

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: P237311

Luminaire Tested: **ARCH-L-AF72-180-D-U-T4W-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237311
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T4W-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21677 lumens
Efficiency: N/A
Efficacy: 119.8 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

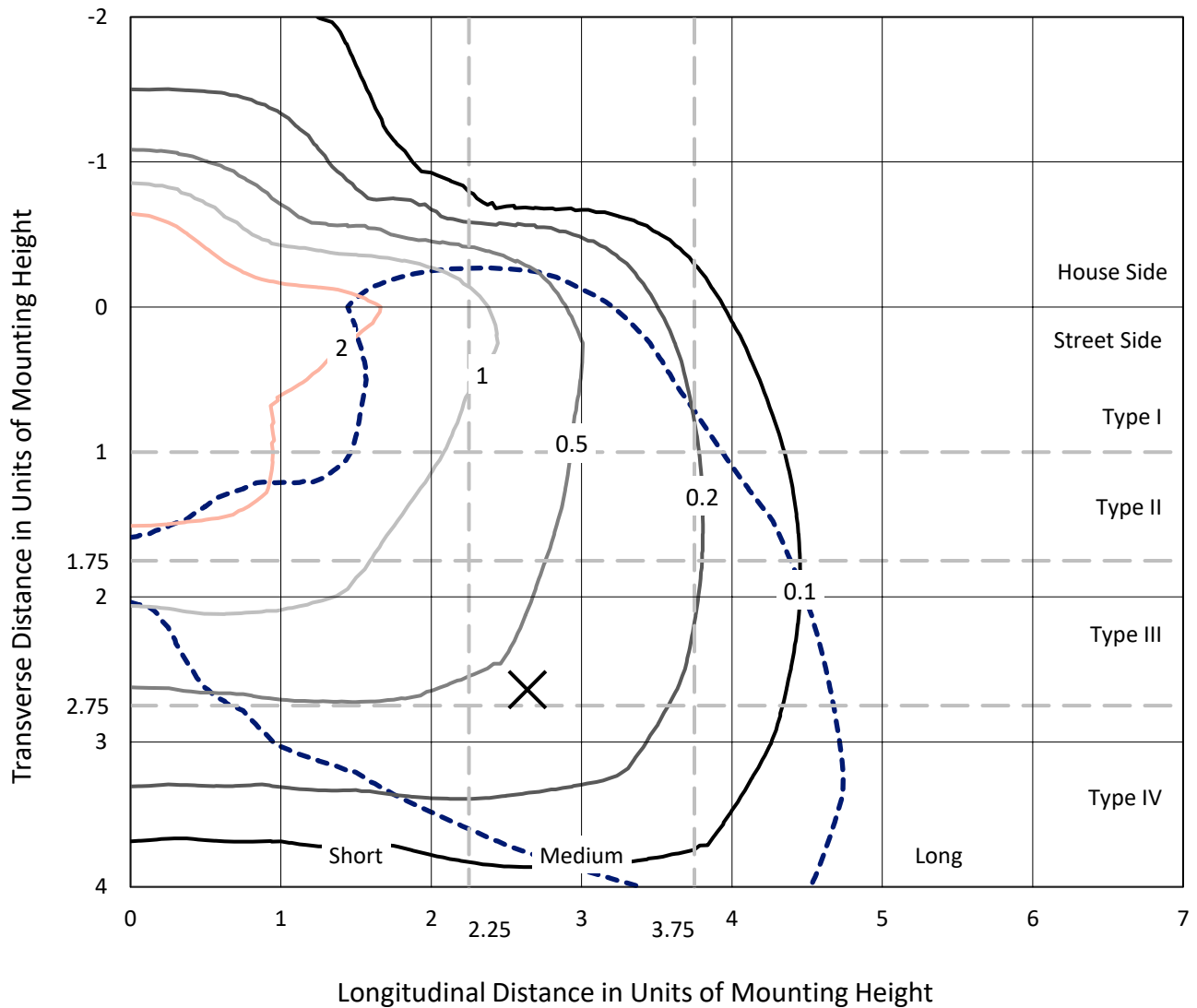
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

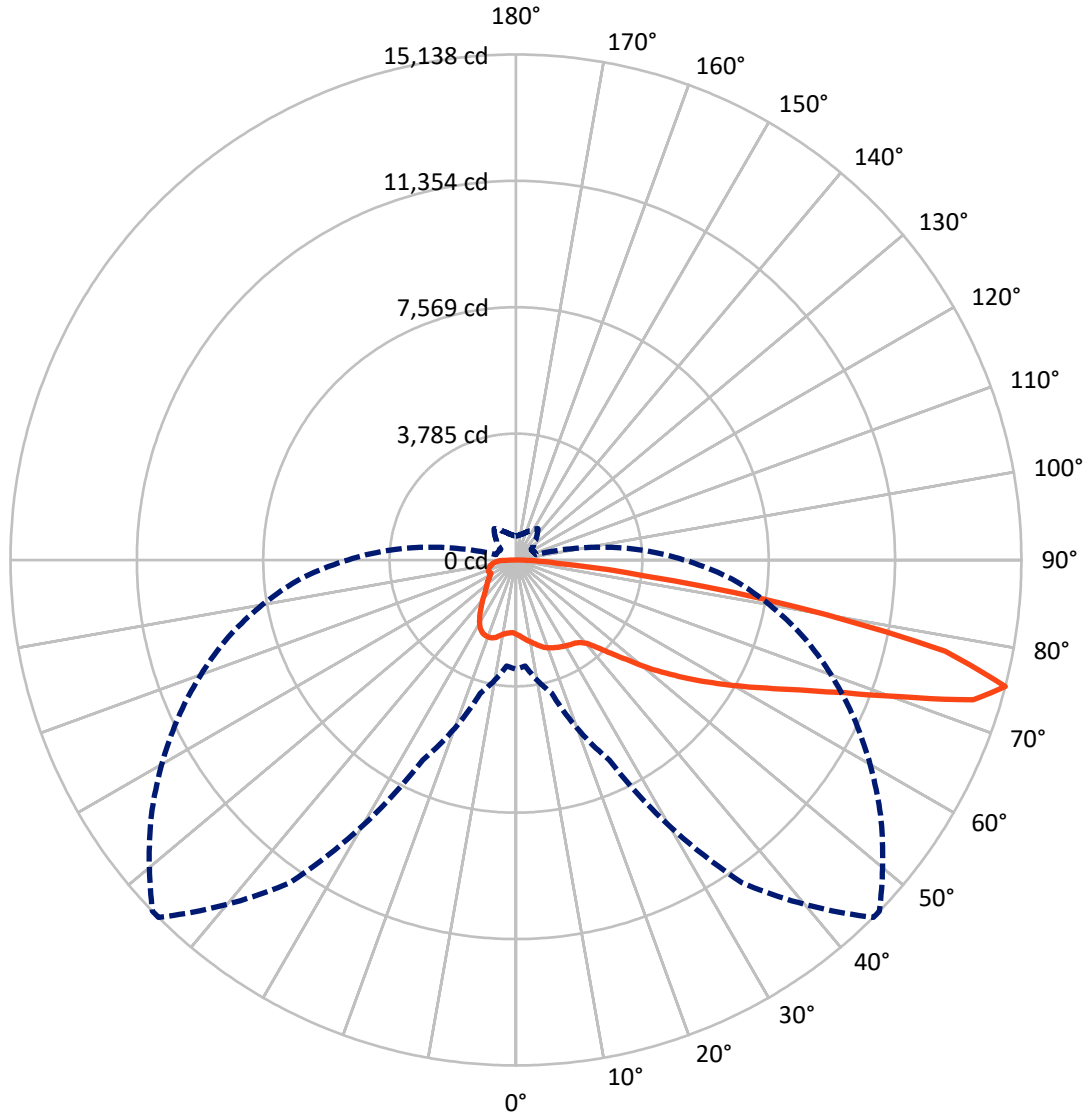
× Max cd
 - - - 1/2 Max cd



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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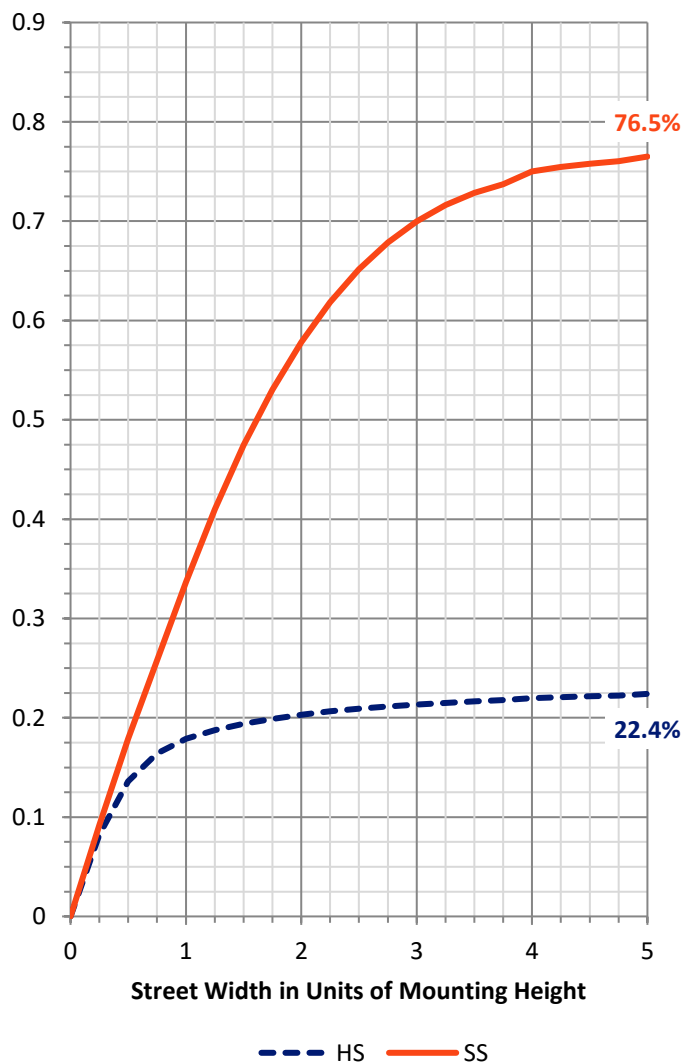
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5021.6	0.0	5021.6
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	16655.4	0.0	16655.4
	% Fixture	76.8	0.0	76.8
Total	Lumens	21677.0	0.0	21677.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.2	1.0
10°-20°	713.6	3.3
20°-30°	1224.6	5.6
30°-40°	1712.7	7.9
40°-50°	2512.4	11.6
50°-60°	3913.7	18.1
60°-70°	5631.5	26.0
70°-80°	4905.7	22.6
80°-90°	842.5	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°	21677.0	100.0
0°-180°	21677.0	100.0

Coefficient of Utilization



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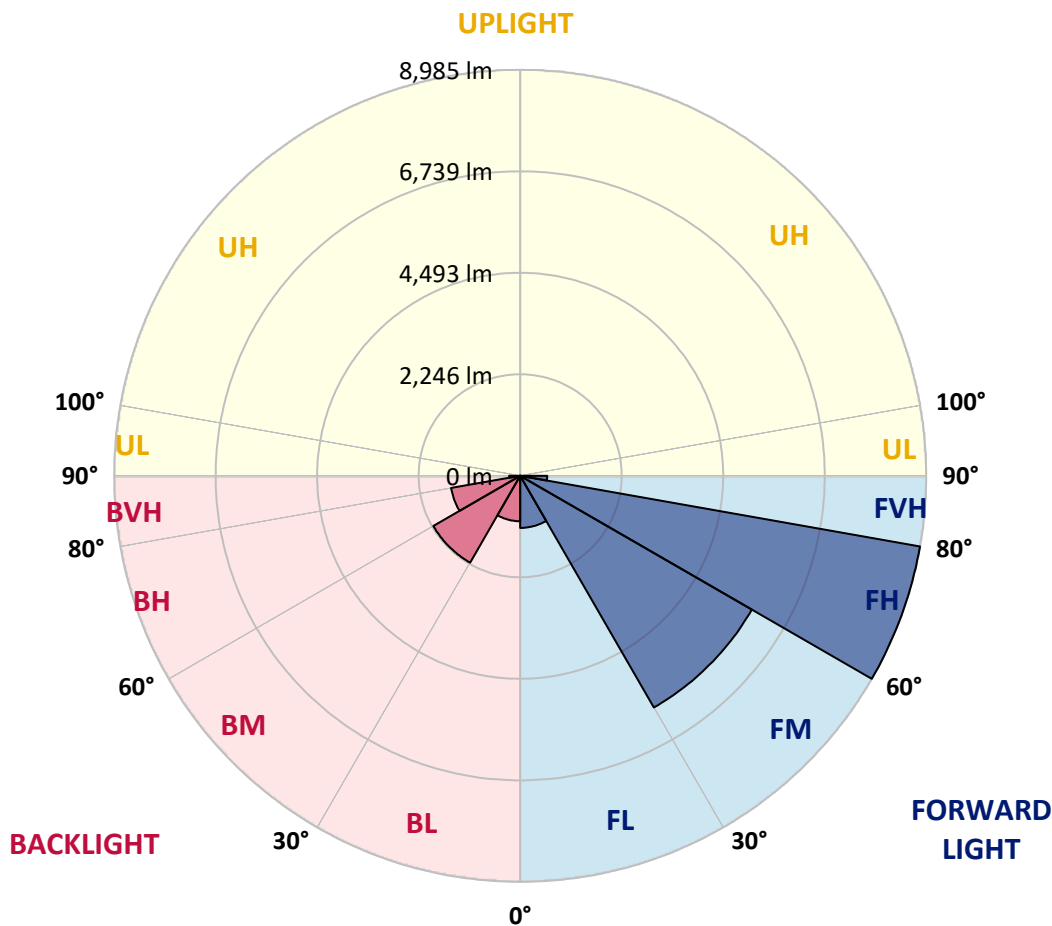
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1152.7	5.3			
FM (30°-60°)	5919.6	27.3			
FH (60°-80°)	8985.3	41.5			G4/12000
FVH (80°-90°)	597.7	2.8			G4/750
BL (0°-30°)	1005.8	4.6	B3/2500		
BM (30°-60°)	2219.3	10.2	B2/2500		
BH (60°-80°)	1551.8	7.2	B3/2500		G3/2500
BVH (80°-90°)	244.7	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°	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3
2.5°	2331.8	2314.9	2314.9	2302.3	2302.3	2281.3	2272.8	2268.5	2247.5	2234.9	2222.3
5°	2466.7	2445.7	2441.5	2412.0	2399.4	2352.9	2348.7	2319.1	2281.3	2243.3	2213.8
7.5°	2589.0	2576.5	2555.3	2525.8	2487.9	2428.9	2424.6	2378.2	2314.9	2264.4	2222.3
10°	2677.6	2669.2	2639.7	2601.7	2559.5	2500.5	2496.2	2445.7	2369.9	2310.8	2251.8
12.5°	2783.1	2770.4	2732.5	2681.9	2635.5	2580.6	2576.5	2534.3	2449.9	2373.9	2298.0
15°	2884.2	2867.4	2821.0	2770.4	2719.8	2673.3	2673.3	2627.0	2538.4	2449.9	2361.3
17.5°	2934.8	2926.4	2880.0	2825.2	2783.1	2749.3	2745.0	2702.8	2614.3	2521.6	2424.6
20°	2951.7	2955.9	2913.7	2854.7	2825.2	2808.3	2804.1	2774.6	2677.6	2589.0	2496.2
22.5°	2947.5	2960.2	2926.4	2863.1	2854.7	2854.7	2854.7	2821.0	2745.0	2656.5	2563.8
25°	2964.3	2981.2	2955.9	2880.0	2880.0	2896.9	2896.9	2880.0	2812.6	2736.6	2643.8
27.5°	3023.4	3036.0	3014.9	2909.6	2913.7	2939.1	2934.8	2939.1	2896.9	2825.2	2732.5
30°	3095.1	3111.9	3086.6	2955.9	2951.7	2977.0	2977.0	2998.1	2968.6	2892.6	2816.8
32.5°	3289.0	3284.8	3204.7	3006.5	2993.8	3019.2	3019.2	3040.2	3023.4	2964.3	2892.6
35°	3866.6	3803.5	3626.4	3170.9	3044.5	3057.1	3057.1	3095.1	3103.5	3057.1	2993.8
37.5°	4457.0	4435.9	4301.0	3609.5	3230.0	3137.3	3133.0	3187.8	3225.8	3187.8	3145.7
40°	5051.6	5034.7	5005.2	4195.7	3617.9	3280.6	3268.0	3314.4	3381.8	3356.5	3331.2
42.5°	5604.0	5595.6	5625.1	4773.3	4111.3	3588.4	3550.5	3495.6	3592.7	3584.2	3584.2
45°	6038.3	6059.4	6076.2	5313.1	4646.8	3984.8	3938.4	3752.8	3883.6	3917.3	3942.6
47.5°	6282.9	6299.8	6358.8	5840.1	5182.3	4444.4	4410.7	4107.0	4279.9	4381.2	4452.9
50°	6632.9	6586.4	6637.1	6354.6	5827.5	5043.2	4950.4	4583.5	4802.8	4979.9	5148.7
52.5°	6970.2	6894.3	6936.5	6949.1	6561.2	5629.2	5532.4	5144.4	5418.5	5696.8	5996.1
55°	7273.8	7269.6	7311.7	7526.9	7269.6	6257.6	6147.9	5764.2	6160.6	6460.0	6966.1
57.5°	7518.3	7560.5	7746.1	8197.2	8087.6	6940.7	6818.5	6485.3	6953.4	7252.7	8091.8
60°	7805.2	7872.5	8180.5	8766.5	8834.0	7657.6	7531.0	7290.7	7767.1	8070.8	9394.7
62.5°	7902.0	7999.1	8631.6	9365.2	9614.0	8441.8	8328.0	8167.7	8623.2	8897.2	10693.5
65°	7257.0	7442.5	8880.4	9673.2	10453.2	9386.4	9289.4	9150.3	9475.0	9656.3	11574.8
67.5°	7079.9	7164.1	8395.5	10115.9	11241.6	10600.8	10503.8	10263.5	10271.9	10196.0	11861.6
70°	6831.1	6923.9	7898.0	10449.0	12371.9	12262.1	12144.1	11435.7	11001.5	10541.8	11296.6
72.5°	5819.0	5789.5	6805.8	9550.8	12915.7	14319.9	14180.8	12696.5	11541.2	10242.4	9534.0
75°	3268.0	3183.6	4128.2	6607.6	11794.1	15138.0	15133.7	13333.2	11161.6	8922.5	6489.6
77.5°	948.8	923.5	1362.0	2770.4	7940.1	13151.9	13312.1	12026.0	9314.7	6409.3	3563.2
80°	447.0	455.4	586.1	915.0	3390.2	8488.3	8947.9	7919.0	5566.1	2955.9	1471.6
82.5°	282.6	286.7	400.6	590.3	1433.7	3854.1	4233.6	3563.2	2205.3	1277.7	649.3
85°	177.1	177.1	265.6	388.0	855.9	1231.3	1336.7	1214.4	944.5	695.8	354.2
87.5°	97.0	97.0	160.3	223.4	468.0	396.4	409.0	484.9	590.3	425.9	177.1
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°	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3	2222.3
2.5°	2218.0	2209.5	2196.8	2192.8	2188.5	2184.2	2188.5	2196.8	2188.5	2188.5	2192.8
5°	2205.3	2196.8	2180.0	2180.0	2184.2	2188.5	2209.5	2222.3	2226.3	2226.3	2226.3
7.5°	2205.3	2192.8	2180.0	2184.2	2192.8	2209.5	2243.3	2264.4	2281.3	2285.4	2285.4
10°	2226.3	2209.5	2201.1	2209.5	2234.9	2247.5	2281.3	2314.9	2336.1	2344.4	2344.4
12.5°	2264.4	2247.5	2247.5	2264.4	2298.0	2314.9	2344.4	2369.9	2395.1	2407.7	2407.7
15°	2327.7	2306.6	2310.8	2340.3	2378.2	2395.1	2416.2	2424.6	2445.7	2462.6	2462.6
17.5°	2386.7	2365.6	2373.9	2407.7	2432.9	2441.5	2454.1	2449.9	2458.4	2471.0	2475.2
20°	2454.1	2432.9	2437.2	2458.4	2462.6	2454.1	2454.1	2441.5	2437.2	2458.4	2466.7
22.5°	2521.6	2500.5	2496.2	2483.7	2462.6	2441.5	2428.9	2416.2	2407.7	2428.9	2437.2
25°	2601.7	2572.2	2551.1	2496.2	2441.5	2403.4	2386.7	2378.2	2373.9	2395.1	2403.4
27.5°	2690.3	2660.8	2597.5	2479.4	2390.9	2327.7	2314.9	2314.9	2323.4	2336.1	2344.4
30°	2774.6	2745.0	2631.2	2441.5	2302.3	2209.5	2196.8	2209.5	2230.6	2243.3	2255.9
32.5°	2858.9	2829.4	2652.3	2382.4	2171.6	2053.5	2045.2	2066.2	2100.0	2108.3	2116.8
35°	2972.7	2943.2	2677.6	2298.0	2007.2	1880.7	1872.2	1884.8	1914.3	1927.0	1939.7
37.5°	3133.0	3116.2	2715.5	2205.3	1855.3	1716.3	1690.9	1682.5	1699.3	1695.1	1712.0
40°	3343.9	3356.5	2783.1	2083.0	1707.7	1564.4	1509.6	1484.3	1467.5	1433.7	1450.5
42.5°	3651.7	3660.0	2858.9	1943.9	1581.3	1421.0	1349.4	1302.9	1269.3	1214.4	1222.8
45°	4102.9	4031.1	2947.5	1796.3	1467.5	1307.2	1222.8	1168.0	1121.6	1075.2	1079.5
47.5°	4701.7	4482.4	3044.5	1674.1	1353.6	1214.4	1138.5	1075.2	1020.5	982.5	986.7
50°	5439.6	5043.2	3141.4	1560.2	1239.8	1142.8	1075.2	1007.8	953.0	915.0	910.7
52.5°	6413.6	5717.9	3204.7	1433.7	1125.8	1079.5	1020.5	957.2	889.7	843.4	839.1
55°	7425.6	6502.1	3259.5	1281.8	1016.2	1007.8	978.3	906.7	826.4	767.4	759.1
57.5°	8538.8	7341.2	3301.7	1134.3	931.9	948.8	940.2	855.9	767.4	712.6	708.4
60°	9550.8	8210.0	3166.8	1003.5	855.9	889.7	898.1	826.4	780.1	792.7	796.9
62.5°	10571.3	8880.4	2652.3	906.7	805.4	851.7	923.5	919.2	898.1	919.2	923.5
65°	10938.2	9019.6	1880.7	826.4	754.8	868.6	1003.5	995.2	898.1	860.2	851.7
67.5°	10731.6	8606.3	1265.0	763.1	716.8	889.7	1087.9	995.2	864.5	813.9	796.9
70°	9748.9	7590.0	927.7	700.1	683.1	885.5	1134.3	990.9	847.6	792.7	771.7
72.5°	7775.7	5857.0	746.4	641.0	632.5	864.5	1159.6	982.5	830.7	771.7	746.4
75°	5034.7	3643.2	628.2	582.0	556.5	830.7	1146.9	957.2	809.6	733.6	716.8
77.5°	2336.1	1568.6	535.5	514.4	484.9	780.1	1109.0	906.7	763.1	691.5	670.5
80°	1087.9	742.1	451.2	447.0	434.3	737.9	1058.4	847.6	708.4	649.3	615.6
82.5°	582.0	447.0	366.9	366.9	379.4	687.4	995.2	775.8	636.8	607.2	518.7
85°	307.8	257.2	265.6	286.7	324.7	607.2	910.7	700.1	556.5	463.8	451.2
87.5°	156.0	164.4	164.4	193.9	248.8	493.3	750.6	577.7	472.2	379.4	371.1
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)