

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: P400251

Luminaire Tested: **ARCH-L-PA3-250-827-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400251  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-250-827-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17783 lumens  
Efficiency: N/A  
Efficacy: 70.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G4

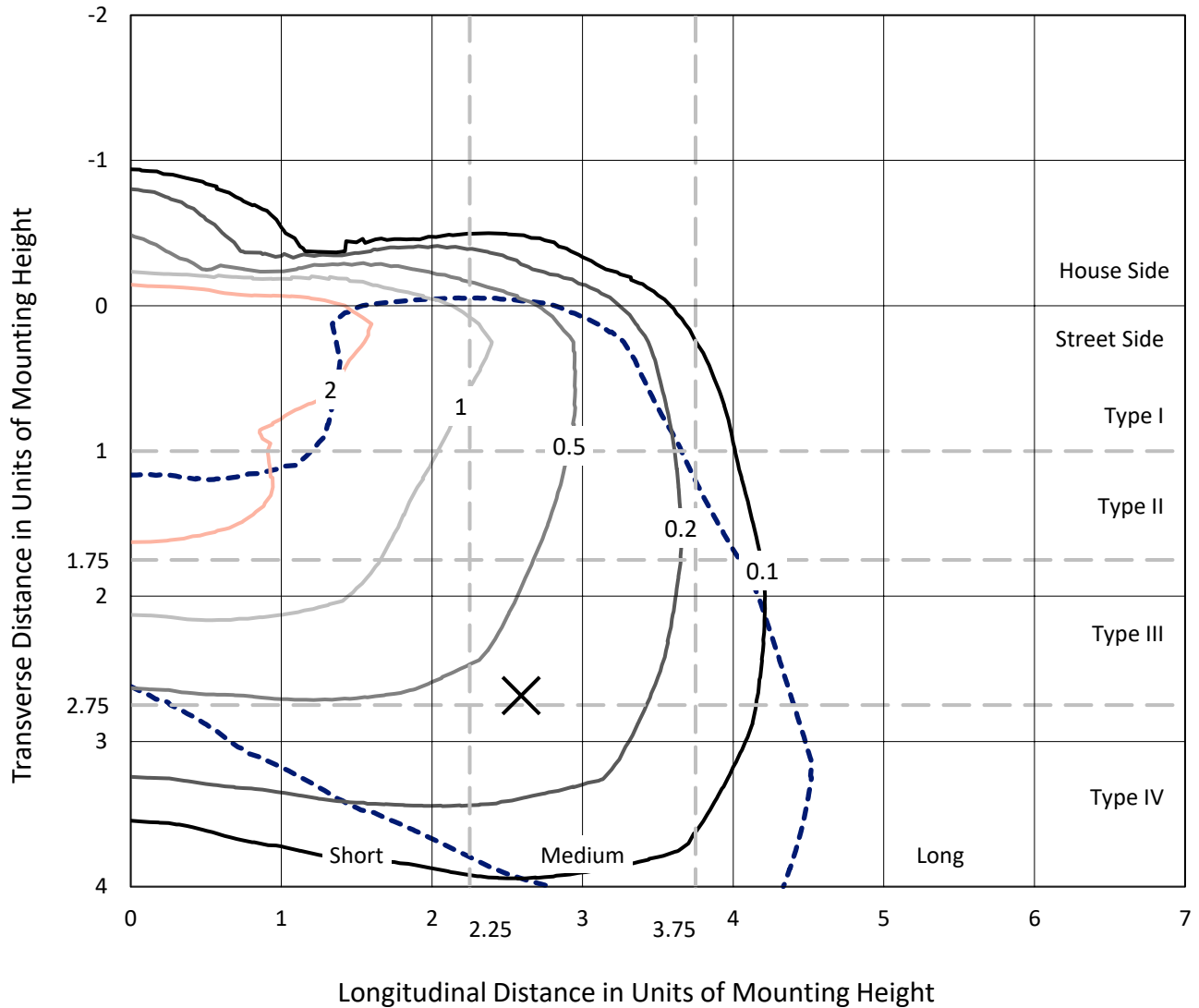
Input Watts (W): 251  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

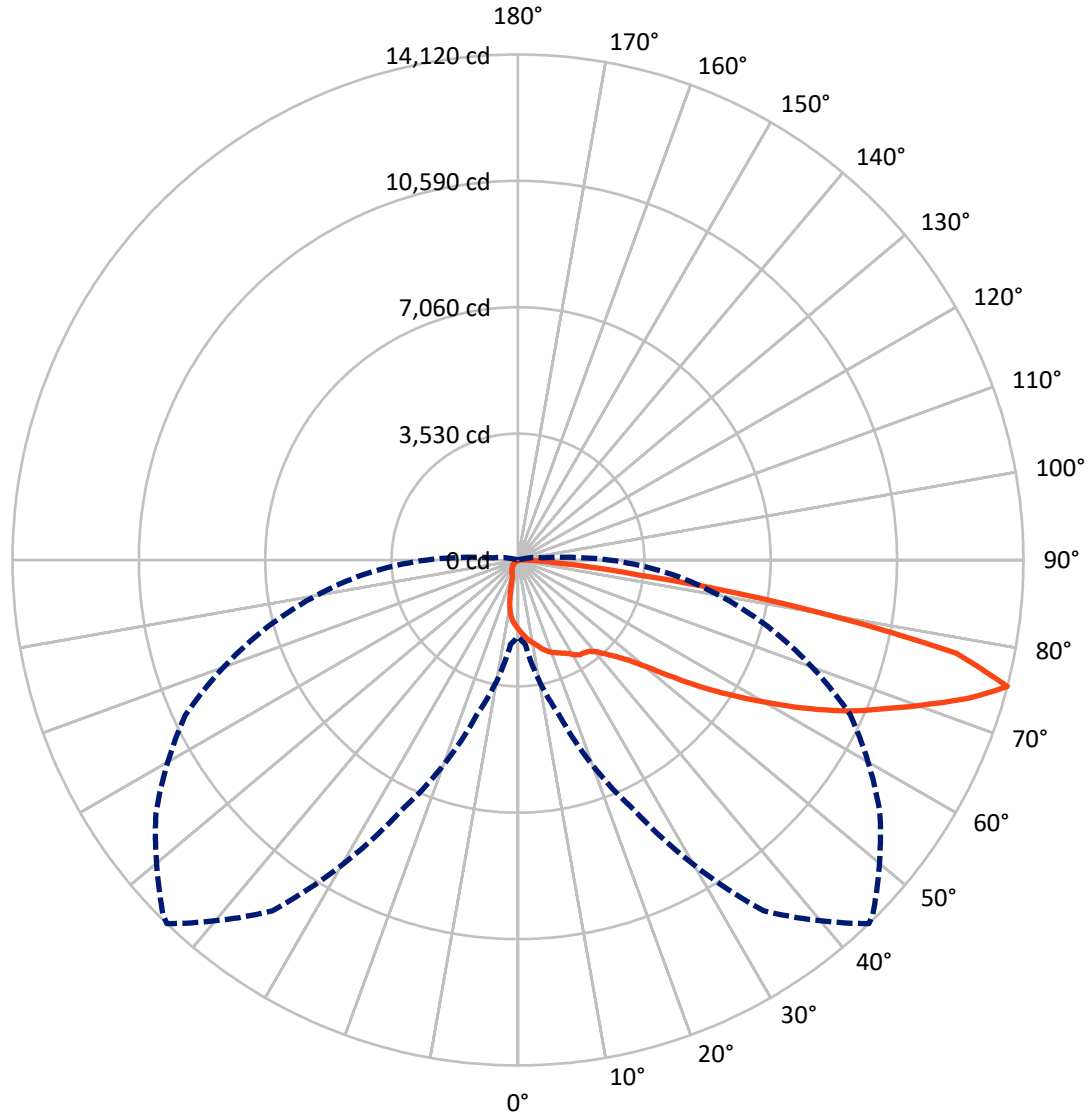
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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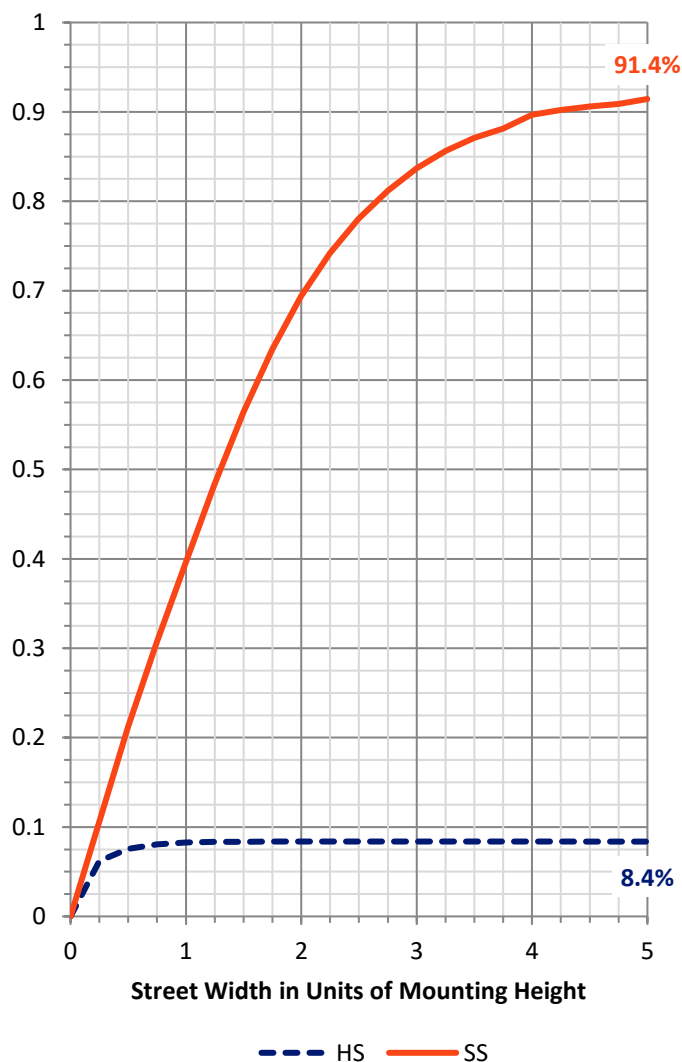
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1499.7	0.0	1499.7
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	16283.3	0.0	16283.3
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	17783.0	0.0	17783.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.5	1.0
10°-20°	511.5	2.9
20°-30°	844.1	4.7
30°-40°	1225.2	6.9
40°-50°	1991.6	11.2
50°-60°	3510.9	19.7
60°-70°	5045.9	28.4
70°-80°	4040.7	22.7
80°-90°	430.5	2.4
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°	17783.0	100.0
0°-180°	17783.0	100.0

**Coefficient of Utilization**



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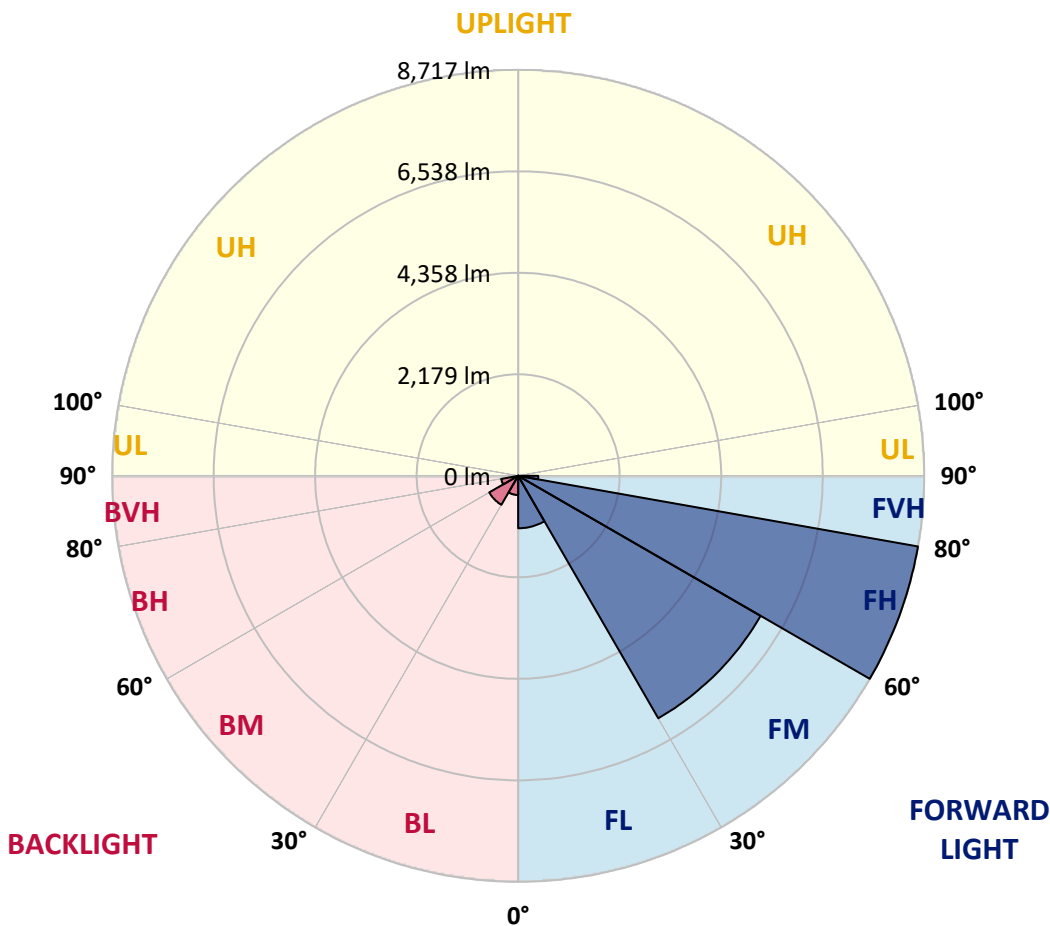
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1126.2	6.3			
FM (30°-60°)	6010.8	33.8			
FH (60°-80°)	8716.9	49.0			G4/12000
FVH (80°-90°)	429.4	2.4			G3/500
BL (0°-30°)	412.0	2.3	B1/500		
BM (30°-60°)	716.9	4.0	B1/1000		
BH (60°-80°)	369.7	2.1	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6
2.5°	2109.5	2106.2	2096.4	2080.0	2063.6	2047.2	2043.9	2017.6	1988.1	1965.1	1945.5
5°	2296.5	2293.2	2276.8	2240.7	2204.6	2162.0	2158.7	2096.4	2040.6	1978.3	1925.8
7.5°	2490.1	2483.5	2454.0	2398.2	2335.9	2270.2	2263.7	2171.8	2089.8	2007.8	1932.3
10°	2641.0	2634.4	2591.8	2526.1	2440.8	2358.8	2349.0	2253.8	2171.8	2066.8	1965.1
12.5°	2788.6	2775.5	2719.7	2647.5	2542.5	2463.8	2454.0	2355.5	2257.1	2148.9	2024.2
15°	2926.4	2910.0	2857.5	2765.6	2654.1	2578.6	2572.1	2467.1	2365.4	2240.7	2102.9
17.5°	3021.5	3015.0	2952.6	2850.9	2742.7	2680.3	2673.8	2565.5	2463.8	2332.6	2184.9
20°	3070.7	3070.7	3011.7	2900.1	2801.7	2759.1	2749.2	2647.5	2549.1	2424.4	2270.2
22.5°	3080.6	3090.4	3044.5	2923.1	2850.9	2814.8	2808.3	2719.7	2624.6	2509.7	2365.4
25°	3100.3	3100.3	3077.3	2946.1	2893.6	2883.7	2880.5	2801.7	2716.4	2601.6	2460.5
27.5°	3123.2	3123.2	3106.8	2978.9	2959.2	2955.9	2952.6	2916.5	2847.6	2713.1	2572.1
30°	3182.3	3185.6	3172.4	3044.5	3031.4	3067.5	3074.0	3054.3	2969.0	2801.7	2686.9
32.5°	3329.9	3300.4	3264.3	3090.4	3113.4	3159.3	3162.6	3123.2	3031.4	2896.9	2824.7
35°	3700.6	3526.8	3362.7	3129.8	3139.6	3185.6	3192.1	3188.8	3133.1	3018.2	2982.2
37.5°	4045.1	3799.0	3566.1	3221.6	3188.8	3238.0	3251.2	3306.9	3264.3	3185.6	3195.4
40°	4245.2	4150.1	3986.0	3474.3	3287.3	3362.7	3375.8	3461.1	3444.7	3411.9	3474.3
42.5°	4862.0	4868.6	4691.4	3851.5	3467.7	3589.1	3605.5	3674.4	3697.3	3713.8	3864.7
45°	5577.2	5600.2	5557.5	4530.6	3808.9	3848.3	3871.2	3963.1	4048.4	4153.4	4428.9
47.5°	6436.7	6417.0	6259.6	5360.7	4402.7	4182.9	4199.3	4376.5	4524.1	4753.7	5147.4
50°	7197.9	7247.1	6948.5	6134.9	5239.3	4711.1	4694.7	4868.6	5134.3	5455.8	5951.2
52.5°	7965.5	7893.4	7489.8	6902.6	6230.0	5429.6	5380.3	5475.5	5849.5	6230.0	6738.6
55°	8168.9	8175.5	8037.7	7742.4	7056.8	6302.2	6220.2	6213.6	6679.5	6938.7	7565.3
57.5°	8569.2	8585.6	8618.4	8677.4	8352.7	7174.9	7089.6	6997.7	7450.5	7601.4	8395.3
60°	8976.0	8995.7	9195.8	9514.0	9297.5	8116.4	8024.6	7808.1	8060.7	8264.1	9268.0
62.5°	8923.5	9061.3	9642.0	10275.1	10248.9	9149.9	9035.0	8513.4	8674.2	8851.3	10068.5
65°	8057.4	8205.0	9510.7	10485.1	11203.6	10170.2	9983.2	9241.7	9251.6	9464.8	10839.4
67.5°	7283.2	7443.9	8690.6	10396.5	11833.5	11085.5	10891.9	9973.3	9819.1	10173.4	11252.8
70°	6837.0	6997.7	8037.7	10121.0	12010.6	12099.2	11931.9	10809.9	10495.0	10819.7	10790.2
72.5°	5350.8	5603.4	7204.4	9596.0	12200.9	13185.1	13053.9	11869.6	11069.1	10143.9	8214.9
75°	2132.5	2365.4	4497.8	7722.8	11961.4	14120.1	14018.4	12345.3	10245.6	7243.8	4205.9
77.5°	643.0	688.9	1249.9	3818.7	8769.3	12519.1	12486.3	10380.1	7250.3	3362.7	1148.2
80°	213.2	236.2	383.8	1053.1	4002.5	7821.2	7968.8	6613.9	3293.8	771.0	232.9
82.5°	88.6	98.4	193.6	423.2	1417.3	3369.3	3320.1	2962.5	1148.2	479.0	85.3
85°	23.0	29.5	88.6	242.8	518.4	1161.4	1220.4	994.1	649.6	397.0	26.2
87.5°	0.0	0.0	42.6	98.4	232.9	351.0	367.4	301.8	367.4	298.5	13.1
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°	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6	1935.6
2.5°	1929.1	1912.6	1883.1	1863.4	1837.2	1830.6	1817.5	1801.1	1797.8	1781.4	1784.7
5°	1896.2	1870.0	1817.5	1781.4	1738.8	1725.6	1702.7	1686.3	1673.2	1650.2	1653.5
7.5°	1889.7	1850.3	1778.1	1709.2	1640.3	1591.1	1522.2	1466.5	1420.5	1371.3	1381.2
10°	1912.6	1863.4	1761.7	1666.6	1541.9	1384.5	1204.0	1085.9	1026.9	967.8	974.4
12.5°	1958.6	1899.5	1768.3	1623.9	1371.3	1102.3	853.0	692.2	649.6	623.3	626.6
15°	2027.5	1955.3	1788.0	1541.9	1141.7	797.2	567.6	498.7	515.1	524.9	524.9
17.5°	2099.6	2017.6	1804.4	1394.3	882.5	557.7	462.6	456.0	479.0	501.9	501.9
20°	2188.2	2083.2	1807.7	1207.3	636.5	452.7	436.3	436.3	452.7	479.0	479.0
22.5°	2273.5	2155.4	1778.1	994.1	485.5	419.9	419.9	419.9	429.8	456.0	459.3
25°	2375.2	2244.0	1715.8	767.7	416.6	400.2	400.2	403.5	410.1	433.1	436.3
27.5°	2483.5	2335.9	1610.8	561.0	380.6	377.3	380.6	383.8	387.1	410.1	416.6
30°	2608.2	2437.6	1476.3	419.9	347.8	347.8	357.6	364.2	364.2	383.8	390.4
32.5°	2752.5	2572.1	1315.6	347.8	314.9	311.7	328.1	337.9	337.9	354.3	360.9
35°	2932.9	2709.9	1122.0	308.4	288.7	282.1	288.7	305.1	311.7	324.8	328.1
37.5°	3172.4	2873.9	915.3	285.4	269.0	255.9	255.9	259.2	272.3	285.4	288.7
40°	3477.5	3054.3	711.9	269.0	249.3	236.2	226.4	223.1	219.8	229.6	236.2
42.5°	3861.4	3257.7	531.5	252.6	232.9	213.2	200.1	187.0	170.6	167.3	170.6
45°	4353.5	3507.1	393.7	239.5	223.1	193.6	170.6	147.6	118.1	108.3	111.5
47.5°	4934.2	3766.2	308.4	226.4	216.5	170.6	141.1	101.7	72.2	65.6	68.9
50°	5550.9	4015.6	262.5	210.0	203.4	147.6	101.7	62.3	42.6	42.6	45.9
52.5°	6075.9	4156.6	239.5	196.8	183.7	121.4	65.6	36.1	26.2	26.2	29.5
55°	6584.4	4232.1	223.1	183.7	157.5	85.3	36.1	23.0	16.4	16.4	16.4
57.5°	7109.3	4264.9	203.4	167.3	124.7	52.5	19.7	13.1	9.8	9.8	9.8
60°	7575.1	4202.6	173.9	137.8	82.0	26.2	9.8	9.8	6.6	3.3	3.3
62.5°	7965.5	4084.5	121.4	98.4	49.2	13.1	6.6	3.3	0.0	0.0	0.0
65°	8205.0	3894.2	78.7	65.6	29.5	9.8	3.3	0.0	0.0	0.0	0.0
67.5°	8136.1	3536.6	49.2	42.6	13.1	6.6	3.3	0.0	0.0	0.0	0.0
70°	7342.2	2900.1	36.1	26.2	9.8	3.3	0.0	0.0	0.0	0.0	0.0
72.5°	5291.8	1961.9	26.2	16.4	6.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	2545.8	698.8	16.4	13.1	3.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	623.3	154.2	9.8	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	137.8	29.5	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.9	13.1	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.4	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.8	3.3	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)