

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: P399144

Luminaire Tested: **ARCH-L-PA3-100-740-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399144  
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-PA3-100-740-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 440mA 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: 12061 lumens  
Efficiency: N/A  
Efficacy: 118.2 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

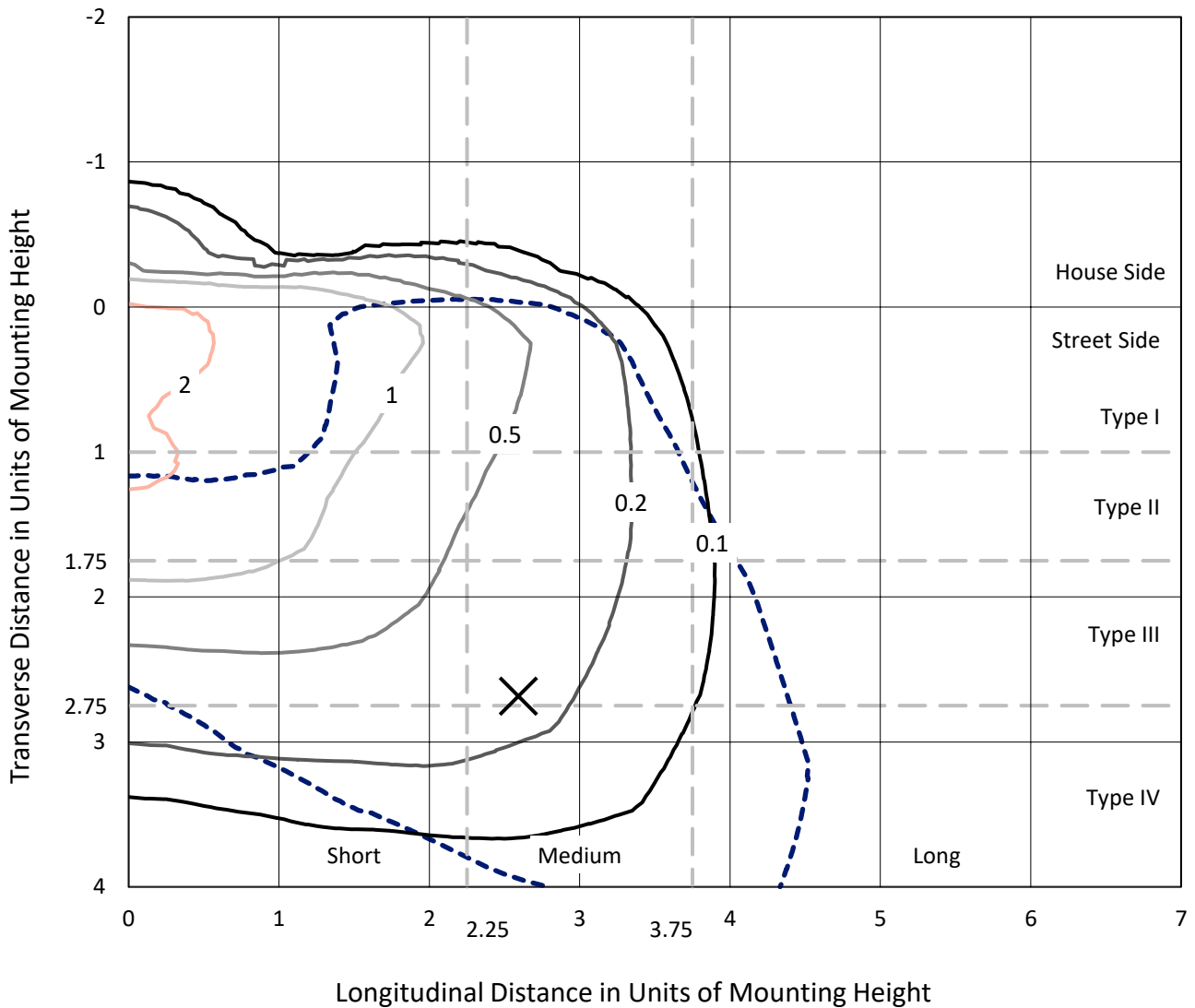
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

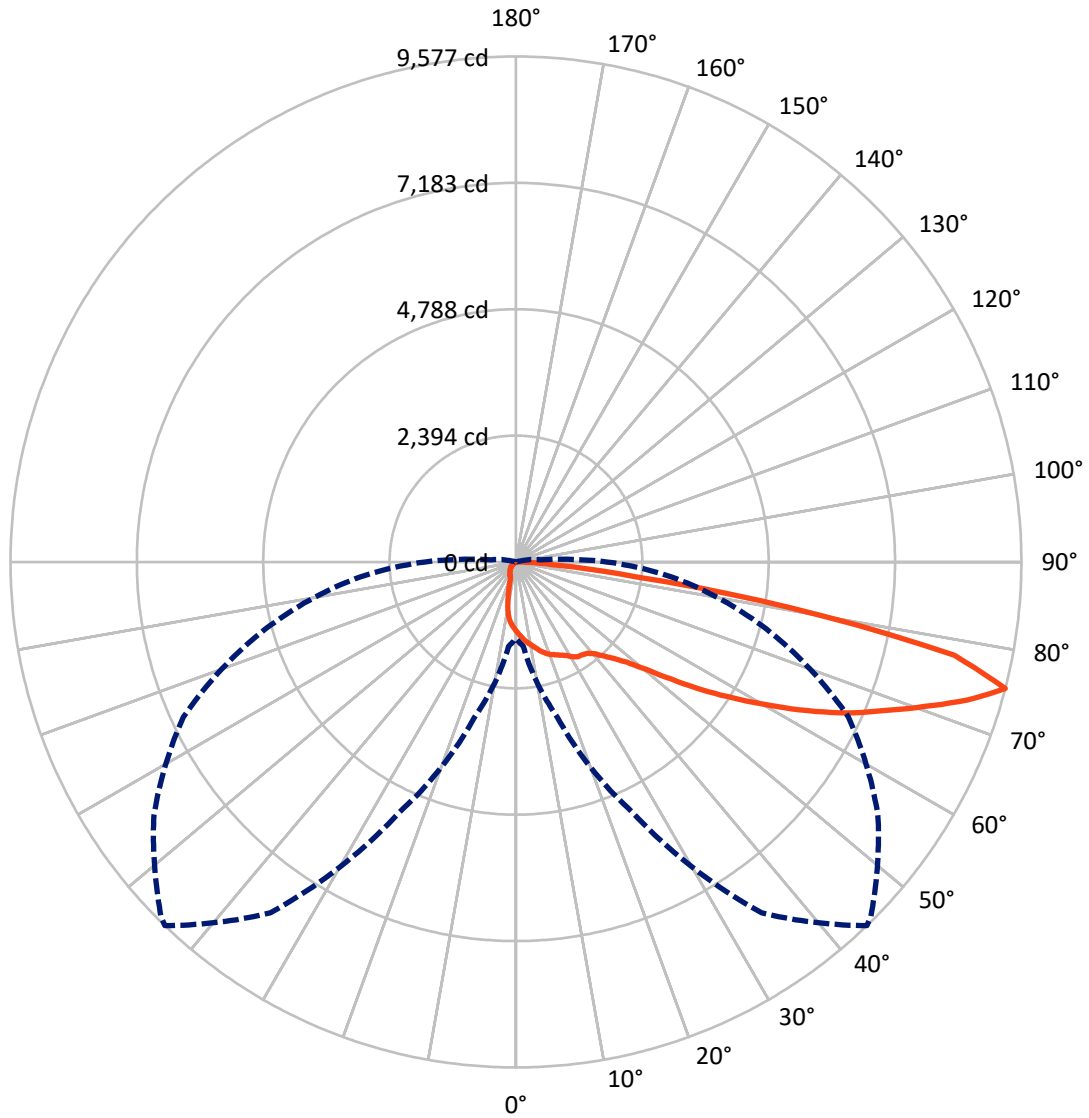
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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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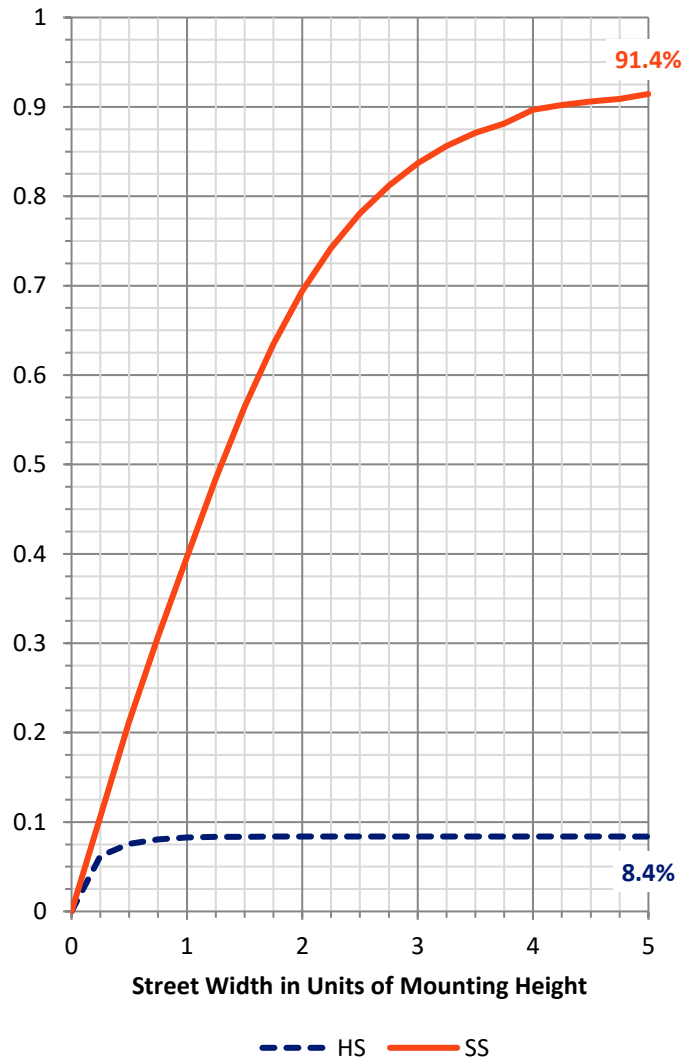
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1017.1	0.0	1017.1
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	11043.9	0.0	11043.9
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	12061.0	0.0	12061.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.8	1.0
10°-20°	346.9	2.9
20°-30°	572.5	4.7
30°-40°	830.9	6.9
40°-50°	1350.8	11.2
50°-60°	2381.2	19.7
60°-70°	3422.3	28.4
70°-80°	2740.5	22.7
80°-90°	292.0	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°	12061.0	100.0
0°-180°	12061.0	100.0

**Coefficient of Utilization**



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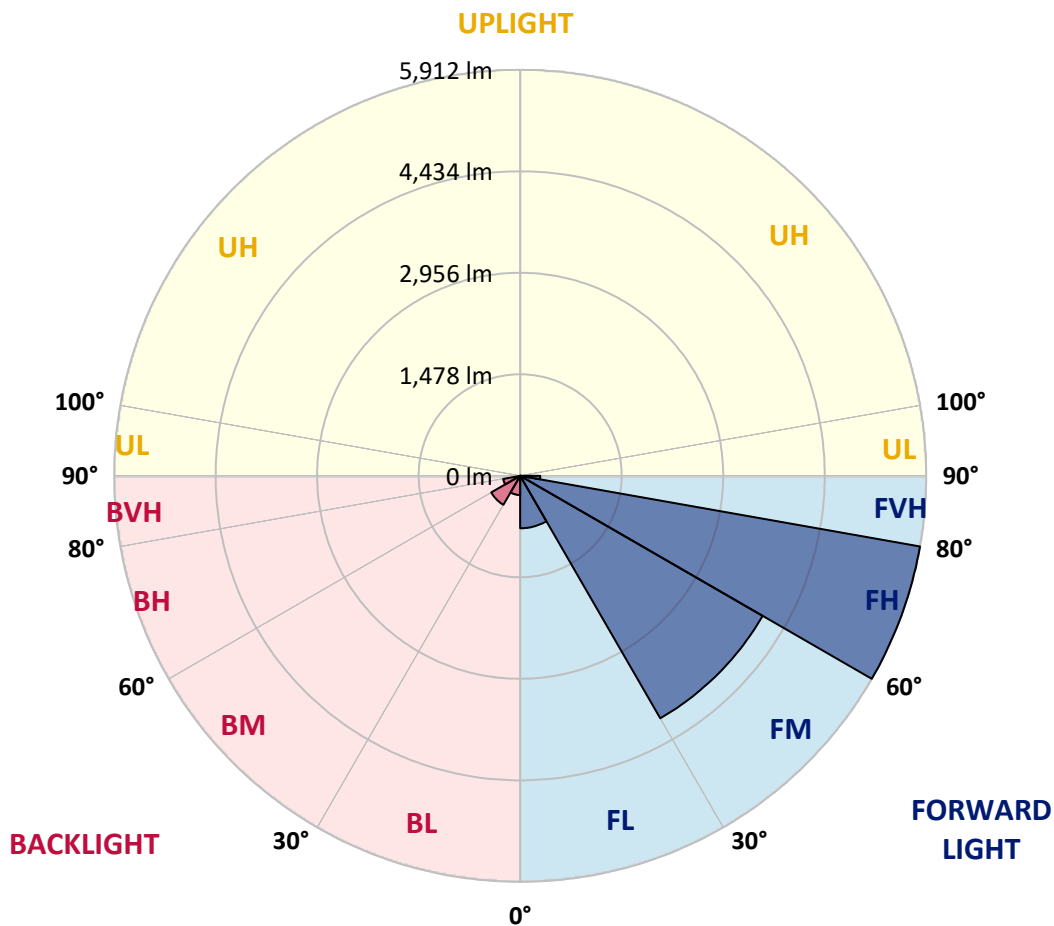
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	763.8	6.3			
FM (30°-60°)	4076.7	33.8			
FH (60°-80°)	5912.1	49.0			G3/7500
FVH (80°-90°)	291.2	2.4			G3/500
BL (0°-30°)	279.4	2.3	B1/500		
BM (30°-60°)	486.2	4.0	B1/1000		
BH (60°-80°)	250.8	2.1	B1/500		G1/500
BVH (80°-90°)	0.7	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°	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8
2.5°	1430.7	1428.5	1421.8	1410.7	1399.6	1388.4	1386.2	1368.4	1348.4	1332.8	1319.5
5°	1557.6	1555.3	1544.2	1519.7	1495.3	1466.3	1464.1	1421.8	1384.0	1341.7	1306.1
7.5°	1688.8	1684.4	1664.4	1626.5	1584.3	1539.8	1535.3	1473.0	1417.4	1361.7	1310.6
10°	1791.2	1786.7	1757.8	1713.3	1655.5	1599.8	1593.2	1528.6	1473.0	1401.8	1332.8
12.5°	1891.3	1882.4	1844.6	1795.6	1724.4	1671.0	1664.4	1597.6	1530.9	1457.4	1372.9
15°	1984.8	1973.6	1938.0	1875.7	1800.1	1748.9	1744.5	1673.3	1604.3	1519.7	1426.3
17.5°	2049.3	2044.8	2002.6	1933.6	1860.2	1817.9	1813.4	1740.0	1671.0	1582.0	1481.9
20°	2082.7	2082.7	2042.6	1967.0	1900.2	1871.3	1864.6	1795.6	1728.9	1644.3	1539.8
22.5°	2089.3	2096.0	2064.9	1982.5	1933.6	1909.1	1904.7	1844.6	1780.1	1702.2	1604.3
25°	2102.7	2102.7	2087.1	1998.1	1962.5	1955.8	1953.6	1900.2	1842.4	1764.5	1668.8
27.5°	2118.3	2118.3	2107.1	2020.4	2007.0	2004.8	2002.6	1978.1	1931.4	1840.1	1744.5
30°	2158.3	2160.5	2151.6	2064.9	2056.0	2080.4	2084.9	2071.5	2013.7	1900.2	1822.3
32.5°	2258.5	2238.4	2213.9	2096.0	2111.6	2142.7	2145.0	2118.3	2056.0	1964.7	1915.8
35°	2509.9	2392.0	2280.7	2122.7	2129.4	2160.5	2165.0	2162.8	2124.9	2047.1	2022.6
37.5°	2743.5	2576.6	2418.7	2185.0	2162.8	2196.1	2205.0	2242.9	2213.9	2160.5	2167.2
40°	2879.2	2814.7	2703.5	2356.4	2229.5	2280.7	2289.6	2347.5	2336.3	2314.1	2356.4
42.5°	3297.6	3302.0	3181.9	2612.2	2351.9	2434.2	2445.4	2492.1	2507.7	2518.8	2621.1
45°	3782.6	3798.2	3769.3	3072.8	2583.3	2610.0	2625.6	2687.9	2745.7	2816.9	3003.9
47.5°	4365.6	4352.2	4245.4	3635.8	2986.1	2837.0	2848.1	2968.2	3068.4	3224.1	3491.1
50°	4881.8	4915.2	4712.7	4160.9	3553.4	3195.2	3184.1	3302.0	3482.2	3700.3	4036.3
52.5°	5402.5	5353.5	5079.8	4681.6	4225.4	3682.5	3649.1	3713.6	3967.3	4225.4	4570.3
55°	5540.4	5544.9	5451.4	5251.2	4786.1	4274.4	4218.7	4214.3	4530.3	4706.0	5131.0
57.5°	5811.9	5823.0	5845.3	5885.3	5665.0	4866.2	4808.4	4746.1	5053.1	5155.5	5694.0
60°	6087.8	6101.2	6236.9	6452.7	6305.9	5504.8	5442.5	5295.7	5467.0	5605.0	6285.8
62.5°	6052.2	6145.7	6539.5	6968.9	6951.1	6205.7	6127.9	5774.1	5883.1	6003.3	6828.8
65°	5464.8	5564.9	6450.5	7111.3	7598.6	6897.7	6770.9	6268.0	6274.7	6419.3	7351.6
67.5°	4939.7	5048.7	5894.2	7051.3	8025.8	7518.5	7387.2	6764.2	6659.6	6900.0	7632.0
70°	4637.1	4746.1	5451.4	6864.4	8146.0	8206.1	8092.6	7331.6	7118.0	7338.3	7318.3
72.5°	3629.1	3800.4	4886.3	6508.3	8275.1	8942.6	8853.6	8050.3	7507.4	6879.9	5571.6
75°	1446.3	1604.3	3050.6	5237.8	8112.6	9576.7	9507.7	8373.0	6948.9	4913.0	2852.5
77.5°	436.1	467.3	847.8	2590.0	5947.6	8490.9	8468.6	7040.1	4917.4	2280.7	778.8
80°	144.6	160.2	260.3	714.2	2714.6	5304.6	5404.7	4485.8	2234.0	522.9	158.0
82.5°	60.1	66.8	131.3	287.0	961.2	2285.2	2251.8	2009.2	778.8	324.9	57.9
85°	15.6	20.0	60.1	164.7	351.6	787.7	827.7	674.2	440.6	269.2	17.8
87.5°	0.0	0.0	28.9	66.8	158.0	238.1	249.2	204.7	249.2	202.5	8.9
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°	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8	1312.8
2.5°	1308.3	1297.2	1277.2	1263.8	1246.0	1241.6	1232.7	1221.6	1219.3	1208.2	1210.4
5°	1286.1	1268.3	1232.7	1208.2	1179.3	1170.4	1154.8	1143.7	1134.8	1119.2	1121.4
7.5°	1281.6	1254.9	1206.0	1159.3	1112.5	1079.2	1032.4	994.6	963.5	930.1	936.8
10°	1297.2	1263.8	1194.9	1130.3	1045.8	939.0	816.6	736.5	696.4	656.4	660.8
12.5°	1328.4	1288.3	1199.3	1101.4	930.1	747.6	578.5	469.5	440.6	422.8	425.0
15°	1375.1	1326.1	1212.7	1045.8	774.3	540.7	384.9	338.2	349.3	356.0	356.0
17.5°	1424.0	1368.4	1223.8	945.7	598.5	378.3	313.7	309.3	324.9	340.4	340.4
20°	1484.1	1412.9	1226.0	818.8	431.7	307.1	295.9	295.9	307.1	324.9	324.9
22.5°	1542.0	1461.9	1206.0	674.2	329.3	284.8	284.8	284.8	291.5	309.3	311.5
25°	1611.0	1522.0	1163.7	520.7	282.6	271.5	271.5	273.7	278.1	293.7	295.9
27.5°	1684.4	1584.3	1092.5	380.5	258.1	255.9	258.1	260.3	262.6	278.1	282.6
30°	1768.9	1653.2	1001.3	284.8	235.9	235.9	242.5	247.0	247.0	260.3	264.8
32.5°	1866.8	1744.5	892.3	235.9	213.6	211.4	222.5	229.2	229.2	240.3	244.8
35°	1989.2	1837.9	761.0	209.2	195.8	191.4	195.8	206.9	211.4	220.3	222.5
37.5°	2151.6	1949.2	620.8	193.6	182.5	173.6	173.6	175.8	184.7	193.6	195.8
40°	2358.6	2071.5	482.8	182.5	169.1	160.2	153.5	151.3	149.1	155.8	160.2
42.5°	2618.9	2209.5	360.5	171.3	158.0	144.6	135.7	126.8	115.7	113.5	115.7
45°	2952.7	2378.6	267.0	162.4	151.3	131.3	115.7	100.1	80.1	73.4	75.7
47.5°	3346.5	2554.4	209.2	153.5	146.9	115.7	95.7	69.0	49.0	44.5	46.7
50°	3764.8	2723.5	178.0	142.4	138.0	100.1	69.0	42.3	28.9	28.9	31.2
52.5°	4120.8	2819.2	162.4	133.5	124.6	82.3	44.5	24.5	17.8	17.8	20.0
55°	4465.7	2870.3	151.3	124.6	106.8	57.9	24.5	15.6	11.1	11.1	11.1
57.5°	4821.7	2892.6	138.0	113.5	84.6	35.6	13.4	8.9	6.7	6.7	6.7
60°	5137.7	2850.3	117.9	93.5	55.6	17.8	6.7	6.7	4.5	2.2	2.2
62.5°	5402.5	2770.2	82.3	66.8	33.4	8.9	4.5	2.2	0.0	0.0	0.0
65°	5564.9	2641.2	53.4	44.5	20.0	6.7	2.2	0.0	0.0	0.0	0.0
67.5°	5518.2	2398.6	33.4	28.9	8.9	4.5	2.2	0.0	0.0	0.0	0.0
70°	4979.7	1967.0	24.5	17.8	6.7	2.2	0.0	0.0	0.0	0.0	0.0
72.5°	3589.0	1330.6	17.8	11.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	1726.7	473.9	11.1	8.9	2.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	422.8	104.6	6.7	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	93.5	20.0	4.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.2	8.9	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.7	2.2	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)