

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: P399558

Luminaire Tested: **ARCH-L-PA3-160-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399558  
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-PA3-160-727-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 705mA 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: 15026 lumens  
Efficiency: N/A  
Efficacy: 92.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3

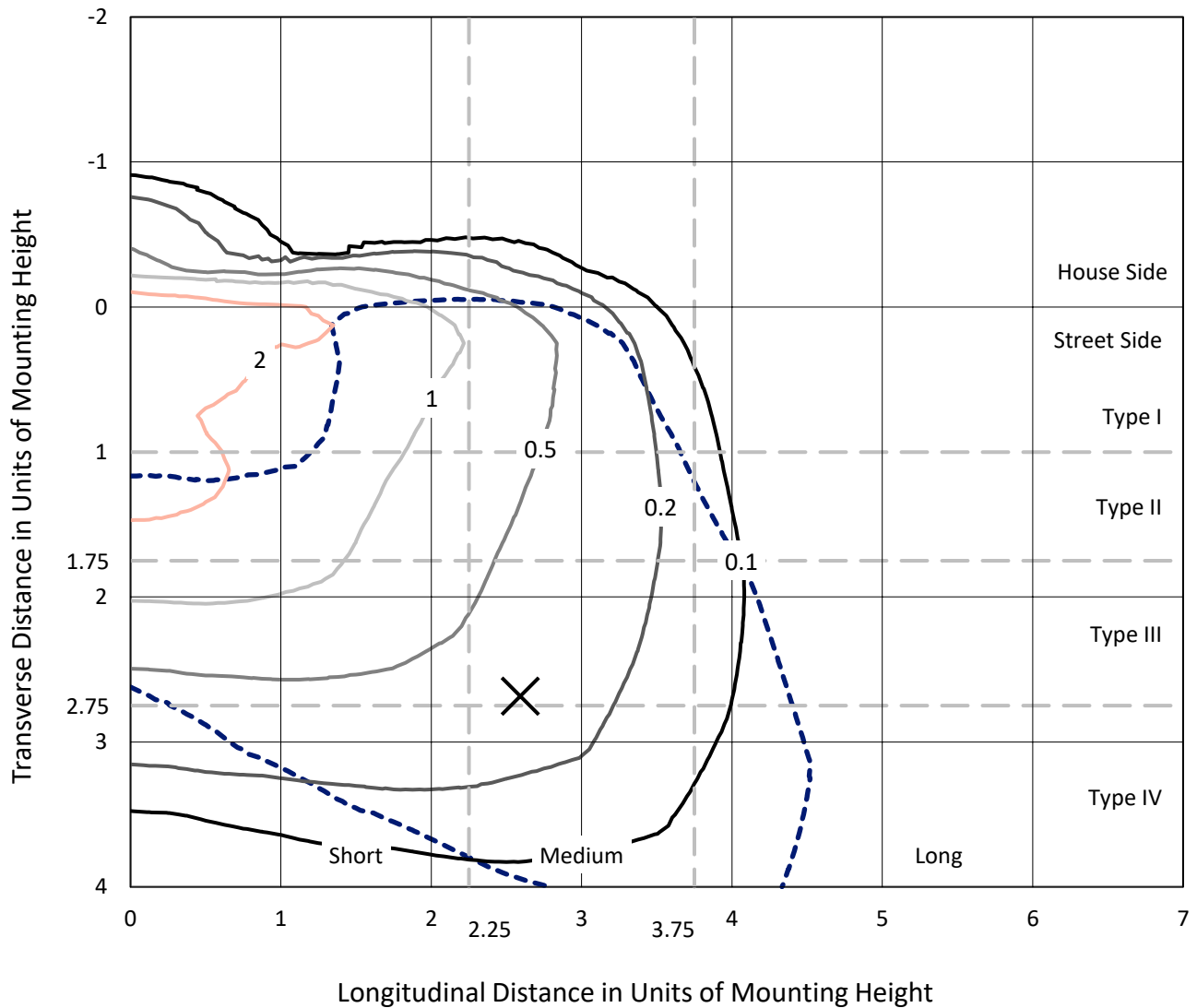
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

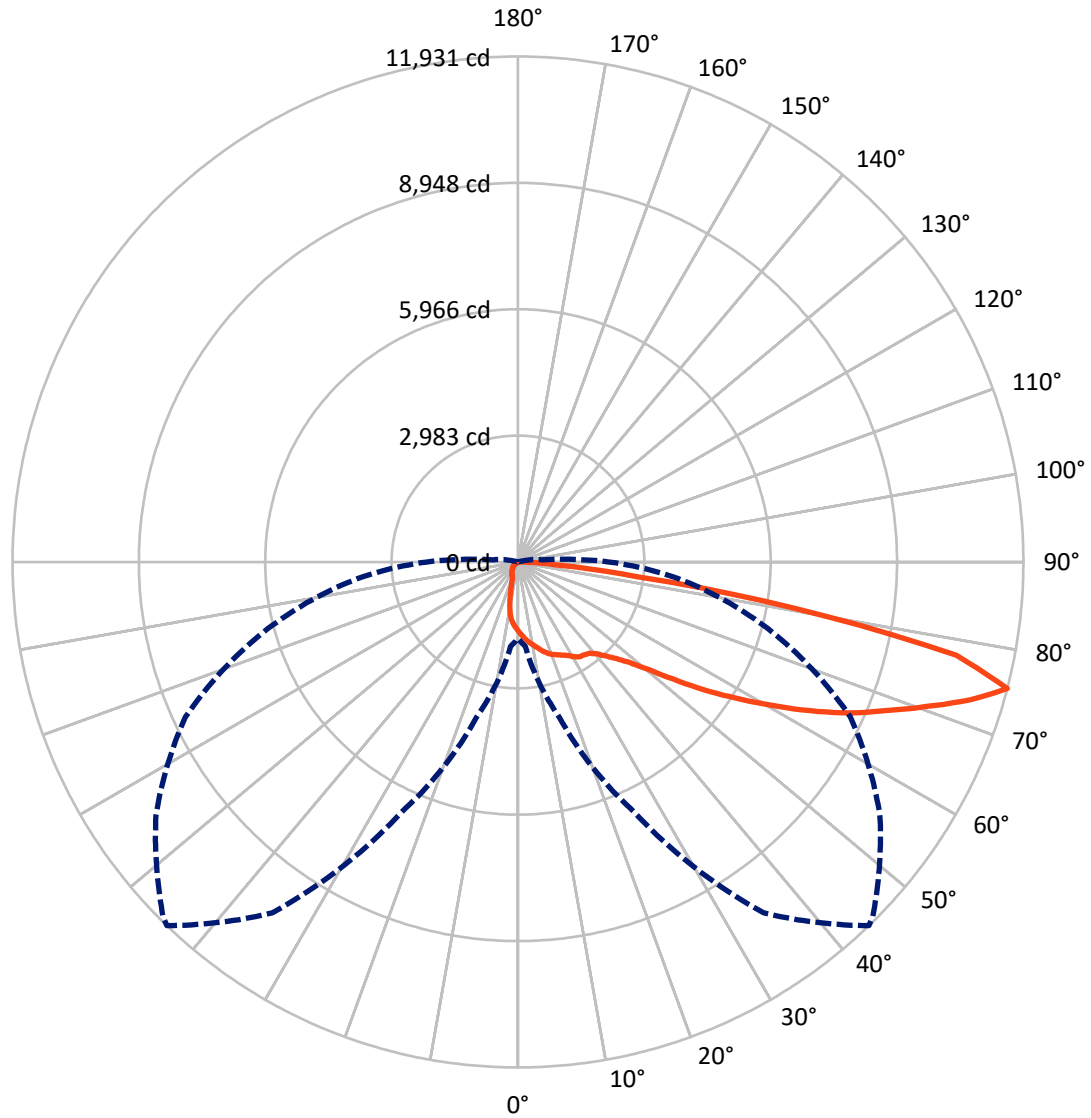
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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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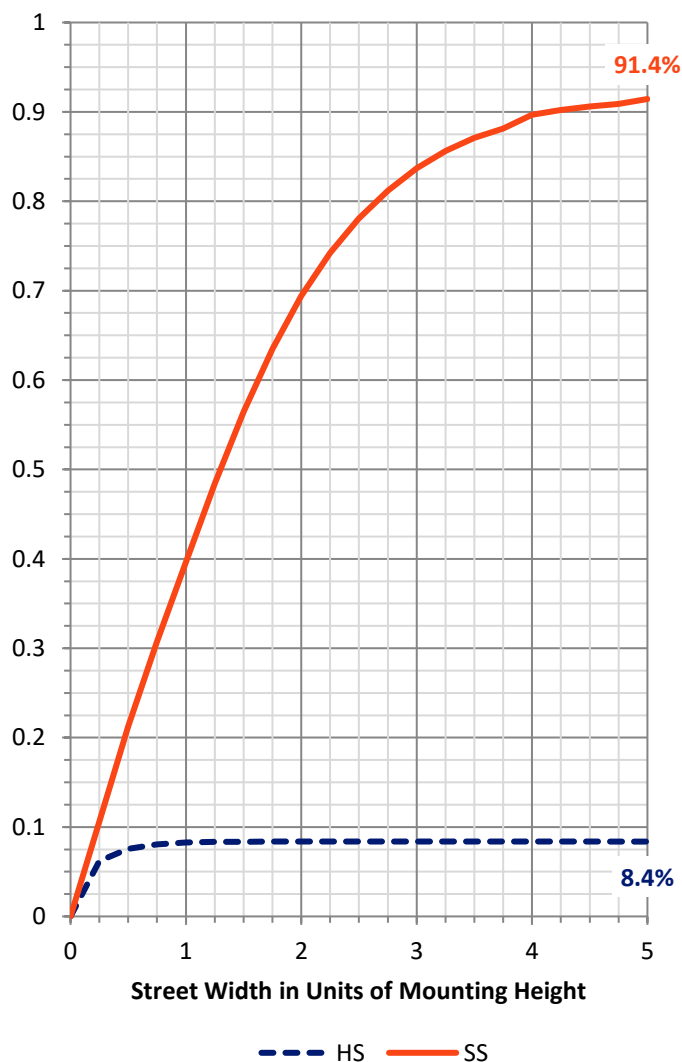
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1267.2	0.0	1267.2
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	13758.8	0.0	13758.8
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	15026.0	0.0	15026.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.2	1.0
10°-20°	432.2	2.9
20°-30°	713.3	4.7
30°-40°	1035.2	6.9
40°-50°	1682.8	11.2
50°-60°	2966.6	19.7
60°-70°	4263.6	28.4
70°-80°	3414.2	22.7
80°-90°	363.8	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°	15026.0	100.0
0°-180°	15026.0	100.0

**Coefficient of Utilization**



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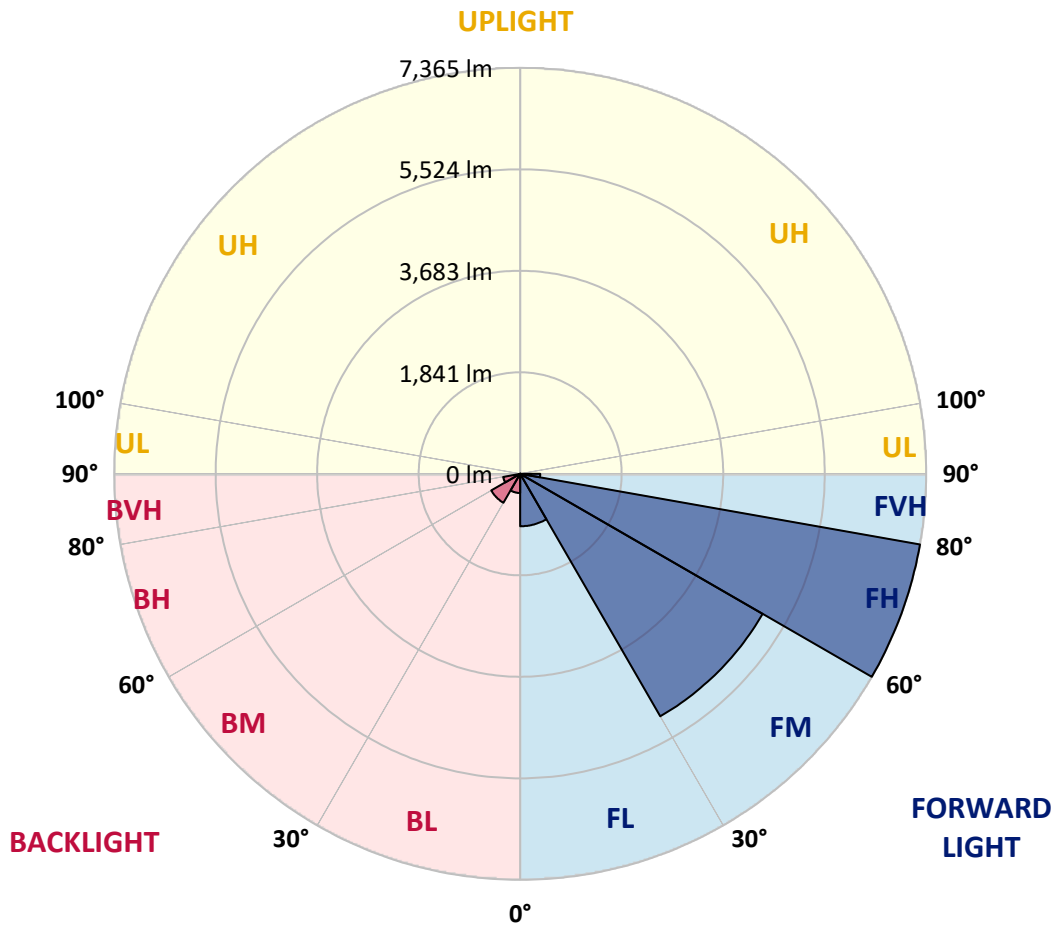
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	951.6	6.3			
FM (30°-60°)	5078.9	33.8			
FH (60°-80°)	7365.5	49.0			G3/7500
FVH (80°-90°)	362.8	2.4			G3/500
BL (0°-30°)	348.1	2.3	B1/500		
BM (30°-60°)	605.7	4.0	B1/1000		
BH (60°-80°)	312.4	2.1	B1/500		G1/500
BVH (80°-90°)	0.9	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°	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5
2.5°	1782.4	1779.7	1771.4	1757.5	1743.6	1729.8	1727.0	1704.8	1679.9	1660.5	1643.8
5°	1940.5	1937.7	1923.8	1893.3	1862.8	1826.8	1824.0	1771.4	1724.2	1671.6	1627.2
7.5°	2104.0	2098.5	2073.5	2026.4	1973.7	1918.3	1912.7	1835.1	1765.8	1696.5	1632.8
10°	2231.5	2226.0	2189.9	2134.5	2062.4	1993.1	1984.8	1904.4	1835.1	1746.4	1660.5
12.5°	2356.3	2345.2	2298.0	2237.1	2148.4	2081.8	2073.5	1990.3	1907.2	1815.7	1710.4
15°	2472.7	2458.8	2414.5	2336.9	2242.6	2178.8	2173.3	2084.6	1998.7	1893.3	1776.9
17.5°	2553.1	2547.5	2494.9	2408.9	2317.5	2264.8	2259.2	2167.8	2081.8	1970.9	1846.2
20°	2594.7	2594.7	2544.8	2450.5	2367.4	2331.3	2323.0	2237.1	2153.9	2048.6	1918.3
22.5°	2603.0	2611.3	2572.5	2469.9	2408.9	2378.4	2372.9	2298.0	2217.7	2120.6	1998.7
25°	2619.6	2619.6	2600.2	2489.3	2445.0	2436.7	2433.9	2367.4	2295.3	2198.3	2079.1
27.5°	2639.0	2639.0	2625.2	2517.0	2500.4	2497.6	2494.9	2464.4	2406.2	2292.5	2173.3
30°	2688.9	2691.7	2680.6	2572.5	2561.4	2591.9	2597.4	2580.8	2508.7	2367.4	2270.3
32.5°	2813.7	2788.7	2758.2	2611.3	2630.7	2669.5	2672.3	2639.0	2561.4	2447.7	2386.8
35°	3126.9	2980.0	2841.4	2644.6	2652.9	2691.7	2697.2	2694.5	2647.3	2550.3	2519.8
37.5°	3418.0	3210.1	3013.2	2722.2	2694.5	2736.0	2747.1	2794.2	2758.2	2691.7	2700.0
40°	3587.1	3506.7	3368.1	2935.6	2777.6	2841.4	2852.5	2924.5	2910.7	2883.0	2935.6
42.5°	4108.2	4113.8	3964.1	3254.4	2930.1	3032.6	3046.5	3104.7	3124.1	3138.0	3265.5
45°	4712.5	4731.9	4695.9	3828.2	3218.4	3251.6	3271.0	3348.7	3420.7	3509.4	3742.3
47.5°	5438.8	5422.2	5289.1	4529.6	3720.1	3534.4	3548.3	3697.9	3822.7	4016.7	4349.4
50°	6081.9	6123.5	5871.3	5183.8	4427.0	3980.7	3966.8	4113.8	4338.3	4610.0	5028.5
52.5°	6730.6	6669.6	6328.6	5832.4	5264.2	4587.8	4546.2	4626.6	4942.6	5264.2	5693.8
55°	6902.5	6908.0	6791.6	6542.1	5962.7	5325.2	5255.9	5250.3	5643.9	5862.9	6392.4
57.5°	7240.7	7254.5	7282.2	7332.1	7057.7	6062.5	5990.4	5912.8	6295.4	6422.9	7093.7
60°	7584.4	7601.0	7770.1	8039.0	7856.1	6858.1	6780.5	6597.5	6811.0	6982.9	7831.1
62.5°	7540.0	7656.5	8147.1	8682.1	8660.0	7731.3	7634.3	7193.5	7329.4	7479.1	8507.5
65°	6808.2	6933.0	8036.2	8859.5	9466.6	8593.4	8435.4	7808.9	7817.2	7997.4	9158.9
67.5°	6154.0	6289.8	7343.2	8784.7	9998.9	9366.8	9203.3	8427.1	8296.8	8596.2	9508.2
70°	5777.0	5912.8	6791.6	8551.8	10148.6	10223.4	10082.0	9134.0	8867.9	9142.3	9117.3
72.5°	4521.3	4734.7	6087.5	8108.3	10309.3	11141.0	11030.1	10029.4	9353.0	8571.3	6941.3
75°	1801.8	1998.7	3800.5	6525.5	10107.0	11931.0	11845.1	10431.3	8657.2	6120.7	3553.8
77.5°	543.3	582.1	1056.2	3226.7	7409.8	10578.2	10550.5	8770.8	6126.3	2841.4	970.2
80°	180.2	199.6	324.3	889.8	3381.9	6608.6	6733.4	5588.5	2783.2	651.4	196.8
82.5°	74.8	83.2	163.6	357.6	1197.5	2846.9	2805.3	2503.2	970.2	404.7	72.1
85°	19.4	24.9	74.8	205.1	438.0	981.3	1031.2	839.9	548.9	335.4	22.2
87.5°	0.0	0.0	36.0	83.2	196.8	296.6	310.5	255.0	310.5	252.3	11.1
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°	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5	1635.5
2.5°	1630.0	1616.1	1591.2	1574.5	1552.4	1546.8	1535.7	1521.9	1519.1	1505.2	1508.0
5°	1602.3	1580.1	1535.7	1505.2	1469.2	1458.1	1438.7	1424.8	1413.8	1394.4	1397.1
7.5°	1596.7	1563.4	1502.5	1444.3	1386.0	1344.5	1286.2	1239.1	1200.3	1158.7	1167.0
10°	1616.1	1574.5	1488.6	1408.2	1302.9	1169.8	1017.4	917.6	867.7	817.8	823.3
12.5°	1654.9	1605.0	1494.1	1372.2	1158.7	931.4	720.7	584.9	548.9	526.7	529.5
15°	1713.1	1652.2	1510.8	1302.9	964.7	673.6	479.6	421.4	435.2	443.5	443.5
17.5°	1774.1	1704.8	1524.6	1178.1	745.7	471.3	390.9	385.3	404.7	424.1	424.1
20°	1849.0	1760.3	1527.4	1020.1	537.8	382.5	368.7	368.7	382.5	404.7	404.7
22.5°	1921.0	1821.3	1502.5	839.9	410.3	354.8	354.8	354.8	363.1	385.3	388.1
25°	2007.0	1896.1	1449.8	648.7	352.1	338.2	338.2	341.0	346.5	365.9	368.7
27.5°	2098.5	1973.7	1361.1	474.0	321.6	318.8	321.6	324.3	327.1	346.5	352.1
30°	2203.8	2059.7	1247.4	354.8	293.8	293.8	302.2	307.7	307.7	324.3	329.9
32.5°	2325.8	2173.3	1111.6	293.8	266.1	263.3	277.2	285.5	285.5	299.4	304.9
35°	2478.2	2289.7	948.0	260.6	243.9	238.4	243.9	257.8	263.3	274.4	277.2
37.5°	2680.6	2428.3	773.4	241.2	227.3	216.2	216.2	219.0	230.1	241.2	243.9
40°	2938.4	2580.8	601.5	227.3	210.7	199.6	191.3	188.5	185.7	194.0	199.6
42.5°	3262.7	2752.7	449.1	213.4	196.8	180.2	169.1	158.0	144.1	141.4	144.1
45°	3678.5	2963.3	332.6	202.4	188.5	163.6	144.1	124.7	99.8	91.5	94.3
47.5°	4169.2	3182.3	260.6	191.3	183.0	144.1	119.2	85.9	61.0	55.4	58.2
50°	4690.3	3393.0	221.8	177.4	171.9	124.7	85.9	52.7	36.0	36.0	38.8
52.5°	5133.9	3512.2	202.4	166.3	155.2	102.6	55.4	30.5	22.2	22.2	24.9
55°	5563.6	3576.0	188.5	155.2	133.1	72.1	30.5	19.4	13.9	13.9	13.9
57.5°	6007.1	3603.7	171.9	141.4	105.3	44.4	16.6	11.1	8.3	8.3	8.3
60°	6400.7	3551.0	146.9	116.4	69.3	22.2	8.3	8.3	5.5	2.8	2.8
62.5°	6730.6	3451.2	102.6	83.2	41.6	11.1	5.5	2.8	0.0	0.0	0.0
65°	6933.0	3290.5	66.5	55.4	24.9	8.3	2.8	0.0	0.0	0.0	0.0
67.5°	6874.7	2988.3	41.6	36.0	11.1	5.5	2.8	0.0	0.0	0.0	0.0
70°	6203.9	2450.5	30.5	22.2	8.3	2.8	0.0	0.0	0.0	0.0	0.0
72.5°	4471.4	1657.7	22.2	13.9	5.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	2151.1	590.5	13.9	11.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	526.7	130.3	8.3	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	116.4	24.9	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.8	11.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.9	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.3	2.8	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)