

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: P237110

Luminaire Tested: **ARCH-L-AF72-170-D-U-T3-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237110
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
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-T3-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21981 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

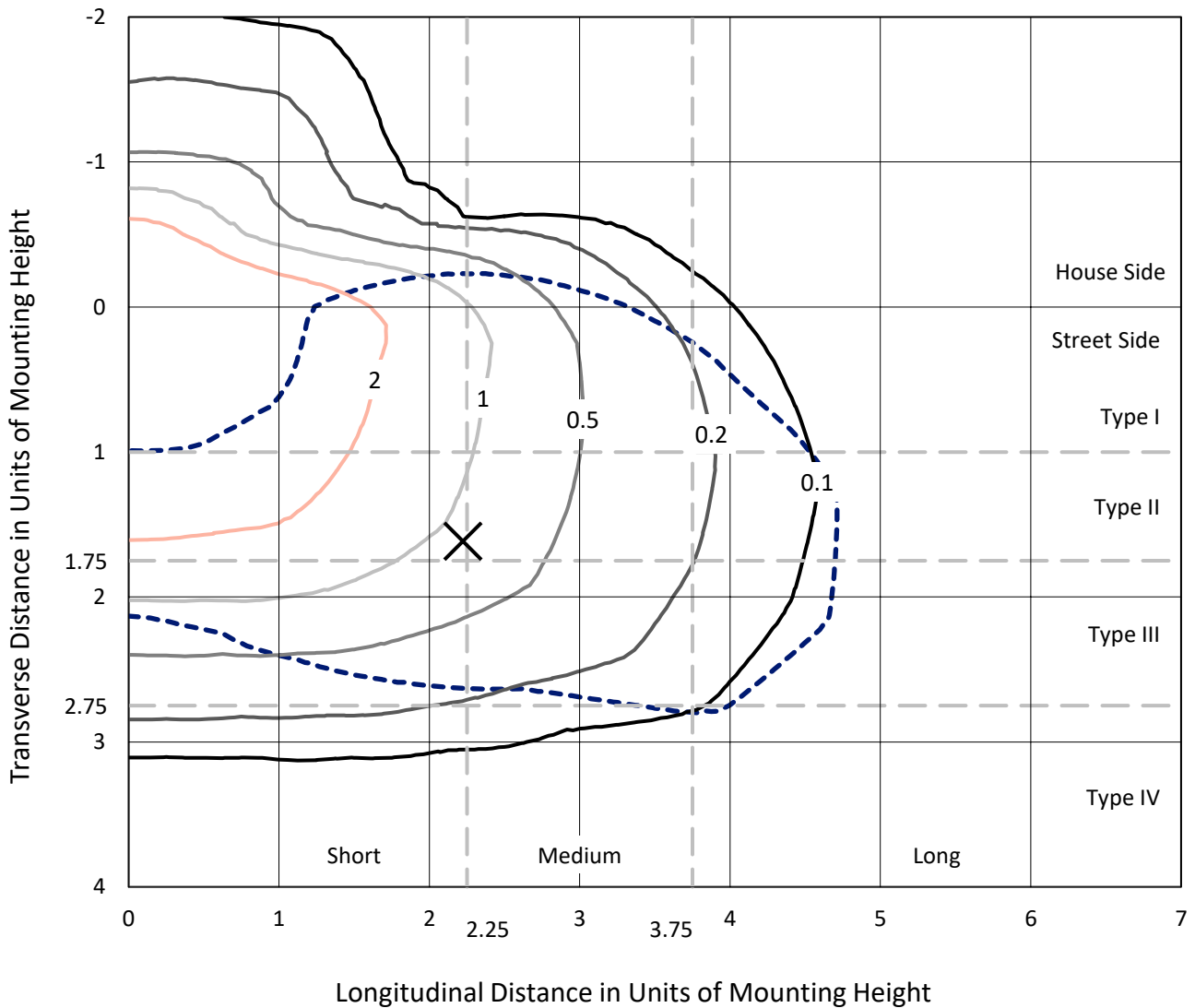
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

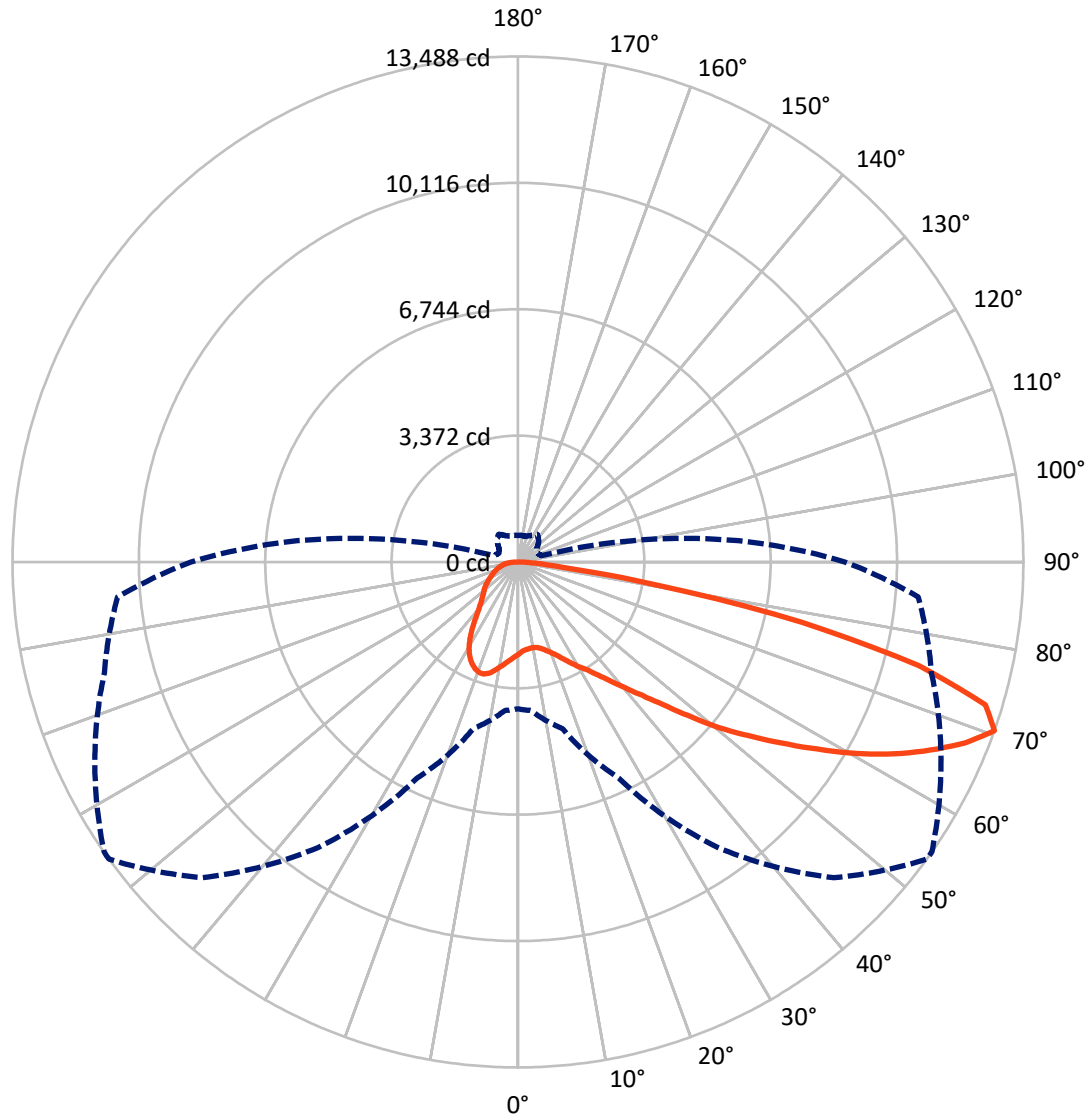
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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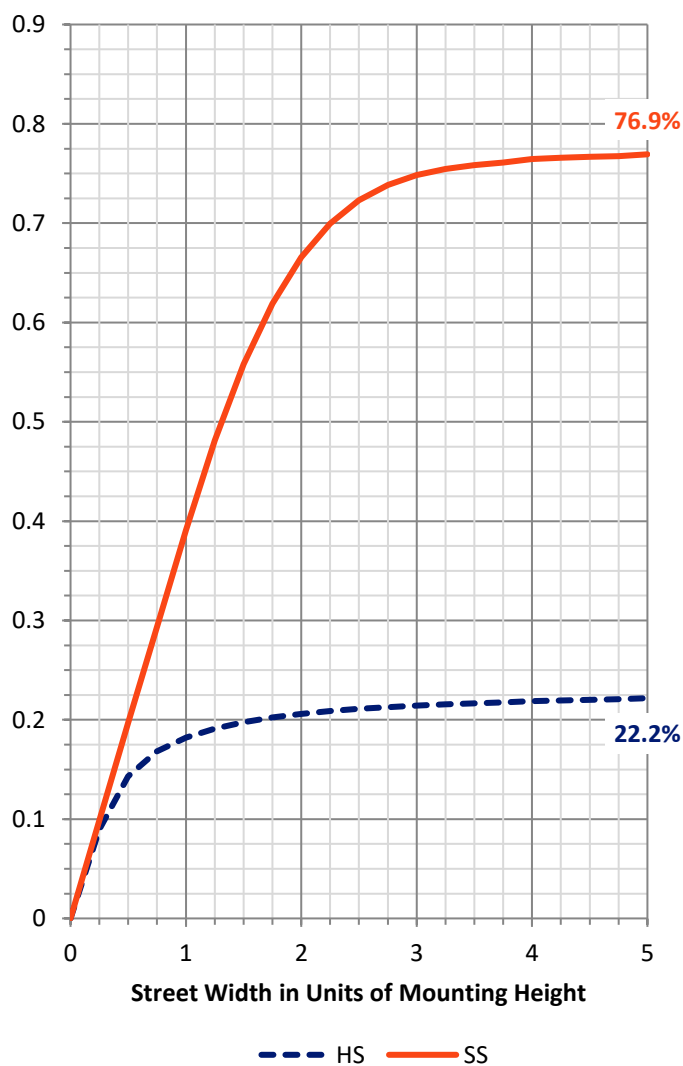
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4985.2	0.0	4985.2
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	16995.8	0.0	16995.8
	% Fixture	77.3	0.0	77.3
Total	Lumens	21981.0	0.0	21981.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.3	1.1
10°-20°	771.2	3.5
20°-30°	1339.8	6.1
30°-40°	1957.9	8.9
40°-50°	3072.9	14.0
50°-60°	4725.4	21.5
60°-70°	5773.2	26.3
70°-80°	3579.4	16.3
80°-90°	520.0	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°	21981.0	100.0
0°-180°	21981.0	100.0

Coefficient of Utilization



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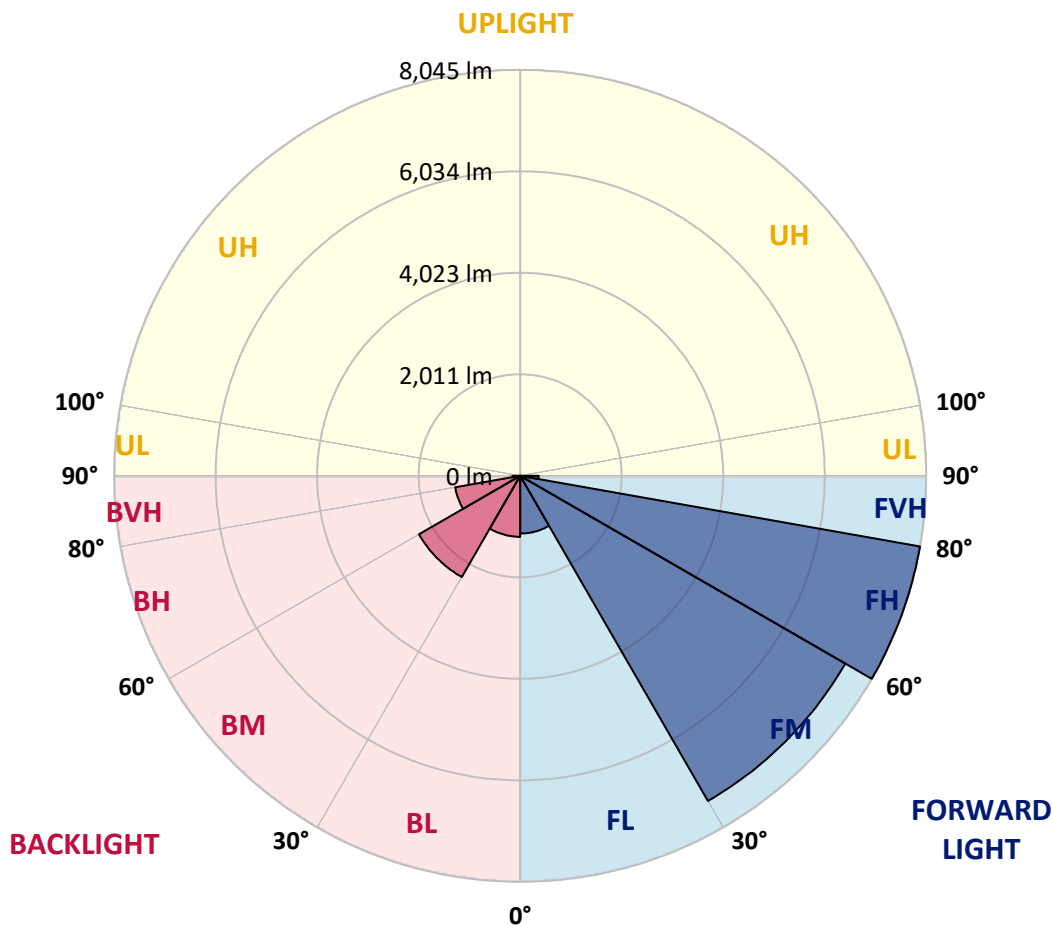
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1143.7	5.2			
FM (30°-60°)	7439.6	33.8			
FH (60°-80°)	8045.4	36.6			G4/12000
FVH (80°-90°)	367.2	1.7			G3/500
BL (0°-30°)	1208.6	5.5	B3/2500		
BM (30°-60°)	2316.6	10.5	B2/2500		
BH (60°-80°)	1307.3	5.9	B3/2500		G3/2500
BVH (80°-90°)	152.8	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°	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2
2.5°	2362.6	2354.6	2354.6	2366.7	2370.7	2382.8	2382.8	2386.8	2398.9	2419.0	2443.1
5°	2290.2	2286.2	2290.2	2306.3	2314.3	2338.5	2346.5	2350.6	2374.7	2406.9	2443.1
7.5°	2217.7	2213.7	2221.8	2245.9	2270.1	2306.3	2326.4	2330.4	2366.7	2410.9	2459.2
10°	2193.6	2189.6	2201.6	2221.8	2245.9	2286.2	2318.4	2322.4	2374.7	2427.0	2495.5
12.5°	2225.8	2221.8	2233.8	2254.0	2278.1	2306.3	2342.5	2346.5	2415.0	2483.4	2555.8
15°	2306.3	2306.3	2310.3	2322.4	2346.5	2370.7	2402.9	2406.9	2479.4	2559.9	2632.3
17.5°	2431.1	2423.0	2423.0	2419.0	2435.1	2447.2	2487.4	2491.4	2567.9	2640.4	2712.8
20°	2584.0	2580.0	2563.9	2543.8	2539.7	2547.8	2588.0	2592.1	2668.5	2728.9	2797.3
22.5°	2769.1	2773.2	2736.9	2692.7	2672.6	2684.6	2720.9	2724.9	2781.2	2833.5	2893.9
25°	3014.7	3002.6	2950.3	2885.9	2845.6	2845.6	2881.8	2881.8	2934.2	2966.4	3006.6
27.5°	3248.1	3224.0	3175.7	3083.1	3018.7	3030.8	3067.0	3067.0	3115.3	3127.4	3147.5
30°	3501.7	3477.5	3417.2	3300.4	3215.9	3207.9	3252.1	3248.1	3312.5	3308.5	3292.4
32.5°	3811.6	3799.5	3698.9	3550.0	3437.3	3409.1	3449.4	3453.4	3493.6	3481.6	3429.2
35°	4246.3	4242.3	4149.7	3888.1	3739.2	3686.8	3711.0	3711.0	3739.2	3707.0	3618.4
37.5°	4793.7	4801.7	4721.2	4334.8	4125.5	4037.0	4041.0	4037.0	4045.1	4008.8	3916.3
40°	5341.1	5361.2	5357.2	4890.3	4624.6	4471.7	4415.3	4407.3	4427.4	4411.3	4322.8
42.5°	6061.5	6109.8	5997.1	5574.5	5276.7	5019.1	4866.1	4846.0	4890.3	4910.4	4825.9
45°	6810.2	6794.1	6617.0	6311.1	6041.4	5711.4	5421.6	5389.4	5421.6	5481.9	5393.4
47.5°	7200.6	7188.5	7144.2	6991.3	6951.0	6572.7	6134.0	6105.8	6045.4	6130.0	6025.3
50°	7844.6	7856.7	7675.5	7659.4	7828.5	7619.2	6939.0	6874.6	6765.9	6834.3	6745.8
52.5°	8311.5	8259.1	8146.5	8287.3	8814.6	8701.9	7695.7	7667.5	7566.9	7550.8	7510.5
55°	8500.6	8500.6	8520.8	8846.8	9599.4	9450.5	8516.7	8544.9	8408.1	8295.4	8347.7
57.5°	8557.0	8581.1	8754.2	9293.6	10521.2	10034.1	9422.4	9462.6	9265.4	9040.0	9205.0
60°	8279.3	8351.7	8766.3	9547.1	11040.4	10654.0	10376.3	10388.3	10102.6	9772.5	10062.3
62.5°	7566.9	7655.4	8396.0	9651.8	10955.8	11289.9	11277.8	11306.0	10915.6	10505.1	10867.3
65°	6693.5	6782.0	7570.9	9358.0	10891.5	11744.7	12103.0	12179.4	11676.3	11124.9	11370.4
67.5°	5409.5	5526.2	6274.9	8367.8	10577.5	12119.1	12875.7	12956.2	12264.0	11446.9	11326.1
70°	3920.3	3976.6	4604.5	6359.4	9297.6	11913.8	13487.5	13483.5	12457.1	11422.7	10722.4
72.5°	1887.7	1932.0	2475.3	3948.5	6649.2	10110.6	13044.8	13121.3	12191.5	11072.6	9341.9
75°	776.8	821.1	1002.2	1666.3	3489.6	6681.4	11056.5	11237.6	11072.6	9937.5	7309.3
77.5°	483.0	499.1	587.6	861.3	1593.9	3119.3	7739.9	7985.5	8774.3	7961.3	4825.9
80°	362.2	374.3	438.7	603.7	1006.2	1151.1	3843.8	4153.7	5316.9	4568.3	2185.5
82.5°	301.9	305.9	350.2	438.7	684.2	660.1	1231.6	1372.5	2479.4	1742.8	752.7
85°	281.7	289.8	313.9	313.9	434.7	414.6	511.2	535.3	720.5	595.7	261.6
87.5°	144.9	136.8	277.7	245.5	225.4	201.2	217.3	233.4	269.7	285.8	116.7
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°	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2	2459.2
2.5°	2451.2	2463.3	2483.4	2503.5	2527.7	2555.8	2571.9	2592.1	2608.2	2600.1	2596.1
5°	2463.3	2483.4	2527.7	2567.9	2616.2	2672.6	2708.8	2749.0	2781.2	2789.3	2777.2
7.5°	2483.4	2519.6	2580.0	2652.4	2716.8	2789.3	2845.6	2902.0	2942.2	2950.3	2950.3
10°	2531.7	2571.9	2652.4	2749.0	2825.5	2902.0	2966.4	3010.6	3046.9	3063.0	3063.0
12.5°	2600.1	2648.4	2745.0	2861.7	2946.2	3018.7	3054.9	3075.0	3091.1	3107.2	3111.3
15°	2680.6	2732.9	2849.6	2974.4	3063.0	3099.2	3099.2	3095.2	3095.2	3103.2	3111.3
17.5°	2761.1	2817.4	2938.2	3071.0	3127.4	3107.2	3079.1	3067.0	3058.9	3054.9	3067.0
20°	2845.6	2902.0	3022.7	3147.5	3131.4	3046.9	3006.6	2978.4	2954.3	2942.2	2958.3
22.5°	2938.2	2990.5	3115.3	3199.8	3079.1	2950.3	2873.8	2829.5	2789.3	2765.1	2781.2
25°	3046.9	3099.2	3219.9	3215.9	2986.5	2805.4	2684.6	2612.2	2567.9	2543.8	2543.8
27.5°	3175.7	3219.9	3336.7	3175.7	2857.7	2612.2	2435.1	2366.7	2354.6	2334.5	2334.5
30°	3308.5	3344.7	3445.3	3083.1	2680.6	2358.6	2165.4	2133.2	2137.2	2117.1	2121.1
32.5°	3445.3	3481.6	3509.7	2946.2	2451.2	2072.8	1944.0	1919.9	1915.9	1899.8	1883.7
35°	3638.5	3690.9	3517.8	2761.1	2173.5	1835.4	1742.8	1718.6	1694.5	1638.1	1638.1
37.5°	3932.4	3988.7	3497.7	2531.7	1887.7	1650.2	1565.7	1533.5	1493.2	1436.9	1416.8
40°	4334.8	4334.8	3453.4	2274.1	1658.3	1501.3	1420.8	1380.5	1336.3	1279.9	1267.9
42.5°	4809.8	4697.1	3385.0	2012.5	1489.2	1400.7	1328.2	1284.0	1231.6	1167.2	1159.2
45°	5365.2	5059.3	3288.4	1779.0	1364.5	1340.3	1296.0	1219.6	1131.0	1062.6	1050.5
47.5°	5904.6	5385.4	3195.8	1614.0	1259.8	1316.2	1279.9	1151.1	1030.4	933.8	921.7
50°	6496.2	5675.1	3087.1	1477.1	1179.3	1300.1	1259.8	1050.5	917.7	849.3	841.2
52.5°	7087.9	5969.0	2970.4	1332.3	1110.9	1267.9	1211.5	978.1	913.7	821.1	809.0
55°	7711.8	6311.1	2833.5	1171.3	1030.4	1203.5	1147.1	974.0	941.8	821.1	792.9
57.5°	8319.5	6689.4	2612.2	1014.3	941.8	1106.9	1123.0	949.9	881.5	813.0	780.8
60°	8991.7	7091.9	2245.9	881.5	865.4	1026.4	1090.8	897.6	813.0	788.9	772.8
62.5°	9531.0	7454.2	1754.9	788.9	801.0	962.0	1050.5	865.4	784.9	764.7	760.7
65°	9764.5	7462.2	1259.8	708.4	736.6	901.6	1010.3	837.2	760.7	752.7	748.6
67.5°	9519.0	7051.7	885.5	631.9	668.1	845.2	957.9	809.0	736.6	740.6	732.5
70°	8726.0	6186.3	648.0	559.5	603.7	784.9	901.6	772.8	708.4	716.4	704.4
72.5°	7301.2	4821.9	519.2	499.1	551.4	720.5	845.2	732.5	664.1	668.1	644.0
75°	5393.4	3195.8	434.7	446.8	491.0	660.1	772.8	680.2	615.8	599.7	583.6
77.5°	3207.9	1642.2	358.2	390.4	438.7	587.6	692.3	615.8	563.5	535.3	523.2
80°	1324.2	664.1	293.8	330.0	382.4	523.2	611.8	539.3	503.1	474.9	458.8
82.5°	527.3	326.0	233.4	269.7	322.0	454.8	535.3	474.9	438.7	418.6	374.3
85°	201.2	161.0	157.0	189.2	241.5	350.2	442.7	398.5	370.3	318.0	305.9
87.5°	80.5	72.4	72.4	92.6	136.8	221.4	318.0	277.7	289.8	229.4	233.4
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)