

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: P258097

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P258097  
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-AF72-210-D-U-T2U-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 900mA 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: 17390 lumens  
Efficiency: N/A  
Efficacy: 82.4 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

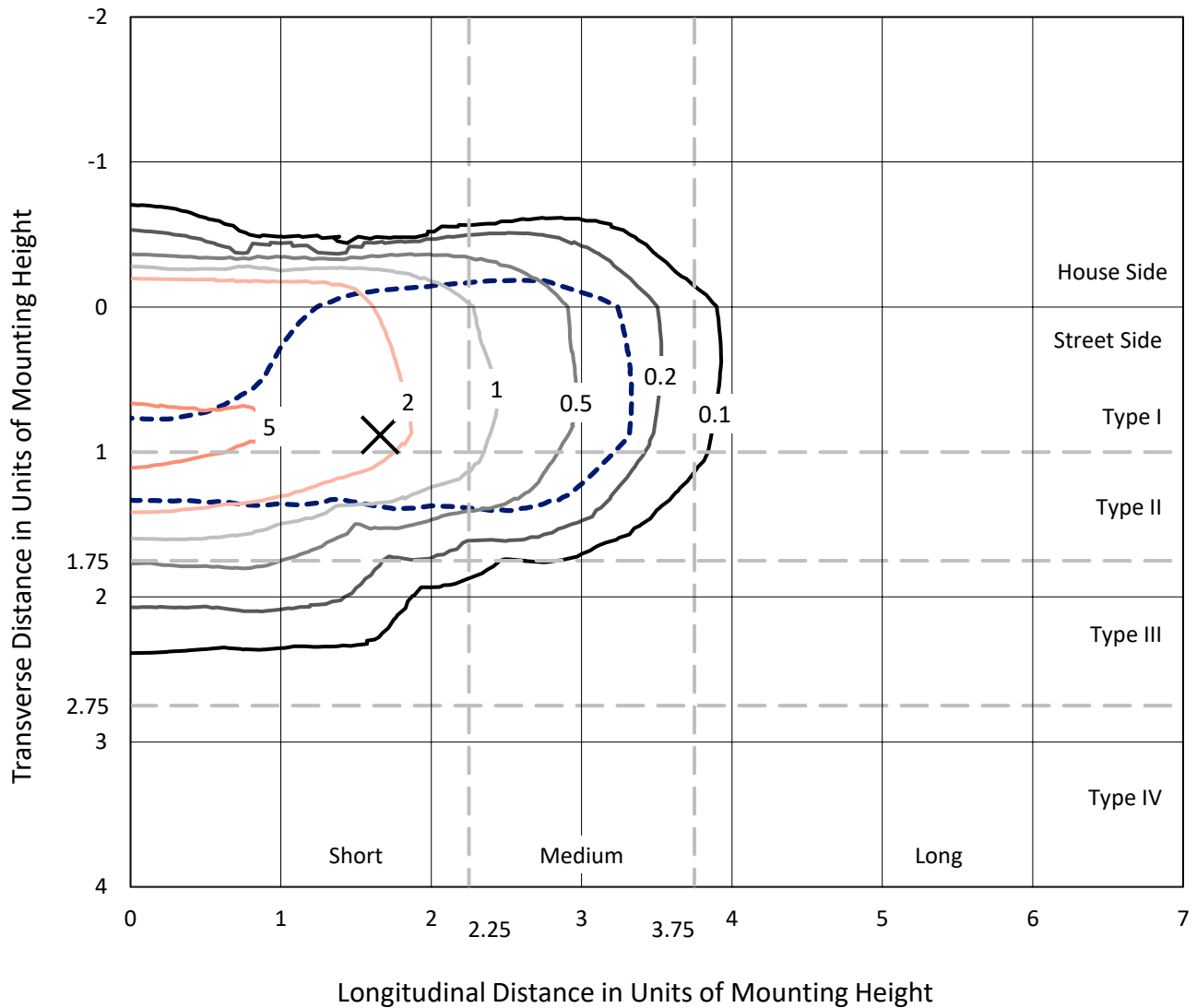
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

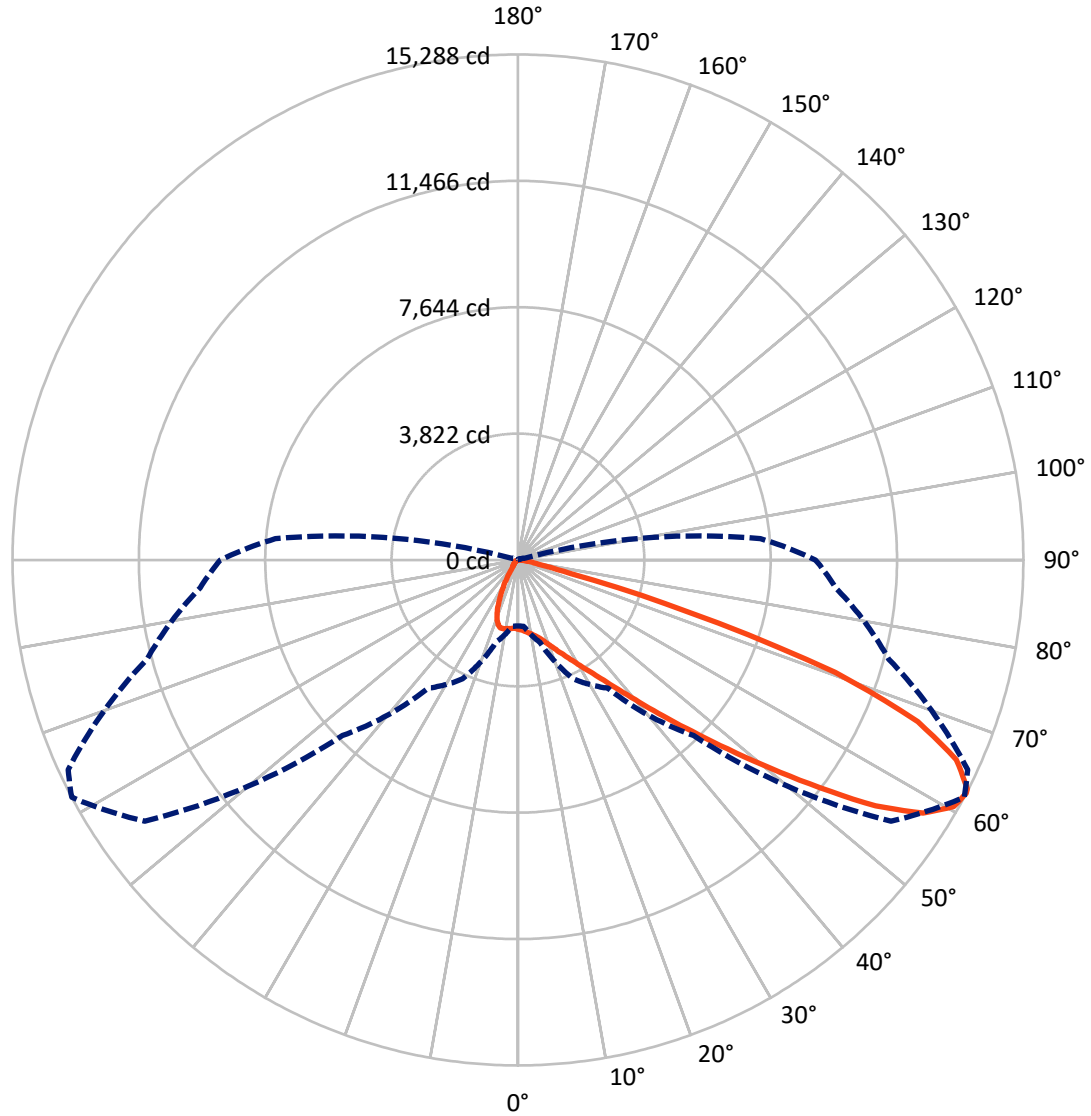
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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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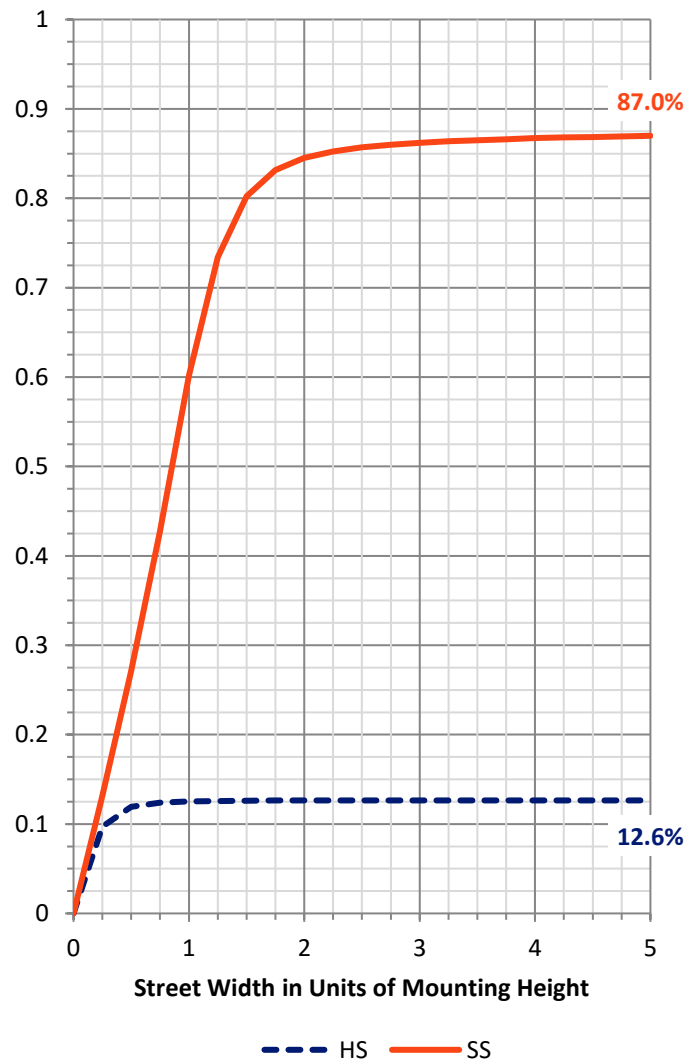
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2223.6	0.0	2223.6
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	15166.5	0.0	15166.5
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	17390.0	0.0	17390.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.6	1.2
10°-20°	563.0	3.2
20°-30°	945.5	5.4
30°-40°	1812.4	10.4
40°-50°	3701.9	21.3
50°-60°	4898.9	28.2
60°-70°	3805.6	21.9
70°-80°	1373.6	7.9
80°-90°	87.6	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°	17390.0	100.0
0°-180°	17390.0	100.0



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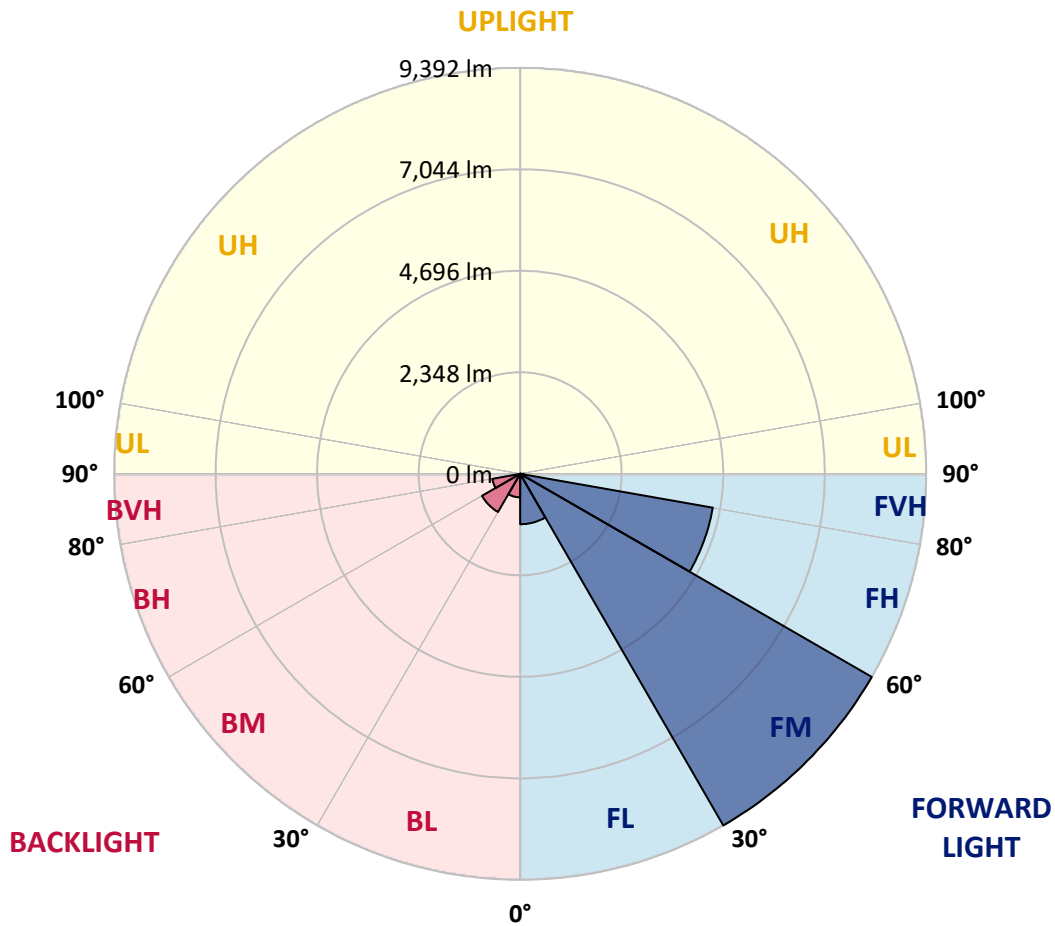
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1165.8	6.7			
FM (30°-60°)	9392.4	54.0			
FH (60°-80°)	4524.5	26.0			G2/5000
FVH (80°-90°)	83.7	0.5			G1/100
BL (0°-30°)	544.2	3.1	B2/1000		
BM (30°-60°)	1020.8	5.9	B2/2500		
BH (60°-80°)	654.8	3.8	B2/1000		G2/1000
BVH (80°-90°)	3.8	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°	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9
2.5°	2150.4	2146.2	2141.9	2137.6	2137.6	2133.3	2129.1	2120.5	2112.0	2103.4	2099.1
5°	2188.9	2184.6	2180.4	2184.6	2180.4	2180.4	2176.1	2167.5	2159.0	2146.2	2133.3
7.5°	2218.8	2214.6	2210.3	2214.6	2218.8	2223.1	2227.4	2218.8	2214.6	2197.5	2184.6
10°	2257.3	2253.0	2248.8	2257.3	2257.3	2278.7	2283.0	2278.7	2274.4	2261.6	2240.2
12.5°	2312.9	2317.2	2317.2	2325.7	2334.3	2359.9	2368.5	2355.6	2355.6	2338.5	2312.9
15°	2415.5	2415.5	2415.5	2424.0	2428.3	2462.5	2471.1	2458.2	2466.8	2436.9	2411.2
17.5°	2513.8	2518.1	2526.6	2543.7	2543.7	2573.7	2590.8	2590.8	2607.9	2569.4	2535.2
20°	2612.2	2616.4	2629.3	2667.7	2667.7	2706.2	2736.1	2749.0	2766.1	2727.6	2667.7
22.5°	2719.0	2719.0	2740.4	2800.3	2787.4	2864.4	2920.0	2941.3	2958.4	2907.1	2813.1
25°	2881.5	2864.4	2881.5	2937.1	2928.5	3035.4	3138.0	3159.4	3180.8	3120.9	2979.8
27.5°	3189.3	3163.7	3103.8	3108.1	3108.1	3232.1	3377.4	3407.3	3420.2	3368.9	3193.6
30°	3804.9	3804.9	3582.6	3433.0	3334.7	3445.8	3651.0	3702.3	3719.4	3642.5	3411.6
32.5°	4878.0	4878.0	4467.6	4087.1	3715.2	3715.2	3950.3	4044.3	4061.4	3971.7	3702.3
35°	6246.1	6237.5	5621.9	5100.3	4373.5	4099.9	4300.9	4459.0	4510.3	4390.6	4078.5
37.5°	7699.7	7644.1	6981.4	6382.9	5386.8	4715.6	4775.4	4984.9	5031.9	4933.6	4565.9
40°	8879.6	8815.5	8281.1	7780.9	6695.0	5698.9	5459.4	5651.8	5707.4	5570.6	5147.4
42.5°	9948.4	9790.2	9422.6	9063.4	8199.9	7400.4	6370.1	6447.0	6506.9	6361.5	5801.5
45°	10722.2	10478.5	10290.4	10179.3	9721.8	9268.7	7550.0	7396.1	7417.5	7237.9	6515.4
47.5°	10743.6	10572.6	10589.7	10880.4	11068.5	11051.4	9084.8	8537.6	8456.4	8157.1	7276.4
50°	9717.5	9815.9	10128.0	10957.4	11974.9	12590.5	10910.3	9888.6	9644.9	9106.2	8033.1
52.5°	8007.5	8161.4	8747.1	10145.1	12107.4	13603.7	12804.2	11431.9	10995.8	10046.7	8614.5
55°	6271.7	6280.3	6895.9	8319.6	11222.4	13787.5	14317.7	13129.2	12462.2	10760.7	8999.3
57.5°	4313.7	4548.8	5331.2	6288.8	9225.9	12872.7	14886.3	14445.9	13586.6	11201.0	9268.7
60°	2825.9	2838.7	3749.4	4856.6	6280.3	10474.3	14540.0	15142.8	14497.2	11461.8	9452.5
62°	1992.2	2013.6	2578.0	3967.4	4732.7	7507.3	13774.7	15288.1	15010.3	11615.7	9644.9
62.5°	1846.9	1864.0	2338.5	3745.1	4446.2	6733.5	13501.1	15253.9	15087.2	11667.0	9713.3
65°	1355.2	1355.2	1530.5	2573.7	3257.7	3638.2	11440.5	14574.2	14984.6	12077.5	9969.8
67.5°	1047.4	1056.0	1115.8	1586.1	2458.2	2206.0	7302.1	13043.7	13915.8	12684.5	10115.1
70°	902.1	897.8	940.5	1051.7	1774.2	1466.4	3215.0	10179.3	11654.2	12530.6	9982.6
72.5°	666.9	671.2	769.5	923.4	1235.5	953.4	1453.6	5403.9	7558.6	9807.3	8554.7
75°	427.5	431.8	543.0	726.8	889.2	624.2	837.9	1611.8	3095.3	5438.1	5232.9
77.5°	286.4	295.0	354.8	508.7	778.1	389.0	525.9	675.5	932.0	2039.3	1876.8
80°	192.4	192.4	226.6	342.0	491.6	324.9	282.2	448.9	483.1	632.7	316.4
82.5°	128.3	128.3	149.6	226.6	320.6	290.7	171.0	243.7	282.2	316.4	111.2
85°	77.0	77.0	102.6	141.1	209.5	162.5	111.2	136.8	145.4	200.9	59.9
87.5°	47.0	42.8	68.4	98.3	111.2	98.3	72.7	72.7	77.0	111.2	29.9
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°	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9	2094.9
2.5°	2090.6	2086.3	2082.0	2073.5	2060.7	2052.1	2043.5	2035.0	2026.4	2026.4	2039.3
5°	2129.1	2116.2	2099.1	2082.0	2056.4	2039.3	2026.4	2009.3	2000.8	2000.8	2005.1
7.5°	2176.1	2163.3	2133.3	2103.4	2064.9	2035.0	2005.1	1966.6	1936.7	1923.8	1936.7
10°	2227.4	2210.3	2167.5	2120.5	2077.8	2000.8	1902.5	1782.8	1680.2	1633.1	1654.5
12.5°	2291.5	2270.1	2218.8	2154.7	2056.4	1868.3	1624.6	1346.7	1171.4	1090.2	1107.3
15°	2385.6	2355.6	2283.0	2184.6	1966.6	1560.5	1162.9	842.2	679.8	611.4	619.9
17.5°	2496.7	2458.2	2359.9	2176.1	1735.7	1124.4	692.6	491.6	423.2	406.1	406.1
20°	2616.4	2565.1	2436.9	2112.0	1385.2	705.4	431.8	376.2	350.6	337.7	337.7
22.5°	2740.4	2672.0	2501.0	1962.3	987.6	440.3	354.8	316.4	286.4	273.6	273.6
25°	2890.0	2800.3	2565.1	1701.5	628.5	354.8	303.5	265.1	235.1	218.0	222.3
27.5°	3065.3	2949.9	2620.7	1376.6	406.1	307.8	252.2	213.8	188.1	179.6	179.6
30°	3249.2	3112.4	2633.5	1030.3	329.2	265.1	209.5	175.3	158.2	149.6	149.6
32.5°	3501.4	3321.8	2595.1	684.0	277.9	222.3	175.3	145.4	132.5	128.3	128.3
35°	3834.9	3595.5	2505.3	423.2	235.1	183.8	145.4	128.3	115.4	111.2	111.2
37.5°	4258.1	3975.9	2347.1	290.7	200.9	149.6	124.0	111.2	102.6	98.3	98.3
40°	4822.4	4437.7	2141.9	252.2	171.0	128.3	106.9	98.3	89.8	89.8	89.8
42.5°	5421.0	4997.7	1876.8	222.3	145.4	111.2	94.1	85.5	81.2	77.0	77.0
45°	6075.1	5570.6	1547.6	196.7	124.0	98.3	85.5	72.7	68.4	68.4	68.4
47.5°	6724.9	6160.6	1188.5	171.0	106.9	85.5	72.7	64.1	59.9	55.6	55.6
50°	7391.8	6695.0	872.1	149.6	94.1	77.0	64.1	55.6	47.0	42.8	42.8
52.5°	7874.9	7015.6	637.0	128.3	81.2	64.1	51.3	42.8	34.2	29.9	29.9
55°	8229.8	7212.3	466.0	106.9	72.7	55.6	42.8	34.2	25.7	25.7	21.4
57.5°	8507.7	7306.3	350.6	94.1	64.1	47.0	34.2	25.7	21.4	17.1	17.1
60°	8721.4	7310.6	260.8	77.0	55.6	38.5	25.7	17.1	12.8	12.8	12.8
62°	9003.6	7366.2	213.8	64.1	51.3	34.2	21.4	12.8	8.6	4.3	4.3
62.5°	9084.8	7387.6	205.2	64.1	47.0	29.9	17.1	12.8	8.6	4.3	4.3
65°	9461.0	7426.0	158.2	51.3	38.5	25.7	12.8	8.6	0.0	0.0	0.0
67.5°	9803.1	7366.2	115.4	38.5	29.9	17.1	12.8	4.3	0.0	0.0	0.0
70°	9768.9	6955.8	81.2	25.7	21.4	12.8	8.6	0.0	0.0	0.0	0.0
72.5°	8050.2	5207.2	55.6	21.4	12.8	8.6	4.3	0.0	0.0	0.0	0.0
75°	4860.9	2278.7	38.5	12.8	12.8	8.6	4.3	0.0	0.0	0.0	0.0
77.5°	1594.7	825.1	25.7	8.6	8.6	4.3	4.3	0.0	0.0	0.0	0.0
80°	260.8	136.8	12.8	8.6	8.6	4.3	4.3	0.0	0.0	0.0	0.0
82.5°	81.2	34.2	8.6	8.6	4.3	4.3	0.0	0.0	0.0	0.0	0.0
85°	29.9	12.8	8.6	8.6	4.3	4.3	0.0	0.0	0.0	0.0	0.0
87.5°	12.8	8.6	8.6	8.6	4.3	4.3	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)