

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: P399702

Luminaire Tested: **ARCH-L-PA3-180-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399702  
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-PA3-180-727-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 775mA 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: 16123 lumens  
Efficiency: N/A  
Efficacy: 89.1 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

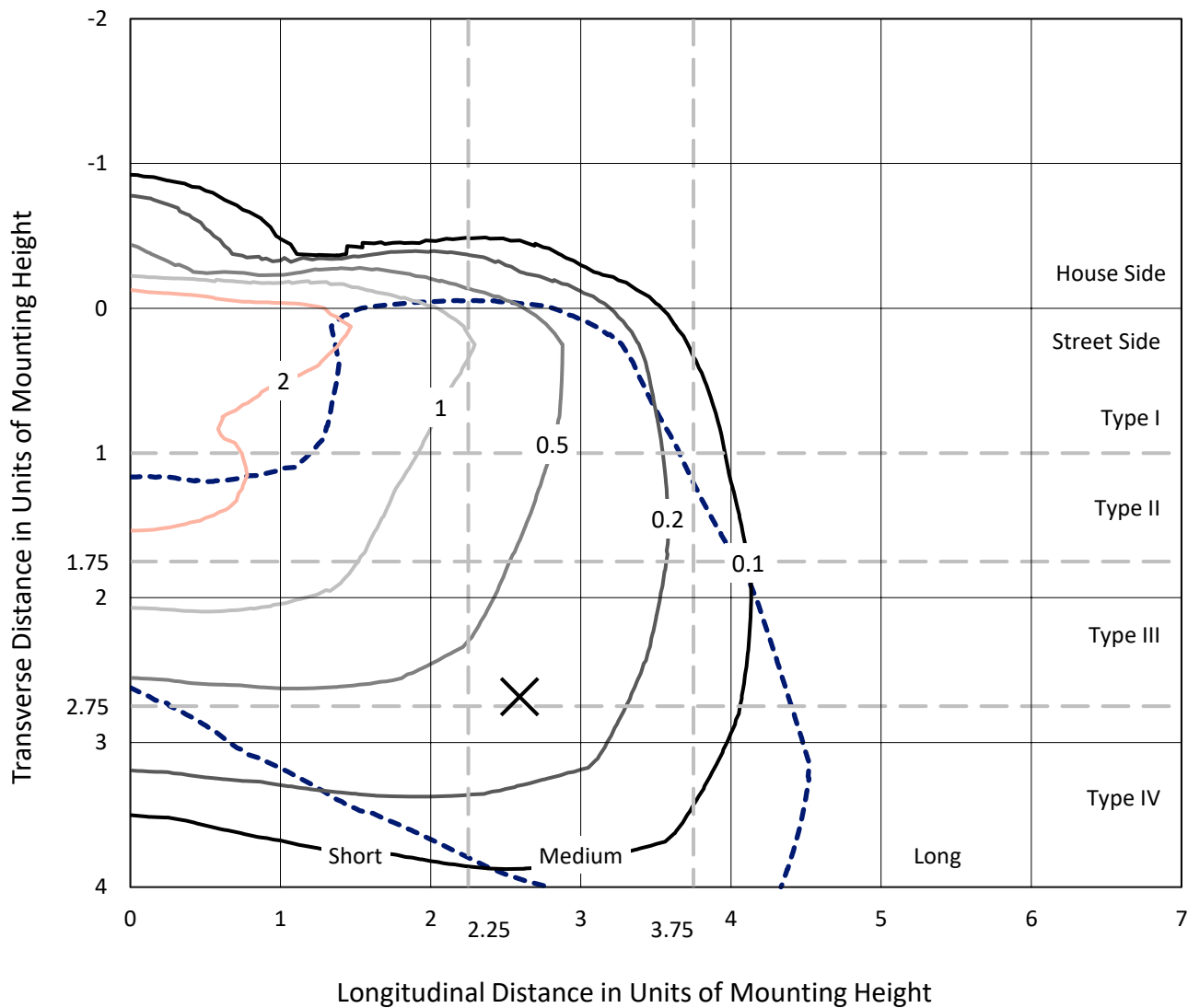
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

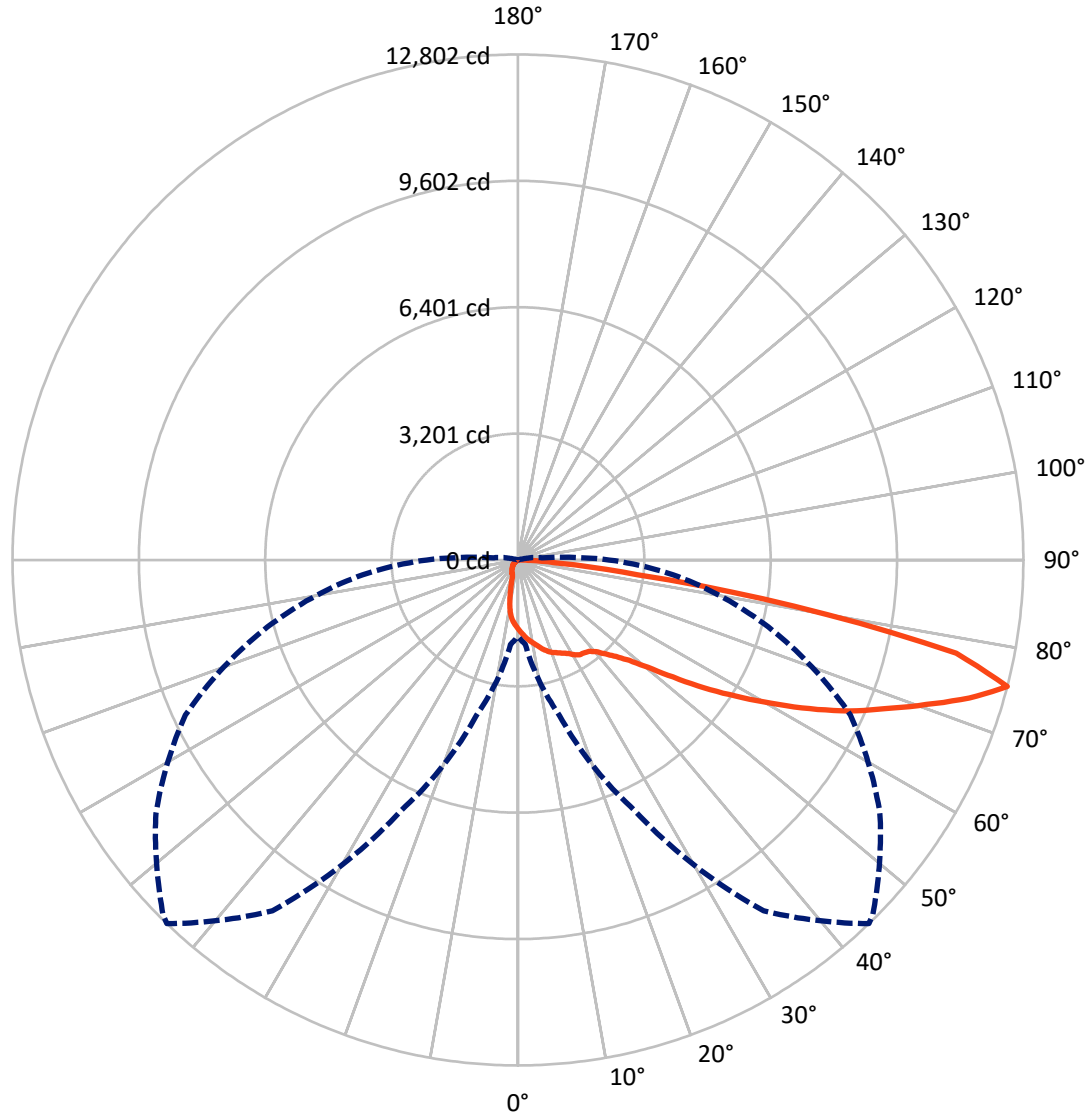
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 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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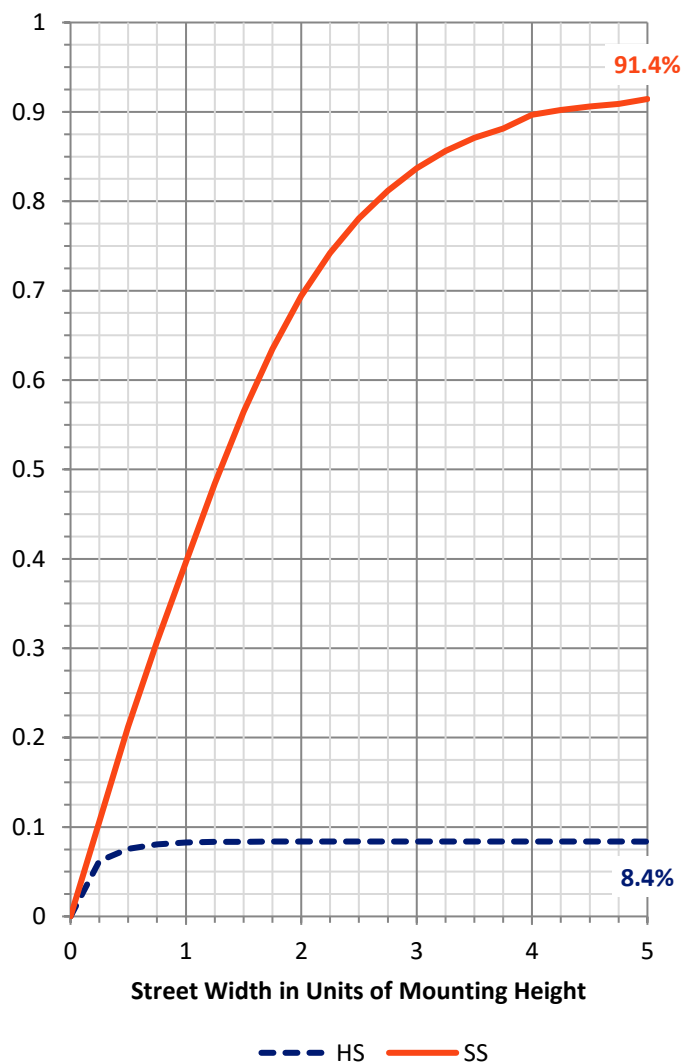
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1359.7	0.0	1359.7
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	14763.3	0.0	14763.3
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	16123.0	0.0	16123.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.5	1.0
10°-20°	463.8	2.9
20°-30°	765.3	4.7
30°-40°	1110.8	6.9
40°-50°	1805.7	11.2
50°-60°	3183.2	19.7
60°-70°	4574.9	28.4
70°-80°	3663.5	22.7
80°-90°	390.3	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°	16123.0	100.0
0°-180°	16123.0	100.0

**Coefficient of Utilization**



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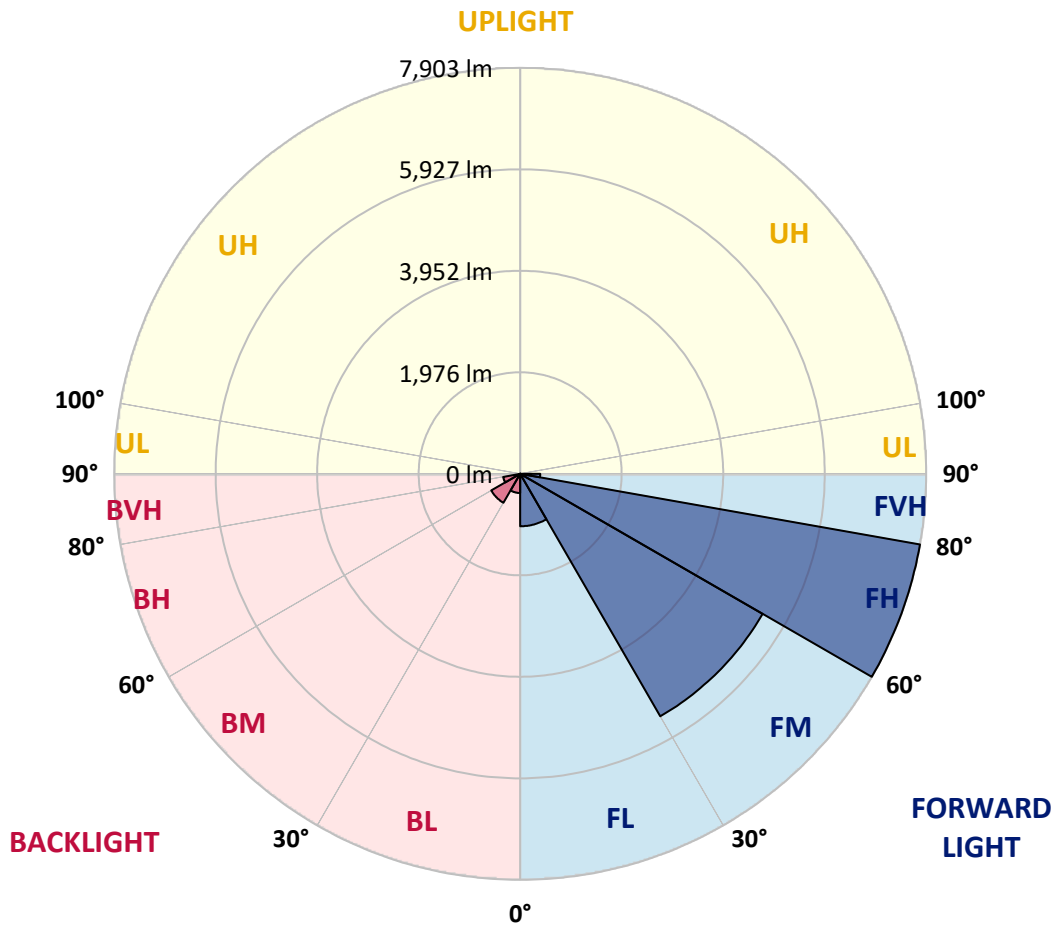
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1021.0	6.3			
FM (30°-60°)	5449.7	33.8			
FH (60°-80°)	7903.2	49.0			G4/12000
FVH (80°-90°)	389.3	2.4			G3/500
BL (0°-30°)	373.6	2.3	B1/500		
BM (30°-60°)	650.0	4.0	B1/1000		
BH (60°-80°)	335.2	2.1	B1/500		G1/500
BVH (80°-90°)	1.0	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°	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9
2.5°	1912.6	1909.6	1900.7	1885.8	1870.9	1856.1	1853.1	1829.3	1802.5	1781.7	1763.9
5°	2082.1	2079.1	2064.3	2031.6	1998.8	1960.2	1957.2	1900.7	1850.1	1793.6	1746.0
7.5°	2257.6	2251.7	2224.9	2174.3	2117.8	2058.3	2052.4	1969.1	1894.7	1820.4	1752.0
10°	2394.4	2388.5	2349.8	2290.3	2213.0	2138.6	2129.7	2043.4	1969.1	1873.9	1781.7
12.5°	2528.3	2516.4	2465.8	2400.4	2305.2	2233.8	2224.9	2135.7	2046.4	1948.3	1835.2
15°	2653.2	2638.3	2590.7	2507.5	2406.3	2337.9	2332.0	2236.8	2144.6	2031.6	1906.6
17.5°	2739.5	2733.5	2677.0	2584.8	2486.6	2430.1	2424.2	2326.0	2233.8	2114.8	1981.0
20°	2784.1	2784.1	2730.5	2629.4	2540.2	2501.5	2492.6	2400.4	2311.2	2198.1	2058.3
22.5°	2793.0	2801.9	2760.3	2650.2	2584.8	2552.1	2546.1	2465.8	2379.6	2275.5	2144.6
25°	2810.9	2810.9	2790.0	2671.1	2623.5	2614.5	2611.6	2540.2	2462.8	2358.7	2230.8
27.5°	2831.7	2831.7	2816.8	2700.8	2683.0	2680.0	2677.0	2644.3	2581.8	2459.9	2332.0
30°	2885.2	2888.2	2876.3	2760.3	2748.4	2781.1	2787.1	2769.2	2691.9	2540.2	2436.1
32.5°	3019.1	2992.3	2959.6	2801.9	2822.8	2864.4	2867.4	2831.7	2748.4	2626.4	2561.0
35°	3355.2	3197.5	3048.8	2837.6	2846.6	2888.2	2894.1	2891.2	2840.6	2736.5	2703.8
37.5°	3667.5	3444.4	3233.2	2920.9	2891.2	2935.8	2947.7	2998.2	2959.6	2888.2	2897.1
40°	3848.9	3762.7	3614.0	3149.9	2980.4	3048.8	3060.7	3138.0	3123.2	3093.4	3149.9
42.5°	4408.1	4414.1	4253.5	3492.0	3144.0	3254.1	3268.9	3331.4	3352.2	3367.1	3503.9
45°	5056.6	5077.4	5038.7	4107.7	3453.3	3489.0	3509.9	3593.1	3670.5	3765.7	4015.5
47.5°	5835.9	5818.0	5675.3	4860.3	3991.7	3792.4	3807.3	3967.9	4101.8	4310.0	4666.9
50°	6526.0	6570.6	6299.9	5562.2	4750.2	4271.3	4256.4	4414.1	4655.0	4946.5	5395.7
52.5°	7222.0	7156.5	6790.7	6258.2	5648.5	4922.7	4878.1	4964.4	5303.5	5648.5	6109.5
55°	7406.4	7412.3	7287.4	7019.7	6398.0	5713.9	5639.6	5633.6	6056.0	6291.0	6859.1
57.5°	7769.3	7784.1	7813.9	7867.4	7573.0	6505.1	6427.8	6344.5	6755.0	6891.8	7611.6
60°	8138.1	8156.0	8337.4	8625.9	8429.6	7358.8	7275.5	7079.2	7308.2	7492.6	8402.8
62.5°	8090.5	8215.4	8741.9	9316.0	9292.2	8295.8	8191.6	7718.7	7864.5	8025.1	9128.6
65°	7305.3	7439.1	8622.9	9506.4	10157.8	9220.8	9051.3	8379.0	8388.0	8581.3	9827.6
67.5°	6603.3	6749.0	7879.3	9426.0	10728.9	10050.7	9875.2	9042.3	8902.5	9223.8	10202.4
70°	6198.8	6344.5	7287.4	9176.2	10889.5	10969.8	10818.1	9800.8	9515.3	9809.7	9783.0
72.5°	4851.3	5080.4	6531.9	8700.3	11062.0	11954.3	11835.3	10761.6	10035.8	9197.0	7448.0
75°	1933.4	2144.6	4078.0	7001.9	10844.9	12802.0	12709.8	11192.9	9289.2	6567.6	3813.2
77.5°	583.0	624.6	1133.3	3462.3	7950.7	11350.5	11320.8	9411.2	6573.5	3048.8	1041.1
80°	193.3	214.2	348.0	954.8	3628.8	7091.1	7224.9	5996.5	2986.4	699.0	211.2
82.5°	80.3	89.2	175.5	383.7	1285.0	3054.8	3010.1	2685.9	1041.1	434.3	77.3
85°	20.8	26.8	80.3	220.1	470.0	1053.0	1106.5	901.3	588.9	359.9	23.8
87.5°	0.0	0.0	38.7	89.2	211.2	318.3	333.1	273.6	333.1	270.7	11.9
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°	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9
2.5°	1749.0	1734.1	1707.3	1689.5	1665.7	1659.7	1647.8	1633.0	1630.0	1615.1	1618.1
5°	1719.2	1695.4	1647.8	1615.1	1576.5	1564.6	1543.7	1528.9	1517.0	1496.1	1499.1
7.5°	1713.3	1677.6	1612.2	1549.7	1487.2	1442.6	1380.1	1329.6	1287.9	1243.3	1252.2
10°	1734.1	1689.5	1597.3	1511.0	1398.0	1255.2	1091.6	984.5	931.0	877.5	883.4
12.5°	1775.7	1722.2	1603.2	1472.4	1243.3	999.4	773.4	627.6	588.9	565.1	568.1
15°	1838.2	1772.8	1621.1	1398.0	1035.1	722.8	514.6	452.1	467.0	475.9	475.9
17.5°	1903.7	1829.3	1635.9	1264.1	800.1	505.7	419.4	413.4	434.3	455.1	455.1
20°	1984.0	1888.8	1638.9	1094.6	577.0	410.5	395.6	395.6	410.5	434.3	434.3
22.5°	2061.3	1954.2	1612.2	901.3	440.2	380.7	380.7	380.7	389.7	413.4	416.4
25°	2153.5	2034.5	1555.6	696.0	377.8	362.9	362.9	365.9	371.8	392.6	395.6
27.5°	2251.7	2117.8	1460.5	508.6	345.0	342.1	345.0	348.0	351.0	371.8	377.8
30°	2364.7	2210.0	1338.5	380.7	315.3	315.3	324.2	330.2	330.2	348.0	354.0
32.5°	2495.6	2332.0	1192.8	315.3	285.5	282.6	297.4	306.4	306.4	321.2	327.2
35°	2659.2	2456.9	1017.3	279.6	261.8	255.8	261.8	276.6	282.6	294.5	297.4
37.5°	2876.3	2605.6	829.9	258.8	243.9	232.0	232.0	235.0	246.9	258.8	261.8
40°	3152.9	2769.2	645.5	243.9	226.1	214.2	205.2	202.3	199.3	208.2	214.2
42.5°	3500.9	2953.6	481.9	229.0	211.2	193.3	181.4	169.5	154.7	151.7	154.7
45°	3947.1	3179.7	356.9	217.1	202.3	175.5	154.7	133.9	107.1	98.2	101.1
47.5°	4473.6	3414.7	279.6	205.2	196.3	154.7	127.9	92.2	65.4	59.5	62.5
50°	5032.8	3640.7	238.0	190.4	184.4	133.9	92.2	56.5	38.7	38.7	41.6
52.5°	5508.7	3768.6	217.1	178.5	166.6	110.1	59.5	32.7	23.8	23.8	26.8
55°	5969.7	3837.0	202.3	166.6	142.8	77.3	32.7	20.8	14.9	14.9	14.9
57.5°	6445.6	3866.8	184.4	151.7	113.0	47.6	17.8	11.9	8.9	8.9	8.9
60°	6868.0	3810.3	157.6	124.9	74.4	23.8	8.9	8.9	5.9	3.0	3.0
62.5°	7222.0	3703.2	110.1	89.2	44.6	11.9	5.9	3.0	0.0	0.0	0.0
65°	7439.1	3530.7	71.4	59.5	26.8	8.9	3.0	0.0	0.0	0.0	0.0
67.5°	7376.6	3206.5	44.6	38.7	11.9	5.9	3.0	0.0	0.0	0.0	0.0
70°	6656.8	2629.4	32.7	23.8	8.9	3.0	0.0	0.0	0.0	0.0	0.0
72.5°	4797.8	1778.7	23.8	14.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2308.2	633.6	14.9	11.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	565.1	139.8	8.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	124.9	26.8	5.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.6	11.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.9	3.0	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)