

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: P258098

Luminaire Tested: **ARCH-L-AF72-220-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P258098  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-220-D-U-T2U-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17999 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

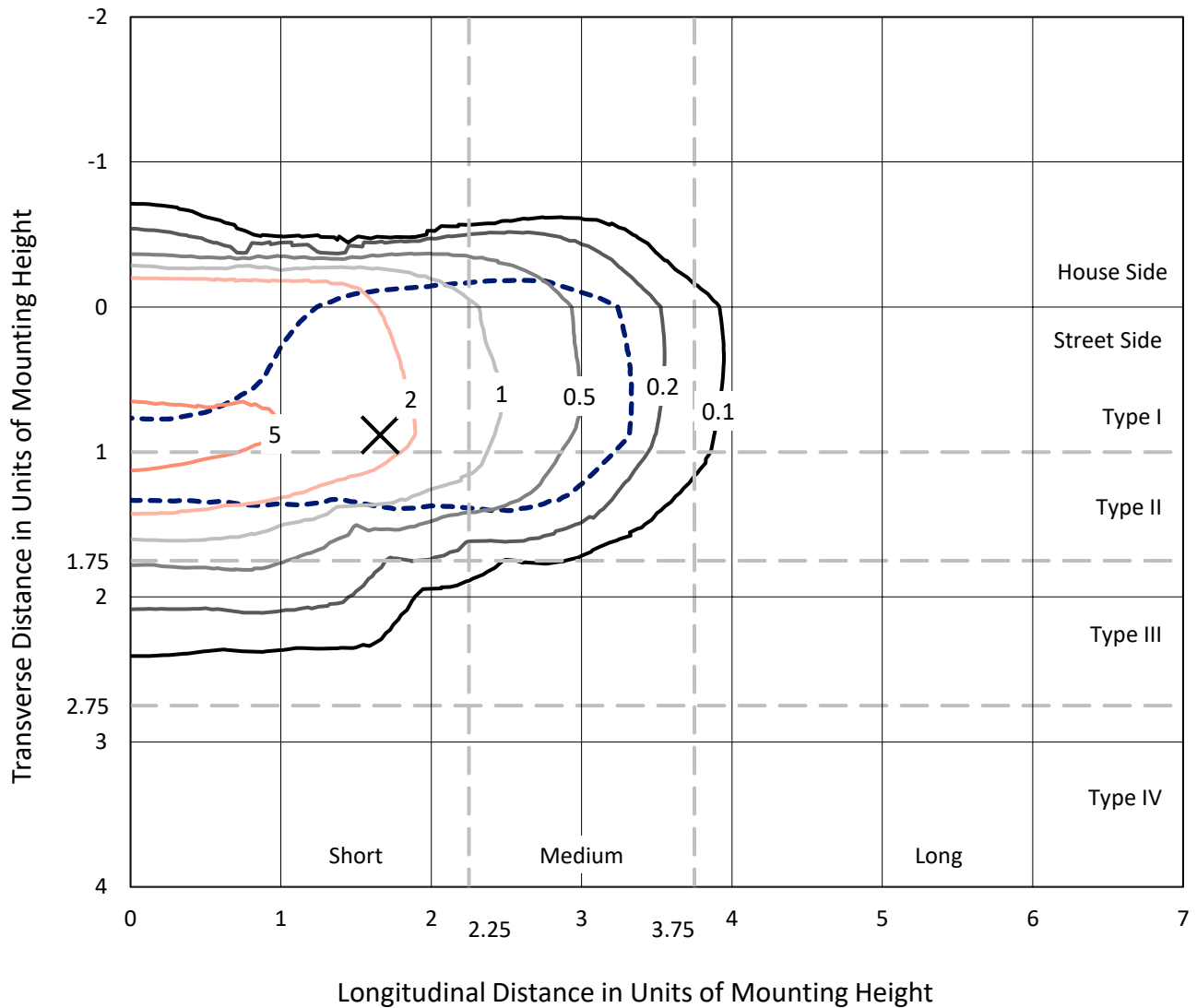
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

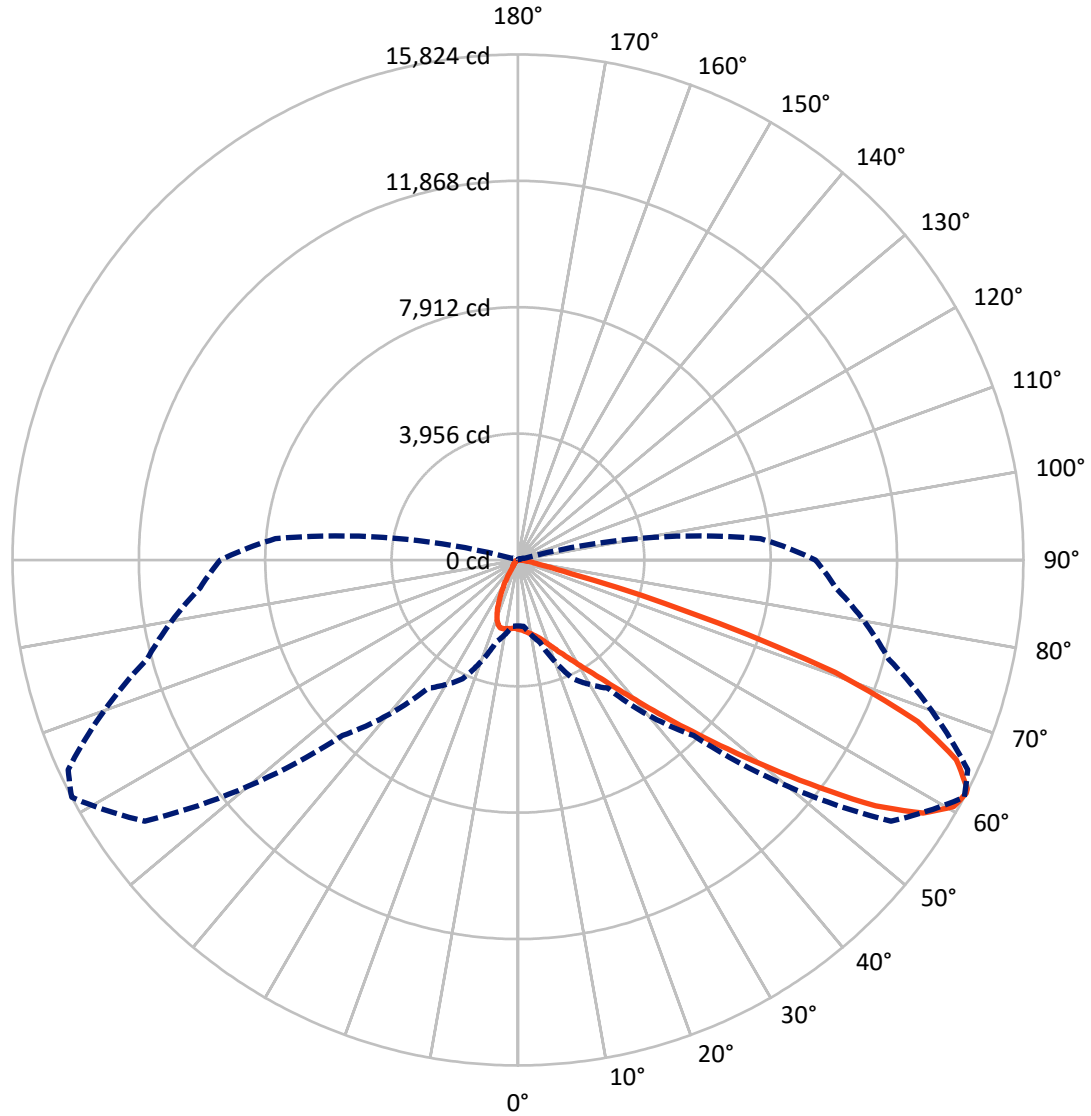
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral      - - - Horizontal Cone Through 62-Deg Vertical

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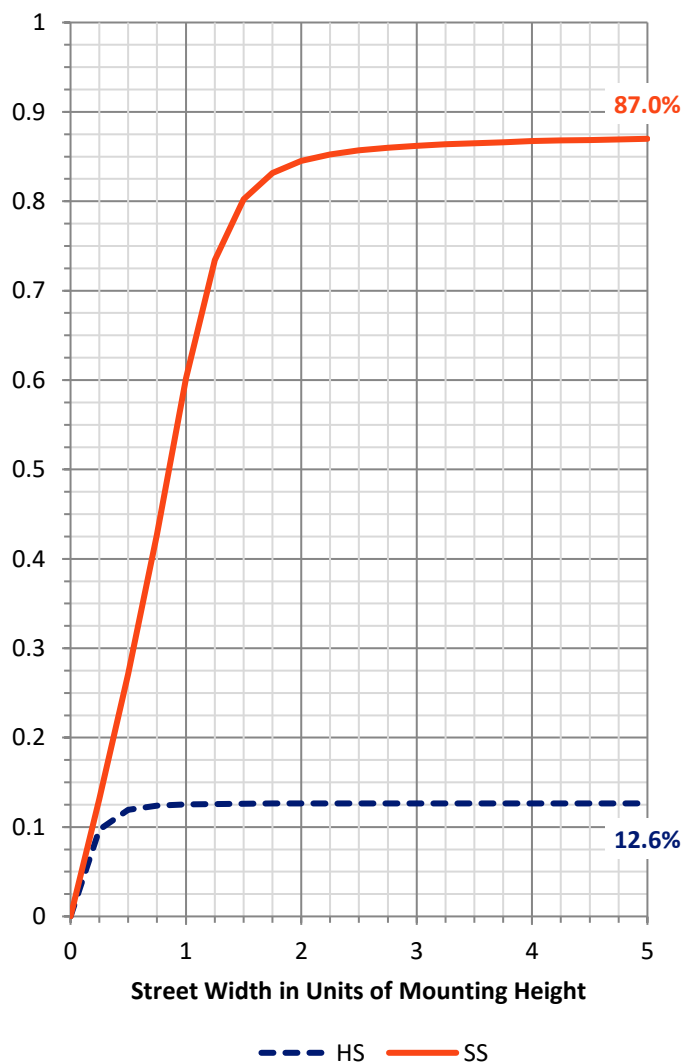
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2301.4	0.0	2301.4
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	15697.6	0.0	15697.6
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	17999.0	0.0	17999.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.6	1.2
10°-20°	582.7	3.2
20°-30°	978.6	5.4
30°-40°	1875.9	10.4
40°-50°	3831.5	21.3
50°-60°	5070.4	28.2
60°-70°	3938.9	21.9
70°-80°	1421.7	7.9
80°-90°	90.6	0.5
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°	17999.0	100.0
0°-180°	17999.0	100.0

**Coefficient of Utilization**



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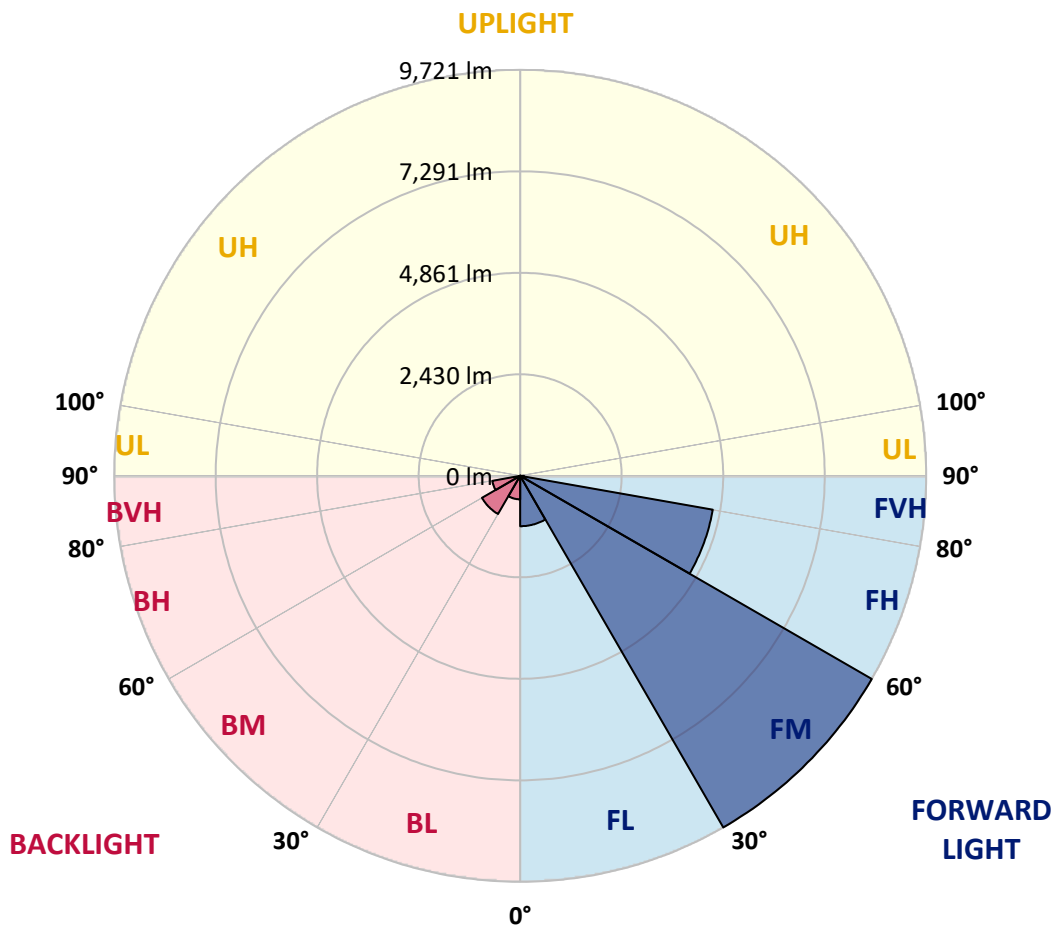
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1206.7	6.7			
FM (30°-60°)	9721.3	54.0			
FH (60°-80°)	4682.9	26.0			G2/5000
FVH (80°-90°)	86.7	0.5			G1/100
BL (0°-30°)	563.3	3.1	B2/1000		
BM (30°-60°)	1056.5	5.9	B2/2500		
BH (60°-80°)	677.7	3.8	B2/1000		G2/1000
BVH (80°-90°)	3.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2
2.5°	2225.7	2221.3	2216.9	2212.5	2212.5	2208.0	2203.6	2194.8	2185.9	2177.1	2172.6
5°	2265.6	2261.1	2256.7	2261.1	2256.7	2256.7	2252.3	2243.4	2234.6	2221.3	2208.0
7.5°	2296.5	2292.1	2287.7	2292.1	2296.5	2301.0	2305.4	2296.5	2292.1	2274.4	2261.1
10°	2336.4	2331.9	2327.5	2336.4	2336.4	2358.5	2362.9	2358.5	2354.1	2340.8	2318.7
12.5°	2393.9	2398.3	2398.3	2407.2	2416.0	2442.6	2451.4	2438.1	2438.1	2420.4	2393.9
15°	2500.1	2500.1	2500.1	2508.9	2513.4	2548.8	2557.6	2544.3	2553.2	2522.2	2495.7
17.5°	2601.9	2606.3	2615.1	2632.8	2632.8	2663.8	2681.5	2681.5	2699.2	2659.4	2624.0
20°	2703.6	2708.1	2721.3	2761.2	2761.2	2801.0	2832.0	2845.2	2862.9	2823.1	2761.2
22.5°	2814.3	2814.3	2836.4	2898.3	2885.1	2964.7	3022.2	3044.3	3062.0	3009.0	2911.6
25°	2982.4	2964.7	2982.4	3039.9	3031.1	3141.7	3247.9	3270.0	3292.1	3230.2	3084.2
27.5°	3301.0	3274.4	3212.5	3216.9	3216.9	3345.2	3495.7	3526.7	3539.9	3486.8	3305.4
30°	3938.2	3938.2	3708.1	3553.2	3451.4	3566.5	3778.9	3832.0	3849.7	3770.0	3531.1
32.5°	5048.8	5048.8	4624.0	4230.2	3845.3	3845.3	4088.6	4186.0	4203.7	4110.8	3832.0
35°	6464.8	6456.0	5818.8	5278.9	4526.7	4243.5	4451.5	4615.2	4668.3	4544.4	4221.4
37.5°	7969.3	7911.8	7225.9	6606.4	5575.4	4880.7	4942.6	5159.5	5208.1	5106.4	4725.8
40°	9190.6	9124.2	8571.1	8053.4	6929.4	5898.4	5650.6	5849.8	5907.3	5765.7	5327.6
42.5°	10296.8	10133.1	9752.5	9380.8	8487.0	7659.5	6593.1	6672.8	6734.7	6584.3	6004.6
45°	11097.7	10845.5	10650.8	10535.8	10062.3	9593.2	7814.4	7655.1	7677.2	7491.4	6743.6
47.5°	11119.8	10942.8	10960.5	11261.4	11456.1	11438.4	9403.0	8836.6	8752.5	8442.8	7531.2
50°	10057.9	10159.6	10482.7	11341.1	12394.2	13031.4	11292.4	10234.9	9982.6	9425.1	8314.4
52.5°	8287.9	8447.2	9053.4	10500.4	12531.4	14080.1	13252.7	11832.3	11380.9	10398.6	8916.2
55°	6491.4	6500.2	7137.4	8610.9	11615.4	14270.4	14819.1	13589.0	12898.7	11137.5	9314.5
57.5°	4464.8	4708.1	5517.9	6509.1	9549.0	13323.5	15407.6	14951.8	14062.4	11593.3	9593.2
60°	2924.9	2938.2	3880.7	5026.7	6500.2	10841.1	15049.2	15673.1	15004.9	11863.2	9783.5
62°	2062.0	2084.1	2668.2	4106.3	4898.4	7770.2	14257.1	15823.5	15535.9	12022.5	9982.6
62.5°	1911.6	1929.3	2420.4	3876.2	4601.9	6969.3	13973.9	15788.1	15615.6	12075.6	10053.4
65°	1402.7	1402.7	1584.1	2663.8	3371.8	3765.6	11841.1	15084.6	15509.4	12500.4	10318.9
67.5°	1084.1	1093.0	1154.9	1641.6	2544.3	2283.3	7557.8	13500.5	14403.1	13128.8	10469.4
70°	933.7	929.2	973.5	1088.5	1836.3	1517.7	3327.5	10535.8	12062.4	12969.5	10332.2
72.5°	690.3	694.7	796.5	955.8	1278.8	986.8	1504.5	5593.1	7823.3	10150.8	8854.3
75°	442.5	446.9	562.0	752.2	920.4	646.0	867.3	1668.2	3203.6	5628.5	5416.1
77.5°	296.5	305.3	367.3	526.6	805.3	402.7	544.3	699.1	964.6	2110.7	1942.5
80°	199.1	199.1	234.5	354.0	508.9	336.3	292.0	464.6	500.0	654.9	327.4
82.5°	132.7	132.7	154.9	234.5	331.9	300.9	177.0	252.2	292.0	327.4	115.0
85°	79.6	79.6	106.2	146.0	216.8	168.1	115.0	141.6	150.4	208.0	61.9
87.5°	48.7	44.2	70.8	101.8	115.0	101.8	75.2	75.2	79.6	115.0	31.0
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°	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2	2168.2
2.5°	2163.8	2159.4	2154.9	2146.1	2132.8	2124.0	2115.1	2106.3	2097.4	2097.4	2110.7
5°	2203.6	2190.3	2172.6	2154.9	2128.4	2110.7	2097.4	2079.7	2070.9	2070.9	2075.3
7.5°	2252.3	2239.0	2208.0	2177.1	2137.2	2106.3	2075.3	2035.5	2004.5	1991.2	2004.5
10°	2305.4	2287.7	2243.4	2194.8	2150.5	2070.9	1969.1	1845.2	1739.0	1690.3	1712.4
12.5°	2371.8	2349.6	2296.5	2230.2	2128.4	1933.7	1681.5	1393.9	1212.4	1128.4	1146.1
15°	2469.1	2438.1	2362.9	2261.1	2035.5	1615.1	1203.6	871.7	703.6	632.8	641.6
17.5°	2584.2	2544.3	2442.6	2252.3	1796.5	1163.8	716.8	508.9	438.1	420.4	420.4
20°	2708.1	2655.0	2522.2	2185.9	1433.7	730.1	446.9	389.4	362.8	349.6	349.6
22.5°	2836.4	2765.6	2588.6	2031.0	1022.2	455.8	367.3	327.4	296.5	283.2	283.2
25°	2991.3	2898.3	2655.0	1761.1	650.5	367.3	314.2	274.3	243.4	225.7	230.1
27.5°	3172.7	3053.2	2712.5	1424.8	420.4	318.6	261.1	221.2	194.7	185.8	185.8
30°	3362.9	3221.3	2725.8	1066.4	340.7	274.3	216.8	181.4	163.7	154.9	154.9
32.5°	3624.0	3438.2	2685.9	708.0	287.6	230.1	181.4	150.4	137.2	132.7	132.7
35°	3969.2	3721.4	2593.0	438.1	243.4	190.3	150.4	132.7	119.5	115.0	115.0
37.5°	4407.2	4115.2	2429.3	300.9	208.0	154.9	128.3	115.0	106.2	101.8	101.8
40°	4991.3	4593.1	2216.9	261.1	177.0	132.7	110.6	101.8	92.9	92.9	92.9
42.5°	5610.8	5172.7	1942.5	230.1	150.4	115.0	97.3	88.5	84.1	79.6	79.6
45°	6287.8	5765.7	1601.8	203.5	128.3	101.8	88.5	75.2	70.8	70.8	70.8
47.5°	6960.4	6376.3	1230.1	177.0	110.6	88.5	75.2	66.4	61.9	57.5	57.5
50°	7650.7	6929.4	902.7	154.9	97.3	79.6	66.4	57.5	48.7	44.2	44.2
52.5°	8150.7	7261.3	659.3	132.7	84.1	66.4	53.1	44.2	35.4	31.0	31.0
55°	8518.0	7464.9	482.3	110.6	75.2	57.5	44.2	35.4	26.5	26.5	22.1
57.5°	8805.6	7562.2	362.8	97.3	66.4	48.7	35.4	26.5	22.1	17.7	17.7
60°	9026.9	7566.6	269.9	79.6	57.5	39.8	26.5	17.7	13.3	13.3	13.3
62°	9318.9	7624.1	221.2	66.4	53.1	35.4	22.1	13.3	8.8	4.4	4.4
62.5°	9403.0	7646.3	212.4	66.4	48.7	31.0	17.7	13.3	8.8	4.4	4.4
65°	9792.4	7686.1	163.7	53.1	39.8	26.5	13.3	8.8	0.0	0.0	0.0
67.5°	10146.4	7624.1	119.5	39.8	31.0	17.7	13.3	4.4	0.0	0.0	0.0
70°	10111.0	7199.4	84.1	26.5	22.1	13.3	8.8	0.0	0.0	0.0	0.0
72.5°	8332.1	5389.6	57.5	22.1	13.3	8.8	4.4	0.0	0.0	0.0	0.0
75°	5031.1	2358.5	39.8	13.3	13.3	8.8	4.4	0.0	0.0	0.0	0.0
77.5°	1650.5	854.0	26.5	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0
80°	269.9	141.6	13.3	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0
82.5°	84.1	35.4	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0	0.0
85°	31.0	13.3	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0	0.0
87.5°	13.3	8.8	8.8	8.8	4.4	4.4	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)