

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: P237088

Luminaire Tested: **ARCH-L-AF72-150-D-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237088  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-150-D-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20498.9 lumens  
Efficiency: N/A  
Efficacy: 134.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 153  
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

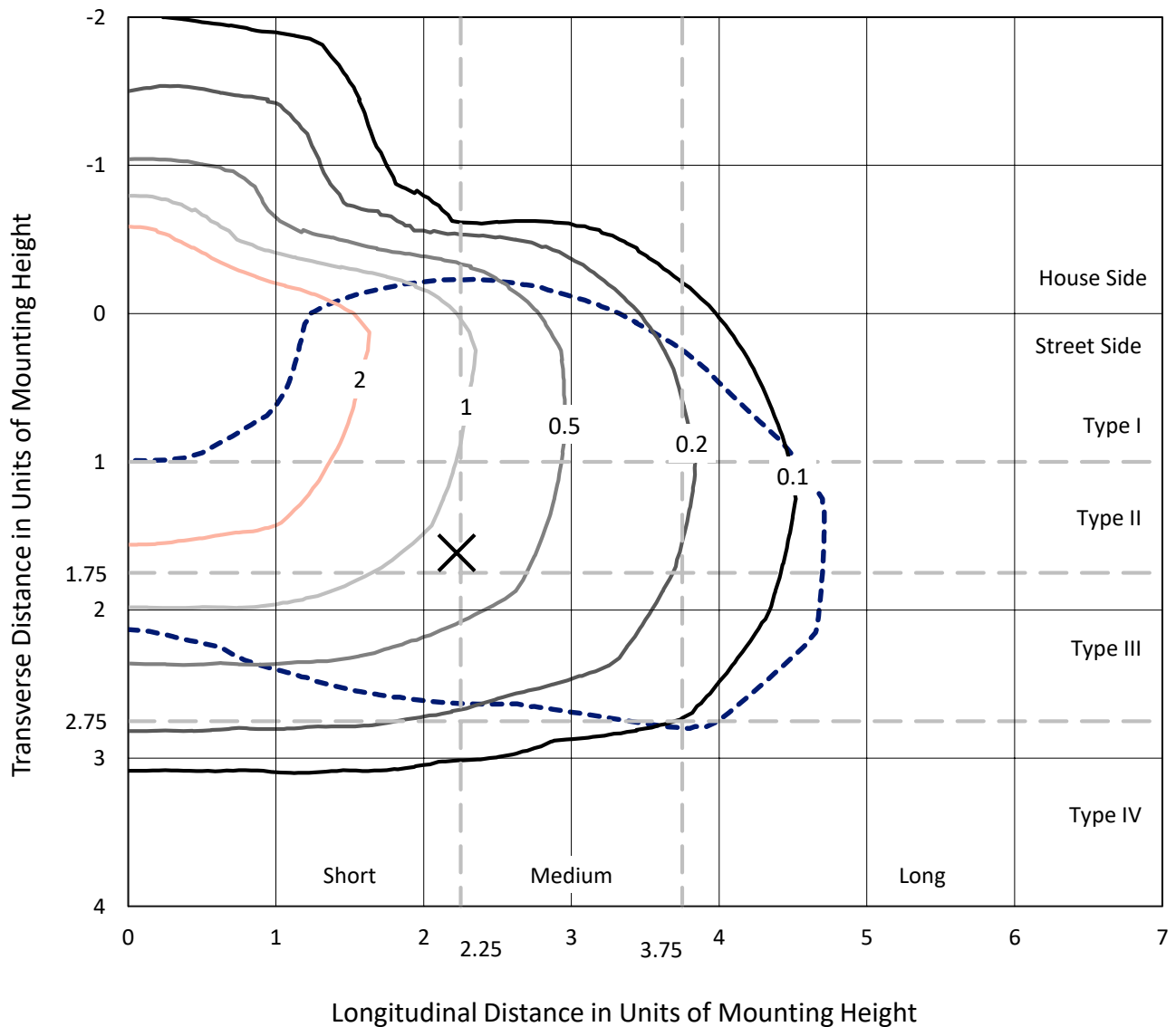


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

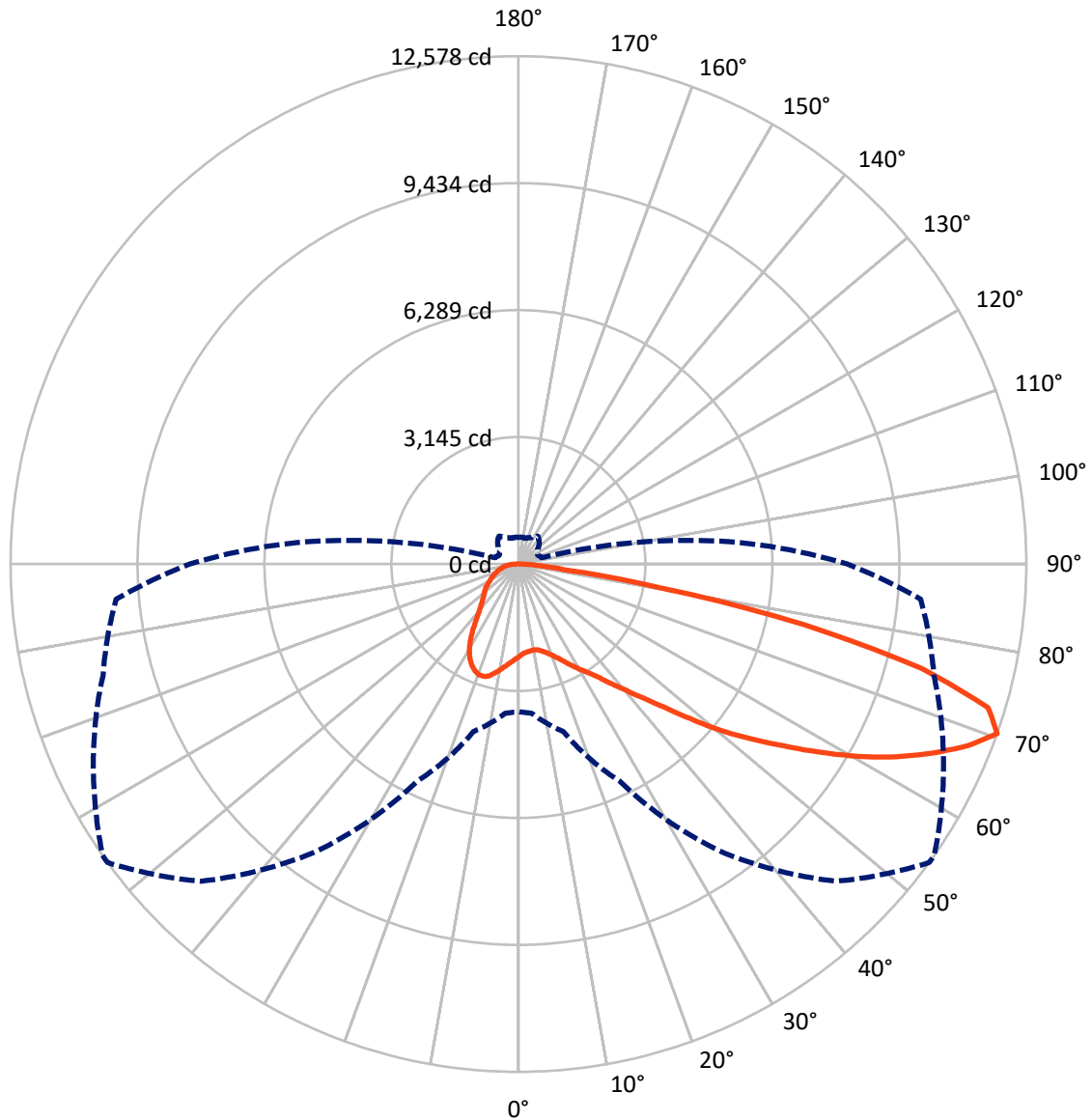


Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4649.1	0.0	4649.1
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	15849.8	0.0	15849.8
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	20498.9	0.0	20498.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.1	1.1
10°-20°	719.2	3.5
20°-30°	1249.4	6.1
30°-40°	1825.9	8.9
40°-50°	2865.7	14.0
50°-60°	4406.7	21.5
60°-70°	5384.0	26.3
70°-80°	3338.1	16.3
80°-90°	484.9	2.4
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°	20498.9	100.0
0°-180°	20498.9	100.0

**Coefficient of Utilization**



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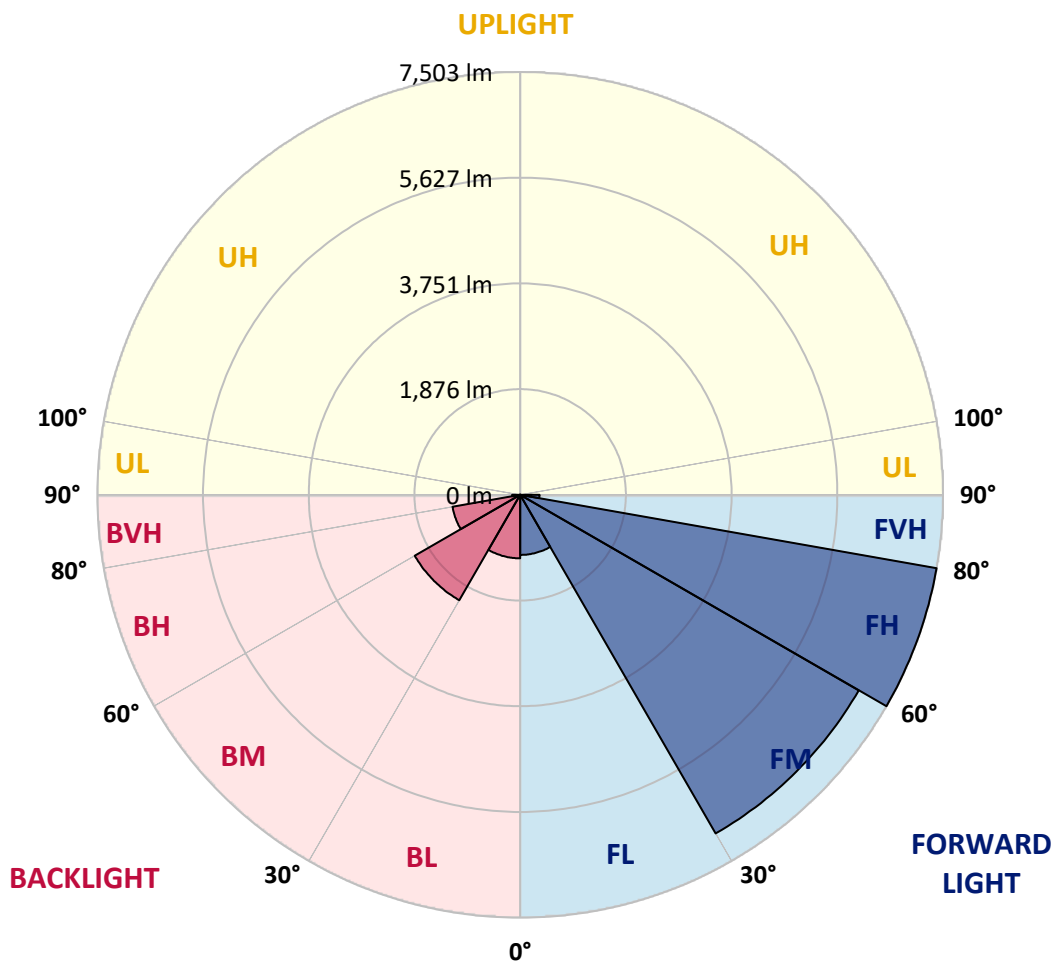
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1066.5	5.2			
FM	(30°-60°)	6937.9	33.8			
FH	(60°-80°)	7502.9	36.6			G4/12000
FVH	(80°-90°)	342.4	1.7			G3/500
BL	(0°-30°)	1127.1	5.5	B3/2500		
BM	(30°-60°)	2160.4	10.5	B2/2500		
BH	(60°-80°)	1219.1	5.9	B3/2500		G3/2500
BVH	(80°-90°)	142.5	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5
2.5°	2203.3	2195.9	2195.9	2207.1	2210.8	2222.1	2222.1	2225.8	2237.1	2255.9	2278.4
5°	2135.7	2132.0	2135.7	2150.8	2158.3	2180.8	2188.3	2192.1	2214.6	2244.7	2278.4
7.5°	2068.2	2064.4	2072.0	2094.5	2117.0	2150.8	2169.6	2173.3	2207.1	2248.3	2293.5
10°	2045.7	2041.9	2053.2	2072.0	2094.5	2132.0	2162.0	2165.8	2214.6	2263.4	2327.2
12.5°	2075.7	2072.0	2083.2	2102.0	2124.5	2150.8	2184.5	2188.3	2252.1	2316.0	2383.5
15°	2150.8	2150.8	2154.5	2165.8	2188.3	2210.8	2240.9	2244.7	2312.2	2387.3	2454.8
17.5°	2267.2	2259.6	2259.6	2255.9	2270.8	2282.2	2319.6	2323.4	2394.7	2462.3	2529.9
20°	2409.8	2406.0	2391.0	2372.2	2368.4	2376.0	2413.6	2417.2	2488.6	2544.9	2608.7
22.5°	2582.4	2586.2	2552.4	2511.1	2492.3	2503.6	2537.4	2541.1	2593.7	2642.5	2698.7
25°	2811.4	2800.1	2751.3	2691.3	2653.7	2653.7	2687.5	2687.5	2736.3	2766.4	2803.9
27.5°	3029.1	3006.6	2961.5	2875.2	2815.2	2826.4	2860.2	2860.2	2905.3	2916.5	2935.3
30°	3265.6	3243.1	3186.8	3077.9	2999.1	2991.6	3032.8	3029.1	3089.2	3085.4	3070.4
32.5°	3554.7	3543.3	3449.5	3310.6	3205.5	3179.2	3216.8	3220.6	3258.1	3246.8	3198.1
35°	3959.9	3956.3	3869.9	3626.0	3487.0	3438.2	3460.7	3460.7	3487.0	3457.1	3374.4
37.5°	4470.5	4478.0	4402.9	4042.6	3847.4	3764.8	3768.6	3764.8	3772.3	3738.6	3652.2
40°	4981.0	4999.7	4996.0	4560.5	4312.9	4170.2	4117.7	4110.1	4128.9	4113.9	4031.3
42.5°	5652.8	5697.8	5592.8	5198.6	4920.9	4680.7	4538.0	4519.3	4560.5	4579.3	4500.5
45°	6351.0	6336.0	6170.8	5885.5	5634.1	5326.3	5056.0	5026.0	5056.0	5112.3	5029.7
47.5°	6715.1	6703.8	6662.6	6519.9	6482.3	6129.5	5720.4	5694.2	5637.8	5716.7	5619.1
50°	7315.6	7326.9	7158.0	7143.0	7300.6	7105.4	6471.1	6411.0	6309.7	6373.5	6290.9
52.5°	7751.1	7702.3	7597.1	7728.5	8220.2	8115.2	7176.8	7150.5	7056.6	7041.7	7004.1
55°	7927.5	7927.5	7946.3	8250.3	8952.1	8813.3	7942.5	7968.8	7841.1	7736.1	7784.9
57.5°	7980.0	8002.5	8164.0	8667.0	9811.7	9357.5	8787.0	8824.6	8640.7	8430.4	8584.4
60°	7721.0	7788.6	8175.2	8903.4	10296.0	9935.6	9676.6	9687.9	9421.4	9113.6	9383.8
62.5°	7056.6	7139.3	7829.9	9000.9	10217.1	10528.7	10517.5	10543.7	10179.6	9796.7	10134.6
65°	6242.1	6324.7	7060.4	8727.0	10157.1	10952.8	11286.9	11358.2	10889.0	10374.8	10603.8
67.5°	5044.8	5153.6	5851.8	7803.6	9864.3	11301.9	12007.6	12082.7	11437.0	10675.1	10562.5
70°	3655.9	3708.5	4294.0	5930.6	8670.6	11110.5	12578.1	12574.3	11617.2	10652.6	9999.4
72.5°	1760.4	1801.7	2308.4	3682.2	6200.8	9428.9	12165.2	12236.5	11369.5	10326.0	8712.0
75°	724.5	765.7	934.7	1554.0	3254.3	6230.9	10310.9	10479.9	10326.0	9267.5	6816.4
77.5°	450.4	465.4	548.0	803.2	1486.4	2909.0	7218.0	7447.0	8182.7	7424.5	4500.5
80°	337.8	349.0	409.2	563.0	938.4	1073.5	3584.6	3873.6	4958.4	4260.3	2038.1
82.5°	281.5	285.3	326.5	409.2	638.1	615.6	1148.6	1279.9	2312.2	1625.3	701.9
85°	262.8	270.3	292.8	292.8	405.4	386.6	476.7	499.2	671.9	555.6	244.0
87.5°	135.1	127.7	259.0	228.9	210.2	187.7	202.6	217.7	251.4	266.5	108.8
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°	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5
2.5°	2285.9	2297.1	2316.0	2334.7	2357.2	2383.5	2398.5	2417.2	2432.3	2424.8	2421.0
5°	2297.1	2316.0	2357.2	2394.7	2439.8	2492.3	2526.2	2563.7	2593.7	2601.2	2589.9
7.5°	2316.0	2349.7	2406.0	2473.6	2533.6	2601.2	2653.7	2706.3	2743.9	2751.3	2751.3
10°	2361.0	2398.5	2473.6	2563.7	2635.0	2706.3	2766.4	2807.7	2841.5	2856.5	2856.5
12.5°	2424.8	2469.8	2559.9	2668.8	2747.5	2815.2	2848.9	2867.7	2882.7	2897.7	2901.5
15°	2499.9	2548.7	2657.5	2773.8	2856.5	2890.2	2890.2	2886.5	2886.5	2894.0	2901.5
17.5°	2575.0	2627.4	2740.1	2864.0	2916.5	2897.7	2871.4	2860.2	2852.7	2848.9	2860.2
20°	2653.7	2706.3	2818.9	2935.3	2920.2	2841.5	2803.9	2777.6	2755.1	2743.9	2758.9
22.5°	2740.1	2788.9	2905.3	2984.0	2871.4	2751.3	2680.0	2638.7	2601.2	2578.7	2593.7
25°	2841.5	2890.2	3002.9	2999.1	2785.1	2616.2	2503.6	2436.1	2394.7	2372.2	2372.2
27.5°	2961.5	3002.9	3111.7	2961.5	2665.0	2436.1	2270.8	2207.1	2195.9	2177.0	2177.0
30°	3085.4	3119.2	3213.0	2875.2	2499.9	2199.5	2019.4	1989.3	1993.1	1974.4	1978.1
32.5°	3213.0	3246.8	3273.1	2747.5	2285.9	1933.1	1813.0	1790.5	1786.7	1771.6	1756.6
35°	3393.2	3442.0	3280.6	2575.0	2026.9	1711.6	1625.3	1602.8	1580.3	1527.7	1527.7
37.5°	3667.2	3719.8	3261.8	2361.0	1760.4	1538.9	1460.2	1430.1	1392.5	1340.1	1321.2
40°	4042.6	4042.6	3220.6	2120.8	1546.5	1400.1	1325.0	1287.5	1246.2	1193.6	1182.3
42.5°	4485.4	4380.4	3156.7	1876.8	1388.9	1306.2	1238.7	1197.4	1148.6	1088.5	1081.1
45°	5003.5	4718.2	3066.6	1659.0	1272.4	1249.9	1208.6	1137.3	1054.8	990.9	979.7
47.5°	5506.4	5022.3	2980.3	1505.2	1174.9	1227.4	1193.6	1073.5	960.9	870.8	859.6
50°	6058.2	5292.5	2879.0	1377.5	1099.8	1212.4	1174.9	979.7	855.8	792.0	784.5
52.5°	6610.0	5566.5	2770.2	1242.4	1035.9	1182.3	1129.8	912.1	852.0	765.7	754.4
55°	7191.8	5885.5	2642.5	1092.3	960.9	1122.3	1069.8	908.4	878.3	765.7	739.5
57.5°	7758.6	6238.4	2436.1	945.9	878.3	1032.3	1047.2	885.9	822.0	758.2	728.1
60°	8385.4	6613.8	2094.5	822.0	807.0	957.2	1017.2	837.1	758.2	735.7	720.7
62.5°	8888.4	6951.6	1636.5	735.7	747.0	897.1	979.7	807.0	731.9	713.2	709.4
65°	9106.1	6959.0	1174.9	660.6	686.9	840.8	942.1	780.7	709.4	701.9	698.2
67.5°	8877.2	6576.2	825.8	589.3	623.1	788.3	893.3	754.4	686.9	690.7	683.1
70°	8137.7	5769.2	604.4	521.7	563.0	731.9	840.8	720.7	660.6	668.1	656.8
72.5°	6809.0	4496.8	484.2	465.4	514.2	671.9	788.3	683.1	619.3	623.1	600.6
75°	5029.7	2980.3	405.4	416.6	458.0	615.6	720.7	634.3	574.3	559.2	544.3
77.5°	2991.6	1531.5	334.1	364.1	409.2	548.0	645.6	574.3	525.5	499.2	487.9
80°	1234.9	619.3	274.0	307.8	356.6	487.9	570.5	503.0	469.2	442.9	427.9
82.5°	491.7	304.0	217.7	251.4	300.2	424.1	499.2	442.9	409.2	390.4	349.0
85°	187.7	150.2	146.4	176.5	225.3	326.5	412.9	371.6	345.3	296.6	285.3
87.5°	75.1	67.5	67.5	86.3	127.7	206.4	296.6	259.0	270.3	214.0	217.7
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)