

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: P399540

Luminaire Tested: **ARCH-L-PA3-150-830-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399540  
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-PA3-150-830-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 665mA 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: 13641 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3

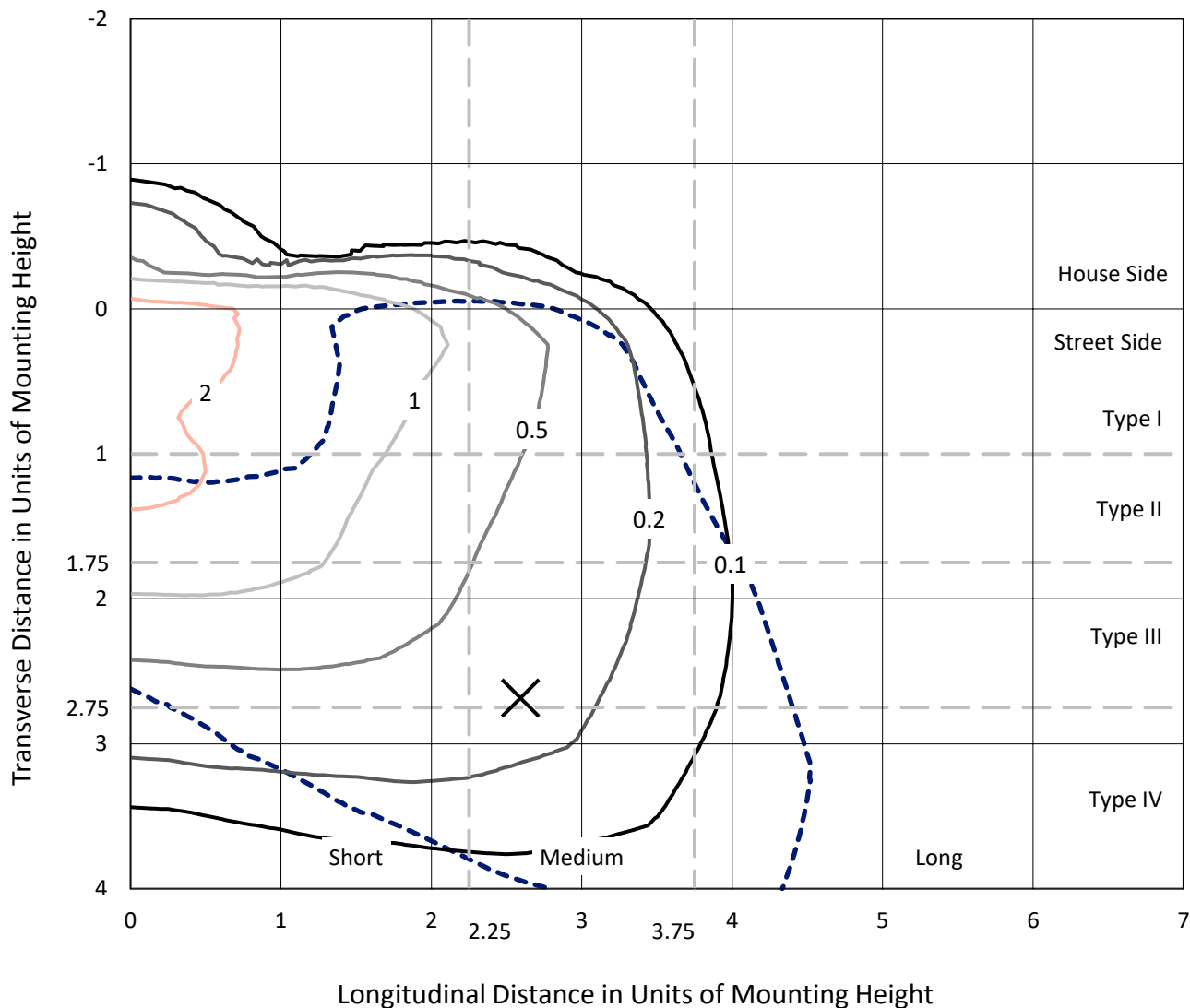
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

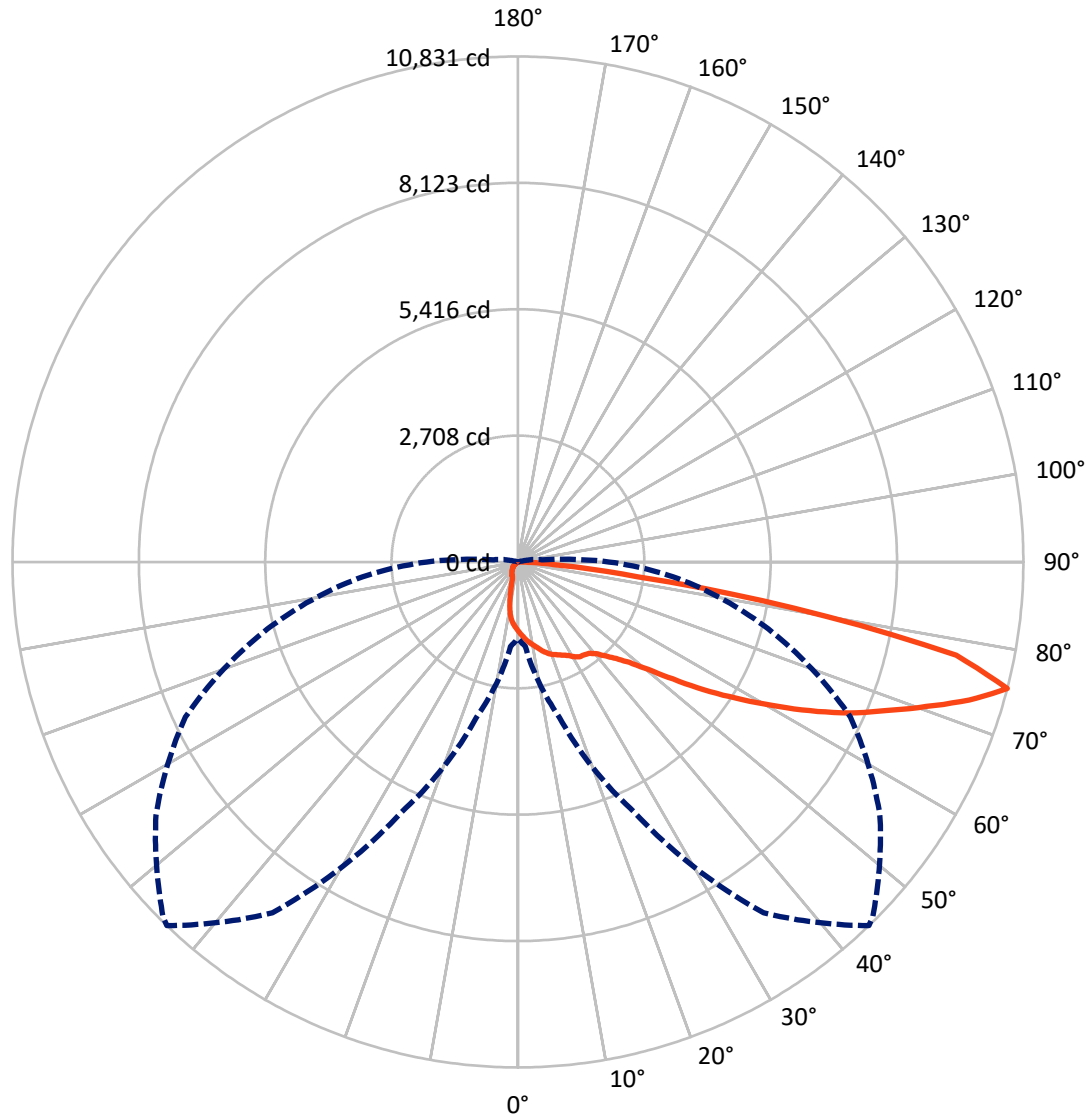
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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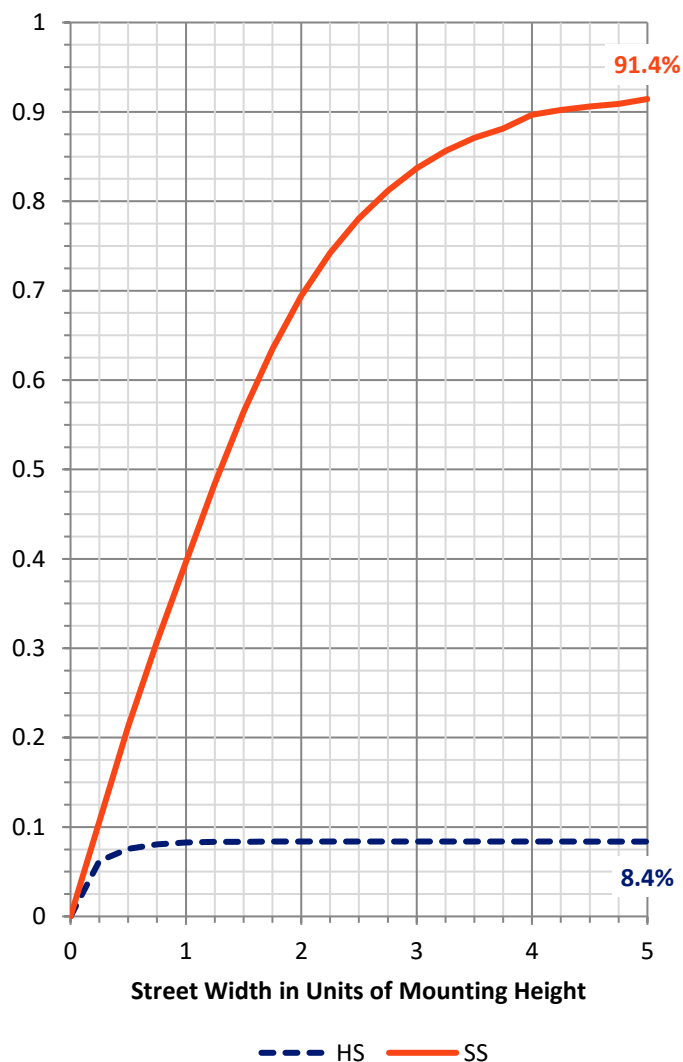
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1150.4	0.0	1150.4
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	12490.6	0.0	12490.6
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	13641.0	0.0	13641.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.0	1.0
10°-20°	392.4	2.9
20°-30°	647.5	4.7
30°-40°	939.8	6.9
40°-50°	1527.7	11.2
50°-60°	2693.2	19.7
60°-70°	3870.6	28.4
70°-80°	3099.5	22.7
80°-90°	330.2	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°	13641.0	100.0
0°-180°	13641.0	100.0

**Coefficient of Utilization**



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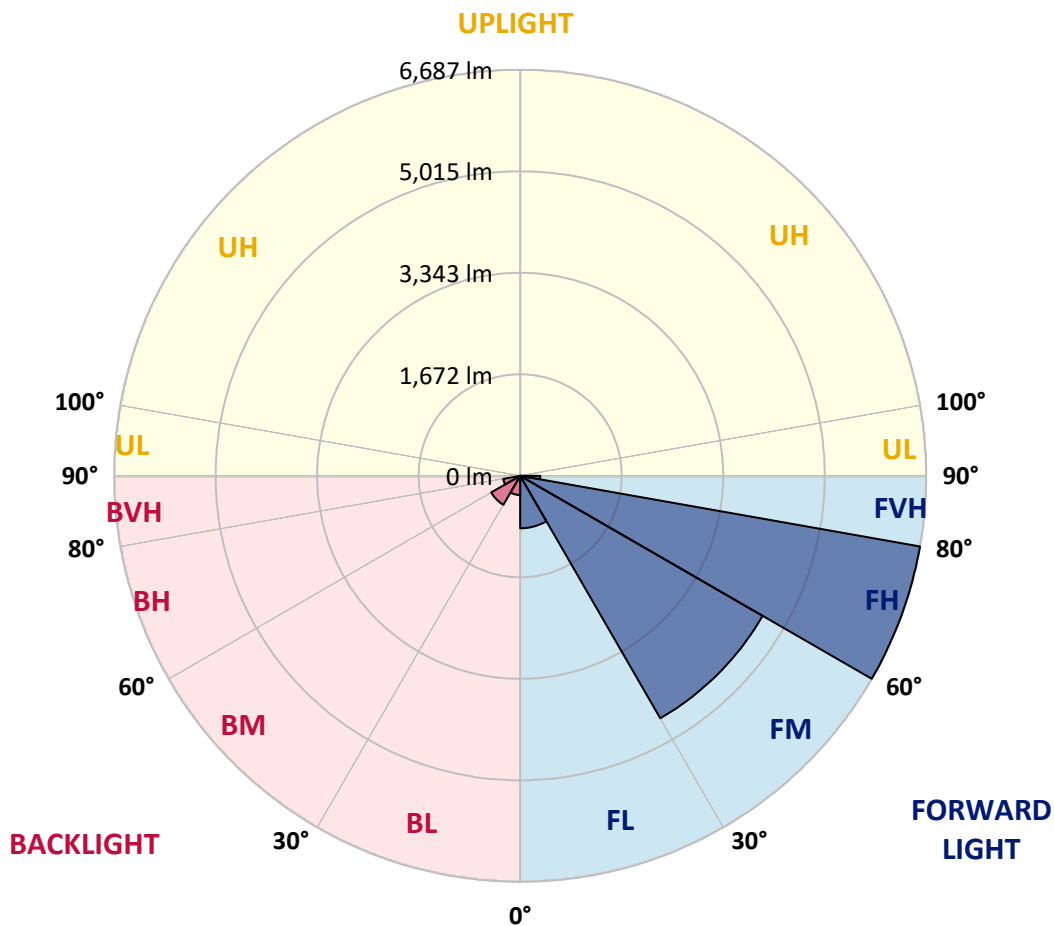
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	863.9	6.3			
FM (30°-60°)	4610.8	33.8			
FH (60°-80°)	6686.6	49.0			G3/7500
FVH (80°-90°)	329.4	2.4			G3/500
BL (0°-30°)	316.1	2.3	B1/500		
BM (30°-60°)	549.9	4.0	B1/1000		
BH (60°-80°)	283.6	2.1	B1/500		G1/500
BVH (80°-90°)	0.8	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-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8
2.5°	1618.1	1615.6	1608.1	1595.5	1582.9	1570.3	1567.8	1547.7	1525.0	1507.4	1492.3
5°	1761.6	1759.1	1746.5	1718.8	1691.1	1658.4	1655.9	1608.1	1565.3	1517.5	1477.2
7.5°	1910.1	1905.0	1882.4	1839.6	1791.8	1741.5	1736.4	1666.0	1603.0	1540.1	1482.3
10°	2025.8	2020.8	1988.1	1937.8	1872.3	1809.4	1801.9	1728.9	1666.0	1585.4	1507.4
12.5°	2139.1	2129.0	2086.2	2030.9	1950.3	1889.9	1882.4	1806.9	1731.4	1648.3	1552.7
15°	2244.8	2232.2	2191.9	2121.5	2035.9	1978.0	1973.0	1892.5	1814.4	1718.8	1613.1
17.5°	2317.8	2312.7	2264.9	2186.9	2103.8	2056.0	2051.0	1968.0	1889.9	1789.3	1676.0
20°	2355.5	2355.5	2310.2	2224.6	2149.1	2116.4	2108.9	2030.9	1955.4	1859.7	1741.5
22.5°	2363.1	2370.6	2335.4	2242.3	2186.9	2159.2	2154.2	2086.2	2013.2	1925.2	1814.4
25°	2378.2	2378.2	2360.5	2259.9	2219.6	2212.1	2209.5	2149.1	2083.7	1995.6	1887.4
27.5°	2395.8	2395.8	2383.2	2285.0	2269.9	2267.4	2264.9	2237.2	2184.4	2081.2	1973.0
30°	2441.1	2443.6	2433.5	2335.4	2325.3	2353.0	2358.0	2342.9	2277.5	2149.1	2061.1
32.5°	2554.3	2531.7	2504.0	2370.6	2388.2	2423.4	2426.0	2395.8	2325.3	2222.1	2166.8
35°	2838.7	2705.3	2579.5	2400.8	2408.3	2443.6	2448.6	2446.1	2403.3	2315.2	2287.6
37.5°	3102.9	2914.2	2735.5	2471.3	2446.1	2483.8	2493.9	2536.7	2504.0	2443.6	2451.1
40°	3256.4	3183.4	3057.6	2665.0	2521.6	2579.5	2589.5	2655.0	2642.4	2617.2	2665.0
42.5°	3729.5	3734.6	3598.7	2954.4	2660.0	2753.1	2765.7	2818.5	2836.2	2848.7	2964.5
45°	4278.2	4295.8	4263.1	3475.4	2921.7	2951.9	2969.5	3040.0	3105.4	3186.0	3397.4
47.5°	4937.5	4922.4	4801.6	4112.1	3377.2	3208.6	3221.2	3357.1	3470.3	3646.5	3948.5
50°	5521.3	5559.1	5330.1	4706.0	4018.9	3613.8	3601.2	3734.6	3938.4	4185.0	4565.0
52.5°	6110.2	6054.8	5745.3	5294.8	4778.9	4164.9	4127.2	4200.1	4487.0	4778.9	5169.0
55°	6266.2	6271.3	6165.6	5939.1	5413.1	4834.3	4771.4	4766.4	5123.7	5322.5	5803.2
57.5°	6573.3	6585.8	6611.0	6656.3	6407.2	5503.7	5438.3	5367.8	5715.1	5830.9	6439.9
60°	6885.3	6900.4	7053.9	7298.0	7131.9	6226.0	6155.5	5989.4	6183.2	6339.2	7109.3
62.5°	6845.0	6950.7	7396.2	7881.9	7861.7	7018.7	6930.6	6530.5	6653.8	6789.7	7723.3
65°	6180.7	6293.9	7295.5	8042.9	8594.1	7801.3	7657.9	7089.2	7096.7	7260.3	8314.7
67.5°	5586.8	5710.1	6666.4	7975.0	9077.2	8503.5	8355.0	7650.3	7532.1	7803.9	8631.8
70°	5244.5	5367.8	6165.6	7763.6	9213.1	9281.1	9152.7	8292.1	8050.5	8299.6	8277.0
72.5°	4104.5	4298.3	5526.4	7360.9	9359.1	10114.1	10013.4	9104.9	8490.9	7781.2	6301.5
75°	1635.8	1814.4	3450.2	5924.0	9175.4	10831.3	10753.3	9469.8	7859.2	5556.6	3226.2
77.5°	493.2	528.5	958.8	2929.3	6726.8	9603.2	9578.0	7962.4	5561.6	2579.5	880.8
80°	163.6	181.2	294.4	807.8	3070.2	5999.5	6112.7	5073.4	2526.6	591.4	178.7
82.5°	67.9	75.5	148.5	324.6	1087.2	2584.5	2546.8	2272.5	880.8	367.4	65.4
85°	17.6	22.6	67.9	186.2	397.6	890.9	936.2	762.5	498.3	304.5	20.1
87.5°	0.0	0.0	32.7	75.5	178.7	269.3	281.9	231.5	281.9	229.0	10.1
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°	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8	1484.8
2.5°	1479.7	1467.2	1444.5	1429.4	1409.3	1404.2	1394.2	1381.6	1379.1	1366.5	1369.0
5°	1454.6	1434.4	1394.2	1366.5	1333.8	1323.7	1306.1	1293.5	1283.4	1265.8	1268.3
7.5°	1449.5	1419.3	1364.0	1311.1	1258.3	1220.5	1167.7	1124.9	1089.7	1051.9	1059.5
10°	1467.2	1429.4	1351.4	1278.4	1182.8	1062.0	923.6	833.0	787.7	742.4	747.4
12.5°	1502.4	1457.1	1356.4	1245.7	1051.9	845.6	654.3	531.0	498.3	478.1	480.7
15°	1555.2	1499.9	1371.5	1182.8	875.8	611.5	435.4	382.5	395.1	402.6	402.6
17.5°	1610.6	1547.7	1384.1	1069.5	677.0	427.8	354.8	349.8	367.4	385.0	385.0
20°	1678.5	1598.0	1386.6	926.1	488.2	347.3	334.7	334.7	347.3	367.4	367.4
22.5°	1744.0	1653.4	1364.0	762.5	372.5	322.1	322.1	322.1	329.7	349.8	352.3
25°	1822.0	1721.3	1316.2	588.9	319.6	307.0	307.0	309.5	314.6	332.2	334.7
27.5°	1905.0	1791.8	1235.6	430.3	291.9	289.4	291.9	294.4	297.0	314.6	319.6
30°	2000.7	1869.8	1132.5	322.1	266.8	266.8	274.3	279.3	279.3	294.4	299.5
32.5°	2111.4	1973.0	1009.1	266.8	241.6	239.1	251.7	259.2	259.2	271.8	276.8
35°	2249.8	2078.7	860.7	236.6	221.5	216.4	221.5	234.0	239.1	249.1	251.7
37.5°	2433.5	2204.5	702.1	218.9	206.4	196.3	196.3	198.8	208.9	218.9	221.5
40°	2667.6	2342.9	546.1	206.4	191.3	181.2	173.6	171.1	168.6	176.2	181.2
42.5°	2962.0	2498.9	407.7	193.8	178.7	163.6	153.5	143.4	130.9	128.3	130.9
45°	3339.5	2690.2	302.0	183.7	171.1	148.5	130.9	113.2	90.6	83.0	85.6
47.5°	3784.9	2889.0	236.6	173.6	166.1	130.9	108.2	78.0	55.4	50.3	52.8
50°	4258.0	3080.3	201.3	161.1	156.0	113.2	78.0	47.8	32.7	32.7	35.2
52.5°	4660.7	3188.5	183.7	151.0	140.9	93.1	50.3	27.7	20.1	20.1	22.6
55°	5050.7	3246.4	171.1	140.9	120.8	65.4	27.7	17.6	12.6	12.6	12.6
57.5°	5453.4	3271.5	156.0	128.3	95.6	40.3	15.1	10.1	7.5	7.5	7.5
60°	5810.7	3223.7	133.4	105.7	62.9	20.1	7.5	7.5	5.0	2.5	2.5
62.5°	6110.2	3133.1	93.1	75.5	37.7	10.1	5.0	2.5	0.0	0.0	0.0
65°	6293.9	2987.2	60.4	50.3	22.6	7.5	2.5	0.0	0.0	0.0	0.0
67.5°	6241.1	2712.9	37.7	32.7	10.1	5.0	2.5	0.0	0.0	0.0	0.0
70°	5632.1	2224.6	27.7	20.1	7.5	2.5	0.0	0.0	0.0	0.0	0.0
72.5°	4059.2	1504.9	20.1	12.6	5.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	1952.9	536.0	12.6	10.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	478.1	118.3	7.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	105.7	22.6	5.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.2	10.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.6	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	2.5	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)