

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: P399613

Luminaire Tested: **ARCH-L-PA3-160-830-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399613
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-830-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19723 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

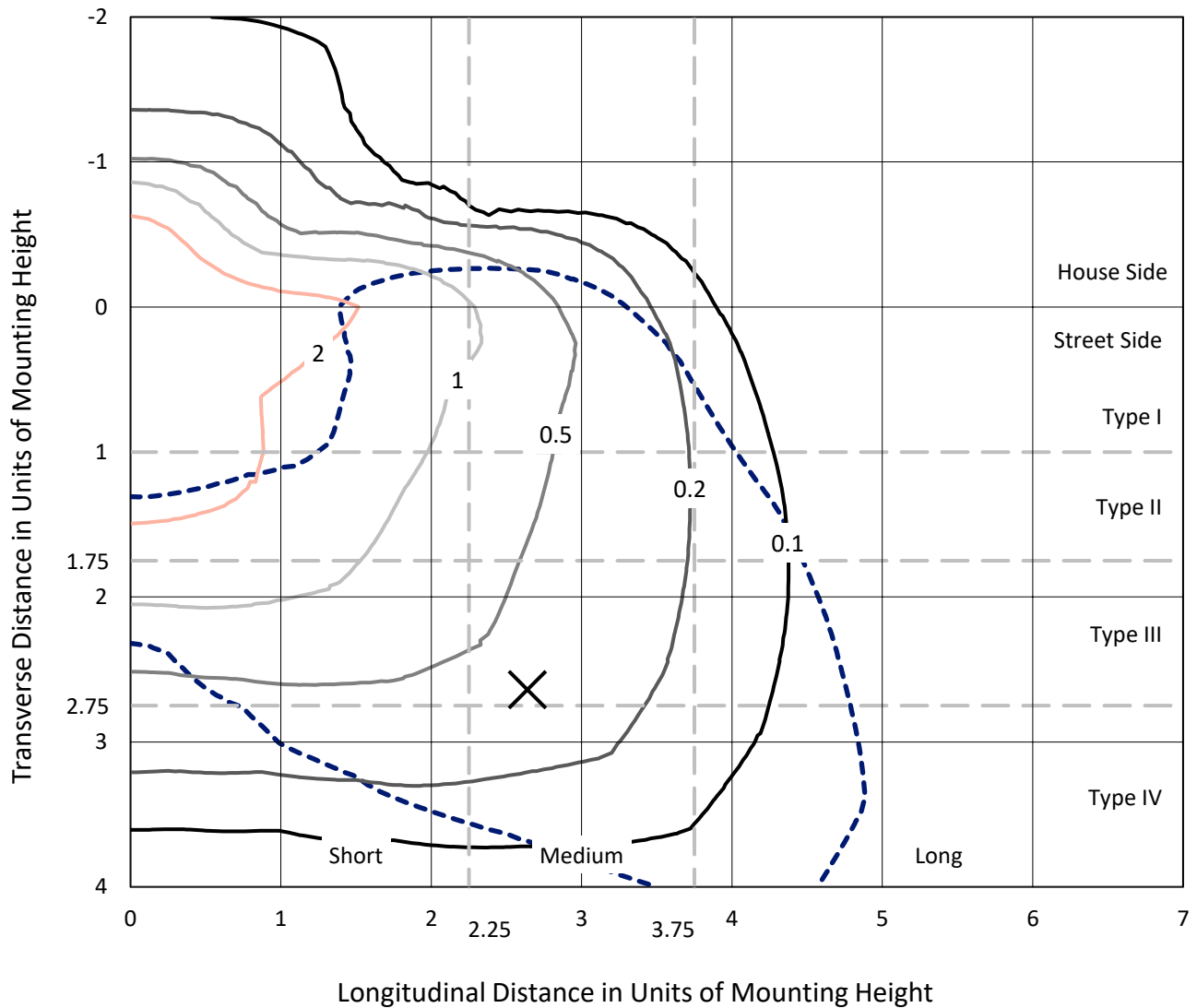
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

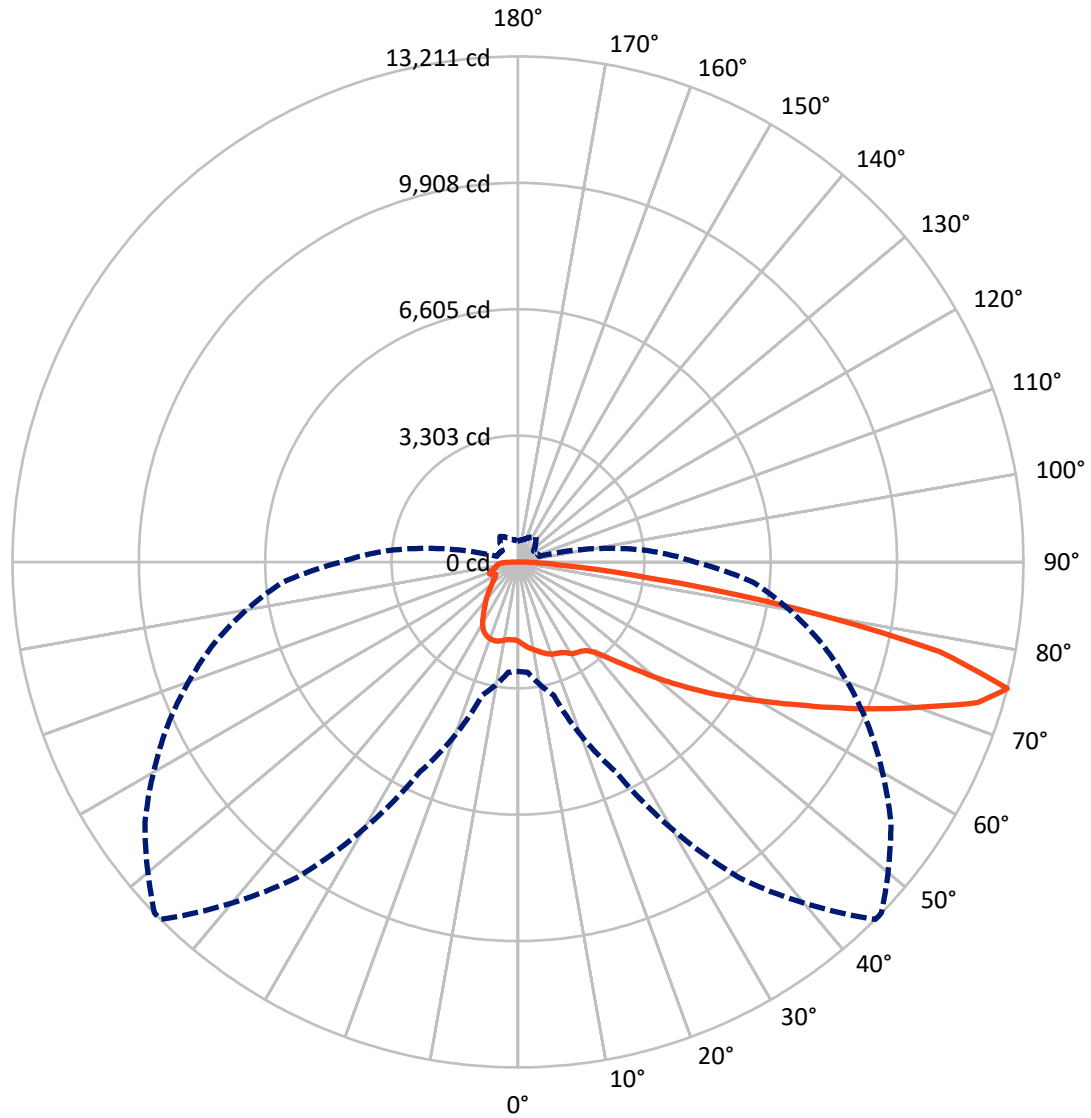
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Medium - N/A

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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	4358.7	0.0	4358.7
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	15364.3	0.0	15364.3
	% Fixture	77.9	0.0	77.9
Total	Lumens	19723.0	0.0	19723.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.9	1.0
10°-20°	651.9	3.3
20°-30°	1111.4	5.6
30°-40°	1557.2	7.9
40°-50°	2287.8	11.6
50°-60°	3641.0	18.5
60°-70°	5179.4	26.3
70°-80°	4336.7	22.0
80°-90°	752.6	3.8
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°	19723.0	100.0
0°-180°	19723.0	100.0

Coefficient of Utilization



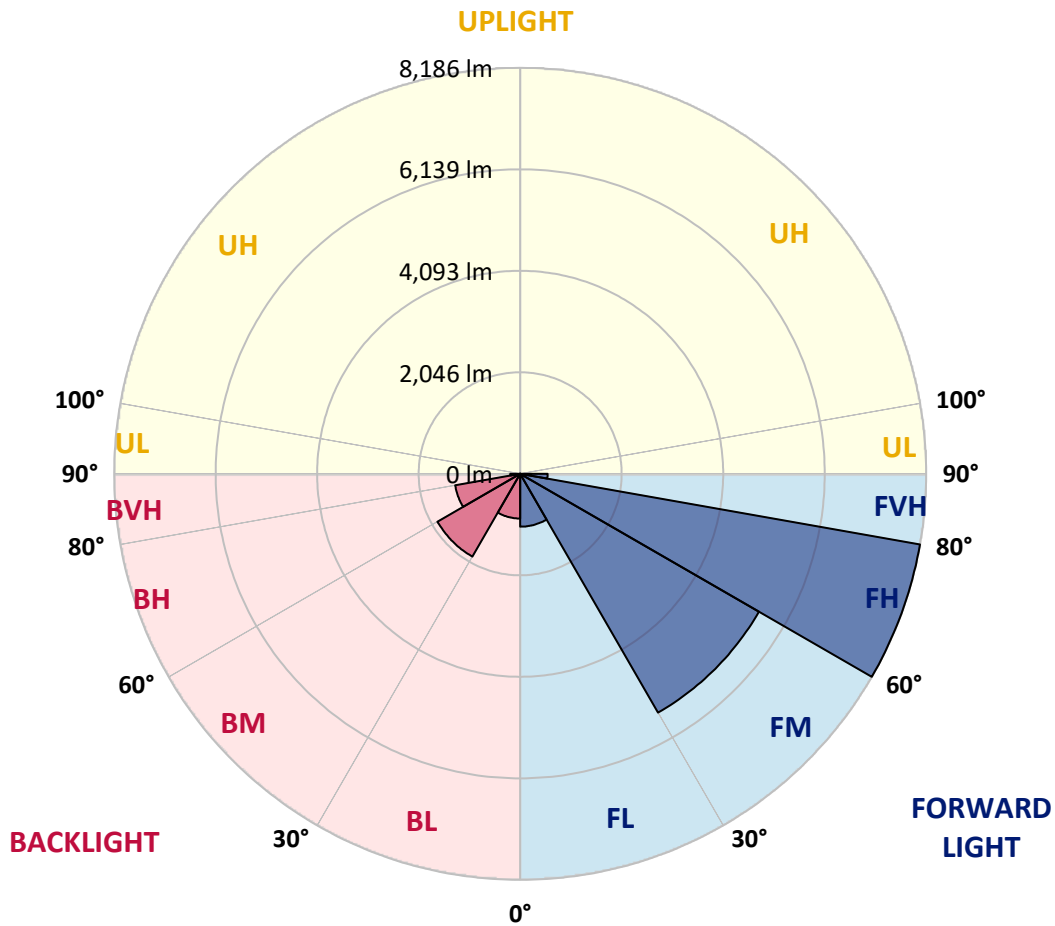
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1066.2	5.4			
FM (30°-60°)	5559.3	28.2			
FH (60°-80°)	8185.5	41.5			G4/12000
FVH (80°-90°)	553.3	2.8			G4/750
BL (0°-30°)	902.1	4.6	B2/1000		
BM (30°-60°)	1926.7	9.8	B2/2500		
BH (60°-80°)	1330.5	6.7	B3/2500		G3/2500
BVH (80°-90°)	199.3	1.0			G2/225
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°	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3
2.5°	2189.9	2179.4	2174.1	2174.1	2153.0	2139.9	2137.2	2118.8	2103.0	2087.2	2074.0
5°	2316.4	2308.5	2292.7	2279.5	2250.5	2213.7	2208.4	2168.9	2129.3	2092.4	2060.8
7.5°	2432.4	2416.6	2398.1	2371.8	2324.3	2274.3	2266.4	2211.0	2155.7	2100.3	2058.2
10°	2529.9	2514.1	2487.7	2450.8	2390.2	2329.6	2321.7	2263.7	2205.7	2139.9	2079.3
12.5°	2622.1	2608.9	2569.4	2519.3	2448.2	2392.9	2384.9	2334.9	2274.3	2200.5	2121.4
15°	2701.2	2688.0	2645.8	2587.9	2506.2	2464.0	2453.5	2406.0	2345.4	2266.4	2184.7
17.5°	2740.7	2740.7	2695.9	2632.7	2556.2	2524.6	2516.7	2458.7	2403.4	2327.0	2245.3
20°	2753.9	2759.2	2727.5	2651.1	2585.2	2572.1	2564.1	2516.7	2453.5	2379.7	2303.3
22.5°	2761.8	2772.3	2746.0	2659.0	2603.7	2595.8	2590.5	2558.9	2508.8	2437.7	2361.2
25°	2788.1	2788.1	2769.7	2672.2	2627.4	2624.8	2624.8	2606.3	2572.1	2511.4	2435.0
27.5°	2827.7	2825.0	2801.3	2701.2	2680.1	2688.0	2685.4	2682.7	2659.0	2598.4	2516.7
30°	2893.6	2893.6	2867.2	2759.2	2746.0	2780.2	2782.9	2788.1	2751.3	2656.4	2590.5
32.5°	2993.7	2983.2	2956.8	2817.1	2796.1	2827.7	2832.9	2830.3	2798.7	2709.1	2677.5
35°	3302.0	3278.3	3183.4	2946.3	2840.9	2859.3	2861.9	2875.1	2880.4	2809.2	2793.4
37.5°	3842.3	3810.6	3665.7	3252.0	2983.2	2938.4	2935.7	2970.0	2999.0	2935.7	2935.7
40°	4429.9	4403.6	4319.3	3779.0	3246.7	3099.1	3088.6	3120.2	3157.1	3112.3	3125.5
42.5°	4935.9	4957.0	4964.9	4337.7	3642.0	3399.5	3370.5	3325.7	3383.7	3344.2	3396.9
45°	5315.4	5304.9	5449.8	4909.6	4153.2	3776.4	3736.9	3615.6	3689.4	3686.8	3802.7
47.5°	5718.6	5700.2	5760.8	5447.2	4735.6	4237.6	4177.0	3997.8	4108.4	4184.9	4377.2
50°	6100.7	6106.0	6127.1	5871.5	5368.1	4798.9	4722.5	4482.6	4640.8	4801.5	5073.0
52.5°	6598.8	6561.9	6535.5	6366.9	6077.0	5383.9	5333.8	5059.8	5281.1	5470.9	5831.9
55°	7033.6	7009.9	6994.1	6986.2	6669.9	6029.6	5976.9	5692.3	6011.1	6145.5	6677.9
57.5°	7497.4	7484.3	7568.6	7703.0	7576.5	6685.8	6630.4	6356.3	6712.1	6807.0	7594.9
60°	7837.4	7845.3	8077.2	8419.8	8332.8	7397.3	7331.4	7089.0	7394.7	7479.0	8512.0
62.5°	7840.0	7919.1	8456.7	9070.7	9170.8	8216.9	8140.4	7876.9	8095.6	8095.6	9334.2
65°	7091.6	7181.2	8388.2	9231.5	10019.4	9191.9	9118.1	8704.4	8786.1	8675.4	10106.4
67.5°	6345.8	6451.2	7587.0	9244.6	10615.0	10235.5	10148.5	9531.9	9392.2	9112.9	10646.6
70°	5850.4	5924.2	6872.9	9073.3	10973.4	11326.5	11260.6	10317.2	9869.2	9479.2	10533.3
72.5°	4925.4	4899.0	5805.6	8259.0	11173.7	12565.1	12509.8	11171.0	10282.9	9305.2	8983.7
75°	2859.3	2890.9	3602.5	6050.7	10072.1	13210.8	13205.5	11901.0	10101.1	8219.5	6190.3
77.5°	824.8	848.6	1183.3	2659.0	6369.5	11268.5	11629.6	10883.8	8538.4	5858.3	3209.8
80°	361.0	379.5	513.9	885.5	2743.3	7360.4	7676.6	7360.4	5149.4	2688.0	1259.7
82.5°	213.5	226.6	334.7	548.1	1315.0	3502.3	3929.2	3431.2	2221.6	1141.1	521.8
85°	121.2	126.5	192.4	347.9	827.5	1225.4	1375.6	1288.7	1083.1	648.3	274.1
87.5°	55.3	58.0	94.9	163.4	463.8	413.7	429.6	569.2	627.2	395.3	137.0
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°	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3	2071.3
2.5°	2068.7	2060.8	2045.0	2039.7	2031.8	2034.5	2037.1	2037.1	2039.7	2031.8	2031.8
5°	2047.6	2034.5	2018.6	2018.6	2018.6	2039.7	2058.2	2068.7	2074.0	2074.0	2068.7
7.5°	2039.7	2023.9	2005.5	2010.7	2016.0	2042.4	2076.6	2110.9	2121.4	2121.4	2116.1
10°	2055.5	2039.7	2026.5	2034.5	2047.6	2068.7	2095.1	2126.7	2153.0	2155.7	2153.0
12.5°	2092.4	2074.0	2060.8	2076.6	2092.4	2105.6	2118.8	2132.0	2166.2	2171.5	2171.5
15°	2153.0	2134.6	2118.8	2132.0	2137.2	2137.2	2137.2	2137.2	2171.5	2176.8	2176.8
17.5°	2213.7	2197.8	2182.0	2184.7	2168.9	2147.8	2139.9	2137.2	2155.7	2171.5	2174.1
20°	2271.6	2258.5	2242.6	2216.3	2176.8	2137.2	2124.1	2124.1	2134.6	2158.3	2158.3
22.5°	2334.9	2319.1	2292.7	2232.1	2166.2	2110.9	2097.7	2105.6	2118.8	2150.4	2147.8
25°	2406.0	2384.9	2340.1	2226.8	2132.0	2066.1	2068.7	2092.4	2116.1	2150.4	2150.4
27.5°	2485.1	2456.1	2366.5	2184.7	2055.5	1992.3	2016.0	2071.3	2105.6	2142.5	2147.8
30°	2572.1	2545.7	2387.6	2110.9	1931.7	1873.7	1931.7	2021.3	2074.0	2108.2	2116.1
32.5°	2677.5	2656.4	2406.0	2016.0	1770.9	1720.9	1805.2	1915.9	2000.2	2039.7	2047.6
35°	2809.2	2788.1	2429.7	1908.0	1620.7	1568.0	1644.4	1757.7	1868.4	1918.5	1934.3
37.5°	2980.5	2948.9	2450.8	1792.0	1494.2	1433.6	1470.5	1573.3	1673.4	1741.9	1760.4
40°	3199.3	3149.2	2469.3	1660.2	1383.5	1315.0	1328.2	1378.3	1436.2	1496.9	1520.6
42.5°	3507.6	3407.4	2471.9	1520.6	1270.2	1207.0	1201.7	1217.5	1217.5	1217.5	1225.4
45°	3937.1	3747.4	2477.2	1388.8	1154.3	1088.4	1072.6	1067.3	1027.8	951.3	946.1
47.5°	4480.0	4192.8	2500.9	1278.1	1033.0	975.1	954.0	932.9	859.1	780.0	764.2
50°	5175.7	4709.3	2548.3	1172.7	930.3	890.7	864.4	814.3	732.6	672.0	656.2
52.5°	5976.9	5323.3	2593.1	1062.0	853.8	827.5	795.9	735.2	648.3	611.4	606.1
55°	6896.6	6008.5	2682.7	964.5	788.0	769.5	740.5	682.5	616.7	590.3	587.7
57.5°	7837.4	6775.4	2809.2	877.6	724.7	714.2	714.2	664.1	621.9	611.4	611.4
60°	8743.9	7434.2	2711.7	795.9	666.7	672.0	722.1	708.9	677.3	690.4	698.4
62.5°	9447.6	7821.6	2200.5	730.0	624.6	672.0	801.1	801.1	764.2	759.0	759.0
65°	9748.0	7816.3	1546.9	679.9	608.8	737.9	893.4	851.2	753.7	716.8	708.9
67.5°	9671.6	7473.7	1067.3	645.6	603.5	806.4	935.5	816.9	706.3	674.6	650.9
70°	8999.6	6749.0	822.2	614.0	595.6	777.4	922.4	777.4	669.4	640.4	619.3
72.5°	7260.3	5412.9	682.5	582.4	564.0	719.4	877.6	740.5	640.4	608.8	587.7
75°	4630.2	3404.8	577.1	540.2	503.3	645.6	816.9	703.6	608.8	566.6	550.8
77.5°	2226.8	1467.9	503.3	490.2	453.3	598.2	756.3	656.2	566.6	532.3	521.8
80°	901.3	672.0	437.5	440.1	416.4	569.2	714.2	611.4	524.4	487.5	469.1
82.5°	469.1	390.0	368.9	379.5	379.5	542.9	682.5	574.5	487.5	471.7	411.1
85°	253.0	242.4	284.6	305.7	329.4	490.2	635.1	535.0	445.4	382.1	368.9
87.5°	123.9	158.1	160.8	184.5	229.3	392.7	535.0	448.0	371.6	308.3	303.1
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)