

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: P265668

Luminaire Tested: **ARCH-L-AF72-190-D-U-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265668  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-190-D-U-T4W-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20151.8 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 189  
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

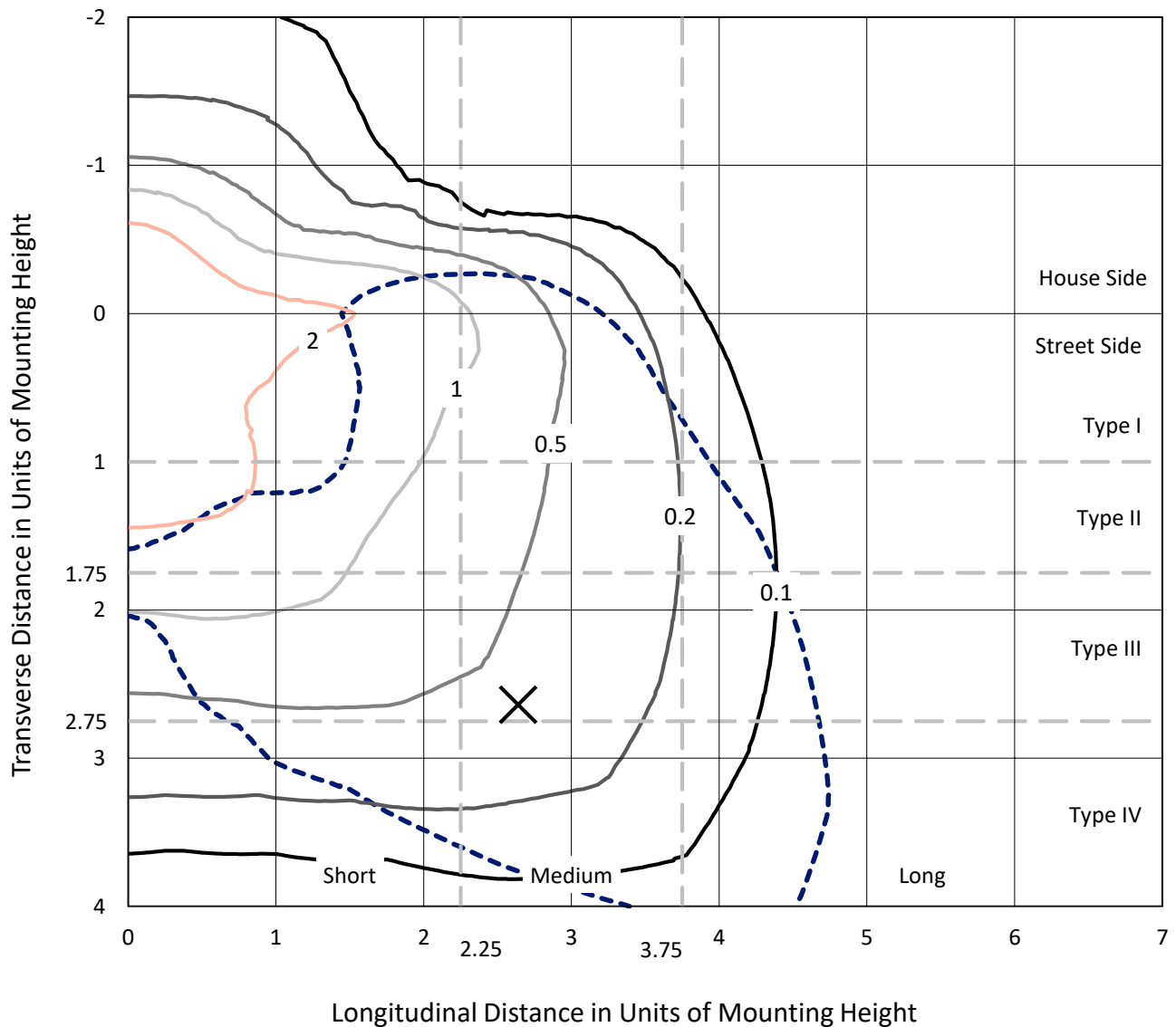


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

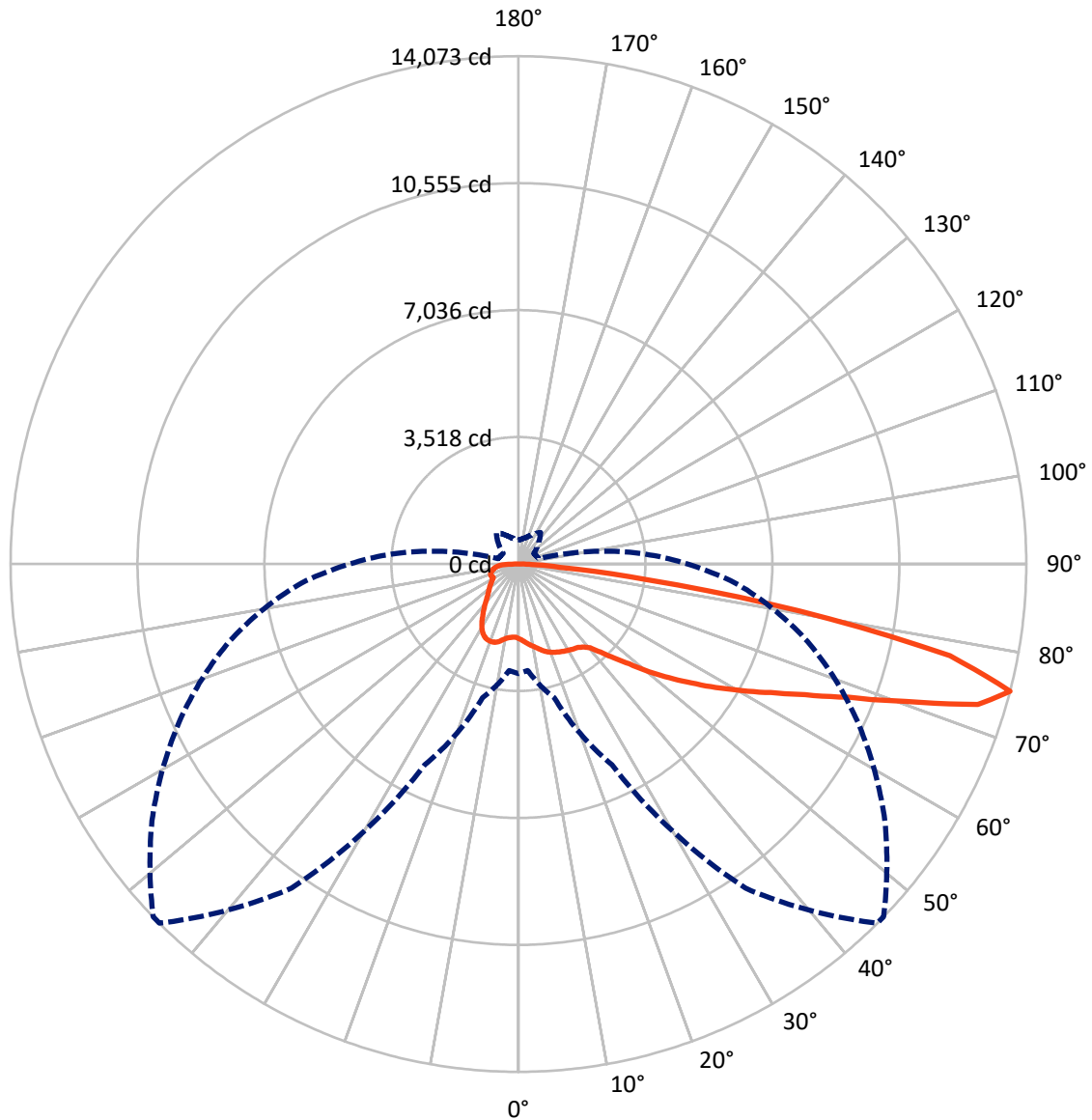


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4668.3	0.0	4668.3
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	15483.4	0.0	15483.4
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	20151.8	0.0	20151.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.7	1.0
10°-20°	663.4	3.3
20°-30°	1138.5	5.6
30°-40°	1592.2	7.9
40°-50°	2335.6	11.6
50°-60°	3638.3	18.1
60°-70°	5235.3	26.0
70°-80°	4560.5	22.6
80°-90°	783.2	3.9
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°	20151.8	100.0
0°-180°	20151.8	100.0

**Coefficient of Utilization**



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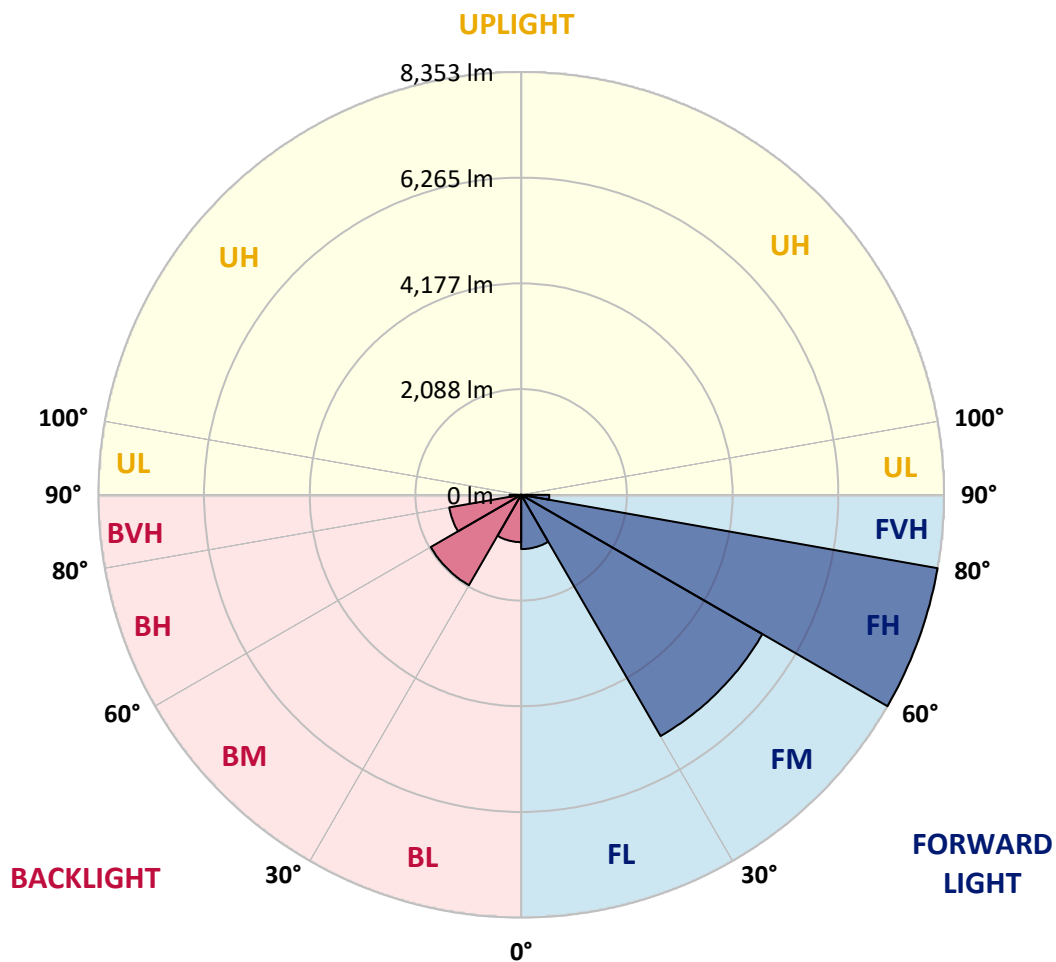
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1071.6	5.3			
FM (30°-60°)	5503.1	27.3			
FH (60°-80°)	8353.1	41.5			G4/12000
FVH (80°-90°)	555.7	2.8			G4/750
BL (0°-30°)	935.0	4.6	B2/1000		
BM (30°-60°)	2063.1	10.2	B2/2500		
BH (60°-80°)	1442.7	7.2	B3/2500		G3/2500
BVH (80°-90°)	227.5	1.1			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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8
2.5°	2167.8	2152.1	2152.1	2140.3	2140.3	2120.7	2112.9	2109.0	2089.4	2077.6	2065.8
5°	2293.3	2273.6	2269.7	2242.2	2230.5	2187.4	2183.4	2156.0	2120.7	2085.4	2057.9
7.5°	2406.9	2395.2	2375.5	2348.1	2312.7	2257.9	2253.9	2210.9	2152.1	2105.1	2065.8
10°	2489.3	2481.4	2453.9	2418.6	2379.4	2324.5	2320.6	2273.6	2203.1	2148.1	2093.3
12.5°	2587.2	2575.4	2540.1	2493.2	2449.9	2399.1	2395.2	2356.0	2277.6	2207.0	2136.3
15°	2681.4	2665.6	2622.5	2575.4	2528.4	2485.3	2485.3	2442.1	2359.8	2277.6	2195.2
17.5°	2728.3	2720.4	2677.4	2626.5	2587.2	2555.9	2551.9	2512.6	2430.5	2344.1	2253.9
20°	2744.1	2747.9	2708.7	2653.9	2626.5	2610.7	2606.8	2579.4	2489.3	2406.9	2320.6
22.5°	2740.1	2751.9	2720.4	2661.7	2653.9	2653.9	2653.9	2622.5	2551.9	2469.6	2383.4
25°	2755.8	2771.5	2747.9	2677.4	2677.4	2693.1	2693.1	2677.4	2614.6	2544.1	2457.9
27.5°	2810.6	2822.5	2802.8	2704.7	2708.7	2732.3	2728.3	2732.3	2693.1	2626.5	2540.1
30°	2877.4	2892.9	2869.5	2747.9	2744.1	2767.5	2767.5	2787.1	2759.8	2689.2	2618.6
32.5°	3057.7	3053.7	2979.1	2794.9	2783.2	2806.8	2806.8	2826.3	2810.6	2755.8	2689.2
35°	3594.7	3535.9	3371.2	2947.9	2830.2	2842.0	2842.0	2877.4	2885.1	2842.0	2783.2
37.5°	4143.4	4123.8	3998.4	3355.4	3002.8	2916.4	2912.6	2963.5	2998.8	2963.5	2924.3
40°	4696.2	4680.4	4653.0	3900.4	3363.3	3049.7	3038.0	3081.1	3143.9	3120.4	3096.7
42.5°	5209.7	5201.8	5229.4	4437.4	3822.0	3335.9	3300.6	3249.7	3339.9	3332.1	3332.1
45°	5613.5	5633.0	5648.7	4939.2	4319.9	3704.4	3661.3	3488.7	3610.3	3641.6	3665.3
47.5°	5840.8	5856.5	5911.3	5429.1	4817.7	4131.7	4100.4	3818.1	3978.9	4072.8	4139.5
50°	6166.1	6123.0	6170.1	5907.4	5417.5	4688.3	4602.0	4261.0	4464.8	4629.5	4786.3
52.5°	6479.7	6409.1	6448.5	6460.3	6099.5	5233.2	5143.1	4782.3	5037.2	5296.0	5574.3
55°	6762.0	6758.0	6797.2	6997.2	6758.0	5817.2	5715.3	5358.7	5727.1	6005.4	6475.8
57.5°	6989.4	7028.6	7201.1	7620.5	7518.5	6452.3	6338.6	6029.0	6464.2	6742.4	7522.4
60°	7255.9	7318.6	7604.8	8149.8	8212.5	7118.7	7001.1	6777.7	7220.7	7503.0	8733.9
62.5°	7346.1	7436.3	8024.3	8706.4	8937.5	7847.9	7742.0	7593.1	8016.5	8271.2	9941.2
65°	6746.4	6918.8	8255.6	8992.6	9717.7	8726.0	8635.8	8506.4	8808.2	8976.9	10760.3
67.5°	6581.7	6660.2	7804.7	9404.0	10450.7	9854.9	9764.8	9541.3	9549.2	9478.6	11027.0
70°	6350.4	6436.6	7342.1	9713.8	11501.3	11399.4	11289.5	10631.0	10227.4	9800.0	10501.6
72.5°	5409.7	5382.1	6326.9	8878.8	12006.9	13312.3	13182.9	11803.1	10729.0	9521.7	8863.1
75°	3038.0	2959.6	3837.6	6142.6	10964.3	14072.8	14069.0	12395.1	10376.2	8294.7	6032.8
77.5°	882.0	858.5	1266.3	2575.4	7381.4	12226.6	12375.5	11179.9	8659.3	5958.4	3312.4
80°	415.6	423.3	544.9	850.7	3151.8	7891.0	8318.2	7361.8	5174.3	2747.9	1368.1
82.5°	262.7	266.5	372.3	548.9	1332.7	3582.9	3935.7	3312.4	2050.1	1187.7	603.8
85°	164.6	164.6	246.9	360.6	795.8	1144.6	1242.6	1129.0	878.1	646.8	329.3
87.5°	90.2	90.2	148.9	207.8	435.0	368.5	380.3	450.8	548.9	396.0	164.6
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°	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8	2065.8
2.5°	2061.9	2054.1	2042.3	2038.4	2034.5	2030.6	2034.5	2042.3	2034.5	2034.5	2038.4
5°	2050.1	2042.3	2026.7	2026.7	2030.6	2034.5	2054.1	2065.8	2069.8	2069.8	2069.8
7.5°	2050.1	2038.4	2026.7	2030.6	2038.4	2054.1	2085.4	2105.1	2120.7	2124.6	2124.6
10°	2069.8	2054.1	2046.2	2054.1	2077.6	2089.4	2120.7	2152.1	2171.7	2179.5	2179.5
12.5°	2105.1	2089.4	2089.4	2105.1	2136.3	2152.1	2179.5	2203.1	2226.5	2238.3	2238.3
15°	2163.8	2144.3	2148.1	2175.7	2210.9	2226.5	2246.1	2253.9	2273.6	2289.3	2289.3
17.5°	2218.8	2199.1	2207.0	2238.3	2261.8	2269.7	2281.4	2277.6	2285.4	2297.1	2301.1
20°	2281.4	2261.8	2265.7	2285.4	2289.3	2281.4	2281.4	2269.7	2265.7	2285.4	2293.3
22.5°	2344.1	2324.5	2320.6	2308.9	2289.3	2269.7	2257.9	2246.1	2238.3	2257.9	2265.7
25°	2418.6	2391.2	2371.6	2320.6	2269.7	2234.4	2218.8	2210.9	2207.0	2226.5	2234.4
27.5°	2501.1	2473.6	2414.7	2305.1	2222.6	2163.8	2152.1	2152.1	2160.0	2171.7	2179.5
30°	2579.4	2551.9	2446.1	2269.7	2140.3	2054.1	2042.3	2054.1	2073.6	2085.4	2097.3
32.5°	2657.7	2630.3	2465.7	2214.9	2018.9	1909.1	1901.3	1920.8	1952.1	1960.0	1967.8
35°	2763.5	2736.1	2489.3	2136.3	1865.9	1748.3	1740.5	1752.2	1779.7	1791.4	1803.2
37.5°	2912.6	2896.9	2524.4	2050.1	1724.7	1595.4	1571.9	1564.0	1579.8	1575.8	1591.5
40°	3108.6	3120.4	2587.2	1936.4	1587.7	1454.4	1403.3	1379.8	1364.2	1332.7	1348.4
42.5°	3394.8	3402.6	2657.7	1807.1	1469.9	1321.0	1254.5	1211.3	1180.0	1129.0	1136.8
45°	3814.2	3747.5	2740.1	1669.9	1364.2	1215.1	1136.8	1085.8	1042.8	999.6	1003.5
47.5°	4370.9	4167.0	2830.2	1556.3	1258.3	1129.0	1058.5	999.6	948.6	913.3	917.3
50°	5056.7	4688.3	2920.4	1450.5	1152.4	1062.3	999.6	936.9	885.9	850.7	846.7
52.5°	5962.3	5315.5	2979.1	1332.7	1046.6	1003.5	948.6	889.9	827.1	784.0	780.1
55°	6903.1	6044.6	3030.2	1191.7	944.7	936.9	909.4	842.8	768.3	713.4	705.6
57.5°	7938.1	6824.8	3069.4	1054.5	866.3	882.0	874.2	795.8	713.4	662.5	658.5
60°	8878.8	7632.3	2943.9	933.0	795.8	827.1	835.0	768.3	725.2	737.0	740.9
62.5°	9827.5	8255.6	2465.7	842.8	748.6	791.9	858.5	854.6	835.0	854.6	858.5
65°	10168.5	8384.9	1748.3	768.3	701.7	807.5	933.0	925.2	835.0	799.8	791.9
67.5°	9976.3	8000.8	1176.1	709.5	666.5	827.1	1011.3	925.2	803.7	756.6	740.9
70°	9063.1	7055.9	862.5	650.7	635.0	823.1	1054.5	921.2	788.0	737.0	717.3
72.5°	7228.5	5444.8	693.9	595.8	588.0	803.7	1078.0	913.3	772.3	717.3	693.9
75°	4680.4	3386.9	584.1	541.0	517.5	772.3	1066.3	889.9	752.6	682.2	666.5
77.5°	2171.7	1458.3	497.8	478.3	450.8	725.2	1031.0	842.8	709.5	642.8	623.2
80°	1011.3	689.9	419.5	415.6	403.8	685.9	984.0	788.0	658.5	603.8	572.3
82.5°	541.0	415.6	341.0	341.0	352.9	639.0	925.2	721.2	592.0	564.5	482.2
85°	286.2	239.0	246.9	266.5	301.8	564.5	846.7	650.7	517.5	431.1	419.5
87.5°	145.0	152.9	152.9	180.3	231.3	458.7	697.8	537.0	439.0	352.9	344.9
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)