

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: P237350

Luminaire Tested: **ARCH-L-AF72-170-D-U-T4W-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237350
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-AF72-170-D-U-T4W-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21890 lumens
Efficiency: N/A
Efficacy: 126.5 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

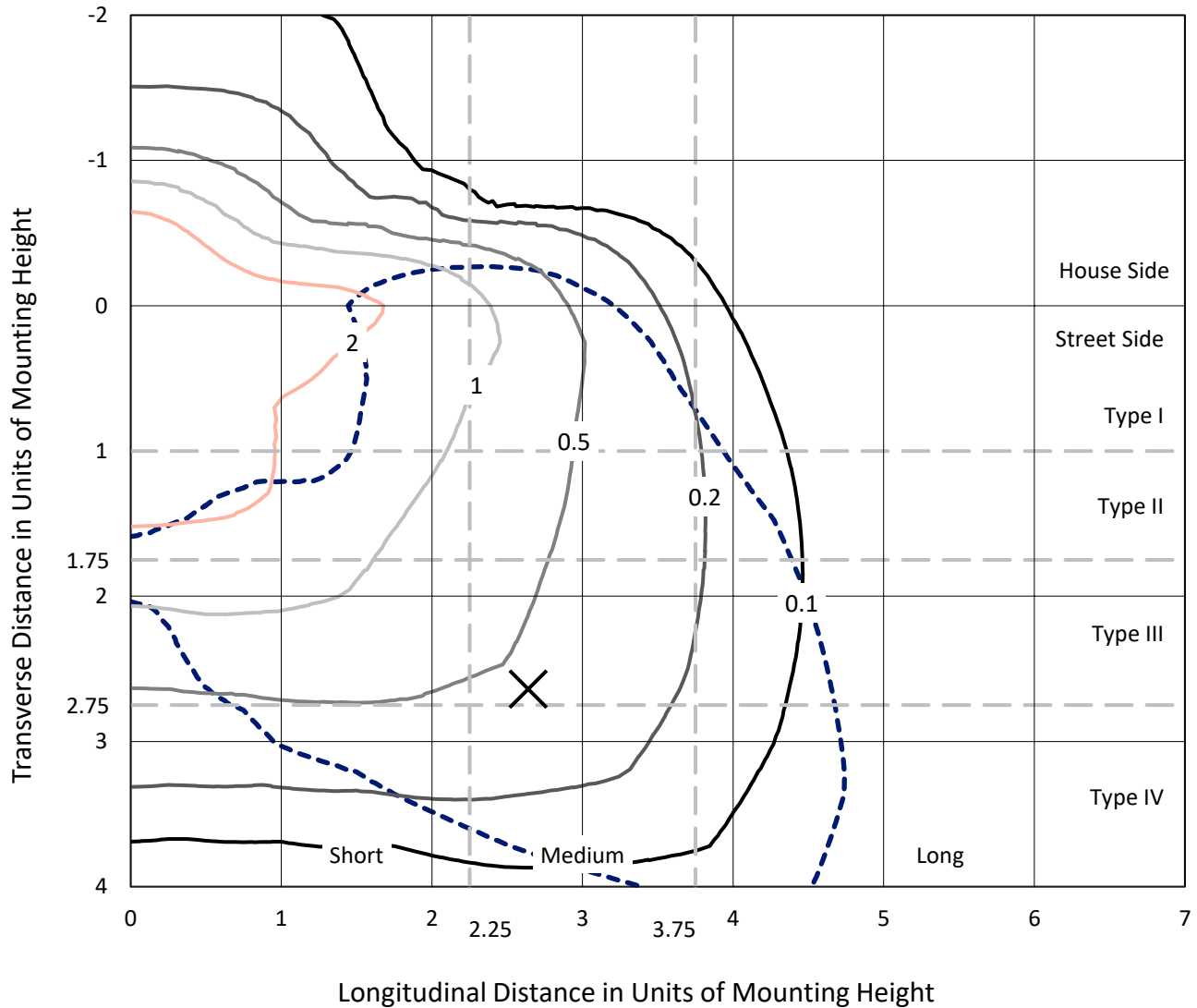
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

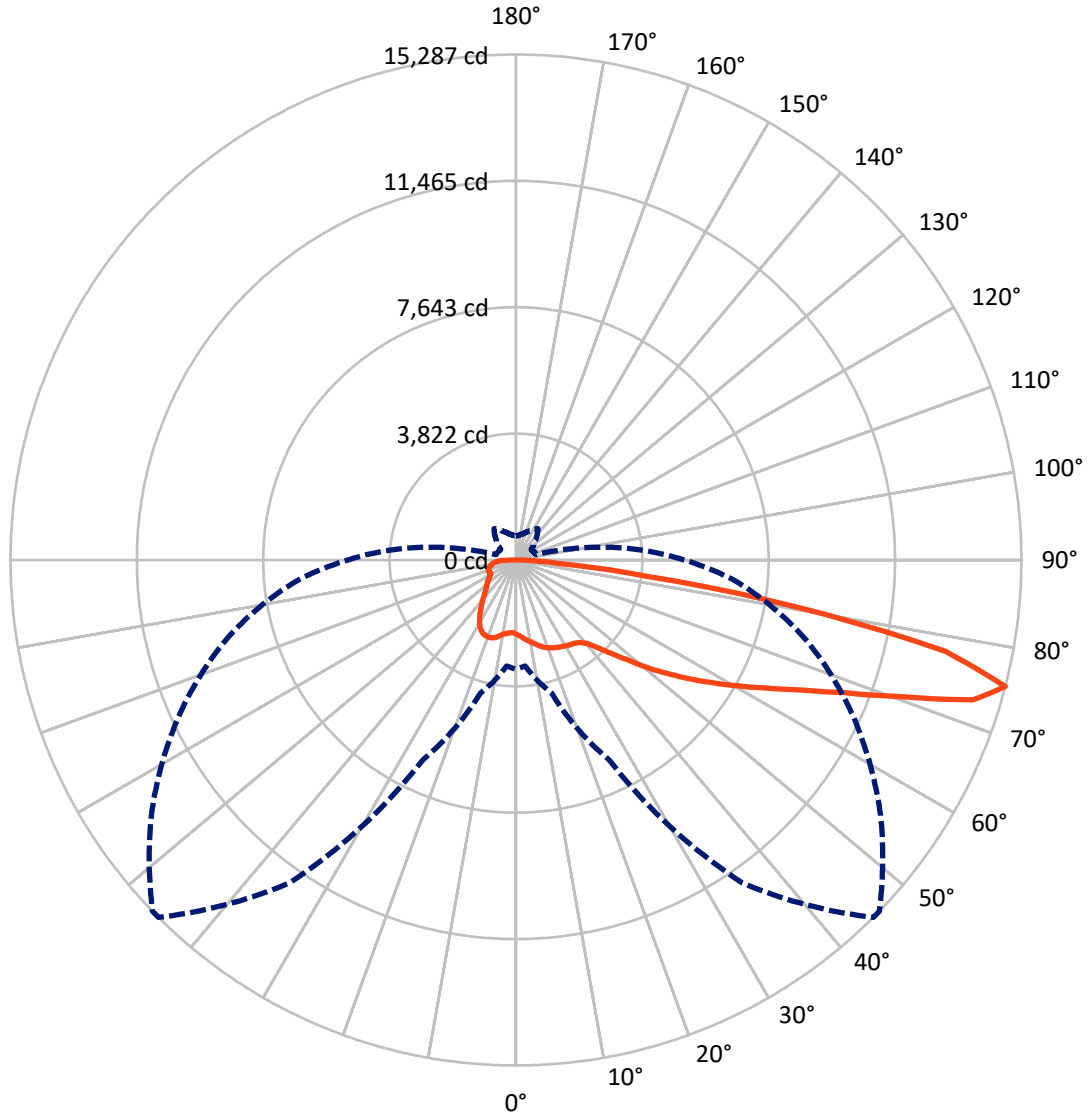
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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

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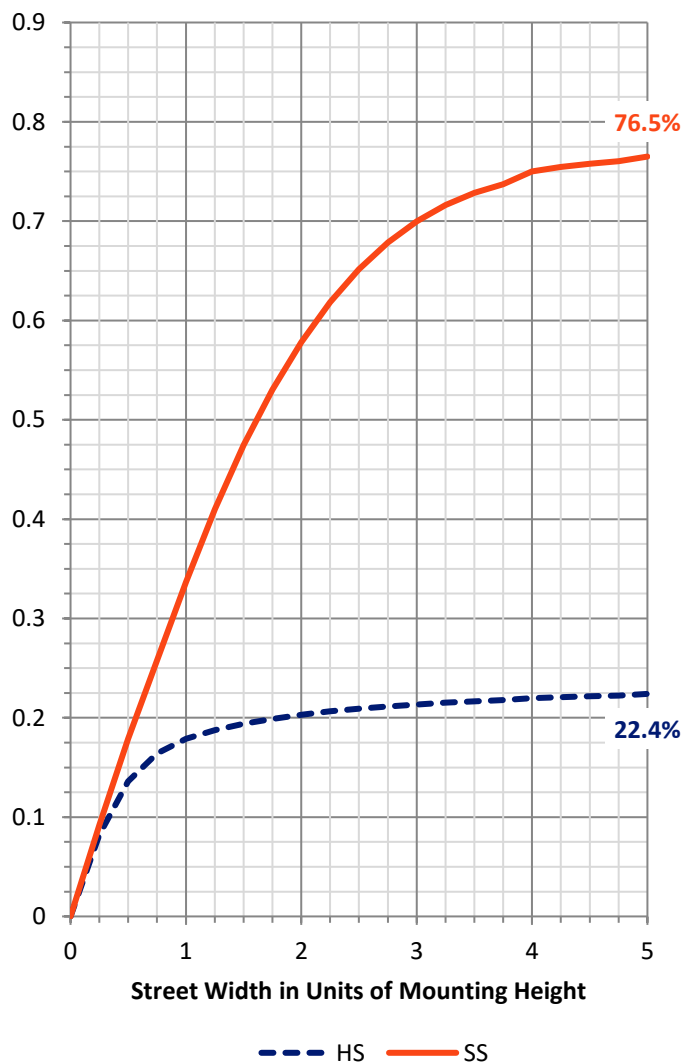
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5071.0	0.0	5071.0
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	16819.0	0.0	16819.0
	% Fixture	76.8	0.0	76.8
Total	Lumens	21890.0	0.0	21890.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.4	1.0
10°-20°	720.6	3.3
20°-30°	1236.6	5.6
30°-40°	1729.6	7.9
40°-50°	2537.1	11.6
50°-60°	3952.2	18.1
60°-70°	5686.8	26.0
70°-80°	4953.9	22.6
80°-90°	850.8	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°	21890.0	100.0
0°-180°	21890.0	100.0



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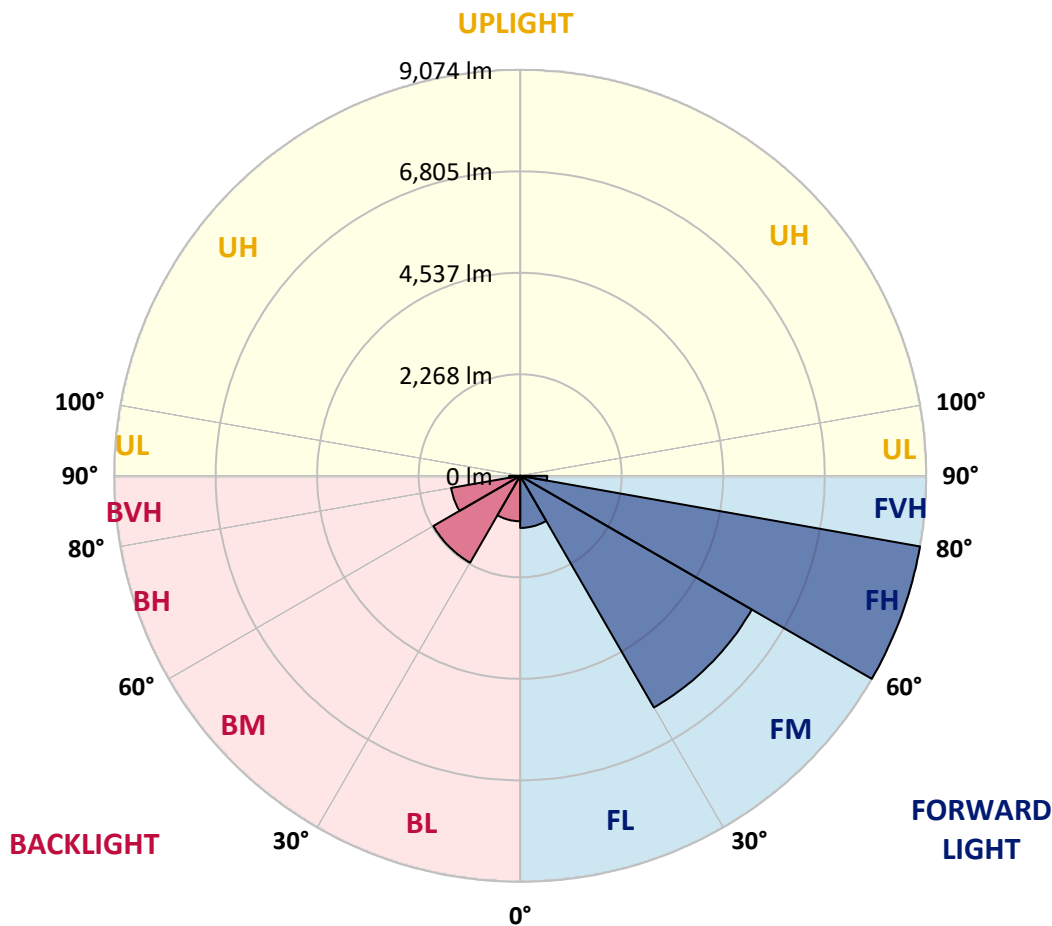
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1164.0	5.3			
FM (30°-60°)	5977.7	27.3			
FH (60°-80°)	9073.6	41.5			G4/12000
FVH (80°-90°)	603.6	2.8			G4/750
BL (0°-30°)	1015.6	4.6	B3/2500		
BM (30°-60°)	2241.1	10.2	B2/2500		
BH (60°-80°)	1567.1	7.2	B3/2500		G3/2500
BVH (80°-90°)	247.2	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°	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0
2.5°	2354.7	2337.7	2337.7	2324.9	2324.9	2303.6	2295.1	2290.9	2269.6	2256.8	2244.0
5°	2491.0	2469.7	2465.5	2435.7	2422.9	2376.0	2371.8	2342.0	2303.6	2265.3	2235.5
7.5°	2614.5	2601.7	2580.4	2550.6	2512.3	2452.7	2448.4	2401.6	2337.7	2286.6	2244.0
10°	2703.9	2695.4	2665.6	2627.3	2584.7	2525.1	2520.8	2469.7	2393.1	2333.5	2273.8
12.5°	2810.4	2797.6	2759.3	2708.2	2661.3	2606.0	2601.7	2559.1	2474.0	2397.3	2320.7
15°	2912.6	2895.5	2848.7	2797.6	2746.5	2699.7	2699.7	2652.8	2563.4	2474.0	2384.6
17.5°	2963.7	2955.1	2908.3	2852.9	2810.4	2776.3	2772.0	2729.5	2640.0	2546.4	2448.4
20°	2980.7	2985.0	2942.4	2882.8	2852.9	2835.9	2831.7	2801.9	2703.9	2614.5	2520.8
22.5°	2976.4	2989.2	2955.1	2891.3	2882.8	2882.8	2882.8	2848.7	2772.0	2682.6	2588.9
25°	2993.5	3010.5	2985.0	2908.3	2908.3	2925.3	2925.3	2908.3	2840.2	2763.5	2669.8
27.5°	3053.1	3065.9	3044.6	2938.1	2942.4	2967.9	2963.7	2967.9	2925.3	2852.9	2759.3
30°	3125.5	3142.5	3117.0	2985.0	2980.7	3006.2	3006.2	3027.5	2997.7	2921.1	2844.4
32.5°	3321.3	3317.1	3236.2	3036.0	3023.3	3048.8	3048.8	3070.1	3053.1	2993.5	2921.1
35°	3904.7	3840.8	3662.0	3202.1	3074.4	3087.1	3087.1	3125.5	3134.0	3087.1	3023.3
37.5°	4500.8	4479.6	4343.3	3645.0	3261.7	3168.1	3163.8	3219.1	3257.5	3219.1	3176.6
40°	5101.2	5084.2	5054.4	4236.8	3653.5	3312.8	3300.1	3346.9	3415.0	3389.5	3363.9
42.5°	5659.1	5650.5	5680.3	4820.2	4151.7	3623.7	3585.3	3530.0	3627.9	3619.4	3619.4
45°	6097.6	6118.9	6136.0	5365.2	4692.5	4023.9	3977.1	3789.7	3921.7	3955.8	3981.4
47.5°	6344.6	6361.6	6421.3	5897.5	5233.2	4488.1	4454.0	4147.4	4322.0	4424.2	4496.6
50°	6698.0	6651.2	6702.3	6417.0	5884.7	5092.7	4999.0	4628.6	4850.0	5028.9	5199.2
52.5°	7038.7	6962.0	7004.6	7017.4	6625.7	5684.6	5586.7	5194.9	5471.7	5752.7	6055.1
55°	7345.3	7341.0	7383.6	7600.8	7341.0	6319.1	6208.4	5820.9	6221.1	6523.5	7034.4
57.5°	7592.2	7634.8	7822.2	8277.8	8167.1	7008.9	6885.4	6549.0	7021.7	7324.0	8171.4
60°	7881.8	7949.9	8260.8	8852.7	8920.8	7732.8	7605.0	7362.3	7843.5	8150.1	9487.1
62.5°	7979.7	8077.7	8716.4	9457.3	9708.5	8524.8	8409.8	8248.0	8707.9	8984.7	10798.6
65°	7328.2	7515.6	8967.6	9768.2	10555.9	9478.6	9380.7	9240.1	9568.0	9751.1	11688.6
67.5°	7149.4	7234.6	8477.9	10215.3	11352.2	10704.9	10607.0	10364.3	10372.8	10296.2	11978.1
70°	6898.2	6991.9	7975.5	10551.7	12493.4	12382.6	12263.4	11548.1	11109.5	10645.3	11407.5
72.5°	5876.2	5846.4	6872.6	9644.7	13042.7	14460.6	14320.1	12821.2	11654.5	10343.0	9627.6
75°	3300.1	3214.9	4168.7	6672.5	11910.0	15286.7	15282.4	13464.2	11271.3	9010.2	6553.3
77.5°	958.1	932.5	1375.4	2797.6	8018.1	13281.1	13442.9	12144.2	9406.2	6472.4	3598.1
80°	451.4	459.9	591.9	924.0	3423.5	8571.6	9035.8	7996.8	5620.7	2985.0	1486.1
82.5°	285.3	289.6	404.5	596.1	1447.8	3891.9	4275.2	3598.1	2227.0	1290.2	655.8
85°	178.8	178.8	268.3	391.7	864.4	1243.4	1349.8	1226.3	953.8	702.6	357.7
87.5°	97.9	97.9	161.8	225.7	472.7	400.3	413.0	489.7	596.1	430.1	178.8
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°	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0
2.5°	2239.8	2231.3	2218.5	2214.2	2210.0	2205.7	2210.0	2218.5	2210.0	2210.0	2214.2
5°	2227.0	2218.5	2201.5	2201.5	2205.7	2210.0	2231.3	2244.0	2248.3	2248.3	2248.3
7.5°	2227.0	2214.2	2201.5	2205.7	2214.2	2231.3	2265.3	2286.6	2303.6	2307.9	2307.9
10°	2248.3	2231.3	2222.7	2231.3	2256.8	2269.6	2303.6	2337.7	2359.0	2367.5	2367.5
12.5°	2286.6	2269.6	2269.6	2286.6	2320.7	2337.7	2367.5	2393.1	2418.6	2431.4	2431.4
15°	2350.5	2329.2	2333.5	2363.3	2401.6	2418.6	2439.9	2448.4	2469.7	2486.7	2486.7
17.5°	2410.1	2388.8	2397.3	2431.4	2456.9	2465.5	2478.2	2474.0	2482.5	2495.3	2499.5
20°	2478.2	2456.9	2461.2	2482.5	2486.7	2478.2	2478.2	2465.5	2461.2	2482.5	2491.0
22.5°	2546.4	2525.1	2520.8	2508.0	2486.7	2465.5	2452.7	2439.9	2431.4	2452.7	2461.2
25°	2627.3	2597.5	2576.2	2520.8	2465.5	2427.1	2410.1	2401.6	2397.3	2418.6	2427.1
27.5°	2716.7	2686.9	2623.0	2503.8	2414.4	2350.5	2337.7	2337.7	2346.2	2359.0	2367.5
30°	2801.9	2772.0	2657.1	2465.5	2324.9	2231.3	2218.5	2231.3	2252.6	2265.3	2278.1
32.5°	2887.0	2857.2	2678.4	2405.8	2192.9	2073.7	2065.2	2086.5	2120.5	2129.1	2137.6
35°	3002.0	2972.2	2703.9	2320.7	2026.9	1899.1	1890.6	1903.4	1933.2	1946.0	1958.7
37.5°	3163.8	3146.8	2742.2	2227.0	1873.6	1733.1	1707.5	1699.0	1716.0	1711.8	1728.8
40°	3376.7	3389.5	2810.4	2103.5	1724.5	1579.8	1524.4	1498.9	1481.8	1447.8	1464.8
42.5°	3687.5	3696.1	2887.0	1963.0	1596.8	1435.0	1362.6	1315.8	1281.7	1226.3	1234.9
45°	4143.2	4070.8	2976.4	1814.0	1481.8	1320.0	1234.9	1179.5	1132.7	1085.8	1090.1
47.5°	4747.8	4526.4	3074.4	1690.5	1366.9	1226.3	1149.7	1085.8	1030.5	992.1	996.4
50°	5493.0	5092.7	3172.3	1575.5	1251.9	1154.0	1085.8	1017.7	962.3	924.0	919.8
52.5°	6476.6	5774.0	3236.2	1447.8	1136.9	1090.1	1030.5	966.6	898.5	851.6	847.4
55°	7498.6	6566.0	3291.5	1294.5	1026.2	1017.7	987.9	915.5	834.6	775.0	766.5
57.5°	8622.7	7413.4	3334.1	1145.4	941.0	958.1	949.6	864.4	775.0	719.6	715.4
60°	9644.7	8290.6	3197.9	1013.4	864.4	898.5	907.0	834.6	787.8	800.5	804.8
62.5°	10675.1	8967.6	2678.4	915.5	813.3	860.1	932.5	928.3	907.0	928.3	932.5
65°	11045.6	9108.1	1899.1	834.6	762.2	877.2	1013.4	1004.9	907.0	868.7	860.1
67.5°	10836.9	8690.8	1277.4	770.7	723.9	898.5	1098.6	1004.9	872.9	821.8	804.8
70°	9844.8	7664.6	936.8	706.8	689.8	894.2	1145.4	1000.7	855.9	800.5	779.2
72.5°	7852.0	5914.5	753.7	647.2	638.7	872.9	1171.0	992.1	838.9	779.2	753.7
75°	5084.2	3679.0	634.5	587.6	562.1	838.9	1158.2	966.6	817.6	740.9	723.9
77.5°	2359.0	1584.0	540.8	519.5	489.7	787.8	1119.9	915.5	770.7	698.3	677.0
80°	1098.6	749.4	455.6	451.4	438.6	745.2	1068.8	855.9	715.4	655.8	621.7
82.5°	587.6	451.4	370.5	370.5	383.2	694.1	1004.9	783.5	643.0	613.2	523.8
85°	310.8	259.7	268.3	289.6	327.9	613.2	919.8	706.8	562.1	468.4	455.6
87.5°	157.6	166.1	166.1	195.9	251.2	498.2	757.9	583.4	476.9	383.2	374.7
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)