

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: P399221

Luminaire Tested: **ARCH-L-PA3-110-750-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399221  
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-PA3-110-750-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 485mA 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: 12636 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

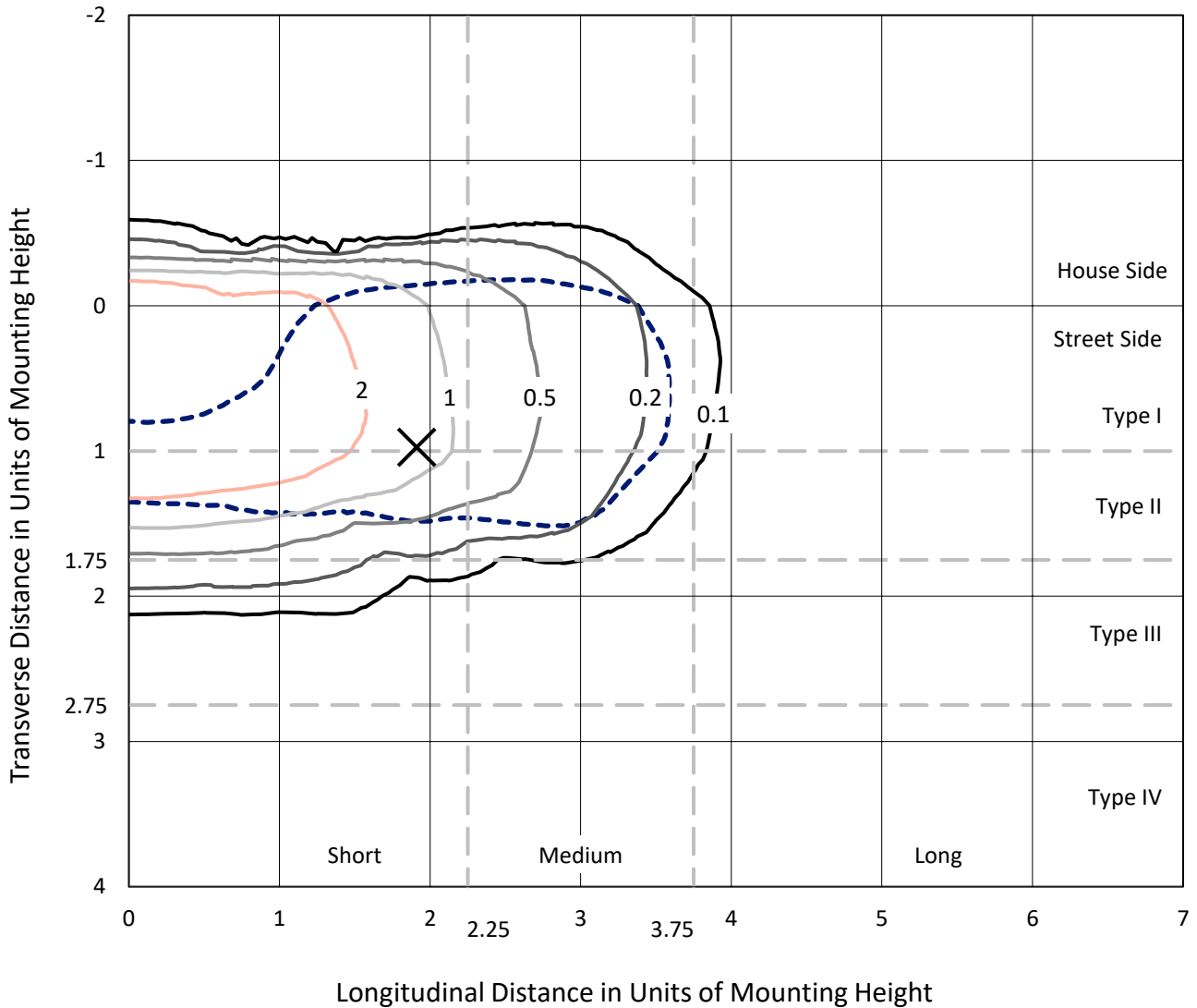
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

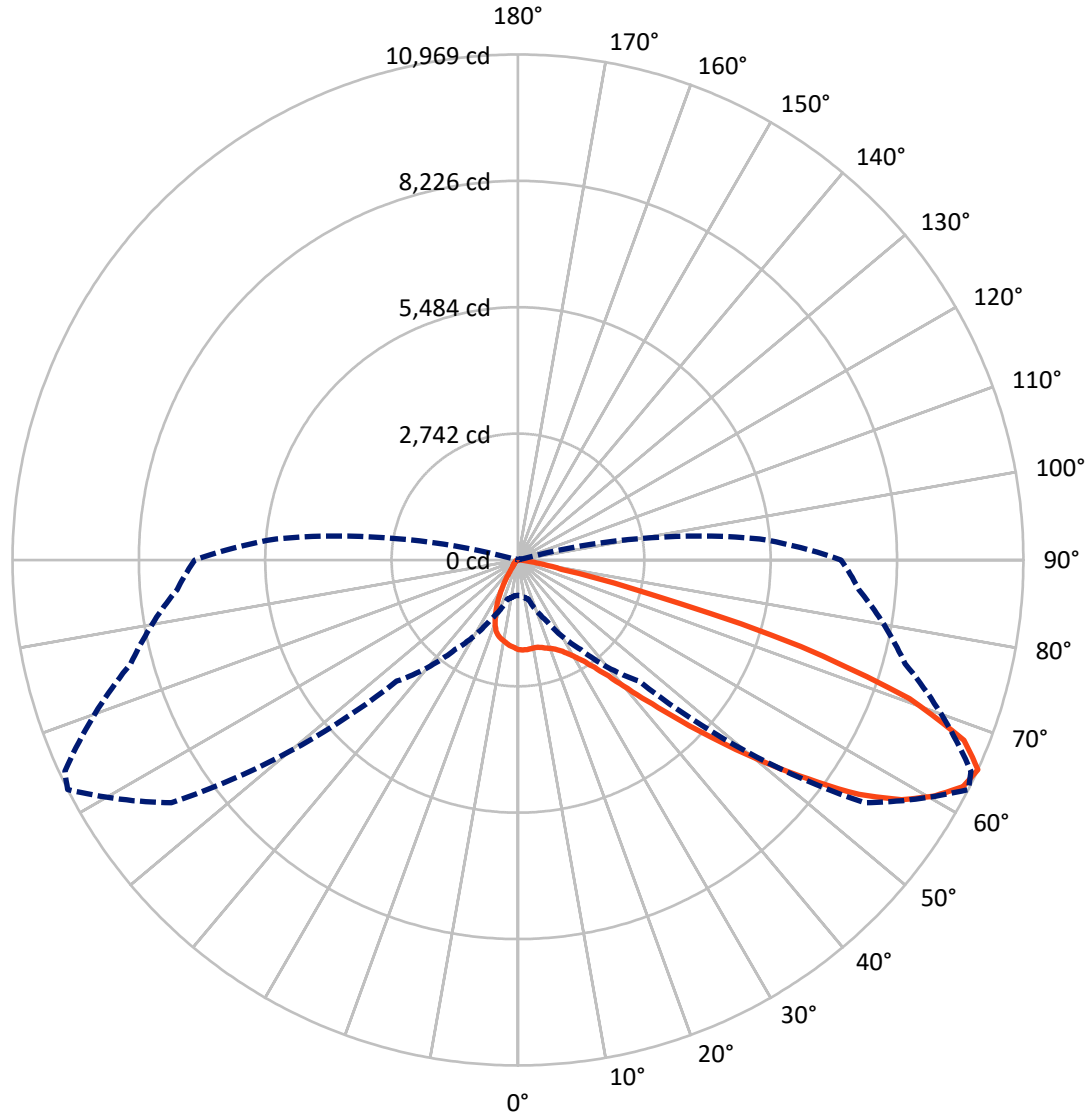
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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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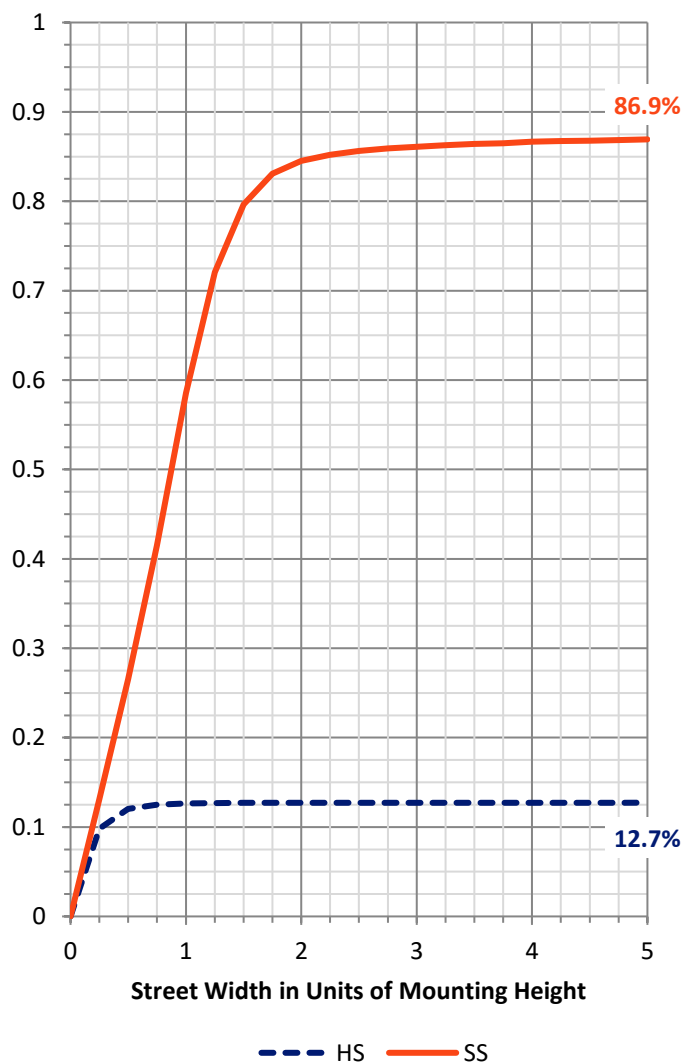
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1626.2	0.0	1626.2
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	11009.8	0.0	11009.8
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	12636.0	0.0	12636.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.6	1.4
10°-20°	438.2	3.5
20°-30°	649.5	5.1
30°-40°	1205.9	9.5
40°-50°	2554.6	20.2
50°-60°	3532.3	28.0
60°-70°	2827.7	22.4
70°-80°	1174.9	9.3
80°-90°	75.4	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°	12636.0	100.0
0°-180°	12636.0	100.0

**Coefficient of Utilization**

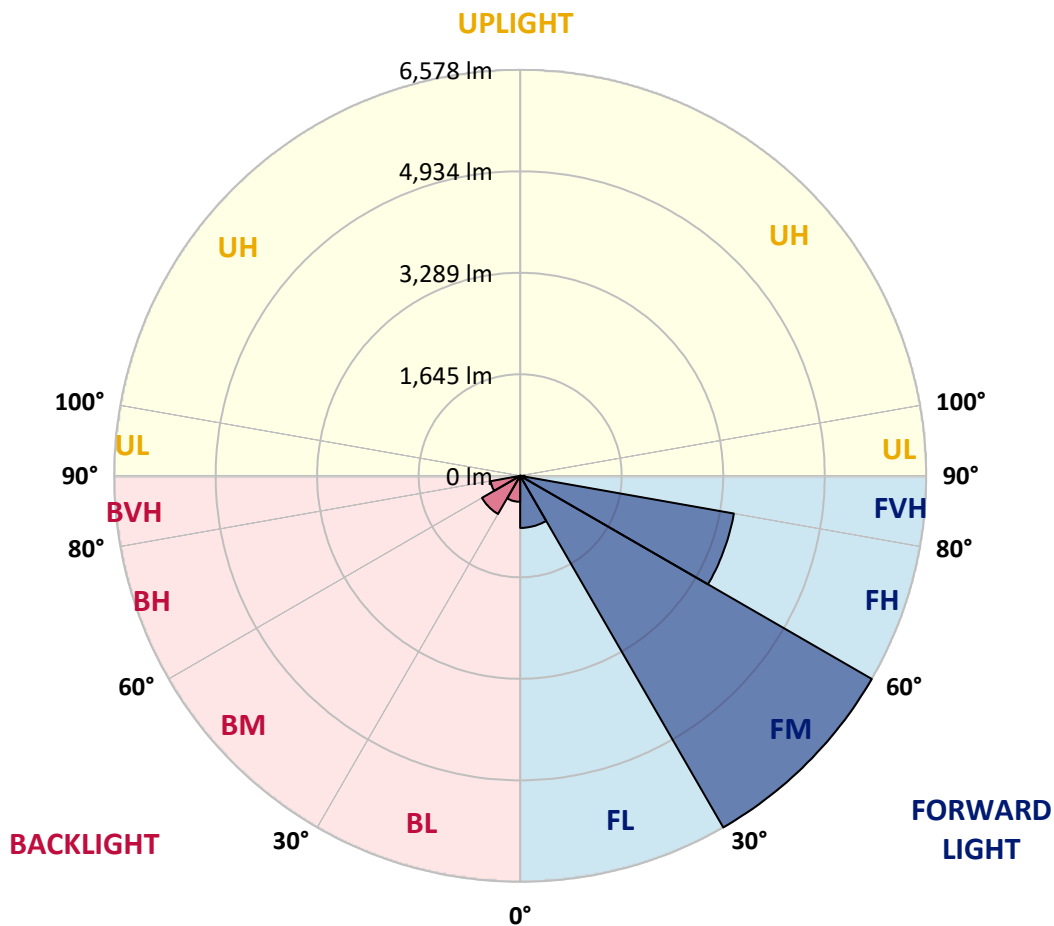


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	843.8	6.7			
FM (30°-60°)	6578.4	52.1			
FH (60°-80°)	3515.6	27.8			G2/5000
FVH (80°-90°)	72.0	0.6			G1/100
BL (0°-30°)	421.5	3.3	B1/500		
BM (30°-60°)	714.4	5.7	B1/1000		
BH (60°-80°)	487.0	3.9	B1/500		G1/500
BVH (80°-90°)	3.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6
2.5°	1980.0	1975.2	1970.4	1968.1	1968.1	1965.7	1956.1	1953.7	1949.0	1944.2	1939.4
5°	1960.9	1953.7	1951.4	1953.7	1956.1	1960.9	1956.1	1956.1	1951.4	1946.6	1937.0
7.5°	1913.2	1908.4	1910.8	1918.0	1920.3	1937.0	1939.4	1946.6	1946.6	1941.8	1934.7
10°	1855.9	1853.5	1853.5	1865.5	1877.4	1901.3	1918.0	1937.0	1939.4	1939.4	1927.5
12.5°	1813.0	1810.6	1817.8	1832.1	1855.9	1886.9	1915.6	1944.2	1949.0	1951.4	1932.3
15°	1786.8	1786.8	1796.3	1824.9	1858.3	1901.3	1934.7	1972.8	1977.6	1975.2	1949.0
17.5°	1762.9	1765.3	1784.4	1832.1	1870.2	1927.5	1968.1	2011.0	2013.4	2011.0	1968.1
20°	1753.4	1758.1	1786.8	1848.8	1891.7	1956.1	2008.6	2051.5	2053.9	2044.4	1987.1
22.5°	1779.6	1782.0	1817.8	1884.6	1925.1	1996.7	2063.5	2104.0	2106.4	2092.1	2015.8
25°	1870.2	1870.2	1901.3	1958.5	1994.3	2065.9	2137.4	2185.1	2185.1	2168.4	2080.2
27.5°	2082.6	2063.5	2056.3	2073.0	2084.9	2161.3	2237.6	2297.3	2294.9	2271.0	2163.7
30°	2492.9	2445.2	2368.8	2282.9	2240.0	2292.5	2364.0	2440.4	2438.0	2399.8	2266.2
32.5°	3182.3	3113.1	2931.8	2705.2	2521.5	2461.9	2528.6	2612.1	2614.5	2569.2	2430.8
35°	4148.4	4038.7	3714.3	3399.4	2979.5	2752.9	2772.0	2862.6	2891.2	2867.4	2707.6
37.5°	5078.8	4978.6	4668.5	4231.9	3661.8	3199.0	3117.9	3196.6	3230.0	3230.0	3060.6
40°	6016.3	5899.4	5625.1	5186.1	4585.0	3895.6	3604.5	3668.9	3704.7	3711.9	3490.0
42.5°	6767.7	6691.4	6481.5	6140.3	5577.3	5116.9	4305.9	4270.1	4303.5	4277.2	3988.6
45°	7287.8	7228.1	7082.6	6953.8	6679.5	6448.1	5243.4	5002.4	5023.9	4933.3	4549.2
47.5°	7395.1	7328.3	7297.3	7476.2	7671.8	7729.1	6395.6	5873.1	5851.7	5651.3	5131.2
50°	6927.5	6934.7	7049.2	7559.7	8375.6	8890.8	7731.5	6856.0	6777.3	6331.2	5672.8
52.5°	5918.5	6033.0	6321.6	7149.4	8590.2	9735.3	9067.4	7898.4	7776.8	6992.0	6078.3
55°	4630.3	4778.2	5252.9	6204.7	8141.8	10112.2	10193.3	8981.5	8704.8	7488.1	6393.2
57.5°	3442.3	3487.6	4041.1	4909.4	7080.2	9742.5	10770.6	9816.4	9461.0	7884.1	6705.7
60°	2144.6	2173.2	2757.7	3738.1	5362.6	8375.6	10770.6	10391.3	10052.6	8239.6	6992.0
62.5°	1333.5	1343.0	1562.5	2562.0	3645.1	6211.9	10324.5	10837.4	10565.5	8494.8	7237.7
65°	768.1	777.7	880.3	1448.0	2371.2	3719.0	9184.2	10968.6	10846.9	8697.6	7428.5
67.5°	560.6	565.4	605.9	813.5	1550.6	1910.8	6898.9	10441.4	10594.1	8797.8	7423.7
70°	486.6	493.8	546.3	634.5	1118.8	1173.7	3511.5	9017.3	9444.3	8654.7	7201.9
72.5°	374.5	384.1	462.8	596.4	820.6	844.5	1271.5	6417.0	7063.5	7760.1	6593.6
75°	257.6	267.2	345.9	491.4	677.5	632.2	699.0	2953.3	3726.2	5205.2	5019.1
77.5°	164.6	167.0	217.1	357.8	584.5	448.5	479.5	963.7	1352.6	2354.5	2368.8
80°	109.7	112.1	133.6	231.4	400.8	415.1	295.8	446.1	489.0	687.0	477.1
82.5°	66.8	66.8	90.6	145.5	243.3	343.5	193.2	233.8	250.5	264.8	124.0
85°	26.2	26.2	54.9	95.4	152.7	159.8	121.7	136.0	143.1	155.1	57.3
87.5°	7.2	7.2	31.0	52.5	66.8	74.0	74.0	66.8	71.6	88.3	28.6
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°	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6	1946.6
2.5°	1937.0	1929.9	1920.3	1910.8	1901.3	1894.1	1886.9	1886.9	1882.2	1875.0	1870.2
5°	1932.3	1920.3	1898.9	1882.2	1855.9	1836.8	1822.5	1810.6	1803.5	1786.8	1784.4
7.5°	1925.1	1910.8	1879.8	1846.4	1803.5	1770.1	1736.7	1712.8	1688.9	1669.9	1665.1
10°	1913.2	1896.5	1851.2	1803.5	1743.8	1681.8	1603.1	1512.4	1428.9	1381.2	1366.9
12.5°	1913.2	1891.7	1832.1	1767.7	1681.8	1529.1	1328.7	1128.3	973.3	904.1	885.0
15°	1925.1	1896.5	1817.8	1729.5	1569.7	1259.6	935.1	670.3	501.0	448.5	436.5
17.5°	1937.0	1896.5	1796.3	1677.0	1364.5	913.7	532.0	353.1	298.2	286.3	286.3
20°	1941.8	1891.7	1767.7	1579.2	1090.2	567.8	317.3	264.8	243.3	236.2	236.2
22.5°	1960.9	1894.1	1746.2	1438.5	792.0	334.0	250.5	221.9	200.4	193.2	193.2
25°	2008.6	1922.7	1751.0	1259.6	508.1	252.9	212.3	183.7	162.2	152.7	152.7
27.5°	2084.9	1987.1	1777.2	1052.0	319.7	217.1	178.9	147.9	131.2	121.7	121.7
30°	2170.8	2058.7	1789.1	813.5	238.6	183.7	145.5	116.9	105.0	97.8	95.4
32.5°	2321.1	2182.7	1779.6	558.2	195.6	155.1	116.9	93.0	83.5	81.1	81.1
35°	2562.0	2399.8	1760.5	350.7	162.2	124.0	93.0	76.3	69.2	66.8	64.4
37.5°	2888.9	2717.1	1703.3	231.4	133.6	97.8	76.3	64.4	57.3	54.9	54.9
40°	3287.2	3079.7	1593.5	176.5	114.5	78.7	64.4	54.9	50.1	47.7	47.7
42.5°	3742.9	3482.9	1419.4	152.7	95.4	66.8	54.9	45.3	42.9	40.6	40.6
45°	4241.5	3905.1	1178.4	136.0	81.1	54.9	45.3	40.6	35.8	35.8	33.4
47.5°	4771.0	4329.7	906.5	119.3	69.2	47.7	40.6	33.4	31.0	28.6	28.6
50°	5281.5	4709.0	636.9	102.6	57.3	40.6	33.4	28.6	26.2	23.9	23.9
52.5°	5641.7	4938.0	450.9	88.3	47.7	35.8	26.2	21.5	19.1	19.1	19.1
55°	5930.4	5081.2	314.9	74.0	40.6	31.0	21.5	16.7	16.7	14.3	14.3
57.5°	6202.3	5174.2	231.4	62.0	33.4	23.9	16.7	11.9	11.9	9.5	9.5
60°	6483.8	5224.3	176.5	50.1	28.6	19.1	11.9	9.5	7.2	7.2	7.2
62.5°	6767.7	5255.3	136.0	40.6	23.9	14.3	9.5	7.2	4.8	2.4	2.4
65°	7015.8	5264.8	105.0	31.0	19.1	9.5	7.2	2.4	0.0	0.0	0.0
67.5°	7089.8	5155.1	81.1	23.9	14.3	7.2	4.8	0.0	0.0	0.0	0.0
70°	6889.4	4864.1	62.0	19.1	11.9	4.8	2.4	0.0	0.0	0.0	0.0
72.5°	6114.1	4079.2	47.7	11.9	9.5	4.8	2.4	0.0	0.0	0.0	0.0
75°	4375.0	2175.6	33.4	9.5	7.2	2.4	0.0	0.0	0.0	0.0	0.0
77.5°	2013.4	842.1	23.9	7.2	4.8	2.4	0.0	0.0	0.0	0.0	0.0
80°	393.6	209.9	9.5	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	90.6	35.8	4.8	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	31.0	11.9	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.9	4.8	2.4	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)