

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: P399427

Luminaire Tested: **ARCH-L-PA3-140-740-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399427  
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-PA3-140-740-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22632 lumens  
Efficiency: N/A  
Efficacy: 158.3 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

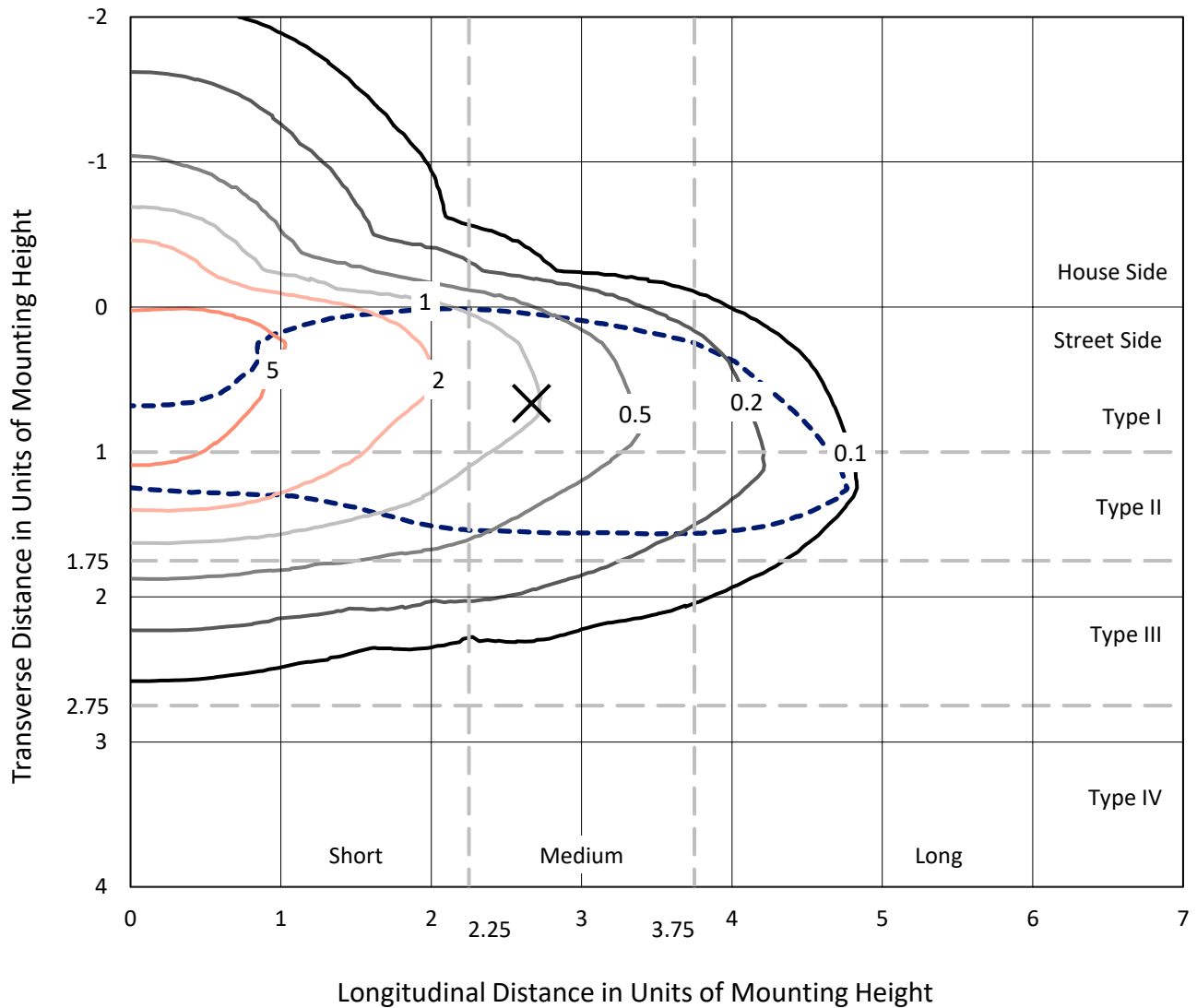
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

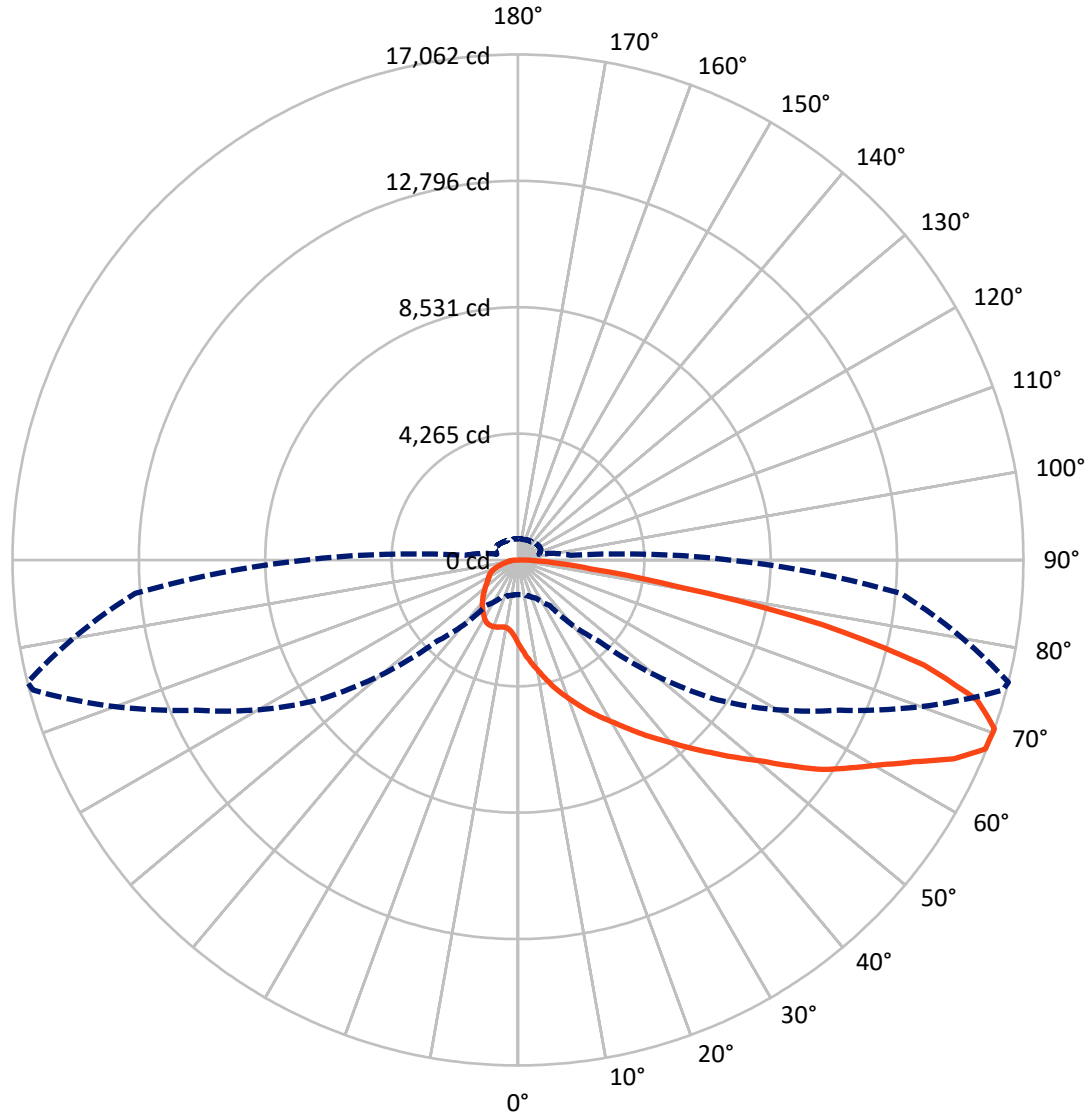
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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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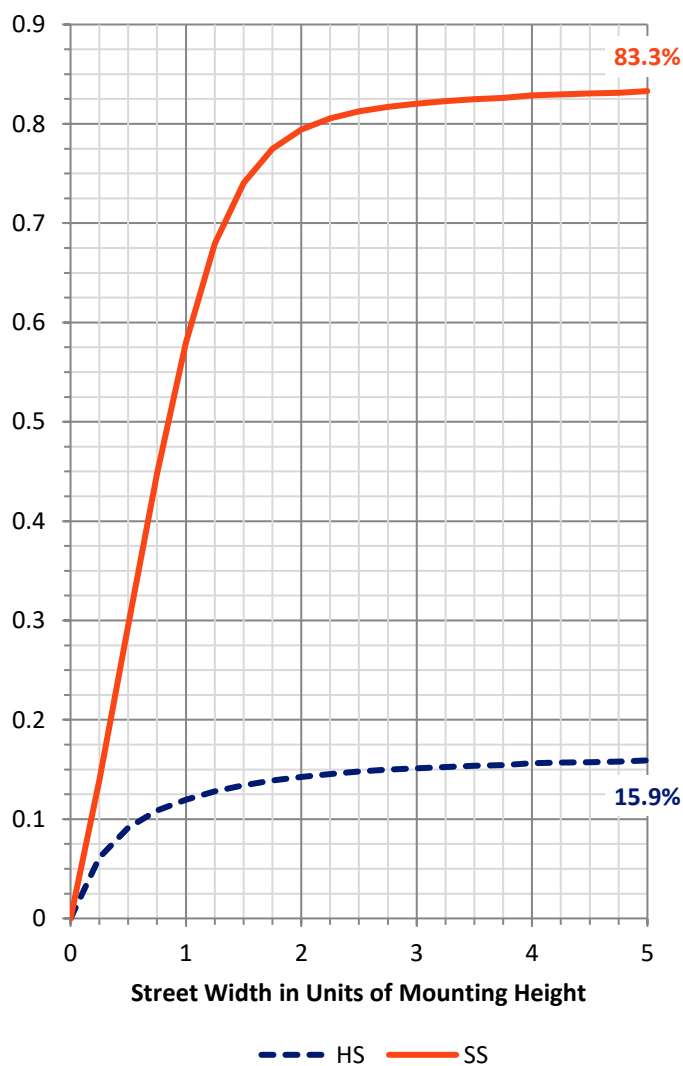
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3694.9	0.0	3694.9
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	18937.1	0.0	18937.1
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	22632.0	0.0	22632.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	294.1	1.3
10°-20°	999.5	4.4
20°-30°	1788.2	7.9
30°-40°	2892.6	12.8
40°-50°	4184.6	18.5
50°-60°	4789.5	21.2
60°-70°	4405.8	19.5
70°-80°	2724.5	12.0
80°-90°	553.2	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°	22632.0	100.0
0°-180°	22632.0	100.0

**Coefficient of Utilization**



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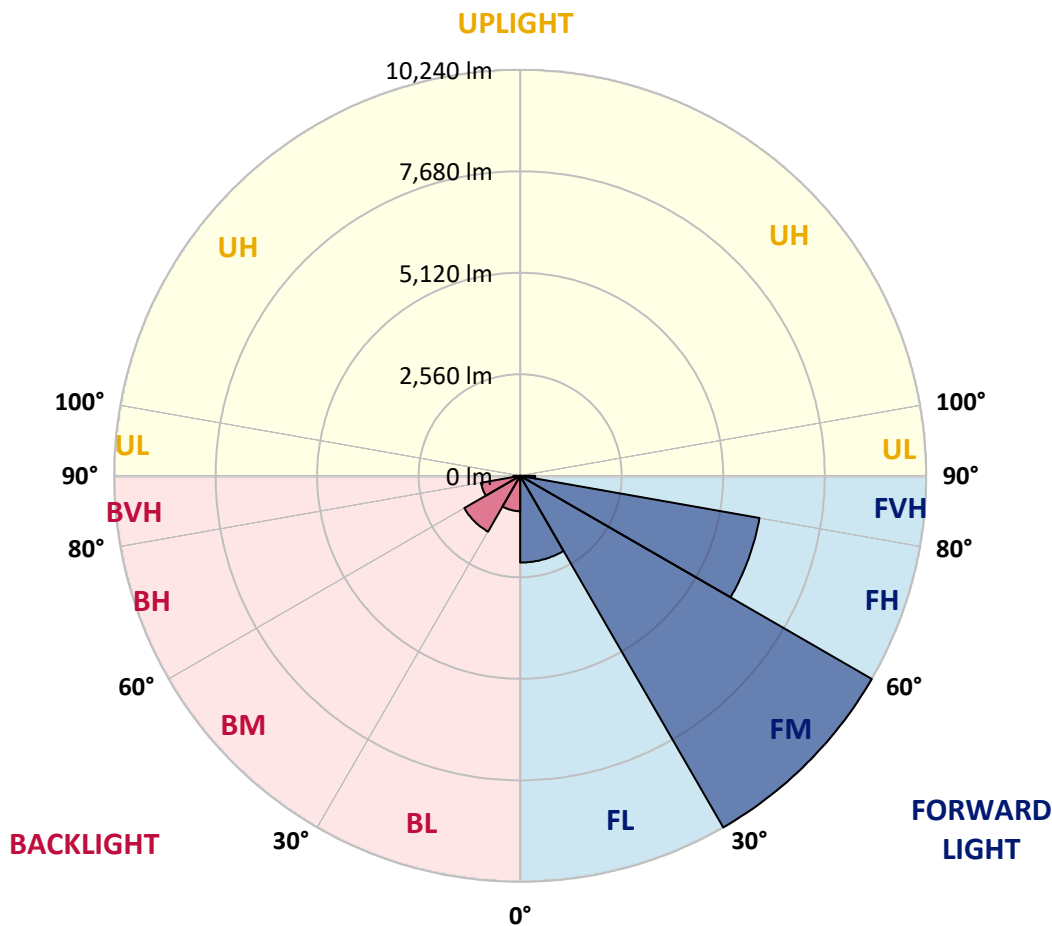
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2189.3	9.7			
FM (30°-60°)	10239.9	45.2			
FH (60°-80°)	6128.1	27.1			G3/7500
FVH (80°-90°)	379.8	1.7			G3/500
BL (0°-30°)	892.4	3.9	B2/1000		
BM (30°-60°)	1626.8	7.2	B2/2500		
BH (60°-80°)	1002.2	4.4	B3/2500		G3/2500
BVH (80°-90°)	173.4	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°	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2
2.5°	3607.0	3580.2	3577.2	3535.6	3496.9	3392.7	3318.3	3187.4	3056.4	3053.4	2922.5
5°	4169.5	4142.7	4127.8	4077.2	4011.7	3874.8	3740.9	3538.5	3315.3	3300.4	3053.4
7.5°	4550.4	4526.6	4496.8	4476.0	4413.5	4291.5	4127.8	3886.7	3580.2	3550.4	3205.2
10°	4806.3	4791.4	4785.5	4770.6	4731.9	4633.7	4476.0	4220.0	3845.1	3812.3	3365.9
12.5°	4916.4	4910.5	4937.3	4978.9	4993.8	4955.1	4803.4	4562.3	4136.7	4101.0	3559.4
15°	4788.5	4794.4	4862.9	5005.7	5157.5	5240.8	5151.6	4916.4	4467.1	4416.5	3785.5
17.5°	4729.0	4737.9	4785.5	4922.4	5136.7	5395.6	5437.3	5252.7	4785.5	4714.1	4023.6
20°	4833.1	4845.0	4880.7	4987.9	5136.7	5413.4	5630.7	5574.2	5098.0	5023.6	4252.8
22.5°	5098.0	5112.9	5109.9	5178.3	5279.5	5470.0	5737.8	5877.7	5425.3	5342.0	4490.9
25°	5663.4	5651.5	5550.3	5517.6	5544.4	5666.4	5880.7	6169.4	5767.6	5684.3	4740.9
27.5°	6431.3	6416.4	6231.9	6065.2	5916.4	5970.0	6083.1	6404.5	6115.8	6020.6	4978.9
30°	7252.6	7234.8	7020.5	6749.7	6419.4	6342.0	6327.1	6609.8	6467.0	6365.8	5231.9
32.5°	8053.2	8038.3	7809.2	7493.7	7038.4	6806.2	6663.4	6839.0	6865.8	6767.5	5508.7
35°	8782.3	8782.3	8585.9	8210.9	7696.1	7344.9	7109.8	7121.7	7324.1	7211.0	5824.1
37.5°	9431.1	9428.1	9213.9	8844.8	8350.8	7949.0	7657.4	7463.9	7761.6	7663.3	6154.5
40°	9946.0	9925.1	9767.4	9446.0	8949.0	8550.2	8255.6	7865.7	8249.6	8160.3	6505.7
42.5°	10321.0	10309.1	10201.9	9922.2	9449.0	9074.0	8871.6	8371.6	8803.2	8713.9	6916.4
45°	10466.8	10490.6	10490.6	10225.7	9850.7	9508.5	9419.2	8928.2	9401.4	9312.1	7356.8
47.5°	10231.7	10294.2	10422.1	10440.0	10109.7	9877.5	9907.3	9487.7	10017.4	9969.8	7838.9
50°	9496.6	9612.7	9892.4	10398.3	10213.8	10160.3	10323.9	10059.1	10678.1	10663.2	8425.2
52.5°	7600.8	7883.6	8755.6	9663.3	10142.4	10291.2	10737.6	10701.9	11529.2	11553.0	9190.1
55°	5830.1	5937.2	6946.1	8490.7	9704.9	10249.5	11014.4	11329.8	12451.8	12481.6	9892.4
57.5°	4714.1	4785.5	5336.1	6946.1	8707.9	10023.4	11231.6	11695.9	13160.1	13237.5	10517.4
60°	3734.9	3839.1	4208.1	5315.2	7312.2	9478.7	11383.4	12103.6	13922.0	14038.1	11264.4
62.5°	2776.7	2827.3	3175.5	3937.3	5788.4	8499.6	11303.1	12547.0	14856.5	14996.3	12163.1
65°	1976.1	2020.7	2267.8	2800.5	4279.6	7175.3	10835.8	12877.4	16029.0	16171.9	13067.9
67.5°	1479.1	1497.0	1636.8	1958.2	2883.8	5574.2	9889.4	12820.8	16886.1	17014.1	13430.9
70°	1169.6	1175.5	1244.0	1416.6	1874.9	3880.8	8231.8	11990.5	16948.6	17061.7	12972.6
72.5°	970.2	967.2	1005.9	1089.2	1306.5	2455.2	6097.9	10448.9	16145.1	16222.5	11692.9
75°	800.6	806.5	833.3	880.9	997.0	1619.0	3952.2	8335.9	14243.4	14160.1	9812.1
77.5°	672.6	669.6	681.5	723.2	806.5	1163.6	2315.4	6023.5	10556.1	10514.4	6440.2
80°	541.6	547.6	565.5	601.2	678.5	886.9	1369.0	3758.8	5663.4	5511.7	3077.2
82.5°	363.1	419.6	455.3	497.0	586.3	654.7	869.0	1910.6	2532.6	2493.9	1395.8
85°	172.6	229.2	339.3	386.9	476.2	410.7	589.3	910.7	1267.8	1252.9	503.0
87.5°	35.7	35.7	181.5	217.3	294.6	175.6	327.4	395.8	613.1	574.4	205.3
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°	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2	2830.2
2.5°	2845.1	2764.8	2604.0	2476.1	2345.1	2270.7	2178.5	2133.8	2124.9	2101.1	2119.0
5°	2895.7	2738.0	2434.4	2235.0	2101.1	2035.6	2002.9	1991.0	1988.0	1982.1	1982.1
7.5°	2964.2	2723.1	2327.3	2124.9	2038.6	2017.8	2026.7	2044.5	2047.5	2053.5	2050.5
10°	3047.5	2726.1	2267.8	2098.1	2056.5	2059.4	2089.2	2113.0	2124.9	2133.8	2130.9
12.5°	3163.5	2761.8	2258.8	2116.0	2098.1	2110.0	2139.8	2163.6	2175.5	2178.5	2178.5
15°	3315.3	2836.2	2279.7	2154.7	2139.8	2148.7	2166.6	2175.5	2178.5	2175.5	2175.5
17.5°	3482.0	2925.5	2309.4	2178.5	2154.7	2145.7	2139.8	2130.9	2113.0	2101.1	2101.1
20°	3642.7	3005.8	2324.3	2175.5	2133.8	2098.1	2062.4	2017.8	1988.0	1964.2	1964.2
22.5°	3803.4	3080.2	2324.3	2142.8	2077.3	2008.8	1934.4	1863.0	1818.4	1788.6	1788.6
25°	3973.0	3151.6	2306.4	2086.2	1988.0	1889.8	1788.6	1699.3	1654.7	1624.9	1619.0
27.5°	4115.9	3193.3	2258.8	2005.9	1877.9	1752.9	1636.8	1544.6	1511.8	1485.1	1485.1
30°	4267.7	3220.1	2169.5	1901.7	1752.9	1610.0	1491.0	1416.6	1380.9	1342.2	1339.2
32.5°	4437.3	3237.9	2068.4	1791.6	1624.9	1473.1	1372.0	1312.4	1235.1	1193.4	1187.4
35°	4633.7	3261.8	1961.2	1666.6	1497.0	1360.1	1300.5	1202.3	1127.9	1092.2	1089.2
37.5°	4842.0	3279.6	1845.2	1556.5	1380.9	1285.7	1226.1	1110.1	1044.6	991.0	985.1
40°	5062.3	3279.6	1726.1	1449.3	1288.6	1252.9	1139.8	1035.7	925.6	898.8	892.8
42.5°	5306.3	3273.7	1607.1	1345.2	1202.3	1178.5	1089.2	979.1	922.6	898.8	892.8
45°	5565.2	3252.8	1494.0	1226.1	1113.0	1065.4	997.0	967.2	943.4	943.4	943.4
47.5°	5859.9	3235.0	1366.0	1119.0	1047.6	994.0	943.4	925.6	922.6	931.5	940.4
50°	6237.8	3229.0	1258.9	1041.6	997.0	934.5	928.5	913.6	916.6	916.6	916.6
52.5°	6696.1	3175.5	1157.7	985.1	946.4	872.0	889.8	904.7	910.7	907.7	904.7
55°	7032.4	3080.2	1071.4	946.4	910.7	848.2	872.0	895.8	901.7	892.8	892.8
57.5°	7336.0	2946.3	1002.9	916.6	886.9	833.3	860.1	883.9	877.9	875.0	872.0
60°	7684.2	2818.3	949.4	901.7	863.1	827.3	851.2	866.0	857.1	851.2	848.2
62.5°	8062.1	2693.3	910.7	901.7	845.2	824.4	842.2	848.2	830.3	824.4	824.4
65°	8237.7	2496.9	869.0	901.7	836.3	818.4	824.4	818.4	800.6	800.6	797.6
67.5°	7949.0	2172.5	815.4	889.8	848.2	809.5	797.6	788.7	767.8	767.8	761.9
70°	7151.5	1785.6	738.1	851.2	851.2	806.5	761.9	741.0	717.2	726.2	714.3
72.5°	6109.8	1416.6	642.8	785.7	833.3	803.5	723.2	690.4	669.6	678.5	660.7
75°	4949.2	1098.2	529.7	681.5	788.7	788.7	684.5	639.9	616.0	616.0	595.2
77.5°	3154.6	812.5	431.5	565.5	708.3	767.8	651.8	583.3	547.6	538.7	523.8
80°	1562.4	571.4	354.2	449.4	604.1	720.2	627.9	517.8	467.2	449.4	422.6
82.5°	830.3	395.8	282.7	351.2	482.1	648.8	598.2	446.4	383.9	357.1	327.4
85°	372.0	244.0	226.2	267.8	366.1	532.7	538.7	366.1	294.6	351.2	258.9
87.5°	136.9	110.1	110.1	136.9	211.3	223.2	380.9	235.1	187.5	128.0	101.2
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)