

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: P237477

Luminaire Tested: **ARCH-L-AF72-240-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237477  
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-AF72-240-D-U-T4W-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

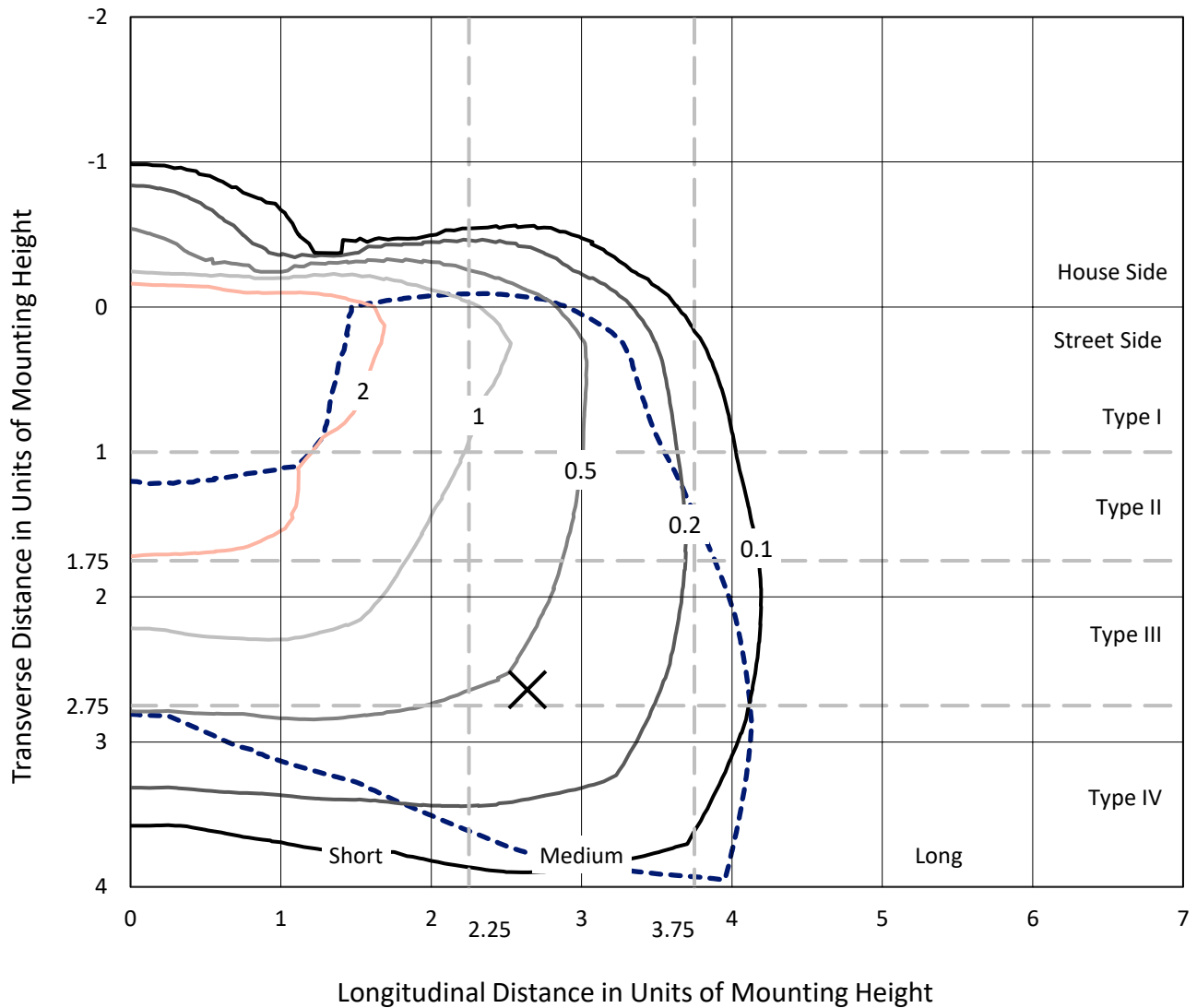
Lumens per Lamp: N/A  
Luminaire Lumens: 19901 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G4  
  
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

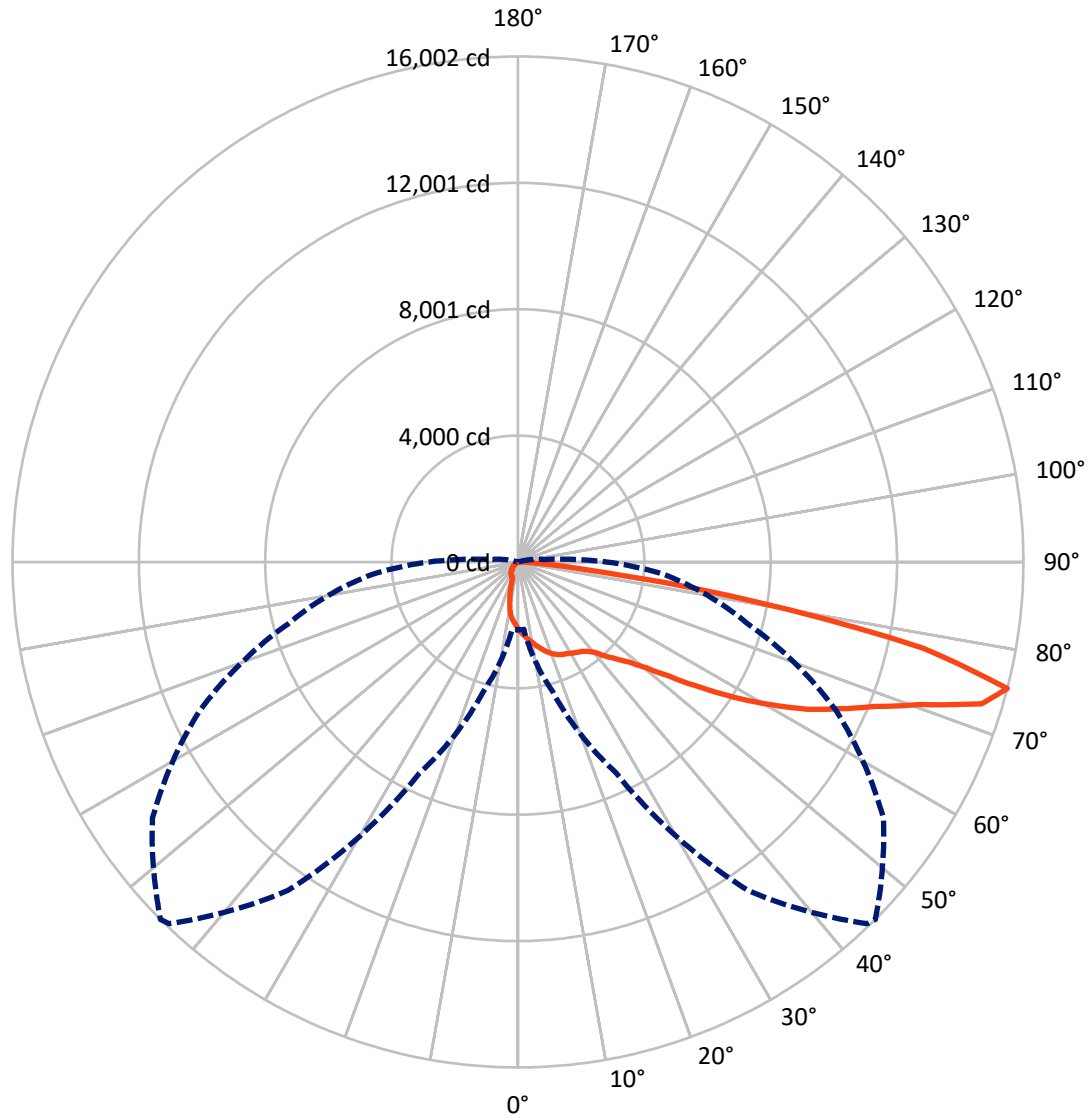
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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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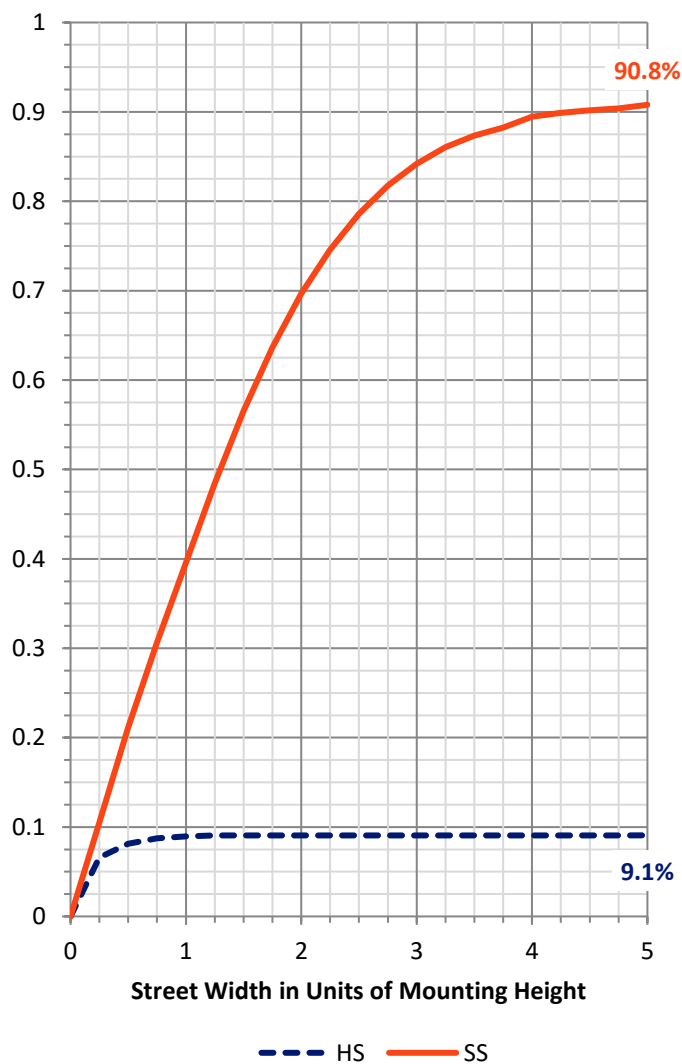
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1820.3	0.0	1820.3
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	18080.7	0.0	18080.7
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	19901.0	0.0	19901.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.9	1.0
10°-20°	569.1	2.9
20°-30°	942.5	4.7
30°-40°	1364.1	6.9
40°-50°	2233.6	11.2
50°-60°	3979.8	20.0
60°-70°	5850.8	29.4
70°-80°	4413.9	22.2
80°-90°	346.3	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°	19901.0	100.0
0°-180°	19901.0	100.0

**Coefficient of Utilization**



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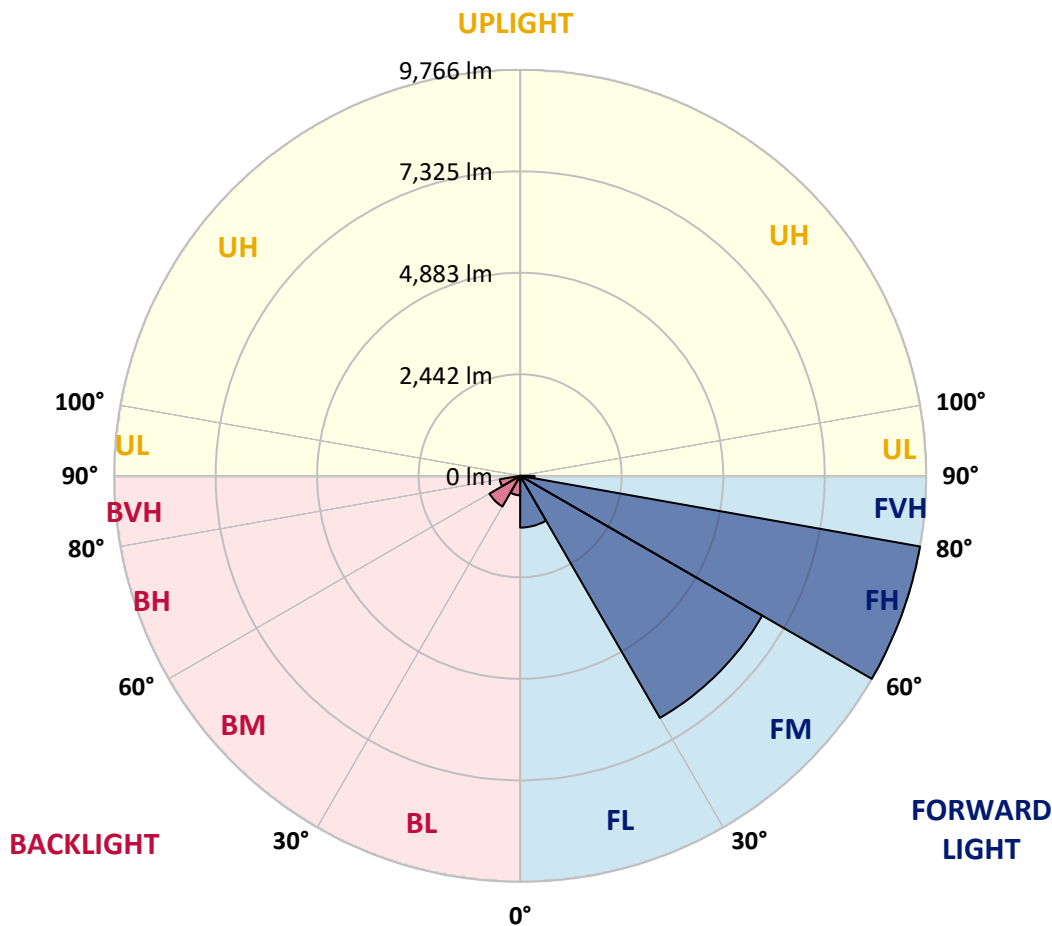
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1244.8	6.3			
FM (30°-60°)	6724.4	33.8			
FH (60°-80°)	9766.1	49.1			G4/12000
FVH (80°-90°)	345.3	1.7			G3/500
BL (0°-30°)	467.8	2.4	B1/500		
BM (30°-60°)	853.0	4.3	B1/1000		
BH (60°-80°)	498.6	2.5	B1/500		G1/500
BVH (80°-90°)	1.0	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°	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5
2.5°	2312.2	2312.2	2307.5	2302.8	2279.2	2255.7	2251.0	2236.8	2194.4	2166.2	2137.9
5°	2505.2	2510.0	2500.5	2477.0	2425.2	2373.4	2368.7	2331.0	2251.0	2194.4	2133.2
7.5°	2688.9	2698.3	2674.8	2632.4	2571.2	2495.8	2491.1	2420.5	2316.9	2236.8	2147.4
10°	2844.3	2844.3	2811.3	2759.5	2693.6	2613.6	2604.1	2524.1	2406.4	2307.5	2189.7
12.5°	3013.8	3009.1	2962.0	2891.4	2816.1	2740.7	2736.0	2637.1	2524.1	2396.9	2251.0
15°	3169.2	3159.8	3098.6	3032.7	2952.6	2872.6	2867.9	2769.0	2651.2	2500.5	2340.4
17.5°	3254.0	3249.3	3192.8	3126.9	3060.9	2999.7	2995.0	2891.4	2764.3	2608.8	2429.9
20°	3268.1	3272.8	3225.7	3169.2	3131.6	3098.6	3098.6	3004.4	2867.9	2703.0	2524.1
22.5°	3272.8	3287.0	3254.0	3178.7	3169.2	3173.9	3183.4	3108.0	2966.7	2811.3	2623.0
25°	3305.8	3324.6	3301.1	3211.6	3202.2	3235.2	3244.6	3211.6	3084.5	2929.1	2736.0
27.5°	3371.7	3390.6	3371.7	3258.7	3244.6	3277.5	3287.0	3305.8	3211.6	3042.1	2853.7
30°	3503.6	3508.3	3465.9	3324.6	3296.4	3338.8	3352.9	3404.7	3329.3	3150.4	2966.7
32.5°	3734.3	3687.2	3560.1	3371.7	3348.2	3395.3	3409.4	3465.9	3437.7	3254.0	3084.5
35°	4205.2	3960.4	3668.4	3437.7	3414.1	3461.2	3480.0	3560.1	3574.2	3400.0	3230.5
37.5°	4200.5	3979.2	3922.7	3564.8	3531.8	3564.8	3588.3	3687.2	3743.7	3593.1	3442.4
40°	4497.2	4403.0	4403.0	3805.0	3696.7	3743.7	3767.3	3866.2	3965.1	3847.3	3691.9
42.5°	5429.6	5368.4	5302.5	4266.5	3927.4	4059.3	4073.4	4134.6	4252.3	4214.7	4031.0
45°	6470.3	6413.8	6159.5	5048.2	4323.0	4346.5	4379.5	4478.4	4647.9	4718.5	4501.9
47.5°	7285.0	7228.5	7011.9	5990.0	4939.9	4732.7	4732.7	4925.7	5189.4	5368.4	5161.2
50°	7939.6	7873.6	7741.8	6993.0	5952.3	5288.3	5260.1	5486.1	5877.0	6154.8	6013.5
52.5°	8575.3	8382.2	8302.2	8029.0	7096.6	6093.6	6018.2	6178.4	6719.9	7063.7	6945.9
55°	8999.1	8970.9	8886.1	8980.3	8297.5	7073.1	7007.2	7040.1	7718.2	7949.0	7803.0
57.5°	9394.7	9390.0	9578.3	10016.3	9606.6	8193.9	8090.3	8038.5	8683.6	8627.1	8754.2
60°	9884.4	9799.7	10237.6	10863.9	10807.4	9286.4	9168.6	9065.0	9422.9	9262.8	9893.8
62.5°	9908.0	9884.4	10774.5	11673.9	11998.8	10397.7	10261.2	9889.1	10068.1	9884.4	10981.7
65°	9008.5	9126.3	11000.5	12102.4	12997.2	11372.5	11207.7	10628.5	10642.6	10520.2	12262.5
67.5°	8806.0	8867.3	10378.9	12563.9	13717.7	12356.7	12201.3	11480.8	11311.3	11320.7	13020.7
70°	8302.2	8396.4	9606.6	12531.0	14287.5	13670.6	13515.2	12733.4	12323.8	11867.0	12436.8
72.5°	6343.2	6503.3	8095.0	10986.4	14132.1	15389.4	15347.0	14320.4	12728.7	10896.9	9408.8
75°	2147.4	2142.6	4252.3	7379.2	12695.8	15916.8	16001.6	14122.6	11104.1	7515.7	4671.4
77.5°	461.5	466.2	875.9	2990.3	8434.0	12780.5	13105.5	10652.0	7162.6	3348.2	1069.0
80°	226.0	230.7	362.6	791.1	3371.7	7167.3	7675.9	5476.7	2646.5	668.7	178.9
82.5°	113.0	117.7	188.4	419.1	1247.9	2547.6	2721.9	2015.5	758.2	376.7	89.5
85°	42.4	42.4	94.2	249.6	569.8	598.1	734.6	583.9	456.8	306.1	23.5
87.5°	9.4	9.4	51.8	122.4	254.3	188.4	188.4	178.9	277.8	207.2	9.4
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°	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5	2128.5
2.5°	2123.8	2105.0	2072.0	2039.0	2015.5	1987.2	1973.1	1959.0	1954.3	1949.6	1959.0
5°	2100.3	2072.0	2010.8	1959.0	1911.9	1874.2	1846.0	1817.7	1803.6	1794.2	1798.9
7.5°	2100.3	2057.9	1968.4	1888.4	1813.0	1733.0	1652.9	1591.7	1544.6	1516.3	1521.0
10°	2123.8	2067.3	1949.6	1841.3	1700.0	1530.5	1356.2	1224.4	1134.9	1083.1	1083.1
12.5°	2175.6	2100.3	1954.3	1784.8	1544.6	1247.9	984.2	824.1	758.2	720.5	725.2
15°	2246.2	2156.8	1977.8	1709.4	1328.0	927.7	687.5	583.9	583.9	593.3	598.1
17.5°	2326.3	2227.4	1996.7	1596.4	1050.1	664.0	541.5	532.1	546.3	569.8	569.8
20°	2406.4	2298.0	2006.1	1417.4	786.4	527.4	513.3	513.3	522.7	546.3	551.0
22.5°	2505.2	2387.5	1996.7	1196.1	588.6	499.2	494.5	494.5	494.5	522.7	522.7
25°	2608.8	2491.1	1959.0	960.7	499.2	480.3	475.6	470.9	470.9	494.5	499.2
27.5°	2726.6	2599.4	1869.5	734.6	470.9	461.5	456.8	447.4	447.4	466.2	466.2
30°	2844.3	2721.9	1733.0	555.7	447.4	442.7	433.2	423.8	414.4	433.2	433.2
32.5°	2971.5	2849.0	1554.0	442.7	414.4	414.4	409.7	395.6	386.1	395.6	400.3
35°	3141.0	2995.0	1351.5	386.1	372.0	372.0	372.0	367.3	348.5	357.9	357.9
37.5°	3367.0	3197.5	1116.1	357.9	339.1	329.6	329.6	329.6	315.5	320.2	320.2
40°	3654.3	3432.9	890.0	334.3	315.5	292.0	282.5	287.3	277.8	277.8	273.1
42.5°	4045.1	3687.2	668.7	315.5	296.7	263.7	244.9	240.2	230.7	226.0	226.0
45°	4605.5	3998.0	480.3	296.7	282.5	230.7	211.9	197.8	174.2	160.1	160.1
47.5°	5330.7	4351.2	357.9	277.8	268.4	202.5	178.9	150.7	117.7	108.3	108.3
50°	6216.0	4746.8	301.4	249.6	244.9	178.9	141.3	98.9	65.9	56.5	61.2
52.5°	7077.8	5118.8	268.4	221.3	216.6	155.4	103.6	51.8	28.3	28.3	28.3
55°	7803.0	5382.5	244.9	197.8	188.4	122.4	56.5	23.5	14.1	14.1	14.1
57.5°	8457.6	5533.2	221.3	174.2	150.7	84.8	23.5	9.4	9.4	4.7	4.7
60°	9055.6	5622.7	193.1	150.7	117.7	47.1	9.4	4.7	4.7	0.0	0.0
62.5°	9644.3	5688.6	164.8	122.4	89.5	18.8	4.7	4.7	0.0	0.0	0.0
65°	10091.6	5665.1	131.9	98.9	56.5	9.4	4.7	0.0	0.0	0.0	0.0
67.5°	10077.5	5344.8	98.9	75.3	28.3	4.7	0.0	0.0	0.0	0.0	0.0
70°	9013.2	4501.9	65.9	47.1	9.4	4.7	0.0	0.0	0.0	0.0	0.0
72.5°	6395.0	2886.7	42.4	28.3	4.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	2816.1	875.9	23.5	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	551.0	202.5	14.1	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	131.9	23.5	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	56.5	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.4	4.7	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)