

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: P237474

Luminaire Tested: **ARCH-L-AF72-210-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237474
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-210-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 900mA 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: 18143 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

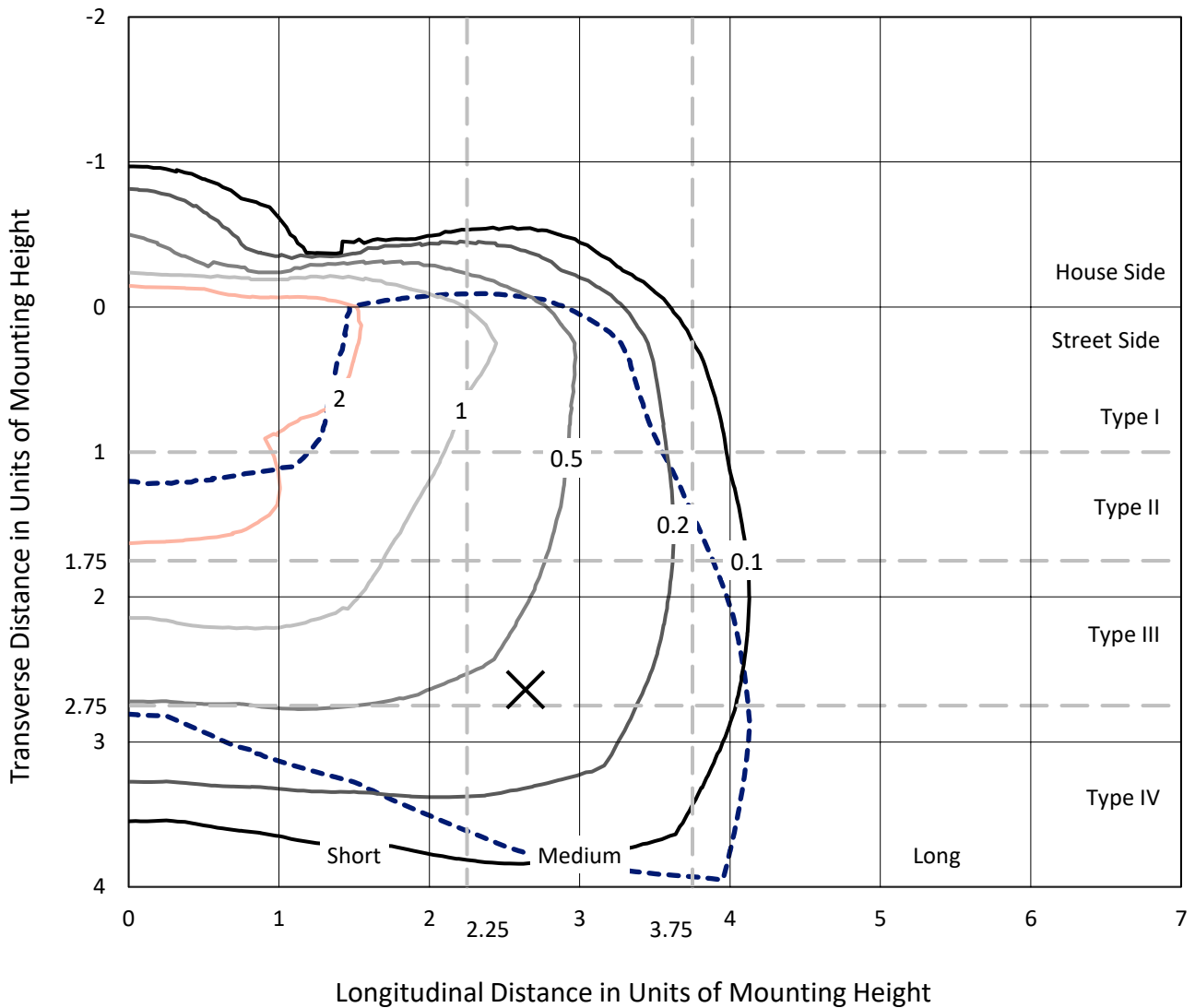
Input Watts (W): 211
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

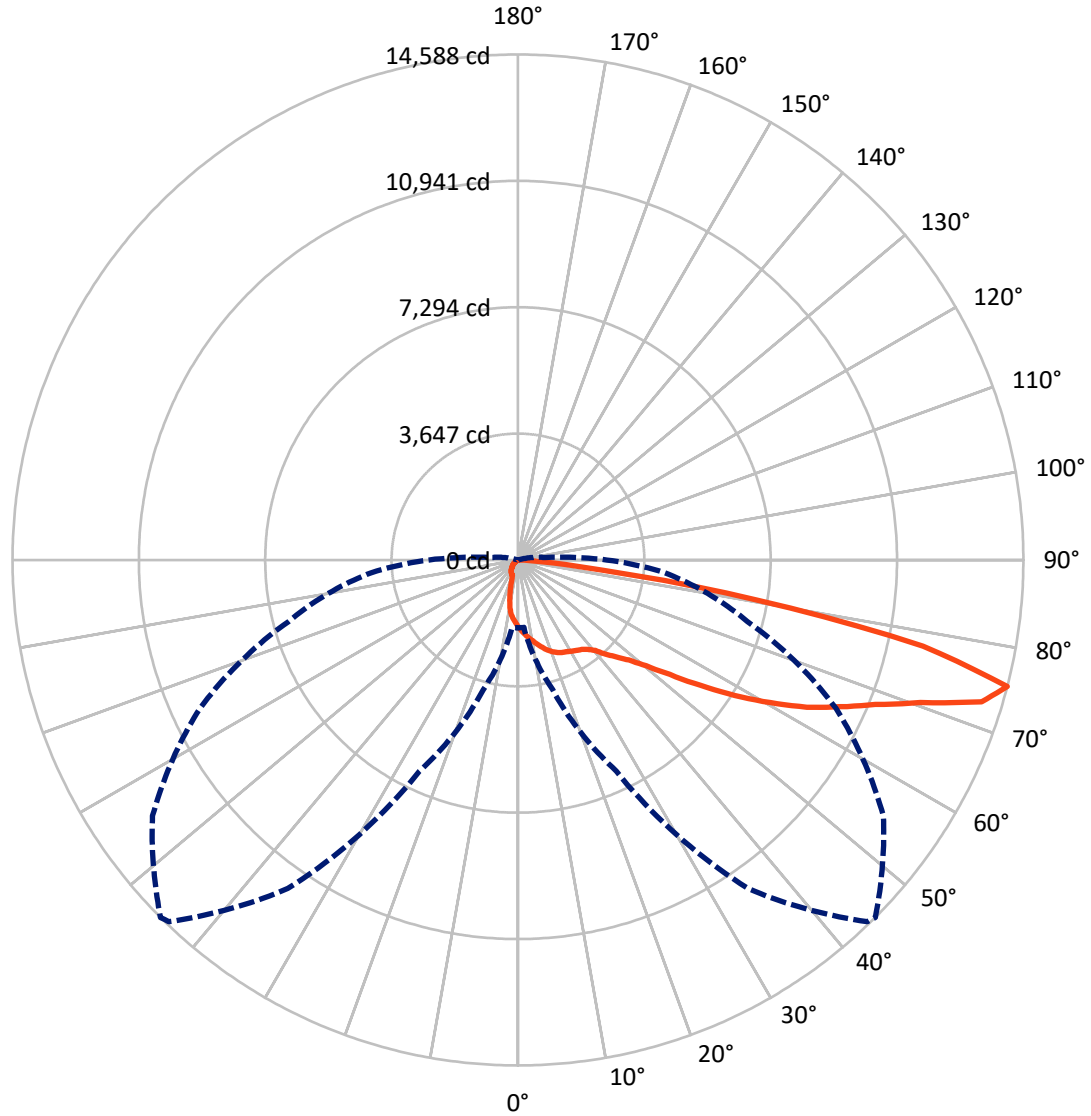
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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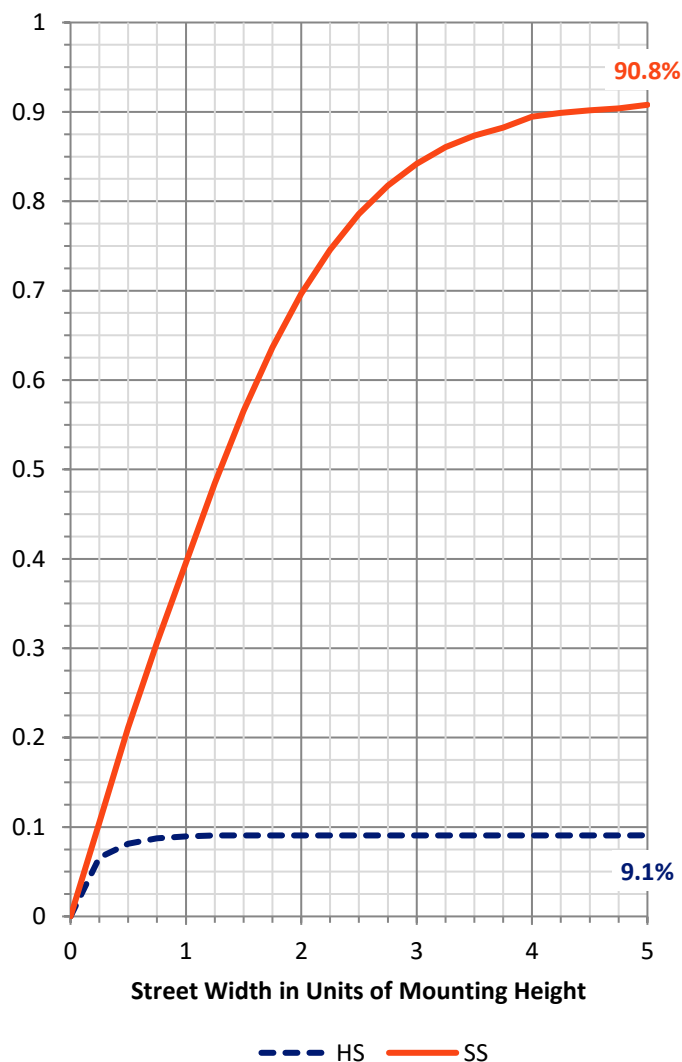
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1659.5	0.0	1659.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	16483.5	0.0	16483.5
	% Fixture	90.9	0.0	90.9
Total	Lumens	18143.0	0.0	18143.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.1	1.0
10°-20°	518.8	2.9
20°-30°	859.3	4.7
30°-40°	1243.6	6.9
40°-50°	2036.3	11.2
50°-60°	3628.2	20.0
60°-70°	5334.0	29.4
70°-80°	4024.0	22.2
80°-90°	315.7	1.7
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°	18143.0	100.0
0°-180°	18143.0	100.0

Coefficient of Utilization



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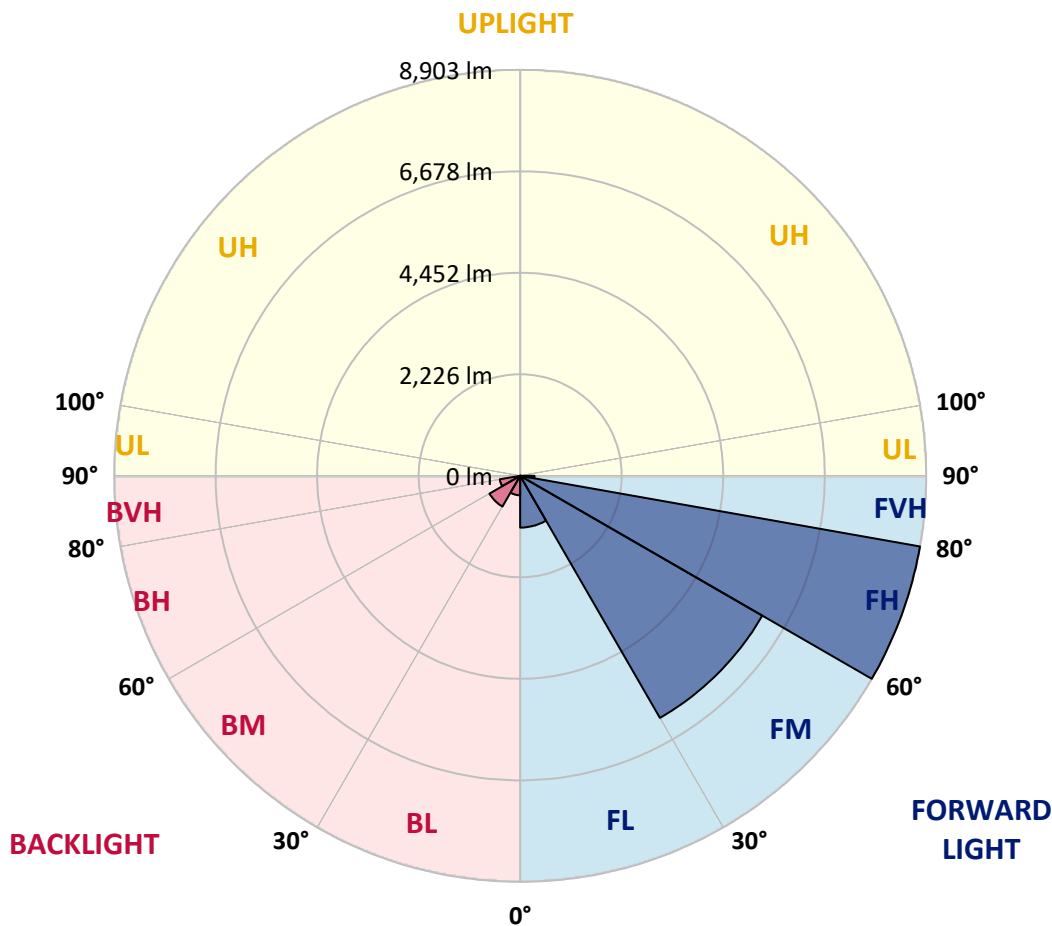
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1134.8	6.3			
FM (30°-60°)	6130.4	33.8			
FH (60°-80°)	8903.4	49.1			G4/12000
FVH (80°-90°)	314.8	1.7			G3/500
BL (0°-30°)	426.4	2.4	B1/500		
BM (30°-60°)	777.7	4.3	B1/1000		
BH (60°-80°)	454.5	2.5	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5
2.5°	2107.9	2107.9	2103.6	2099.3	2077.9	2056.4	2052.1	2039.2	2000.6	1974.8	1949.1
5°	2283.9	2288.2	2279.6	2258.2	2211.0	2163.7	2159.4	2125.1	2052.1	2000.6	1944.8
7.5°	2451.4	2460.0	2438.5	2399.9	2344.0	2275.4	2271.1	2206.7	2112.2	2039.2	1957.7
10°	2593.0	2593.0	2563.0	2515.8	2455.7	2382.7	2374.1	2301.1	2193.8	2103.6	1996.3
12.5°	2747.6	2743.3	2700.4	2636.0	2567.3	2498.6	2494.3	2404.1	2301.1	2185.2	2052.1
15°	2889.3	2880.7	2824.9	2764.8	2691.8	2618.8	2614.5	2524.4	2417.0	2279.6	2133.7
17.5°	2966.5	2962.3	2910.7	2850.6	2790.5	2734.7	2730.4	2636.0	2520.1	2378.4	2215.3
20°	2979.4	2983.7	2940.8	2889.3	2854.9	2824.9	2824.9	2739.0	2614.5	2464.3	2301.1
22.5°	2983.7	2996.6	2966.5	2897.9	2889.3	2893.6	2902.2	2833.5	2704.7	2563.0	2391.3
25°	3013.8	3030.9	3009.5	2927.9	2919.3	2949.4	2958.0	2927.9	2812.0	2670.3	2494.3
27.5°	3073.9	3091.0	3073.9	2970.8	2958.0	2988.0	2996.6	3013.8	2927.9	2773.4	2601.6
30°	3194.1	3198.4	3159.7	3030.9	3005.2	3043.8	3056.7	3103.9	3035.2	2872.1	2704.7
32.5°	3404.4	3361.5	3245.6	3073.9	3052.4	3095.3	3108.2	3159.7	3134.0	2966.5	2812.0
35°	3833.8	3610.5	3344.3	3134.0	3112.5	3155.4	3172.6	3245.6	3258.5	3099.6	2945.1
37.5°	3829.5	3627.7	3576.2	3249.9	3219.8	3249.9	3271.4	3361.5	3413.0	3275.7	3138.3
40°	4099.9	4014.1	4014.1	3468.8	3370.1	3413.0	3434.5	3524.7	3614.8	3507.5	3365.8
42.5°	4950.0	4894.2	4834.1	3889.6	3580.5	3700.7	3713.6	3769.4	3876.7	3842.3	3674.9
45°	5898.8	5847.2	5615.4	4602.2	3941.1	3962.6	3992.6	4082.8	4237.3	4301.7	4104.2
47.5°	6641.5	6589.9	6392.5	5460.9	4503.5	4314.6	4314.6	4490.6	4731.0	4894.2	4705.3
50°	7238.2	7178.1	7057.9	6375.3	5426.5	4821.2	4795.4	5001.5	5357.8	5611.1	5482.3
52.5°	7817.8	7641.8	7568.8	7319.8	6469.7	5555.3	5486.6	5632.6	6126.3	6439.7	6332.4
55°	8204.2	8178.4	8101.1	8187.0	7564.5	6448.3	6388.2	6418.2	7036.4	7246.8	7113.7
57.5°	8564.8	8560.5	8732.2	9131.5	8758.0	7470.0	7375.6	7328.4	7916.5	7865.0	7980.9
60°	9011.3	8934.0	9333.3	9904.2	9852.7	8466.0	8358.7	8264.3	8590.5	8444.6	9019.9
62.5°	9032.7	9011.3	9822.7	10642.7	10938.9	9479.2	9354.7	9015.6	9178.7	9011.3	10011.6
65°	8212.7	8320.1	10028.7	11033.3	11849.0	10367.9	10217.6	9689.6	9702.5	9590.8	11179.3
67.5°	8028.1	8084.0	9462.0	11454.1	12505.9	11265.2	11123.5	10466.6	10312.1	10320.7	11870.5
70°	7568.8	7654.6	8758.0	11424.0	13025.3	12462.9	12321.3	11608.6	11235.1	10818.7	11338.1
72.5°	5782.8	5928.8	7379.9	10015.9	12883.7	14029.9	13991.3	13055.4	11604.3	9934.3	8577.7
75°	1957.7	1953.4	3876.7	6727.3	11574.3	14510.8	14588.0	12875.1	10123.2	6851.8	4258.8
77.5°	420.7	425.0	798.5	2726.1	7689.0	11651.5	11947.8	9711.0	6529.8	3052.4	974.5
80°	206.1	210.4	330.6	721.2	3073.9	6534.1	6997.8	4992.9	2412.7	609.6	163.1
82.5°	103.0	107.3	171.7	382.1	1137.7	2322.6	2481.4	1837.5	691.2	343.4	81.6
85°	38.6	38.6	85.9	227.5	519.5	545.2	669.7	532.3	416.4	279.1	21.5
87.5°	8.6	8.6	47.2	111.6	231.8	171.7	171.7	163.1	253.3	188.9	8.6
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°	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5	1940.5
2.5°	1936.2	1919.0	1889.0	1858.9	1837.5	1811.7	1798.8	1785.9	1781.6	1777.4	1785.9
5°	1914.7	1889.0	1833.2	1785.9	1743.0	1708.7	1682.9	1657.1	1644.3	1635.7	1640.0
7.5°	1914.7	1876.1	1794.5	1721.5	1652.9	1579.9	1506.9	1451.1	1408.1	1382.4	1386.7
10°	1936.2	1884.7	1777.4	1678.6	1549.8	1395.3	1236.4	1116.2	1034.6	987.4	987.4
12.5°	1983.4	1914.7	1781.6	1627.1	1408.1	1137.7	897.3	751.3	691.2	656.8	661.1
15°	2047.8	1966.3	1803.1	1558.4	1210.7	845.7	626.8	532.3	532.3	540.9	545.2
17.5°	2120.8	2030.6	1820.3	1455.4	957.4	605.3	493.7	485.1	498.0	519.5	519.5
20°	2193.8	2095.0	1828.9	1292.2	717.0	480.8	468.0	468.0	476.5	498.0	502.3
22.5°	2283.9	2176.6	1820.3	1090.5	536.6	455.1	450.8	450.8	450.8	476.5	476.5
25°	2378.4	2271.1	1785.9	875.8	455.1	437.9	433.6	429.3	429.3	450.8	455.1
27.5°	2485.7	2369.8	1704.4	669.7	429.3	420.7	416.4	407.8	407.8	425.0	425.0
30°	2593.0	2481.4	1579.9	506.6	407.8	403.6	395.0	386.4	377.8	395.0	395.0
32.5°	2709.0	2597.3	1416.7	403.6	377.8	377.8	373.5	360.6	352.0	360.6	364.9
35°	2863.5	2730.4	1232.1	352.0	339.2	339.2	339.2	334.9	317.7	326.3	326.3
37.5°	3069.6	2915.0	1017.5	326.3	309.1	300.5	300.5	300.5	287.6	291.9	291.9
40°	3331.5	3129.7	811.4	304.8	287.6	266.2	257.6	261.9	253.3	253.3	249.0
42.5°	3687.8	3361.5	609.6	287.6	270.5	240.4	223.2	218.9	210.4	206.1	206.1
45°	4198.7	3644.9	437.9	270.5	257.6	210.4	193.2	180.3	158.8	146.0	146.0
47.5°	4859.8	3966.8	326.3	253.3	244.7	184.6	163.1	137.4	107.3	98.7	98.7
50°	5666.9	4327.5	274.8	227.5	223.2	163.1	128.8	90.2	60.1	51.5	55.8
52.5°	6452.6	4666.6	244.7	201.8	197.5	141.7	94.4	47.2	25.8	25.8	25.8
55°	7113.7	4907.0	223.2	180.3	171.7	111.6	51.5	21.5	12.9	12.9	12.9
57.5°	7710.5	5044.4	201.8	158.8	137.4	77.3	21.5	8.6	8.6	4.3	4.3
60°	8255.7	5126.0	176.0	137.4	107.3	42.9	8.6	4.3	4.3	0.0	0.0
62.5°	8792.3	5186.1	150.3	111.6	81.6	17.2	4.3	4.3	0.0	0.0	0.0
65°	9200.2	5164.6	120.2	90.2	51.5	8.6	4.3	0.0	0.0	0.0	0.0
67.5°	9187.3	4872.7	90.2	68.7	25.8	4.3	0.0	0.0	0.0	0.0	0.0
70°	8217.0	4104.2	60.1	42.9	8.6	4.3	0.0	0.0	0.0	0.0	0.0
72.5°	5830.1	2631.7	38.6	25.8	4.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	2567.3	798.5	21.5	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	502.3	184.6	12.9	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	120.2	21.5	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.5	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.6	4.3	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)