

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: P400111

Luminaire Tested: **ARCH-L-PA3-230-830-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400111  
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-PA3-230-830-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25389 lumens  
Efficiency: N/A  
Efficacy: 110.9 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

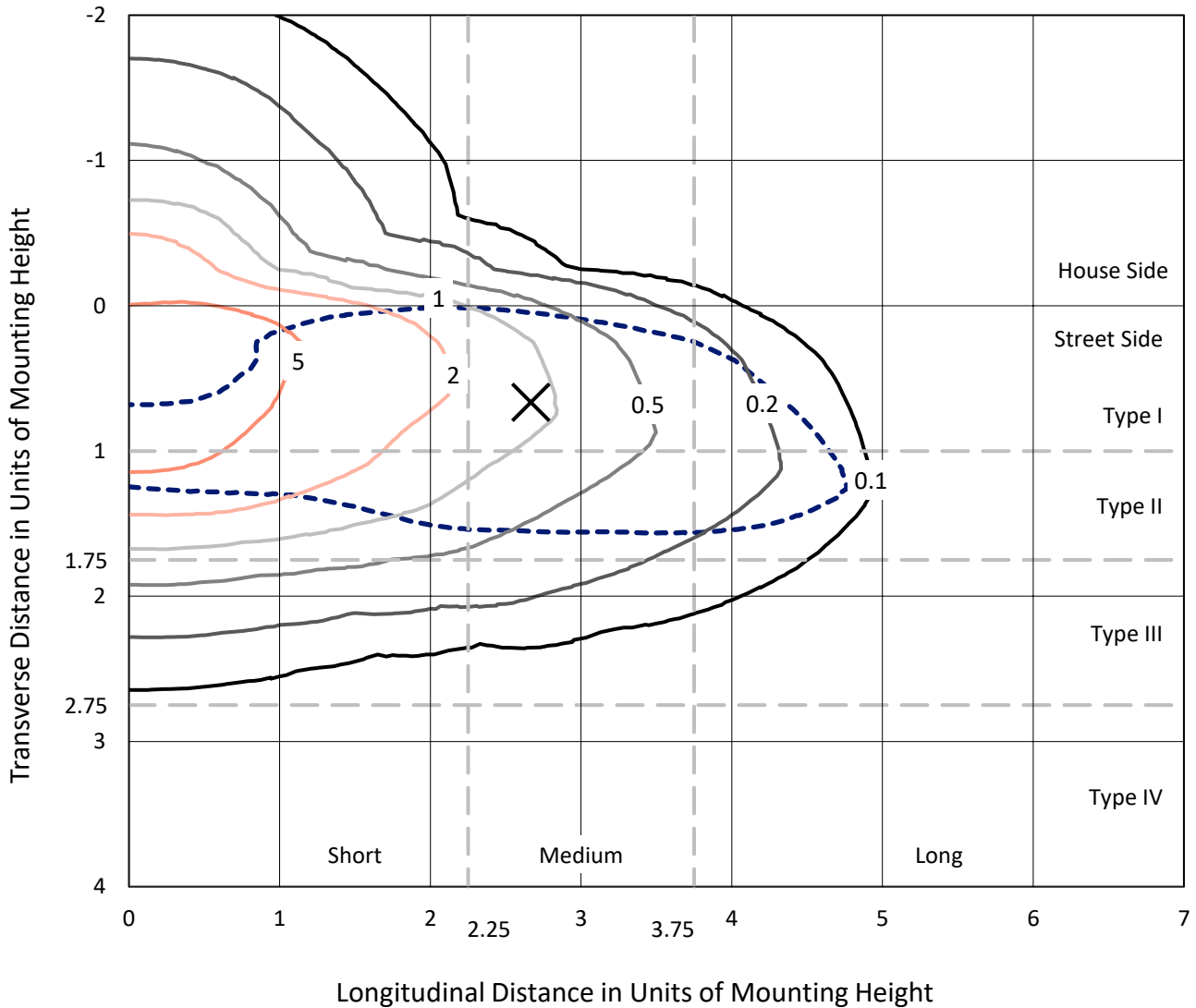
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

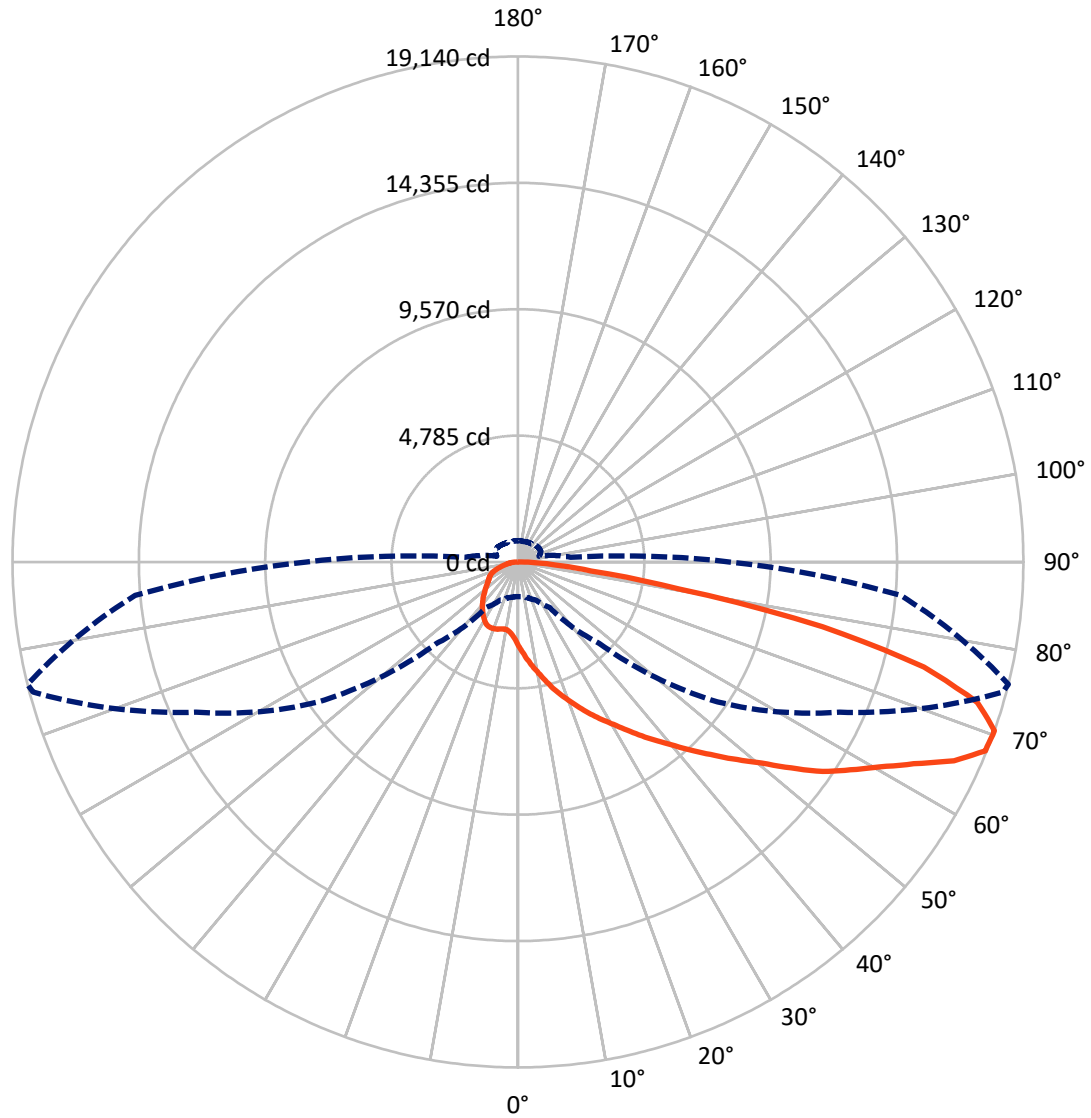
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 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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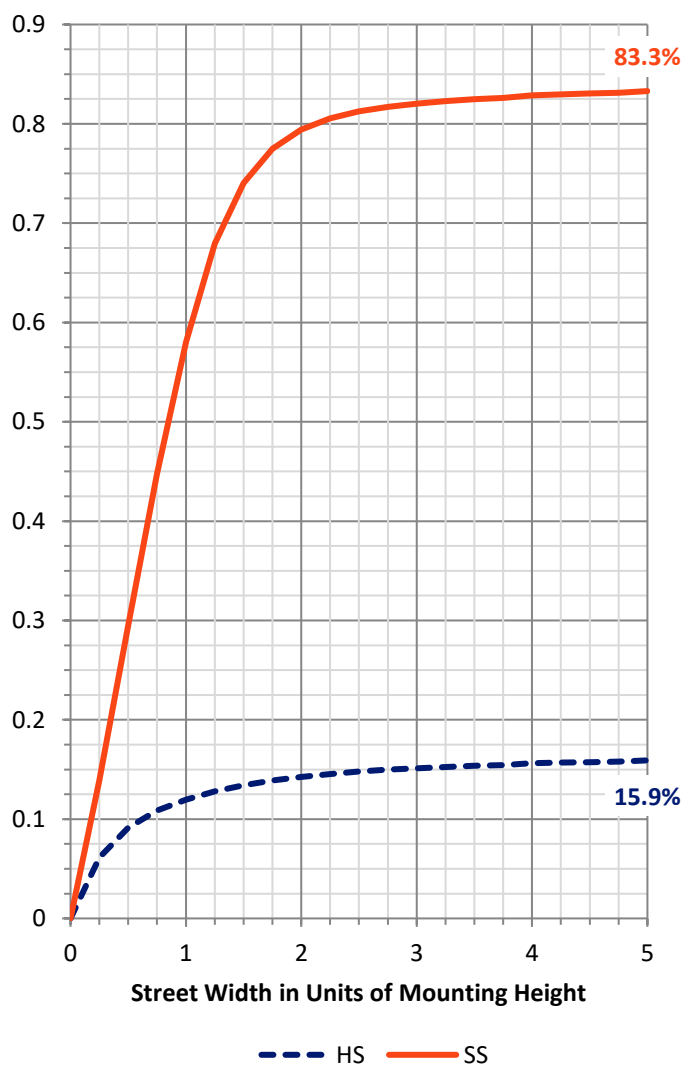
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4145.0	0.0	4145.0
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	21244.0	0.0	21244.0
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	25389.0	0.0	25389.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	329.9	1.3
10°-20°	1121.2	4.4
20°-30°	2006.0	7.9
30°-40°	3245.0	12.8
40°-50°	4694.4	18.5
50°-60°	5373.0	21.2
60°-70°	4942.5	19.5
70°-80°	3056.4	12.0
80°-90°	620.6	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°	25389.0	100.0
0°-180°	25389.0	100.0

**Coefficient of Utilization**



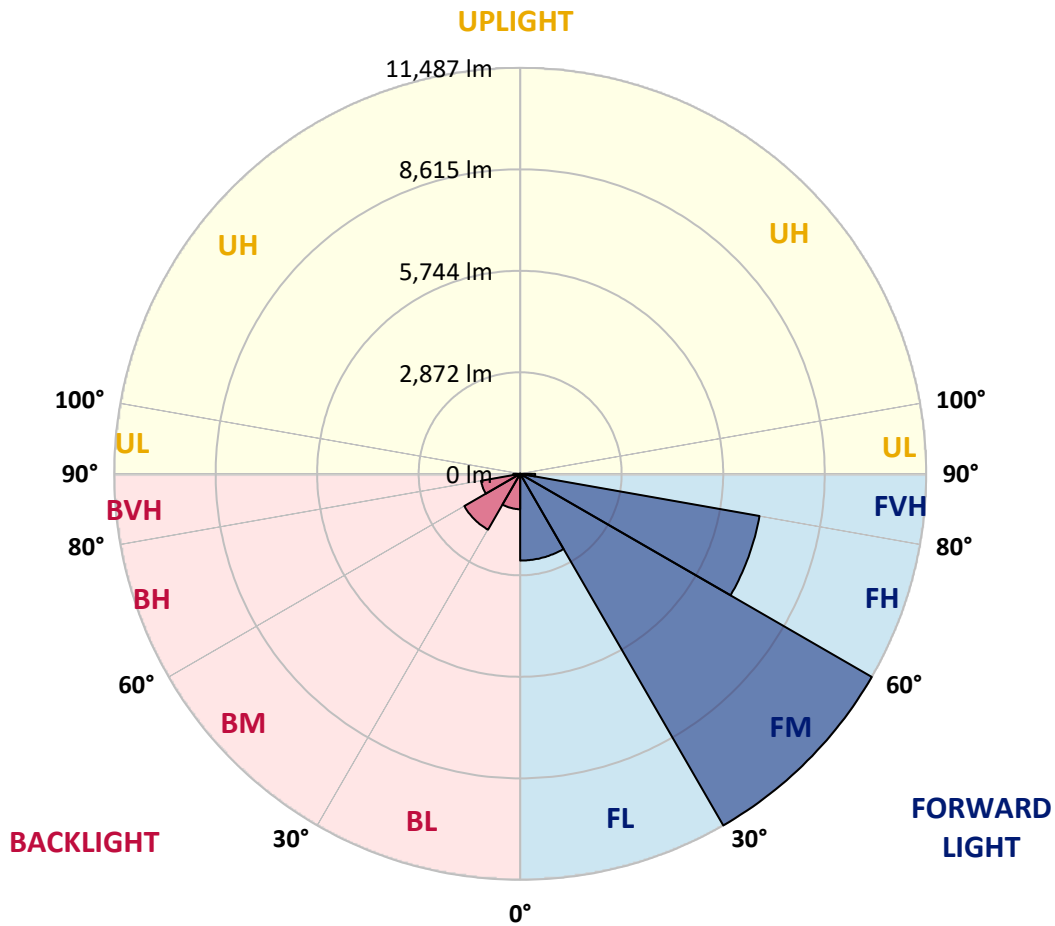
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2456.0	9.7			
FM (30°-60°)	11487.3	45.2			
FH (60°-80°)	6874.7	27.1			G3/7500
FVH (80°-90°)	426.1	1.7			G3/500
BL (0°-30°)	1001.1	3.9	B3/2500		
BM (30°-60°)	1825.0	7.2	B2/2500		
BH (60°-80°)	1124.3	4.4	B3/2500		G3/2500
BVH (80°-90°)	194.6	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°	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0
2.5°	4046.4	4016.3	4013.0	3966.2	3922.8	3806.0	3722.5	3575.6	3428.7	3425.4	3278.5
5°	4677.4	4647.3	4630.6	4573.9	4500.4	4346.8	4196.6	3969.6	3719.2	3702.5	3425.4
7.5°	5104.7	5078.0	5044.6	5021.2	4951.1	4814.3	4630.6	4360.2	4016.3	3982.9	3595.7
10°	5391.8	5375.1	5368.5	5351.8	5308.4	5198.2	5021.2	4734.1	4313.5	4276.7	3776.0
12.5°	5515.4	5508.7	5538.7	5585.5	5602.2	5558.8	5388.5	5118.1	4640.6	4600.6	3993.0
15°	5371.8	5378.5	5455.3	5615.5	5785.8	5879.3	5779.1	5515.4	5011.2	4954.5	4246.7
17.5°	5305.0	5315.0	5368.5	5522.0	5762.4	6052.9	6099.6	5892.6	5368.5	5288.3	4513.8
20°	5421.9	5435.2	5475.3	5595.5	5762.4	6072.9	6316.6	6253.2	5719.0	5635.5	4770.9
22.5°	5719.0	5735.7	5732.4	5809.2	5922.7	6136.3	6436.8	6593.7	6086.3	5992.8	5037.9
25°	6353.3	6340.0	6226.5	6189.8	6219.8	6356.7	6597.1	6920.9	6470.2	6376.7	5318.4
27.5°	7214.7	7198.0	6991.0	6804.1	6637.1	6697.2	6824.1	7184.7	6860.8	6754.0	5585.5
30°	8136.2	8116.1	7875.7	7571.9	7201.3	7114.5	7097.9	7415.0	7254.8	7141.3	5869.2
32.5°	9034.2	9017.5	8760.5	8406.6	7895.8	7635.4	7475.1	7672.1	7702.1	7592.0	6179.7
35°	9852.2	9852.2	9631.8	9211.2	8633.6	8239.7	7975.9	7989.3	8216.3	8089.4	6533.6
37.5°	10580.0	10576.7	10336.3	9922.3	9368.1	8917.4	8590.2	8373.2	8707.1	8596.9	6904.2
40°	11157.6	11134.2	10957.3	10596.7	10039.2	9591.8	9261.3	8823.9	9254.6	9154.4	7298.2
42.5°	11578.2	11564.9	11444.7	11130.9	10600.0	10179.4	9952.3	9391.5	9875.6	9775.4	7758.9
45°	11741.8	11768.5	11768.5	11471.4	11050.7	10666.8	10566.7	10015.8	10546.6	10446.5	8253.0
47.5°	11478.1	11548.2	11691.8	11711.8	11341.2	11080.8	11114.2	10643.4	11237.7	11184.3	8793.9
50°	10653.5	10783.7	11097.5	11665.0	11458.1	11398.0	11581.6	11284.4	11978.9	11962.2	9451.6
52.5°	8526.8	8843.9	9822.1	10840.4	11377.9	11544.9	12045.6	12005.6	12933.7	12960.4	10309.6
55°	6540.3	6660.5	7792.3	9525.0	10887.2	11498.1	12356.1	12710.0	13968.7	14002.1	11097.5
57.5°	5288.3	5368.5	5986.1	7792.3	9768.7	11244.4	12599.9	13120.7	14763.3	14850.1	11798.6
60°	4189.9	4306.8	4720.8	5962.7	8202.9	10633.4	12770.1	13578.1	15617.9	15748.1	12636.6
62.5°	3114.9	3171.7	3562.3	4417.0	6493.6	9535.0	12680.0	14075.5	16666.3	16823.2	13644.8
65°	2216.8	2266.9	2544.0	3141.6	4800.9	8049.4	12155.8	14446.1	17981.7	18141.9	14659.8
67.5°	1659.3	1679.3	1836.2	2196.8	3235.1	6253.2	11094.1	14382.7	18943.2	19086.7	15067.1
70°	1312.1	1318.7	1395.5	1589.2	2103.3	4353.5	9234.6	13451.2	19013.3	19140.2	14552.9
72.5°	1088.4	1085.0	1128.4	1221.9	1465.6	2754.3	6840.8	11721.8	18111.9	18198.7	13117.3
75°	898.1	904.8	934.8	988.2	1118.4	1816.2	4433.7	9351.4	15978.5	15885.0	11007.3
77.5°	754.5	751.2	764.5	811.3	904.8	1305.4	2597.4	6757.3	11842.0	11795.3	7224.7
80°	607.6	614.3	634.3	674.4	761.2	994.9	1535.8	4216.6	6353.3	6183.1	3452.1
82.5°	407.3	470.7	510.8	557.5	657.7	734.5	974.9	2143.4	2841.1	2797.7	1565.8
85°	193.6	257.1	380.6	434.0	534.2	460.7	661.0	1021.6	1422.2	1405.5	564.2
87.5°	40.1	40.1	203.7	243.7	330.5	197.0	367.2	444.0	687.8	644.3	230.4
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°	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0	3175.0
2.5°	3191.7	3101.6	2921.3	2777.7	2630.8	2547.3	2443.9	2393.8	2383.8	2357.0	2377.1
5°	3248.5	3071.5	2731.0	2507.3	2357.0	2283.6	2246.9	2233.5	2230.2	2223.5	2223.5
7.5°	3325.2	3054.8	2610.8	2383.8	2286.9	2263.6	2273.6	2293.6	2297.0	2303.6	2300.3
10°	3418.7	3058.2	2544.0	2353.7	2307.0	2310.3	2343.7	2370.4	2383.8	2393.8	2390.4
12.5°	3548.9	3098.2	2534.0	2373.7	2353.7	2367.1	2400.4	2427.2	2440.5	2443.9	2443.9
15°	3719.2	3181.7	2557.4	2417.1	2400.4	2410.5	2430.5	2440.5	2443.9	2440.5	2440.5
17.5°	3906.2	3281.8	2590.7	2443.9	2417.1	2407.1	2400.4	2390.4	2370.4	2357.0	2357.0
20°	4086.4	3372.0	2607.4	2440.5	2393.8	2353.7	2313.6	2263.6	2230.2	2203.5	2203.5
22.5°	4266.7	3455.4	2607.4	2403.8	2330.3	2253.6	2170.1	2090.0	2039.9	2006.5	2006.5
25°	4457.0	3535.6	2587.4	2340.4	2230.2	2120.0	2006.5	1906.3	1856.3	1822.9	1816.2
27.5°	4617.3	3582.3	2534.0	2250.2	2106.7	1966.4	1836.2	1732.7	1696.0	1666.0	1666.0
30°	4787.5	3612.4	2433.8	2133.4	1966.4	1806.2	1672.6	1589.2	1549.1	1505.7	1502.4
32.5°	4977.8	3632.4	2320.3	2009.8	1822.9	1652.6	1539.1	1472.3	1385.5	1338.8	1332.1
35°	5198.2	3659.1	2200.1	1869.6	1679.3	1525.7	1459.0	1348.8	1265.3	1225.3	1221.9
37.5°	5431.9	3679.1	2069.9	1746.1	1549.1	1442.3	1375.5	1245.3	1171.8	1111.8	1105.1
40°	5678.9	3679.1	1936.4	1625.9	1445.6	1405.5	1278.7	1161.8	1038.3	1008.3	1001.6
42.5°	5952.7	3672.5	1802.8	1509.0	1348.8	1322.1	1221.9	1098.4	1035.0	1008.3	1001.6
45°	6243.2	3649.1	1676.0	1375.5	1248.6	1195.2	1118.4	1085.0	1058.3	1058.3	1058.3
47.5°	6573.7	3629.1	1532.4	1255.3	1175.2	1115.1	1058.3	1038.3	1035.0	1045.0	1055.0
50°	6997.7	3622.4	1412.2	1168.5	1118.4	1048.3	1041.6	1024.9	1028.3	1028.3	1028.3
52.5°	7511.8	3562.3	1298.7	1105.1	1061.7	978.2	998.2	1014.9	1021.6	1018.3	1014.9
55°	7889.1	3455.4	1201.9	1061.7	1021.6	951.5	978.2	1004.9	1011.6	1001.6	1001.6
57.5°	8229.6	3305.2	1125.1	1028.3	994.9	934.8	964.9	991.6	984.9	981.5	978.2
60°	8620.3	3161.6	1065.0	1011.6	968.2	928.1	954.8	971.5	961.5	954.8	951.5
62.5°	9044.3	3021.4	1021.6	1011.6	948.2	924.8	944.8	951.5	931.5	924.8	924.8
65°	9241.2	2801.1	974.9	1011.6	938.1	918.1	924.8	918.1	898.1	898.1	894.7
67.5°	8917.4	2437.2	914.8	998.2	951.5	908.1	894.7	884.7	861.4	861.4	854.7
70°	8022.6	2003.2	828.0	954.8	954.8	904.8	854.7	831.3	804.6	814.6	801.3
72.5°	6854.1	1589.2	721.1	881.4	934.8	901.4	811.3	774.6	751.2	761.2	741.2
75°	5552.1	1231.9	594.3	764.5	884.7	884.7	767.9	717.8	691.1	691.1	667.7
77.5°	3538.9	911.4	484.1	634.3	794.6	861.4	731.2	654.4	614.3	604.3	587.6
80°	1752.8	641.0	397.3	504.1	677.7	807.9	704.4	580.9	524.2	504.1	474.1
82.5°	931.5	444.0	317.2	394.0	540.9	727.8	671.1	500.8	430.7	400.6	367.2
85°	417.3	273.8	253.7	300.5	410.6	597.6	604.3	410.6	330.5	394.0	290.5
87.5°	153.6	123.5	123.5	153.6	237.0	250.4	427.3	263.7	210.3	143.6	113.5
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)