

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: P399986

Luminaire Tested: **ARCH-L-PA3-220-727-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399986
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-PA3-220-727-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 17887 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

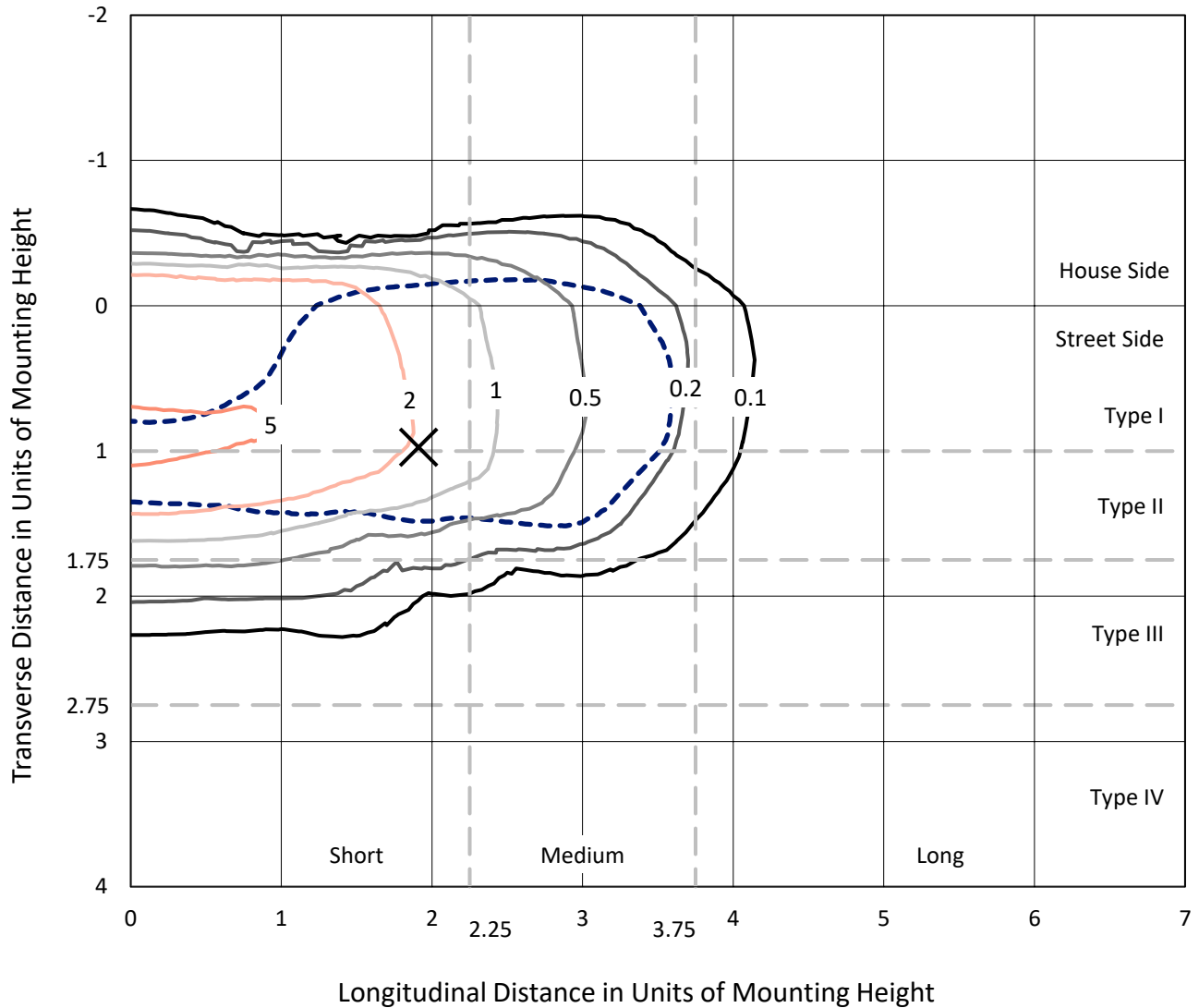
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

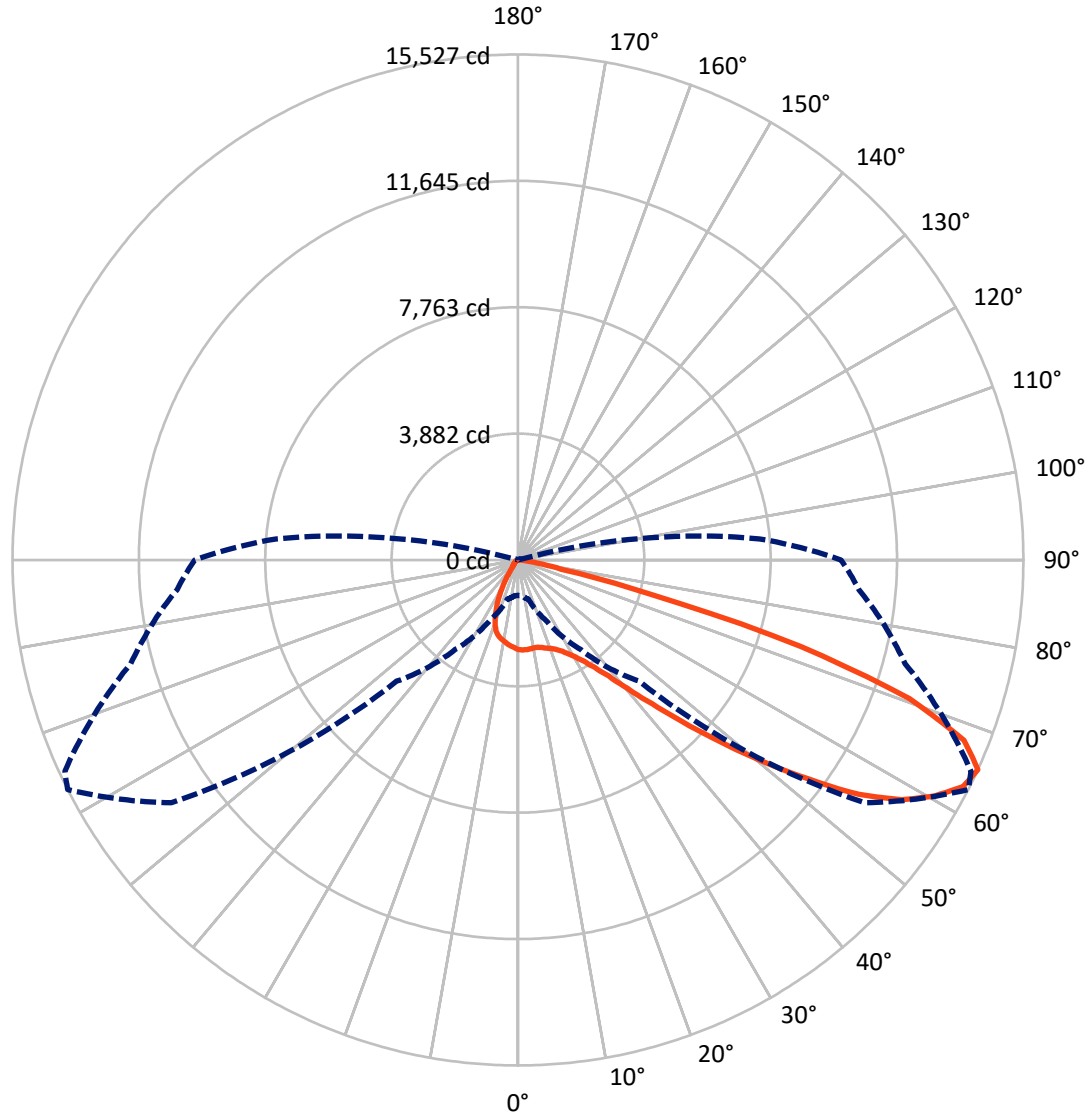
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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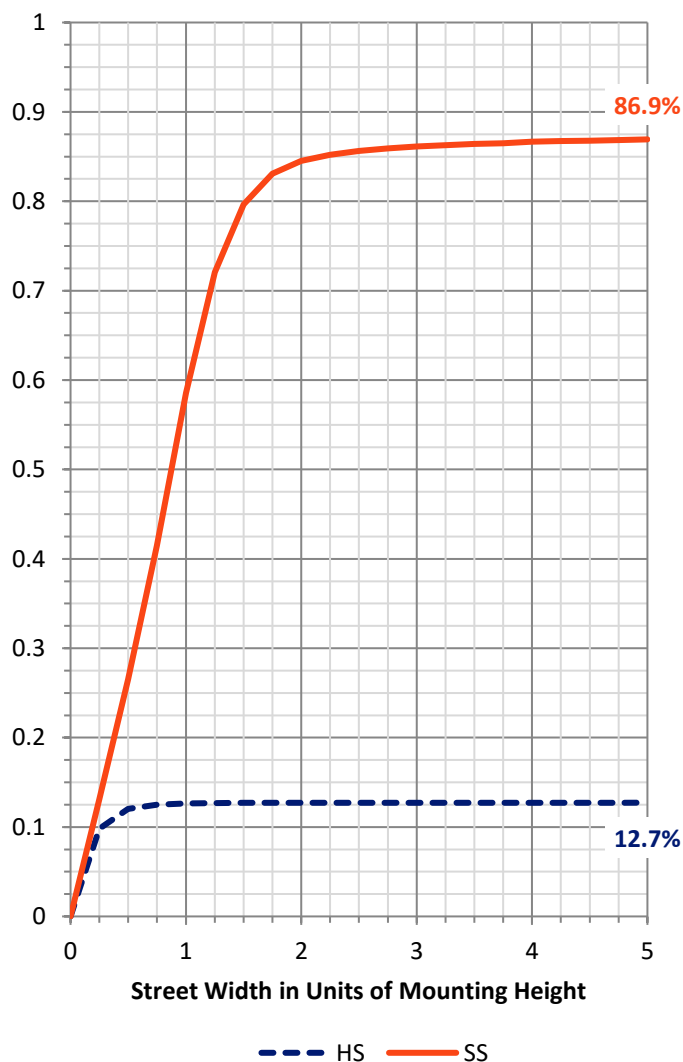
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2302.0	0.0	2302.0
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	15585.0	0.0	15585.0
	% Fixture	87.1	0.0	87.1
Total	Lumens	17887.0	0.0	17887.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.4	1.4
10°-20°	620.3	3.5
20°-30°	919.3	5.1
30°-40°	1707.0	9.5
40°-50°	3616.1	20.2
50°-60°	5000.2	28.0
60°-70°	4002.8	22.4
70°-80°	1663.1	9.3
80°-90°	106.8	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°	17887.0	100.0
0°-180°	17887.0	100.0

Coefficient of Utilization



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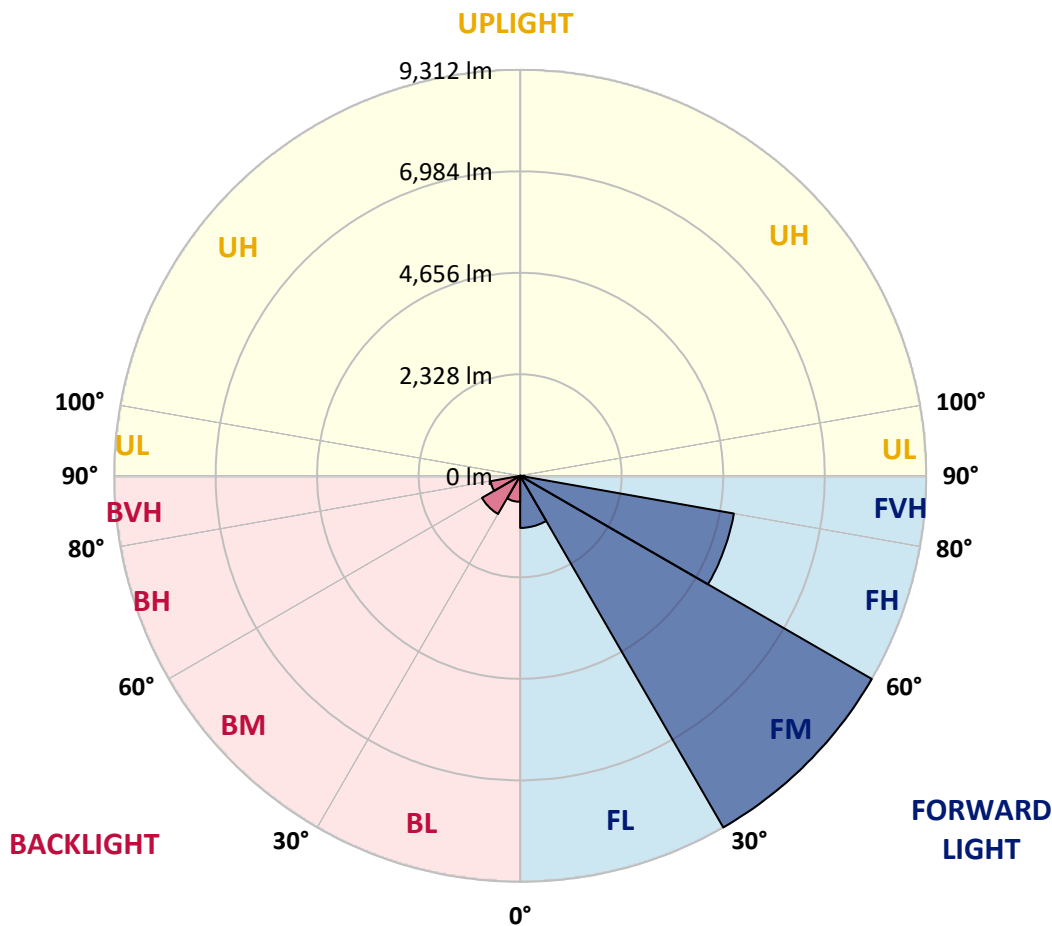
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1194.4	6.7			
FM (30°-60°)	9312.1	52.1			
FH (60°-80°)	4976.6	27.8			G2/5000
FVH (80°-90°)	101.9	0.6			G2/225
BL (0°-30°)	596.6	3.3	B2/1000		
BM (30°-60°)	1011.2	5.7	B2/2500		
BH (60°-80°)	689.3	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.9	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°	63°	65°	75°	85°
0°	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5
2.5°	2802.8	2796.0	2789.3	2785.9	2785.9	2782.5	2769.0	2765.6	2758.9	2752.1	2745.4
5°	2775.8	2765.6	2762.3	2765.6	2769.0	2775.8	2769.0	2769.0	2762.3	2755.5	2742.0
7.5°	2708.2	2701.5	2704.8	2715.0	2718.4	2742.0	2745.4	2755.5	2755.5	2748.7	2738.6
10°	2627.2	2623.8	2623.8	2640.7	2657.6	2691.3	2715.0	2742.0	2745.4	2745.4	2728.5
12.5°	2566.4	2563.0	2573.2	2593.4	2627.2	2671.1	2711.6	2752.1	2758.9	2762.3	2735.2
15°	2529.3	2529.3	2542.8	2583.3	2630.6	2691.3	2738.6	2792.6	2799.4	2796.0	2758.9
17.5°	2495.5	2498.9	2525.9	2593.4	2647.4	2728.5	2785.9	2846.7	2850.1	2846.7	2785.9
20°	2482.0	2488.7	2529.3	2617.1	2677.8	2769.0	2843.3	2904.1	2907.5	2894.0	2812.9
22.5°	2519.1	2522.5	2573.2	2667.7	2725.1	2826.4	2921.0	2978.4	2981.8	2961.5	2853.4
25°	2647.4	2647.4	2691.3	2772.4	2823.0	2924.3	3025.6	3093.2	3093.2	3069.5	2944.6
27.5°	2948.0	2921.0	2910.8	2934.5	2951.4	3059.4	3167.5	3251.9	3248.5	3214.8	3062.8
30°	3528.8	3461.3	3353.2	3231.6	3170.9	3245.1	3346.4	3454.5	3451.1	3397.1	3208.0
32.5°	4504.7	4406.8	4150.1	3829.3	3569.3	3484.9	3579.5	3697.6	3701.0	3636.9	3441.0
35°	5872.3	5717.0	5257.7	4812.0	4217.7	3896.9	3923.9	4052.2	4092.7	4059.0	3832.7
37.5°	7189.3	7047.5	6608.5	5990.5	5183.5	4528.3	4413.5	4525.0	4572.2	4572.2	4332.5
40°	8516.4	8350.9	7962.6	7341.3	6490.3	5514.4	5102.4	5193.6	5244.2	5254.4	4940.3
42.5°	9580.1	9472.0	9174.9	8692.0	7895.1	7243.3	6095.2	6044.5	6091.8	6054.7	5646.1
45°	10316.2	10231.8	10025.8	9843.5	9455.2	9127.6	7422.3	7081.2	7111.6	6983.3	6439.6
47.5°	10468.2	10373.7	10329.8	10583.0	10859.9	10941.0	9053.3	8313.8	8283.4	7999.7	7263.6
50°	9806.3	9816.5	9978.6	10701.2	11856.1	12585.5	10944.3	9705.0	9593.6	8962.1	8030.1
52.5°	8377.9	8540.0	8948.6	10120.4	12160.0	13780.9	12835.4	11180.7	11008.5	9897.5	8604.2
55°	6554.4	6763.8	7435.8	8783.2	11525.2	14314.4	14429.2	12713.8	12322.1	10599.9	9049.9
57.5°	4872.8	4936.9	5720.4	6949.5	10022.5	13791.0	15246.4	13895.7	13392.5	11160.5	9492.3
60°	3035.8	3076.3	3903.6	5291.5	7591.1	11856.1	15246.4	14709.5	14230.0	11663.6	9897.5
62.5°	1887.7	1901.2	2211.8	3626.7	5159.8	8793.3	14615.0	15341.0	14956.0	12024.9	10245.3
65°	1087.3	1100.9	1246.1	2049.7	3356.6	5264.5	13000.8	15526.7	15354.5	12312.0	10515.5
67.5°	793.6	800.3	857.7	1151.5	2194.9	2704.8	9765.8	14780.4	14996.5	12453.8	10508.7
70°	688.9	699.0	773.3	898.2	1583.7	1661.4	4970.7	12764.5	13368.9	12251.2	10194.7
72.5°	530.2	543.7	655.1	844.2	1161.6	1195.4	1799.9	9083.7	9998.8	10984.9	9333.6
75°	364.7	378.2	489.6	695.6	959.0	894.9	989.4	4180.5	5274.6	7368.3	7104.9
77.5°	233.0	236.4	307.3	506.5	827.3	634.8	678.7	1364.2	1914.7	3332.9	3353.2
80°	155.3	158.7	189.1	327.6	567.3	587.6	418.7	631.5	692.3	972.5	675.4
82.5°	94.6	94.6	128.3	206.0	344.4	486.3	273.5	330.9	354.6	374.8	175.6
85°	37.1	37.1	77.7	135.1	216.1	226.2	172.2	192.5	202.6	219.5	81.0
87.5°	10.1	10.1	43.9	74.3	94.6	104.7	104.7	94.6	101.3	124.9	40.5
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°	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5	2755.5
2.5°	2742.0	2731.9	2718.4	2704.8	2691.3	2681.2	2671.1	2671.1	2664.3	2654.2	2647.4
5°	2735.2	2718.4	2688.0	2664.3	2627.2	2600.2	2579.9	2563.0	2552.9	2529.3	2525.9
7.5°	2725.1	2704.8	2661.0	2613.7	2552.9	2505.6	2458.3	2424.6	2390.8	2363.8	2357.0
10°	2708.2	2684.6	2620.4	2552.9	2468.5	2380.7	2269.2	2140.9	2022.7	1955.2	1934.9
12.5°	2708.2	2677.8	2593.4	2502.2	2380.7	2164.6	1880.9	1597.2	1377.8	1279.8	1252.8
15°	2725.1	2684.6	2573.2	2448.2	2222.0	1783.0	1323.7	948.9	709.1	634.8	618.0
17.5°	2742.0	2684.6	2542.8	2373.9	1931.6	1293.3	753.0	499.8	422.1	405.2	405.2
20°	2748.7	2677.8	2502.2	2235.5	1543.2	803.7	449.1	374.8	344.4	334.3	334.3
22.5°	2775.8	2681.2	2471.8	2036.2	1121.1	472.8	354.6	314.0	283.7	273.5	273.5
25°	2843.3	2721.7	2478.6	1783.0	719.3	357.9	300.5	260.0	229.6	216.1	216.1
27.5°	2951.4	2812.9	2515.7	1489.2	452.5	307.3	253.3	209.4	185.7	172.2	172.2
30°	3072.9	2914.2	2532.6	1151.5	337.7	260.0	206.0	165.5	148.6	138.5	135.1
32.5°	3285.7	3089.8	2519.1	790.2	276.9	219.5	165.5	131.7	118.2	114.8	114.8
35°	3626.7	3397.1	2492.1	496.4	229.6	175.6	131.7	108.1	97.9	94.6	91.2
37.5°	4089.4	3846.2	2411.1	327.6	189.1	138.5	108.1	91.2	81.0	77.7	77.7
40°	4653.3	4359.5	2255.7	249.9	162.1	111.4	91.2	77.7	70.9	67.5	67.5
42.5°	5298.3	4930.2	2009.2	216.1	135.1	94.6	77.7	64.2	60.8	57.4	57.4
45°	6004.0	5527.9	1668.2	192.5	114.8	77.7	64.2	57.4	50.7	50.7	47.3
47.5°	6753.7	6129.0	1283.2	168.8	97.9	67.5	57.4	47.3	43.9	40.5	40.5
50°	7476.3	6665.9	901.6	145.2	81.0	57.4	47.3	40.5	37.1	33.8	33.8
52.5°	7986.2	6990.1	638.2	124.9	67.5	50.7	37.1	30.4	27.0	27.0	27.0
55°	8394.8	7192.7	445.7	104.7	57.4	43.9	30.4	23.6	23.6	20.3	20.3
57.5°	8779.8	7324.4	327.6	87.8	47.3	33.8	23.6	16.9	16.9	13.5	13.5
60°	9178.3	7395.3	249.9	70.9	40.5	27.0	16.9	13.5	10.1	10.1	10.1
62.5°	9580.1	7439.2	192.5	57.4	33.8	20.3	13.5	10.1	6.8	3.4	3.4
65°	9931.3	7452.7	148.6	43.9	27.0	13.5	10.1	3.4	0.0	0.0	0.0
67.5°	10036.0	7297.4	114.8	33.8	20.3	10.1	6.8	0.0	0.0	0.0	0.0
70°	9752.3	6885.4	87.8	27.0	16.9	6.8	3.4	0.0	0.0	0.0	0.0
72.5°	8654.8	5774.4	67.5	16.9	13.5	6.8	3.4	0.0	0.0	0.0	0.0
75°	6193.1	3079.7	47.3	13.5	10.1	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	2850.1	1192.0	33.8	10.1	6.8	3.4	0.0	0.0	0.0	0.0	0.0
80°	557.2	297.2	13.5	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	128.3	50.7	6.8	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	43.9	16.9	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.9	6.8	3.4	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)