

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: P237190

Luminaire Tested: **ARCH-L-AF72-170-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237190
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T3-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15523.6 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G3

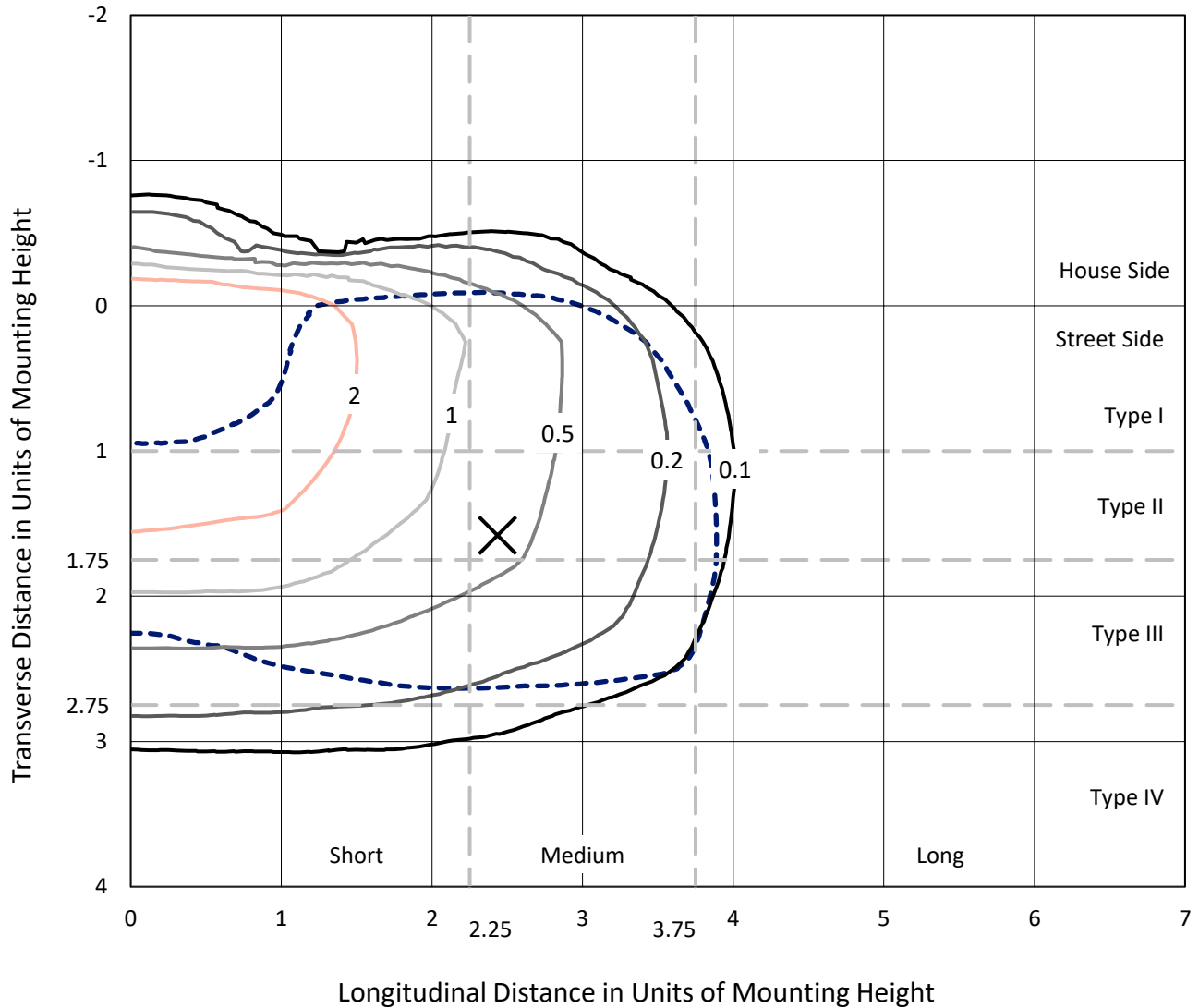
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

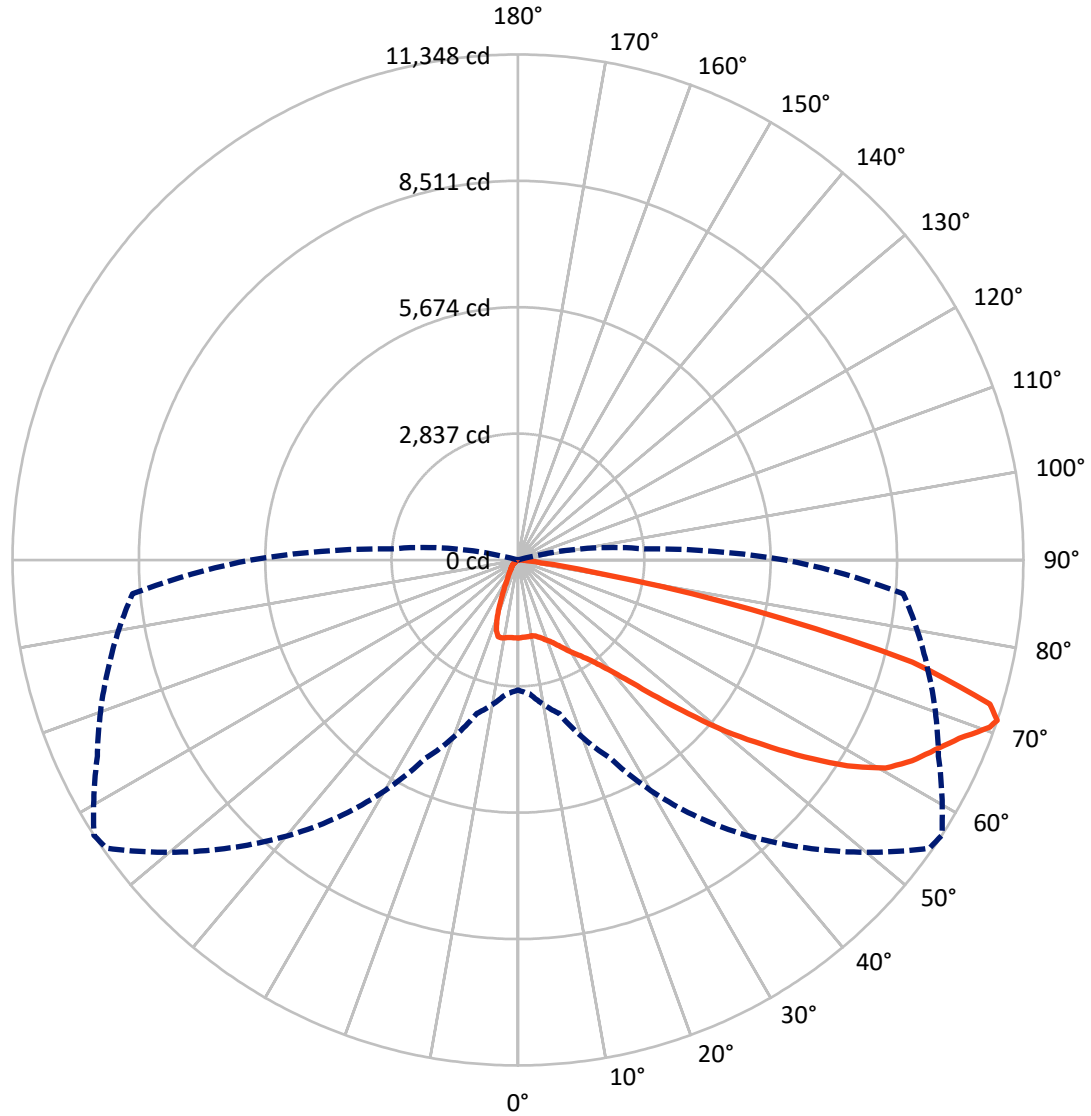
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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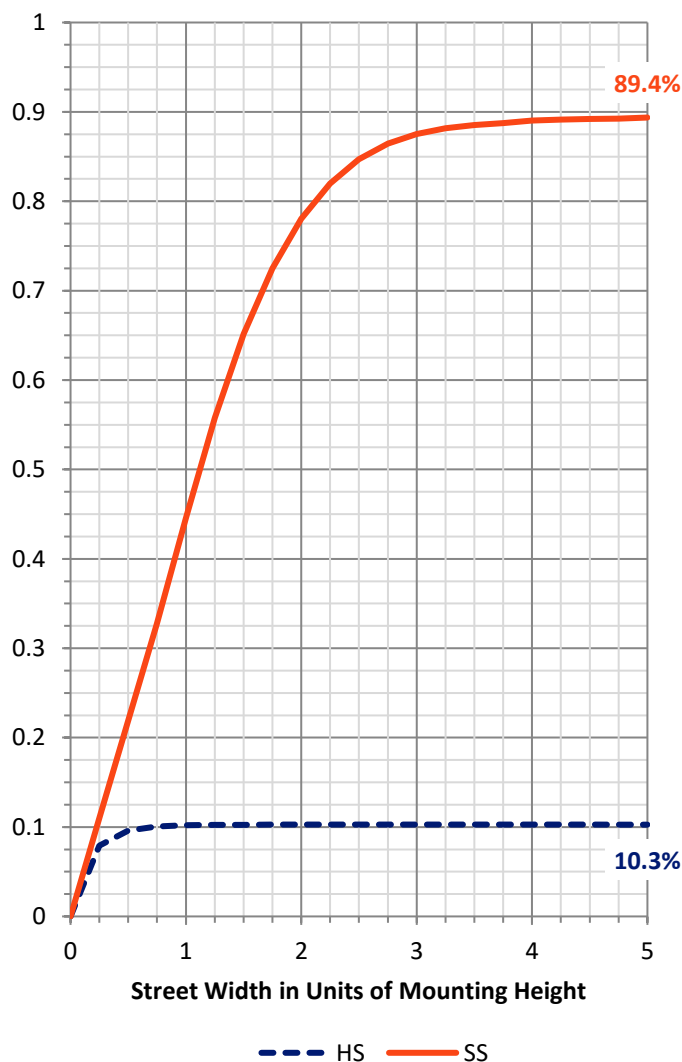
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1608.7	0.0	1608.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	13914.8	0.0	13914.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	15523.6	0.0	15523.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.8	1.1
10°-20°	440.5	2.8
20°-30°	687.2	4.4
30°-40°	1161.5	7.5
40°-50°	2256.0	14.5
50°-60°	3788.5	24.4
60°-70°	4521.2	29.1
70°-80°	2382.7	15.3
80°-90°	121.1	0.8
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°	15523.6	100.0
0°-180°	15523.6	100.0

Coefficient of Utilization



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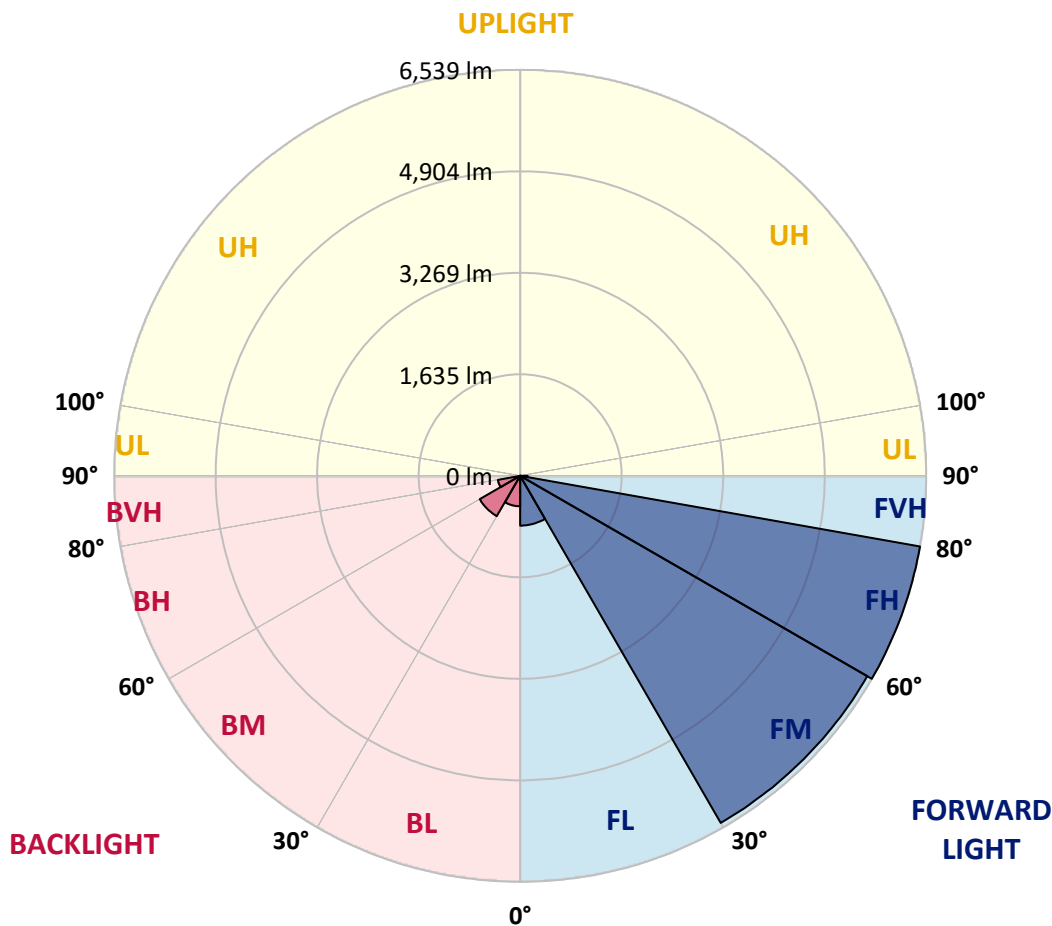
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	801.4	5.2			
FM (30°-60°)	6454.8	41.6			
FH (60°-80°)	6538.6	42.1			G3/7500
FVH (80°-90°)	119.9	0.8			G2/225
BL (0°-30°)	491.1	3.2	B1/500		
BM (30°-60°)	751.2	4.8	B1/1000		
BH (60°-80°)	365.3	2.4	B1/500		G1/500
BVH (80°-90°)	1.2	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3
2.5°	1729.0	1729.0	1729.0	1732.8	1736.3	1736.3	1743.6	1740.0	1740.0	1740.0	1747.2
5°	1682.0	1685.7	1689.2	1696.5	1711.0	1721.8	1740.0	1740.0	1743.6	1750.8	1754.3
7.5°	1616.9	1620.6	1631.5	1645.9	1674.8	1700.2	1729.0	1736.3	1747.2	1765.3	1772.5
10°	1577.1	1584.4	1598.9	1616.9	1649.5	1682.0	1718.2	1729.0	1761.6	1794.1	1812.3
12.5°	1566.3	1569.9	1584.4	1613.3	1653.1	1692.9	1740.0	1750.8	1797.8	1848.4	1877.4
15°	1584.4	1588.0	1595.1	1627.8	1674.8	1725.4	1786.9	1801.4	1859.3	1917.2	1953.3
17.5°	1616.9	1616.9	1624.1	1653.1	1703.8	1761.6	1841.2	1862.9	1928.0	1993.1	2032.9
20°	1638.7	1638.7	1649.5	1678.4	1736.3	1812.3	1906.3	1935.3	2007.6	2080.0	2116.2
22.5°	1660.3	1664.0	1674.8	1707.4	1772.5	1877.4	1985.9	2014.8	2098.0	2174.0	2210.2
25°	1721.8	1718.2	1721.8	1750.8	1826.7	1957.0	2094.4	2130.5	2217.4	2300.6	2318.7
27.5°	1891.9	1884.6	1837.6	1819.5	1877.4	2040.2	2231.8	2268.0	2369.3	2452.6	2452.6
30°	2282.5	2268.0	2152.3	2004.1	1957.0	2116.2	2362.0	2412.8	2543.0	2615.3	2593.6
32.5°	2778.1	2745.5	2597.2	2344.0	2155.9	2217.4	2499.6	2557.4	2723.9	2785.3	2738.2
35°	3320.7	3317.1	3132.6	2807.1	2539.4	2427.2	2676.9	2745.5	2955.4	3009.6	2933.6
37.5°	3895.8	3910.3	3787.4	3338.8	3024.1	2770.9	2912.0	2991.5	3248.4	3313.5	3241.0
40°	4536.1	4532.5	4485.4	3953.8	3606.4	3259.2	3252.0	3324.3	3635.4	3736.6	3635.4
42.5°	5346.4	5339.2	5169.2	4691.7	4311.8	3895.8	3747.5	3772.8	4120.1	4286.6	4138.2
45°	6171.2	6120.4	5925.1	5512.7	5176.3	4684.4	4402.3	4402.3	4698.9	4926.8	4695.3
47.5°	6630.5	6579.9	6500.3	6272.5	6171.2	5621.3	5205.3	5154.7	5386.2	5617.7	5292.1
50°	7234.6	7234.6	7035.6	6948.9	7122.5	6735.4	6091.5	6041.0	6153.1	6337.6	5910.7
52.5°	7712.1	7625.3	7484.3	7560.2	8055.8	7878.4	6977.9	6880.2	6966.9	7014.0	6449.7
55°	7911.0	7827.9	7817.1	8095.6	8862.4	8616.4	7885.8	7798.9	7791.8	7560.2	6919.9
57.5°	7950.9	7878.4	8016.0	8504.3	9647.4	9220.5	8790.1	8725.0	8522.4	7943.5	7401.0
60°	7614.5	7650.7	7983.5	8728.6	10110.5	9745.1	9553.3	9484.6	9017.9	8269.2	7936.4
62.5°	6923.5	7010.4	7632.6	8750.2	9940.4	9958.4	9976.6	9929.5	9401.4	8565.8	8475.4
65°	6106.1	6131.3	6880.2	8450.0	9643.8	9893.3	10287.7	10284.0	9694.3	8898.6	9083.0
67.5°	5031.7	5075.1	5722.6	7437.2	9050.5	9864.4	10696.4	10685.5	10027.2	9278.4	9444.8
70°	3743.9	3798.2	4322.8	5784.0	7726.6	9502.8	11231.8	11239.0	10378.1	9567.9	9195.3
71°	2919.2	3016.8	3566.7	4912.3	7050.2	9137.4	11282.4	11347.5	10417.9	9528.0	8681.5
72.5°	1432.5	1548.2	2239.2	3458.2	5802.2	8319.9	10949.6	11076.2	10168.3	9032.5	7422.7
75°	372.6	394.3	669.2	1414.4	3110.9	5512.7	8829.9	9151.8	8312.6	6876.6	4536.1
77.5°	235.1	242.3	314.6	549.8	1164.8	2094.4	5187.2	5346.4	4749.5	3483.5	1598.9
80°	166.4	170.0	199.0	354.5	680.0	611.3	1866.5	1935.3	1718.2	922.3	285.8
82.5°	101.3	101.3	144.7	228.0	419.5	332.8	492.0	524.6	463.0	256.9	94.1
85°	57.9	61.5	90.4	155.5	199.0	162.8	184.4	195.3	199.0	170.0	39.8
87.5°	47.0	50.7	79.5	130.2	108.5	79.5	79.5	83.1	86.9	101.3	18.1
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°	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3	1754.3
2.5°	1747.2	1747.2	1750.8	1747.2	1747.2	1747.2	1750.8	1750.8	1750.8	1758.0	1761.6
5°	1754.3	1754.3	1754.3	1750.8	1747.2	1747.2	1754.3	1758.0	1758.0	1768.9	1768.9
7.5°	1772.5	1772.5	1765.3	1758.0	1750.8	1740.0	1743.6	1747.2	1743.6	1747.2	1747.2
10°	1812.3	1812.3	1801.4	1786.9	1765.3	1732.8	1689.2	1635.1	1584.4	1566.3	1559.0
12.5°	1877.4	1873.8	1852.1	1826.7	1779.8	1667.7	1504.8	1313.1	1153.9	1110.5	1096.1
15°	1949.7	1942.5	1917.2	1873.8	1747.2	1450.5	1110.5	864.6	712.6	676.5	669.2
17.5°	2025.6	2014.8	1978.6	1891.9	1598.9	1078.0	716.2	542.6	459.4	452.2	455.8
20°	2105.3	2090.7	2040.2	1855.7	1291.3	719.8	463.0	419.5	412.4	412.4	415.9
22.5°	2195.7	2177.6	2108.9	1725.4	940.5	477.5	397.9	394.3	390.7	387.1	387.1
25°	2300.6	2278.9	2174.0	1490.3	647.5	390.7	379.7	369.0	361.7	354.5	350.8
27.5°	2427.2	2398.2	2224.6	1201.0	444.9	365.4	358.2	340.1	325.6	311.1	311.1
30°	2553.8	2517.7	2210.2	904.3	361.7	340.1	325.6	303.8	282.1	267.6	264.1
32.5°	2687.7	2651.5	2116.2	607.7	329.2	311.1	293.1	260.5	235.1	217.0	213.4
35°	2886.6	2857.6	1931.6	401.5	296.6	274.9	249.5	217.0	184.4	166.4	162.8
37.5°	3183.3	3147.1	1703.8	307.4	260.5	228.0	206.2	170.0	137.4	119.4	115.7
40°	3581.2	3472.6	1432.5	271.3	228.0	188.2	159.2	123.0	97.7	86.9	86.9
42.5°	4044.1	3787.4	1139.5	246.0	202.5	155.5	115.7	83.1	68.8	65.1	65.1
45°	4536.1	4080.3	846.4	228.0	177.2	123.0	83.1	57.9	50.7	47.0	47.0
47.5°	5042.6	4319.0	589.7	206.2	148.3	94.1	57.9	43.3	36.2	32.6	32.6
50°	5516.4	4474.6	415.9	184.4	126.6	68.8	43.3	32.6	25.3	25.3	25.3
52.5°	5845.6	4460.2	300.3	159.2	97.7	47.0	29.0	21.8	21.8	21.8	21.8
55°	6135.0	4405.9	235.1	137.4	75.9	32.6	21.8	18.1	18.1	14.4	14.4
57.5°	6381.0	4319.0	199.0	112.1	54.3	25.3	14.4	14.4	10.8	10.8	10.8
60°	6590.7	4210.6	166.4	94.1	36.2	18.1	10.8	7.2	7.2	3.6	7.2
62.5°	6876.6	4141.8	144.7	72.3	25.3	10.8	7.2	3.6	3.6	0.0	0.0
65°	7086.3	4011.6	123.0	50.7	14.4	7.2	3.6	3.6	0.0	0.0	0.0
67.5°	7093.5	3776.4	90.4	29.0	10.8	7.2	3.6	0.0	0.0	0.0	0.0
70°	6522.0	3219.5	57.9	14.4	7.2	3.6	3.6	0.0	0.0	0.0	0.0
71°	5997.5	2850.5	47.0	10.8	7.2	3.6	0.0	0.0	0.0	0.0	0.0
72.5°	4941.2	2094.4	36.2	10.8	3.6	3.6	0.0	0.0	0.0	0.0	0.0
75°	2723.9	759.7	18.1	7.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	871.8	231.5	10.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	148.3	36.2	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	50.7	14.4	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.4	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.2	3.6	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)