

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: P265680

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2R-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265680  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-210-D-U-T2R-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22017.6 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 211  
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

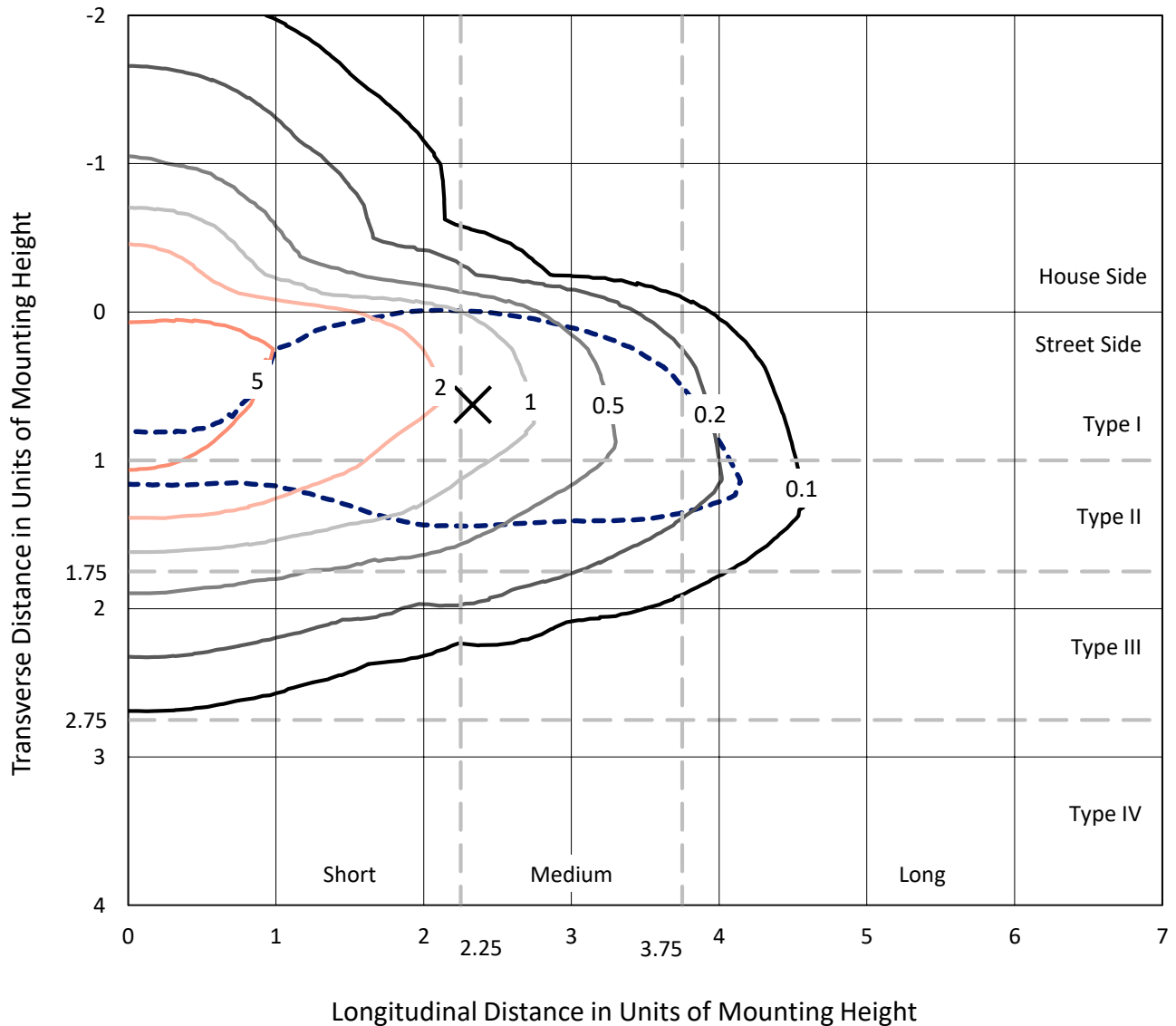


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### Iso-Footcandle Lines of Horizontal Illumination

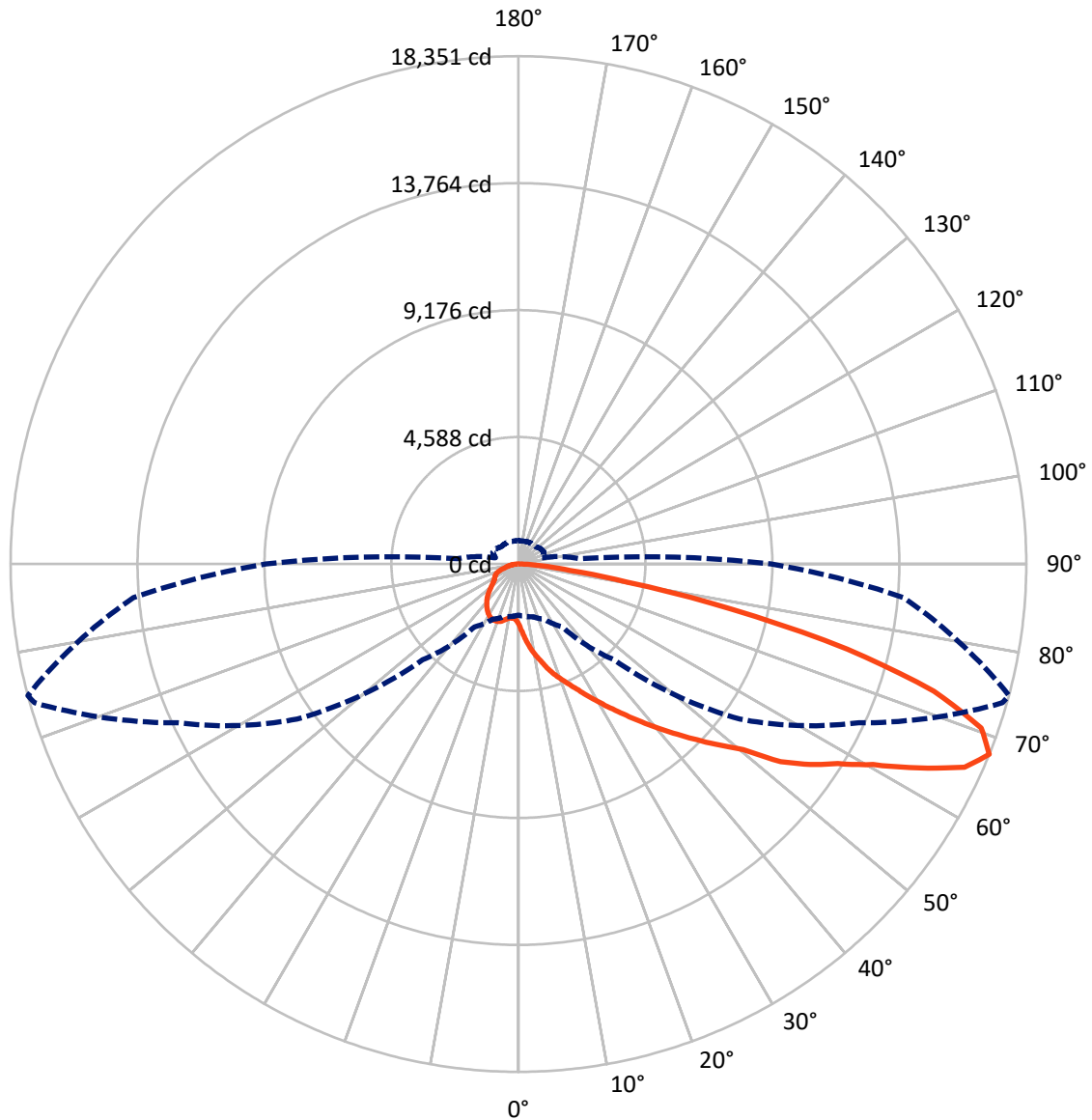
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc  
 Type II - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3759.8	0.0	3759.8
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	18257.8	0.0	18257.8
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	22017.6	0.0	22017.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.3	1.2
10°-20°	926.3	4.2
20°-30°	1689.4	7.7
30°-40°	2773.0	12.6
40°-50°	4010.2	18.2
50°-60°	4726.0	21.5
60°-70°	4592.6	20.9
70°-80°	2552.8	11.6
80°-90°	490.9	2.2
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°	22017.6	100.0
0°-180°	22017.6	100.0



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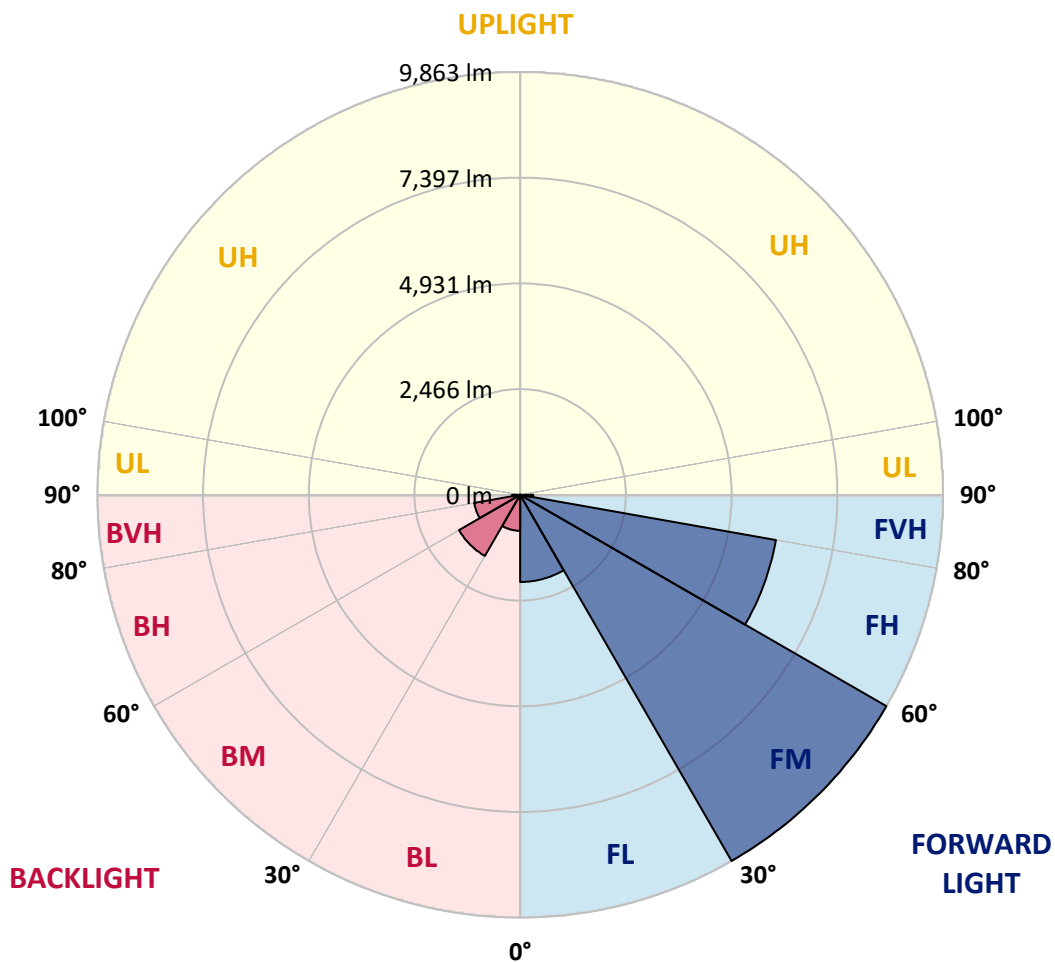
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2032.8	9.2			
FM	(30°-60°)	9862.7	44.8			
FH	(60°-80°)	6056.8	27.5			G3/7500
FVH	(80°-90°)	305.5	1.4			G3/500
BL	(0°-30°)	839.2	3.8	B2/1000		
BM	(30°-60°)	1646.6	7.5	B2/2500		
BH	(60°-80°)	1088.6	4.9	B3/2500		G3/2500
BVH	(80°-90°)	185.4	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°	74°	75°	85°
0°	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8
2.5°	3093.0	3102.2	3083.9	3042.5	2982.6	2872.2	2775.6	2605.2	2453.4	2434.9	2273.8
5°	3636.2	3645.4	3622.3	3571.8	3507.3	3387.7	3254.2	3033.2	2789.2	2743.2	2402.6
7.5°	4009.0	4013.6	3986.0	3935.4	3884.8	3765.1	3631.6	3383.0	3083.9	3047.1	2568.3
10°	4326.6	4335.8	4299.0	4266.8	4211.6	4091.9	3953.8	3691.4	3383.0	3332.4	2738.7
12.5°	4621.2	4630.5	4607.3	4579.7	4561.4	4450.9	4299.0	3986.0	3654.7	3599.4	2941.2
15°	4819.1	4828.3	4832.9	4869.7	4892.8	4814.6	4662.7	4322.0	3949.2	3898.6	3180.4
17.5°	4763.9	4786.9	4856.0	4989.5	5132.1	5136.7	5012.5	4653.4	4239.2	4183.9	3424.5
20°	4602.7	4621.2	4704.1	4906.6	5187.4	5348.5	5339.3	4989.5	4510.7	4450.9	3650.1
22.5°	4736.3	4759.3	4759.3	4883.5	5159.8	5458.9	5578.6	5320.8	4782.2	4727.2	3875.6
25°	5307.0	5320.8	5224.2	5173.6	5274.8	5550.9	5776.6	5679.9	5113.7	5049.3	4119.4
27.5°	6103.4	6080.3	5960.7	5758.0	5647.6	5721.2	5951.5	6020.5	5495.7	5417.5	4372.7
30°	6895.0	6881.1	6743.0	6471.5	6223.0	6066.4	6144.8	6324.2	5909.9	5818.0	4616.6
32.5°	7636.0	7613.0	7461.1	7143.5	6862.8	6572.8	6420.9	6600.3	6351.8	6245.9	4888.1
35°	8317.2	8257.4	8105.5	7774.1	7484.1	7208.0	6835.2	6862.8	6830.5	6720.1	5187.4
37.5°	8869.5	8823.5	8657.9	8349.4	8041.1	7778.8	7387.5	7161.9	7346.1	7240.2	5532.5
40°	9357.5	9306.9	9136.5	8828.2	8542.8	8294.2	7985.8	7525.6	7926.0	7806.4	5919.2
42.5°	9725.7	9688.8	9550.8	9247.1	8970.8	8745.3	8593.5	7985.8	8529.0	8414.0	6342.7
45°	9923.7	9886.8	9813.2	9569.3	9316.1	9141.2	9154.9	8533.5	9159.6	9062.9	6844.4
47.5°	9679.6	9707.4	9771.8	9725.7	9569.3	9486.5	9656.7	9099.7	9863.7	9771.8	7387.5
50°	9026.1	9053.7	9311.4	9629.0	9684.3	9785.5	10107.8	9753.3	10609.4	10535.9	8059.6
52.5°	7419.7	7571.6	8285.1	9044.5	9564.7	9983.5	10609.4	10724.5	11866.0	11866.0	9247.1
55°	5606.2	5739.7	6554.5	7880.0	9099.7	10001.9	10977.6	11382.8	12772.8	12791.1	9868.4
57.5°	4543.0	4625.8	5026.2	6384.1	8123.9	9771.8	11414.9	11948.9	13527.7	13610.5	10669.3
60°	3686.9	3732.8	3995.2	4938.8	6775.3	9150.3	11727.9	12758.9	14604.6	14719.7	11691.1
62.5°	2964.1	3010.2	3185.1	3751.3	5316.2	7985.8	11672.7	13601.2	16040.8	16229.5	13030.5
65°	2365.9	2416.5	2531.6	2881.4	3940.0	6540.6	11106.6	14034.0	17527.5	17711.5	13918.9
67.5°	1845.7	1891.7	1970.1	2200.0	2775.6	4892.8	9767.1	13578.2	18194.9	18351.4	13965.0
70°	1394.7	1417.6	1482.2	1629.3	1983.7	3249.6	7645.3	12050.1	17596.4	17739.2	13044.3
72.5°	1081.6	1077.1	1113.9	1187.5	1385.5	2237.0	5067.7	9799.3	15557.4	15704.8	11129.6
75°	883.8	879.1	902.2	925.2	1003.3	1500.4	2991.9	7378.3	12556.4	12275.7	8349.4
77.5°	745.7	741.0	764.1	768.7	800.8	1035.7	1703.0	4856.0	8377.1	7893.8	4704.1
80°	630.6	625.9	653.5	662.8	685.9	759.4	980.4	2628.3	4206.9	3986.0	2246.1
82.5°	474.0	492.5	543.1	566.1	593.8	561.5	607.6	1159.9	1951.6	1864.2	975.7
85°	230.1	271.6	409.6	455.7	487.9	354.4	414.3	547.7	879.1	837.7	395.9
87.5°	78.2	69.0	244.0	290.0	317.6	161.1	230.1	303.7	363.6	331.5	124.2
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°	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8	2181.8
2.5°	2204.7	2135.7	2034.4	1956.1	1905.6	1864.2	1845.7	1841.2	1832.0	1827.3	1827.3
5°	2250.8	2126.5	1970.1	1887.2	1864.2	1845.7	1854.9	1859.5	1859.5	1859.5	1859.5
7.5°	2319.9	2145.0	1956.1	1901.0	1896.3	1896.3	1924.0	1937.7	1946.9	1946.9	1946.9
10°	2411.9	2177.1	1979.1	1933.2	1946.9	1956.1	1988.4	2006.9	2016.1	2020.6	2025.1
12.5°	2536.2	2246.1	2025.1	1988.4	2006.9	2011.5	2034.4	2043.6	2052.8	2057.5	2057.5
15°	2701.8	2347.5	2098.9	2052.8	2057.5	2052.8	2052.8	2043.6	2039.1	2039.1	2048.2
17.5°	2872.2	2444.1	2163.3	2098.9	2080.5	2043.6	2016.1	1993.0	1979.1	1970.1	1974.7
20°	3042.5	2531.6	2200.0	2108.1	2057.5	1997.7	1946.9	1914.7	1896.3	1877.9	1887.2
22.5°	3212.8	2614.3	2214.0	2080.5	2006.9	1919.4	1864.2	1813.5	1772.0	1744.5	1749.1
25°	3401.4	2706.5	2214.0	2048.2	1937.7	1845.7	1776.7	1693.8	1633.9	1611.0	1620.3
27.5°	3590.2	2784.7	2191.0	1988.4	1859.5	1767.4	1666.3	1569.6	1532.8	1518.9	1523.5
30°	3778.9	2844.6	2140.3	1914.7	1776.7	1675.3	1541.9	1477.5	1431.4	1394.7	1399.3
32.5°	3967.6	2886.0	2071.2	1822.8	1689.3	1560.4	1449.9	1376.3	1293.4	1247.3	1252.0
35°	4183.9	2918.1	1988.4	1730.7	1592.5	1459.0	1376.3	1256.5	1169.1	1132.4	1123.2
37.5°	4409.5	2941.2	1901.0	1629.3	1495.9	1385.5	1302.6	1155.3	1072.4	1021.8	1017.2
40°	4653.4	2950.5	1795.2	1523.5	1403.8	1339.5	1206.0	1095.5	952.8	920.6	920.6
42.5°	4943.5	2945.8	1689.3	1417.6	1302.6	1233.6	1136.8	1086.3	961.9	929.7	911.3
45°	5274.8	2945.8	1574.2	1293.4	1201.4	1100.1	1058.7	1026.5	943.6	957.4	966.5
47.5°	5652.2	2936.6	1436.1	1192.1	1118.5	1031.1	1008.0	939.0	906.7	915.9	925.2
50°	6172.3	2950.5	1311.7	1109.2	1058.7	985.0	957.4	920.6	906.7	911.3	906.7
52.5°	6895.0	2904.4	1192.1	1058.7	1012.6	915.9	915.9	911.3	915.9	911.3	911.3
55°	7290.9	2803.2	1104.6	1031.1	980.4	883.8	902.2	911.3	920.6	915.9	915.9
57.5°	7852.4	2734.0	1035.7	1012.6	961.9	874.5	892.9	911.3	915.9	911.3	911.3
60°	8515.2	2688.1	989.7	1017.2	948.3	874.5	897.5	911.3	906.7	902.2	902.2
62.5°	9283.9	2669.7	957.4	1031.1	934.3	879.1	897.5	911.3	892.9	888.3	888.3
65°	9573.9	2503.9	915.9	1040.2	943.6	879.1	892.9	897.5	874.5	869.9	865.3
67.5°	9127.4	2218.5	856.2	1021.8	971.2	879.1	879.1	874.5	846.9	842.3	833.1
70°	8128.6	1841.2	764.1	961.9	989.7	883.8	860.8	837.7	810.1	810.1	791.6
72.5°	6655.6	1449.9	644.4	856.2	975.7	897.5	823.8	791.6	759.4	759.4	741.0
75°	4796.1	1081.6	515.4	713.4	915.9	892.9	777.8	736.4	699.6	695.0	672.0
77.5°	2734.0	759.4	418.9	556.9	814.8	869.9	736.4	672.0	630.6	616.7	602.9
80°	1403.8	511.0	340.5	437.2	676.7	805.5	704.2	598.5	552.4	529.3	506.4
82.5°	667.4	340.5	262.3	322.2	511.0	704.2	662.8	515.4	465.0	437.2	409.6
85°	299.1	202.5	174.9	207.1	363.6	547.7	584.5	423.5	363.6	455.7	336.0
87.5°	96.7	92.0	92.0	96.7	174.9	239.4	428.0	313.0	290.0	239.4	202.5
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)