

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: P400069

Luminaire Tested: **ARCH-L-PA3-230-730-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400069  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-230-730-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21100 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G4

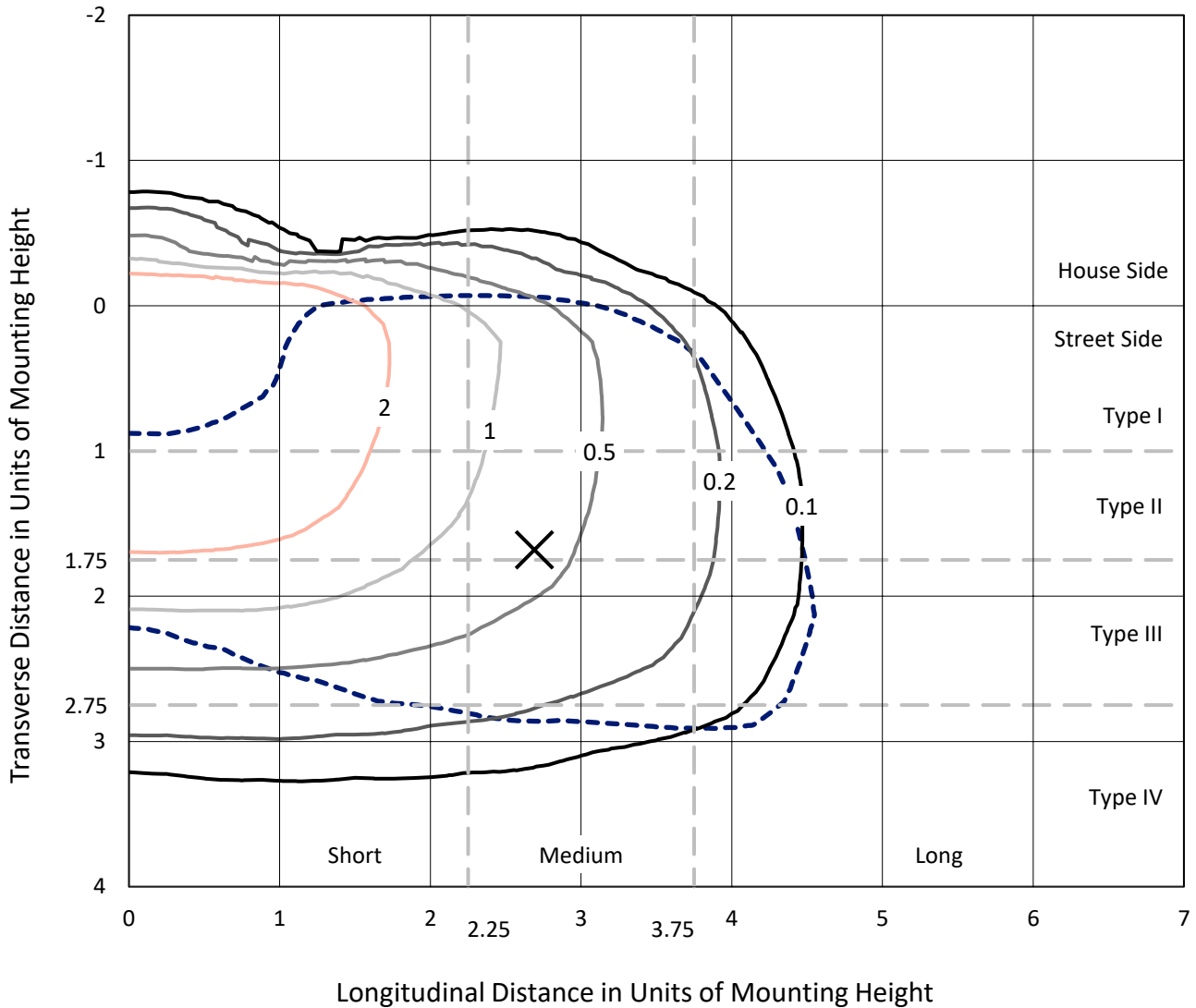
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

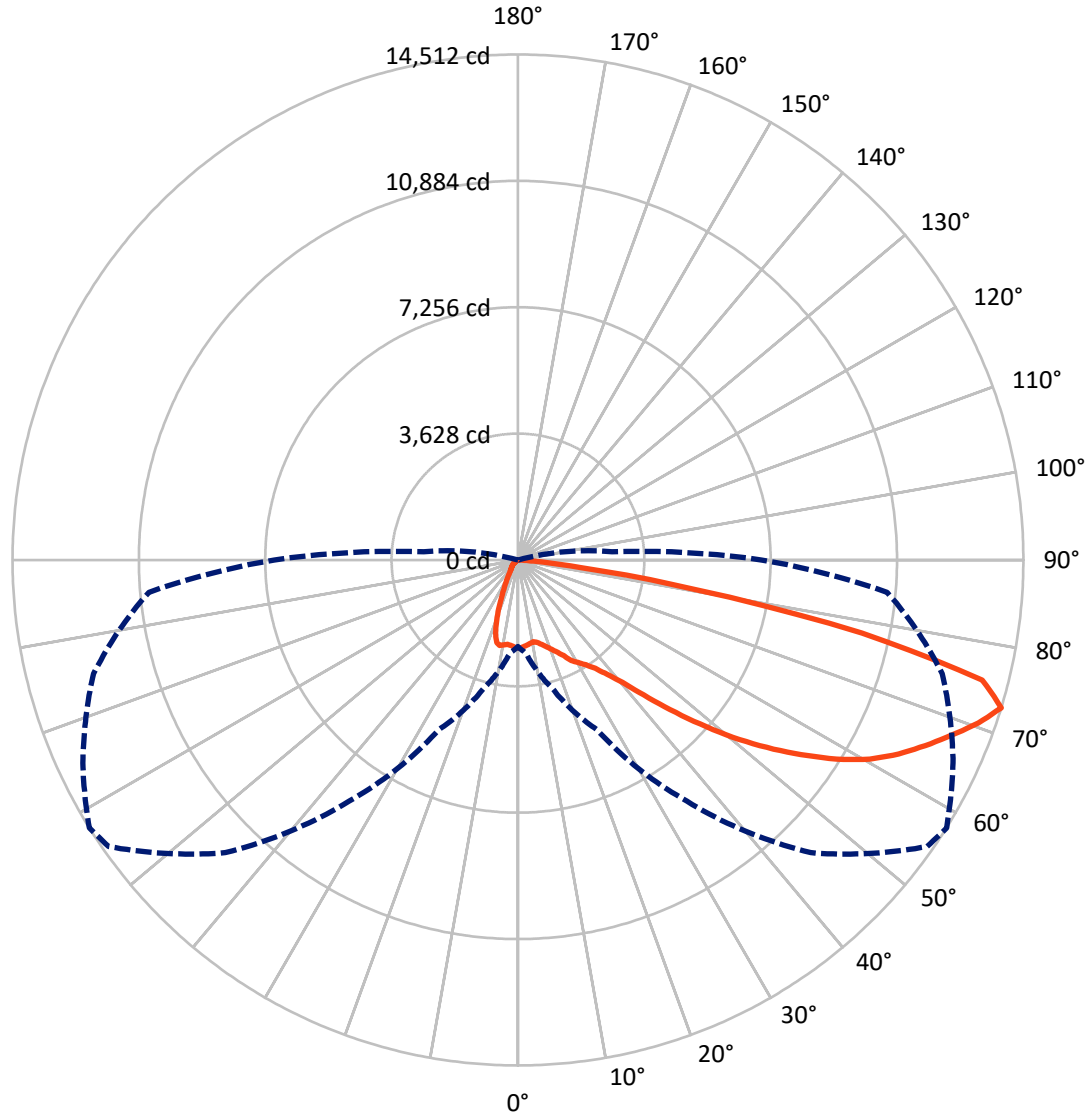
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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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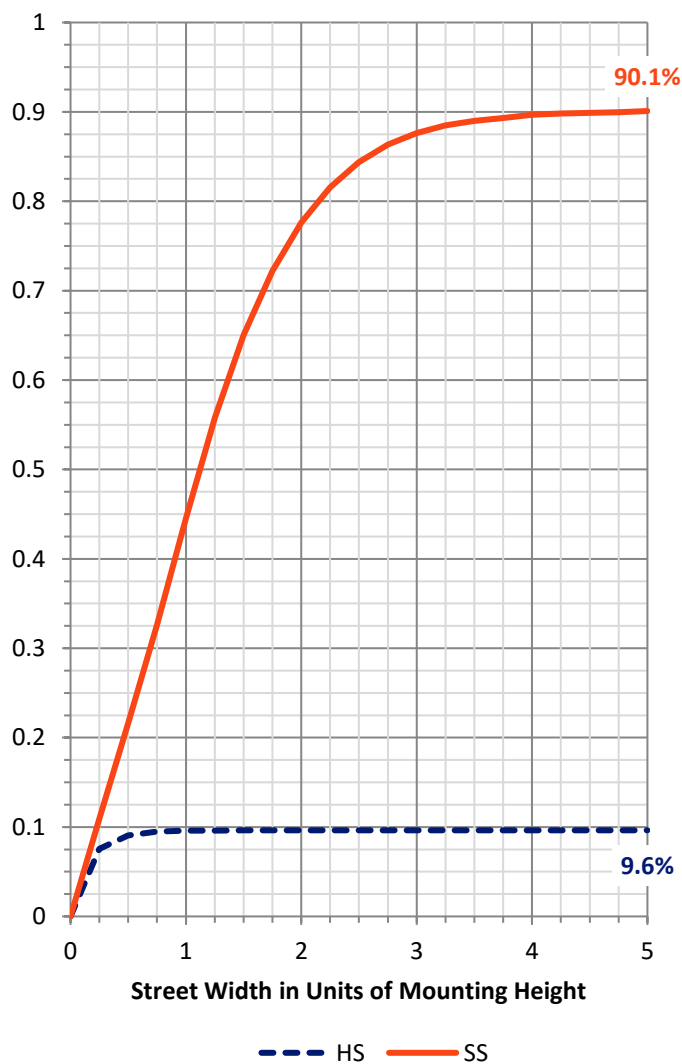
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2051.8	0.0	2051.8
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	19048.2	0.0	19048.2
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	21100.0	0.0	21100.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.4	1.1
10°-20°	605.2	2.9
20°-30°	950.7	4.5
30°-40°	1639.6	7.8
40°-50°	3119.5	14.8
50°-60°	4940.3	23.4
60°-70°	5764.8	27.3
70°-80°	3610.5	17.1
80°-90°	237.0	1.1
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°	21100.0	100.0
0°-180°	21100.0	100.0

**Coefficient of Utilization**



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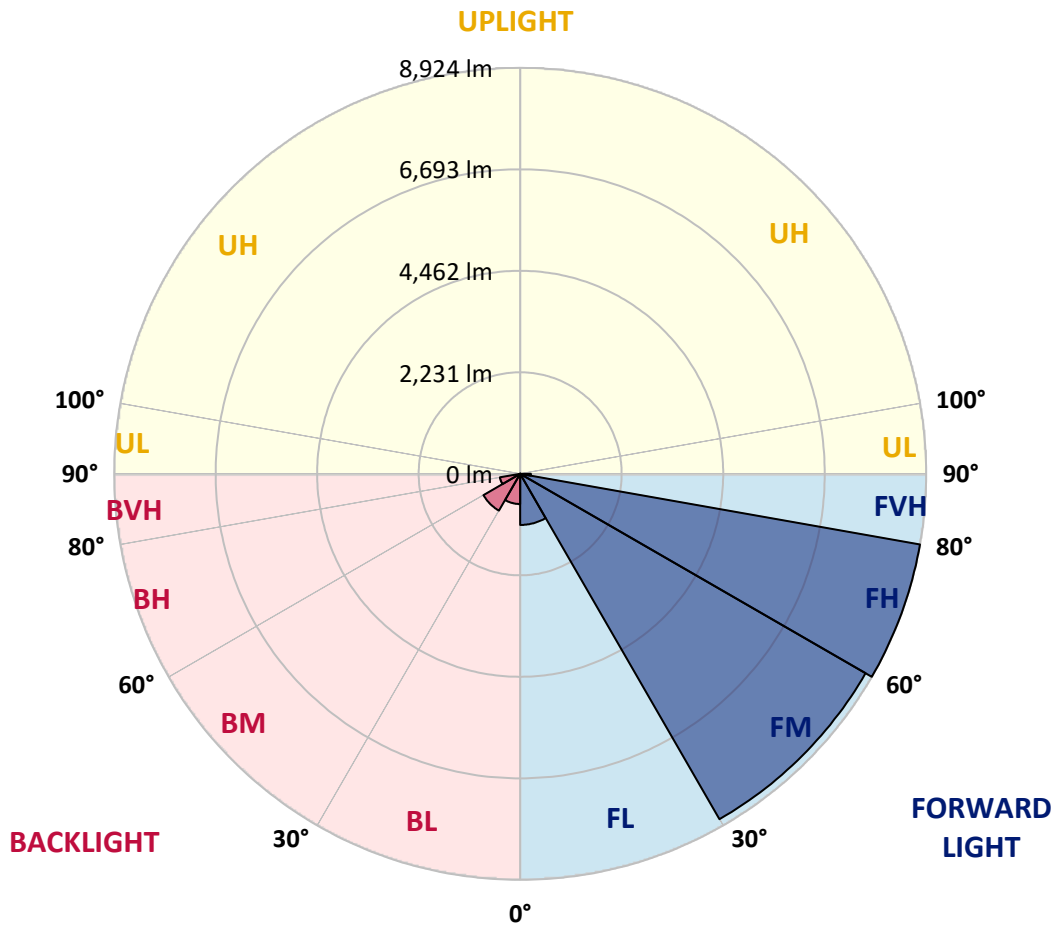
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1123.9	5.3			
FM (30°-60°)	8765.8	41.5			
FH (60°-80°)	8923.8	42.3			G4/12000
FVH (80°-90°)	234.7	1.1			G3/500
BL (0°-30°)	664.4	3.1	B2/1000		
BM (30°-60°)	933.6	4.4	B1/1000		
BH (60°-80°)	451.5	2.1	B1/500		G1/500
BVH (80°-90°)	2.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9
2.5°	2520.6	2509.2	2505.5	2501.7	2505.5	2509.2	2497.9	2509.2	2501.7	2505.5	2513.0
5°	2430.0	2418.7	2414.9	2418.7	2430.0	2448.9	2456.4	2467.7	2467.7	2479.0	2482.8
7.5°	2328.1	2320.6	2316.8	2324.3	2347.0	2388.5	2411.1	2426.2	2441.3	2464.0	2486.6
10°	2271.5	2267.7	2264.0	2275.3	2297.9	2335.7	2365.8	2388.5	2445.1	2509.2	2550.7
12.5°	2233.8	2233.8	2241.3	2264.0	2294.2	2324.3	2396.0	2426.2	2513.0	2611.1	2667.7
15°	2203.6	2203.6	2214.9	2256.4	2297.9	2369.6	2475.3	2509.2	2611.1	2731.9	2807.3
17.5°	2181.0	2188.5	2196.0	2237.6	2316.8	2437.5	2562.1	2611.1	2735.6	2867.7	2950.7
20°	2184.7	2192.3	2196.0	2237.6	2350.8	2516.8	2675.3	2731.9	2875.2	3014.9	3097.9
22.5°	2207.4	2218.7	2222.5	2279.1	2411.1	2599.8	2803.5	2867.7	3022.4	3169.6	3233.7
25°	2301.7	2309.2	2286.6	2335.7	2497.9	2728.1	2969.6	3037.5	3192.2	3328.0	3380.9
27.5°	2622.4	2630.0	2505.5	2448.9	2565.8	2833.7	3173.3	3267.7	3460.1	3550.7	3558.2
30°	3316.7	3324.3	3079.0	2811.1	2728.1	2924.3	3286.5	3418.6	3667.6	3769.5	3724.2
32.5°	4211.0	4203.4	3867.6	3471.4	3113.0	3082.8	3448.8	3588.4	3860.1	3958.2	3924.2
35°	5109.0	5120.3	4833.6	4237.4	3724.2	3380.9	3656.3	3818.6	4146.8	4286.4	4226.1
37.5°	5724.1	5799.5	5675.0	5029.8	4475.1	3931.8	3992.1	4165.7	4577.0	4765.7	4637.4
40°	6591.9	6573.1	6271.2	5795.8	5305.2	4746.8	4535.5	4618.5	5090.2	5343.0	5143.0
42.5°	7757.9	7720.1	7207.0	6742.9	6195.7	5739.2	5309.0	5293.9	5678.8	5973.1	5682.6
45°	8814.4	8757.8	8406.9	7957.8	7357.9	6833.4	6252.3	6120.3	6388.2	6637.2	6297.6
47.5°	9655.8	9561.5	9312.5	9074.7	8927.6	8112.6	7240.9	7040.9	7176.8	7361.7	6882.5
50°	10652.0	10391.6	10029.4	9886.0	10191.6	9561.5	8191.8	7999.4	7991.8	8097.5	7486.2
52.5°	11104.8	10633.1	10429.3	10550.1	11089.7	10908.6	9218.1	8942.7	8833.3	8844.6	8048.4
55°	10557.6	10504.8	10614.2	10991.6	11697.2	11591.5	10203.0	9863.4	9701.1	9497.3	8588.0
57.5°	9935.0	10097.3	10531.2	11251.9	12466.9	12304.7	11172.7	10787.8	10489.7	10021.8	9187.9
60°	9361.5	9527.5	10244.5	11312.3	12889.5	12991.4	11980.2	11614.2	11172.7	10557.6	9848.3
62.5°	8489.9	8618.2	9625.6	11225.5	12704.6	13391.4	12542.4	12266.9	11855.6	11067.0	10606.7
65°	7508.8	7591.8	8588.0	10531.2	12342.4	13346.1	13006.5	12851.8	12451.8	11599.1	11357.6
67.5°	6433.4	6531.5	7361.7	9282.3	11633.0	13134.8	13444.2	13429.1	12972.5	12187.7	11900.9
70°	5195.8	5203.4	5890.1	7697.5	10395.4	12712.2	13987.6	14021.5	13470.6	12629.2	11923.6
72.5°	2486.6	2690.3	3818.6	5373.2	8448.4	11882.1	14342.2	14512.0	13783.8	12614.1	10636.9
75°	569.8	588.6	1113.1	2554.5	4954.3	9120.0	13455.5	13772.5	13021.6	10908.6	7493.7
77.5°	207.5	218.9	313.2	747.1	1905.5	4712.8	9629.4	10093.5	9625.6	7052.3	3543.1
80°	139.6	135.8	162.3	332.0	875.4	1335.7	4924.1	5199.6	4746.8	2407.4	849.0
82.5°	71.7	75.5	113.2	184.9	588.6	464.1	1645.2	1788.5	1471.6	483.0	158.5
85°	34.0	34.0	64.1	117.0	249.0	162.3	366.0	441.5	396.2	211.3	52.8
87.5°	34.0	34.0	60.4	75.5	128.3	67.9	90.6	113.2	105.7	113.2	18.9
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°	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9	2531.9
2.5°	2513.0	2509.2	2505.5	2513.0	2509.2	2516.8	2516.8	2524.3	2524.3	2516.8	2513.0
5°	2479.0	2471.5	2464.0	2464.0	2460.2	2467.7	2490.4	2509.2	2513.0	2501.7	2497.9
7.5°	2482.8	2482.8	2475.3	2460.2	2433.8	2433.8	2433.8	2456.4	2467.7	2460.2	2456.4
10°	2550.7	2554.5	2535.6	2501.7	2456.4	2414.9	2335.7	2218.7	2109.3	2079.1	2067.8
12.5°	2667.7	2671.5	2633.7	2573.4	2479.0	2233.8	1931.9	1652.7	1437.6	1377.2	1365.9
15°	2807.3	2811.1	2743.2	2645.1	2358.3	1788.5	1339.5	1022.6	833.9	788.6	784.8
17.5°	2950.7	2943.2	2841.3	2652.6	1999.8	1267.8	815.0	652.8	603.7	592.4	596.2
20°	3090.3	3067.7	2928.1	2513.0	1539.5	830.1	596.2	558.4	547.1	539.6	539.6
22.5°	3218.6	3173.3	2999.8	2237.6	1079.2	596.2	532.0	524.5	509.4	498.1	494.3
25°	3346.9	3282.8	3045.0	1879.1	724.5	520.7	501.8	486.8	467.9	452.8	449.0
27.5°	3501.6	3411.0	3022.4	1426.3	543.4	483.0	467.9	445.2	418.8	396.2	388.6
30°	3648.8	3546.9	2894.1	984.8	464.1	445.2	422.6	388.6	354.7	328.3	320.7
32.5°	3833.7	3716.7	2663.9	645.2	403.7	388.6	366.0	324.5	279.2	249.0	241.5
35°	4097.8	3965.7	2369.6	452.8	354.7	328.3	298.1	252.8	203.8	181.1	177.3
37.5°	4467.6	4290.2	1999.8	366.0	313.2	275.4	230.2	184.9	150.9	132.1	128.3
40°	4920.4	4648.7	1588.6	324.5	279.2	230.2	173.6	132.1	109.4	94.3	94.3
42.5°	5410.9	4984.5	1169.7	298.1	245.3	188.7	128.3	94.3	79.2	71.7	67.9
45°	5916.5	5282.6	788.6	275.4	215.1	143.4	90.6	64.1	52.8	52.8	49.1
47.5°	6441.0	5482.6	509.4	249.0	181.1	105.7	60.4	45.3	37.7	37.7	37.7
50°	6961.7	5588.2	362.2	226.4	147.2	71.7	45.3	34.0	30.2	30.2	30.2
52.5°	7339.0	5520.3	290.5	196.2	113.2	52.8	34.0	26.4	22.6	22.6	22.6
55°	7667.3	5403.3	252.8	169.8	83.0	37.7	26.4	22.6	18.9	18.9	18.9
57.5°	8003.1	5252.4	226.4	143.4	60.4	26.4	18.9	15.1	15.1	15.1	15.1
60°	8308.8	4995.8	196.2	113.2	41.5	18.9	15.1	11.3	11.3	11.3	11.3
62.5°	8606.9	4777.0	169.8	86.8	30.2	15.1	7.5	7.5	3.8	3.8	3.8
65°	8776.7	4482.7	135.8	56.6	18.9	11.3	3.8	3.8	0.0	0.0	0.0
67.5°	8723.8	4131.7	94.3	34.0	11.3	7.5	3.8	0.0	0.0	0.0	0.0
70°	8357.8	3660.1	56.6	18.9	11.3	7.5	3.8	0.0	0.0	0.0	0.0
72.5°	6999.4	2709.2	34.0	15.1	7.5	3.8	0.0	0.0	0.0	0.0	0.0
75°	4675.1	1245.2	18.9	11.3	3.8	3.8	0.0	0.0	0.0	0.0	0.0
77.5°	2139.5	373.6	11.3	7.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	430.2	98.1	7.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	90.6	18.9	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.9	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)