

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: P400103

Luminaire Tested: **ARCH-L-PA3-230-827-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400103  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-230-827-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16117 lumens  
Efficiency: N/A  
Efficacy: 70.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

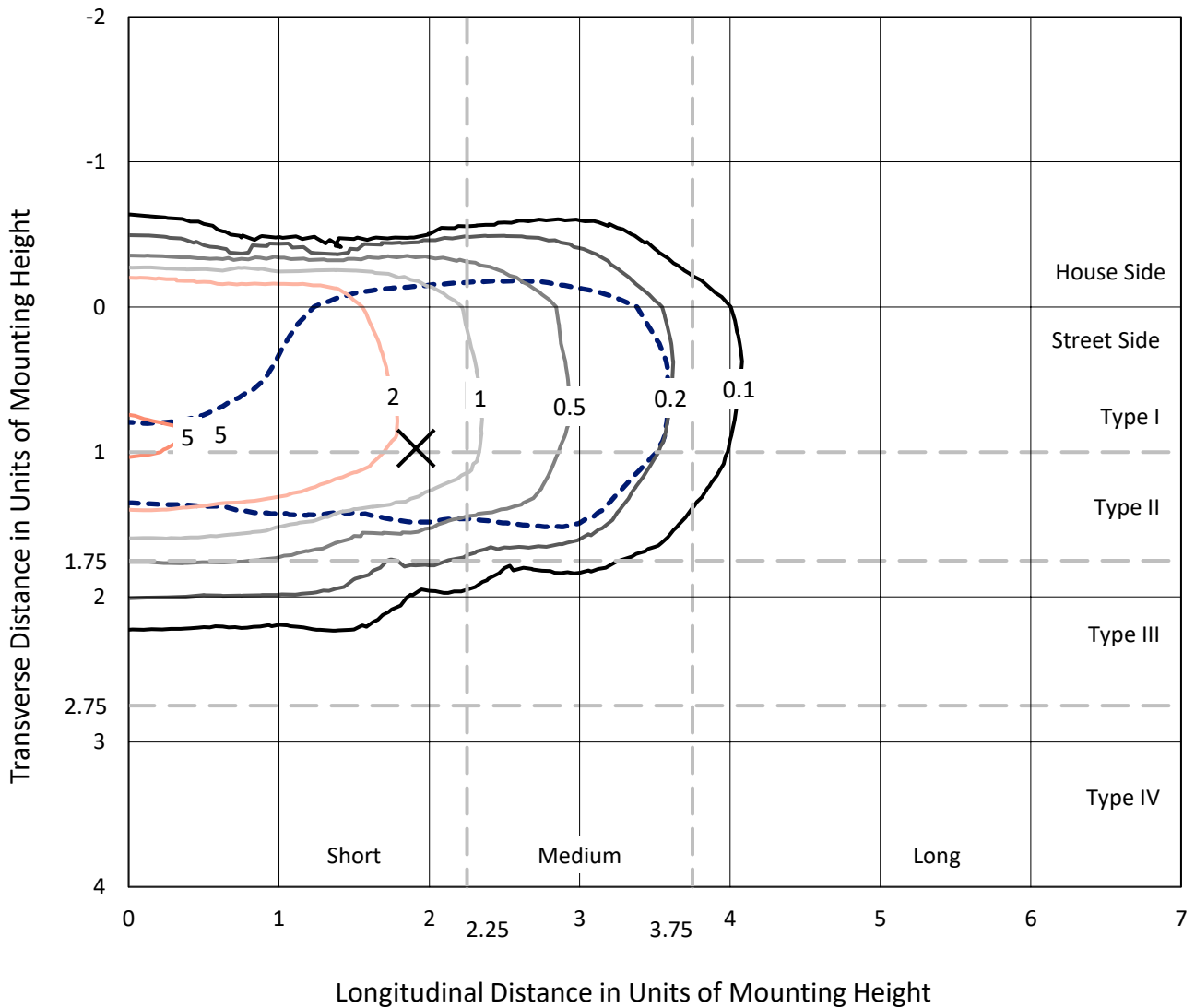
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

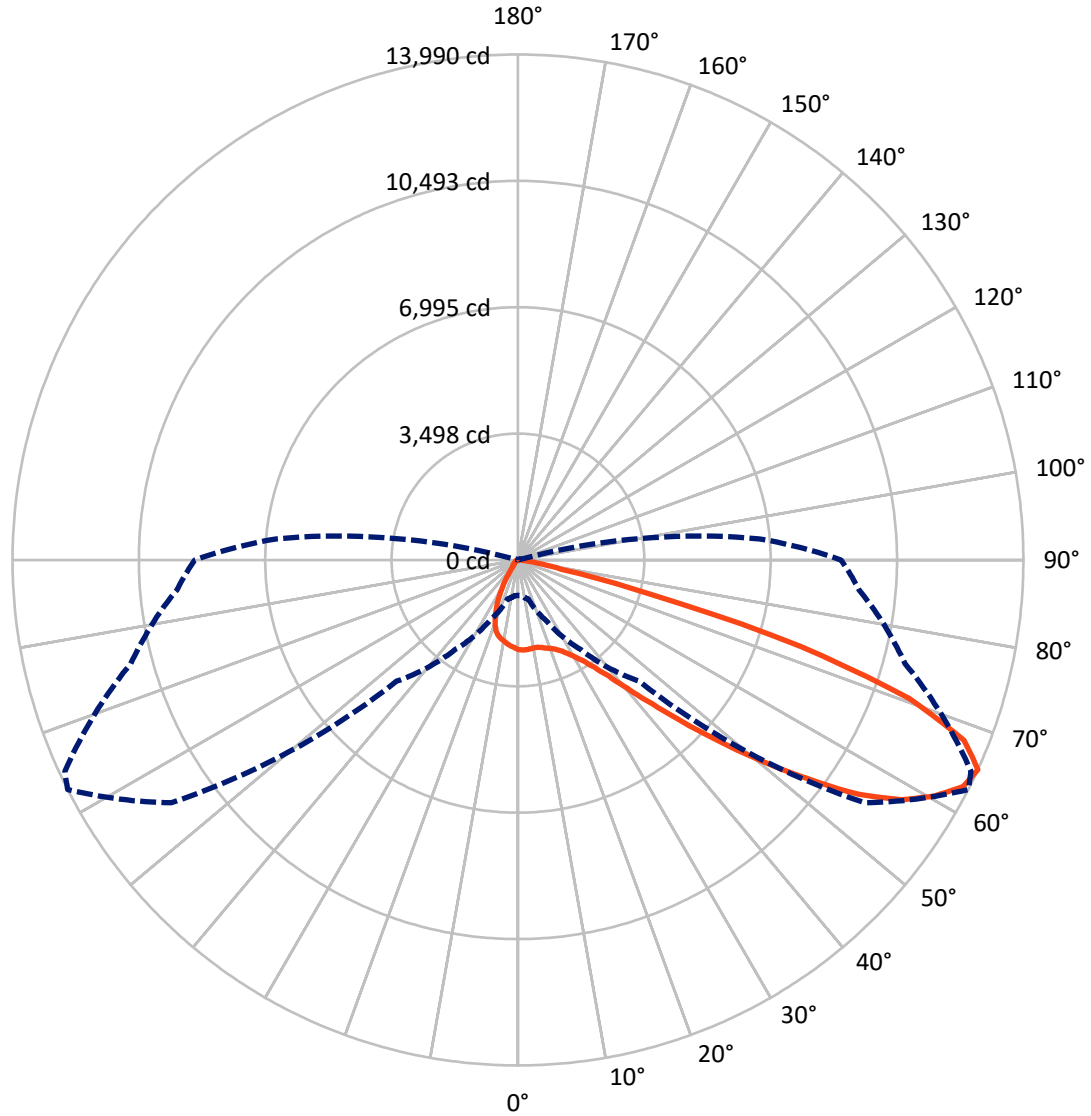
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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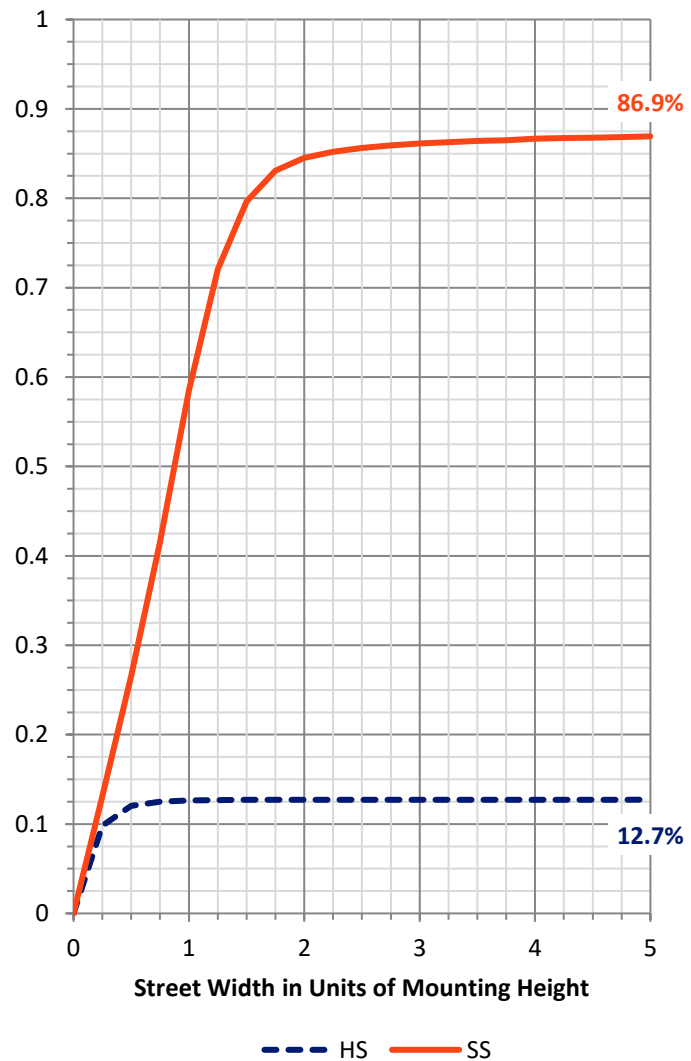
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2074.2	0.0	2074.2
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	14042.8	0.0	14042.8
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	16117.0	0.0	16117.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.6	1.4
10°-20°	558.9	3.5
20°-30°	828.4	5.1
30°-40°	1538.1	9.5
40°-50°	3258.3	20.2
50°-60°	4505.4	28.0
60°-70°	3606.7	22.4
70°-80°	1498.5	9.3
80°-90°	96.2	0.6
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°	16117.0	100.0
0°-180°	16117.0	100.0

**Coefficient of Utilization**



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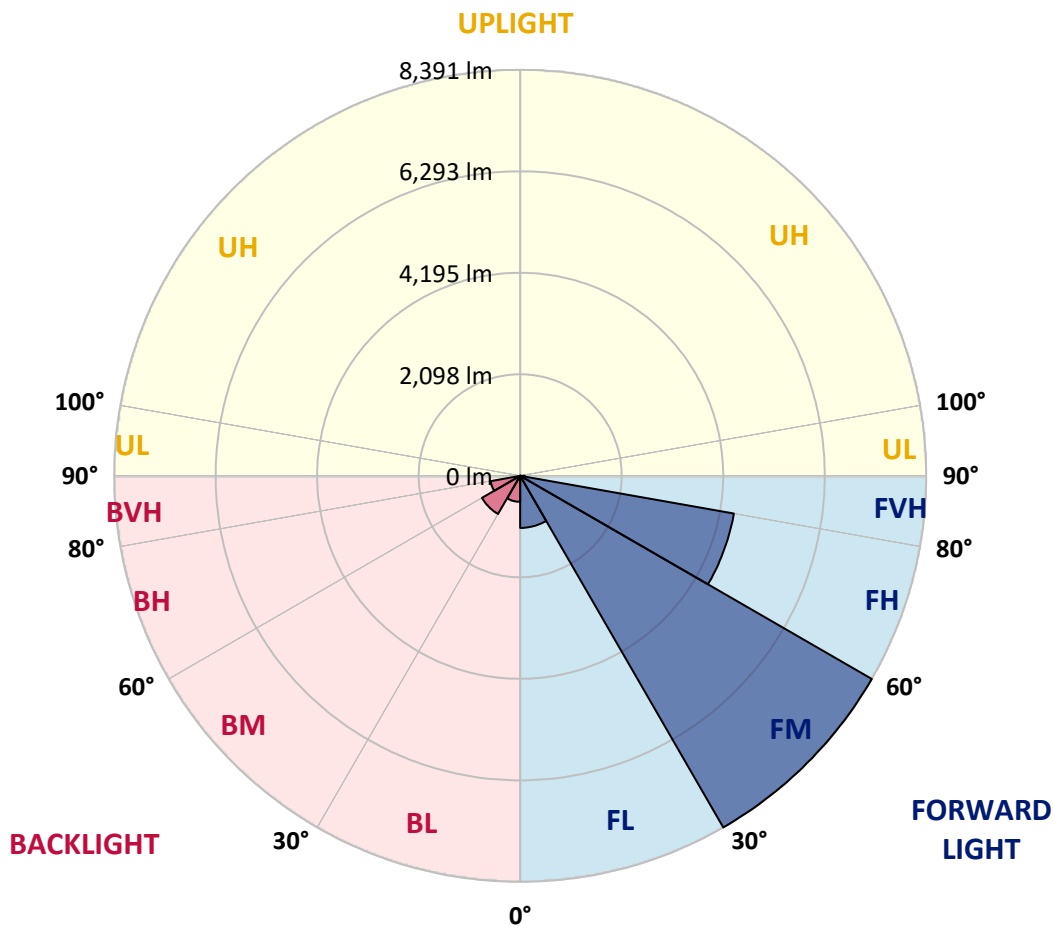
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1076.2	6.7			
FM (30°-60°)	8390.6	52.1			
FH (60°-80°)	4484.1	27.8			G2/5000
FVH (80°-90°)	91.8	0.6			G1/100
BL (0°-30°)	537.6	3.3	B2/1000		
BM (30°-60°)	911.2	5.7	B1/1000		
BH (60°-80°)	621.1	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.4	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-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8
2.5°	2525.4	2519.3	2513.3	2510.2	2510.2	2507.2	2495.0	2492.0	2485.9	2479.8	2473.7
5°	2501.1	2492.0	2488.9	2492.0	2495.0	2501.1	2495.0	2495.0	2488.9	2482.8	2470.7
7.5°	2440.2	2434.1	2437.2	2446.3	2449.4	2470.7	2473.7	2482.8	2482.8	2476.7	2467.6
10°	2367.2	2364.2	2364.2	2379.4	2394.6	2425.0	2446.3	2470.7	2473.7	2473.7	2458.5
12.5°	2312.4	2309.4	2318.5	2336.8	2367.2	2406.8	2443.3	2479.8	2485.9	2488.9	2464.6
15°	2279.0	2279.0	2291.1	2327.7	2370.3	2425.0	2467.6	2516.3	2522.4	2519.3	2485.9
17.5°	2248.5	2251.6	2275.9	2336.8	2385.5	2458.5	2510.2	2565.0	2568.0	2565.0	2510.2
20°	2236.4	2242.5	2279.0	2358.1	2412.9	2495.0	2561.9	2616.7	2619.8	2607.6	2534.6
22.5°	2269.8	2272.9	2318.5	2403.7	2455.4	2546.7	2631.9	2683.6	2686.7	2668.4	2571.1
25°	2385.5	2385.5	2425.0	2498.0	2543.7	2635.0	2726.2	2787.1	2787.1	2765.8	2653.2
27.5°	2656.3	2631.9	2622.8	2644.1	2659.3	2756.7	2854.0	2930.1	2927.1	2896.6	2759.7
30°	3179.6	3118.8	3021.4	2911.9	2857.1	2924.0	3015.3	3112.7	3109.6	3060.9	2890.6
32.5°	4058.9	3970.7	3739.5	3450.4	3216.1	3140.1	3225.2	3331.7	3334.8	3277.0	3100.5
35°	5291.2	5151.3	4737.5	4335.8	3800.3	3511.3	3535.6	3651.2	3687.7	3657.3	3453.4
37.5°	6477.9	6350.1	5954.5	5397.7	4670.5	4080.2	3976.8	4077.2	4119.8	4119.8	3903.8
40°	7673.7	7524.6	7174.7	6614.8	5848.0	4968.7	4597.5	4679.7	4725.3	4734.4	4451.5
42.5°	8632.1	8534.7	8267.0	7831.9	7113.8	6526.6	5492.0	5446.4	5489.0	5455.5	5087.4
45°	9295.4	9219.3	9033.7	8869.4	8519.5	8224.4	6687.8	6380.5	6407.9	6292.3	5802.4
47.5°	9432.3	9347.1	9307.6	9535.8	9785.3	9858.3	8157.4	7491.1	7463.7	7208.1	6544.8
50°	8836.0	8845.1	8991.1	9642.3	10682.9	11340.1	9861.3	8744.7	8644.3	8075.3	7235.5
52.5°	7548.9	7695.0	8063.1	9118.9	10956.7	12417.2	11565.3	10074.3	9919.2	8918.1	7752.8
55°	5905.9	6094.5	6700.0	7914.0	10384.7	12897.9	13001.4	11455.7	11102.8	9551.0	8154.4
57.5°	4390.6	4448.4	5154.3	6261.8	9030.7	12426.3	13737.7	12520.7	12067.3	10056.1	8553.0
60°	2735.4	2771.9	3517.3	4767.9	6840.0	10682.9	13737.7	13253.9	12821.9	10509.4	8918.1
62.5°	1700.9	1713.0	1993.0	3267.8	4649.2	7923.2	13168.7	13822.9	13476.1	10835.0	9231.5
65°	979.7	991.9	1122.8	1846.9	3024.4	4743.5	11714.3	13990.3	13835.1	11093.6	9474.9
67.5°	715.0	721.1	772.8	1037.6	1977.7	2437.2	8799.5	13317.8	13512.6	11221.4	9468.8
70°	620.7	629.8	696.8	809.4	1427.0	1497.0	4478.8	11501.4	12046.0	11038.9	9185.9
72.5°	477.7	489.9	590.3	760.7	1046.7	1077.1	1621.8	8184.8	9009.4	9897.9	8410.0
75°	328.6	340.8	441.2	626.8	864.1	806.3	891.5	3766.8	4752.7	6639.1	6401.8
77.5°	209.9	213.0	276.9	456.4	745.5	572.0	611.6	1229.2	1725.2	3003.1	3021.4
80°	140.0	143.0	170.4	295.1	511.2	529.4	377.3	569.0	623.8	876.3	608.5
82.5°	85.2	85.2	115.6	185.6	310.4	438.1	246.5	298.2	319.5	337.7	158.2
85°	33.5	33.5	70.0	121.7	194.7	203.9	155.2	173.4	182.6	197.8	73.0
87.5°	9.1	9.1	39.6	66.9	85.2	94.3	94.3	85.2	91.3	112.6	36.5
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°	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8	2482.8
2.5°	2470.7	2461.5	2449.4	2437.2	2425.0	2415.9	2406.8	2406.8	2400.7	2391.6	2385.5
5°	2464.6	2449.4	2422.0	2400.7	2367.2	2342.9	2324.6	2309.4	2300.3	2279.0	2275.9
7.5°	2455.4	2437.2	2397.6	2355.0	2300.3	2257.7	2215.1	2184.6	2154.2	2129.9	2123.8
10°	2440.2	2418.9	2361.1	2300.3	2224.2	2145.1	2044.7	1929.1	1822.6	1761.7	1743.5
12.5°	2440.2	2412.9	2336.8	2254.6	2145.1	1950.4	1694.8	1439.2	1241.4	1153.2	1128.8
15°	2455.4	2418.9	2318.5	2205.9	2002.1	1606.5	1192.7	855.0	639.0	572.0	556.8
17.5°	2470.7	2418.9	2291.1	2139.0	1740.4	1165.3	678.5	450.3	380.3	365.1	365.1
20°	2476.7	2412.9	2254.6	2014.3	1390.5	724.2	404.7	337.7	310.4	301.2	301.2
22.5°	2501.1	2415.9	2227.2	1834.7	1010.2	426.0	319.5	283.0	255.6	246.5	246.5
25°	2561.9	2452.4	2233.3	1606.5	648.1	322.5	270.8	234.3	206.9	194.7	194.7
27.5°	2659.3	2534.6	2266.8	1341.8	407.7	276.9	228.2	188.6	167.3	155.2	155.2
30°	2768.8	2625.8	2282.0	1037.6	304.3	234.3	185.6	149.1	133.9	124.8	121.7
32.5°	2960.5	2784.1	2269.8	712.0	249.5	197.8	149.1	118.7	106.5	103.5	103.5
35°	3267.8	3060.9	2245.5	447.3	206.9	158.2	118.7	97.4	88.2	85.2	82.2
37.5°	3684.7	3465.6	2172.5	295.1	170.4	124.8	97.4	82.2	73.0	70.0	70.0
40°	4192.8	3928.1	2032.5	225.2	146.0	100.4	82.2	70.0	63.9	60.9	60.9
42.5°	4774.0	4442.3	1810.4	194.7	121.7	85.2	70.0	57.8	54.8	51.7	51.7
45°	5409.9	4980.9	1503.1	173.4	103.5	70.0	57.8	51.7	45.6	45.6	42.6
47.5°	6085.4	5522.5	1156.2	152.1	88.2	60.9	51.7	42.6	39.6	36.5	36.5
50°	6736.5	6006.3	812.4	130.8	73.0	51.7	42.6	36.5	33.5	30.4	30.4
52.5°	7196.0	6298.4	575.1	112.6	60.9	45.6	33.5	27.4	24.3	24.3	24.3
55°	7564.1	6480.9	401.6	94.3	51.7	39.6	27.4	21.3	21.3	18.3	18.3
57.5°	7911.0	6599.6	295.1	79.1	42.6	30.4	21.3	15.2	15.2	12.2	12.2
60°	8270.0	6663.5	225.2	63.9	36.5	24.3	15.2	12.2	9.1	9.1	9.1
62.5°	8632.1	6703.0	173.4	51.7	30.4	18.3	12.2	9.1	6.1	3.0	3.0
65°	8948.5	6715.2	133.9	39.6	24.3	12.2	9.1	3.0	0.0	0.0	0.0
67.5°	9042.9	6575.2	103.5	30.4	18.3	9.1	6.1	0.0	0.0	0.0	0.0
70°	8787.3	6204.0	79.1	24.3	15.2	6.1	3.0	0.0	0.0	0.0	0.0
72.5°	7798.4	5203.0	60.9	15.2	12.2	6.1	3.0	0.0	0.0	0.0	0.0
75°	5580.3	2774.9	42.6	12.2	9.1	3.0	0.0	0.0	0.0	0.0	0.0
77.5°	2568.0	1074.1	30.4	9.1	6.1	3.0	0.0	0.0	0.0	0.0	0.0
80°	502.0	267.8	12.2	6.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	115.6	45.6	6.1	6.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	39.6	15.2	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.2	6.1	3.0	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)