

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: P237087

Luminaire Tested: **ARCH-L-AF72-140-D-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237087  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-140-D-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19349.1 lumens  
Efficiency: N/A  
Efficacy: 135.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
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

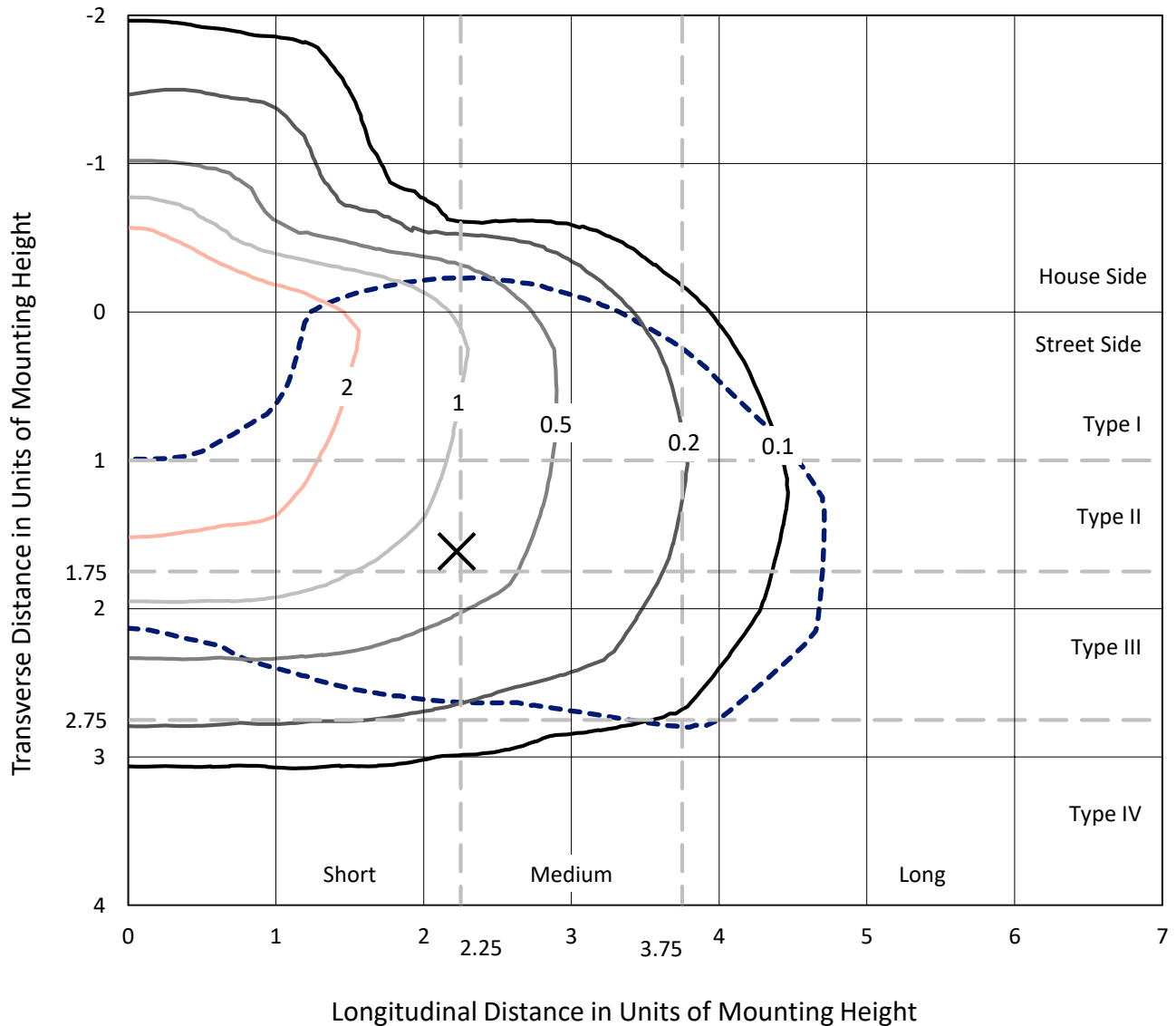


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

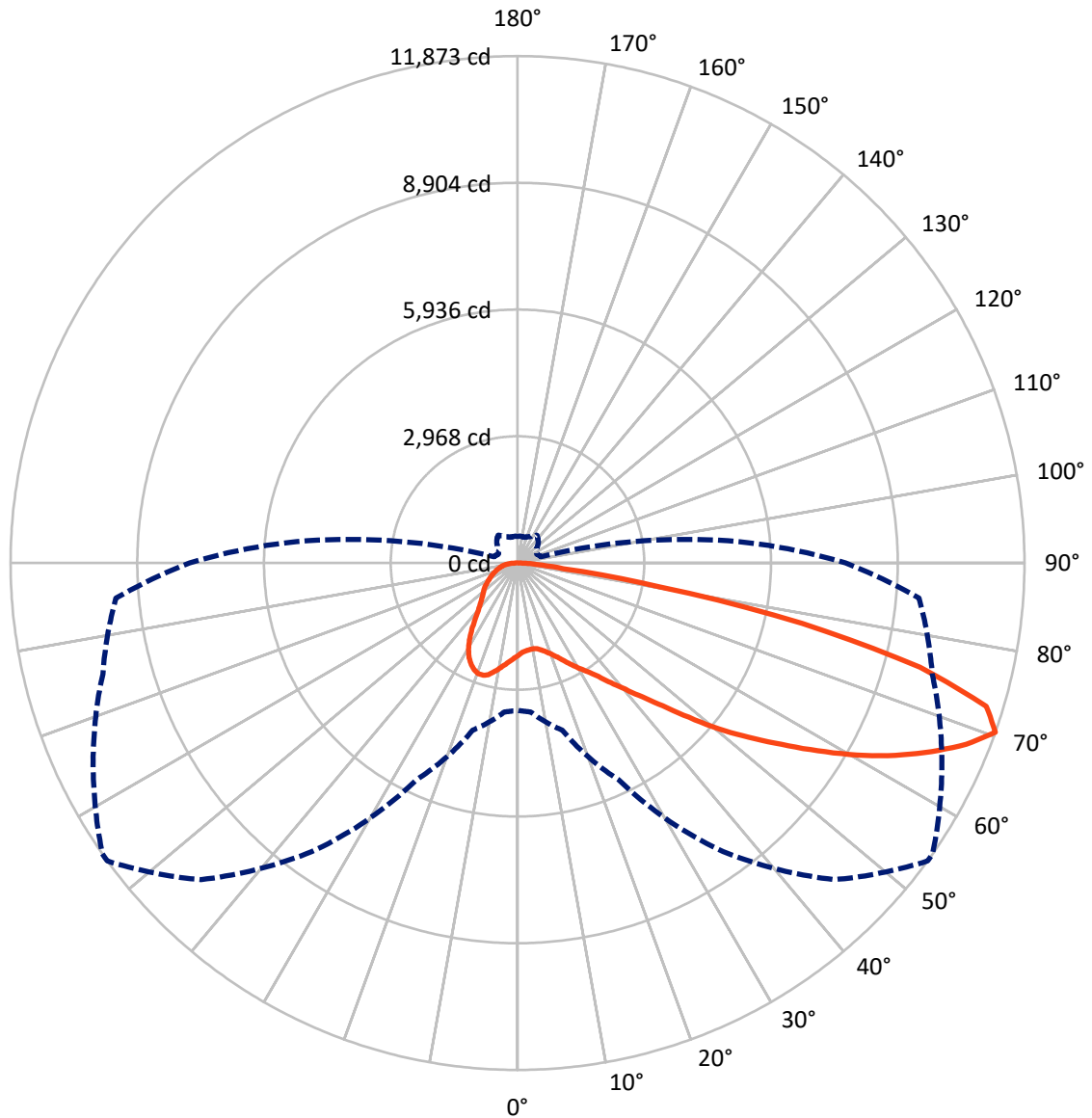


Based on 25 foot mounting height. Maximum calculated value = 4 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4388.3	0.0	4388.3
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	14960.8	0.0	14960.8
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	19349.1	0.0	19349.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.4	1.1
10°-20°	678.8	3.5
20°-30°	1179.4	6.1
30°-40°	1723.5	8.9
40°-50°	2704.9	14.0
50°-60°	4159.6	21.5
60°-70°	5082.0	26.3
70°-80°	3150.8	16.3
80°-90°	457.7	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°	19349.1	100.0
0°-180°	19349.1	100.0



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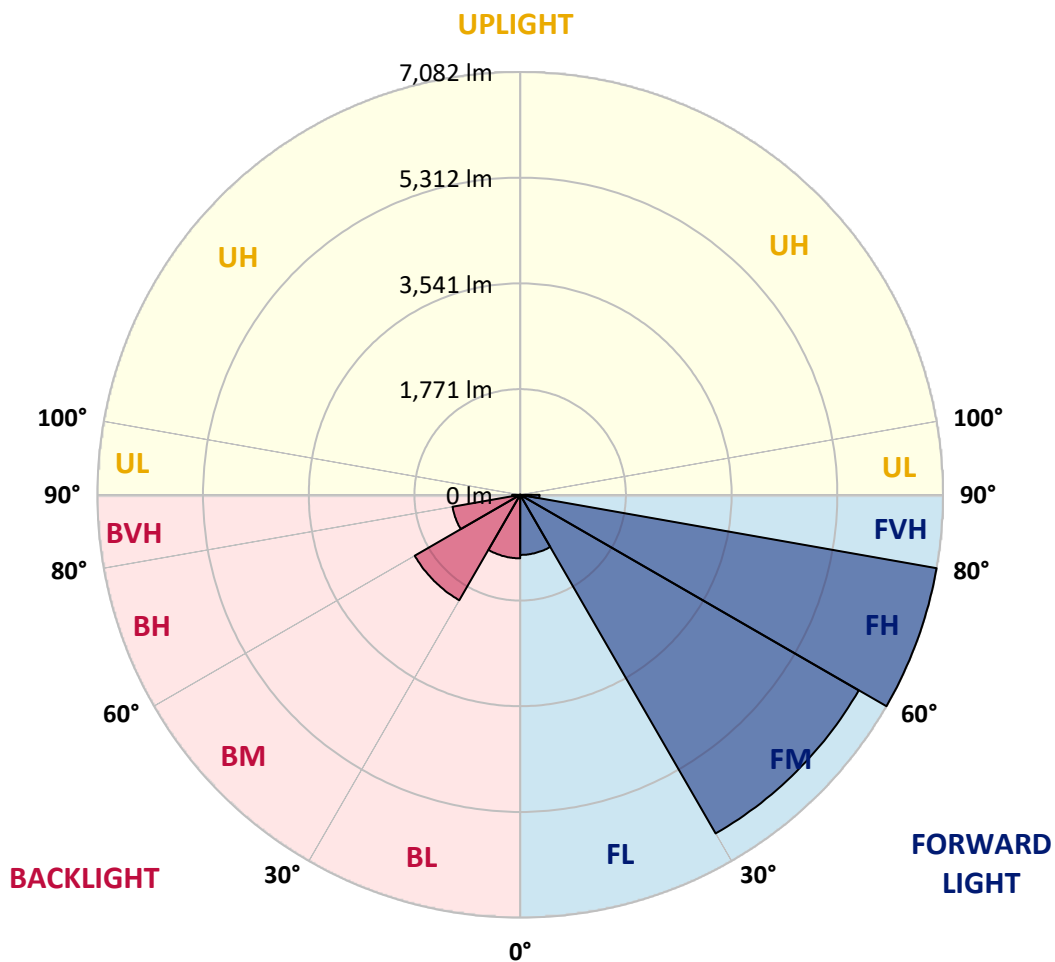
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1006.7	5.2			
FM	(30°-60°)	6548.8	33.8			
FH	(60°-80°)	7082.1	36.6			G3/7500
FVH	(80°-90°)	323.2	1.7			G3/500
BL	(0°-30°)	1063.9	5.5	B3/2500		
BM	(30°-60°)	2039.2	10.5	B2/2500		
BH	(60°-80°)	1150.7	5.9	B3/2500		G3/2500
BVH	(80°-90°)	134.5	0.7			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8
2.5°	2079.8	2072.7	2072.7	2083.2	2086.8	2097.5	2097.5	2101.0	2111.7	2129.4	2150.7
5°	2015.9	2012.5	2015.9	2030.1	2037.2	2058.5	2065.5	2069.1	2090.4	2118.7	2150.7
7.5°	1952.2	1948.6	1955.8	1977.0	1998.2	2030.1	2047.8	2051.4	2083.2	2122.2	2164.8
10°	1930.9	1927.4	1938.0	1955.8	1977.0	2012.5	2040.8	2044.3	2090.4	2136.4	2196.7
12.5°	1959.3	1955.8	1966.3	1984.1	2005.3	2030.1	2062.1	2065.5	2125.8	2186.0	2249.8
15°	2030.1	2030.1	2033.7	2044.3	2065.5	2086.8	2115.2	2118.7	2182.5	2253.4	2317.1
17.5°	2140.0	2132.9	2132.9	2129.4	2143.5	2154.1	2189.6	2193.1	2260.4	2324.2	2388.0
20°	2274.6	2271.1	2256.9	2239.1	2235.7	2242.7	2278.1	2281.7	2349.0	2402.2	2462.3
22.5°	2437.6	2441.2	2409.3	2370.3	2352.6	2363.2	2395.0	2398.6	2448.2	2494.3	2547.5
25°	2653.7	2643.1	2597.1	2540.3	2504.9	2504.9	2536.8	2536.8	2582.8	2611.2	2646.6
27.5°	2859.2	2838.0	2795.4	2714.0	2657.2	2667.9	2699.8	2699.8	2742.3	2752.9	2770.7
30°	3082.5	3061.2	3008.0	2905.3	2830.8	2823.8	2862.7	2859.2	2915.9	2912.3	2898.2
32.5°	3355.2	3344.6	3256.1	3124.9	3025.7	3000.9	3036.3	3039.9	3075.3	3064.7	3018.6
35°	3737.9	3734.3	3652.9	3422.6	3291.4	3245.4	3266.7	3266.7	3291.4	3263.1	3185.2
37.5°	4219.7	4226.8	4155.9	3815.8	3631.6	3553.6	3557.2	3553.6	3560.7	3528.9	3447.3
40°	4701.6	4719.3	4715.7	4304.8	4070.9	3936.3	3886.7	3879.5	3897.3	3883.1	3805.2
42.5°	5335.8	5378.3	5279.0	4907.1	4644.9	4418.1	4283.5	4265.8	4304.8	4322.5	4248.1
45°	5994.8	5980.6	5824.7	5555.4	5318.0	5027.5	4772.5	4744.0	4772.5	4825.6	4747.6
47.5°	6338.4	6327.8	6288.8	6154.2	6118.8	5785.7	5399.5	5374.7	5321.6	5396.0	5303.9
50°	6905.3	6916.0	6756.5	6742.4	6891.1	6706.9	6108.1	6051.5	5955.8	6016.0	5938.0
52.5°	7316.3	7270.2	7171.1	7295.1	7759.2	7660.0	6774.2	6749.4	6660.8	6646.7	6611.2
55°	7482.8	7482.8	7500.6	7787.5	8450.1	8318.9	7497.0	7521.8	7401.4	7302.1	7348.2
57.5°	7532.4	7553.7	7706.0	8180.8	9261.4	8832.7	8294.2	8329.6	8156.0	7957.6	8102.9
60°	7287.9	7351.7	7716.6	8404.1	9718.4	9378.3	9133.8	9144.5	8892.9	8602.4	8857.5
62.5°	6660.8	6738.8	7390.7	8496.1	9644.1	9938.2	9927.5	9952.3	9608.6	9247.3	9566.1
65°	5892.0	5969.9	6664.4	8237.5	9587.4	10338.5	10653.8	10721.1	10278.3	9792.9	10009.0
67.5°	4761.8	4864.5	5523.5	7365.9	9311.0	10667.9	11334.1	11404.9	10795.5	10076.3	9970.0
70°	3450.9	3500.5	4053.2	5598.0	8184.3	10487.3	11872.6	11869.1	10965.6	10055.1	9438.6
72.5°	1661.7	1700.7	2179.0	3475.7	5853.0	8900.0	11482.8	11550.2	10731.8	9746.8	8223.3
75°	683.8	722.8	882.2	1466.8	3071.8	5881.4	9732.7	9892.0	9746.8	8747.7	6434.1
77.5°	425.1	439.4	517.3	758.2	1403.1	2745.8	6813.2	7029.3	7723.8	7008.0	4248.1
80°	318.9	329.5	386.2	531.4	885.8	1013.3	3383.6	3656.3	4680.3	4021.3	1923.9
82.5°	265.8	269.2	308.2	386.2	602.3	581.0	1084.1	1208.2	2182.5	1534.1	662.6
85°	248.0	255.1	276.4	276.4	382.7	364.9	450.0	471.2	634.2	524.4	230.3
87.5°	127.6	120.5	244.5	216.1	198.5	177.2	191.3	205.5	237.4	251.5	102.7
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°	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8
2.5°	2157.7	2168.3	2186.0	2203.7	2225.0	2249.8	2264.0	2281.7	2295.9	2288.8	2285.3
5°	2168.3	2186.0	2225.0	2260.4	2303.0	2352.6	2384.4	2419.9	2448.2	2455.3	2444.6
7.5°	2186.0	2218.0	2271.1	2334.9	2391.6	2455.3	2504.9	2554.5	2589.9	2597.1	2597.1
10°	2228.5	2264.0	2334.9	2419.9	2487.2	2554.5	2611.2	2650.2	2682.1	2696.2	2696.2
12.5°	2288.8	2331.3	2416.3	2519.1	2593.5	2657.2	2689.1	2706.8	2721.0	2735.2	2738.7
15°	2359.6	2405.7	2508.5	2618.2	2696.2	2728.1	2728.1	2724.5	2724.5	2731.7	2738.7
17.5°	2430.5	2480.1	2586.4	2703.4	2752.9	2735.2	2710.4	2699.8	2692.7	2689.1	2699.8
20°	2504.9	2554.5	2660.8	2770.7	2756.4	2682.1	2646.6	2621.8	2600.5	2589.9	2604.1
22.5°	2586.4	2632.5	2742.3	2816.7	2710.4	2597.1	2529.7	2490.7	2455.3	2434.0	2448.2
25°	2682.1	2728.1	2834.4	2830.8	2628.9	2469.5	2363.2	2299.4	2260.4	2239.1	2239.1
27.5°	2795.4	2834.4	2937.2	2795.4	2515.5	2299.4	2143.5	2083.2	2072.7	2054.9	2054.9
30°	2912.3	2944.3	3032.8	2714.0	2359.6	2076.2	1906.2	1877.8	1881.3	1863.6	1867.2
32.5°	3032.8	3064.7	3089.5	2593.5	2157.7	1824.6	1711.3	1690.0	1686.4	1672.3	1658.1
35°	3202.9	3248.9	3096.6	2430.5	1913.2	1615.6	1534.1	1512.8	1491.6	1442.0	1442.0
37.5°	3461.6	3511.1	3078.9	2228.5	1661.7	1452.6	1378.2	1349.9	1314.5	1264.9	1247.2
40°	3815.8	3815.8	3039.9	2001.8	1459.8	1321.6	1250.7	1215.3	1176.3	1126.7	1116.0
42.5°	4233.9	4134.7	2979.7	1771.5	1310.9	1233.0	1169.2	1130.3	1084.1	1027.5	1020.4
45°	4722.9	4453.5	2894.6	1566.0	1201.0	1179.8	1140.9	1073.5	995.5	935.4	924.7
47.5°	5197.6	4740.6	2813.1	1420.8	1109.0	1158.6	1126.7	1013.3	907.1	821.9	811.3
50°	5718.4	4995.7	2717.5	1300.3	1038.1	1144.4	1109.0	924.7	807.8	747.6	740.5
52.5°	6239.2	5254.3	2614.8	1172.7	977.8	1116.0	1066.4	860.9	804.2	722.8	712.2
55°	6788.4	5555.4	2494.3	1031.0	907.1	1059.4	1009.8	857.4	829.1	722.8	698.0
57.5°	7323.4	5888.5	2299.4	892.8	829.1	974.4	988.5	836.2	775.9	715.7	687.3
60°	7915.1	6242.8	1977.0	775.9	761.8	903.5	960.1	790.1	715.7	694.4	680.3
62.5°	8389.8	6561.6	1544.8	694.4	705.0	846.8	924.7	761.8	690.9	673.2	669.6
65°	8595.3	6568.8	1109.0	623.6	648.3	793.6	889.3	736.9	669.6	662.6	659.0
67.5°	8379.2	6207.4	779.5	556.3	588.1	744.0	843.2	712.2	648.3	651.9	644.9
70°	7681.2	5445.6	570.4	492.4	531.4	690.9	793.6	680.3	623.6	630.6	620.0
72.5°	6427.0	4244.5	457.1	439.4	485.4	634.2	744.0	644.9	584.6	588.1	566.9
75°	4747.6	2813.1	382.7	393.2	432.2	581.0	680.3	598.7	542.1	527.9	513.7
77.5°	2823.8	1445.5	315.4	343.7	386.2	517.3	609.4	542.1	496.0	471.2	460.6
80°	1165.7	584.6	258.6	290.5	336.6	460.6	538.6	474.8	442.8	418.1	403.9
82.5°	464.1	286.9	205.5	237.4	283.5	400.4	471.2	418.1	386.2	368.5	329.5
85°	177.2	141.7	138.2	166.5	212.6	308.2	389.7	350.8	325.9	279.9	269.2
87.5°	70.9	63.7	63.7	81.5	120.5	194.9	279.9	244.5	255.1	201.9	205.5
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)