

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: P399727

Luminaire Tested: **ARCH-L-PA3-180-750-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399727  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-180-750-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19529 lumens  
Efficiency: N/A  
Efficacy: 107.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G4

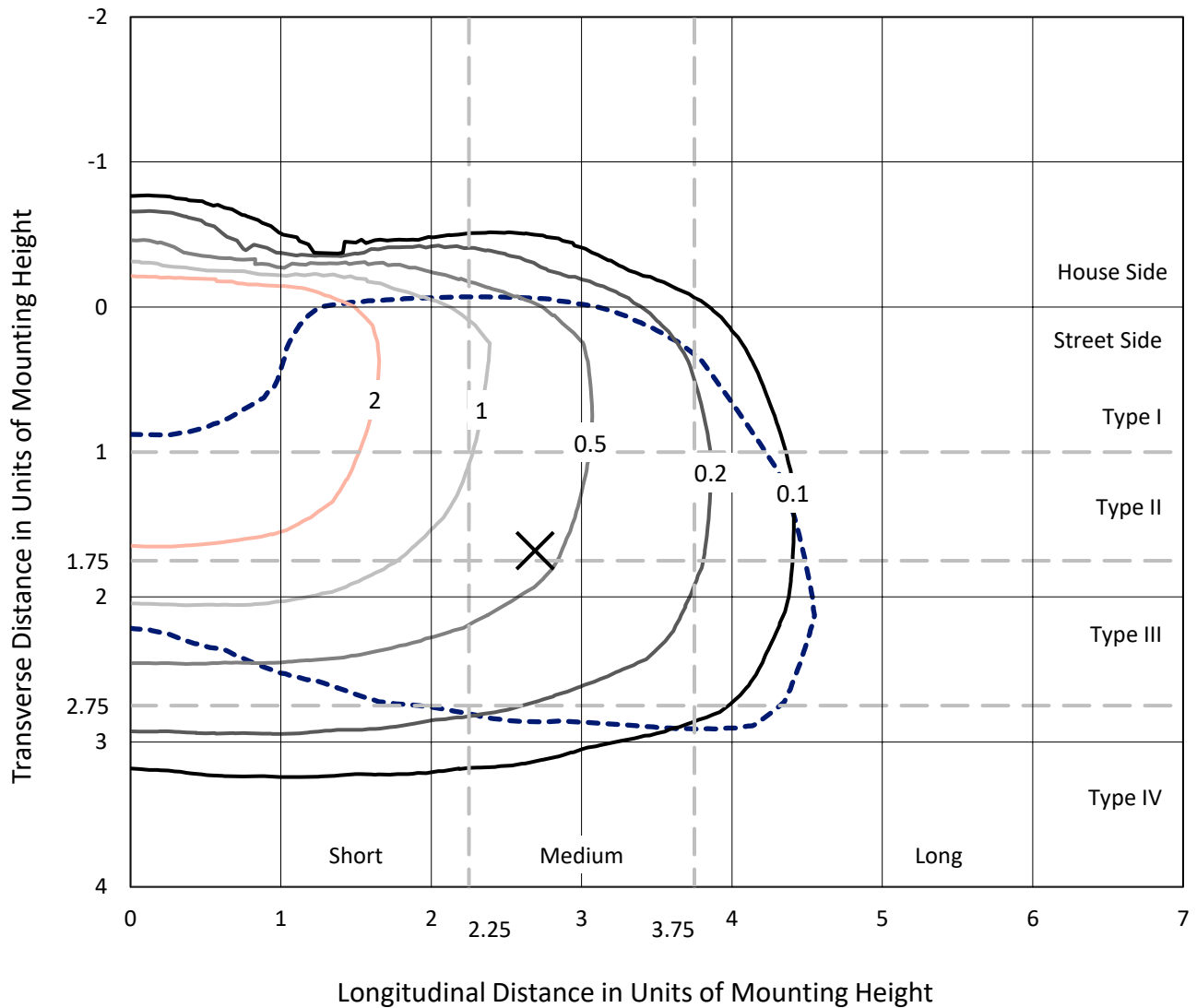
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399727  
 CATALOG NUMBER: ARCH-L-PA3-180-750-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

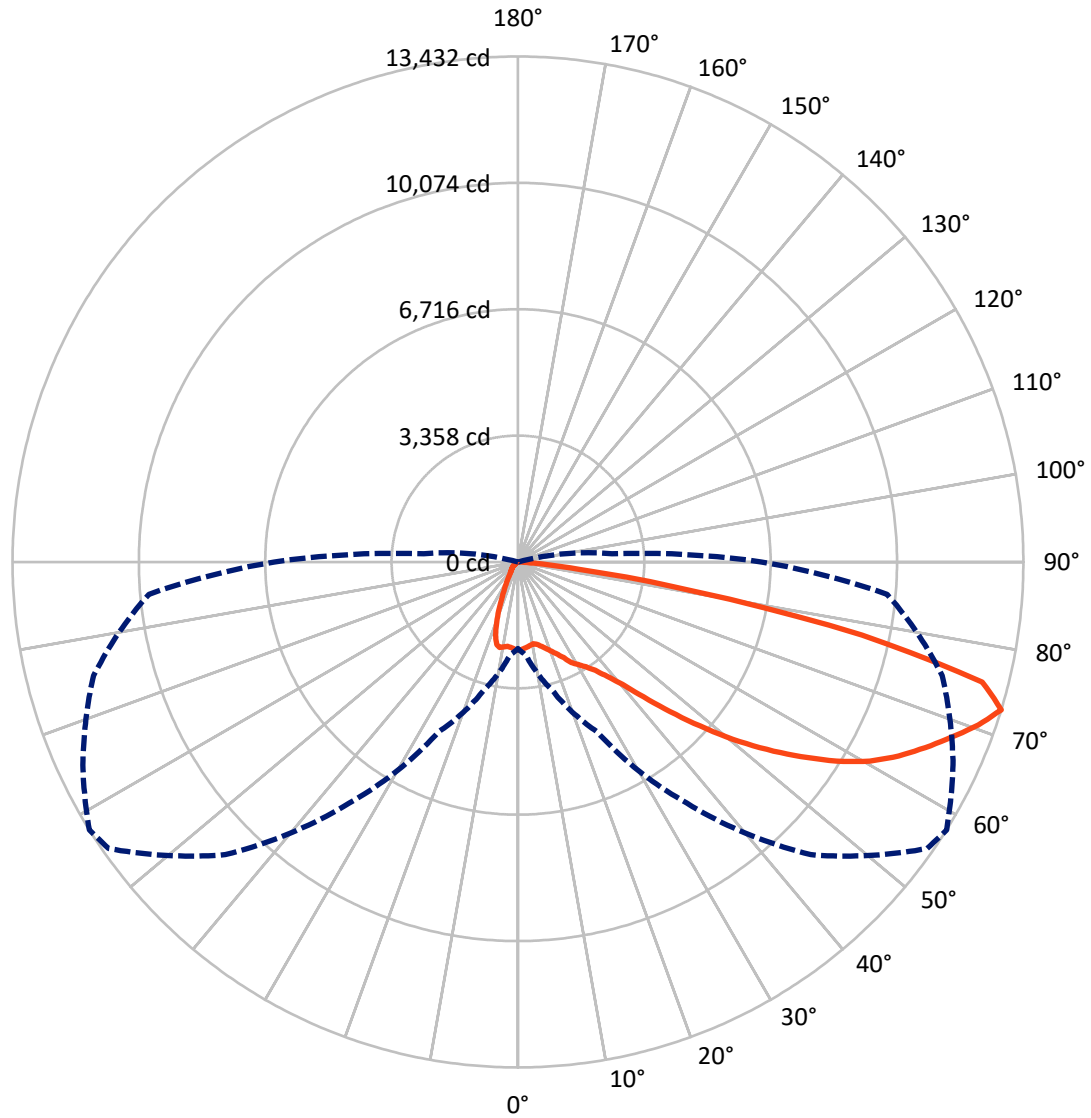
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399727  
CATALOG NUMBER: ARCH-L-PA3-180-750-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P399727  
 CATALOG NUMBER: ARCH-L-PA3-180-750-U-T3-HSS

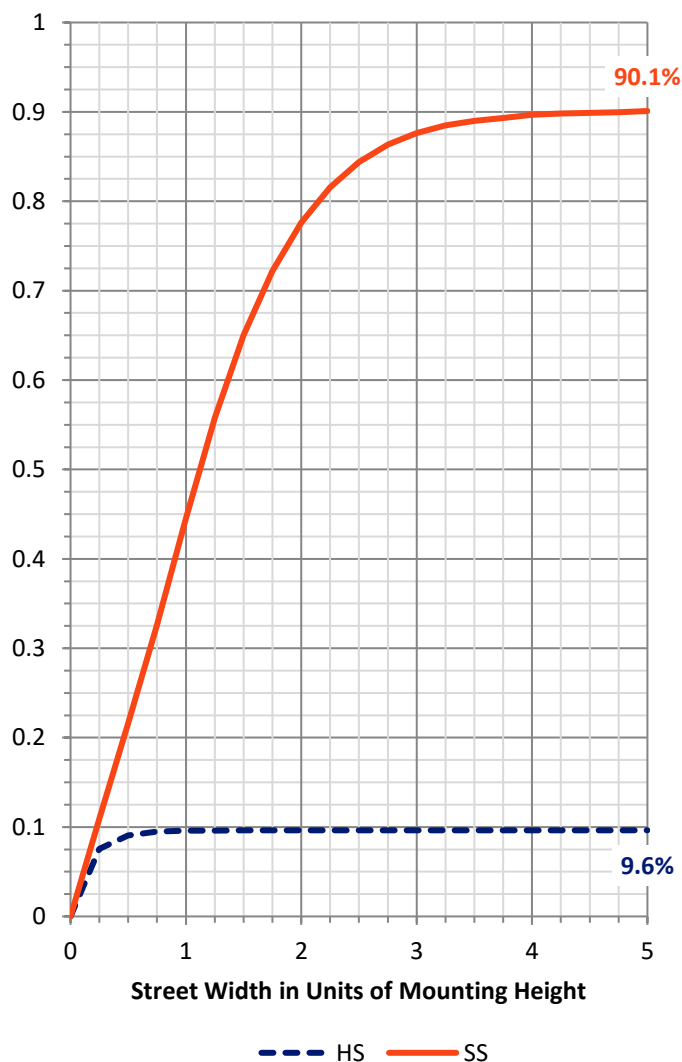
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1899.1	0.0	1899.1
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	17629.9	0.0	17629.9
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	19529.0	0.0	19529.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.1	1.1
10°-20°	560.1	2.9
20°-30°	880.0	4.5
30°-40°	1517.5	7.8
40°-50°	2887.2	14.8
50°-60°	4572.5	23.4
60°-70°	5335.6	27.3
70°-80°	3341.7	17.1
80°-90°	219.3	1.1
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°	19529.0	100.0
0°-180°	19529.0	100.0

**Coefficient of Utilization**



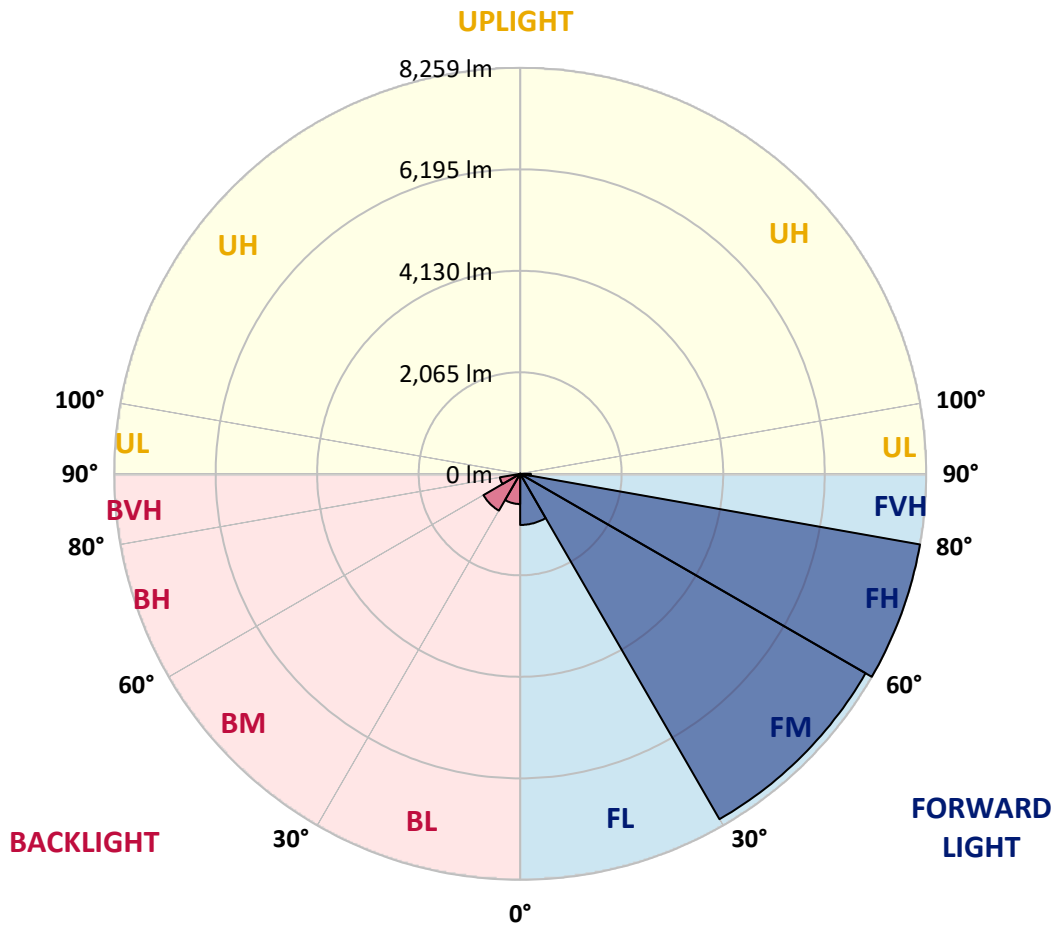
REPORT NUMBER: P399727  
 CATALOG NUMBER: ARCH-L-PA3-180-750-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1040.2	5.3			
FM (30°-60°)	8113.2	41.5			
FH (60°-80°)	8259.4	42.3			G4/12000
FVH (80°-90°)	217.2	1.1			G2/225
BL (0°-30°)	615.0	3.1	B2/1000		
BM (30°-60°)	864.1	4.4	B1/1000		
BH (60°-80°)	417.9	2.1	B1/500		G1/500
BVH (80°-90°)	2.1	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-G4**

Type IV Medium





REPORT NUMBER: P399727

CATALOG NUMBER: ARCH-L-PA3-180-750-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4
2.5°	2332.9	2322.4	2318.9	2315.4	2318.9	2322.4	2311.9	2322.4	2315.4	2318.9	2325.9
5°	2249.1	2238.6	2235.1	2238.6	2249.1	2266.5	2273.5	2284.0	2284.0	2294.5	2298.0
7.5°	2154.8	2147.8	2144.3	2151.3	2172.2	2210.7	2231.6	2245.6	2259.5	2280.5	2301.5
10°	2102.4	2098.9	2095.4	2105.9	2126.8	2161.8	2189.7	2210.7	2263.0	2322.4	2360.8
12.5°	2067.5	2067.5	2074.5	2095.4	2123.3	2151.3	2217.6	2245.6	2325.9	2416.7	2469.1
15°	2039.5	2039.5	2050.0	2088.4	2126.8	2193.2	2291.0	2322.4	2416.7	2528.5	2598.3
17.5°	2018.6	2025.6	2032.5	2071.0	2144.3	2256.1	2371.3	2416.7	2531.9	2654.2	2731.0
20°	2022.1	2029.1	2032.5	2071.0	2175.7	2329.4	2476.1	2528.5	2661.2	2790.4	2867.2
22.5°	2043.0	2053.5	2057.0	2109.4	2231.6	2406.2	2594.8	2654.2	2797.4	2933.6	2992.9
25°	2130.3	2137.3	2116.4	2161.8	2311.9	2525.0	2748.5	2811.3	2954.5	3080.2	3129.1
27.5°	2427.2	2434.2	2318.9	2266.5	2374.8	2622.7	2937.1	3024.4	3202.5	3286.3	3293.3
30°	3069.8	3076.8	2849.8	2601.8	2525.0	2706.6	3041.8	3164.1	3394.6	3488.8	3446.9
32.5°	3897.5	3890.5	3579.6	3213.0	2881.2	2853.2	3192.0	3321.2	3572.7	3663.5	3632.0
35°	4728.6	4739.1	4473.7	3921.9	3446.9	3129.1	3384.1	3534.2	3838.1	3967.3	3911.4
37.5°	5297.9	5367.7	5252.5	4655.3	4141.9	3639.0	3694.9	3855.5	4236.2	4410.8	4292.1
40°	6101.1	6083.7	5804.3	5364.2	4910.2	4393.4	4197.8	4274.6	4711.2	4945.2	4760.1
42.5°	7180.3	7145.3	6670.4	6240.8	5734.4	5311.9	4913.7	4899.8	5256.0	5528.4	5259.5
45°	8158.1	8105.7	7780.9	7365.3	6810.1	6324.6	5786.8	5664.6	5912.5	6143.0	5828.7
47.5°	8936.9	8849.6	8619.1	8399.1	8262.9	7508.5	6701.8	6516.7	6642.4	6813.6	6370.0
50°	9858.9	9617.9	9282.6	9149.9	9432.8	8849.6	7581.9	7403.8	7396.8	7494.6	6928.8
52.5°	10278.0	9841.4	9652.8	9764.6	10264.0	10096.4	8531.8	8276.8	8175.6	8186.0	7449.2
55°	9771.6	9722.7	9824.0	10173.2	10826.3	10728.5	9443.3	9129.0	8978.8	8790.2	7948.6
57.5°	9195.3	9345.5	9747.1	10414.2	11538.7	11388.5	10340.8	9984.6	9708.7	9275.7	8503.9
60°	8664.5	8818.2	9481.7	10470.0	11929.8	12024.1	11088.2	10749.4	10340.8	9771.6	9115.0
62.5°	7857.8	7976.5	8909.0	10389.7	11758.7	12394.3	11608.5	11353.6	10972.9	10243.0	9817.0
65°	6949.8	7026.6	7948.6	9747.1	11423.4	12352.4	12038.1	11894.9	11524.7	10735.5	10511.9
67.5°	5954.4	6045.2	6813.6	8591.2	10766.9	12156.8	12443.2	12429.2	12006.7	11280.3	11014.8
70°	4809.0	4815.9	5451.5	7124.4	9621.4	11765.7	12946.1	12977.5	12467.7	11688.9	11035.8
72.5°	2301.5	2490.0	3534.2	4973.1	7819.4	10997.4	13274.4	13431.5	12757.5	11674.9	9844.9
75°	527.3	544.8	1030.2	2364.3	4585.4	8441.0	12453.7	12747.0	12052.1	10096.4	6935.8
77.5°	192.1	202.6	289.9	691.5	1763.6	4361.9	8912.5	9342.0	8909.0	6527.2	3279.3
80°	129.2	125.7	150.2	307.3	810.2	1236.3	4557.5	4812.4	4393.4	2228.1	785.8
82.5°	66.4	69.8	104.8	171.1	544.8	429.6	1522.7	1655.4	1362.0	447.0	146.7
85°	31.4	31.4	59.4	108.3	230.5	150.2	338.8	408.6	366.7	195.6	48.9
87.5°	31.4	31.4	55.9	69.8	118.7	62.9	83.8	104.8	97.8	104.8	17.5
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: P399727  
 CATALOG NUMBER: ARCH-L-PA3-180-750-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4	2343.4
2.5°	2325.9	2322.4	2318.9	2325.9	2322.4	2329.4	2329.4	2336.4	2336.4	2329.4	2325.9
5°	2294.5	2287.5	2280.5	2280.5	2277.0	2284.0	2304.9	2322.4	2325.9	2315.4	2311.9
7.5°	2298.0	2298.0	2291.0	2277.0	2252.6	2252.6	2252.6	2273.5	2284.0	2277.0	2273.5
10°	2360.8	2364.3	2346.9	2315.4	2273.5	2235.1	2161.8	2053.5	1952.2	1924.3	1913.8
12.5°	2469.1	2472.6	2437.7	2381.8	2294.5	2067.5	1788.1	1529.6	1330.6	1274.7	1264.2
15°	2598.3	2601.8	2538.9	2448.1	2182.7	1655.4	1239.8	946.4	771.8	729.9	726.4
17.5°	2731.0	2724.0	2629.7	2455.1	1850.9	1173.4	754.3	604.2	558.8	548.3	551.8
20°	2860.2	2839.3	2710.1	2325.9	1424.9	768.3	551.8	516.9	506.4	499.4	499.4
22.5°	2979.0	2937.1	2776.4	2071.0	998.8	551.8	492.4	485.4	471.5	461.0	457.5
25°	3097.7	3038.3	2818.3	1739.2	670.5	481.9	464.5	450.5	433.1	419.1	415.6
27.5°	3240.9	3157.1	2797.4	1320.1	502.9	447.0	433.1	412.1	387.6	366.7	359.7
30°	3377.1	3282.8	2678.6	911.5	429.6	412.1	391.1	359.7	328.3	303.8	296.8
32.5°	3548.2	3440.0	2465.6	597.2	373.7	359.7	338.8	300.3	258.4	230.5	223.5
35°	3792.7	3670.5	2193.2	419.1	328.3	303.8	275.9	234.0	188.6	167.6	164.1
37.5°	4134.9	3970.8	1850.9	338.8	289.9	254.9	213.0	171.1	139.7	122.2	118.7
40°	4554.0	4302.6	1470.3	300.3	258.4	213.0	160.6	122.2	101.3	87.3	87.3
42.5°	5008.0	4613.4	1082.6	275.9	227.0	174.6	118.7	87.3	73.3	66.4	62.9
45°	5476.0	4889.3	729.9	254.9	199.1	132.7	83.8	59.4	48.9	48.9	45.4
47.5°	5961.4	5074.4	471.5	230.5	167.6	97.8	55.9	41.9	34.9	34.9	34.9
50°	6443.4	5172.2	335.3	209.5	136.2	66.4	41.9	31.4	27.9	27.9	27.9
52.5°	6792.6	5109.3	268.9	181.6	104.8	48.9	31.4	24.4	21.0	21.0	21.0
55°	7096.4	5001.0	234.0	157.2	76.8	34.9	24.4	21.0	17.5	17.5	17.5
57.5°	7407.3	4861.3	209.5	132.7	55.9	24.4	17.5	14.0	14.0	14.0	14.0
60°	7690.1	4623.9	181.6	104.8	38.4	17.5	14.0	10.5	10.5	10.5	10.5
62.5°	7966.0	4421.3	157.2	80.3	27.9	14.0	7.0	7.0	3.5	3.5	3.5
65°	8123.2	4148.9	125.7	52.4	17.5	10.5	3.5	3.5	0.0	0.0	0.0
67.5°	8074.3	3824.1	87.3	31.4	10.5	7.0	3.5	0.0	0.0	0.0	0.0
70°	7735.5	3387.6	52.4	17.5	10.5	7.0	3.5	0.0	0.0	0.0	0.0
72.5°	6478.3	2507.5	31.4	14.0	7.0	3.5	0.0	0.0	0.0	0.0	0.0
75°	4327.0	1152.5	17.5	10.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0
77.5°	1980.2	345.7	10.5	7.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	398.1	90.8	7.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	83.8	17.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.0	3.5	0.0	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)