

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: P237233

Luminaire Tested: **ARCH-L-AF72-200-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237233
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-200-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 860mA 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: 17832 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

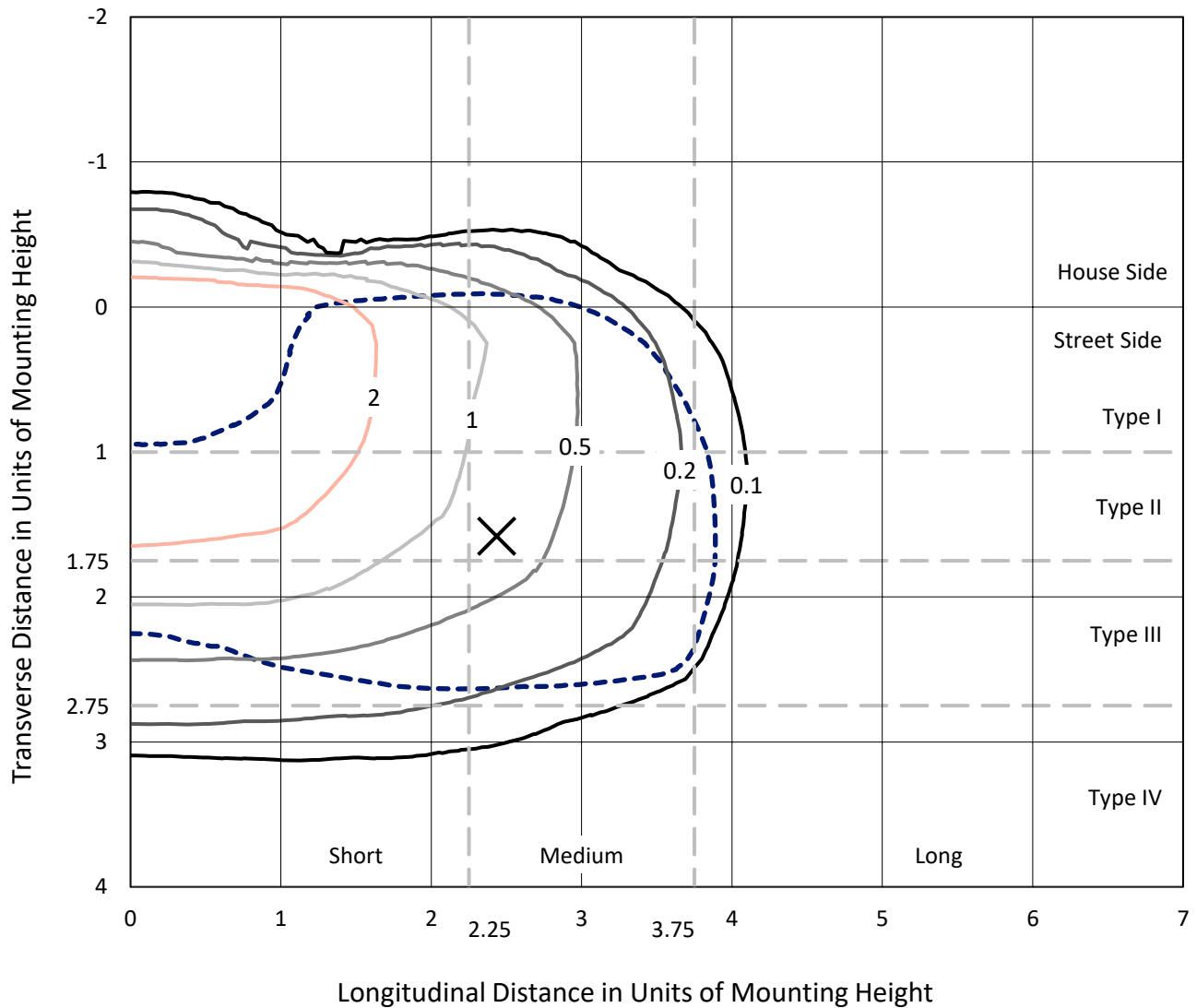
Input Watts (W): 201
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

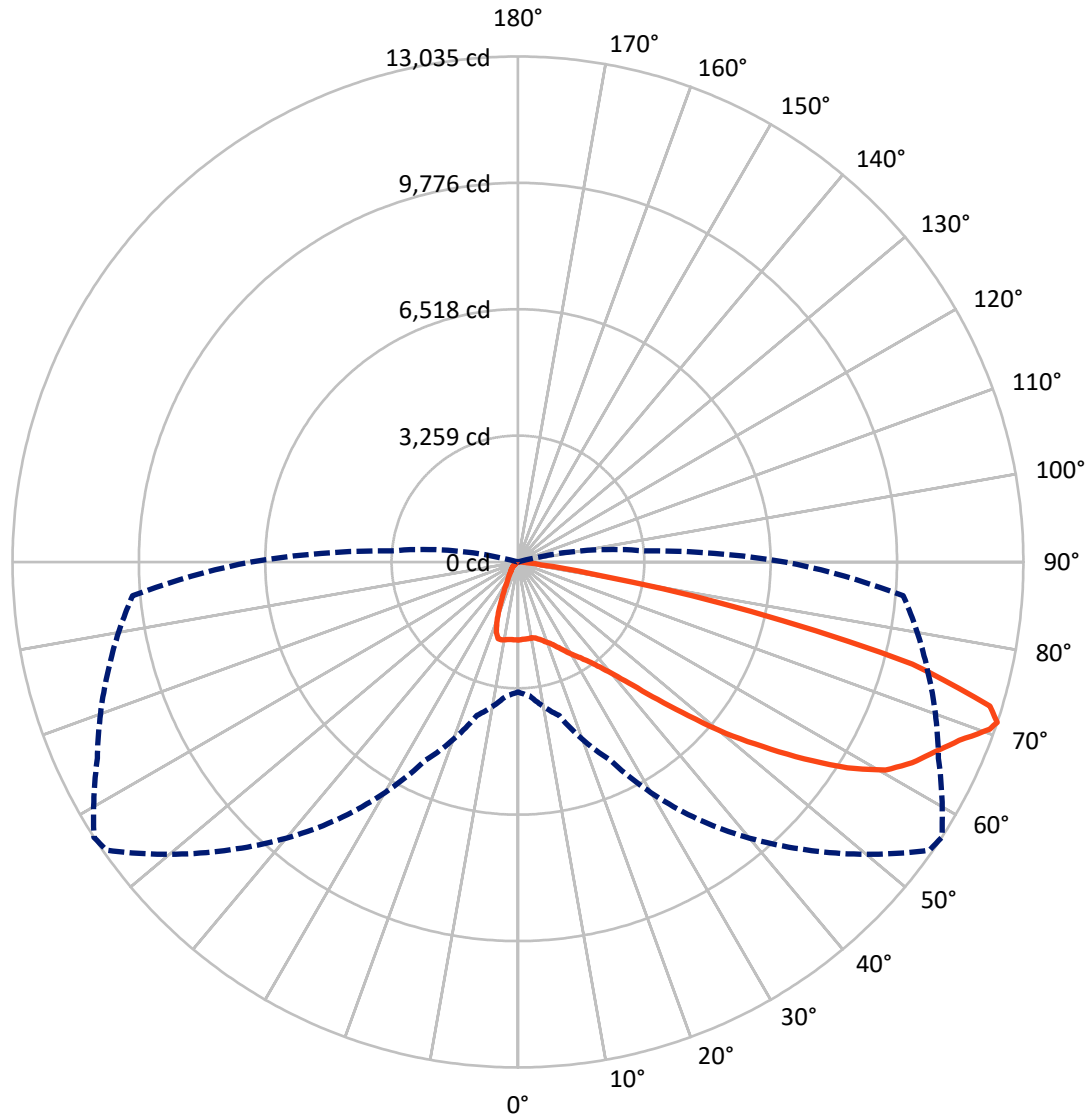
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 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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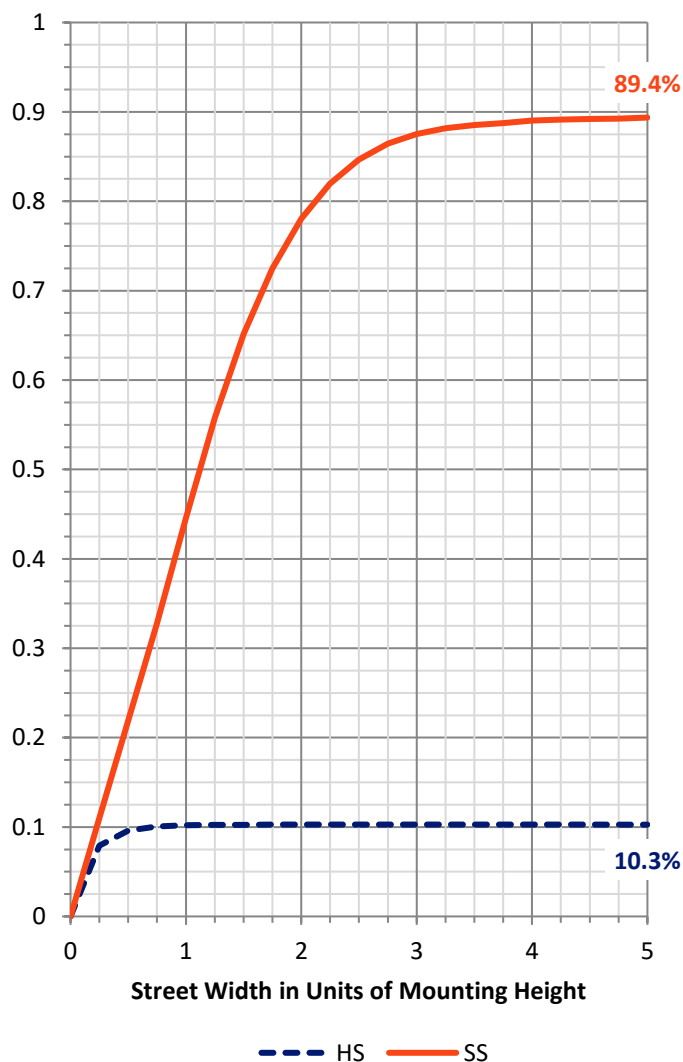
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1848.0	0.0	1848.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	15984.1	0.0	15984.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	17832.0	0.0	17832.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.3	1.1
10°-20°	506.0	2.8
20°-30°	789.4	4.4
30°-40°	1334.2	7.5
40°-50°	2591.5	14.5
50°-60°	4351.9	24.4
60°-70°	5193.6	29.1
70°-80°	2737.1	15.3
80°-90°	139.1	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°	17832.0	100.0
0°-180°	17832.0	100.0

Coefficient of Utilization



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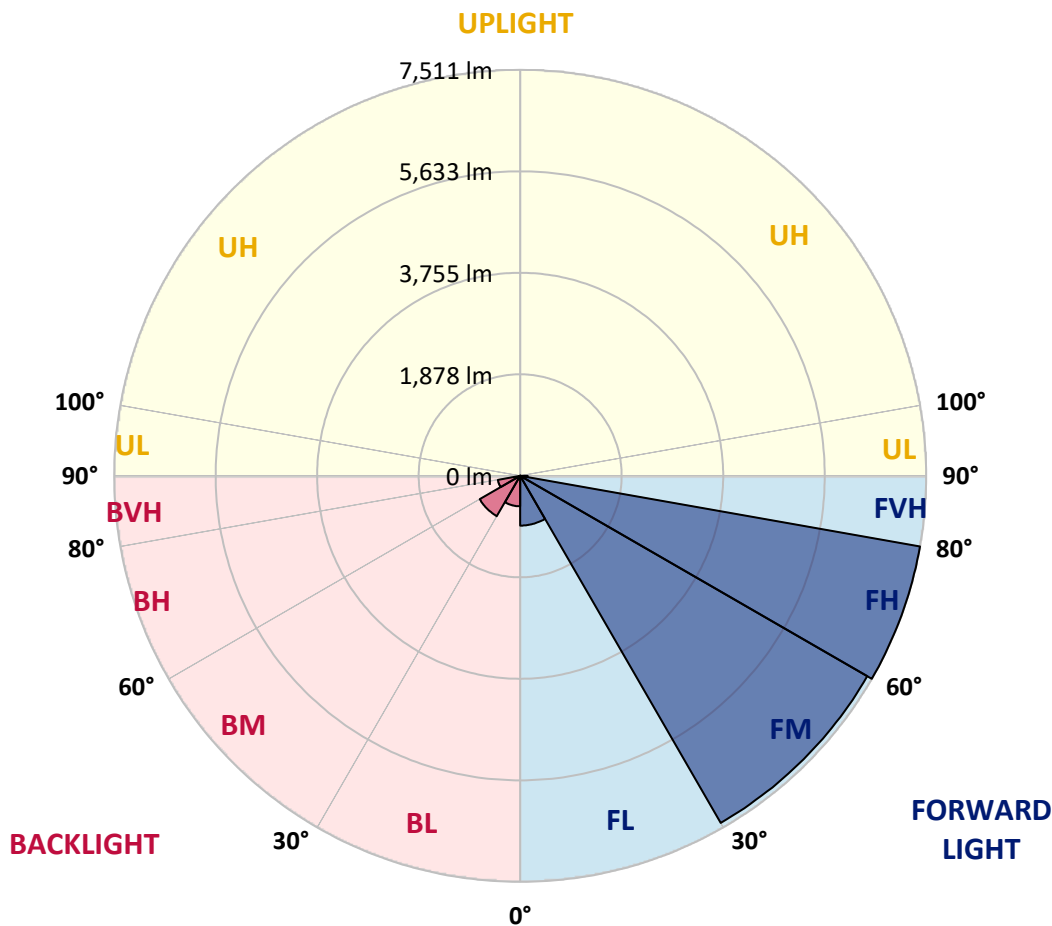
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	920.6	5.2			
FM (30°-60°)	7414.7	41.6			
FH (60°-80°)	7511.0	42.1			G4/12000
FVH (80°-90°)	137.8	0.8			G2/225
BL (0°-30°)	564.1	3.2	B2/1000		
BM (30°-60°)	862.9	4.8	B1/1000		
BH (60°-80°)	419.7	2.4	B1/500		G1/500
BVH (80°-90°)	1.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3
2.5°	1986.2	1986.2	1986.2	1990.4	1994.5	1994.5	2002.8	1998.7	1998.7	1998.7	2007.0
5°	1932.2	1936.3	1940.5	1948.8	1965.4	1977.9	1998.7	1998.7	2002.8	2011.1	2015.3
7.5°	1857.4	1861.5	1874.0	1890.6	1923.9	1953.0	1986.2	1994.5	2007.0	2027.8	2036.1
10°	1811.7	1820.0	1836.6	1857.4	1894.8	1932.2	1973.7	1986.2	2023.6	2061.0	2081.8
12.5°	1799.2	1803.4	1820.0	1853.2	1898.9	1944.6	1998.7	2011.1	2065.1	2123.3	2156.6
15°	1820.0	1824.1	1832.5	1869.9	1923.9	1982.0	2052.7	2069.3	2135.8	2202.3	2243.8
17.5°	1857.4	1857.4	1865.7	1898.9	1957.1	2023.6	2115.0	2139.9	2214.7	2289.5	2335.2
20°	1882.3	1882.3	1894.8	1928.0	1994.5	2081.8	2189.8	2223.0	2306.2	2389.3	2430.8
22.5°	1907.3	1911.4	1923.9	1961.3	2036.1	2156.6	2281.2	2314.5	2410.0	2497.3	2538.8
25°	1977.9	1973.7	1977.9	2011.1	2098.4	2248.0	2405.9	2447.4	2547.2	2642.7	2663.5
27.5°	2173.2	2164.9	2110.9	2090.1	2156.6	2343.5	2563.8	2605.3	2721.7	2817.2	2817.2
30°	2621.9	2605.3	2472.4	2302.0	2248.0	2430.8	2713.4	2771.5	2921.1	3004.2	2979.3
32.5°	3191.2	3153.8	2983.5	2692.6	2476.5	2547.2	2871.3	2937.7	3128.9	3199.5	3145.5
35°	3814.5	3810.3	3598.4	3224.5	2917.0	2788.2	3074.9	3153.8	3394.8	3457.2	3369.9
37.5°	4475.2	4491.8	4350.5	3835.3	3473.8	3182.9	3345.0	3436.4	3731.4	3806.2	3723.1
40°	5210.7	5206.5	5152.5	4541.7	4142.8	3743.9	3735.6	3818.7	4176.0	4292.4	4176.0
42.5°	6141.4	6133.1	5937.8	5389.3	4953.0	4475.2	4304.8	4333.9	4732.8	4923.9	4753.6
45°	7088.8	7030.6	6806.3	6332.6	5946.1	5381.0	5056.9	5056.9	5397.6	5659.4	5393.5
47.5°	7616.5	7558.4	7466.9	7205.2	7088.8	6457.2	5979.4	5921.2	6187.1	6453.1	6079.1
50°	8310.5	8310.5	8081.9	7982.2	8181.6	7737.0	6997.4	6939.2	7068.0	7280.0	6789.6
52.5°	8858.9	8759.2	8597.2	8684.4	9253.7	9050.1	8015.4	7903.2	8003.0	8057.0	7408.8
55°	9087.5	8991.9	8979.5	9299.4	10180.3	9897.8	9058.4	8958.7	8950.4	8684.4	7949.0
57.5°	9133.2	9050.1	9208.0	9768.9	11082.0	10591.7	10097.2	10022.4	9789.7	9124.9	8501.6
60°	8746.8	8788.3	9170.6	10026.6	11613.9	11194.2	10974.0	10895.0	10359.0	9498.9	9116.6
62.5°	7953.1	8052.8	8767.5	10051.5	11418.6	11439.3	11460.1	11406.1	10799.4	9839.6	9735.7
65°	7014.0	7043.1	7903.2	9706.6	11077.8	11364.6	11817.5	11813.3	11136.0	10221.9	10433.8
67.5°	5779.9	5829.8	6573.6	8543.2	10396.4	11331.3	12287.0	12274.5	11518.3	10658.2	10849.3
70°	4300.7	4363.0	4965.5	6644.2	8875.6	10915.8	12902.0	12910.3	11921.4	10990.6	10562.6
71°	3353.3	3465.5	4097.1	5642.8	8098.5	10496.1	12960.2	13035.0	11967.1	10944.9	9972.6
72.5°	1645.5	1778.4	2572.1	3972.4	6665.0	9557.0	12577.9	12723.3	11680.4	10375.6	8526.5
75°	428.0	452.9	768.7	1624.7	3573.5	6332.6	10142.9	10512.7	9548.7	7899.1	5210.7
77.5°	270.1	278.4	361.5	631.6	1338.0	2405.9	5958.6	6141.4	5455.8	4001.5	1836.6
80°	191.1	195.3	228.5	407.2	781.2	702.2	2144.1	2223.0	1973.7	1059.6	328.3
82.5°	116.3	116.3	166.2	261.8	482.0	382.3	565.1	602.5	531.9	295.0	108.0
85°	66.5	70.6	103.9	178.7	228.5	187.0	211.9	224.4	228.5	195.3	45.7
87.5°	54.0	58.2	91.4	149.6	124.7	91.4	91.4	95.6	99.7	116.3	20.8
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°	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3
2.5°	2007.0	2007.0	2011.1	2007.0	2007.0	2007.0	2011.1	2011.1	2011.1	2019.4	2023.6
5°	2015.3	2015.3	2015.3	2011.1	2007.0	2007.0	2015.3	2019.4	2019.4	2031.9	2031.9
7.5°	2036.1	2036.1	2027.8	2019.4	2011.1	1998.7	2002.8	2007.0	2002.8	2007.0	2007.0
10°	2081.8	2081.8	2069.3	2052.7	2027.8	1990.4	1940.5	1878.2	1820.0	1799.2	1790.9
12.5°	2156.6	2152.4	2127.5	2098.4	2044.4	1915.6	1728.6	1508.3	1325.5	1275.7	1259.0
15°	2239.7	2231.4	2202.3	2152.4	2007.0	1666.2	1275.7	993.1	818.6	777.0	768.7
17.5°	2326.9	2314.5	2272.9	2173.2	1836.6	1238.3	822.7	623.3	527.7	519.4	523.6
20°	2418.3	2401.7	2343.5	2131.6	1483.4	826.9	531.9	482.0	473.7	473.7	477.9
22.5°	2522.2	2501.4	2422.5	1982.0	1080.4	548.5	457.1	452.9	448.8	444.6	444.6
25°	2642.7	2617.8	2497.3	1712.0	743.8	448.8	436.3	423.8	415.5	407.2	403.1
27.5°	2788.2	2754.9	2555.5	1379.5	511.1	419.7	411.4	390.6	374.0	357.3	357.3
30°	2933.6	2892.0	2538.8	1038.8	415.5	390.6	374.0	349.0	324.1	307.5	303.3
32.5°	3087.3	3045.8	2430.8	698.1	378.1	357.3	336.6	299.2	270.1	249.3	245.2
35°	3315.9	3282.6	2218.9	461.2	340.7	315.8	286.7	249.3	211.9	191.1	187.0
37.5°	3656.6	3615.0	1957.1	353.2	299.2	261.8	236.8	195.3	157.9	137.1	133.0
40°	4113.7	3989.0	1645.5	311.6	261.8	216.1	182.8	141.3	112.2	99.7	99.7
42.5°	4645.5	4350.5	1308.9	282.6	232.7	178.7	133.0	95.6	78.9	74.8	74.8
45°	5210.7	4687.1	972.3	261.8	203.6	141.3	95.6	66.5	58.2	54.0	54.0
47.5°	5792.4	4961.3	677.3	236.8	170.4	108.0	66.5	49.9	41.6	37.4	37.4
50°	6336.7	5140.0	477.9	211.9	145.4	78.9	49.9	37.4	29.1	29.1	29.1
52.5°	6714.9	5123.4	344.9	182.8	112.2	54.0	33.2	24.9	24.9	24.9	24.9
55°	7047.3	5061.1	270.1	157.9	87.3	37.4	24.9	20.8	20.8	16.6	16.6
57.5°	7329.8	4961.3	228.5	128.8	62.3	29.1	16.6	16.6	12.5	12.5	12.5
60°	7570.8	4836.7	191.1	108.0	41.6	20.8	12.5	8.3	8.3	4.2	8.3
62.5°	7899.1	4757.7	166.2	83.1	29.1	12.5	8.3	4.2	4.2	0.0	0.0
65°	8140.1	4608.1	141.3	58.2	16.6	8.3	4.2	4.2	0.0	0.0	0.0
67.5°	8148.4	4338.1	103.9	33.2	12.5	8.3	4.2	0.0	0.0	0.0	0.0
70°	7491.9	3698.2	66.5	16.6	8.3	4.2	4.2	0.0	0.0	0.0	0.0
71°	6889.4	3274.3	54.0	12.5	8.3	4.2	0.0	0.0	0.0	0.0	0.0
72.5°	5676.0	2405.9	41.6	12.5	4.2	4.2	0.0	0.0	0.0	0.0	0.0
75°	3128.9	872.6	20.8	8.3	4.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1001.4	265.9	12.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	170.4	41.6	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	58.2	16.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.6	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.3	4.2	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)