

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: P400183

Luminaire Tested: **ARCH-L-PA3-240-830-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400183  
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-PA3-240-830-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26247 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

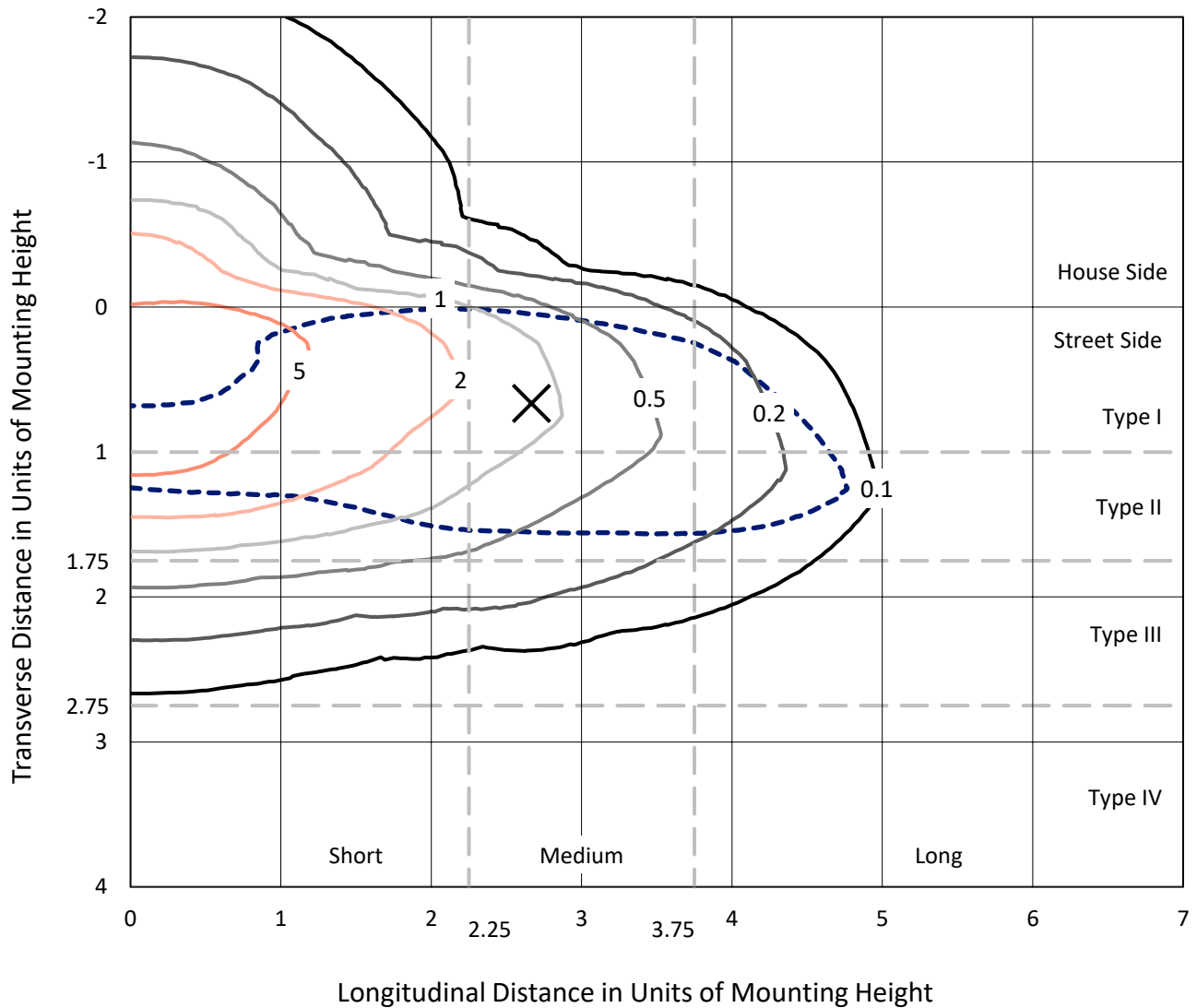
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

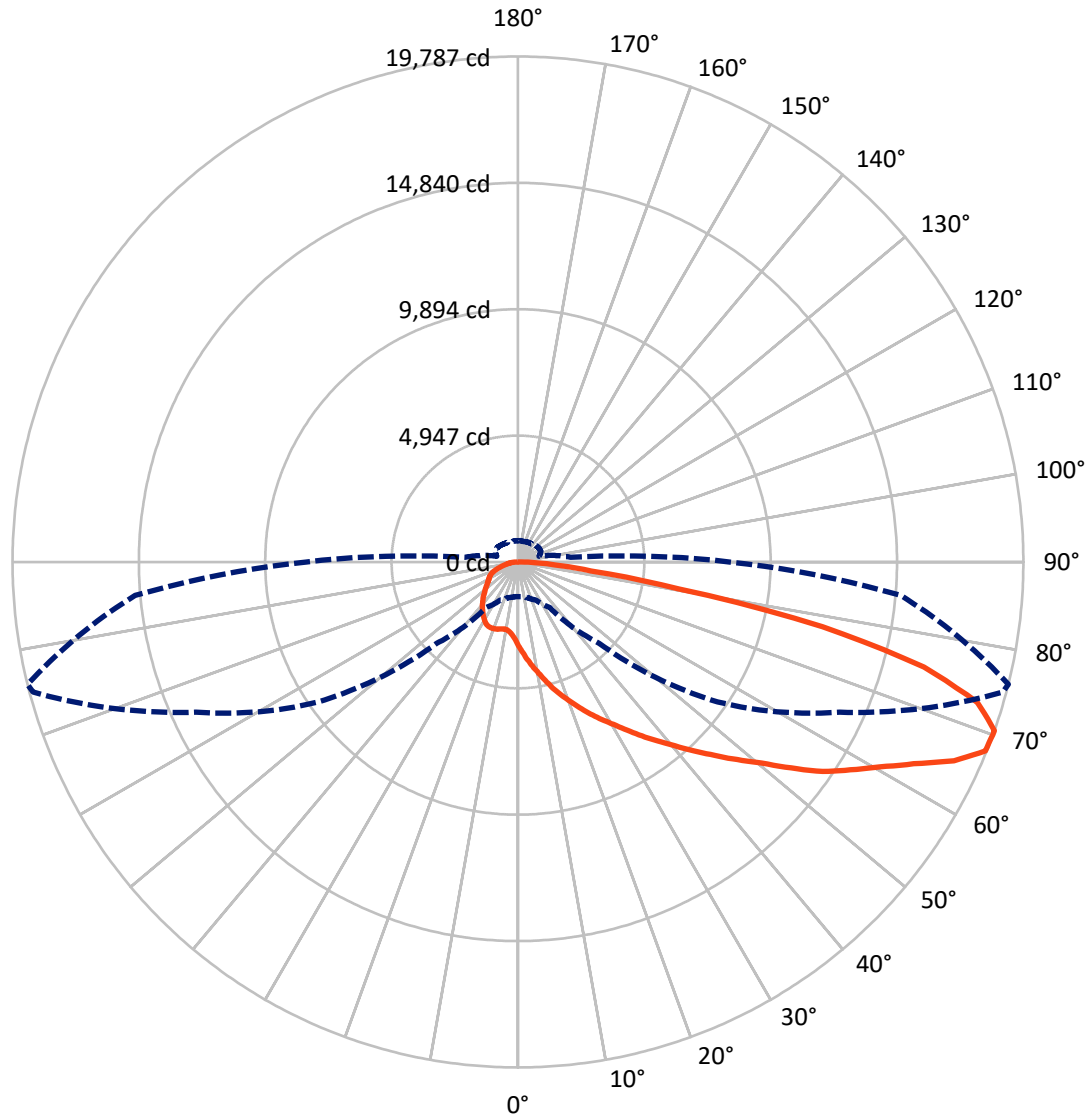
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 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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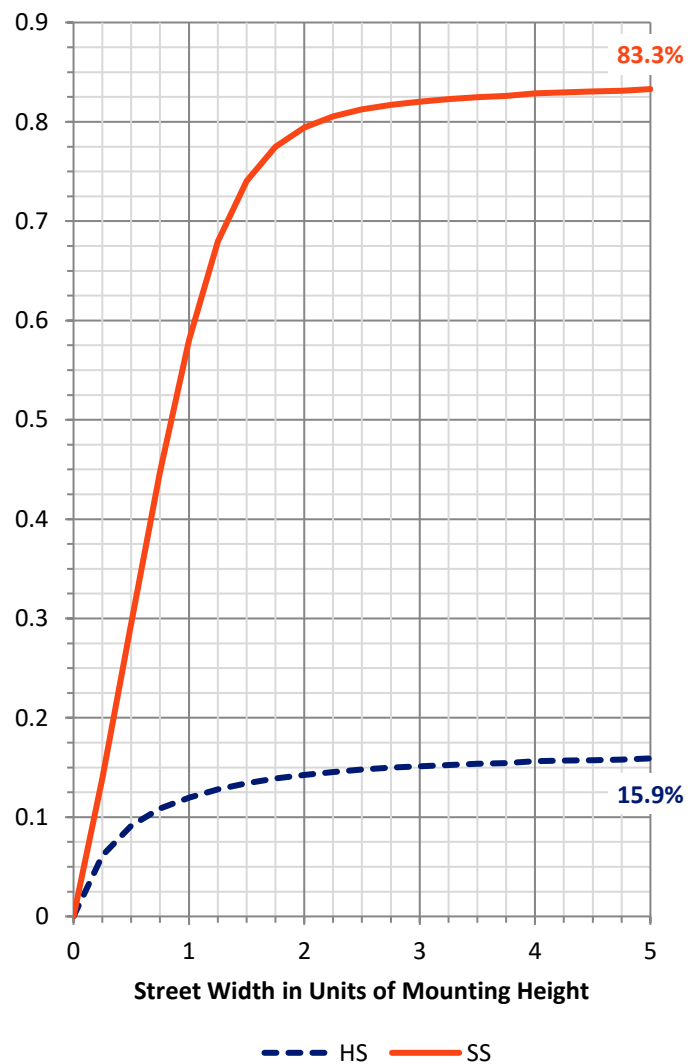
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4285.1	0.0	4285.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	21961.9	0.0	21961.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	26247.0	0.0	26247.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	341.0	1.3
10°-20°	1159.1	4.4
20°-30°	2073.8	7.9
30°-40°	3354.7	12.8
40°-50°	4853.0	18.5
50°-60°	5554.6	21.2
60°-70°	5109.6	19.5
70°-80°	3159.7	12.0
80°-90°	641.6	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°	26247.0	100.0
0°-180°	26247.0	100.0

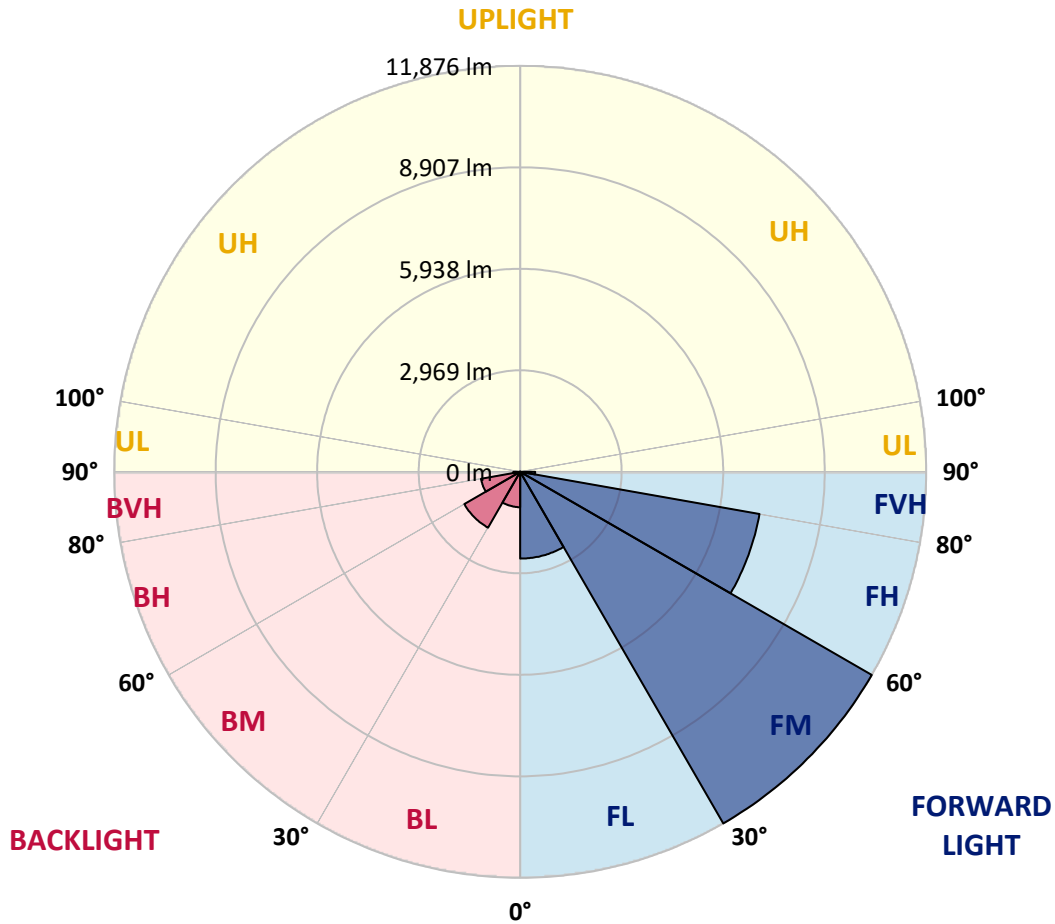


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2538.9	9.7			
FM (30°-60°)	11875.5	45.2			
FH (60°-80°)	7107.0	27.1			G3/7500
FVH (80°-90°)	440.5	1.7			G3/500
BL (0°-30°)	1035.0	3.9	B3/2500		
BM (30°-60°)	1886.7	7.2	B2/2500		
BH (60°-80°)	1162.3	4.4	B3/2500		G3/2500
BVH (80°-90°)	201.1	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3
2.5°	4183.1	4152.1	4148.6	4100.3	4055.4	3934.6	3848.3	3696.5	3544.6	3541.2	3389.3
5°	4835.4	4804.4	4787.1	4728.4	4652.5	4493.7	4338.4	4103.7	3844.9	3827.6	3541.2
7.5°	5277.2	5249.6	5215.1	5190.9	5118.5	4976.9	4787.1	4507.6	4152.1	4117.5	3717.2
10°	5574.0	5556.8	5549.9	5532.6	5487.8	5373.9	5190.9	4894.1	4459.2	4421.3	3903.6
12.5°	5701.7	5694.8	5725.9	5774.2	5791.5	5746.6	5570.6	5291.0	4797.5	4756.1	4127.9
15°	5553.3	5560.2	5639.6	5805.3	5981.3	6077.9	5974.4	5701.7	5180.6	5121.9	4390.2
17.5°	5484.3	5494.7	5549.9	5708.6	5957.1	6257.4	6305.7	6091.8	5549.9	5467.0	4666.3
20°	5605.1	5618.9	5660.3	5784.6	5957.1	6278.1	6530.1	6464.5	5912.3	5826.0	4932.1
22.5°	5912.3	5929.5	5926.1	6005.5	6122.8	6343.7	6654.3	6816.6	6291.9	6195.3	5208.2
25°	6568.1	6554.2	6436.9	6398.9	6430.0	6571.5	6820.0	7154.8	6688.9	6592.2	5498.1
27.5°	7458.5	7441.3	7227.3	7034.0	6861.4	6923.5	7054.7	7427.5	7092.7	6982.2	5774.2
30°	8411.1	8390.4	8141.9	7827.8	7444.7	7355.0	7337.7	7665.6	7499.9	7382.6	6067.6
32.5°	9339.5	9322.3	9056.5	8690.7	8162.6	7893.4	7727.7	7931.4	7962.4	7848.5	6388.6
35°	10185.1	10185.1	9957.3	9522.5	8925.4	8518.1	8245.4	8259.2	8493.9	8362.8	6754.4
37.5°	10937.5	10934.1	10685.6	10257.6	9684.7	9218.7	8880.5	8656.2	9001.3	8887.4	7137.5
40°	11534.6	11510.5	11327.6	10954.8	10378.4	9915.9	9574.2	9122.1	9567.3	9463.8	7544.8
42.5°	11969.5	11955.7	11831.5	11507.0	10958.3	10523.4	10288.7	9708.8	10209.3	10105.8	8021.1
45°	12138.6	12166.3	12166.3	11859.1	11424.2	11027.3	10923.7	10354.3	10903.0	10799.5	8531.9
47.5°	11866.0	11938.5	12086.9	12107.6	11724.5	11455.3	11489.8	11003.1	11617.5	11562.3	9091.0
50°	11013.5	11148.1	11472.5	12059.3	11845.3	11783.1	11973.0	11665.8	12383.7	12366.4	9771.0
52.5°	8814.9	9142.8	10154.1	11206.8	11762.4	11935.0	12452.7	12411.3	13370.8	13398.4	10658.0
55°	6761.3	6885.6	8055.6	9846.9	11255.1	11886.7	12773.7	13139.6	14440.7	14475.3	11472.5
57.5°	5467.0	5549.9	6188.4	8055.6	10098.9	11624.4	13025.7	13564.1	15262.2	15351.9	12197.3
60°	4331.5	4452.3	4880.3	6164.2	8480.1	10992.8	13201.7	14036.9	16145.7	16280.3	13063.6
62.5°	3220.2	3278.8	3682.7	4566.2	6713.0	9857.3	13108.5	14551.2	17229.5	17391.7	14106.0
65°	2291.7	2343.5	2630.0	3247.8	4963.1	8321.4	12566.6	14934.3	18589.3	18755.0	15155.2
67.5°	1715.4	1736.1	1898.3	2271.0	3344.4	6464.5	11469.1	14868.7	19583.4	19731.8	15576.3
70°	1356.4	1363.3	1442.7	1642.9	2174.4	4500.7	9546.6	13905.8	19655.8	19787.0	15044.7
72.5°	1125.2	1121.7	1166.6	1263.2	1515.2	2847.4	7072.0	12117.9	18723.9	18813.7	13560.6
75°	928.4	935.3	966.4	1021.6	1156.2	1877.6	4583.5	9667.4	16518.5	16421.9	11379.3
77.5°	780.0	776.6	790.4	838.7	935.3	1349.5	2685.2	6985.7	12242.2	12193.9	7468.9
80°	628.2	635.1	655.8	697.2	786.9	1028.5	1587.7	4359.1	6568.1	6392.0	3568.8
82.5°	421.1	486.7	528.1	576.4	679.9	759.3	1007.8	2215.8	2937.2	2892.3	1618.7
85°	200.2	265.8	393.5	448.7	552.2	476.3	683.4	1056.1	1470.3	1453.0	583.3
87.5°	41.4	41.4	210.5	252.0	341.7	203.6	379.7	459.0	711.0	666.1	238.1
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°	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3	3282.3
2.5°	3299.6	3206.4	3020.0	2871.6	2719.7	2633.4	2526.4	2474.7	2464.3	2436.7	2457.4
5°	3358.2	3175.3	2823.3	2592.0	2436.7	2360.8	2322.8	2309.0	2305.5	2298.6	2298.6
7.5°	3437.6	3158.0	2699.0	2464.3	2364.2	2340.1	2350.4	2371.1	2374.6	2381.5	2378.0
10°	3534.3	3161.5	2630.0	2433.3	2384.9	2388.4	2422.9	2450.5	2464.3	2474.7	2471.2
12.5°	3668.9	3202.9	2619.6	2454.0	2433.3	2447.1	2481.6	2509.2	2523.0	2526.4	2526.4
15°	3844.9	3289.2	2643.8	2498.8	2481.6	2491.9	2512.6	2523.0	2526.4	2523.0	2523.0
17.5°	4038.2	3392.7	2678.3	2526.4	2498.8	2488.5	2481.6	2471.2	2450.5	2436.7	2436.7
20°	4224.5	3485.9	2695.6	2523.0	2474.7	2433.3	2391.8	2340.1	2305.5	2277.9	2277.9
22.5°	4410.9	3572.2	2695.6	2485.0	2409.1	2329.7	2243.4	2160.6	2108.8	2074.3	2074.3
25°	4607.6	3655.1	2674.8	2419.4	2305.5	2191.7	2074.3	1970.8	1919.0	1884.5	1877.6
27.5°	4773.3	3703.4	2619.6	2326.3	2177.8	2032.9	1898.3	1791.3	1753.3	1722.3	1722.3
30°	4949.3	3734.4	2516.1	2205.5	2032.9	1867.2	1729.2	1642.9	1601.5	1556.6	1553.1
32.5°	5146.1	3755.1	2398.7	2077.8	1884.5	1708.5	1591.1	1522.1	1432.3	1384.0	1377.1
35°	5373.9	3782.8	2274.5	1932.8	1736.1	1577.3	1508.3	1394.4	1308.1	1266.7	1263.2
37.5°	5615.5	3803.5	2139.9	1805.1	1601.5	1491.0	1422.0	1287.4	1211.4	1149.3	1142.4
40°	5870.9	3803.5	2001.8	1680.8	1494.5	1453.0	1321.9	1201.1	1073.4	1042.3	1035.4
42.5°	6153.9	3796.6	1863.8	1560.0	1394.4	1366.8	1263.2	1135.5	1069.9	1042.3	1035.4
45°	6454.2	3772.4	1732.6	1422.0	1290.8	1235.6	1156.2	1121.7	1094.1	1094.1	1094.1
47.5°	6795.8	3751.7	1584.2	1297.7	1214.9	1152.8	1094.1	1073.4	1069.9	1080.3	1090.6
50°	7234.2	3744.8	1460.0	1208.0	1156.2	1083.7	1076.8	1059.6	1063.0	1063.0	1063.0
52.5°	7765.7	3682.7	1342.6	1142.4	1097.6	1011.3	1032.0	1049.2	1056.1	1052.7	1049.2
55°	8155.7	3572.2	1242.5	1097.6	1056.1	983.7	1011.3	1038.9	1045.8	1035.4	1035.4
57.5°	8507.7	3416.9	1163.1	1063.0	1028.5	966.4	997.5	1025.1	1018.2	1014.7	1011.3
60°	8911.6	3268.5	1101.0	1045.8	1000.9	959.5	987.1	1004.4	994.0	987.1	983.7
62.5°	9349.9	3123.5	1056.1	1045.8	980.2	956.0	976.8	983.7	962.9	956.0	956.0
65°	9553.5	2895.7	1007.8	1045.8	969.8	949.1	956.0	949.1	928.4	928.4	925.0
67.5°	9218.7	2519.5	945.7	1032.0	983.7	938.8	925.0	914.6	890.5	890.5	883.6
70°	8293.8	2070.9	856.0	987.1	987.1	935.3	883.6	859.4	831.8	842.1	828.3
72.5°	7085.8	1642.9	745.5	911.2	966.4	931.9	838.7	800.7	776.6	786.9	766.2
75°	5739.7	1273.6	614.4	790.4	914.6	914.6	793.8	742.1	714.4	714.4	690.3
77.5°	3658.5	942.2	500.5	655.8	821.4	890.5	755.9	676.5	635.1	624.7	607.4
80°	1812.0	662.7	410.7	521.2	700.6	835.2	728.2	600.5	541.9	521.2	490.1
82.5°	962.9	459.0	327.9	407.3	559.1	752.4	693.7	517.7	445.2	414.2	379.7
85°	431.4	283.0	262.3	310.6	424.5	617.8	624.7	424.5	341.7	407.3	300.3
87.5°	158.8	127.7	127.7	158.8	245.1	258.9	441.8	272.7	217.4	148.4	117.3
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)