

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: P237194

Luminaire Tested: **ARCH-L-AF72-210-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237194  
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-AF72-210-D-U-T3-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 900mA 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: 17774.3 lumens  
Efficiency: N/A  
Efficacy: 84.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

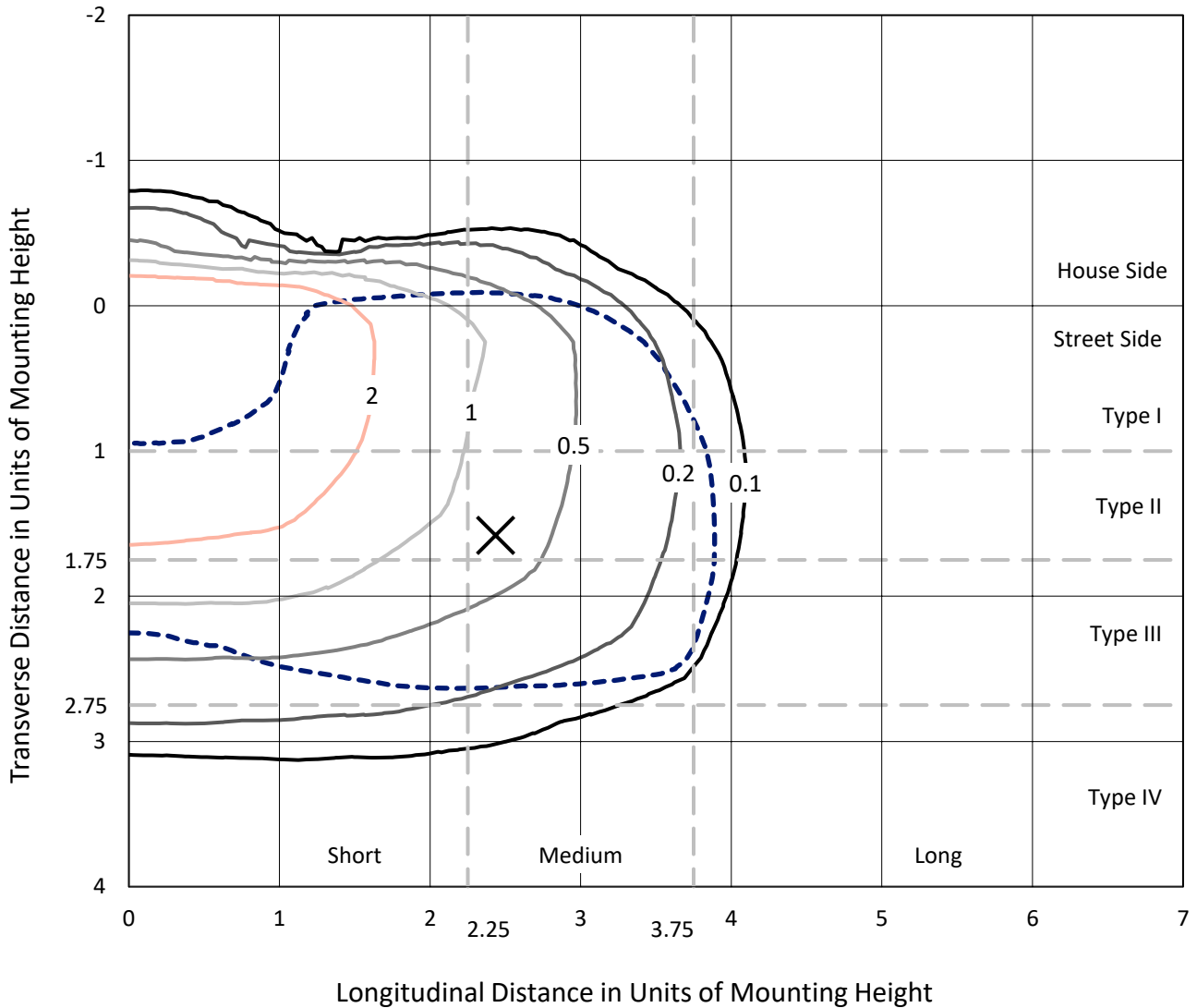
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

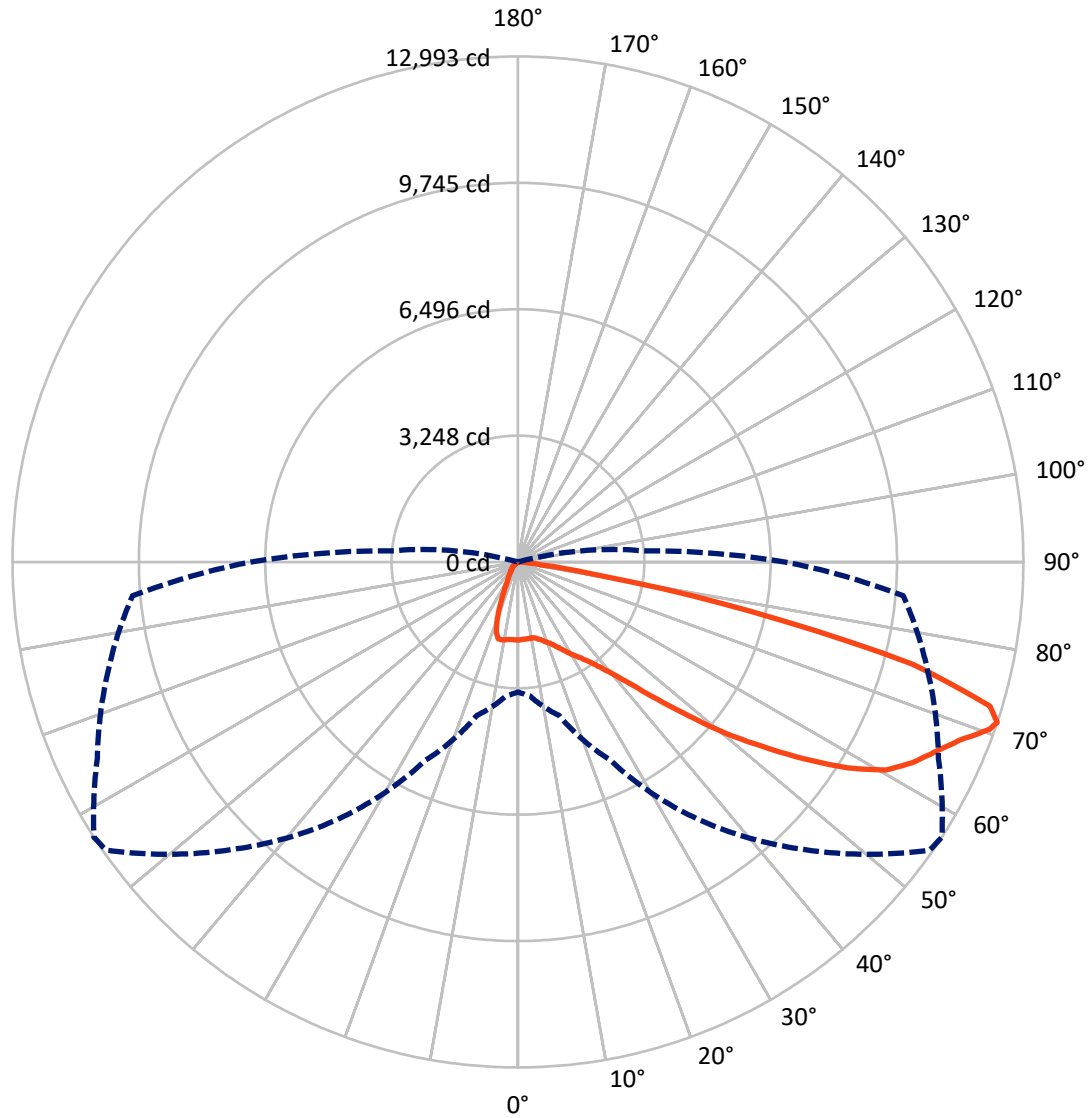
× Max cd  
 - - - 1/2 Max cd



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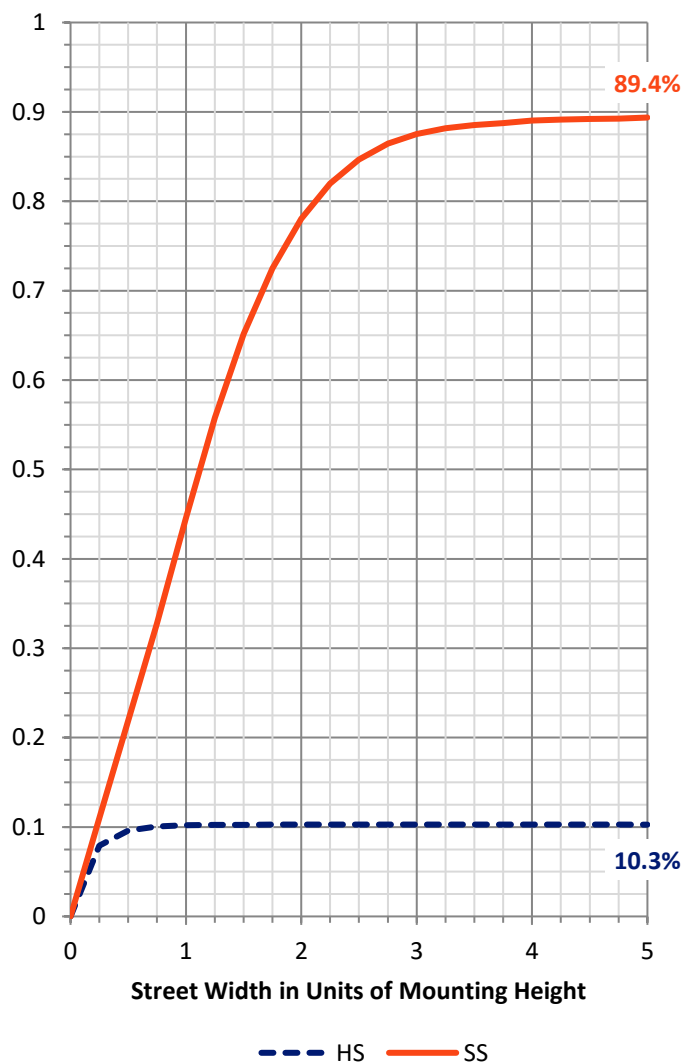
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1842.0	0.0	1842.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	15932.3	0.0	15932.3
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	17774.3	0.0	17774.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.6	1.1
10°-20°	504.4	2.8
20°-30°	786.9	4.4
30°-40°	1329.9	7.5
40°-50°	2583.1	14.5
50°-60°	4337.8	24.4
60°-70°	5176.8	29.1
70°-80°	2728.2	15.3
80°-90°	138.6	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°	17774.3	100.0
0°-180°	17774.3	100.0

**Coefficient of Utilization**



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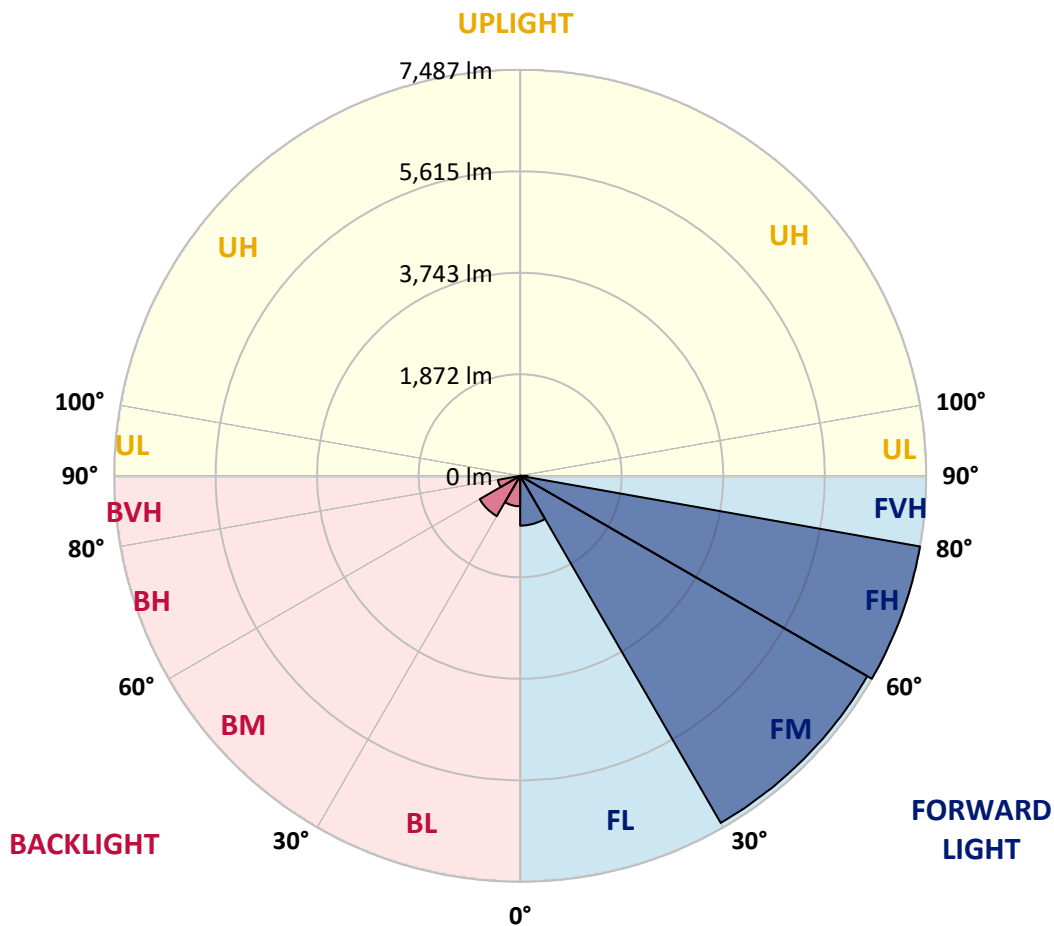
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	917.7	5.2			
FM (30°-60°)	7390.7	41.6			
FH (60°-80°)	7486.7	42.1			G3/7500
FVH (80°-90°)	137.3	0.8			G2/225
BL (0°-30°)	562.3	3.2	B2/1000		
BM (30°-60°)	860.1	4.8	B1/1000		
BH (60°-80°)	418.3	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-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7
2.5°	1979.8	1979.8	1979.8	1983.9	1988.1	1988.1	1996.3	1992.3	1992.3	1992.3	2000.4
5°	1925.9	1930.1	1934.2	1942.5	1959.0	1971.5	1992.3	1992.3	1996.3	2004.6	2008.7
7.5°	1851.4	1855.5	1867.9	1884.5	1917.6	1946.7	1979.8	1988.1	2000.4	2021.2	2029.5
10°	1805.8	1814.1	1830.6	1851.4	1888.6	1925.9	1967.3	1979.8	2017.0	2054.3	2075.1
12.5°	1793.4	1797.6	1814.1	1847.2	1892.8	1938.4	1992.3	2004.6	2058.5	2116.5	2149.5
15°	1814.1	1818.3	1826.5	1863.9	1917.6	1975.6	2046.0	2062.6	2128.9	2195.1	2236.5
17.5°	1851.4	1851.4	1859.7	1892.8	1950.9	2017.0	2108.1	2133.1	2207.6	2282.1	2327.7
20°	1876.2	1876.2	1888.6	1921.8	1988.1	2075.1	2182.7	2215.9	2298.7	2381.6	2423.0
22.5°	1901.1	1905.3	1917.6	1954.9	2029.5	2149.5	2273.8	2307.0	2402.3	2489.3	2530.7
25°	1971.5	1967.3	1971.5	2004.6	2091.5	2240.7	2398.1	2439.5	2538.9	2634.1	2654.9
27.5°	2166.2	2157.9	2104.0	2083.3	2149.5	2336.0	2555.5	2596.9	2712.9	2808.2	2808.2
30°	2613.5	2596.9	2464.4	2294.6	2240.7	2423.0	2704.6	2762.6	2911.6	2994.5	2969.6
32.5°	3180.9	3143.6	2973.8	2683.9	2468.5	2538.9	2861.9	2928.2	3118.8	3189.2	3135.3
35°	3802.1	3798.0	3586.8	3214.0	2907.5	2779.1	3064.9	3143.6	3383.9	3445.9	3358.9
37.5°	4460.7	4477.2	4336.5	3822.9	3462.5	3172.6	3334.1	3425.3	3719.3	3793.9	3711.0
40°	5193.7	5189.7	5135.8	4526.9	4129.4	3731.7	3723.4	3806.3	4162.4	4278.5	4162.4
42.5°	6121.6	6113.3	5918.6	5371.8	4937.0	4460.7	4290.9	4319.9	4717.5	4908.0	4738.2
45°	7065.9	7007.9	6784.2	6312.1	5926.9	5363.6	5040.5	5040.5	5380.2	5641.0	5376.0
47.5°	7591.9	7533.9	7442.7	7181.8	7065.9	6436.4	5960.0	5902.0	6167.1	6432.2	6059.4
50°	8283.6	8283.6	8055.8	7956.4	8155.2	7711.9	6974.8	6916.7	7045.1	7256.5	6767.6
52.5°	8830.4	8730.9	8569.3	8656.3	9223.7	9020.8	7989.5	7877.7	7977.1	8030.9	7384.9
55°	9058.0	8962.9	8950.4	9269.3	10147.4	9865.7	9029.0	8929.6	8921.4	8656.3	7923.3
57.5°	9103.6	9020.8	9178.3	9737.3	11046.1	10557.4	10064.5	9990.0	9758.1	9095.4	8474.0
60°	8718.5	8759.9	9140.9	9994.2	11576.2	11158.0	10938.5	10859.8	10325.4	9468.1	9087.1
62.5°	7927.5	8026.7	8739.2	10019.0	11381.6	11402.3	11423.0	11369.2	10764.4	9807.7	9704.2
65°	6991.3	7020.4	7877.7	9675.2	11042.0	11327.8	11779.2	11775.1	11099.9	10188.8	10400.1
67.5°	5761.2	5811.0	6552.3	8515.5	10362.7	11294.6	12247.3	12234.9	11481.1	10623.8	10814.2
70°	4286.8	4348.8	4949.5	6622.7	8846.8	10880.5	12860.3	12868.5	11882.8	10955.0	10528.4
71°	3342.5	3454.2	4083.8	5624.5	8072.3	10462.1	12918.3	12992.8	11928.4	10909.4	9940.3
72.5°	1640.2	1772.7	2563.8	3959.5	6643.4	9526.1	12537.2	12682.2	11642.5	10342.1	8498.9
75°	426.6	451.5	766.2	1619.4	3562.0	6312.1	10110.1	10478.7	9517.8	7873.6	5193.7
77.5°	269.3	277.5	360.3	629.6	1333.6	2398.1	5939.4	6121.6	5438.2	3988.5	1830.6
80°	190.5	194.7	227.8	405.9	778.7	700.0	2137.1	2215.9	1967.3	1056.2	327.2
82.5°	116.0	116.0	165.6	260.9	480.4	381.1	563.2	600.6	530.1	294.0	107.7
85°	66.3	70.4	103.6	178.1	227.8	186.4	211.2	223.7	227.8	194.7	45.6
87.5°	53.9	58.0	91.1	149.1	124.2	91.1	91.1	95.3	99.4	116.0	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°	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7	2008.7
2.5°	2000.4	2000.4	2004.6	2000.4	2000.4	2000.4	2004.6	2004.6	2004.6	2012.9	2017.0
5°	2008.7	2008.7	2008.7	2004.6	2000.4	2000.4	2008.7	2012.9	2012.9	2025.3	2025.3
7.5°	2029.5	2029.5	2021.2	2012.9	2004.6	1992.3	1996.3	2000.4	1996.3	2000.4	2000.4
10°	2075.1	2075.1	2062.6	2046.0	2021.2	1983.9	1934.2	1872.0	1814.1	1793.4	1785.1
12.5°	2149.5	2145.5	2120.6	2091.5	2037.8	1909.5	1723.0	1503.5	1321.3	1271.6	1255.0
15°	2232.3	2224.2	2195.1	2145.5	2000.4	1660.8	1271.6	989.9	815.9	774.5	766.2
17.5°	2319.3	2307.0	2265.6	2166.2	1830.6	1234.3	820.1	621.2	526.0	517.7	521.8
20°	2410.5	2394.0	2336.0	2124.8	1478.6	824.3	530.1	480.4	472.1	472.1	476.3
22.5°	2514.0	2493.4	2414.6	1975.6	1076.9	546.8	455.6	451.5	447.3	443.1	443.1
25°	2634.1	2609.3	2489.3	1706.4	741.5	447.3	434.9	422.5	414.2	405.9	401.7
27.5°	2779.1	2746.0	2547.2	1375.0	509.4	418.4	410.0	389.3	372.8	356.1	356.1
30°	2924.1	2882.7	2530.7	1035.4	414.2	389.3	372.8	347.9	323.1	306.5	302.3
32.5°	3077.4	3035.9	2423.0	695.9	377.0	356.1	335.5	298.2	269.3	248.4	244.4
35°	3305.1	3272.0	2211.7	459.8	339.6	314.7	285.8	248.4	211.2	190.5	186.4
37.5°	3644.8	3603.4	1950.9	352.1	298.2	260.9	236.1	194.7	157.4	136.7	132.5
40°	4100.4	3976.2	1640.2	310.7	260.9	215.3	182.3	140.8	111.9	99.4	99.4
42.5°	4630.5	4336.5	1304.7	281.7	231.9	178.1	132.5	95.3	78.6	74.6	74.6
45°	5193.7	4671.9	969.1	260.9	202.9	140.8	95.3	66.3	58.0	53.9	53.9
47.5°	5773.7	4945.3	675.1	236.1	169.8	107.7	66.3	49.7	41.4	37.2	37.2
50°	6316.2	5123.3	476.3	211.2	145.0	78.6	49.7	37.2	29.0	29.0	29.0
52.5°	6693.1	5106.8	343.7	182.3	111.9	53.9	33.1	24.8	24.8	24.8	24.8
55°	7024.5	5044.7	269.3	157.4	87.0	37.2	24.8	20.8	20.8	16.6	16.6
57.5°	7306.0	4945.3	227.8	128.4	62.2	29.0	16.6	16.6	12.4	12.4	12.4
60°	7546.3	4821.1	190.5	107.7	41.4	20.8	12.4	8.3	8.3	4.2	8.3
62.5°	7873.6	4742.3	165.6	82.8	29.0	12.4	8.3	4.2	4.2	0.0	0.0
65°	8113.7	4593.3	140.8	58.0	16.6	8.3	4.2	4.2	0.0	0.0	0.0
67.5°	8122.0	4324.1	103.6	33.1	12.4	8.3	4.2	0.0	0.0	0.0	0.0
70°	7467.7	3686.2	66.3	16.6	8.3	4.2	4.2	0.0	0.0	0.0	0.0
71°	6867.1	3263.7	53.9	12.4	8.3	4.2	0.0	0.0	0.0	0.0	0.0
72.5°	5657.7	2398.1	41.4	12.4	4.2	4.2	0.0	0.0	0.0	0.0	0.0
75°	3118.8	869.8	20.8	8.3	4.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	998.2	265.1	12.4	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	169.8	41.4	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	58.0	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)