

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: P237349

Luminaire Tested: **ARCH-L-AF72-160-D-U-T4W-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237349
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T4W-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20888 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

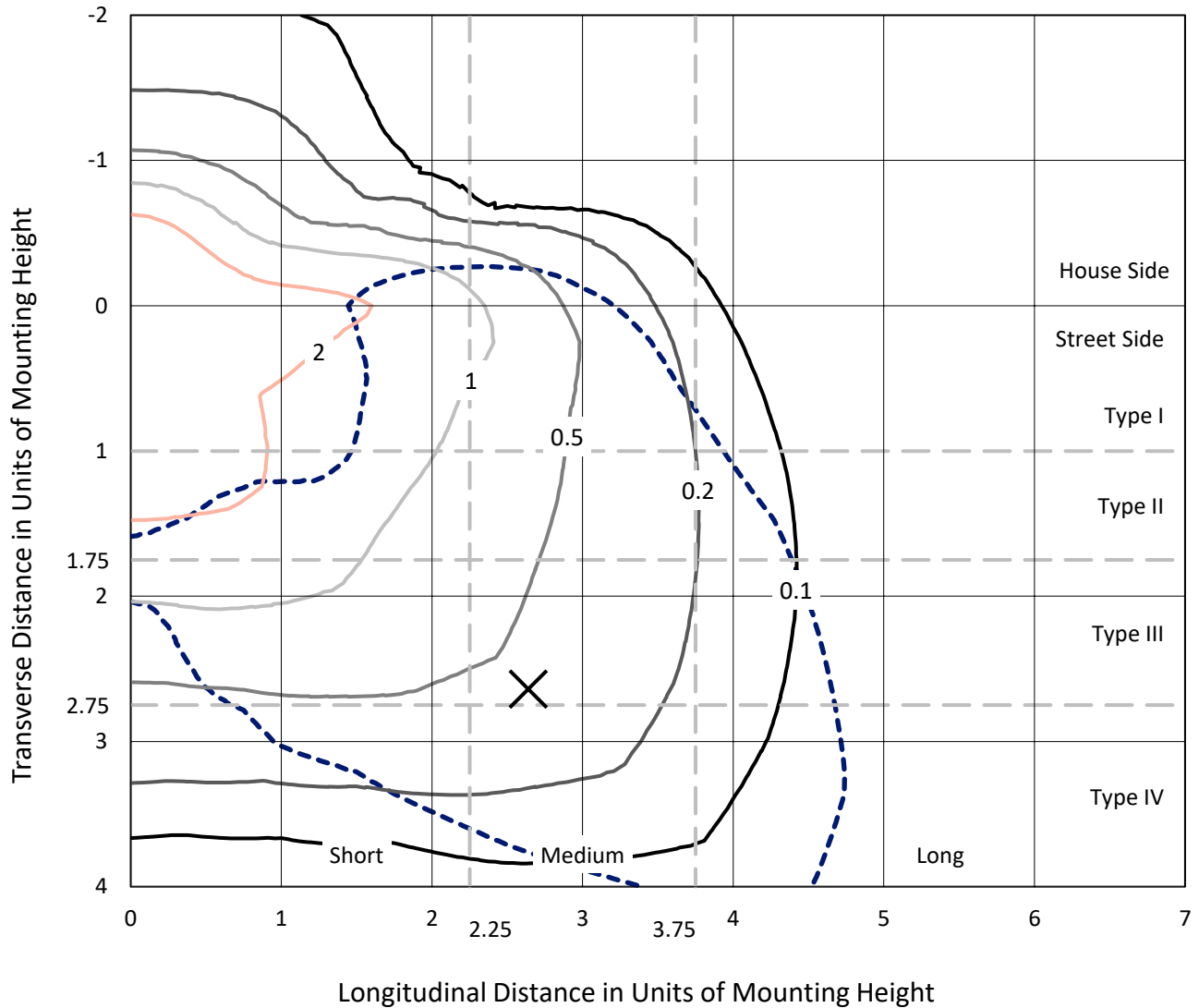
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237349
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050

Iso-Footcandle Lines of Horizontal Illumination

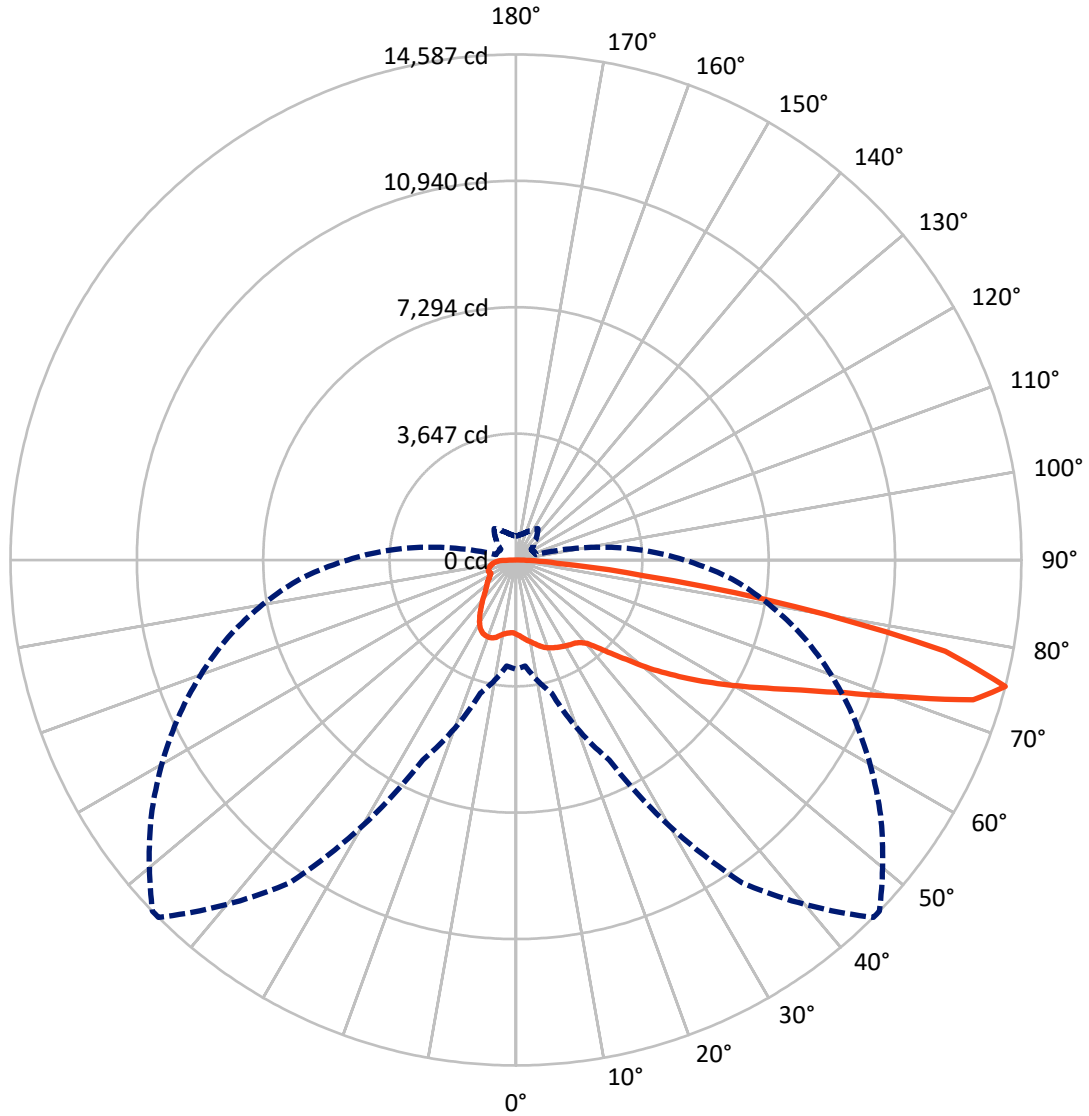
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Medium - N/A

REPORT NUMBER: P237349
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050

Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050

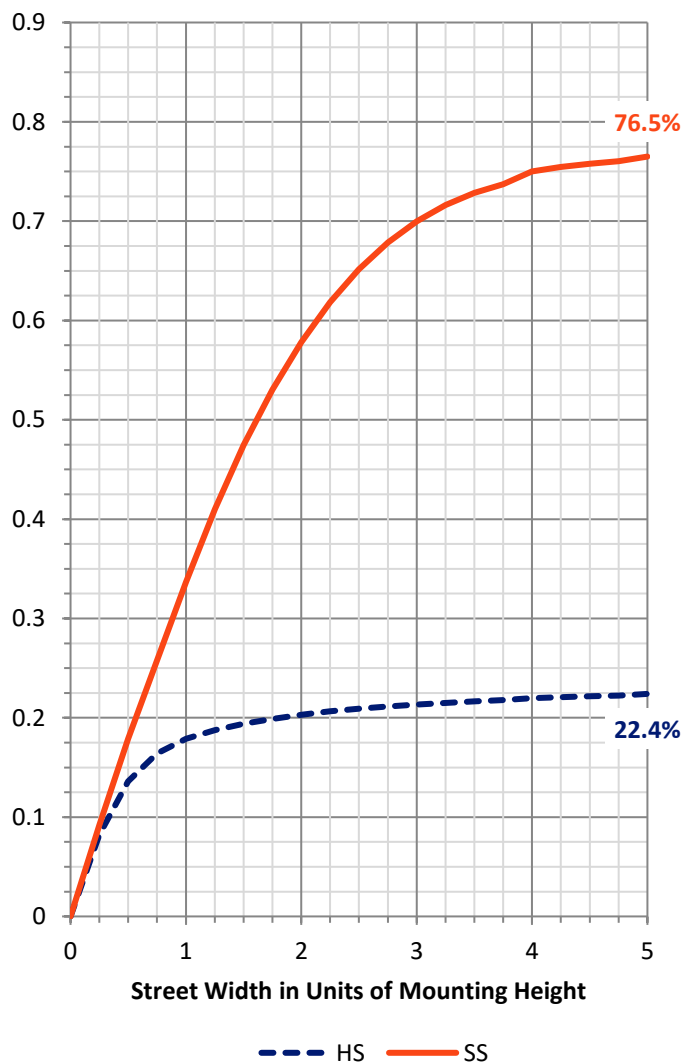
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4838.9	0.0	4838.9
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	16049.1	0.0	16049.1
	% Fixture	76.8	0.0	76.8
Total	Lumens	20888.0	0.0	20888.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.2	1.0
10°-20°	687.7	3.3
20°-30°	1180.0	5.6
30°-40°	1650.4	7.9
40°-50°	2421.0	11.6
50°-60°	3771.3	18.1
60°-70°	5426.5	26.0
70°-80°	4727.1	22.6
80°-90°	811.8	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°	20888.0	100.0
0°-180°	20888.0	100.0



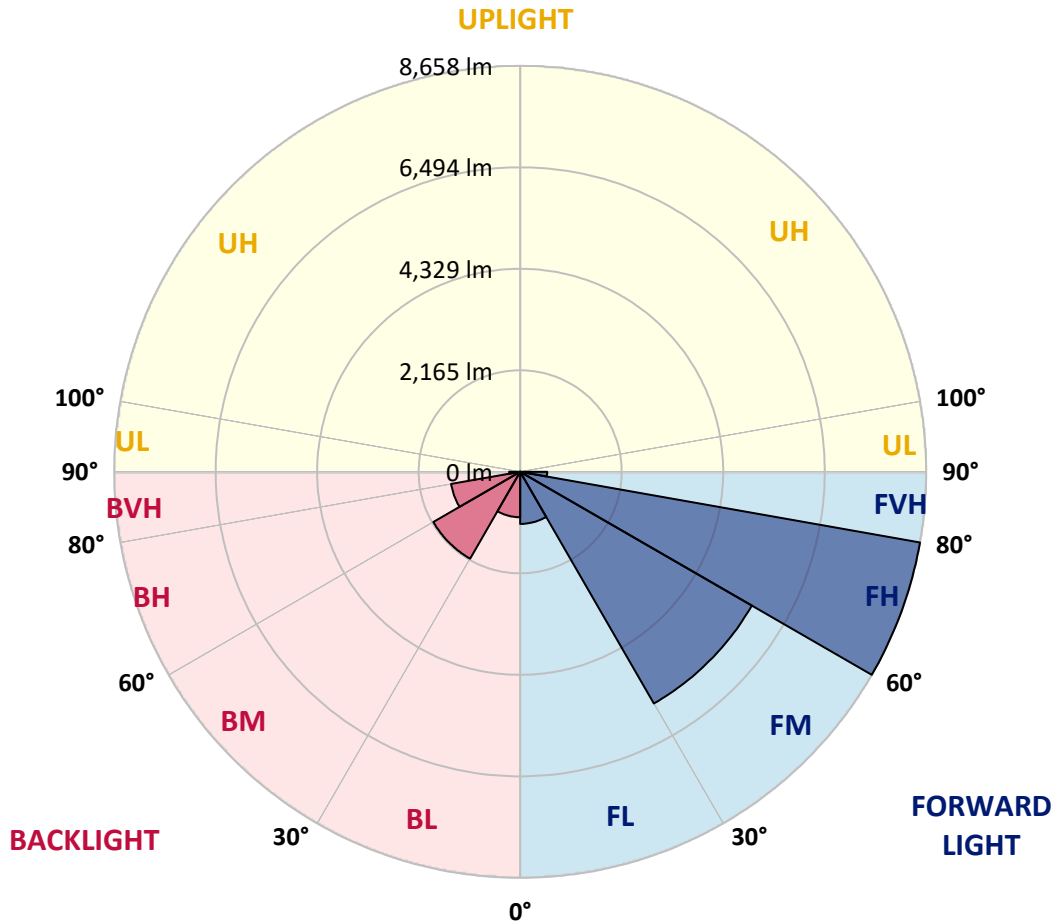
REPORT NUMBER: P237349
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1110.7	5.3			
FM (30°-60°)	5704.1	27.3			
FH (60°-80°)	8658.3	41.5			G4/12000
FVH (80°-90°)	576.0	2.8			G4/750
BL (0°-30°)	969.2	4.6	B2/1000		
BM (30°-60°)	2138.5	10.2	B2/2500		
BH (60°-80°)	1495.4	7.2	B3/2500		G3/2500
BVH (80°-90°)	235.8	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





REPORT NUMBER: P237349

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3
2.5°	2247.0	2230.7	2230.7	2218.5	2218.5	2198.2	2190.1	2186.0	2165.7	2153.5	2141.3
5°	2377.0	2356.7	2352.6	2324.2	2312.0	2267.3	2263.2	2234.8	2198.2	2161.6	2133.2
7.5°	2494.8	2482.6	2462.3	2433.9	2397.3	2340.4	2336.4	2291.7	2230.7	2181.9	2141.3
10°	2580.1	2572.0	2543.6	2507.0	2466.4	2409.5	2405.4	2356.7	2283.5	2226.6	2169.8
12.5°	2681.7	2669.5	2633.0	2584.2	2539.5	2486.7	2482.6	2442.0	2360.7	2287.6	2214.5
15°	2779.2	2763.0	2718.3	2669.5	2620.8	2576.1	2576.1	2531.4	2446.1	2360.7	2275.4
17.5°	2828.0	2819.9	2775.2	2722.4	2681.7	2649.2	2645.2	2604.5	2519.2	2429.8	2336.4
20°	2844.3	2848.3	2807.7	2750.8	2722.4	2706.1	2702.0	2673.6	2580.1	2494.8	2405.4
22.5°	2840.2	2852.4	2819.9	2758.9	2750.8	2750.8	2750.8	2718.3	2645.2	2559.8	2470.4
25°	2856.4	2872.7	2848.3	2775.2	2775.2	2791.4	2791.4	2775.2	2710.2	2637.0	2547.6
27.5°	2913.3	2925.5	2905.2	2803.6	2807.7	2832.1	2828.0	2832.1	2791.4	2722.4	2633.0
30°	2982.4	2998.7	2974.3	2848.3	2844.3	2868.6	2868.6	2888.9	2860.5	2787.4	2714.2
32.5°	3169.3	3165.2	3088.0	2897.1	2884.9	2909.3	2909.3	2929.6	2913.3	2856.4	2787.4
35°	3726.0	3665.0	3494.4	3055.5	2933.6	2945.8	2945.8	2982.4	2990.5	2945.8	2884.9
37.5°	4294.8	4274.5	4144.5	3478.1	3112.4	3023.0	3019.0	3071.8	3108.4	3071.8	3031.2
40°	4867.7	4851.5	4823.0	4042.9	3486.2	3161.2	3149.0	3193.7	3258.7	3234.3	3209.9
42.5°	5400.0	5391.9	5420.3	4599.6	3961.6	3457.8	3421.2	3368.4	3461.9	3453.7	3453.7
45°	5818.5	5838.8	5855.1	5119.7	4477.7	3839.7	3795.0	3616.3	3742.2	3774.7	3799.1
47.5°	6054.2	6070.4	6127.3	5627.6	4993.7	4282.6	4250.1	3957.6	4124.2	4221.7	4290.8
50°	6391.4	6346.7	6395.5	6123.3	5615.4	4859.6	4770.2	4416.7	4628.0	4798.7	4961.2
52.5°	6716.5	6643.4	6684.0	6696.2	6322.4	5424.4	5330.9	4957.1	5221.2	5489.4	5777.9
55°	7009.1	7005.0	7045.6	7252.8	7005.0	6029.8	5924.2	5554.4	5936.4	6224.9	6712.4
57.5°	7244.7	7285.4	7464.1	7898.9	7793.3	6688.1	6570.2	6249.2	6700.2	6988.7	7797.3
60°	7521.0	7586.0	7882.6	8447.4	8512.4	7378.8	7256.9	7025.3	7484.4	7777.0	9052.9
62.5°	7614.5	7707.9	8317.4	9024.4	9264.1	8134.6	8024.9	7870.5	8309.3	8573.4	10304.3
65°	6992.8	7171.6	8557.1	9321.0	10072.7	9044.7	8951.3	8817.2	9130.1	9304.8	11153.5
67.5°	6822.1	6903.4	8089.9	9747.7	10832.5	10214.9	10121.5	9889.9	9898.0	9824.9	11429.8
70°	6582.4	6671.8	7610.4	10068.7	11921.5	11815.8	11702.1	11019.4	10600.9	10158.0	10885.4
72.5°	5607.2	5578.8	6558.0	9203.2	12445.6	13798.7	13664.6	12234.4	11121.0	9869.6	9186.9
75°	3149.0	3067.7	3977.9	6367.1	11364.8	14587.0	14582.9	12847.9	10755.3	8597.8	6253.3
77.5°	914.2	889.8	1312.4	2669.5	7651.0	12673.2	12827.6	11588.3	8975.7	6176.1	3433.4
80°	430.7	438.8	564.8	881.7	3266.8	8179.3	8622.2	7630.7	5363.4	2848.3	1418.1
82.5°	272.2	276.3	386.0	568.9	1381.5	3713.8	4079.5	3433.4	2125.1	1231.2	625.7
85°	170.7	170.7	256.0	373.8	824.8	1186.5	1288.0	1170.2	910.2	670.4	341.3
87.5°	93.5	93.5	154.4	215.4	451.0	381.9	394.1	467.3	568.9	410.4	170.7
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: P237349

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3	2141.3
2.5°	2137.3	2129.1	2116.9	2112.9	2108.8	2104.7	2108.8	2116.9	2108.8	2108.8	2112.9
5°	2125.1	2116.9	2100.7	2100.7	2104.7	2108.8	2129.1	2141.3	2145.4	2145.4	2145.4
7.5°	2125.1	2112.9	2100.7	2104.7	2112.9	2129.1	2161.6	2181.9	2198.2	2202.3	2202.3
10°	2145.4	2129.1	2121.0	2129.1	2153.5	2165.7	2198.2	2230.7	2251.0	2259.1	2259.1
12.5°	2181.9	2165.7	2165.7	2181.9	2214.5	2230.7	2259.1	2283.5	2307.9	2320.1	2320.1
15°	2242.9	2222.6	2226.6	2255.1	2291.7	2307.9	2328.2	2336.4	2356.7	2372.9	2372.9
17.5°	2299.8	2279.5	2287.6	2320.1	2344.5	2352.6	2364.8	2360.7	2368.9	2381.0	2385.1
20°	2364.8	2344.5	2348.5	2368.9	2372.9	2364.8	2364.8	2352.6	2348.5	2368.9	2377.0
22.5°	2429.8	2409.5	2405.4	2393.2	2372.9	2352.6	2340.4	2328.2	2320.1	2340.4	2348.5
25°	2507.0	2478.6	2458.2	2405.4	2352.6	2316.0	2299.8	2291.7	2287.6	2307.9	2316.0
27.5°	2592.3	2563.9	2502.9	2389.2	2303.8	2242.9	2230.7	2230.7	2238.8	2251.0	2259.1
30°	2673.6	2645.2	2535.4	2352.6	2218.5	2129.1	2116.9	2129.1	2149.4	2161.6	2173.8
32.5°	2754.9	2726.4	2555.8	2295.7	2092.6	1978.8	1970.7	1991.0	2023.5	2031.6	2039.7
35°	2864.6	2836.1	2580.1	2214.5	1934.1	1812.2	1804.1	1816.3	1844.7	1856.9	1869.1
37.5°	3019.0	3002.7	2616.7	2125.1	1787.8	1653.7	1629.4	1621.2	1637.5	1633.4	1649.7
40°	3222.1	3234.3	2681.7	2007.2	1645.6	1507.5	1454.6	1430.3	1414.0	1381.5	1397.7
42.5°	3518.7	3526.9	2754.9	1873.1	1523.7	1369.3	1300.2	1255.5	1223.0	1170.2	1178.3
45°	3953.5	3884.4	2840.2	1730.9	1414.0	1259.6	1178.3	1125.5	1080.8	1036.1	1040.2
47.5°	4530.5	4319.2	2933.6	1613.1	1304.3	1170.2	1097.1	1036.1	983.3	946.7	950.8
50°	5241.6	4859.6	3027.1	1503.4	1194.6	1101.1	1036.1	971.1	918.3	881.7	877.7
52.5°	6180.2	5509.7	3088.0	1381.5	1084.9	1040.2	983.3	922.4	857.3	812.6	808.6
55°	7155.3	6265.5	3140.9	1235.2	979.2	971.1	942.7	873.6	796.4	739.5	731.4
57.5°	8228.0	7074.1	3181.5	1093.0	898.0	914.2	906.1	824.8	739.5	686.7	682.6
60°	9203.2	7911.1	3051.5	967.0	824.8	857.3	865.5	796.4	751.7	763.9	767.9
62.5°	10186.5	8557.1	2555.8	873.6	776.1	820.8	889.8	885.8	865.5	885.8	889.8
65°	10540.0	8691.2	1812.2	796.4	727.3	837.0	967.0	958.9	865.5	828.9	820.8
67.5°	10340.9	8293.0	1219.0	735.4	690.7	857.3	1048.3	958.9	833.0	784.2	767.9
70°	9394.2	7313.8	893.9	674.5	658.2	853.3	1093.0	954.9	816.7	763.9	743.6
72.5°	7492.6	5643.8	719.2	617.6	609.5	833.0	1117.4	946.7	800.5	743.6	719.2
75°	4851.5	3510.6	605.4	560.7	536.3	800.5	1105.2	922.4	780.1	707.0	690.7
77.5°	2251.0	1511.5	516.0	495.7	467.3	751.7	1068.6	873.6	735.4	666.4	646.1
80°	1048.3	715.1	434.8	430.7	418.5	711.1	1019.9	816.7	682.6	625.7	593.2
82.5°	560.7	430.7	353.5	353.5	365.7	662.3	958.9	747.6	613.5	585.1	499.8
85°	296.6	247.9	256.0	276.3	312.9	585.1	877.7	674.5	536.3	447.0	434.8
87.5°	150.3	158.5	158.5	186.9	239.7	475.4	723.3	556.7	455.1	365.7	357.6
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)