

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: P400395

Luminaire Tested: **ARCH-L-PA3-270-827-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400395  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-270-827-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18704 lumens  
Efficiency: N/A  
Efficacy: 68.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G4

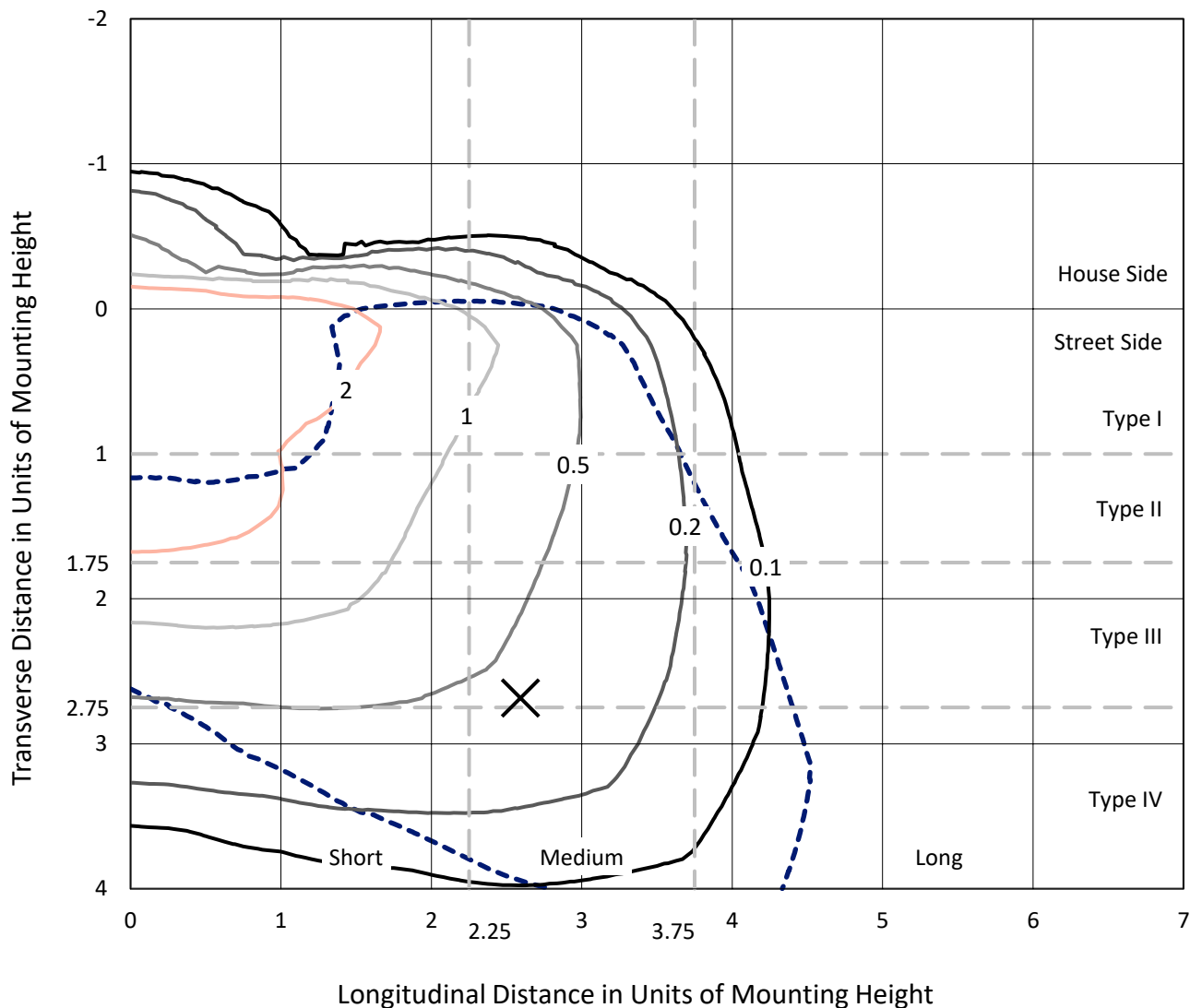
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P400395  
 CATALOG NUMBER: ARCH-L-PA3-270-827-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

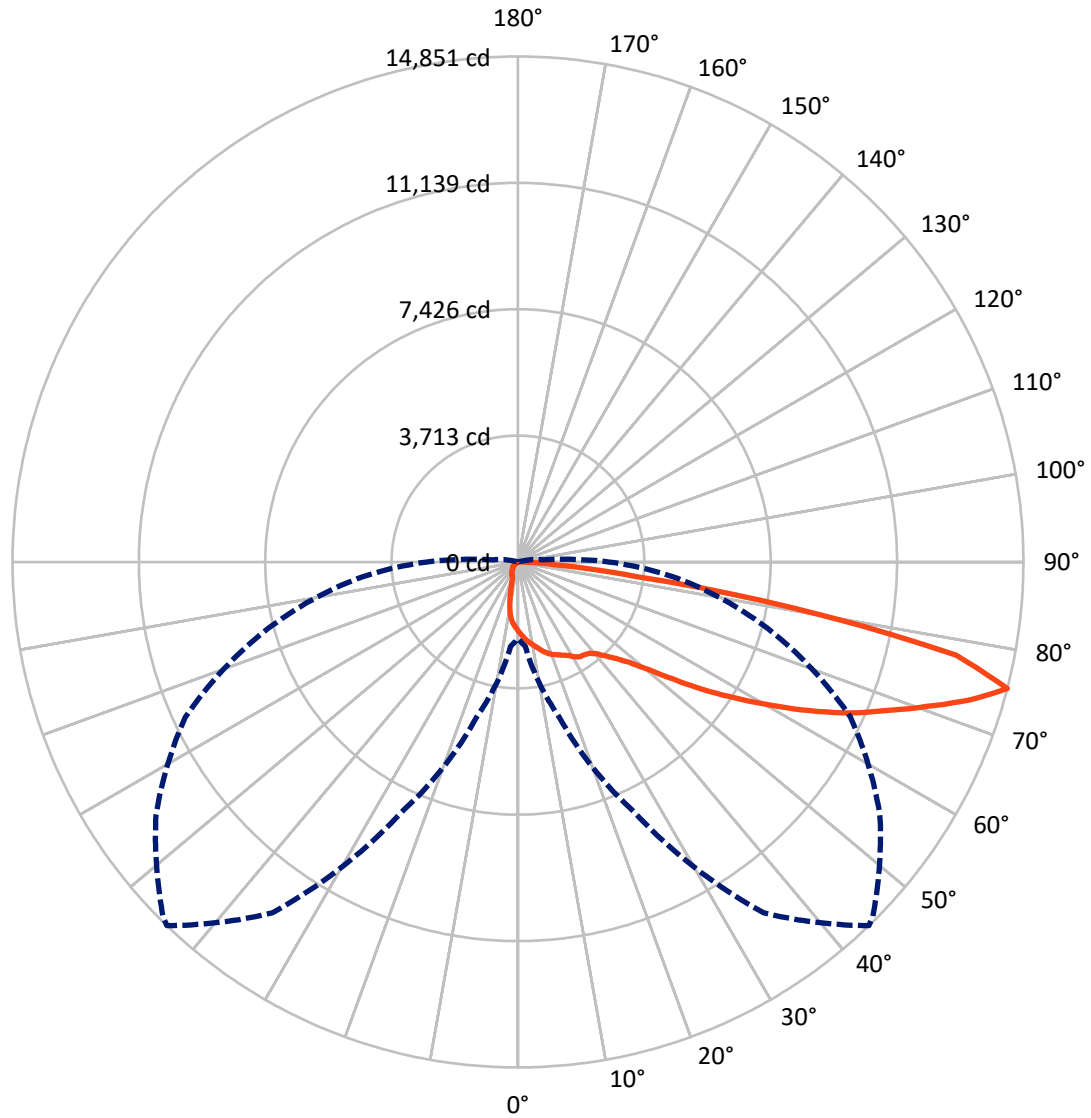
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P400395  
CATALOG NUMBER: ARCH-L-PA3-270-827-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P400395  
 CATALOG NUMBER: ARCH-L-PA3-270-827-U-T4W-HSS

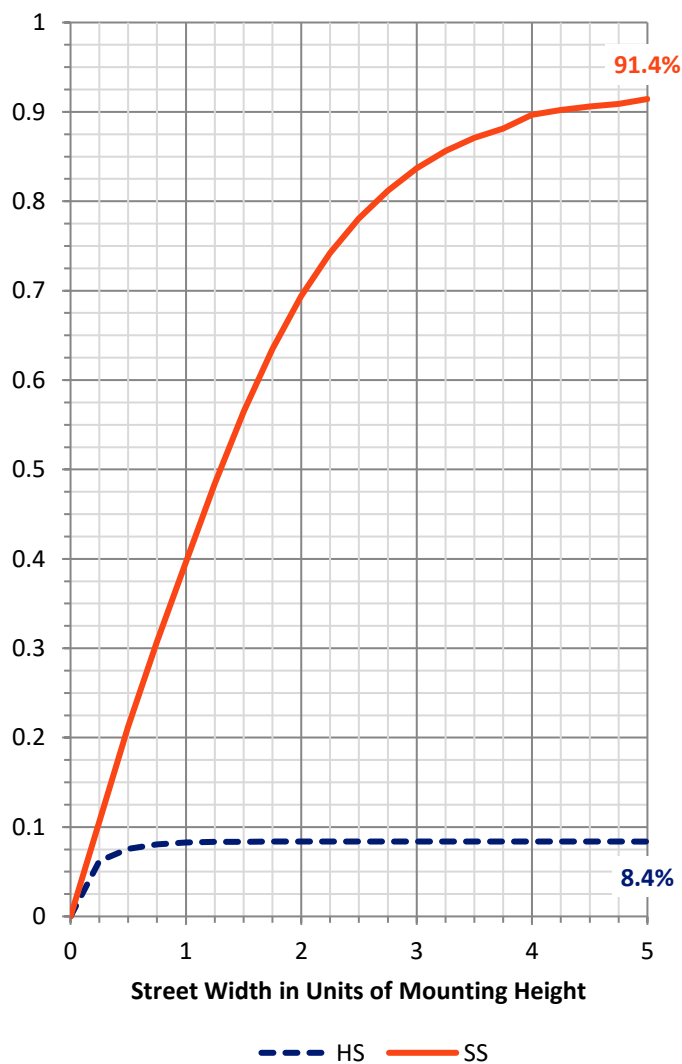
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1577.4	0.0	1577.4
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	17126.6	0.0	17126.6
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	18704.0	0.0	18704.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.0	1.0
10°-20°	538.0	2.9
20°-30°	887.9	4.7
30°-40°	1288.6	6.9
40°-50°	2094.7	11.2
50°-60°	3692.8	19.7
60°-70°	5307.3	28.4
70°-80°	4249.9	22.7
80°-90°	452.8	2.4
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°	18704.0	100.0
0°-180°	18704.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P400395

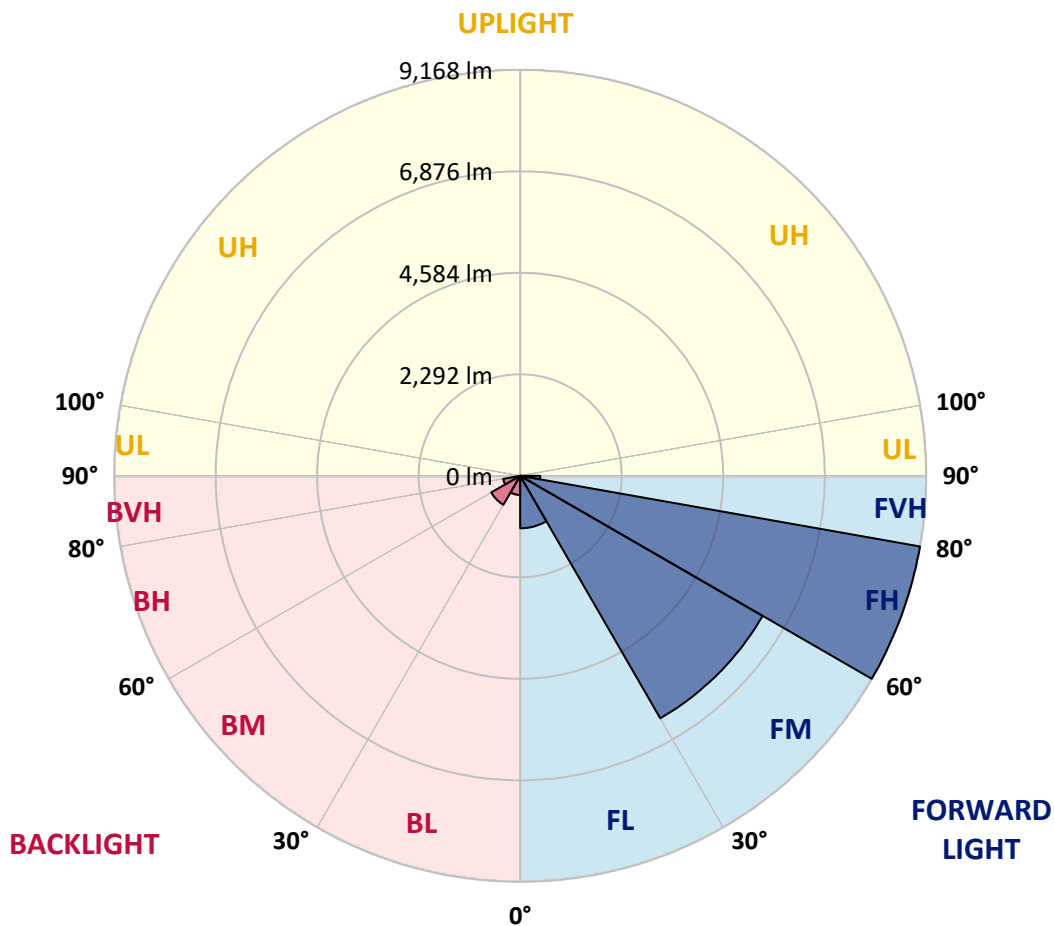
CATALOG NUMBER: ARCH-L-PA3-270-827-U-T4W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1184.5	6.3			
FM (30°-60°)	6322.1	33.8			
FH (60°-80°)	9168.4	49.0			G4/12000
FVH (80°-90°)	451.7	2.4			G3/500
BL (0°-30°)	433.4	2.3	B1/500		
BM (30°-60°)	754.0	4.0	B1/1000		
BH (60°-80°)	388.9	2.1	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**

Type IV Medium





REPORT NUMBER: P400395

CATALOG NUMBER: ARCH-L-PA3-270-827-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9
2.5°	2218.7	2215.3	2204.9	2187.7	2170.4	2153.2	2149.7	2122.1	2091.1	2066.9	2046.2
5°	2415.4	2412.0	2394.7	2356.8	2318.8	2274.0	2270.5	2204.9	2146.3	2080.7	2025.5
7.5°	2619.0	2612.1	2581.1	2522.4	2456.8	2387.8	2380.9	2284.3	2198.0	2111.8	2032.4
10°	2777.7	2770.8	2726.0	2657.0	2567.3	2481.0	2470.6	2370.6	2284.3	2173.9	2066.9
12.5°	2933.0	2919.2	2860.6	2784.6	2674.2	2591.4	2581.1	2477.5	2374.0	2260.1	2129.0
15°	3077.9	3060.7	3005.5	2908.9	2791.5	2712.2	2705.3	2594.9	2487.9	2356.8	2211.8
17.5°	3178.0	3171.1	3105.5	2998.6	2884.7	2819.1	2812.2	2698.4	2591.4	2453.4	2298.1
20°	3229.8	3229.8	3167.7	3050.3	2946.8	2902.0	2891.6	2784.6	2681.1	2550.0	2387.8
22.5°	3240.1	3250.5	3202.2	3074.5	2998.6	2960.6	2953.7	2860.6	2760.5	2639.7	2487.9
25°	3260.8	3260.8	3236.7	3098.6	3043.4	3033.1	3029.6	2946.8	2857.1	2736.3	2588.0
27.5°	3285.0	3285.0	3267.7	3133.2	3112.4	3109.0	3105.5	3067.6	2995.1	2853.7	2705.3
30°	3347.1	3350.5	3336.7	3202.2	3188.4	3226.3	3233.2	3212.5	3122.8	2946.8	2826.0
32.5°	3502.4	3471.3	3433.4	3250.5	3274.6	3322.9	3326.4	3285.0	3188.4	3046.9	2971.0
35°	3892.3	3709.4	3536.9	3291.9	3302.2	3350.5	3357.4	3354.0	3295.3	3174.6	3136.6
37.5°	4254.6	3995.8	3750.8	3388.5	3354.0	3405.8	3419.6	3478.2	3433.4	3350.5	3360.9
40°	4465.1	4365.0	4192.5	3654.2	3457.5	3536.9	3550.7	3640.4	3623.1	3588.6	3654.2
42.5°	5113.8	5120.7	4934.4	4051.0	3647.3	3775.0	3792.2	3864.7	3888.8	3906.1	4064.8
45°	5866.0	5890.2	5845.3	4765.3	4006.2	4047.6	4071.7	4168.3	4258.1	4368.5	4658.3
47.5°	6770.1	6749.4	6583.8	5638.3	4630.7	4399.5	4416.8	4603.1	4758.4	4999.9	5414.0
50°	7570.6	7622.4	7308.4	6452.6	5510.6	4955.1	4937.8	5120.7	5400.2	5738.4	6259.4
52.5°	8378.1	8302.2	7877.7	7260.1	6552.7	5710.8	5659.0	5759.1	6152.4	6552.7	7087.6
55°	8592.0	8598.9	8454.0	8143.4	7422.3	6628.6	6542.4	6535.5	7025.4	7298.0	7957.1
57.5°	9013.0	9030.2	9064.8	9126.9	8785.3	7546.5	7456.8	7360.1	7836.3	7995.1	8830.1
60°	9440.9	9461.6	9672.1	10006.8	9779.0	8536.8	8440.2	8212.5	8478.1	8692.1	9748.0
62.5°	9385.7	9530.6	10141.3	10807.3	10779.7	9623.7	9503.0	8954.3	9123.4	9309.7	10589.9
65°	8474.7	8630.0	10003.3	11028.1	11783.8	10696.9	10500.2	9720.4	9730.7	9955.0	11400.8
67.5°	7660.4	7829.4	9140.7	10935.0	12446.3	11659.6	11456.0	10489.9	10327.7	10700.3	11835.6
70°	7191.1	7360.1	8454.0	10645.1	12632.7	12725.8	12549.9	11369.8	11038.5	11380.1	11349.1
72.5°	5627.9	5893.6	7577.5	10093.0	12832.8	13868.0	13730.0	12484.3	11642.4	10669.3	8640.3
75°	2242.9	2487.9	4730.8	8122.7	12580.9	14851.4	14744.5	12984.6	10776.3	7618.9	4423.7
77.5°	676.3	724.6	1314.7	4016.5	9223.5	13167.5	13133.0	10917.7	7625.8	3536.9	1207.7
80°	224.3	248.4	403.7	1107.6	4209.7	8226.3	8381.5	6956.4	3464.4	810.9	245.0
82.5°	93.2	103.5	203.6	445.1	1490.7	3543.8	3492.0	3115.9	1207.7	503.8	89.7
85°	24.2	31.1	93.2	255.3	545.2	1221.5	1283.6	1045.5	683.2	417.5	27.6
87.5°	0.0	0.0	44.9	103.5	245.0	369.2	386.5	317.5	386.5	314.0	13.8
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: P400395

CATALOG NUMBER: ARCH-L-PA3-270-827-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9	2035.9
2.5°	2029.0	2011.7	1980.6	1959.9	1932.3	1925.4	1911.6	1894.4	1890.9	1873.7	1877.1
5°	1994.5	1966.8	1911.6	1873.7	1828.8	1815.0	1790.9	1773.6	1759.8	1735.7	1739.1
7.5°	1987.6	1946.1	1870.2	1797.8	1725.3	1673.5	1601.1	1542.4	1494.1	1442.4	1452.7
10°	2011.7	1959.9	1853.0	1752.9	1621.8	1456.2	1266.4	1142.2	1080.0	1017.9	1024.8
12.5°	2060.0	1997.9	1859.9	1708.1	1442.4	1159.4	897.2	728.1	683.2	655.6	659.1
15°	2132.5	2056.6	1880.6	1621.8	1200.8	838.5	597.0	524.5	541.7	552.1	552.1
17.5°	2208.4	2122.1	1897.8	1466.5	928.2	586.6	486.5	479.6	503.8	527.9	527.9
20°	2301.6	2191.1	1901.3	1269.8	669.4	476.2	458.9	458.9	476.2	503.8	503.8
22.5°	2391.3	2267.1	1870.2	1045.5	510.7	441.7	441.7	441.7	452.0	479.6	483.1
25°	2498.2	2360.2	1804.7	807.4	438.2	421.0	421.0	424.4	431.3	455.5	458.9
27.5°	2612.1	2456.8	1694.2	590.1	400.3	396.8	400.3	403.7	407.2	431.3	438.2
30°	2743.2	2563.8	1552.8	441.7	365.8	365.8	376.1	383.0	383.0	403.7	410.6
32.5°	2895.1	2705.3	1383.7	365.8	331.3	327.8	345.1	355.4	355.4	372.7	379.6
35°	3084.8	2850.2	1180.1	324.4	303.7	296.8	303.7	320.9	327.8	341.6	345.1
37.5°	3336.7	3022.7	962.7	300.2	282.9	269.1	269.1	272.6	286.4	300.2	303.7
40°	3657.6	3212.5	748.8	282.9	262.2	248.4	238.1	234.6	231.2	241.5	248.4
42.5°	4061.4	3426.5	559.0	265.7	245.0	224.3	210.5	196.7	179.4	176.0	179.4
45°	4579.0	3688.7	414.1	251.9	234.6	203.6	179.4	155.3	124.2	113.9	117.3
47.5°	5189.7	3961.3	324.4	238.1	227.7	179.4	148.4	107.0	75.9	69.0	72.5
50°	5838.4	4223.5	276.0	220.8	213.9	155.3	107.0	65.6	44.9	44.9	48.3
52.5°	6390.5	4371.9	251.9	207.0	193.2	127.7	69.0	38.0	27.6	27.6	31.1
55°	6925.4	4451.3	234.6	193.2	165.6	89.7	38.0	24.2	17.3	17.3	17.3
57.5°	7477.5	4485.8	213.9	176.0	131.1	55.2	20.7	13.8	10.4	10.4	10.4
60°	7967.5	4420.2	182.9	144.9	86.3	27.6	10.4	10.4	6.9	3.5	3.5
62.5°	8378.1	4296.0	127.7	103.5	51.8	13.8	6.9	3.5	0.0	0.0	0.0
65°	8630.0	4095.9	82.8	69.0	31.1	10.4	3.5	0.0	0.0	0.0	0.0
67.5°	8557.5	3719.8	51.8	44.9	13.8	6.9	3.5	0.0	0.0	0.0	0.0
70°	7722.5	3050.3	38.0	27.6	10.4	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	5565.8	2063.5	27.6	17.3	6.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2677.7	735.0	17.3	13.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	655.6	162.2	10.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	144.9	31.1	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.3	13.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.3	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.4	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)