

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: P842743

Luminaire Tested: **ARCH4-90-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842743
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-90-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15486 lumens
Efficiency: N/A
Efficacy: 166.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G2

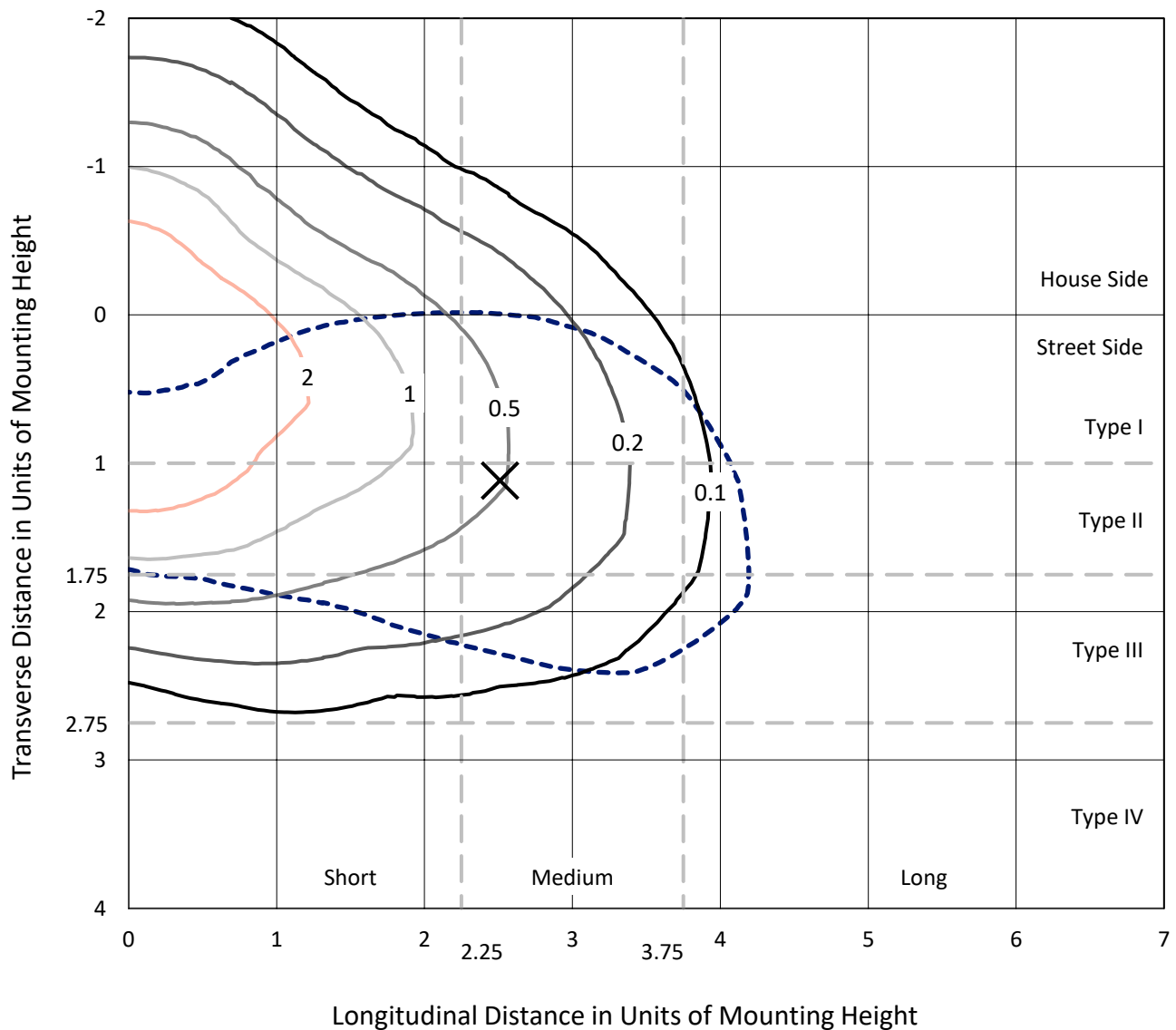
Input Watts (W): 93.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

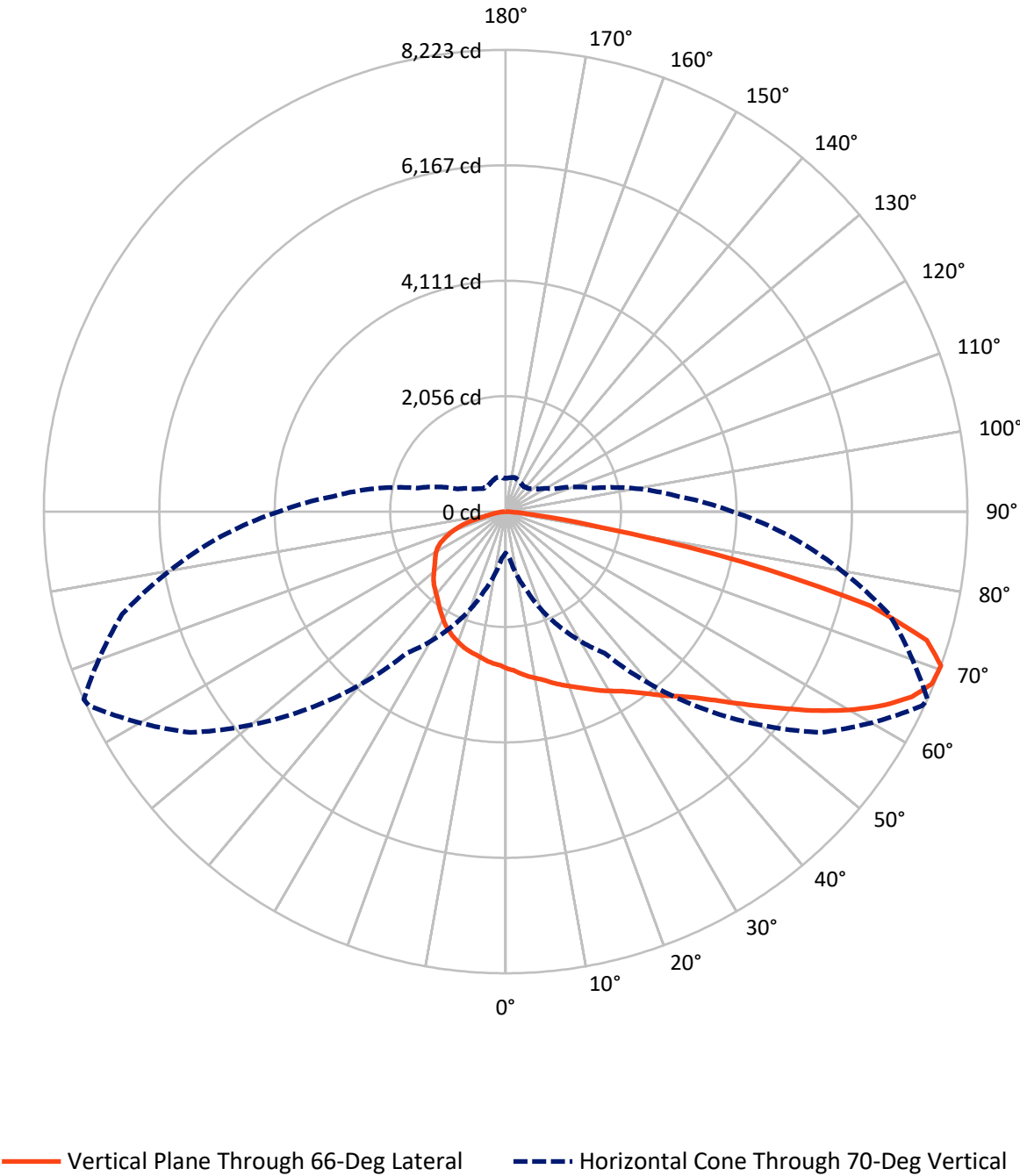
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4103.4	0.0	4103.4
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	11382.6	0.0	11382.6
	% Fixture	73.5	0.0	73.5
Total	Lumens	15486.0	0.0	15486.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.6	1.7
10°-20°	805.6	5.2
20°-30°	1350.4	8.7
30°-40°	2022.0	13.1
40°-50°	2703.4	17.5
50°-60°	3156.3	20.4
60°-70°	3138.5	20.3
70°-80°	1858.0	12.0
80°-90°	183.1	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°	15486.0	100.0
0°-180°	15486.0	100.0

Coefficient of Utilization



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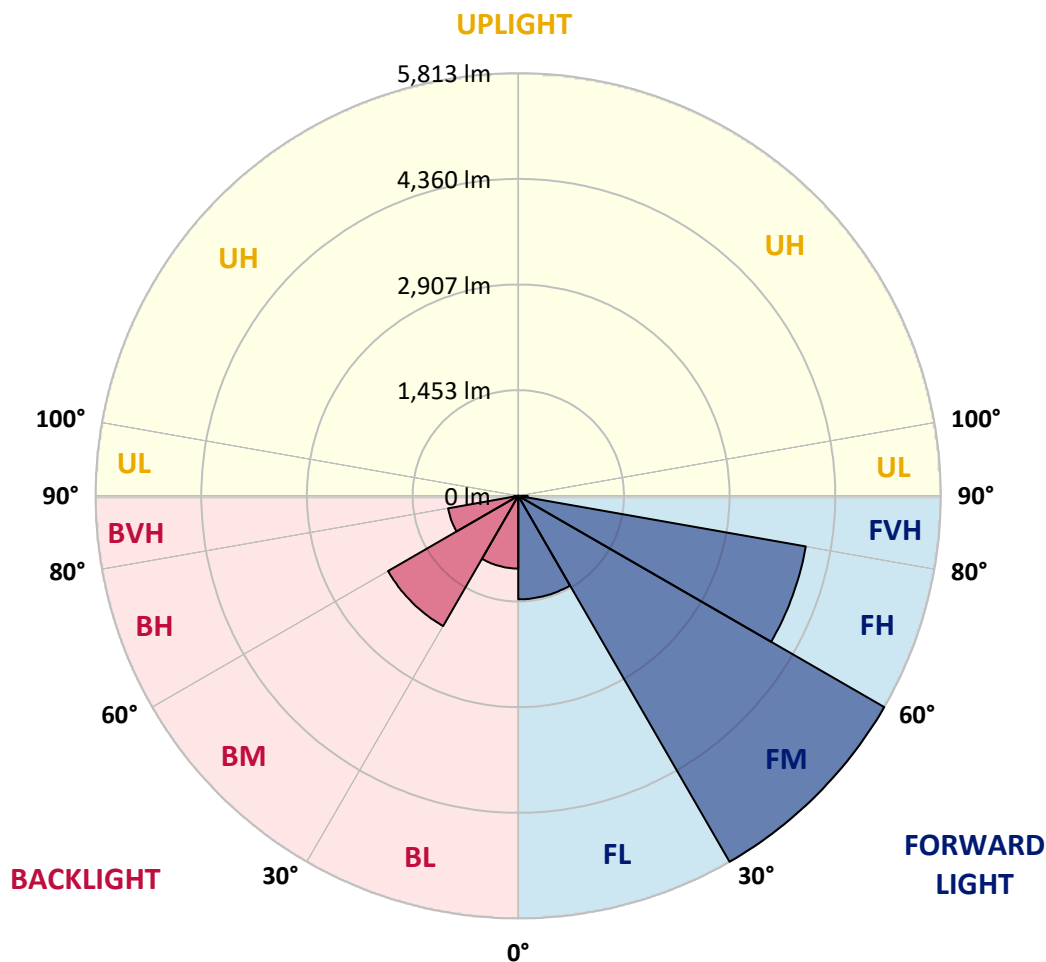
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1424.3	9.2			
FM	(30°-60°)	5813.2	37.5			
FH	(60°-80°)	4016.3	25.9			G2/5000
FVH	(80°-90°)	128.7	0.8			G2/225
BL	(0°-30°)	1000.2	6.5	B3/2500		
BM	(30°-60°)	2068.6	13.4	B2/2500		
BH	(60°-80°)	980.2	6.3	B2/1000		G2/1000
BVH	(80°-90°)	54.4	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9
2.5°	2897.6	2893.1	2890.8	2881.6	2861.1	2870.2	2849.7	2836.0	2833.7	2801.7	2783.5
5°	3016.4	3014.1	3009.5	2995.8	2963.8	2968.4	2934.2	2909.0	2902.2	2852.0	2813.1
7.5°	3116.8	3112.3	3110.0	3091.7	3057.5	3055.2	3014.1	2977.5	2966.1	2897.6	2838.3
10°	3194.5	3187.6	3192.2	3173.9	3137.4	3130.5	3078.0	3030.1	3018.6	2931.9	2849.7
12.5°	3260.7	3256.1	3263.0	3247.0	3217.3	3210.4	3157.9	3096.3	3082.6	2982.1	2874.8
15°	3333.8	3317.8	3331.5	3324.6	3304.1	3301.8	3253.8	3185.3	3167.1	3046.0	2913.6
17.5°	3372.6	3363.4	3379.4	3381.7	3372.6	3388.6	3342.9	3260.7	3244.7	3105.4	2947.9
20°	3400.0	3386.3	3404.5	3418.2	3425.1	3457.1	3420.5	3340.6	3322.3	3162.5	2979.8
22.5°	3493.6	3463.9	3466.2	3475.3	3479.9	3525.6	3502.7	3425.1	3406.8	3233.3	3018.6
25°	3728.8	3669.4	3630.6	3603.2	3571.2	3610.0	3596.3	3521.0	3505.0	3317.8	3066.6
27.5°	4094.1	4018.8	3941.1	3861.2	3735.6	3719.6	3696.8	3628.3	3610.0	3402.3	3114.5
30°	4509.7	4434.3	4343.0	4215.1	3980.0	3856.6	3804.1	3728.8	3708.2	3477.6	3160.2
32.5°	4923.0	4856.8	4765.4	4610.2	4274.5	4023.3	3911.4	3833.8	3813.3	3559.8	3215.0
35°	5244.9	5203.8	5144.5	4950.4	4566.8	4219.7	4066.7	3973.1	3950.3	3690.0	3315.5
37.5°	5505.3	5475.6	5425.3	5222.1	4779.1	4416.1	4244.8	4137.5	4112.4	3831.5	3422.8
40°	5888.9	5811.2	5770.1	5475.6	4964.1	4594.2	4445.8	4333.9	4306.5	3982.2	3509.6
42.5°	6215.4	6158.3	6108.1	5701.6	5139.9	4747.2	4635.3	4532.5	4496.0	4130.7	3603.2
45°	6270.2	6293.0	6267.9	5813.5	5418.5	4897.9	4827.1	4760.9	4726.6	4331.6	3744.8
47.5°	6272.5	6272.5	6124.1	5877.4	5763.3	5066.8	5032.6	5055.4	5018.9	4587.3	3913.7
50°	6108.1	6137.8	6060.1	5893.4	5854.6	5235.8	5283.8	5407.1	5370.5	4859.1	4096.4
52.5°	5767.8	5866.0	5863.7	5868.3	5722.2	5379.7	5548.6	5829.5	5767.8	5165.0	4290.5
55°	5167.3	5363.7	5539.5	5690.2	5608.0	5466.4	5872.9	6279.3	6215.4	5507.5	4486.9
57.5°	4653.6	4779.1	4998.3	5425.3	5473.3	5541.8	6176.6	6749.7	6692.6	5886.6	4692.4
60°	4066.7	4240.3	4459.5	5066.8	5308.9	5640.0	6509.9	7208.7	7153.9	6270.2	4891.0
62.5°	3164.8	3388.6	3827.0	4516.5	5069.1	5701.6	6772.5	7612.8	7587.7	6633.3	5069.1
65°	2205.8	2404.4	3018.6	3840.7	4687.8	5674.2	6982.6	7973.6	7950.8	6930.1	5194.7
67.5°	1287.8	1518.5	2212.6	3091.7	4014.2	5484.7	7051.1	8186.0	8186.0	7110.5	5229.0
70°	735.3	842.6	1459.1	2253.7	3078.0	4961.8	6859.3	8183.7	8222.5	7069.4	5087.4
72.5°	513.8	561.7	981.9	1516.2	2087.0	4014.2	6357.0	7788.6	7841.2	6681.2	4603.3
75°	399.6	433.8	691.9	1034.4	1315.2	2726.4	5258.6	6567.0	6706.3	5694.8	3721.9
77.5°	303.7	328.8	404.2	646.2	842.6	1566.4	3470.8	4306.5	4315.6	3486.7	1995.7
80°	221.5	246.6	269.4	395.0	447.5	733.0	1310.7	1799.3	1749.1	1687.4	1080.0
82.5°	132.4	157.6	164.4	214.6	219.2	312.8	459.0	580.0	557.1	742.1	506.9
85°	57.1	79.9	84.5	98.2	93.6	127.9	182.7	153.0	137.0	157.6	109.6
87.5°	13.7	22.8	22.8	25.1	20.6	32.0	34.3	25.1	22.8	27.4	27.4
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°	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9	2794.9
2.5°	2778.9	2772.0	2774.3	2735.5	2724.1	2712.7	2705.8	2701.3	2696.7	2703.5	2710.4
5°	2799.4	2783.5	2765.2	2708.1	2685.3	2660.2	2641.9	2625.9	2619.0	2619.0	2625.9
7.5°	2815.4	2788.0	2749.2	2673.9	2632.7	2598.5	2568.8	2548.3	2536.8	2536.8	2543.7
10°	2817.7	2778.9	2717.2	2625.9	2571.1	2520.9	2486.6	2463.8	2447.8	2447.8	2452.4
12.5°	2831.4	2778.9	2699.0	2589.4	2520.9	2459.2	2418.1	2383.9	2377.0	2377.0	2381.6
15°	2854.2	2790.3	2687.6	2557.4	2475.2	2404.4	2358.7	2322.2	2308.5	2317.6	2319.9
17.5°	2874.8	2797.2	2667.0	2516.3	2418.1	2340.5	2290.2	2258.3	2240.0	2260.6	2260.6
20°	2888.5	2797.2	2637.3	2463.8	2356.5	2269.7	2221.7	2182.9	2169.2	2194.3	2196.6
22.5°	2909.0	2794.9	2605.3	2411.3	2290.2	2198.9	2151.0	2121.3	2114.4	2141.8	2151.0
25°	2931.9	2799.4	2571.1	2351.9	2217.2	2128.1	2091.6	2077.9	2082.5	2116.7	2128.1
27.5°	2957.0	2808.6	2536.8	2285.7	2137.3	2057.3	2036.8	2043.6	2061.9	2105.3	2119.0
30°	2979.8	2810.9	2488.9	2208.0	2045.9	1970.6	1979.7	2009.4	2036.8	2080.2	2096.2
32.5°	3009.5	2813.1	2438.7	2123.6	1947.7	1892.9	1934.0	1982.0	2009.4	2050.5	2068.8
35°	3082.6	2852.0	2399.8	2041.4	1856.4	1826.7	1895.2	1956.9	1972.8	2009.4	2025.4
37.5°	3167.1	2915.9	2379.3	1956.9	1767.3	1760.5	1847.3	1908.9	1913.5	1936.3	1952.3
40°	3219.6	2943.3	2356.5	1886.1	1687.4	1692.0	1781.0	1829.0	1819.9	1835.8	1847.3
42.5°	3272.1	2952.4	2308.5	1826.7	1612.1	1616.6	1685.1	1719.4	1724.0	1758.2	1774.2
45°	3361.2	2977.5	2256.0	1771.9	1543.6	1527.6	1568.7	1614.4	1673.7	1739.9	1758.2
47.5°	3479.9	3030.1	2201.2	1705.7	1477.4	1424.8	1440.8	1520.7	1582.4	1644.0	1655.5
50°	3600.9	3082.6	2151.0	1625.8	1411.1	1315.2	1322.1	1395.2	1445.4	1493.3	1500.2
52.5°	3719.6	3128.2	2107.6	1550.4	1335.8	1185.1	1212.5	1287.8	1322.1	1344.9	1351.8
55°	3838.4	3167.1	2068.8	1486.5	1249.0	1082.3	1107.4	1178.2	1212.5	1223.9	1228.5
57.5°	3961.7	3212.7	2039.1	1431.7	1150.8	991.0	1007.0	1057.2	1089.2	1102.9	1098.3
60°	4064.4	3251.5	2023.1	1374.6	1052.6	906.5	901.9	947.6	993.3	1007.0	1002.4
62.5°	4144.4	3276.7	1998.0	1301.5	965.9	822.0	799.2	858.6	906.5	915.6	922.5
65°	4187.7	3278.9	1936.3	1207.9	876.8	730.7	714.7	774.1	803.8	812.9	812.9
67.5°	4180.9	3242.4	1815.3	1082.3	794.6	648.5	634.8	671.3	714.7	721.6	714.7
70°	4039.3	3091.7	1621.2	949.9	696.4	575.4	550.3	586.8	627.9	602.8	591.4
72.5°	3637.4	2701.3	1335.8	803.8	586.8	484.1	472.7	509.2	511.5	516.0	504.6
75°	2870.2	2011.7	1000.1	625.6	474.9	406.4	404.2	397.3	406.4	424.7	411.0
77.5°	1507.0	1004.7	541.2	383.6	344.8	326.5	310.5	308.3	335.7	347.1	333.4
80°	817.5	564.0	310.5	230.6	210.1	212.4	232.9	228.3	258.0	264.9	253.5
82.5°	356.2	267.2	153.0	139.3	139.3	137.0	143.9	159.8	191.8	191.8	153.0
85°	77.6	66.2	59.4	68.5	77.6	77.6	77.6	77.6	54.8	29.7	20.6
87.5°	25.1	25.1	25.1	27.4	29.7	29.7	25.1	18.3	11.4	2.3	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)