

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: P258103

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P258103  
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-AF72-270-D-U-T2U-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1155mA 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: 20523 lumens  
Efficiency: N/A  
Efficacy: 75.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G3

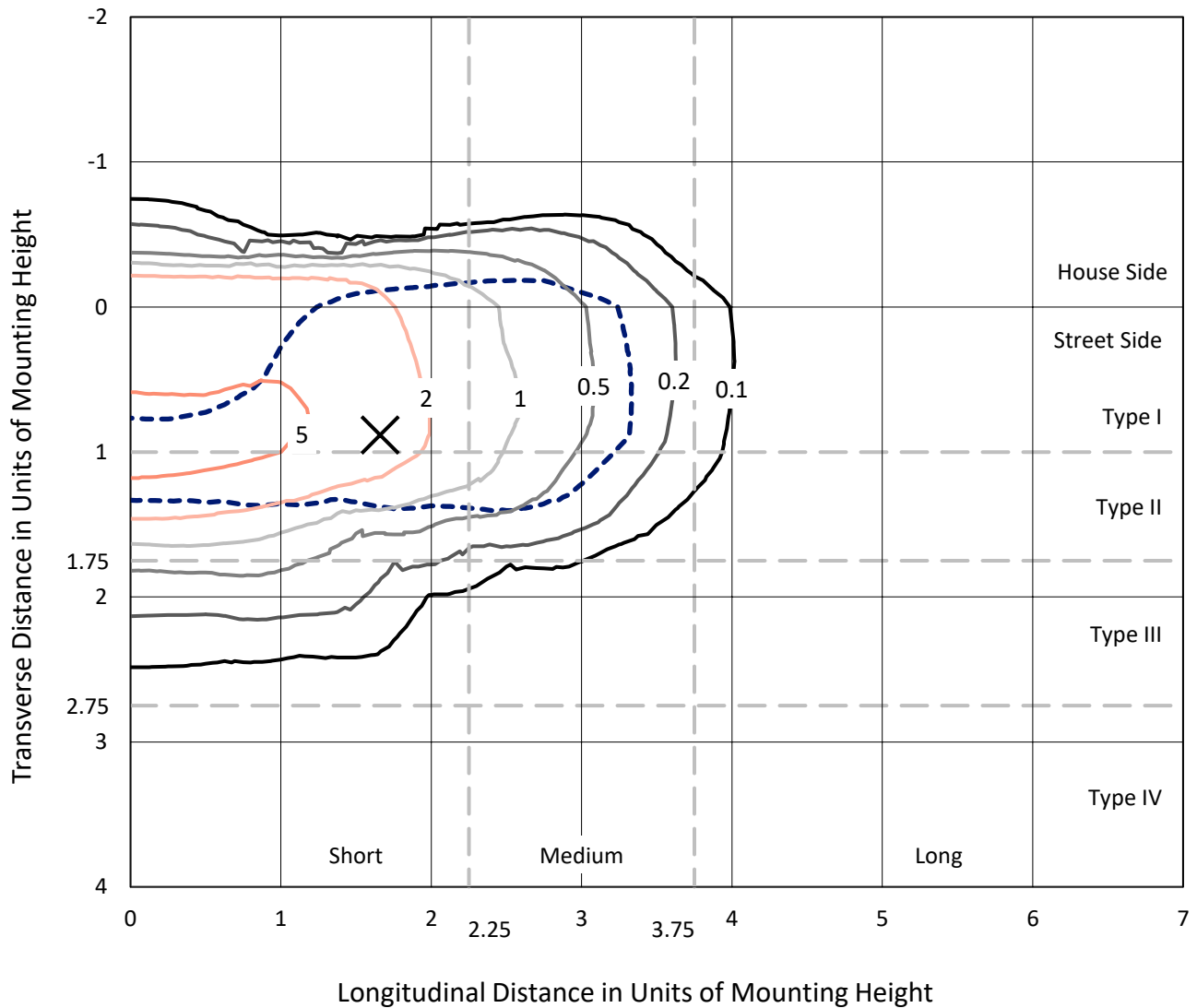
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

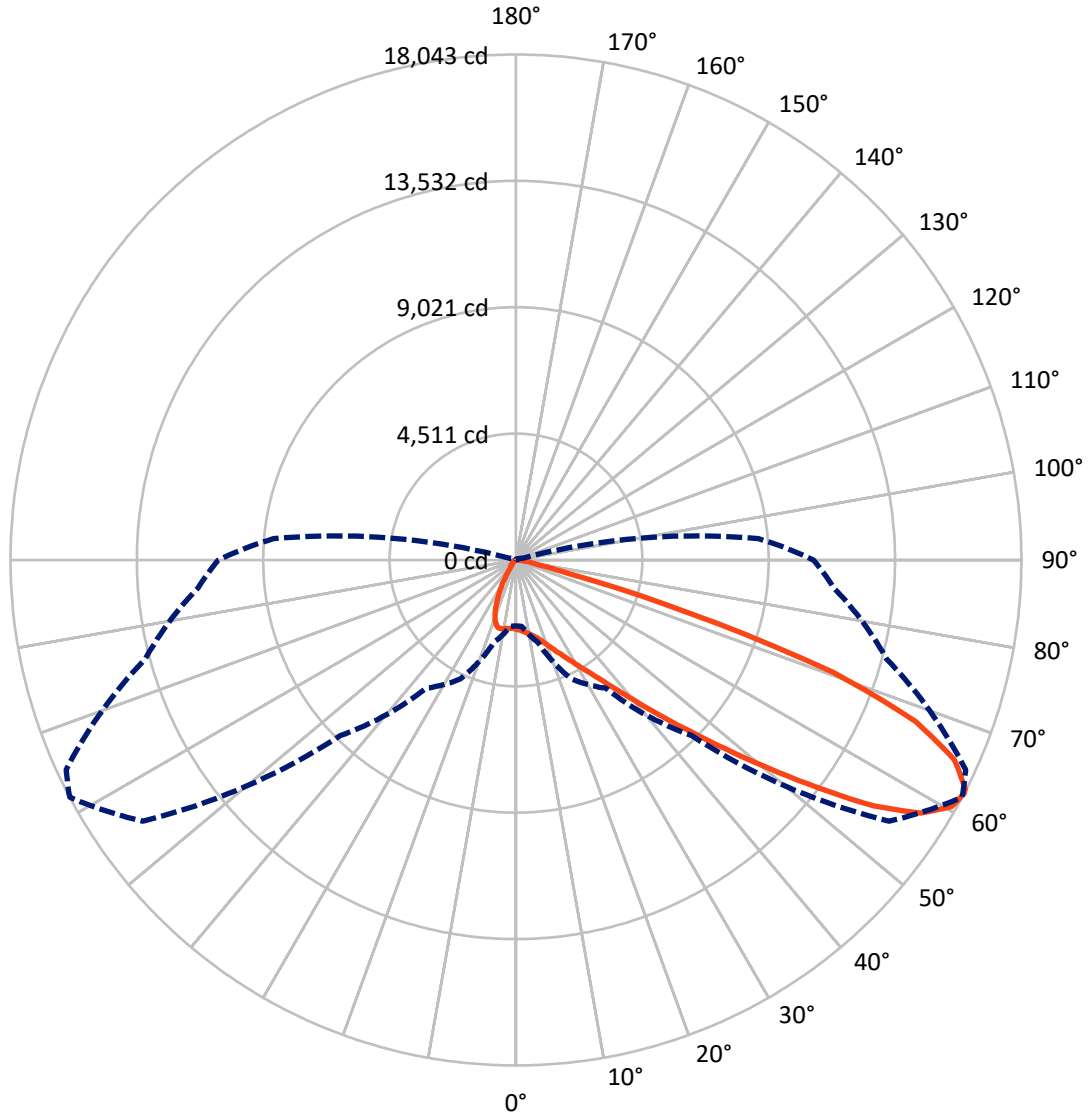
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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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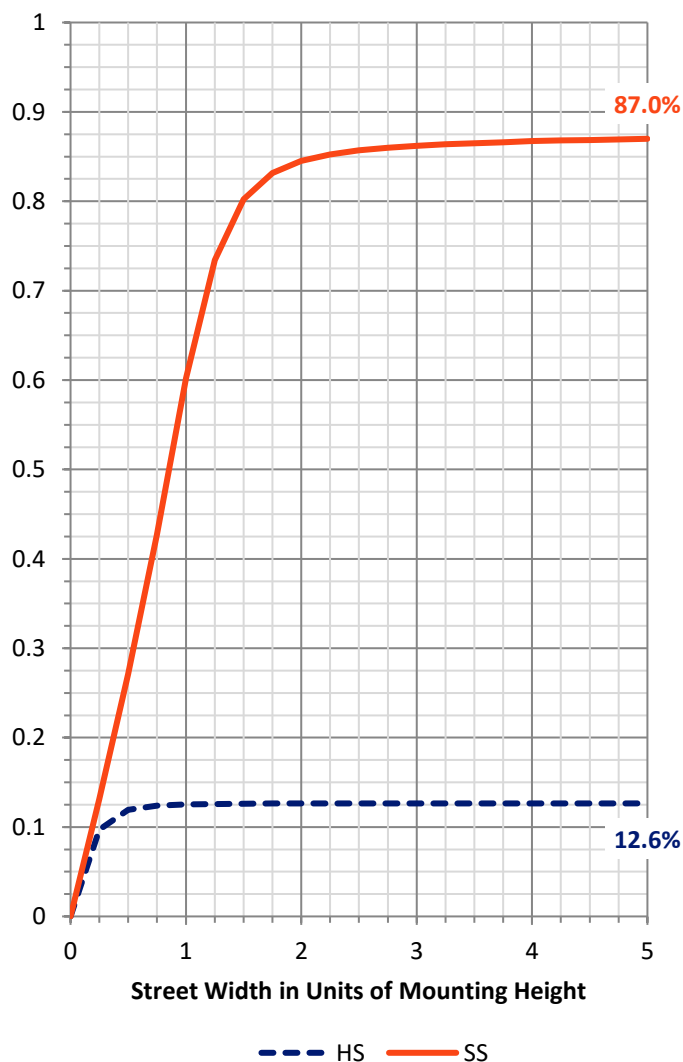
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2624.1	0.0	2624.1
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	17898.9	0.0	17898.9
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	20523.0	0.0	20523.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.9	1.2
10°-20°	664.4	3.2
20°-30°	1115.8	5.4
30°-40°	2138.9	10.4
40°-50°	4368.8	21.3
50°-60°	5781.5	28.2
60°-70°	4491.2	21.9
70°-80°	1621.1	7.9
80°-90°	103.3	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°	20523.0	100.0
0°-180°	20523.0	100.0

**Coefficient of Utilization**



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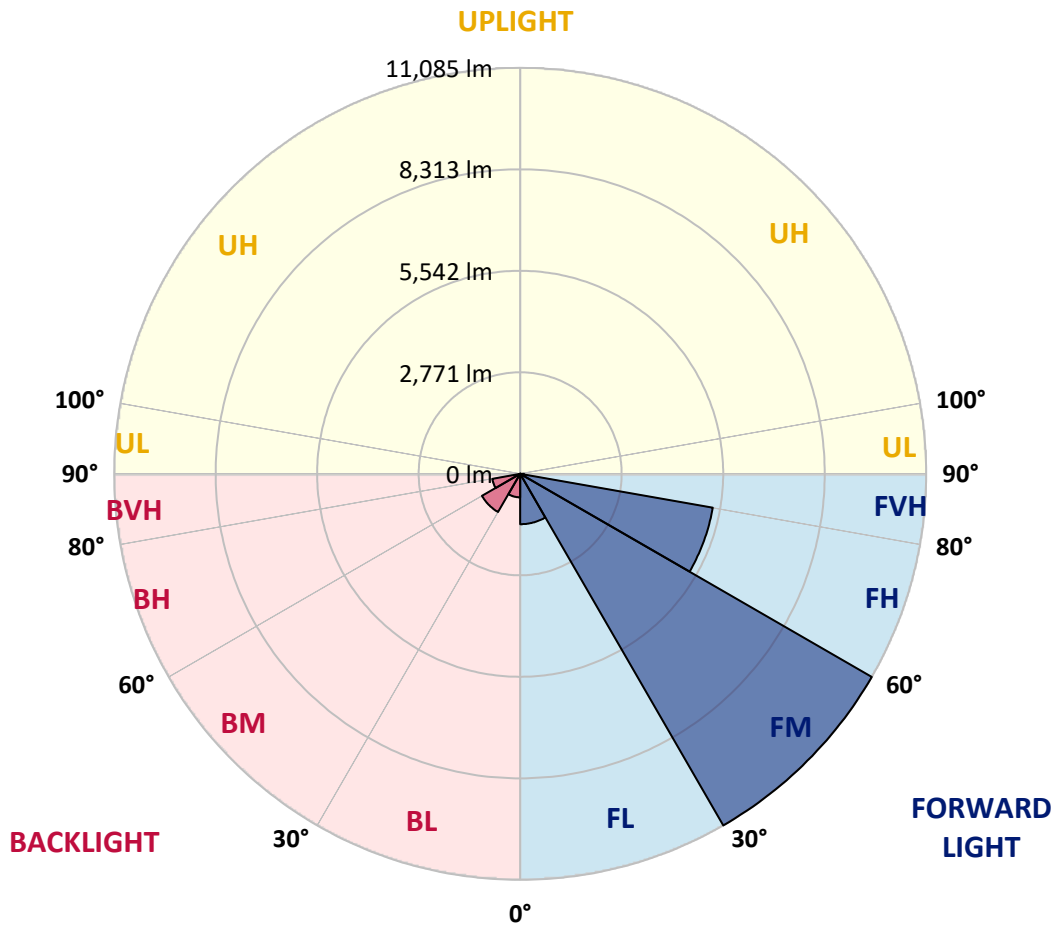
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1375.9	6.7			
FM (30°-60°)	11084.5	54.0			
FH (60°-80°)	5339.6	26.0			G3/7500
FVH (80°-90°)	98.8	0.5			G1/100
BL (0°-30°)	642.2	3.1	B2/1000		
BM (30°-60°)	1204.7	5.9	B2/2500		
BH (60°-80°)	772.7	3.8	B2/1000		G2/1000
BVH (80°-90°)	4.5	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3
2.5°	2537.9	2532.8	2527.8	2522.7	2522.7	2517.7	2512.6	2502.5	2492.4	2482.4	2477.3
5°	2583.3	2578.2	2573.2	2578.2	2573.2	2573.2	2568.1	2558.0	2547.9	2532.8	2517.7
7.5°	2618.6	2613.5	2608.5	2613.5	2618.6	2623.6	2628.7	2618.6	2613.5	2593.4	2578.2
10°	2664.0	2658.9	2653.9	2664.0	2664.0	2689.2	2694.3	2689.2	2684.2	2669.0	2643.8
12.5°	2729.6	2734.6	2734.6	2744.7	2754.8	2785.1	2795.2	2780.0	2780.0	2759.9	2729.6
15°	2850.7	2850.7	2850.7	2860.8	2865.8	2906.2	2916.3	2901.1	2911.2	2875.9	2845.6
17.5°	2966.7	2971.8	2981.9	3002.0	3002.0	3037.4	3057.5	3057.5	3077.7	3032.3	2991.9
20°	3082.8	3087.8	3102.9	3148.4	3148.4	3193.8	3229.1	3244.2	3264.4	3219.0	3148.4
22.5°	3208.9	3208.9	3234.1	3304.8	3289.6	3380.4	3446.0	3471.3	3491.4	3430.9	3319.9
25°	3400.6	3380.4	3400.6	3466.2	3456.1	3582.3	3703.3	3728.6	3753.8	3683.2	3516.7
27.5°	3763.9	3733.6	3663.0	3668.0	3668.0	3814.3	3985.9	4021.2	4036.3	3975.8	3768.9
30°	4490.4	4490.4	4228.1	4051.5	3935.4	4066.6	4308.8	4369.3	4389.5	4298.7	4026.3
32.5°	5756.8	5756.8	5272.5	4823.4	4384.5	4384.5	4662.0	4773.0	4793.2	4687.2	4369.3
35°	7371.4	7361.3	6634.7	6019.2	5161.5	4838.6	5075.7	5262.4	5322.9	5181.7	4813.3
37.5°	9086.8	9021.2	8239.2	7532.8	6357.2	5565.1	5635.8	5883.0	5938.5	5822.4	5388.5
40°	10479.4	10403.7	9773.0	9182.7	7901.2	6725.6	6443.0	6670.1	6735.7	6574.2	6074.7
42.5°	11740.7	11554.0	11120.1	10696.3	9677.1	8733.6	7517.7	7608.5	7679.2	7507.6	6846.7
45°	12653.9	12366.4	12144.4	12013.2	11473.3	10938.5	8910.2	8728.6	8753.8	8541.9	7689.2
47.5°	12679.2	12477.4	12497.5	12840.6	13062.6	13042.4	10721.5	10075.7	9979.9	9626.7	8587.3
50°	11468.3	11584.3	11952.6	12931.4	14132.3	14858.8	12875.9	11670.1	11382.5	10746.8	9480.4
52.5°	9450.1	9631.7	10323.0	11972.8	14288.7	16054.6	15111.1	13491.5	12976.9	11856.8	10166.6
55°	7401.7	7411.7	8138.3	9818.4	13244.3	16271.5	16897.2	15494.5	14707.4	12699.4	10620.6
57.5°	5090.8	5368.3	6291.7	7421.8	10888.0	15191.8	17568.2	17048.5	16034.4	13219.0	10938.5
60°	3335.0	3350.2	4424.8	5731.6	7411.7	12361.3	17159.5	17870.9	17109.1	13526.8	11155.5
62°	2351.2	2376.4	3042.4	4682.2	5585.3	8859.8	16256.4	18042.5	17714.5	13708.4	11382.5
62.5°	2179.6	2199.8	2759.9	4419.8	5247.3	7946.6	15933.5	18002.1	17805.3	13769.0	11463.2
65°	1599.4	1599.4	1806.3	3037.4	3844.6	4293.7	13501.6	17199.9	17684.2	14253.4	11766.0
67.5°	1236.1	1246.2	1316.9	1871.9	2901.1	2603.4	8617.6	15393.6	16422.9	14969.8	11937.5
70°	1064.6	1059.5	1110.0	1241.2	2093.9	1730.6	3794.2	12013.2	13753.9	14788.2	11781.1
72.5°	787.1	792.1	908.2	1089.8	1458.1	1125.1	1715.4	6377.4	8920.3	11574.2	10095.9
75°	504.5	509.6	640.8	857.7	1049.5	736.6	988.9	1902.1	3652.9	6417.8	6175.6
77.5°	338.0	348.1	418.8	600.4	918.3	459.1	620.6	797.2	1099.9	2406.7	2214.9
80°	227.0	227.0	267.4	403.6	580.2	383.5	333.0	529.8	570.1	746.7	373.4
82.5°	151.4	151.4	176.6	267.4	378.4	343.1	201.8	287.6	333.0	373.4	131.2
85°	90.8	90.8	121.1	166.5	247.2	191.7	131.2	161.5	171.5	237.1	70.6
87.5°	55.5	50.5	80.7	116.0	131.2	116.0	85.8	85.8	90.8	131.2	35.3
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°	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3	2472.3
2.5°	2467.2	2462.2	2457.1	2447.0	2431.9	2421.8	2411.7	2401.6	2391.5	2391.5	2406.7
5°	2512.6	2497.5	2477.3	2457.1	2426.9	2406.7	2391.5	2371.4	2361.3	2361.3	2366.3
7.5°	2568.1	2553.0	2517.7	2482.4	2436.9	2401.6	2366.3	2320.9	2285.6	2270.4	2285.6
10°	2628.7	2608.5	2558.0	2502.5	2452.1	2361.3	2245.2	2103.9	1982.9	1927.4	1952.6
12.5°	2704.4	2679.1	2618.6	2542.9	2426.9	2204.9	1917.3	1589.3	1382.4	1286.6	1306.8
15°	2815.4	2780.0	2694.3	2578.2	2320.9	1841.6	1372.4	994.0	802.2	721.5	731.6
17.5°	2946.5	2901.1	2785.1	2568.1	2048.4	1326.9	817.4	580.2	499.5	479.3	479.3
20°	3087.8	3027.3	2875.9	2492.4	1634.7	832.5	509.6	444.0	413.7	398.6	398.6
22.5°	3234.1	3153.4	2951.6	2315.9	1165.5	519.7	418.8	373.4	338.0	322.9	322.9
25°	3410.7	3304.8	3027.3	2008.1	741.7	418.8	358.2	312.8	277.5	257.3	262.4
27.5°	3617.6	3481.3	3092.9	1624.6	479.3	363.3	297.7	252.3	222.0	211.9	211.9
30°	3834.5	3673.1	3108.0	1215.9	388.5	312.8	247.2	206.9	186.7	176.6	176.6
32.5°	4132.2	3920.3	3062.6	807.3	328.0	262.4	206.9	171.5	156.4	151.4	151.4
35°	4525.8	4243.2	2956.6	499.5	277.5	217.0	171.5	151.4	136.2	131.2	131.2
37.5°	5025.3	4692.3	2769.9	343.1	237.1	176.6	146.3	131.2	121.1	116.0	116.0
40°	5691.3	5237.2	2527.8	297.7	201.8	151.4	126.1	116.0	106.0	106.0	106.0
42.5°	6397.6	5898.1	2214.9	262.4	171.5	131.2	111.0	100.9	95.9	90.8	90.8
45°	7169.6	6574.2	1826.4	232.1	146.3	116.0	100.9	85.8	80.7	80.7	80.7
47.5°	7936.5	7270.5	1402.6	201.8	126.1	100.9	85.8	75.7	70.6	65.6	65.6
50°	8723.6	7901.2	1029.3	176.6	111.0	90.8	75.7	65.6	55.5	50.5	50.5
52.5°	9293.7	8279.6	751.8	151.4	95.9	75.7	60.5	50.5	40.4	35.3	35.3
55°	9712.5	8511.6	550.0	126.1	85.8	65.6	50.5	40.4	30.3	30.3	25.2
57.5°	10040.4	8622.6	413.7	111.0	75.7	55.5	40.4	30.3	25.2	20.2	20.2
60°	10292.7	8627.7	307.8	90.8	65.6	45.4	30.3	20.2	15.1	15.1	15.1
62°	10625.7	8693.3	252.3	75.7	60.5	40.4	25.2	15.1	10.1	5.0	5.0
62.5°	10721.5	8718.5	242.2	75.7	55.5	35.3	20.2	15.1	10.1	5.0	5.0
65°	11165.5	8763.9	186.7	60.5	45.4	30.3	15.1	10.1	0.0	0.0	0.0
67.5°	11569.2	8693.3	136.2	45.4	35.3	20.2	15.1	5.0	0.0	0.0	0.0
70°	11528.8	8208.9	95.9	30.3	25.2	15.1	10.1	0.0	0.0	0.0	0.0
72.5°	9500.6	6145.3	65.6	25.2	15.1	10.1	5.0	0.0	0.0	0.0	0.0
75°	5736.7	2689.2	45.4	15.1	15.1	10.1	5.0	0.0	0.0	0.0	0.0
77.5°	1881.9	973.8	30.3	10.1	10.1	5.0	5.0	0.0	0.0	0.0	0.0
80°	307.8	161.5	15.1	10.1	10.1	5.0	5.0	0.0	0.0	0.0	0.0
82.5°	95.9	40.4	10.1	10.1	5.0	5.0	0.0	0.0	0.0	0.0	0.0
85°	35.3	15.1	10.1	10.1	5.0	5.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.1	10.1	10.1	10.1	5.0	5.0	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)