

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: P265722

Luminaire Tested: **ARCH-L-AF72-250-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265722
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24433 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 251
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: 28.75 FT

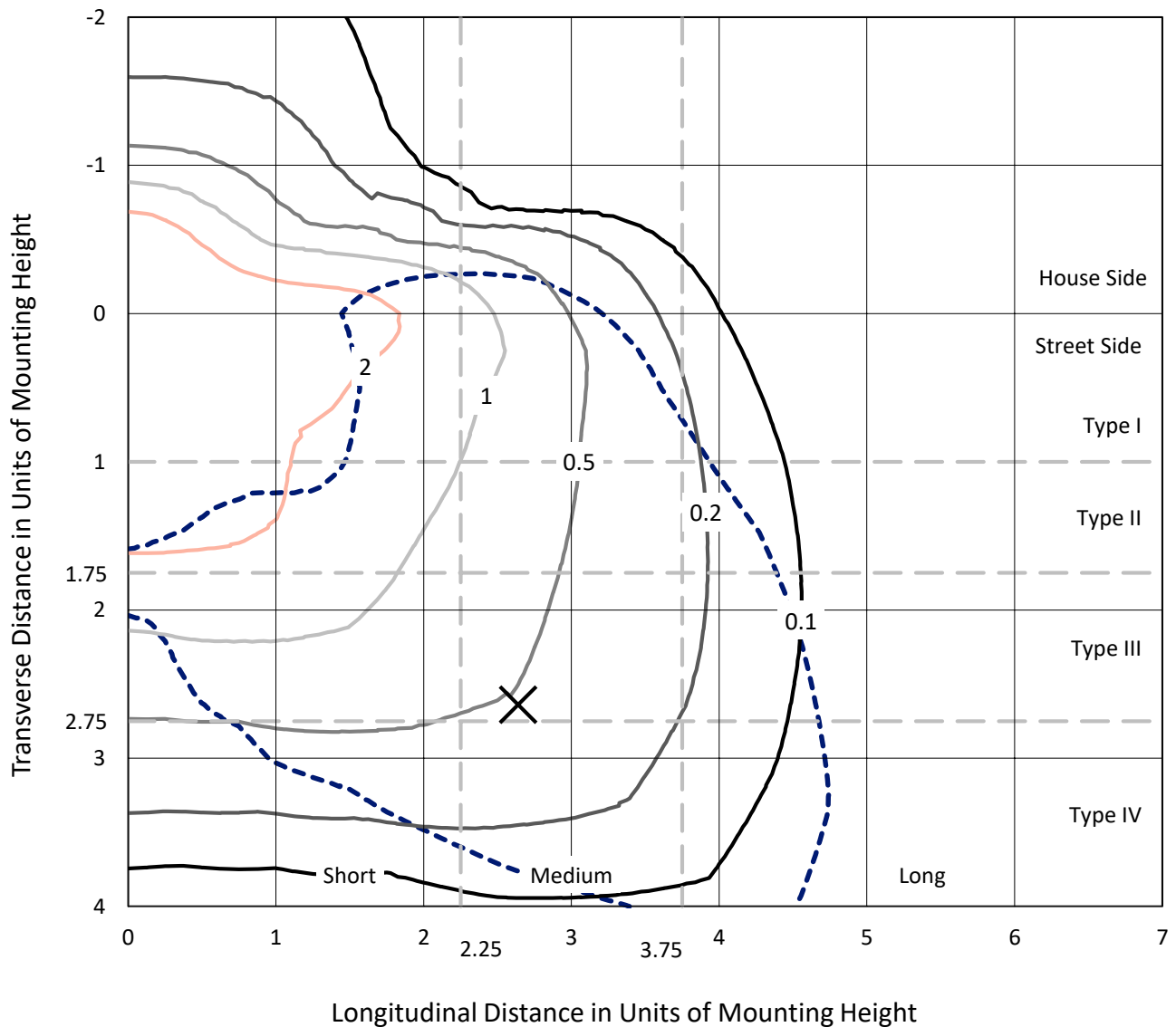


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

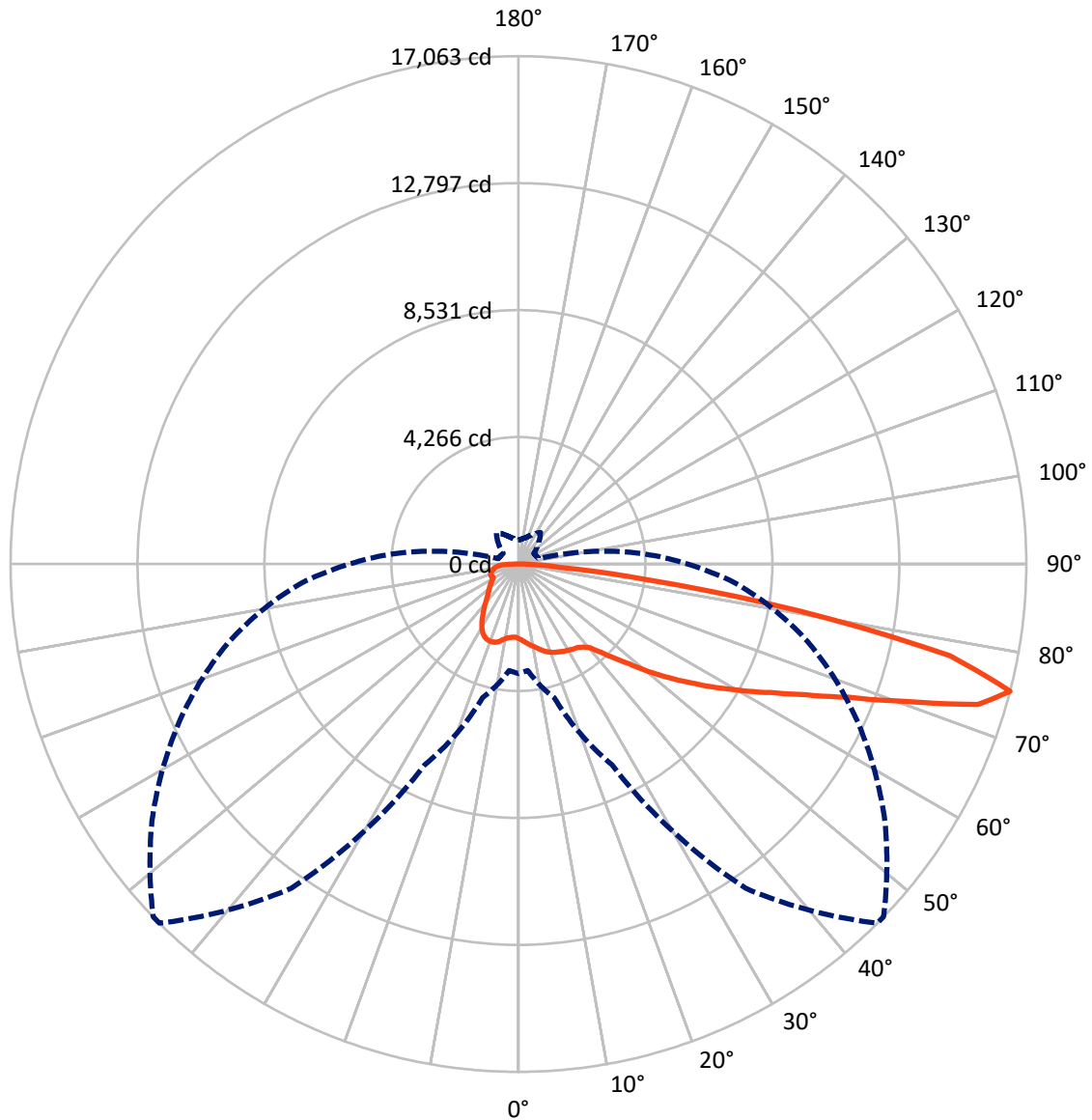


Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5660.1	0.0	5660.1
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	18772.9	0.0	18772.9
	% Fixture	76.8	0.0	76.8
Total	Lumens	24433.0	0.0	24433.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.2	1.0
10°-20°	804.4	3.3
20°-30°	1380.3	5.6
30°-40°	1930.5	7.9
40°-50°	2831.9	11.6
50°-60°	4411.3	18.1
60°-70°	6347.5	26.0
70°-80°	5529.4	22.6
80°-90°	949.6	3.9
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°	24433.0	100.0
0°-180°	24433.0	100.0

Coefficient of Utilization



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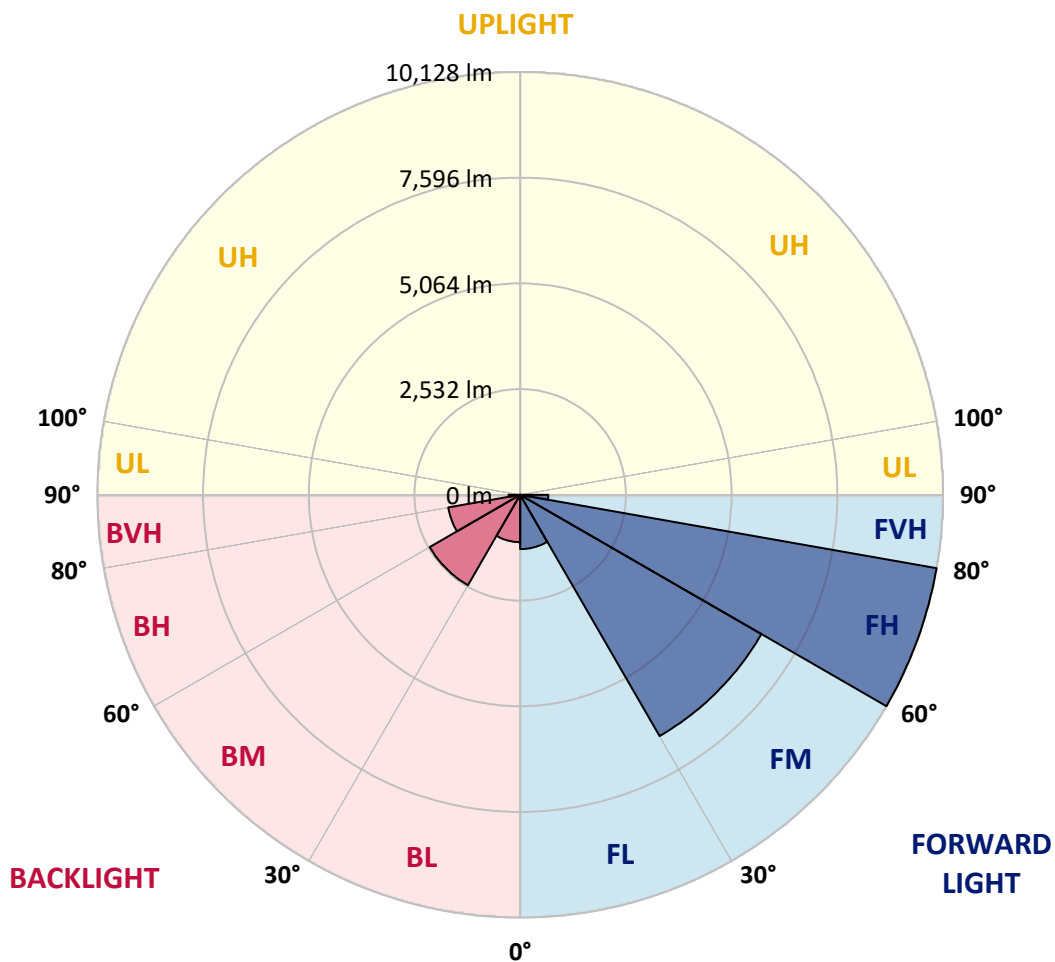
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1299.3	5.3			
FM	(30°-60°)	6672.2	27.3			
FH	(60°-80°)	10127.7	41.5			G4/12000
FVH	(80°-90°)	673.7	2.8			G4/750
BL	(0°-30°)	1133.6	4.6	B3/2500		
BM	(30°-60°)	2501.5	10.2	B3/5000		
BH	(60°-80°)	1749.1	7.2	B3/2500		G3/2500
BVH	(80°-90°)	275.9	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7
2.5°	2628.4	2609.2	2609.2	2595.1	2595.1	2571.3	2561.7	2557.0	2533.2	2518.9	2504.7
5°	2780.4	2756.5	2751.9	2718.6	2704.3	2652.1	2647.3	2614.1	2571.3	2528.5	2495.2
7.5°	2918.2	2904.0	2880.1	2846.9	2804.1	2737.7	2732.9	2680.6	2609.2	2552.3	2504.7
10°	3018.0	3008.6	2975.2	2932.4	2884.9	2818.4	2813.6	2756.5	2671.1	2604.5	2538.0
12.5°	3136.8	3122.6	3079.7	3022.7	2970.5	2908.7	2904.0	2856.4	2761.4	2675.8	2590.4
15°	3251.0	3231.9	3179.6	3122.6	3065.6	3013.3	3013.3	2961.1	2861.2	2761.4	2661.6
17.5°	3308.0	3298.4	3246.1	3184.4	3136.8	3098.9	3094.1	3046.5	2946.7	2842.1	2732.9
20°	3327.0	3331.8	3284.3	3217.6	3184.4	3165.4	3160.6	3127.4	3018.0	2918.2	2813.6
22.5°	3322.2	3336.5	3298.4	3227.2	3217.6	3217.6	3217.6	3179.6	3094.1	2994.3	2889.7
25°	3341.2	3360.2	3331.8	3246.1	3246.1	3265.2	3265.2	3246.1	3170.1	3084.6	2979.9
27.5°	3407.8	3422.1	3398.3	3279.4	3284.3	3312.7	3308.0	3312.7	3265.2	3184.4	3079.7
30°	3488.6	3507.6	3479.0	3331.8	3327.0	3355.4	3355.4	3379.2	3345.9	3260.4	3174.9
32.5°	3707.1	3702.5	3612.2	3388.8	3374.6	3403.0	3403.0	3426.8	3407.8	3341.2	3260.4
35°	4358.3	4287.0	4087.4	3574.0	3431.5	3445.8	3445.8	3488.6	3498.1	3445.8	3374.6
37.5°	5023.7	5000.0	4847.9	4068.5	3640.7	3536.1	3531.3	3593.1	3635.9	3593.1	3545.6
40°	5693.8	5674.9	5641.5	4729.0	4077.9	3697.8	3683.4	3735.7	3811.8	3783.2	3754.7
42.5°	6316.5	6307.0	6340.2	5380.2	4633.9	4044.7	4001.9	3940.1	4049.4	4039.9	4039.9
45°	6806.0	6829.8	6848.8	5988.6	5237.6	4491.3	4439.2	4229.9	4377.4	4415.3	4443.8
47.5°	7081.7	7100.7	7167.2	6582.6	5841.1	5009.5	4971.4	4629.2	4824.1	4938.2	5019.0
50°	7476.1	7424.0	7480.9	7162.5	6568.3	5684.4	5579.8	5166.3	5413.5	5613.1	5803.2
52.5°	7856.3	7770.9	7818.4	7832.6	7395.3	6345.0	6235.7	5798.4	6107.3	6421.1	6758.5
55°	8198.7	8193.8	8241.4	8483.8	8193.8	7053.1	6929.5	6497.1	6943.9	7281.3	7851.6
57.5°	8474.3	8521.9	8730.8	9239.4	9115.9	7823.1	7685.3	7309.8	7837.4	8174.8	9120.6
60°	8797.5	8873.5	9220.5	9881.0	9957.2	8631.0	8488.5	8217.6	8754.7	9096.9	10589.3
62.5°	8906.8	9016.1	9729.1	10556.1	10836.4	9515.0	9386.7	9206.2	9719.5	10028.4	12053.1
65°	8179.5	8388.7	10009.5	10903.0	11782.2	10579.8	10470.5	10313.6	10679.6	10884.0	13046.4
67.5°	7980.0	8075.0	9462.8	11401.9	12671.0	11948.5	11839.2	11568.4	11577.9	11492.2	13369.7
70°	7699.6	7804.1	8902.1	11777.5	13944.7	13821.1	13688.1	12889.6	12400.1	11882.1	12732.8
72.5°	6558.9	6525.6	7671.0	10765.1	14557.8	16140.6	15983.7	14310.7	13008.4	11544.6	10746.2
75°	3683.4	3588.4	4653.0	7447.7	13293.6	17062.5	17057.8	15028.4	12580.8	10057.0	7314.5
77.5°	1069.4	1040.9	1535.2	3122.6	8949.5	14824.0	15004.6	13555.1	10498.9	7224.3	4016.1
80°	503.8	513.3	660.7	1031.3	3821.3	9567.4	10085.5	8925.7	6273.8	3331.8	1658.7
82.5°	318.4	323.2	451.5	665.4	1616.0	4344.1	4771.8	4016.1	2485.7	1440.2	731.8
85°	199.7	199.7	299.4	437.2	964.8	1387.8	1506.6	1368.7	1064.6	784.2	399.2
87.5°	109.4	109.4	180.6	252.0	527.6	446.7	461.0	546.6	665.4	480.1	199.7
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°	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7	2504.7
2.5°	2500.0	2490.6	2476.2	2471.4	2466.7	2462.0	2466.7	2476.2	2466.7	2466.7	2471.4
5°	2485.7	2476.2	2457.3	2457.3	2462.0	2466.7	2490.6	2504.7	2509.4	2509.4	2509.4
7.5°	2485.7	2471.4	2457.3	2462.0	2471.4	2490.6	2528.5	2552.3	2571.3	2576.0	2576.0
10°	2509.4	2490.6	2480.9	2490.6	2518.9	2533.2	2571.3	2609.2	2633.0	2642.5	2642.5
12.5°	2552.3	2533.2	2533.2	2552.3	2590.4	2609.2	2642.5	2671.1	2699.5	2713.9	2713.9
15°	2623.6	2599.8	2604.5	2637.9	2680.6	2699.5	2723.3	2732.9	2756.5	2775.7	2775.7
17.5°	2690.1	2666.3	2675.8	2713.9	2742.3	2751.9	2766.2	2761.4	2770.9	2785.1	2789.9
20°	2766.2	2742.3	2747.1	2770.9	2775.7	2766.2	2766.2	2751.9	2747.1	2770.9	2780.4
22.5°	2842.1	2818.4	2813.6	2799.4	2775.7	2751.9	2737.7	2723.3	2713.9	2737.7	2747.1
25°	2932.4	2899.2	2875.5	2813.6	2751.9	2709.1	2690.1	2680.6	2675.8	2699.5	2709.1
27.5°	3032.3	2999.0	2927.8	2794.6	2694.8	2623.6	2609.2	2609.2	2618.7	2633.0	2642.5
30°	3127.4	3094.1	2965.8	2751.9	2595.1	2490.6	2476.2	2490.6	2514.3	2528.5	2542.7
32.5°	3222.4	3189.2	2989.5	2685.4	2447.7	2314.7	2305.1	2328.9	2366.9	2376.3	2385.9
35°	3350.8	3317.5	3018.0	2590.4	2262.3	2119.7	2110.3	2124.5	2157.8	2172.0	2186.3
37.5°	3531.3	3512.4	3060.9	2485.7	2091.3	1934.4	1905.8	1896.4	1915.4	1910.7	1929.6
40°	3769.0	3783.2	3136.8	2347.9	1924.9	1763.4	1701.5	1673.1	1654.0	1616.0	1634.9
42.5°	4115.9	4125.5	3222.4	2191.1	1782.2	1601.7	1520.9	1468.5	1430.6	1368.7	1378.3
45°	4624.5	4543.6	3322.2	2024.7	1654.0	1473.4	1378.3	1316.6	1264.3	1212.0	1216.8
47.5°	5299.5	5052.2	3431.5	1886.9	1525.6	1368.7	1283.3	1212.0	1150.2	1107.4	1112.1
50°	6131.1	5684.4	3540.8	1758.5	1397.4	1288.0	1212.0	1135.9	1074.2	1031.3	1026.7
52.5°	7229.0	6444.8	3612.2	1616.0	1268.9	1216.8	1150.2	1078.9	1002.9	950.5	945.8
55°	8369.7	7328.8	3673.9	1444.8	1145.3	1135.9	1102.7	1021.8	931.5	865.0	855.5
57.5°	9624.4	8274.6	3721.5	1278.5	1050.4	1069.4	1059.9	964.8	865.0	803.3	798.5
60°	10765.1	9253.7	3569.3	1131.1	964.8	1002.9	1012.3	931.5	879.4	893.5	898.2
62.5°	11915.3	10009.5	2989.5	1021.8	907.7	960.1	1040.9	1036.1	1012.3	1036.1	1040.9
65°	12328.8	10166.3	2119.7	931.5	850.8	979.2	1131.1	1121.7	1012.3	969.6	960.1
67.5°	12095.9	9700.4	1425.8	860.2	807.9	1002.9	1226.2	1121.7	974.3	917.3	898.2
70°	10988.4	8555.1	1045.5	789.0	769.9	998.0	1278.5	1117.0	955.3	893.5	869.7
72.5°	8764.1	6601.6	841.3	722.4	713.0	974.3	1307.0	1107.4	936.4	869.7	841.3
75°	5674.9	4106.4	708.1	655.9	627.3	936.4	1292.8	1078.9	912.6	827.0	807.9
77.5°	2633.0	1768.0	603.7	579.9	546.6	879.4	1250.0	1021.8	860.2	779.5	755.7
80°	1226.2	836.5	508.5	503.8	489.5	831.7	1192.9	955.3	798.5	731.8	693.9
82.5°	655.9	503.8	413.5	413.5	427.8	774.7	1121.7	874.5	717.7	684.4	584.5
85°	346.9	290.0	299.4	323.2	366.0	684.4	1026.7	789.0	627.3	522.9	508.5
87.5°	175.9	185.4	185.4	218.6	280.5	556.1	846.1	651.1	532.3	427.8	418.3
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)