

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: P258099

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P258099  
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-AF72-230-D-U-T2U-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 980mA 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: 18451 lumens  
Efficiency: N/A  
Efficacy: 80.6 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

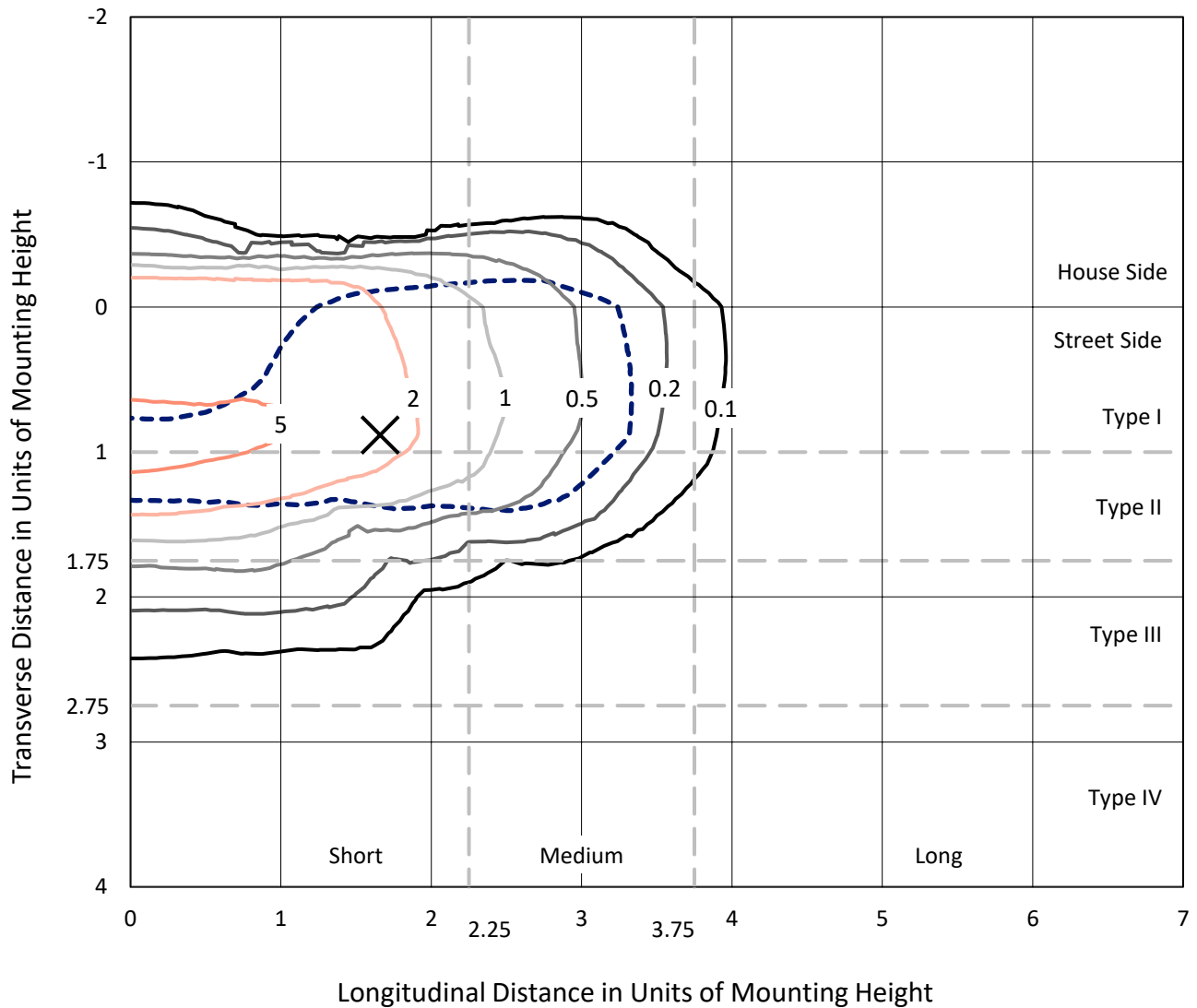
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

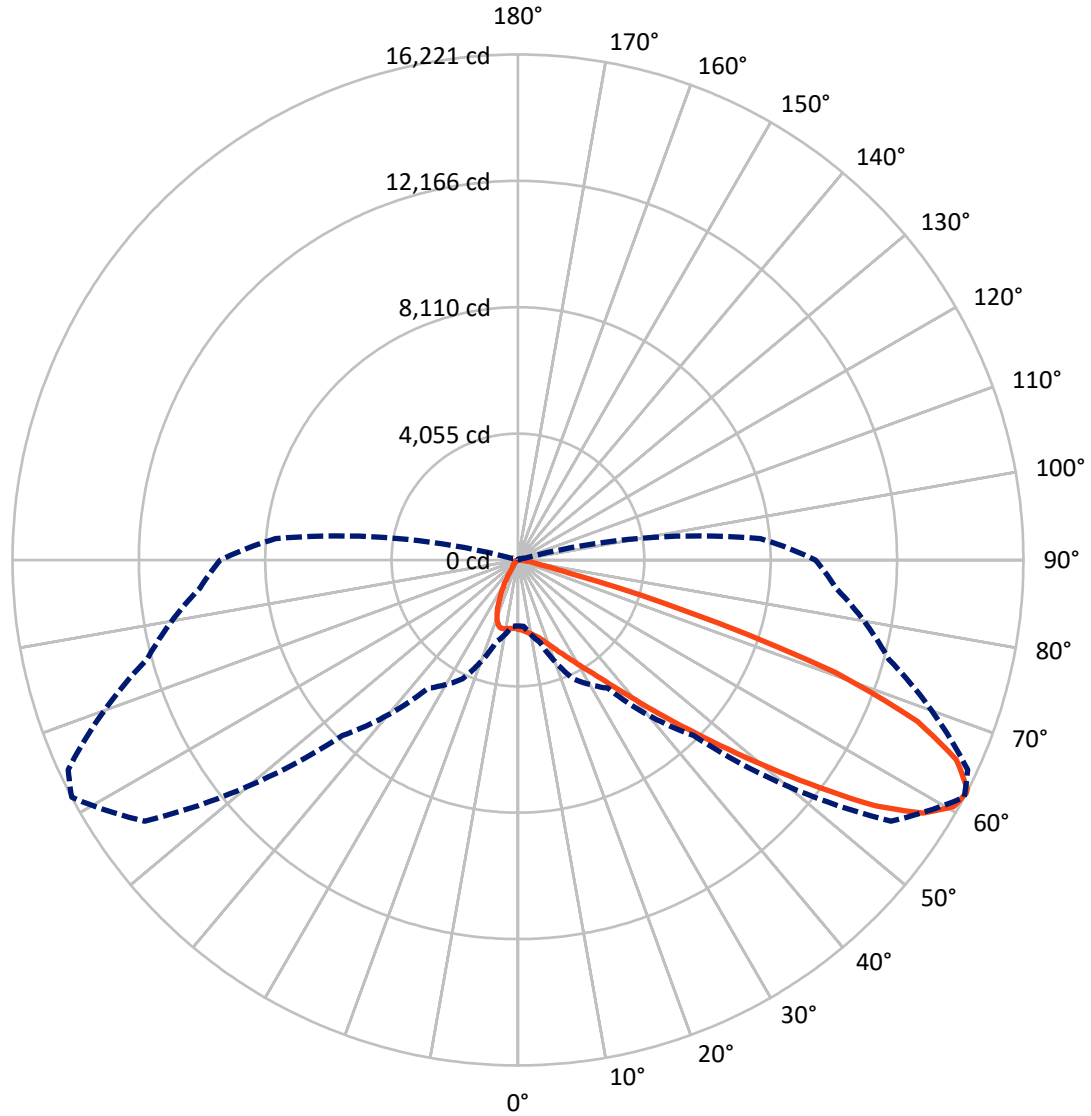
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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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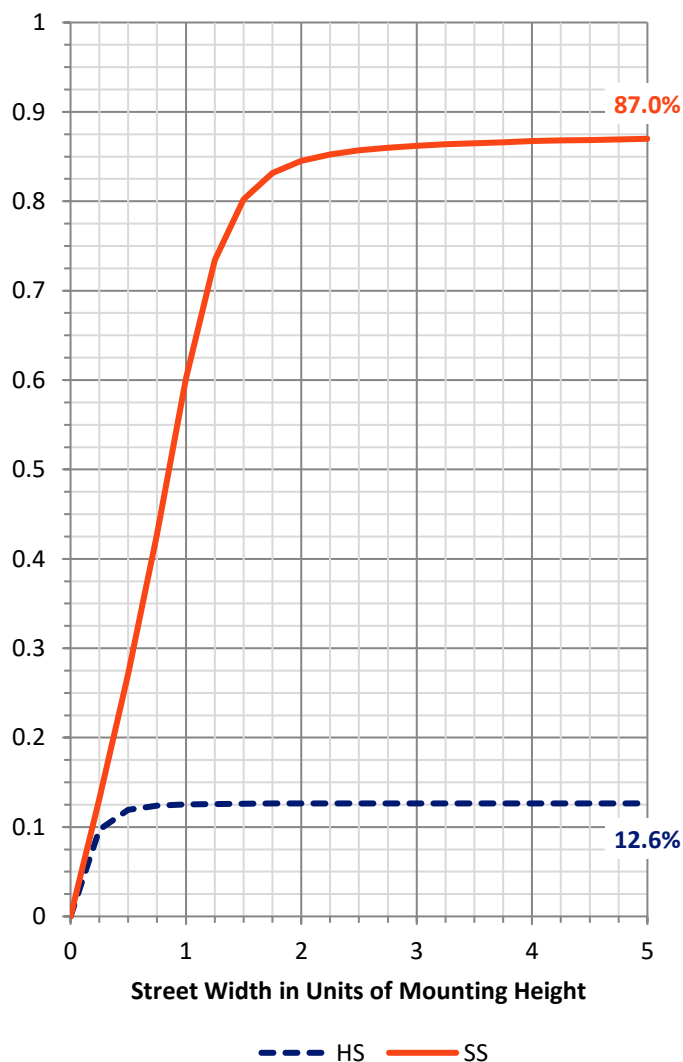
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2359.2	0.0	2359.2
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	16091.8	0.0	16091.8
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	18451.0	0.0	18451.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.9	1.2
10°-20°	597.3	3.2
20°-30°	1003.2	5.4
30°-40°	1923.0	10.4
40°-50°	3927.7	21.3
50°-60°	5197.8	28.2
60°-70°	4037.8	21.9
70°-80°	1457.4	7.9
80°-90°	92.9	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°	18451.0	100.0
0°-180°	18451.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P258099

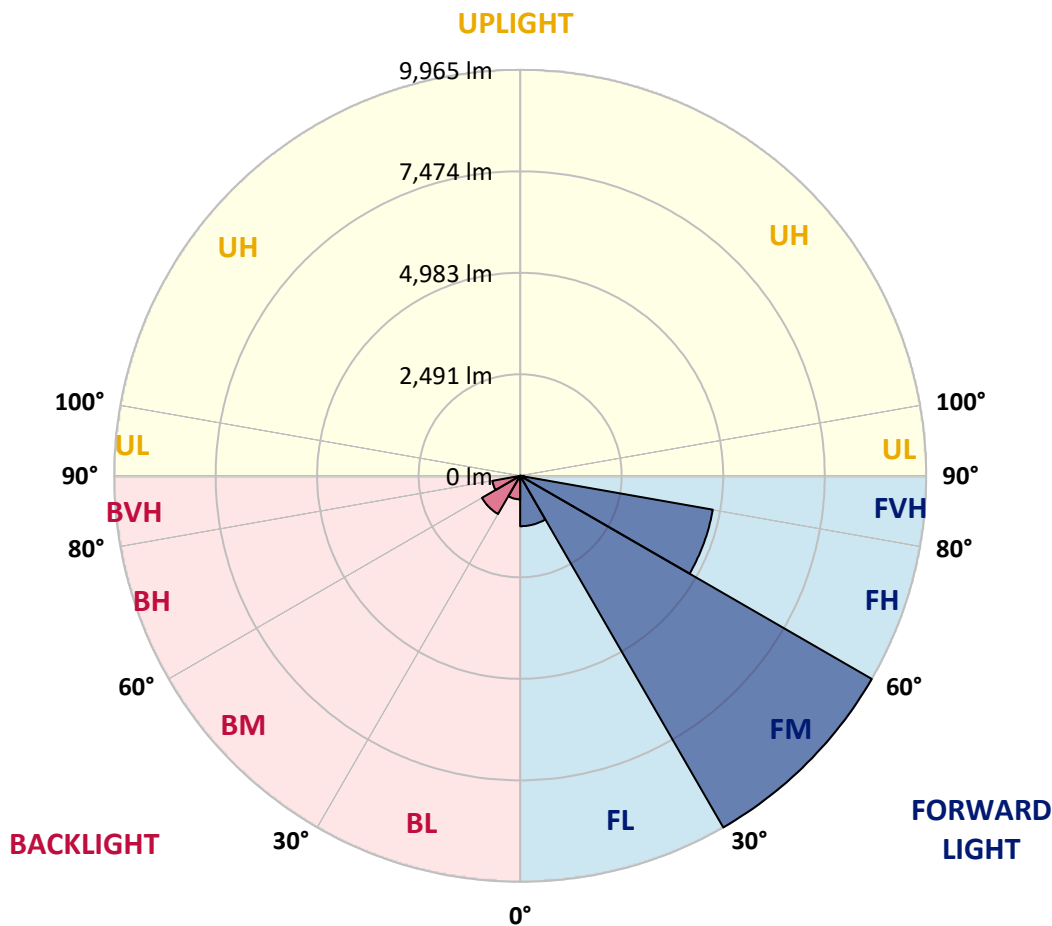
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1237.0	6.7			
FM (30°-60°)	9965.4	54.0			
FH (60°-80°)	4800.5	26.0			G2/5000
FVH (80°-90°)	88.8	0.5			G1/100
BL (0°-30°)	577.4	3.1	B2/1000		
BM (30°-60°)	1083.0	5.9	B2/2500		
BH (60°-80°)	694.7	3.8	B2/1000		G2/1000
BVH (80°-90°)	4.1	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°	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7
2.5°	2281.6	2277.1	2272.6	2268.0	2268.0	2263.5	2259.0	2249.9	2240.8	2231.7	2227.2
5°	2322.5	2317.9	2313.4	2317.9	2313.4	2313.4	2308.8	2299.8	2290.7	2277.1	2263.5
7.5°	2354.2	2349.7	2345.1	2349.7	2354.2	2358.7	2363.3	2354.2	2349.7	2331.5	2317.9
10°	2395.0	2390.5	2386.0	2395.0	2395.0	2417.7	2422.2	2417.7	2413.2	2399.6	2376.9
12.5°	2454.0	2458.5	2458.5	2467.6	2476.7	2503.9	2513.0	2499.4	2499.4	2481.2	2454.0
15°	2562.9	2562.9	2562.9	2571.9	2576.5	2612.8	2621.8	2608.2	2617.3	2585.5	2558.3
17.5°	2667.2	2671.7	2680.8	2698.9	2698.9	2730.7	2748.8	2748.8	2767.0	2726.2	2689.9
20°	2771.5	2776.1	2789.7	2830.5	2830.5	2871.3	2903.1	2916.7	2934.8	2894.0	2830.5
22.5°	2884.9	2884.9	2907.6	2971.1	2957.5	3039.2	3098.1	3120.8	3138.9	3084.5	2984.7
25°	3057.3	3039.2	3057.3	3116.3	3107.2	3220.6	3329.5	3352.1	3374.8	3311.3	3161.6
27.5°	3383.9	3356.7	3293.2	3297.7	3297.7	3429.3	3583.5	3615.2	3628.8	3574.4	3388.4
30°	4037.1	4037.1	3801.2	3642.4	3538.1	3656.1	3873.8	3928.2	3946.4	3864.7	3619.8
32.5°	5175.6	5175.6	4740.2	4336.5	3941.8	3941.8	4191.3	4291.1	4309.2	4214.0	3928.2
35°	6627.2	6618.1	5964.9	5411.5	4640.4	4350.1	4563.3	4731.1	4785.5	4658.5	4327.4
37.5°	8169.4	8110.5	7407.4	6772.3	5715.4	5003.3	5066.8	5289.0	5338.9	5234.6	4844.5
40°	9421.4	9353.3	8786.3	8255.6	7103.5	6046.6	5792.5	5996.7	6055.6	5910.5	5461.4
42.5°	10555.4	10387.5	9997.4	9616.4	8700.1	7851.9	6758.7	6840.4	6903.9	6749.6	6155.4
45°	11376.4	11117.9	10918.3	10800.3	10315.0	9834.2	8010.7	7847.4	7870.0	7679.5	6912.9
47.5°	11399.1	11217.6	11235.8	11544.2	11743.8	11725.7	9639.1	9058.5	8972.3	8654.8	7720.4
50°	10310.4	10414.8	10745.9	11625.9	12705.5	13358.7	11576.0	10491.9	10233.3	9661.8	8523.2
52.5°	8496.0	8659.3	9280.8	10764.0	12846.1	14433.7	13585.5	12129.4	11666.7	10659.7	9140.1
55°	6654.4	6663.5	7316.6	8827.1	11907.1	14628.8	15191.2	13930.2	13222.6	11417.2	9548.4
57.5°	4576.9	4826.4	5656.5	6672.5	9788.8	13658.0	15794.5	15327.3	14415.6	11884.4	9834.2
60°	2998.3	3011.9	3978.1	5153.0	6663.5	11113.3	15427.1	16066.7	15381.7	12161.1	10029.2
62°	2113.8	2136.5	2735.2	4209.5	5021.4	7965.3	14615.1	16220.9	15926.1	12324.4	10233.3
62.5°	1959.6	1977.7	2481.2	3973.6	4717.5	7144.3	14324.8	16184.6	16007.7	12378.9	10305.9
65°	1437.9	1437.9	1623.9	2730.7	3456.5	3860.2	12138.5	15463.4	15898.8	12814.3	10578.1
67.5°	1111.3	1120.4	1183.9	1682.9	2608.2	2340.6	7747.6	13839.5	14764.8	13458.5	10732.3
70°	957.1	952.6	997.9	1115.9	1882.5	1555.9	3411.1	10800.3	12365.3	13295.2	10591.7
72.5°	707.6	712.2	816.5	979.8	1310.9	1011.5	1542.3	5733.6	8019.7	10405.7	9076.6
75°	453.6	458.1	576.1	771.1	943.5	662.3	889.1	1710.1	3284.1	5769.9	5552.1
77.5°	303.9	313.0	376.5	539.8	825.6	412.8	557.9	716.7	988.9	2163.7	1991.3
80°	204.1	204.1	240.4	362.9	521.6	344.7	299.4	476.3	512.6	671.3	335.7
82.5°	136.1	136.1	158.8	240.4	340.2	308.5	181.4	258.6	299.4	335.7	117.9
85°	81.6	81.6	108.9	149.7	222.3	172.4	117.9	145.2	154.2	213.2	63.5
87.5°	49.9	45.4	72.6	104.3	117.9	104.3	77.1	77.1	81.6	117.9	31.8
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°	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7	2222.7
2.5°	2218.1	2213.6	2209.1	2200.0	2186.4	2177.3	2168.2	2159.2	2150.1	2150.1	2163.7
5°	2259.0	2245.3	2227.2	2209.1	2181.8	2163.7	2150.1	2131.9	2122.9	2122.9	2127.4
7.5°	2308.8	2295.2	2263.5	2231.7	2190.9	2159.2	2127.4	2086.6	2054.8	2041.2	2054.8
10°	2363.3	2345.1	2299.8	2249.9	2204.5	2122.9	2018.5	1891.5	1782.7	1732.8	1755.5
12.5°	2431.3	2408.6	2354.2	2286.2	2181.8	1982.3	1723.7	1428.9	1242.9	1156.7	1174.8
15°	2531.1	2499.4	2422.2	2317.9	2086.6	1655.7	1233.8	893.6	721.2	648.7	657.7
17.5°	2649.1	2608.2	2503.9	2308.8	1841.6	1193.0	734.8	521.6	449.1	430.9	430.9
20°	2776.1	2721.6	2585.5	2240.8	1469.7	748.4	458.1	399.2	372.0	358.3	358.3
22.5°	2907.6	2835.0	2653.6	2082.0	1047.8	467.2	376.5	335.7	303.9	290.3	290.3
25°	3066.4	2971.1	2721.6	1805.3	666.8	376.5	322.1	281.2	249.5	231.3	235.9
27.5°	3252.3	3129.9	2780.6	1460.6	430.9	326.6	267.6	226.8	199.6	190.5	190.5
30°	3447.4	3302.2	2794.2	1093.2	349.3	281.2	222.3	186.0	167.8	158.8	158.8
32.5°	3715.0	3524.5	2753.4	725.8	294.8	235.9	186.0	154.2	140.6	136.1	136.1
35°	4068.8	3814.8	2658.1	449.1	249.5	195.1	154.2	136.1	122.5	117.9	117.9
37.5°	4517.9	4218.5	2490.3	308.5	213.2	158.8	131.5	117.9	108.9	104.3	104.3
40°	5116.7	4708.4	2272.6	267.6	181.4	136.1	113.4	104.3	95.3	95.3	95.3
42.5°	5751.7	5302.6	1991.3	235.9	154.2	117.9	99.8	90.7	86.2	81.6	81.6
45°	6445.7	5910.5	1642.0	208.7	131.5	104.3	90.7	77.1	72.6	72.6	72.6
47.5°	7135.2	6536.4	1261.0	181.4	113.4	90.7	77.1	68.0	63.5	59.0	59.0
50°	7842.8	7103.5	925.4	158.8	99.8	81.6	68.0	59.0	49.9	45.4	45.4
52.5°	8355.4	7443.7	675.9	136.1	86.2	68.0	54.4	45.4	36.3	31.8	31.8
55°	8731.9	7652.3	494.4	113.4	77.1	59.0	45.4	36.3	27.2	27.2	22.7
57.5°	9026.7	7752.1	372.0	99.8	68.0	49.9	36.3	27.2	22.7	18.1	18.1
60°	9253.5	7756.6	276.7	81.6	59.0	40.8	27.2	18.1	13.6	13.6	13.6
62°	9552.9	7815.6	226.8	68.0	54.4	36.3	22.7	13.6	9.1	4.5	4.5
62.5°	9639.1	7838.3	217.7	68.0	49.9	31.8	18.1	13.6	9.1	4.5	4.5
65°	10038.3	7879.1	167.8	54.4	40.8	27.2	13.6	9.1	0.0	0.0	0.0
67.5°	10401.2	7815.6	122.5	40.8	31.8	18.1	13.6	4.5	0.0	0.0	0.0
70°	10364.9	7380.1	86.2	27.2	22.7	13.6	9.1	0.0	0.0	0.0	0.0
72.5°	8541.4	5524.9	59.0	22.7	13.6	9.1	4.5	0.0	0.0	0.0	0.0
75°	5157.5	2417.7	40.8	13.6	13.6	9.1	4.5	0.0	0.0	0.0	0.0
77.5°	1691.9	875.5	27.2	9.1	9.1	4.5	4.5	0.0	0.0	0.0	0.0
80°	276.7	145.2	13.6	9.1	9.1	4.5	4.5	0.0	0.0	0.0	0.0
82.5°	86.2	36.3	9.1	9.1	4.5	4.5	0.0	0.0	0.0	0.0	0.0
85°	31.8	13.6	9.1	9.1	4.5	4.5	0.0	0.0	0.0	0.0	0.0
87.5°	13.6	9.1	9.1	9.1	4.5	4.5	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)