

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: P400012

Luminaire Tested: **ARCH-L-PA3-220-750-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400012  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-220-750-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31168 lumens  
Efficiency: N/A  
Efficacy: 140.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

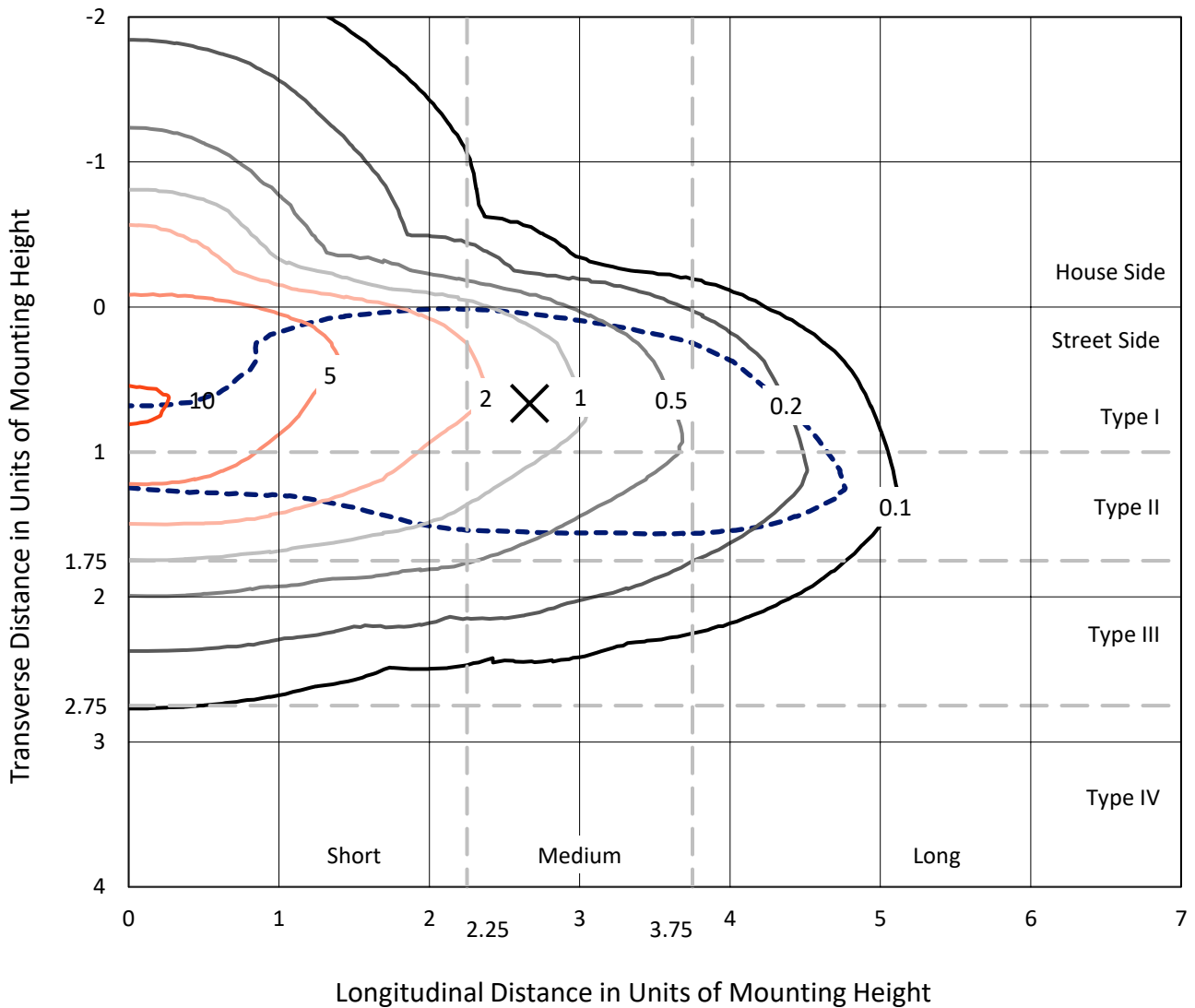
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

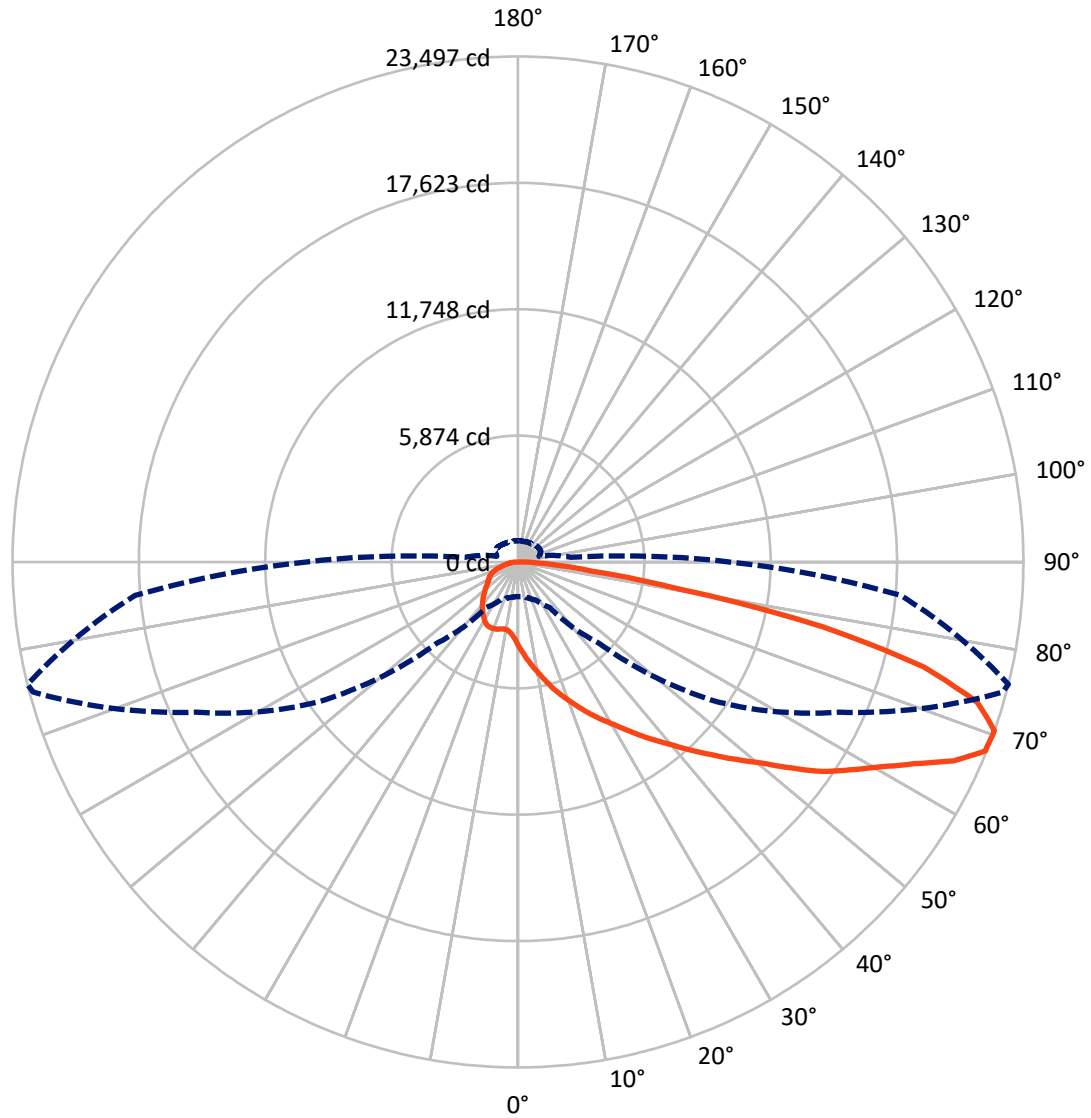
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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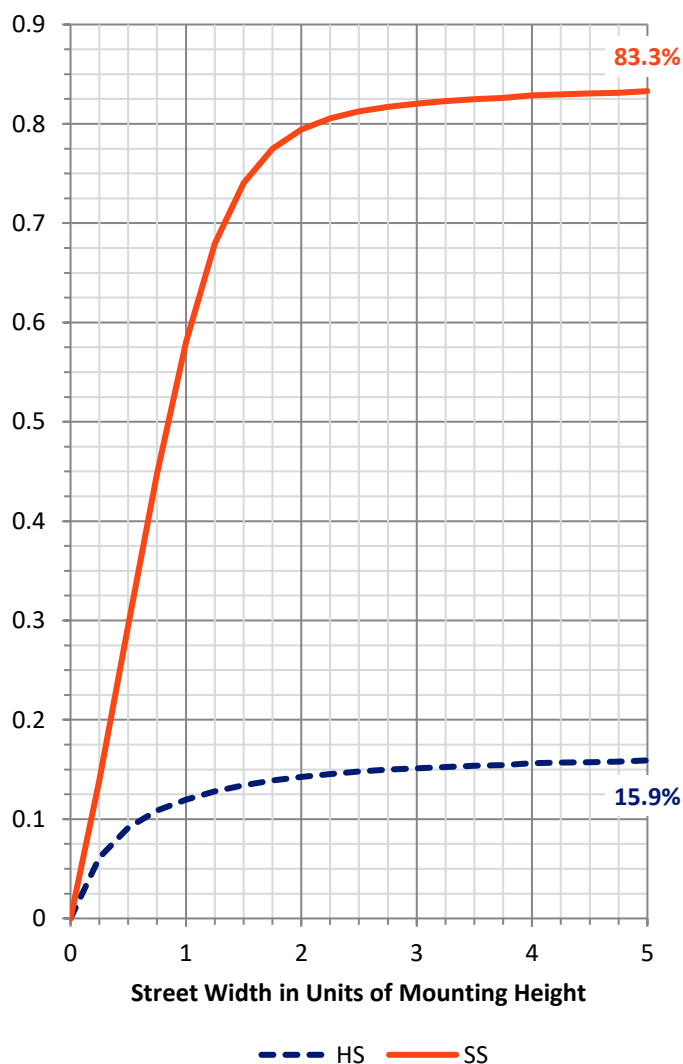
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5088.5	0.0	5088.5
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	26079.5	0.0	26079.5
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	31168.0	0.0	31168.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	405.0	1.3
10°-20°	1376.4	4.4
20°-30°	2462.6	7.9
30°-40°	3983.6	12.8
40°-50°	5762.9	18.5
50°-60°	6596.0	21.2
60°-70°	6067.6	19.5
70°-80°	3752.1	12.0
80°-90°	761.9	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°	31168.0	100.0
0°-180°	31168.0	100.0

**Coefficient of Utilization**



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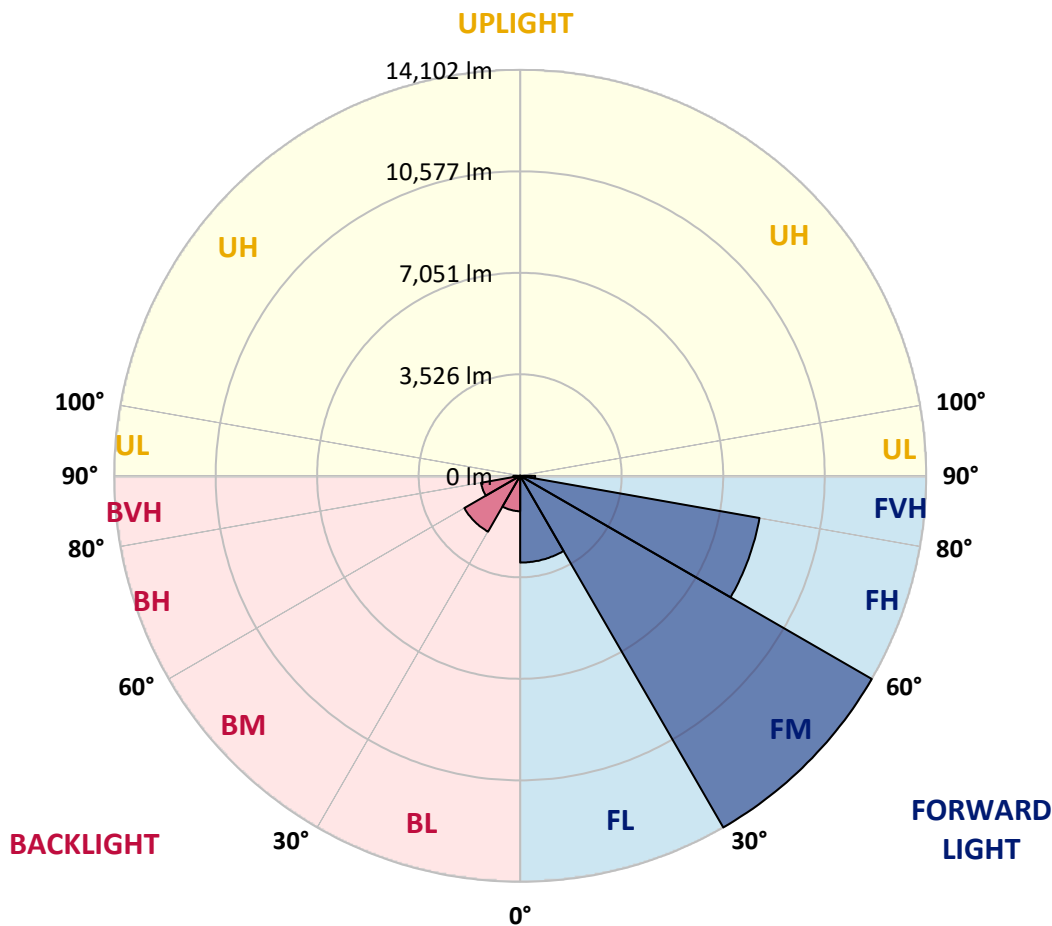
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3015.0	9.7			
FM (30°-60°)	14102.0	45.2			
FH (60°-80°)	8439.5	27.1			G4/12000
FVH (80°-90°)	523.1	1.7			G4/750
BL (0°-30°)	1229.0	3.9	B3/2500		
BM (30°-60°)	2240.4	7.2	B2/2500		
BH (60°-80°)	1380.2	4.4	B3/2500		G3/2500
BVH (80°-90°)	238.9	0.8			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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7
2.5°	4967.4	4930.5	4926.4	4869.0	4815.8	4672.3	4569.8	4389.5	4209.2	4205.1	4024.7
5°	5742.0	5705.1	5684.6	5615.0	5524.8	5336.3	5151.8	4873.1	4565.8	4545.3	4205.1
7.5°	6266.6	6233.8	6192.9	6164.2	6078.1	5910.1	5684.6	5352.7	4930.5	4889.5	4414.1
10°	6619.1	6598.6	6590.4	6569.9	6516.6	6381.4	6164.2	5811.7	5295.3	5250.2	4635.4
12.5°	6770.8	6762.6	6799.4	6856.8	6877.3	6824.0	6615.0	6283.0	5696.9	5647.8	4901.8
15°	6594.5	6602.7	6697.0	6893.7	7102.7	7217.5	7094.5	6770.8	6151.9	6082.2	5213.3
17.5°	6512.5	6524.8	6590.4	6779.0	7074.0	7430.6	7488.0	7233.9	6590.4	6492.1	5541.2
20°	6656.0	6672.4	6721.6	6869.1	7074.0	7455.2	7754.4	7676.5	7020.8	6918.3	5856.8
22.5°	7020.8	7041.3	7037.2	7131.4	7270.8	7533.1	7901.9	8094.6	7471.6	7356.8	6184.7
25°	7799.5	7783.1	7643.7	7598.7	7635.5	7803.6	8098.7	8496.2	7942.9	7828.2	6528.9
27.5°	8856.9	8836.4	8582.3	8352.8	8147.9	8221.6	8377.4	8820.0	8422.5	8291.3	6856.8
30°	9988.1	9963.5	9668.4	9295.4	8840.5	8733.9	8713.5	9102.8	8906.1	8766.7	7205.2
32.5°	11090.6	11070.1	10754.5	10320.1	9693.0	9373.3	9176.6	9418.4	9455.3	9320.0	7586.4
35°	12094.7	12094.7	11824.2	11307.8	10598.8	10115.1	9791.4	9807.8	10086.5	9930.7	8020.8
37.5°	12988.2	12984.1	12689.0	12180.8	11500.4	10947.1	10545.5	10279.1	10688.9	10553.7	8475.7
40°	13697.3	13668.6	13451.3	13008.7	12324.2	11775.0	11369.3	10832.4	11361.1	11238.1	8959.4
42.5°	14213.7	14197.3	14049.7	13664.5	13012.8	12496.4	12217.7	11529.1	12123.4	12000.5	9525.0
45°	14414.5	14447.3	14447.3	14082.5	13566.1	13094.8	12971.8	12295.6	12947.2	12824.3	10131.5
47.5°	14090.7	14176.8	14353.0	14377.6	13922.7	13603.0	13644.0	13066.1	13795.6	13730.0	10795.5
50°	13078.4	13238.2	13623.5	14320.2	14066.1	13992.3	14217.8	13853.0	14705.5	14685.0	11602.9
52.5°	10467.6	10857.0	12057.8	13307.9	13967.8	14172.7	14787.5	14738.3	15877.7	15910.5	12656.2
55°	8029.0	8176.5	9565.9	11693.1	13365.3	14115.3	15168.6	15603.1	17148.2	17189.2	13623.5
57.5°	6492.1	6590.4	7348.6	9565.9	11992.3	13803.8	15467.8	16107.2	18123.7	18230.2	14484.2
60°	5143.6	5287.1	5795.3	7320.0	10070.1	13053.8	15676.8	16668.7	19172.9	19332.7	15512.9
62.5°	3823.9	3893.6	4373.1	5422.3	7971.6	11705.4	15566.2	17279.4	20459.8	20652.4	16750.6
65°	2721.4	2782.9	3123.1	3856.7	5893.7	9881.5	14922.7	17734.3	22074.6	22271.4	17996.6
67.5°	2037.0	2061.6	2254.2	2696.8	3971.5	7676.5	13619.4	17656.4	23255.0	23431.2	18496.6
70°	1610.7	1618.9	1713.2	1950.9	2582.1	5344.5	11336.5	16512.9	23341.1	23496.8	17865.4
72.5°	1336.1	1332.0	1385.3	1500.1	1799.2	3381.3	8397.9	14389.9	22234.5	22341.0	16103.1
75°	1102.5	1110.7	1147.6	1213.2	1373.0	2229.6	5442.8	11480.0	19615.5	19500.8	13512.8
77.5°	926.3	922.2	938.6	995.9	1110.7	1602.5	3188.6	8295.4	14537.4	14480.1	8869.2
80°	745.9	754.1	778.7	827.9	934.5	1221.4	1885.3	5176.4	7799.5	7590.5	4237.9
82.5°	500.0	577.9	627.1	684.5	807.4	901.7	1196.8	2631.2	3487.8	3434.6	1922.2
85°	237.7	315.6	467.2	532.8	655.8	565.6	811.5	1254.1	1746.0	1725.5	692.6
87.5°	49.2	49.2	250.0	299.2	405.8	241.8	450.8	545.1	844.3	791.0	282.8
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°	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7	3897.7
2.5°	3918.2	3807.5	3586.2	3410.0	3229.6	3127.2	3000.1	2938.6	2926.3	2893.6	2918.1
5°	3987.9	3770.6	3352.6	3078.0	2893.6	2803.4	2758.3	2741.9	2737.8	2729.6	2729.6
7.5°	4082.1	3750.1	3205.0	2926.3	2807.5	2778.8	2791.1	2815.7	2819.8	2828.0	2823.9
10°	4196.9	3754.2	3123.1	2889.5	2832.1	2836.2	2877.2	2909.9	2926.3	2938.6	2934.5
12.5°	4356.7	3803.4	3110.8	2914.0	2889.5	2905.9	2946.8	2979.6	2996.0	3000.1	3000.1
15°	4565.8	3905.9	3139.5	2967.3	2946.8	2959.1	2983.7	2996.0	3000.1	2996.0	2996.0
17.5°	4795.3	4028.8	3180.5	3000.1	2967.3	2955.0	2946.8	2934.5	2909.9	2893.6	2893.6
20°	5016.6	4139.5	3200.9	2996.0	2938.6	2889.5	2840.3	2778.8	2737.8	2705.0	2705.0
22.5°	5237.9	4242.0	3200.9	2950.9	2860.8	2766.5	2664.0	2565.7	2504.2	2463.2	2463.2
25°	5471.5	4340.3	3176.4	2873.1	2737.8	2602.6	2463.2	2340.3	2278.8	2237.8	2229.6
27.5°	5668.3	4397.7	3110.8	2762.4	2586.2	2414.0	2254.2	2127.1	2082.0	2045.2	2045.2
30°	5877.3	4434.6	2987.8	2619.0	2414.0	2217.3	2053.4	1950.9	1901.7	1848.4	1844.3
32.5°	6110.9	4459.2	2848.5	2467.3	2237.8	2028.8	1889.4	1807.4	1700.9	1643.5	1635.3
35°	6381.4	4492.0	2700.9	2295.2	2061.6	1873.0	1791.1	1655.8	1553.3	1504.2	1500.1
37.5°	6668.3	4516.6	2541.1	2143.5	1901.7	1770.6	1688.6	1528.7	1438.6	1364.8	1356.6
40°	6971.6	4516.6	2377.1	1996.0	1774.7	1725.5	1569.7	1426.3	1274.6	1237.8	1229.6
42.5°	7307.7	4508.4	2213.2	1852.5	1655.8	1623.0	1500.1	1348.4	1270.5	1237.8	1229.6
45°	7664.2	4479.7	2057.5	1688.6	1532.8	1467.3	1373.0	1332.0	1299.2	1299.2	1299.2
47.5°	8070.0	4455.1	1881.2	1541.0	1442.7	1368.9	1299.2	1274.6	1270.5	1282.8	1295.1
50°	8590.5	4446.9	1733.7	1434.5	1373.0	1286.9	1278.7	1258.2	1262.3	1262.3	1262.3
52.5°	9221.7	4373.1	1594.3	1356.6	1303.3	1200.9	1225.5	1245.9	1254.1	1250.0	1245.9
55°	9684.8	4242.0	1475.5	1303.3	1254.1	1168.1	1200.9	1233.7	1241.9	1229.6	1229.6
57.5°	10102.8	4057.5	1381.2	1262.3	1221.4	1147.6	1184.5	1217.3	1209.1	1205.0	1200.9
60°	10582.4	3881.3	1307.4	1241.9	1188.6	1139.4	1172.2	1192.7	1180.4	1172.2	1168.1
62.5°	11102.9	3709.2	1254.1	1241.9	1164.0	1135.3	1159.9	1168.1	1143.5	1135.3	1135.3
65°	11344.7	3438.7	1196.8	1241.9	1151.7	1127.1	1135.3	1127.1	1102.5	1102.5	1098.4
67.5°	10947.1	2991.9	1123.0	1225.5	1168.1	1114.8	1098.4	1086.1	1057.4	1057.4	1049.2
70°	9848.7	2459.1	1016.4	1172.2	1172.2	1110.7	1049.2	1020.5	987.7	1000.0	983.6
72.5°	8414.3	1950.9	885.3	1082.0	1147.6	1106.6	995.9	950.9	922.2	934.5	909.9
75°	6815.8	1512.4	729.5	938.6	1086.1	1086.1	942.7	881.2	848.4	848.4	819.7
77.5°	4344.4	1118.9	594.3	778.7	975.4	1057.4	897.6	803.3	754.1	741.8	721.3
80°	2151.7	786.9	487.7	618.9	832.0	991.8	864.8	713.1	643.5	618.9	582.0
82.5°	1143.5	545.1	389.4	483.6	664.0	893.5	823.8	614.8	528.7	491.8	450.8
85°	512.3	336.1	311.5	368.9	504.1	733.6	741.8	504.1	405.8	483.6	356.6
87.5°	188.5	151.6	151.6	188.5	291.0	307.4	524.6	323.8	258.2	176.2	139.3
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)