

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: P400467

Luminaire Tested: **ARCH-L-PA3-280-827-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400467  
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-PA3-280-827-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 1180mA 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: 18982 lumens  
Efficiency: N/A  
Efficacy: 68.0 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

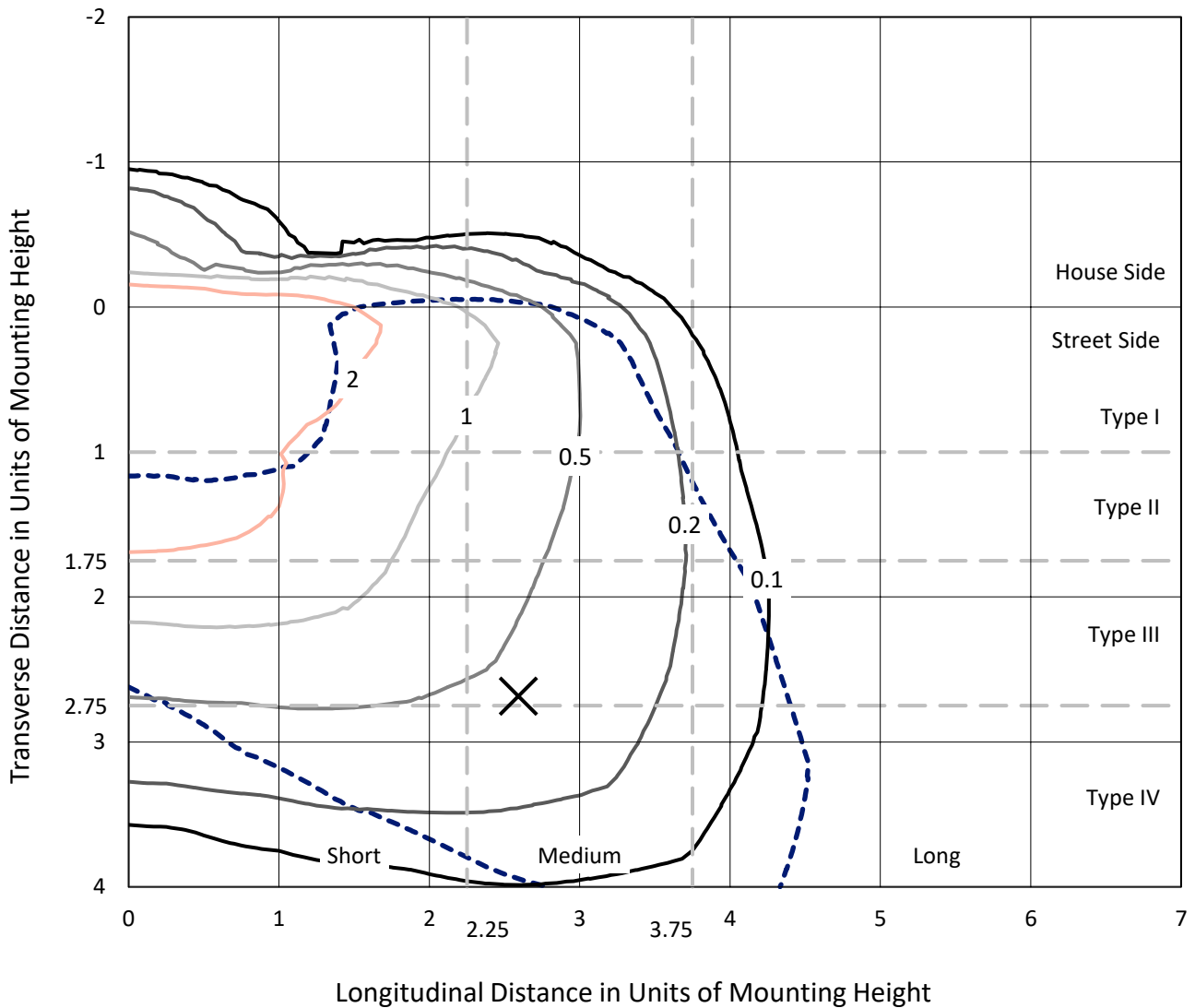
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

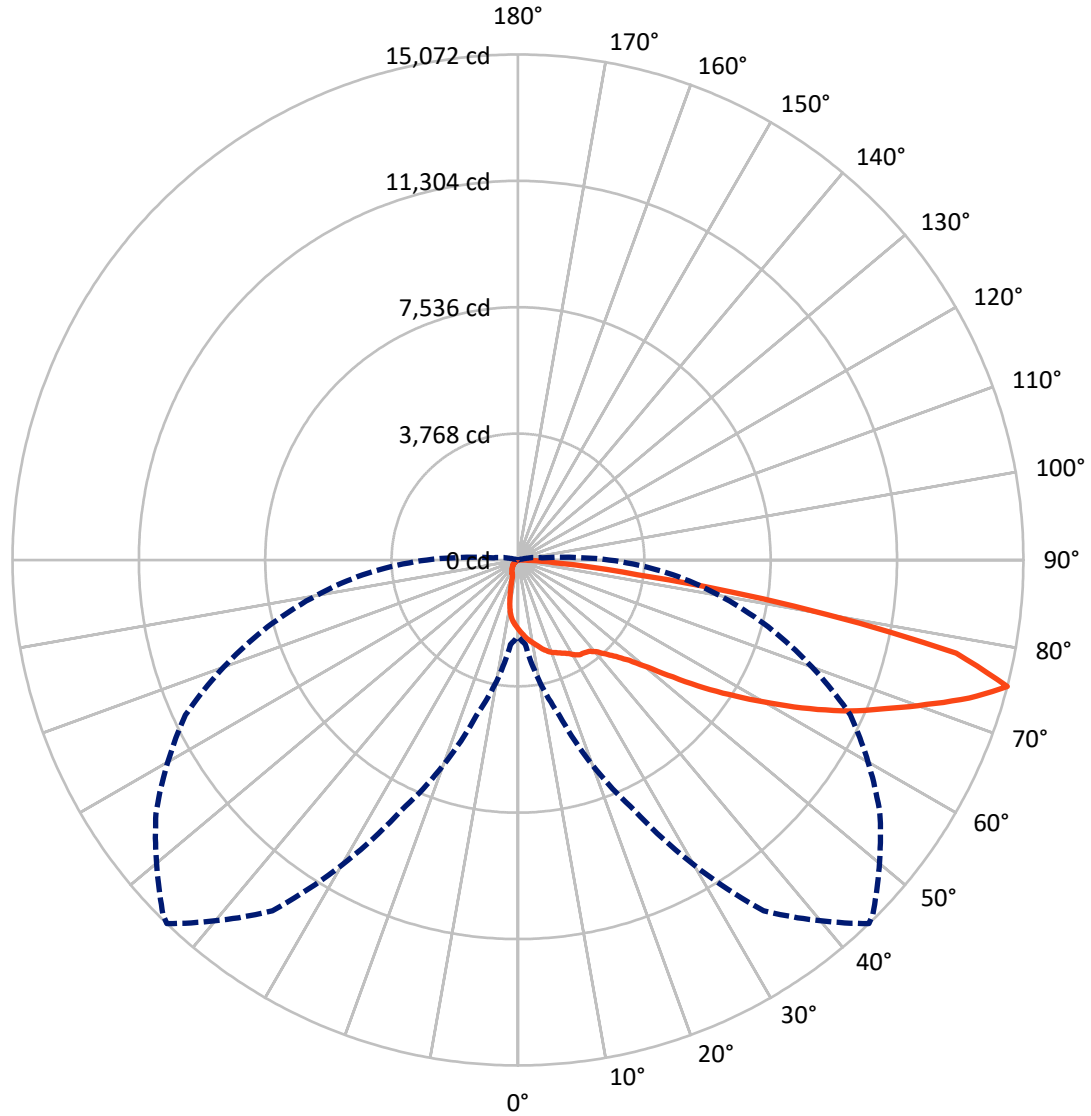
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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

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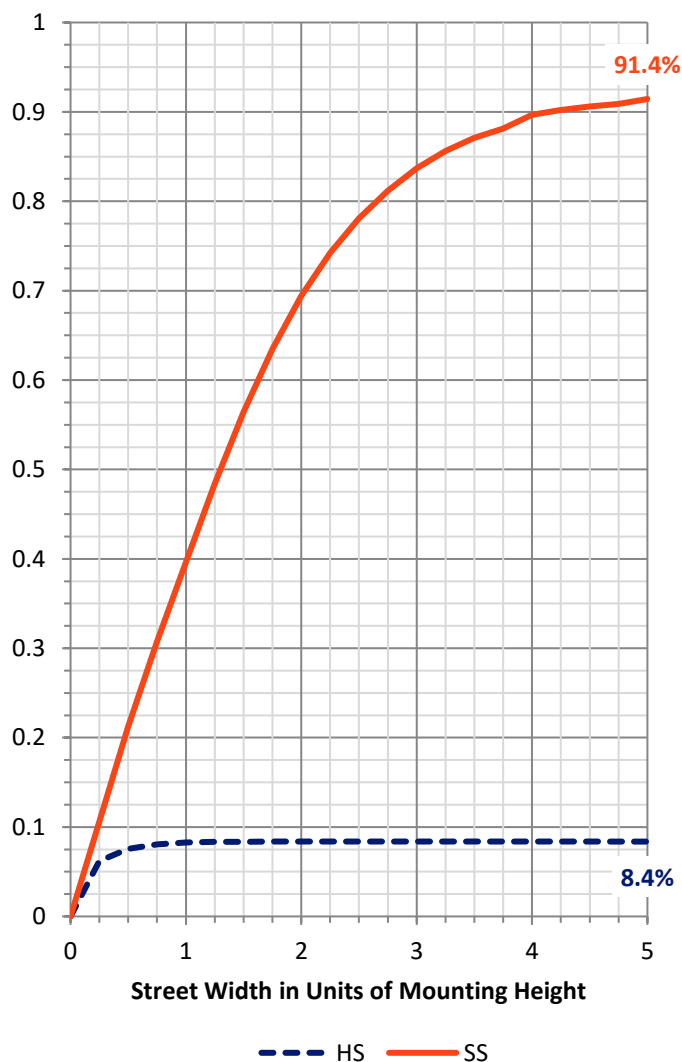
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1600.8	0.0	1600.8
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	17381.2	0.0	17381.2
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	18982.0	0.0	18982.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.8	1.0
10°-20°	546.0	2.9
20°-30°	901.1	4.7
30°-40°	1307.8	6.9
40°-50°	2125.9	11.2
50°-60°	3747.7	19.7
60°-70°	5386.2	28.4
70°-80°	4313.1	22.7
80°-90°	459.5	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°	18982.0	100.0
0°-180°	18982.0	100.0

**Coefficient of Utilization**



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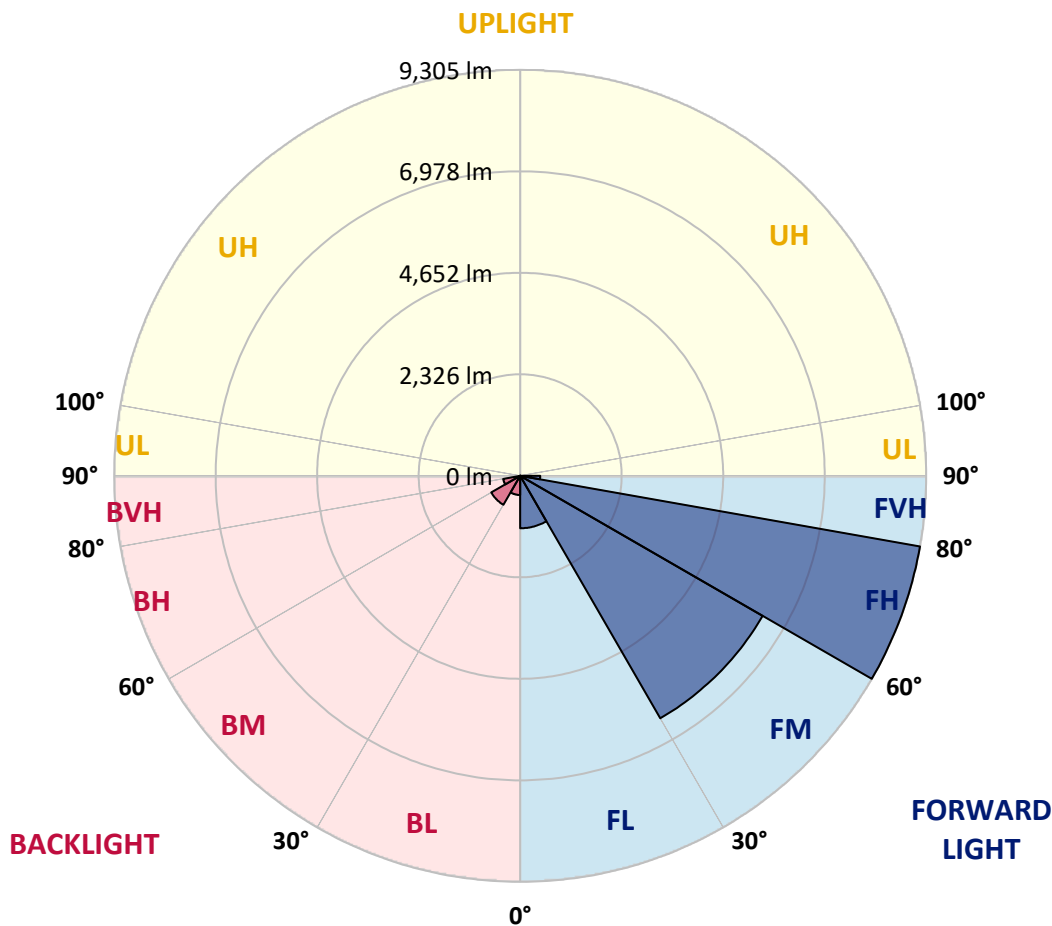
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1202.1	6.3			
FM (30°-60°)	6416.1	33.8			
FH (60°-80°)	9304.6	49.0			G4/12000
FVH (80°-90°)	458.4	2.4			G3/500
BL (0°-30°)	439.8	2.3	B1/500		
BM (30°-60°)	765.2	4.0	B1/1000		
BH (60°-80°)	394.6	2.1	B1/500		G1/500
BVH (80°-90°)	1.2	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1
2.5°	2251.7	2248.2	2237.7	2220.2	2202.7	2185.2	2181.7	2153.7	2122.1	2097.6	2076.6
5°	2451.3	2447.8	2430.3	2391.8	2353.3	2307.7	2304.2	2237.7	2178.2	2111.6	2055.6
7.5°	2657.9	2650.9	2619.4	2559.9	2493.4	2423.3	2416.3	2318.3	2230.7	2143.2	2062.6
10°	2819.0	2812.0	2766.5	2696.5	2605.4	2517.9	2507.4	2405.8	2318.3	2206.2	2097.6
12.5°	2976.6	2962.6	2903.1	2826.0	2714.0	2629.9	2619.4	2514.4	2409.3	2293.7	2160.7
15°	3123.7	3106.2	3050.2	2952.1	2833.0	2752.5	2745.5	2633.4	2524.9	2391.8	2244.7
17.5°	3225.2	3218.2	3151.7	3043.1	2927.6	2861.0	2854.0	2738.5	2629.9	2489.8	2332.3
20°	3277.8	3277.8	3214.7	3095.7	2990.6	2945.1	2934.6	2826.0	2721.0	2587.9	2423.3
22.5°	3288.3	3298.8	3249.8	3120.2	3043.1	3004.6	2997.6	2903.1	2801.5	2679.0	2524.9
25°	3309.3	3309.3	3284.8	3144.7	3088.7	3078.2	3074.7	2990.6	2899.6	2777.0	2626.4
27.5°	3333.8	3333.8	3316.3	3179.7	3158.7	3155.2	3151.7	3113.2	3039.6	2896.1	2745.5
30°	3396.8	3400.3	3386.3	3249.8	3235.8	3274.3	3281.3	3260.3	3169.2	2990.6	2868.1
32.5°	3554.4	3522.9	3484.4	3298.8	3323.3	3372.3	3375.8	3333.8	3235.8	3092.2	3015.1
35°	3950.1	3764.5	3589.4	3340.8	3351.3	3400.3	3407.3	3403.8	3344.3	3221.7	3183.2
37.5°	4317.8	4055.2	3806.6	3438.9	3403.8	3456.4	3470.4	3529.9	3484.4	3400.3	3410.8
40°	4531.5	4429.9	4254.8	3708.5	3508.9	3589.4	3603.5	3694.5	3677.0	3642.0	3708.5
42.5°	5189.8	5196.8	5007.7	4111.2	3701.5	3831.1	3848.6	3922.1	3946.6	3964.1	4125.2
45°	5953.2	5977.7	5932.2	4836.1	4065.7	4107.7	4132.2	4230.3	4321.3	4433.4	4727.6
47.5°	6870.7	6849.7	6681.6	5722.1	4699.5	4464.9	4482.4	4671.5	4829.1	5074.2	5494.5
50°	7683.2	7735.7	7417.0	6548.5	5592.5	5028.7	5011.2	5196.8	5480.5	5823.7	6352.4
52.5°	8502.6	8425.6	7994.8	7368.0	6650.1	5795.6	5743.1	5844.7	6243.9	6650.1	7192.9
55°	8719.7	8726.7	8579.6	8264.5	7532.6	6727.1	6639.6	6632.6	7129.9	7406.5	8075.4
57.5°	9147.0	9164.5	9199.5	9262.5	8915.8	7658.6	7567.6	7469.5	7952.8	8113.9	8961.4
60°	9581.2	9602.2	9815.8	10155.5	9924.4	8663.7	8565.6	8334.5	8604.2	8821.3	9892.9
62.5°	9525.2	9672.2	10292.1	10967.9	10939.9	9766.8	9644.2	9087.4	9259.0	9448.1	10747.3
65°	8600.7	8758.2	10152.0	11192.1	11959.0	10855.9	10656.3	9864.8	9875.3	10103.0	11570.3
67.5°	7774.2	7945.8	9276.5	11097.5	12631.3	11832.9	11626.3	10645.8	10481.2	10859.4	12011.5
70°	7298.0	7469.5	8579.6	10803.3	12820.4	12915.0	12736.4	11538.7	11202.6	11549.3	11517.7
72.5°	5711.6	5981.2	7690.2	10243.0	13023.6	14074.1	13934.0	12669.9	11815.4	10827.9	8768.7
75°	2276.2	2524.9	4801.1	8243.5	12767.9	15072.2	14963.6	13177.6	10936.4	7732.2	4489.4
77.5°	686.4	735.4	1334.2	4076.2	9360.6	13363.2	13328.2	11080.0	7739.2	3589.4	1225.7
80°	227.6	252.1	409.7	1124.1	4272.3	8348.5	8506.1	7059.8	3515.9	822.9	248.6
82.5°	94.6	105.1	206.6	451.7	1512.8	3596.4	3543.9	3162.2	1225.7	511.3	91.0
85°	24.5	31.5	94.6	259.1	553.3	1239.7	1302.7	1061.1	693.4	423.7	28.0
87.5°	0.0	0.0	45.5	105.1	248.6	374.7	392.2	322.2	392.2	318.7	14.0
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°	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1	2066.1
2.5°	2059.1	2041.6	2010.1	1989.1	1961.1	1954.1	1940.1	1922.5	1919.0	1901.5	1905.0
5°	2024.1	1996.1	1940.1	1901.5	1856.0	1842.0	1817.5	1800.0	1786.0	1761.5	1765.0
7.5°	2017.1	1975.1	1898.0	1824.5	1750.9	1698.4	1624.9	1565.3	1516.3	1463.8	1474.3
10°	2041.6	1989.1	1880.5	1779.0	1645.9	1477.8	1285.2	1159.1	1096.1	1033.1	1040.1
12.5°	2090.6	2027.6	1887.5	1733.4	1463.8	1176.6	910.5	738.9	693.4	665.4	668.9
15°	2164.2	2087.1	1908.5	1645.9	1218.7	851.0	605.8	532.3	549.8	560.3	560.3
17.5°	2241.2	2153.7	1926.0	1488.3	942.0	595.3	493.8	486.8	511.3	535.8	535.8
20°	2335.8	2223.7	1929.5	1288.7	679.4	483.3	465.8	465.8	483.3	511.3	511.3
22.5°	2426.8	2300.7	1898.0	1061.1	518.3	448.2	448.2	448.2	458.7	486.8	490.3
25°	2535.4	2395.3	1831.5	819.4	444.7	427.2	427.2	430.7	437.7	462.3	465.8
27.5°	2650.9	2493.4	1719.4	598.8	406.2	402.7	406.2	409.7	413.2	437.7	444.7
30°	2784.0	2601.9	1575.9	448.2	371.2	371.2	381.7	388.7	388.7	409.7	416.7
32.5°	2938.1	2745.5	1404.3	371.2	336.2	332.7	350.2	360.7	360.7	378.2	385.2
35°	3130.7	2892.6	1197.6	329.2	308.2	301.2	308.2	325.7	332.7	346.7	350.2
37.5°	3386.3	3067.7	977.0	304.7	287.2	273.1	273.1	276.6	290.7	304.7	308.2
40°	3712.0	3260.3	759.9	287.2	266.1	252.1	241.6	238.1	234.6	245.1	252.1
42.5°	4121.7	3477.4	567.3	269.6	248.6	227.6	213.6	199.6	182.1	178.6	182.1
45°	4647.0	3743.5	420.2	255.6	238.1	206.6	182.1	157.6	126.1	115.6	119.1
47.5°	5266.9	4020.2	329.2	241.6	231.1	182.1	150.6	108.6	77.0	70.0	73.5
50°	5925.2	4286.3	280.2	224.1	217.1	157.6	108.6	66.5	45.5	45.5	49.0
52.5°	6485.5	4436.9	255.6	210.1	196.1	129.6	70.0	38.5	28.0	28.0	31.5
55°	7028.3	4517.4	238.1	196.1	168.1	91.0	38.5	24.5	17.5	17.5	17.5
57.5°	7588.6	4552.5	217.1	178.6	133.1	56.0	21.0	14.0	10.5	10.5	10.5
60°	8085.9	4485.9	185.6	147.1	87.5	28.0	10.5	10.5	7.0	3.5	3.5
62.5°	8502.6	4359.9	129.6	105.1	52.5	14.0	7.0	3.5	0.0	0.0	0.0
65°	8758.2	4156.8	84.0	70.0	31.5	10.5	3.5	0.0	0.0	0.0	0.0
67.5°	8684.7	3775.0	52.5	45.5	14.0	7.0	3.5	0.0	0.0	0.0	0.0
70°	7837.2	3095.7	38.5	28.0	10.5	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	5648.6	2094.1	28.0	17.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	2717.5	745.9	17.5	14.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	665.4	164.6	10.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	147.1	31.5	7.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	49.0	14.0	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°	10.5	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)