

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: P399914

Luminaire Tested: **ARCH-L-PA3-210-727-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399914  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-210-727-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 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: 17281 lumens  
Efficiency: N/A  
Efficacy: 81.9 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

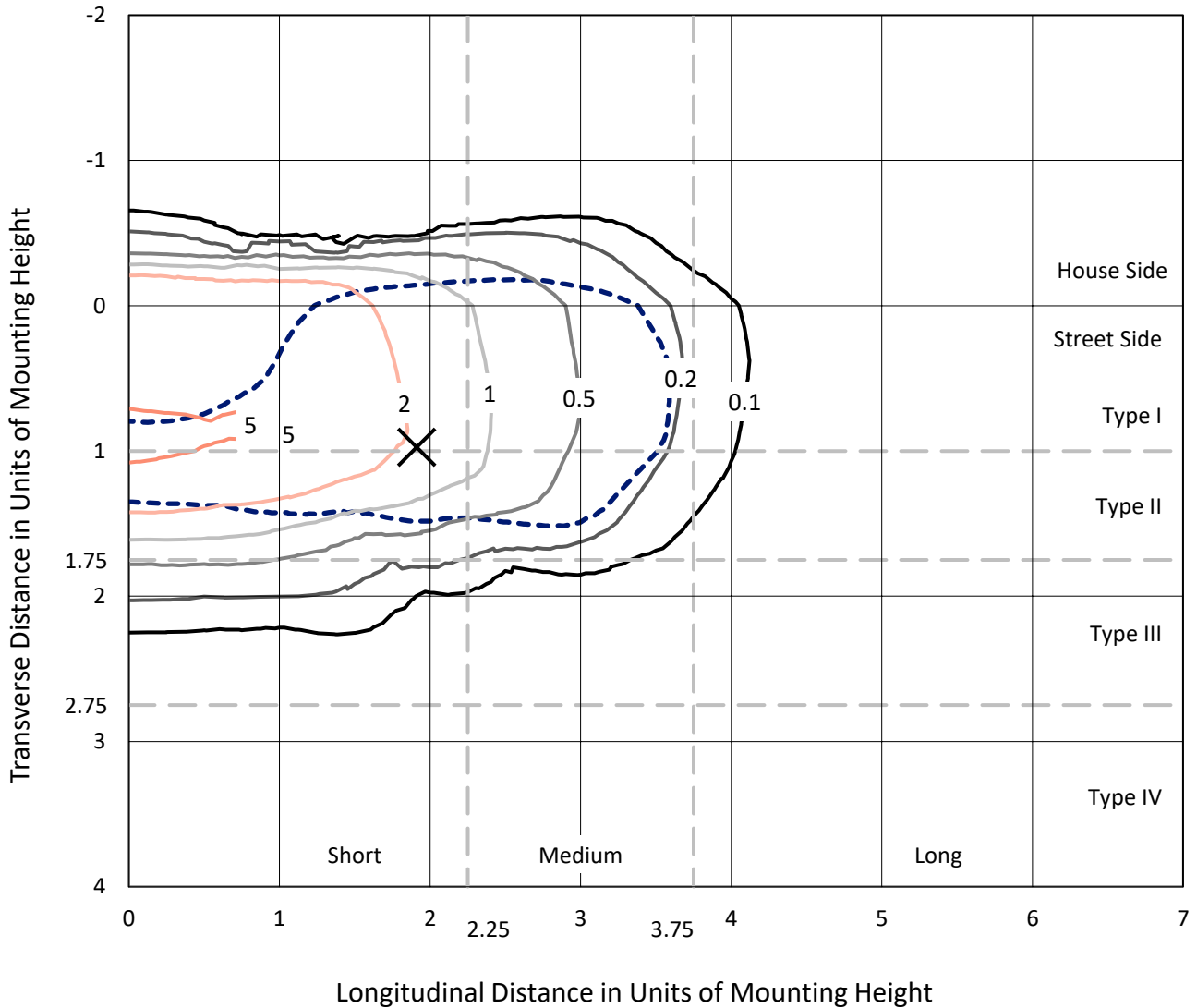
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399914  
 CATALOG NUMBER: ARCH-L-PA3-210-727-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

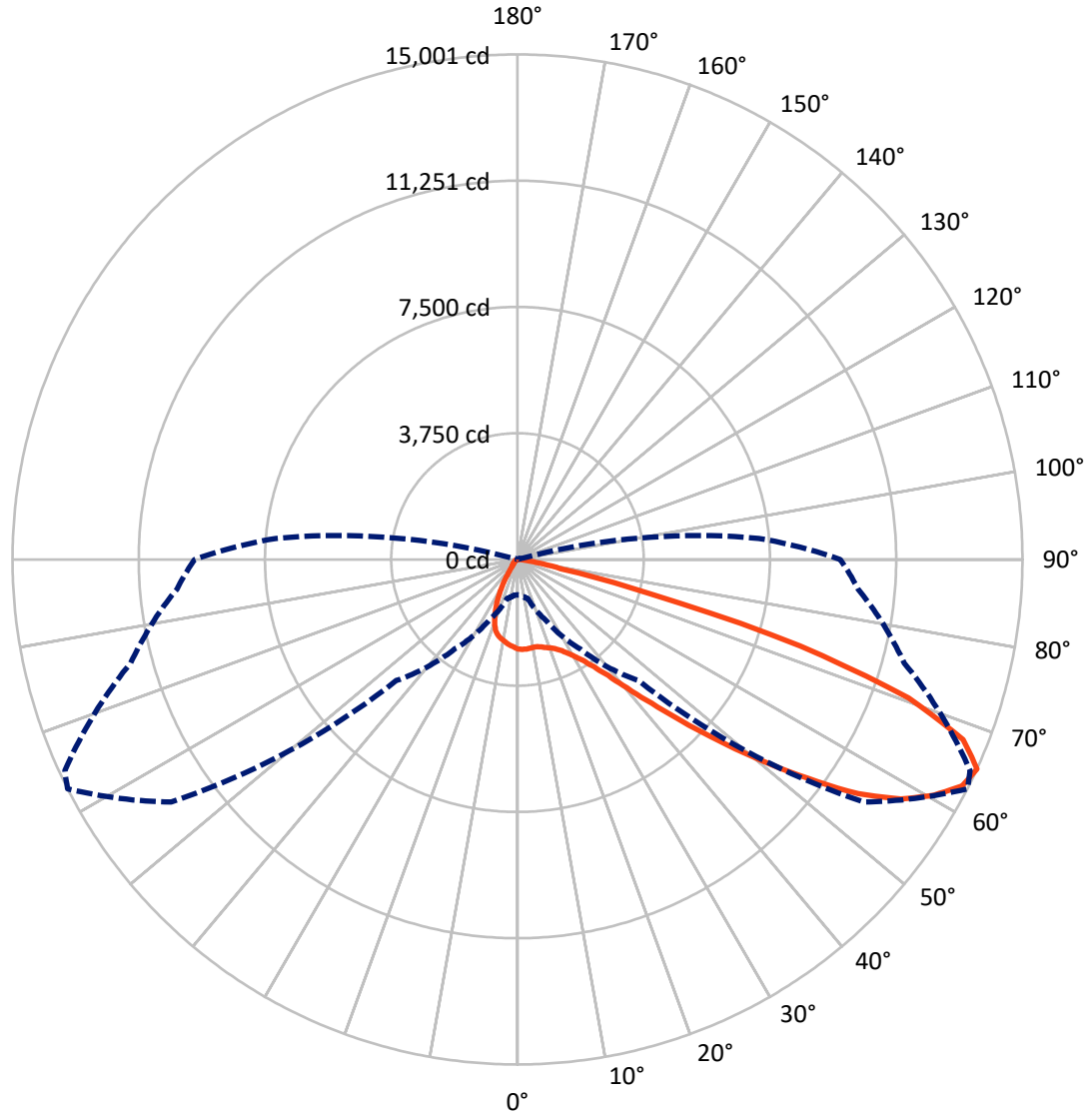
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Short - N/A

REPORT NUMBER: P399914  
CATALOG NUMBER: ARCH-L-PA3-210-727-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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 CATALOG NUMBER: ARCH-L-PA3-210-727-U-T2U-HSS

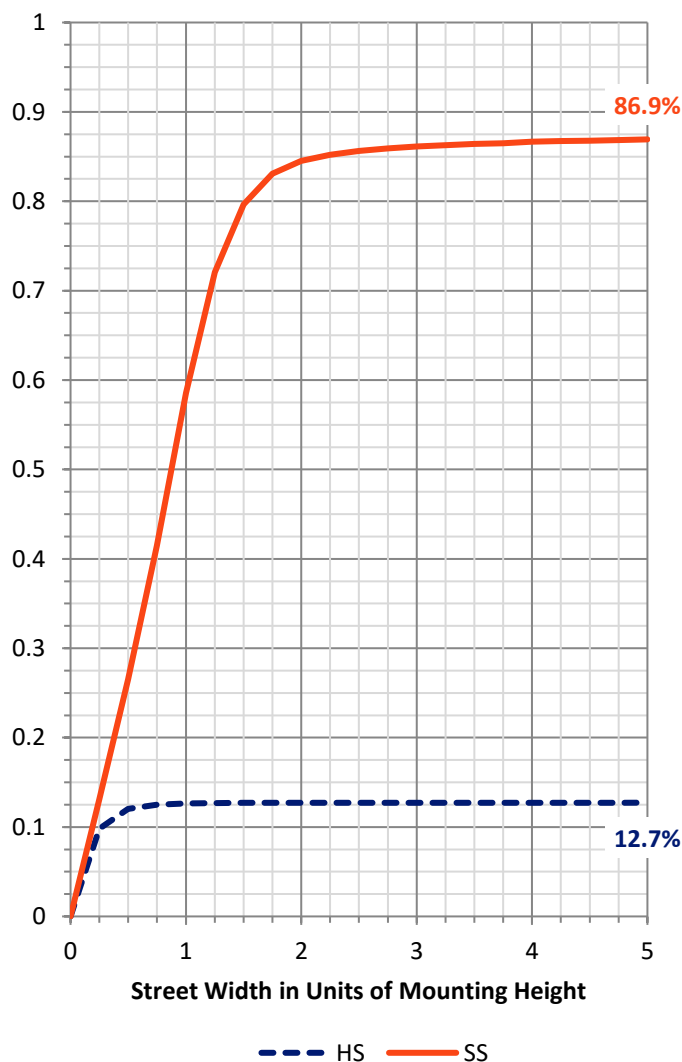
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2224.0	0.0	2224.0
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	15057.0	0.0	15057.0
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	17281.0	0.0	17281.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	242.9	1.4
10°-20°	599.2	3.5
20°-30°	888.2	5.1
30°-40°	1649.1	9.5
40°-50°	3493.6	20.2
50°-60°	4830.8	28.0
60°-70°	3867.2	22.4
70°-80°	1606.7	9.3
80°-90°	103.2	0.6
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°	17281.0	100.0
0°-180°	17281.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399914

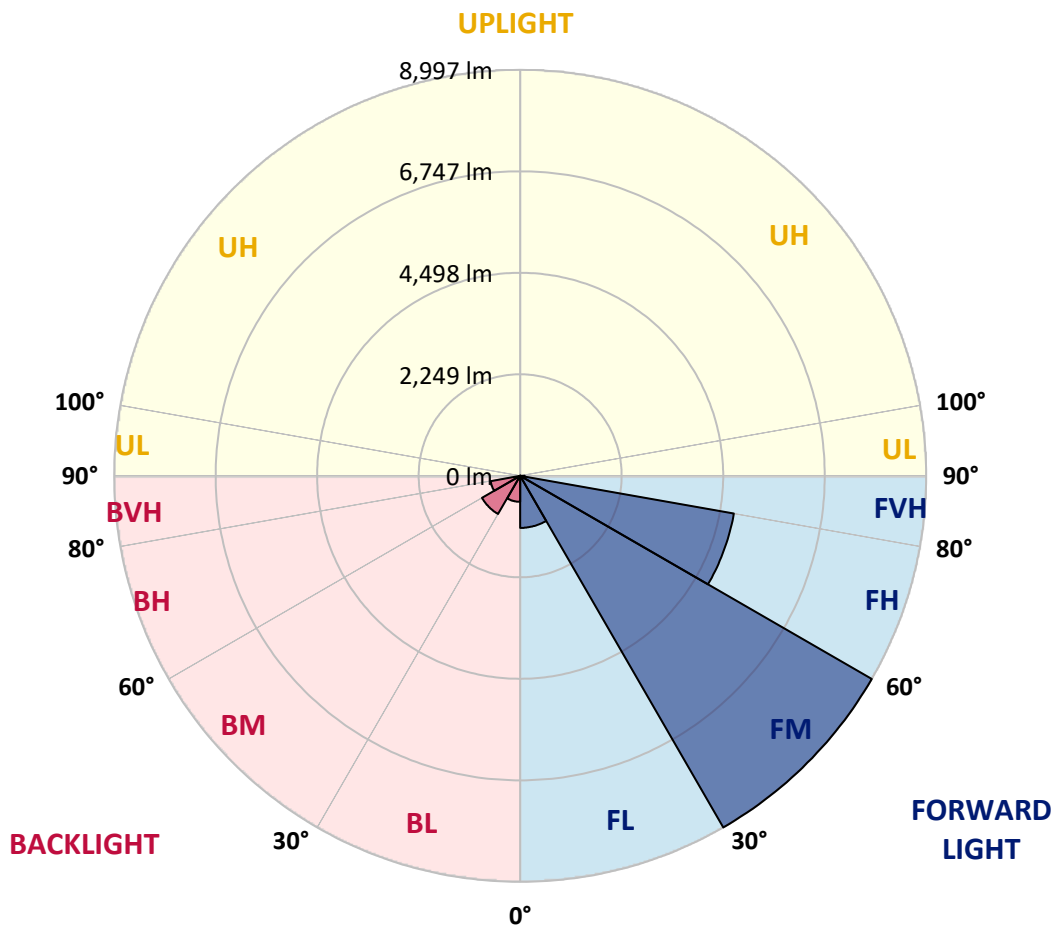
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1154.0	6.7			
FM (30°-60°)	8996.6	52.1			
FH (60°-80°)	4808.0	27.8			G2/5000
FVH (80°-90°)	98.5	0.6			G1/100
BL (0°-30°)	576.4	3.3	B2/1000		
BM (30°-60°)	977.0	5.7	B1/1000		
BH (60°-80°)	665.9	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.7	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





REPORT NUMBER: P399914

CATALOG NUMBER: ARCH-L-PA3-210-727-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1
2.5°	2707.8	2701.3	2694.8	2691.5	2691.5	2688.2	2675.2	2671.9	2665.4	2658.9	2652.4
5°	2681.7	2671.9	2668.7	2671.9	2675.2	2681.7	2675.2	2675.2	2668.7	2662.1	2649.1
7.5°	2616.5	2609.9	2613.2	2623.0	2626.3	2649.1	2652.4	2662.1	2662.1	2655.6	2645.8
10°	2538.2	2534.9	2534.9	2551.2	2567.5	2600.2	2623.0	2649.1	2652.4	2652.4	2636.0
12.5°	2479.5	2476.2	2486.0	2505.6	2538.2	2580.6	2619.7	2658.9	2665.4	2668.7	2642.6
15°	2443.6	2443.6	2456.6	2495.8	2541.4	2600.2	2645.8	2698.0	2704.6	2701.3	2665.4
17.5°	2410.9	2414.2	2440.3	2505.6	2557.7	2636.0	2691.5	2750.2	2753.5	2750.2	2691.5
20°	2397.9	2404.4	2443.6	2528.4	2587.1	2675.2	2747.0	2805.7	2809.0	2795.9	2717.6
22.5°	2433.8	2437.0	2486.0	2577.3	2632.8	2730.7	2822.0	2877.5	2880.7	2861.2	2756.8
25°	2557.7	2557.7	2600.2	2678.5	2727.4	2825.3	2923.1	2988.4	2988.4	2965.6	2844.8
27.5°	2848.1	2822.0	2812.2	2835.1	2851.4	2955.8	3060.2	3141.7	3138.5	3105.8	2959.0
30°	3409.2	3344.0	3239.6	3122.2	3063.4	3135.2	3233.1	3337.5	3334.2	3282.0	3099.3
32.5°	4352.1	4257.5	4009.5	3699.6	3448.4	3366.8	3458.2	3572.4	3575.6	3513.6	3324.4
35°	5673.4	5523.3	5079.6	4649.0	4074.8	3764.9	3791.0	3914.9	3954.1	3921.4	3702.9
37.5°	6945.7	6808.7	6384.6	5787.6	5007.8	4374.9	4264.0	4371.7	4417.3	4417.3	4185.7
40°	8227.9	8068.0	7692.8	7092.5	6270.4	5327.6	4929.5	5017.6	5066.6	5076.3	4772.9
42.5°	9255.5	9151.1	8864.0	8397.5	7627.6	6997.9	5888.7	5839.8	5885.4	5849.5	5454.8
45°	9966.7	9885.2	9686.2	9510.0	9134.8	8818.4	7170.8	6841.3	6870.7	6746.7	6221.5
47.5°	10113.5	10022.2	9979.8	10224.5	10492.0	10570.3	8746.6	8032.1	8002.8	7728.7	7017.5
50°	9474.1	9483.9	9640.5	10338.7	11454.4	12159.1	10573.6	9376.2	9268.6	8658.5	7758.1
52.5°	8094.1	8250.7	8645.5	9777.5	11748.0	13314.0	12400.5	10801.9	10635.5	9562.2	8312.7
55°	6332.4	6534.7	7183.9	8485.6	11134.7	13829.5	13940.4	12283.1	11904.6	10240.8	8743.3
57.5°	4707.7	4769.7	5526.6	6714.1	9682.9	13323.8	14729.9	13424.9	12938.8	10782.3	9170.7
60°	2932.9	2972.1	3771.4	5112.2	7334.0	11454.4	14729.9	14211.2	13747.9	11268.5	9562.2
62.5°	1823.7	1836.8	2136.9	3503.9	4985.0	8495.4	14119.8	14821.2	14449.3	11617.5	9898.2
65°	1050.5	1063.6	1203.8	1980.3	3242.9	5086.1	12560.4	15000.7	14834.3	11894.8	10159.2
67.5°	766.7	773.2	828.7	1112.5	2120.6	2613.2	9435.0	14279.7	14488.5	12031.9	10152.7
70°	665.5	675.3	747.1	867.8	1530.1	1605.1	4802.3	12332.0	12916.0	11836.1	9849.3
72.5°	512.2	525.3	632.9	815.6	1122.3	1154.9	1738.9	8776.0	9660.1	10612.7	9017.4
75°	352.3	365.4	473.1	672.1	926.5	864.5	955.9	4038.9	5095.9	7118.6	6864.2
77.5°	225.1	228.4	296.9	489.4	799.3	613.3	655.7	1318.0	1849.8	3220.0	3239.6
80°	150.1	153.3	182.7	316.5	548.1	567.7	404.5	610.1	668.8	939.6	652.5
82.5°	91.3	91.3	124.0	199.0	332.8	469.8	264.3	319.7	342.6	362.1	169.6
85°	35.9	35.9	75.0	130.5	208.8	218.6	166.4	186.0	195.7	212.1	78.3
87.5°	9.8	9.8	42.4	71.8	91.3	101.1	101.1	91.3	97.9	120.7	39.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399914

CATALOG NUMBER: ARCH-L-PA3-210-727-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1	2662.1
2.5°	2649.1	2639.3	2626.3	2613.2	2600.2	2590.4	2580.6	2580.6	2574.1	2564.3	2557.7
5°	2642.6	2626.3	2596.9	2574.1	2538.2	2512.1	2492.5	2476.2	2466.4	2443.6	2440.3
7.5°	2632.8	2613.2	2570.8	2525.1	2466.4	2420.7	2375.1	2342.4	2309.8	2283.7	2277.2
10°	2616.5	2593.6	2531.6	2466.4	2384.8	2300.0	2192.4	2068.4	1954.2	1889.0	1869.4
12.5°	2616.5	2587.1	2505.6	2417.5	2300.0	2091.2	1817.2	1543.1	1331.1	1236.5	1210.4
15°	2632.8	2593.6	2486.0	2365.3	2146.7	1722.6	1278.9	916.7	685.1	613.3	597.0
17.5°	2649.1	2593.6	2456.6	2293.5	1866.1	1249.5	727.5	482.8	407.8	391.5	391.5
20°	2655.6	2587.1	2417.5	2159.7	1490.9	776.5	433.9	362.1	332.8	323.0	323.0
22.5°	2681.7	2590.4	2388.1	1967.2	1083.1	456.7	342.6	303.4	274.0	264.3	264.3
25°	2747.0	2629.5	2394.6	1722.6	694.9	345.8	290.4	251.2	221.8	208.8	208.8
27.5°	2851.4	2717.6	2430.5	1438.7	437.2	296.9	244.7	202.3	179.4	166.4	166.4
30°	2968.8	2815.5	2446.8	1112.5	326.2	251.2	199.0	159.9	143.5	133.8	130.5
32.5°	3174.3	2985.1	2433.8	763.4	267.5	212.1	159.9	127.2	114.2	110.9	110.9
35°	3503.9	3282.0	2407.7	479.6	221.8	169.6	127.2	104.4	94.6	91.3	88.1
37.5°	3950.8	3715.9	2329.4	316.5	182.7	133.8	104.4	88.1	78.3	75.0	75.0
40°	4495.6	4211.8	2179.3	241.4	156.6	107.7	88.1	75.0	68.5	65.2	65.2
42.5°	5118.8	4763.2	1941.1	208.8	130.5	91.3	75.0	62.0	58.7	55.5	55.5
45°	5800.6	5340.6	1611.6	186.0	110.9	75.0	62.0	55.5	48.9	48.9	45.7
47.5°	6524.9	5921.3	1239.7	163.1	94.6	65.2	55.5	45.7	42.4	39.1	39.1
50°	7223.0	6440.0	871.1	140.3	78.3	55.5	45.7	39.1	35.9	32.6	32.6
52.5°	7715.7	6753.2	616.6	120.7	65.2	48.9	35.9	29.4	26.1	26.1	26.1
55°	8110.4	6949.0	430.6	101.1	55.5	42.4	29.4	22.8	22.8	19.6	19.6
57.5°	8482.3	7076.2	316.5	84.8	45.7	32.6	22.8	16.3	16.3	13.0	13.0
60°	8867.3	7144.7	241.4	68.5	39.1	26.1	16.3	13.0	9.8	9.8	9.8
62.5°	9255.5	7187.1	186.0	55.5	32.6	19.6	13.0	9.8	6.5	3.3	3.3
65°	9594.8	7200.2	143.5	42.4	26.1	13.0	9.8	3.3	0.0	0.0	0.0
67.5°	9696.0	7050.1	110.9	32.6	19.6	9.8	6.5	0.0	0.0	0.0	0.0
70°	9421.9	6652.1	84.8	26.1	16.3	6.5	3.3	0.0	0.0	0.0	0.0
72.5°	8361.6	5578.8	65.2	16.3	13.0	6.5	3.3	0.0	0.0	0.0	0.0
75°	5983.3	2975.3	45.7	13.0	9.8	3.3	0.0	0.0	0.0	0.0	0.0
77.5°	2753.5	1151.6	32.6	9.8	6.5	3.3	0.0	0.0	0.0	0.0	0.0
80°	538.3	287.1	13.0	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	124.0	48.9	6.5	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	42.4	16.3	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.3	6.5	3.3	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)