.0	1745.1	1737.4
42.5°	4728.6	4395.9	3789.5	3254.7	2766.0	2348.9	2031.6	1742.5	1548.0	1468.7	1471.3
45°	4905.1	4503.4	3779.3	3183.1	2635.5	2174.9	1778.3	1486.6	1315.2	1243.5	1246.1
47.5°	5107.2	4618.5	3769.0	3106.3	2476.9	1949.8	1535.2	1261.5	1113.1	1061.9	1056.8
50°	5322.2	4746.5	3756.2	3011.6	2300.3	1699.0	1294.7	1051.6	926.3	893.0	885.3
52.5°	5565.3	4884.6	3748.6	2899.1	2087.9	1432.9	1079.8	867.4	783.0	759.9	757.4
55°	5857.0	5045.8	3758.8	2763.4	1832.1	1182.1	898.1	747.2	690.9	678.1	675.5
57.5°	6212.6	5253.1	3789.5	2604.8	1563.4	964.6	765.1	672.9	637.1	626.9	626.9
60°	6599.0	5488.5	3845.8	2425.7	1294.7	795.8	678.1	614.1	598.7	611.5	611.5
62.5°	7016.1	5764.8	3945.6	2208.2	1044.0	672.9	609.0	565.5	555.2	580.8	583.4
65°	7402.4	6033.5	4009.5	1947.2	829.0	583.4	555.2	516.9	522.0	547.6	545.0
67.5°	7640.4	6256.1	3920.0	1619.7	657.6	516.9	499.0	465.7	478.5	499.0	501.5
70°	7494.6	6130.7	3477.3	1223.1	514.3	450.3	437.5	417.1	427.3	452.9	463.1
72.5°	6780.7	5491.1	2704.6	826.5	414.5	378.7	383.8	373.6	386.4	409.4	432.4
75°	5503.9	4150.3	1814.1	529.7	327.5	322.4	330.1	322.4	327.5	350.5	363.3
77.5°	2873.5	2024.0	903.2	330.1	243.1	250.8	263.6	266.1	281.5	286.6	291.7
80°	1340.8	910.9	376.1	184.2	161.2	176.6	202.1	204.7	209.8	217.5	220.1
82.5°	437.5	273.8	174.0	99.8	92.1	99.8	130.5	156.1	158.6	174.0	174.0
85°	46.1	28.1	38.4	40.9	35.8	43.5	58.9	56.3	25.6	15.4	15.4
87.5°	12.8	10.2	12.8	12.8	10.2	10.2	7.7	2.6	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)