

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: P237330

Luminaire Tested: **ARCH-L-AF72-170-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237330
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-AF72-170-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22392.4 lumens
Efficiency: N/A
Efficacy: 129.4 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): 173
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

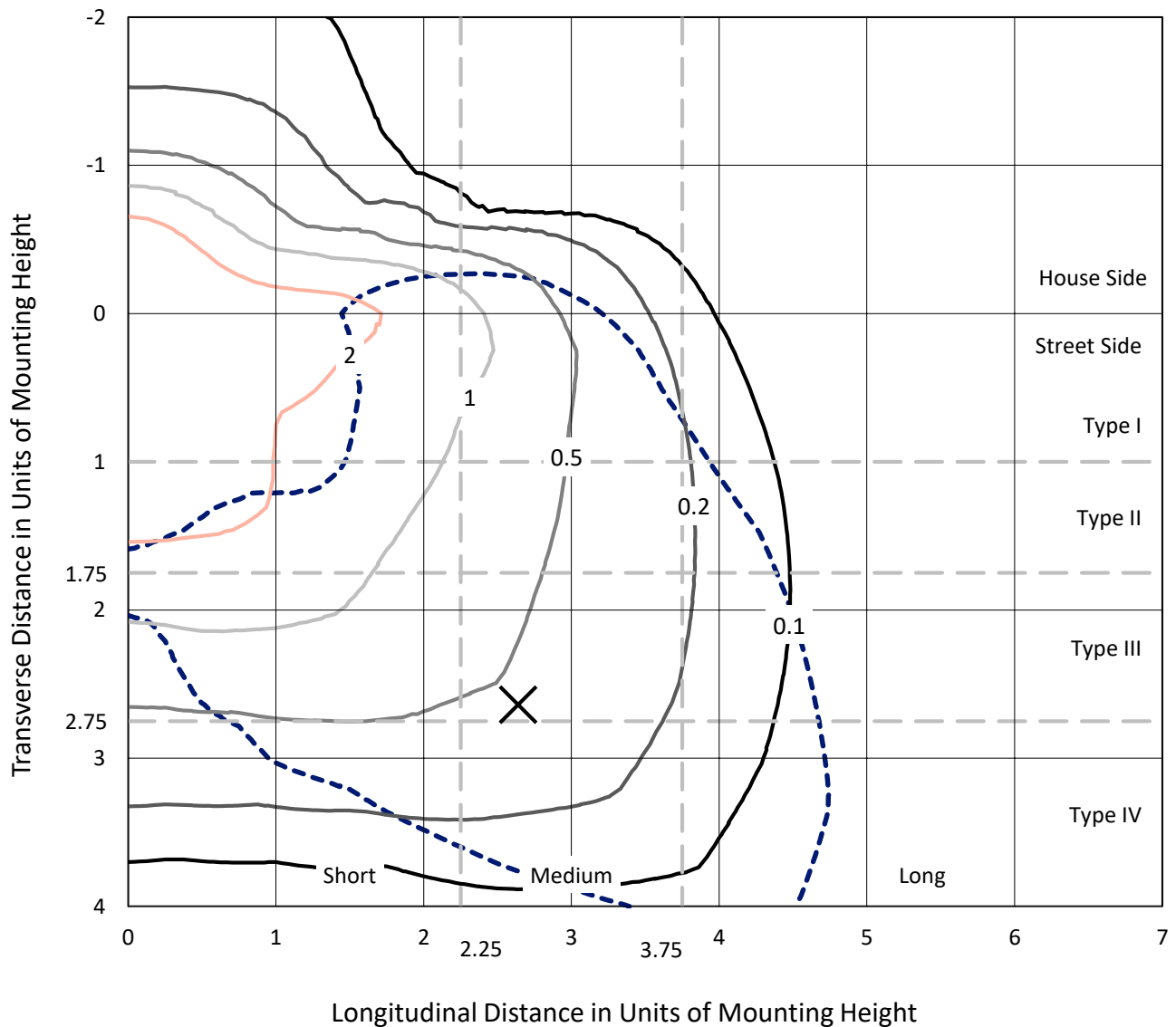


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

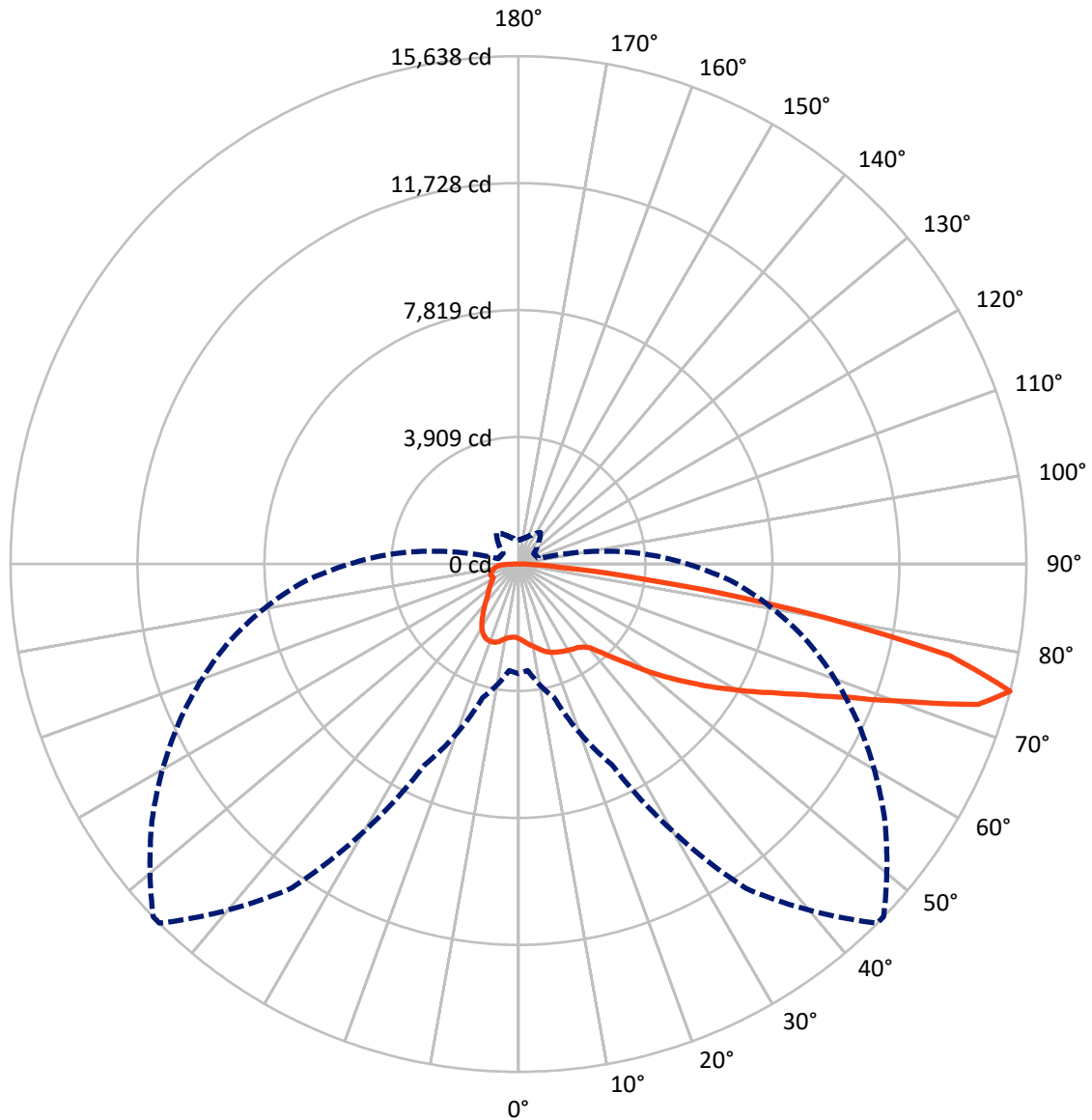


Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Medium - Non-Cutoff

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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
House Side	Lumens	5187.4	0.0	5187.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	17205.0	0.0	17205.0
	% Fixture	76.8	0.0	76.8
Total	Lumens	22392.4	0.0	22392.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.5	1.0
10°-20°	737.2	3.3
20°-30°	1265.0	5.6
30°-40°	1769.3	7.9
40°-50°	2595.3	11.6
50°-60°	4042.9	18.1
60°-70°	5817.4	26.0
70°-80°	5067.6	22.6
80°-90°	870.3	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°	22392.4	100.0
0°-180°	22392.4	100.0



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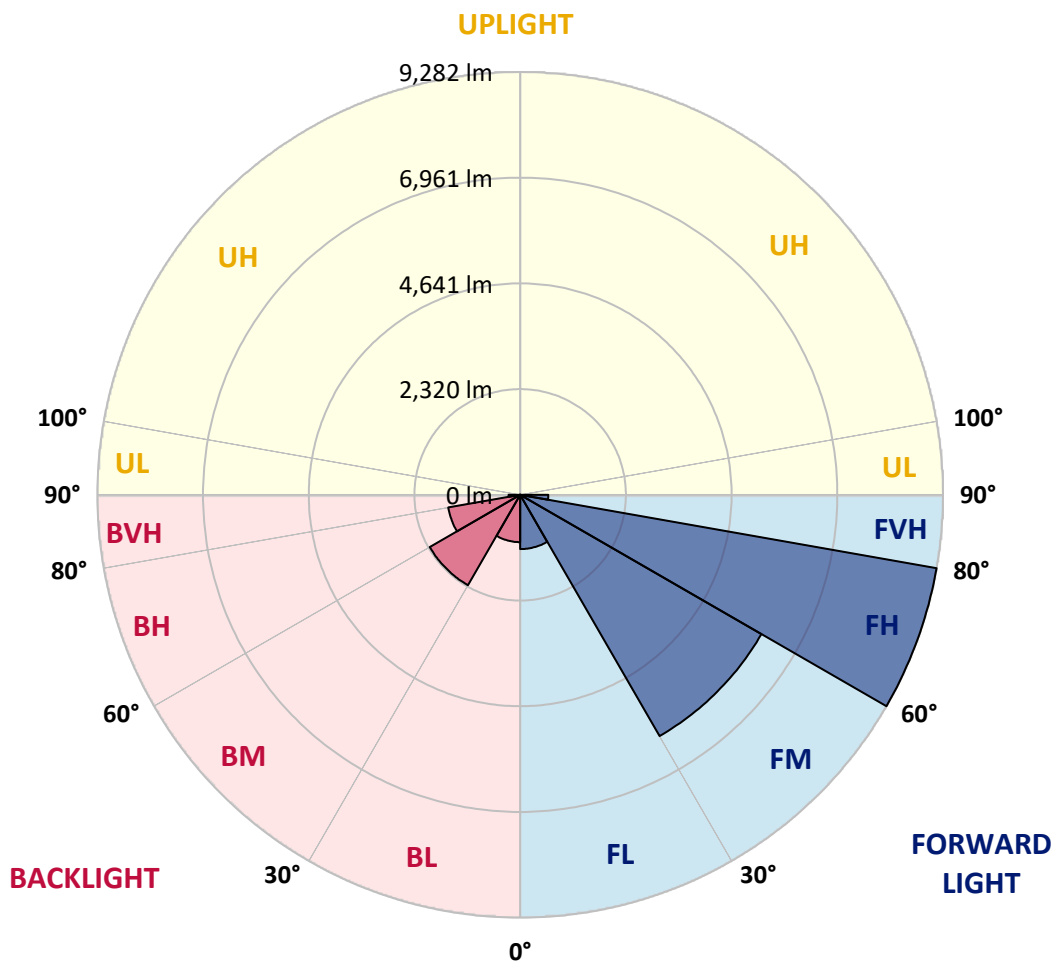
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1190.7	5.3			
FM	(30°-60°)	6114.9	27.3			
FH	(60°-80°)	9281.9	41.5			G4/12000
FVH	(80°-90°)	617.5	2.8			G4/750
BL	(0°-30°)	1039.0	4.6	B3/2500		
BM	(30°-60°)	2292.6	10.2	B2/2500		
BH	(60°-80°)	1603.1	7.2	B3/2500		G3/2500
BVH	(80°-90°)	252.8	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°	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5
2.5°	2408.7	2391.4	2391.4	2378.3	2378.3	2356.5	2347.8	2343.5	2321.7	2308.6	2295.5
5°	2548.2	2526.4	2522.1	2491.6	2478.5	2430.5	2426.2	2395.8	2356.5	2317.3	2286.8
7.5°	2674.5	2661.4	2639.6	2609.1	2570.0	2509.0	2504.6	2456.7	2391.4	2339.1	2295.5
10°	2766.0	2757.3	2726.8	2687.6	2644.0	2583.1	2578.7	2526.4	2448.0	2387.1	2326.0
12.5°	2874.9	2861.8	2822.6	2770.4	2722.4	2665.8	2661.4	2617.8	2530.8	2452.3	2374.0
15°	2979.4	2962.0	2914.1	2861.8	2809.5	2761.7	2761.7	2713.7	2622.2	2530.8	2439.3
17.5°	3031.7	3022.9	2975.0	2918.4	2874.9	2840.0	2835.6	2792.1	2700.6	2604.8	2504.6
20°	3049.1	3053.5	3009.9	2949.0	2918.4	2901.0	2896.7	2866.2	2766.0	2674.5	2578.7
22.5°	3044.7	3057.8	3022.9	2957.7	2949.0	2949.0	2949.0	2914.1	2835.6	2744.2	2648.3
25°	3062.2	3079.6	3053.5	2975.0	2975.0	2992.4	2992.4	2975.0	2905.4	2826.9	2731.1
27.5°	3123.2	3136.3	3114.5	3005.5	3009.9	3036.0	3031.7	3036.0	2992.4	2918.4	2822.6
30°	3197.2	3214.6	3188.5	3053.5	3049.1	3075.2	3075.2	3097.0	3066.5	2988.1	2909.7
32.5°	3397.5	3393.2	3310.5	3105.7	3092.7	3118.8	3118.8	3140.6	3123.2	3062.2	2988.1
35°	3994.3	3928.9	3746.0	3275.6	3145.0	3158.0	3158.0	3197.2	3205.9	3158.0	3092.7
37.5°	4604.1	4582.4	4443.0	3728.7	3336.6	3240.8	3236.4	3293.0	3332.3	3293.0	3249.5
40°	5218.3	5200.9	5170.4	4334.0	3737.4	3388.8	3375.8	3423.7	3493.4	3467.3	3441.1
42.5°	5789.0	5780.2	5810.7	4930.8	4247.0	3706.9	3667.6	3611.0	3711.2	3702.5	3702.5
45°	6237.5	6259.3	6276.8	5488.3	4800.2	4116.3	4068.4	3876.7	4011.7	4046.6	4072.8
47.5°	6490.2	6507.6	6568.7	6032.9	5353.3	4591.1	4556.2	4242.6	4421.2	4525.7	4599.8
50°	6851.7	6803.9	6856.1	6564.3	6019.8	5209.6	5113.7	4734.8	4961.3	5144.3	5318.5
52.5°	7200.2	7121.8	7165.4	7178.5	6777.8	5815.1	5714.9	5314.1	5597.3	5884.7	6194.1
55°	7513.9	7509.5	7553.1	7775.2	7509.5	6464.1	6350.9	5954.5	6363.9	6673.2	7195.8
57.5°	7766.4	7810.0	8001.7	8467.8	8354.5	7169.8	7043.4	6699.3	7182.9	7492.1	8358.9
60°	8062.7	8132.4	8450.4	9055.9	9125.5	7910.3	7779.5	7531.3	8023.5	8337.2	9704.8
62.5°	8162.8	8263.1	8916.4	9674.4	9931.3	8720.5	8602.8	8437.3	8907.8	9190.9	11046.4
65°	7496.4	7688.1	9173.4	9992.4	10798.2	9696.1	9596.0	9452.2	9787.6	9974.9	11956.9
67.5°	7313.5	7400.6	8672.5	10449.7	11612.7	10950.6	10850.4	10602.2	10610.9	10532.5	12253.0
70°	7056.5	7152.4	8158.5	10793.9	12780.1	12666.8	12544.9	11813.1	11364.5	10889.6	11669.3
72.5°	6011.1	5980.6	7030.3	9866.1	13342.0	14792.5	14648.8	13115.5	11922.0	10580.4	9848.6
75°	3375.8	3288.7	4264.4	6825.6	12183.3	15637.5	15633.1	13773.2	11530.0	9217.0	6703.7
77.5°	980.1	953.9	1407.0	2861.8	8202.1	13585.9	13751.4	12422.9	9622.1	6620.9	3680.7
80°	461.8	470.5	605.5	945.2	3502.1	8768.3	9243.2	8180.3	5749.7	3053.5	1520.2
82.5°	291.8	296.2	413.8	609.8	1481.0	3981.2	4373.3	3680.7	2278.1	1319.8	670.9
85°	182.9	182.9	274.5	400.7	884.2	1271.9	1380.8	1254.4	975.7	718.7	365.9
87.5°	100.1	100.1	165.5	230.9	483.5	409.5	422.5	500.9	609.8	440.0	182.9
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°	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5	2295.5
2.5°	2291.2	2282.5	2269.4	2265.0	2260.7	2256.3	2260.7	2269.4	2260.7	2260.7	2265.0
5°	2278.1	2269.4	2252.0	2252.0	2256.3	2260.7	2282.5	2295.5	2299.9	2299.9	2299.9
7.5°	2278.1	2265.0	2252.0	2256.3	2265.0	2282.5	2317.3	2339.1	2356.5	2360.9	2360.9
10°	2299.9	2282.5	2273.7	2282.5	2308.6	2321.7	2356.5	2391.4	2413.1	2421.8	2421.8
12.5°	2339.1	2321.7	2321.7	2339.1	2374.0	2391.4	2421.8	2448.0	2474.1	2487.2	2487.2
15°	2404.4	2382.7	2387.1	2417.5	2456.7	2474.1	2495.9	2504.6	2526.4	2543.8	2543.8
17.5°	2465.4	2443.6	2452.3	2487.2	2513.3	2522.1	2535.1	2530.8	2539.5	2552.6	2556.9
20°	2535.1	2513.3	2517.7	2539.5	2543.8	2535.1	2535.1	2522.1	2517.7	2539.5	2548.2
22.5°	2604.8	2583.1	2578.7	2565.6	2543.8	2522.1	2509.0	2495.9	2487.2	2509.0	2517.7
25°	2687.6	2657.1	2635.3	2578.7	2522.1	2482.8	2465.4	2456.7	2452.3	2474.1	2482.8
27.5°	2779.1	2748.6	2683.2	2561.3	2469.8	2404.4	2391.4	2391.4	2400.0	2413.1	2421.8
30°	2866.2	2835.6	2718.1	2522.1	2378.3	2282.5	2269.4	2282.5	2304.3	2317.3	2330.4
32.5°	2953.3	2922.8	2739.9	2461.0	2243.2	2121.3	2112.6	2134.4	2169.2	2178.0	2186.7
35°	3070.9	3040.4	2766.0	2374.0	2073.4	1942.7	1934.0	1947.1	1977.6	1990.7	2003.7
37.5°	3236.4	3219.0	2805.1	2278.1	1916.6	1772.9	1746.7	1738.0	1755.4	1751.1	1768.5
40°	3454.2	3467.3	2874.9	2151.8	1764.1	1616.1	1559.4	1533.3	1515.8	1481.0	1498.4
42.5°	3772.1	3780.9	2953.3	2008.1	1633.4	1467.9	1393.9	1346.0	1311.1	1254.4	1263.2
45°	4238.3	4164.2	3044.7	1855.6	1515.8	1350.3	1263.2	1206.6	1158.7	1110.7	1115.1
47.5°	4856.8	4630.3	3145.0	1729.3	1398.3	1254.4	1176.1	1110.7	1054.2	1014.9	1019.3
50°	5619.1	5209.6	3245.1	1611.7	1280.6	1180.5	1110.7	1041.1	984.4	945.2	940.9
52.5°	6625.2	5906.5	3310.5	1481.0	1163.0	1115.1	1054.2	988.8	919.1	871.1	866.8
55°	7670.7	6716.7	3367.0	1324.2	1049.8	1041.1	1010.6	936.5	853.8	792.8	784.1
57.5°	8820.6	7583.5	3410.6	1171.7	962.6	980.1	971.4	884.2	792.8	736.1	731.8
60°	9866.1	8480.9	3271.3	1036.7	884.2	919.1	927.8	853.8	805.9	818.9	823.3
62.5°	10920.1	9173.4	2739.9	936.5	832.0	879.8	953.9	949.6	927.8	949.6	953.9
65°	11299.1	9317.1	1942.7	853.8	779.7	897.3	1036.7	1028.0	927.8	888.6	879.8
67.5°	11085.6	8890.3	1306.7	788.4	740.5	919.1	1123.8	1028.0	892.9	840.7	823.3
70°	10070.7	7840.5	958.3	723.0	705.6	914.7	1171.7	1023.7	875.5	818.9	797.1
72.5°	8032.2	6050.2	771.0	662.1	653.4	892.9	1197.9	1014.9	858.2	797.1	771.0
75°	5200.9	3763.4	649.1	601.1	575.0	858.2	1184.8	988.8	836.4	757.9	740.5
77.5°	2413.1	1620.4	553.2	531.4	500.9	805.9	1145.6	936.5	788.4	714.3	692.5
80°	1123.8	766.6	466.1	461.8	448.7	762.3	1093.3	875.5	731.8	670.9	636.0
82.5°	601.1	461.8	379.0	379.0	392.0	710.0	1028.0	801.5	657.8	627.3	535.8
85°	317.9	265.7	274.5	296.2	335.4	627.3	940.9	723.0	575.0	479.2	466.1
87.5°	161.2	169.9	169.9	200.4	257.0	509.6	775.3	596.8	487.8	392.0	383.3
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)