

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: P399566

Luminaire Tested: **ARCH-L-PA3-160-730-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399566  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-160-730-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22698 lumens  
Efficiency: N/A  
Efficacy: 140.1 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

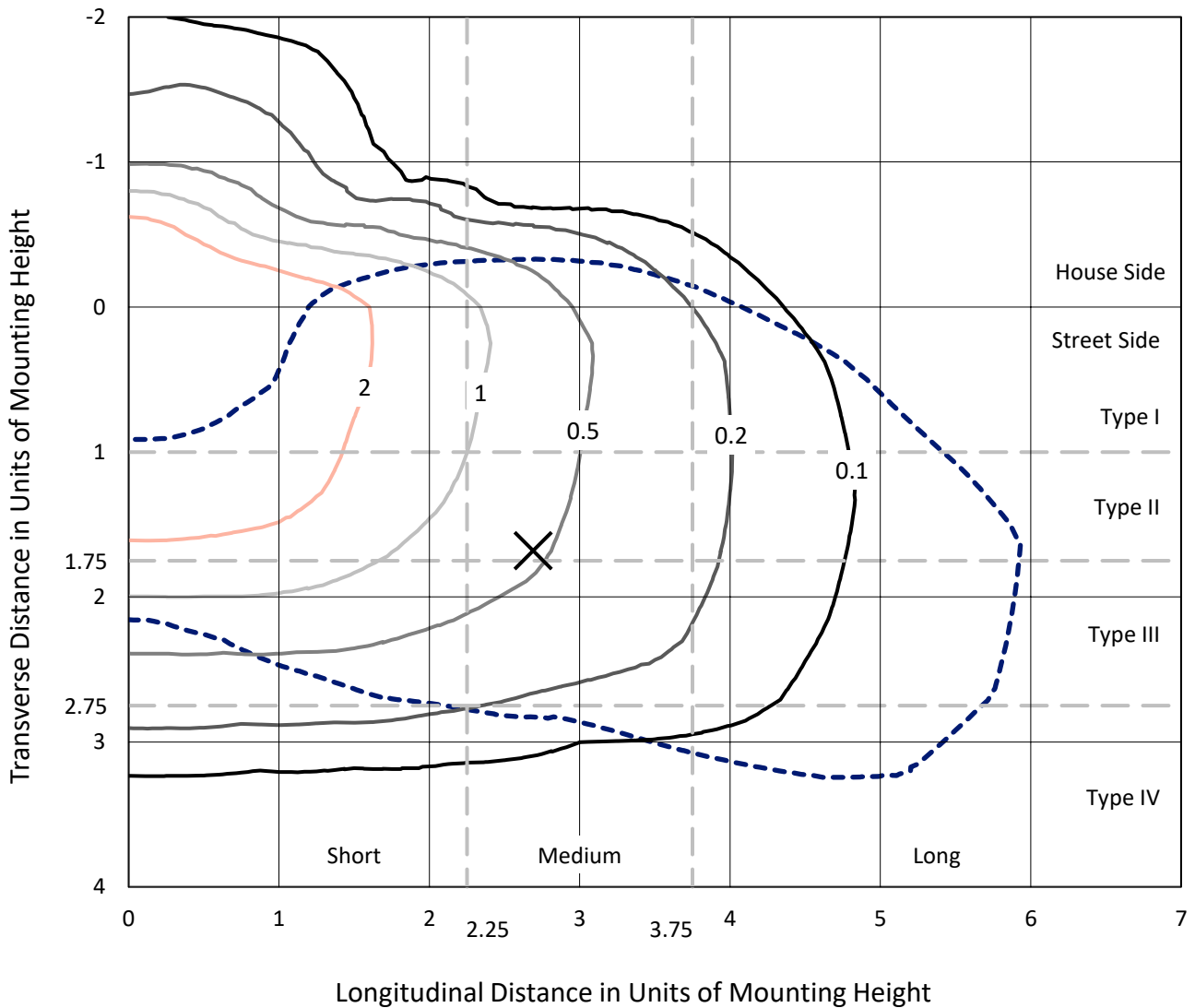
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

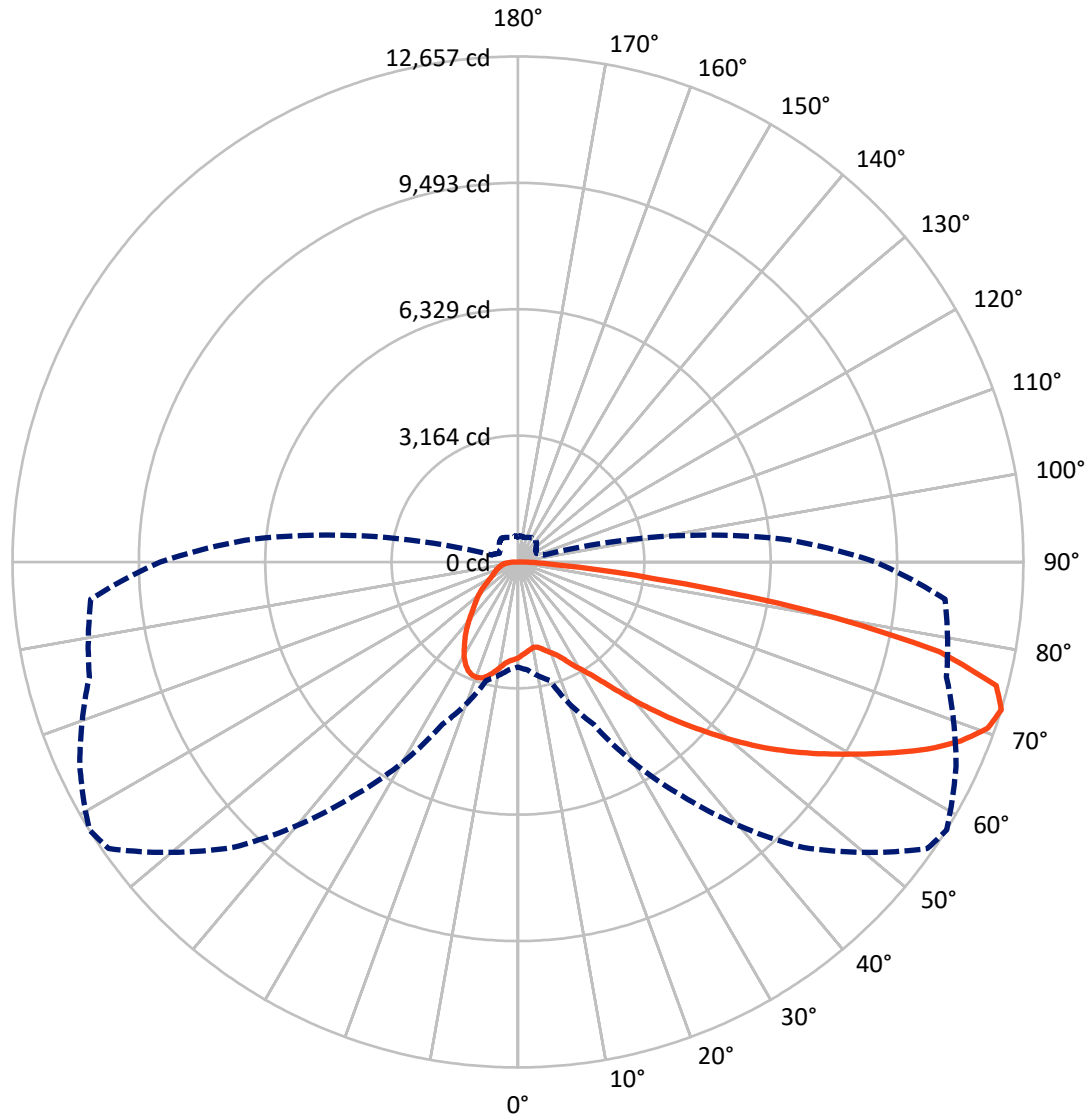
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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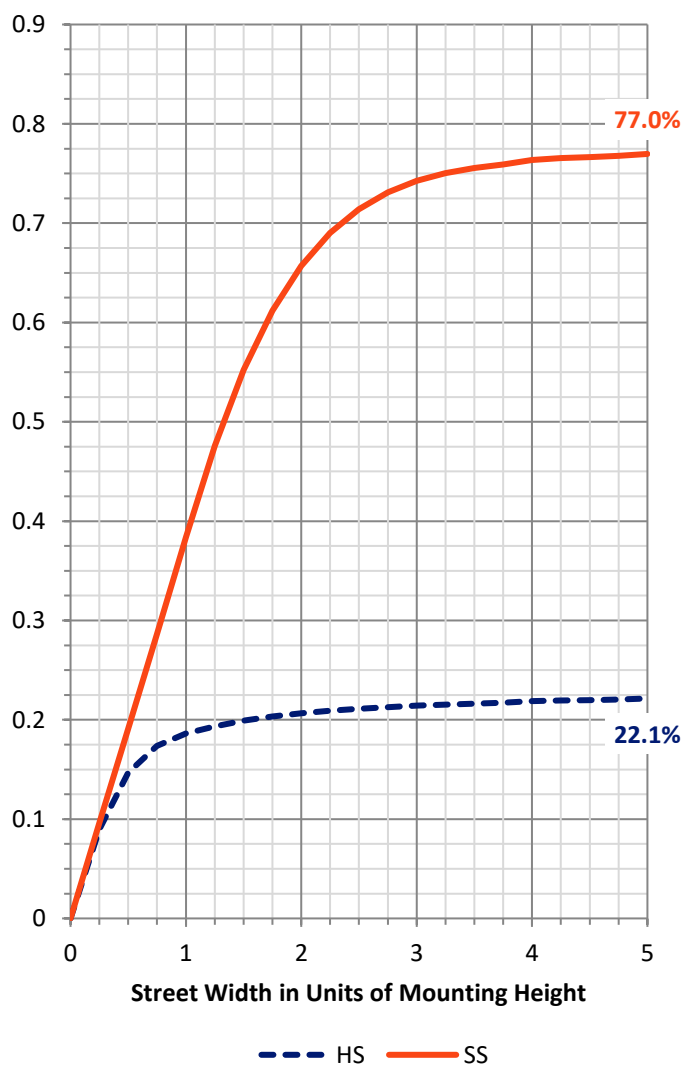
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5147.6	0.0	5147.6
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	17550.4	0.0	17550.4
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	22698.0	0.0	22698.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.6	1.0
10°-20°	732.4	3.2
20°-30°	1312.0	5.8
30°-40°	1973.6	8.7
40°-50°	3196.0	14.1
50°-60°	4811.1	21.2
60°-70°	5662.1	24.9
70°-80°	4015.0	17.7
80°-90°	765.0	3.4
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°	22698.0	100.0
0°-180°	22698.0	100.0

**Coefficient of Utilization**

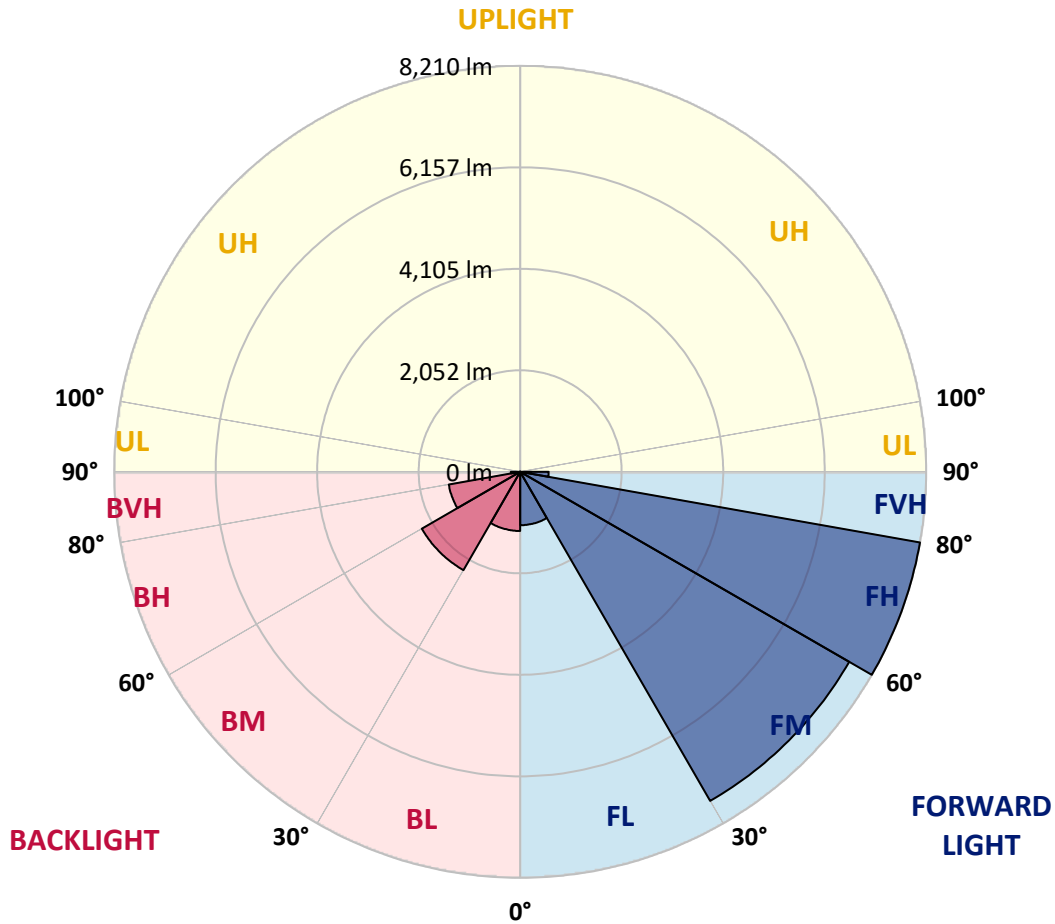


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1079.4	4.8			
FM (30°-60°)	7683.9	33.9			
FH (60°-80°)	8210.0	36.2			G4/12000
FVH (80°-90°)	577.1	2.5			G4/750
BL (0°-30°)	1195.7	5.3	B3/2500		
BM (30°-60°)	2296.8	10.1	B2/2500		
BH (60°-80°)	1467.1	6.5	B3/2500		G3/2500
BVH (80°-90°)	188.0	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-G4**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2
2.5°	2304.3	2292.3	2295.3	2295.3	2307.3	2313.3	2316.2	2325.2	2331.2	2346.2	2367.2
5°	2196.4	2187.4	2190.4	2193.4	2214.4	2235.3	2253.3	2265.3	2283.3	2307.3	2337.2
7.5°	2118.5	2112.5	2115.5	2121.5	2139.5	2163.4	2193.4	2211.4	2238.3	2283.3	2334.2
10°	2061.6	2061.6	2064.5	2076.5	2094.5	2124.5	2148.4	2169.4	2223.4	2304.3	2382.2
12.5°	2016.6	2016.6	2025.6	2049.6	2079.5	2109.5	2166.4	2190.4	2262.3	2373.2	2466.1
15°	2013.6	2016.6	2019.6	2040.6	2073.5	2139.5	2223.4	2259.3	2346.2	2478.1	2585.9
17.5°	2061.6	2064.5	2052.6	2058.6	2097.5	2190.4	2301.3	2343.2	2454.1	2597.9	2708.8
20°	2208.4	2208.4	2172.4	2139.5	2166.4	2268.3	2394.2	2436.1	2559.0	2717.8	2828.6
22.5°	2508.0	2523.0	2439.1	2367.2	2325.2	2382.2	2496.0	2541.0	2678.8	2849.6	2960.5
25°	2870.6	2885.6	2771.7	2669.8	2591.9	2582.9	2657.8	2705.8	2819.7	2996.4	3089.3
27.5°	3221.2	3194.2	3089.3	2993.4	2894.6	2813.7	2870.6	2912.5	3044.4	3179.2	3236.2
30°	3496.8	3475.9	3374.0	3305.1	3212.2	3107.3	3074.3	3119.3	3227.2	3353.0	3383.0
32.5°	3802.5	3787.5	3685.6	3595.7	3517.8	3418.9	3347.0	3368.0	3427.9	3517.8	3535.8
35°	4192.0	4225.0	4117.1	3934.3	3847.4	3751.5	3700.6	3706.6	3751.5	3808.5	3778.5
37.5°	4602.5	4641.5	4647.5	4359.8	4243.0	4156.1	4102.1	4123.1	4177.0	4216.0	4123.1
40°	5363.6	5324.7	5168.9	4956.1	4776.3	4692.4	4617.5	4614.5	4653.5	4722.4	4554.6
42.5°	6373.4	6337.5	6022.8	5747.2	5462.5	5366.6	5219.8	5156.9	5174.9	5261.8	5028.0
45°	7341.3	7326.3	7074.6	6754.0	6412.4	6226.6	5891.0	5738.2	5723.2	5792.1	5513.5
47.5°	8201.3	8135.3	7952.6	7703.9	7667.9	7182.5	6565.2	6358.4	6286.5	6325.5	6013.9
50°	9121.2	8896.4	8644.7	8491.9	8752.6	8300.1	7245.4	7029.7	6852.9	6879.8	6556.2
52.5°	9609.6	9232.0	9067.2	9112.2	9462.8	9289.0	7985.5	7721.8	7437.2	7476.1	7095.6
55°	9190.1	9187.1	9259.0	9537.7	10026.1	9825.3	8689.7	8393.0	8081.4	8090.4	7715.8
57.5°	8614.8	8731.6	9103.2	9717.5	10724.3	10388.7	9381.9	9067.2	8782.6	8737.6	8420.0
60°	8090.4	8219.2	8758.6	9687.5	10967.0	10904.0	10041.1	9765.4	9534.7	9402.8	9160.1
62.5°	7293.3	7389.2	8153.3	9495.7	10763.2	11275.6	10709.3	10520.5	10346.7	10074.0	9957.2
65°	6355.5	6388.4	7194.5	8863.5	10508.5	11419.4	11374.5	11290.6	11122.8	10721.3	10745.2
67.5°	5339.7	5405.6	6112.7	7853.7	9951.2	11353.5	11889.9	11958.8	11761.0	11158.7	11248.6
70°	4257.9	4338.8	4875.2	6457.3	9004.3	11068.9	12366.3	12477.2	12096.6	11302.6	11341.5
72.5°	2633.9	2711.8	3071.4	4485.7	7137.5	10113.0	12513.1	12657.0	12105.6	11110.8	10736.2
75°	910.9	919.9	1201.6	2151.4	4237.0	7634.9	12033.7	12372.3	11725.1	10412.6	9342.9
77.5°	416.5	431.5	533.4	886.9	1878.8	4120.1	9936.2	10784.2	10568.4	9321.9	7191.5
80°	287.7	293.7	368.6	530.4	1084.7	1450.3	6271.6	7377.2	7754.8	7218.4	4608.5
82.5°	215.7	221.7	284.7	359.6	782.1	704.2	2388.2	3427.9	4260.9	4183.0	1926.7
85°	206.8	203.8	221.7	239.7	521.4	419.5	773.1	1060.7	1663.0	1423.3	485.4
87.5°	89.9	98.9	227.7	134.8	272.7	194.8	335.6	392.5	506.4	440.5	173.8
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°	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2	2394.2
2.5°	2376.2	2382.2	2400.1	2427.1	2442.1	2472.1	2493.0	2505.0	2514.0	2517.0	2517.0
5°	2355.2	2367.2	2406.1	2451.1	2493.0	2556.0	2612.9	2645.9	2669.8	2678.8	2681.8
7.5°	2361.2	2391.2	2448.1	2514.0	2568.0	2648.9	2717.8	2783.7	2837.6	2858.6	2858.6
10°	2418.1	2460.1	2538.0	2624.9	2693.8	2777.7	2849.6	2906.5	2969.5	3005.4	3011.4
12.5°	2505.0	2556.0	2657.8	2753.7	2831.6	2897.6	2963.5	3005.4	3035.4	3062.4	3068.4
15°	2627.9	2690.8	2792.7	2891.6	2960.5	3002.4	3020.4	3020.4	3017.4	3020.4	3026.4
17.5°	2750.7	2810.7	2912.5	3011.4	3044.4	3020.4	2999.4	2993.4	2990.4	2984.5	2987.5
20°	2870.6	2927.5	3014.4	3089.3	3062.4	2978.5	2951.5	2948.5	2939.5	2933.5	2927.5
22.5°	2990.4	3032.4	3104.3	3131.3	3023.4	2903.6	2870.6	2852.6	2840.6	2825.6	2810.7
25°	3128.3	3140.3	3194.2	3152.3	2927.5	2765.7	2717.8	2690.8	2678.8	2663.8	2651.9
27.5°	3257.1	3257.1	3266.1	3119.3	2786.7	2582.9	2511.0	2463.1	2460.1	2457.1	2454.1
30°	3374.0	3359.0	3329.0	3020.4	2603.9	2358.2	2250.3	2202.4	2220.4	2235.3	2238.3
32.5°	3511.8	3481.9	3398.0	2885.6	2385.2	2106.5	1974.7	1953.7	1974.7	1992.6	1980.6
35°	3727.6	3673.6	3469.9	2729.8	2175.4	1875.8	1749.9	1720.0	1714.0	1711.0	1687.0
37.5°	4036.2	3943.3	3526.8	2562.0	1968.7	1672.0	1579.1	1516.2	1459.3	1399.3	1390.3
40°	4413.8	4254.9	3565.8	2370.2	1749.9	1501.2	1402.3	1321.4	1225.5	1120.7	1108.7
42.5°	4827.3	4590.5	3583.7	2157.4	1558.1	1360.4	1237.5	1135.7	1027.8	946.9	931.9
45°	5273.7	4953.1	3568.8	1953.7	1402.3	1240.5	1102.7	991.8	904.9	848.0	836.0
47.5°	5708.2	5369.6	3526.8	1791.9	1282.5	1138.6	997.8	895.9	830.0	767.1	752.1
50°	6265.6	5768.1	3475.9	1666.0	1150.6	1036.8	931.9	824.0	749.1	719.1	713.2
52.5°	6882.8	6166.7	3415.9	1507.2	1021.8	955.9	889.9	794.1	770.1	713.2	704.2
55°	7551.0	6640.1	3404.0	1306.4	907.9	898.9	848.0	821.0	827.0	713.2	698.2
57.5°	8255.2	7146.5	3430.9	1105.7	815.0	848.0	866.0	845.0	836.0	728.1	698.2
60°	8989.3	7634.9	3350.0	919.9	743.1	806.0	886.9	833.0	767.1	722.1	701.2
62.5°	9702.5	8045.4	2999.4	788.1	689.2	794.1	875.0	788.1	713.2	713.2	704.2
65°	10220.9	8228.2	2346.2	692.2	653.2	779.1	854.0	758.1	698.2	719.1	707.2
67.5°	10280.8	8039.5	1576.1	617.3	623.3	752.1	806.0	731.1	683.2	737.1	719.1
70°	9912.2	7548.0	964.9	560.3	584.3	704.2	764.1	704.2	662.2	722.1	695.2
72.5°	8956.4	6631.1	680.2	512.4	542.4	659.2	725.1	680.2	632.2	653.2	626.3
75°	7347.3	5138.9	539.4	467.4	500.4	617.3	692.2	644.2	596.3	587.3	569.3
77.5°	5204.8	3293.1	434.5	431.5	455.5	566.3	647.2	602.3	554.3	536.4	524.4
80°	2993.4	1615.1	374.6	389.5	413.5	515.4	593.3	554.3	509.4	482.4	464.4
82.5°	1144.6	563.3	329.6	338.6	365.6	461.5	539.4	506.4	461.5	485.4	407.5
85°	371.6	308.6	269.7	278.7	305.6	383.5	476.4	449.5	398.5	353.6	326.6
87.5°	164.8	167.8	143.8	158.8	191.8	254.7	347.6	329.6	290.7	242.7	233.7
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)