

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: P399919

Luminaire Tested: **ARCH-L-PA3-210-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399919  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
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-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24906 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

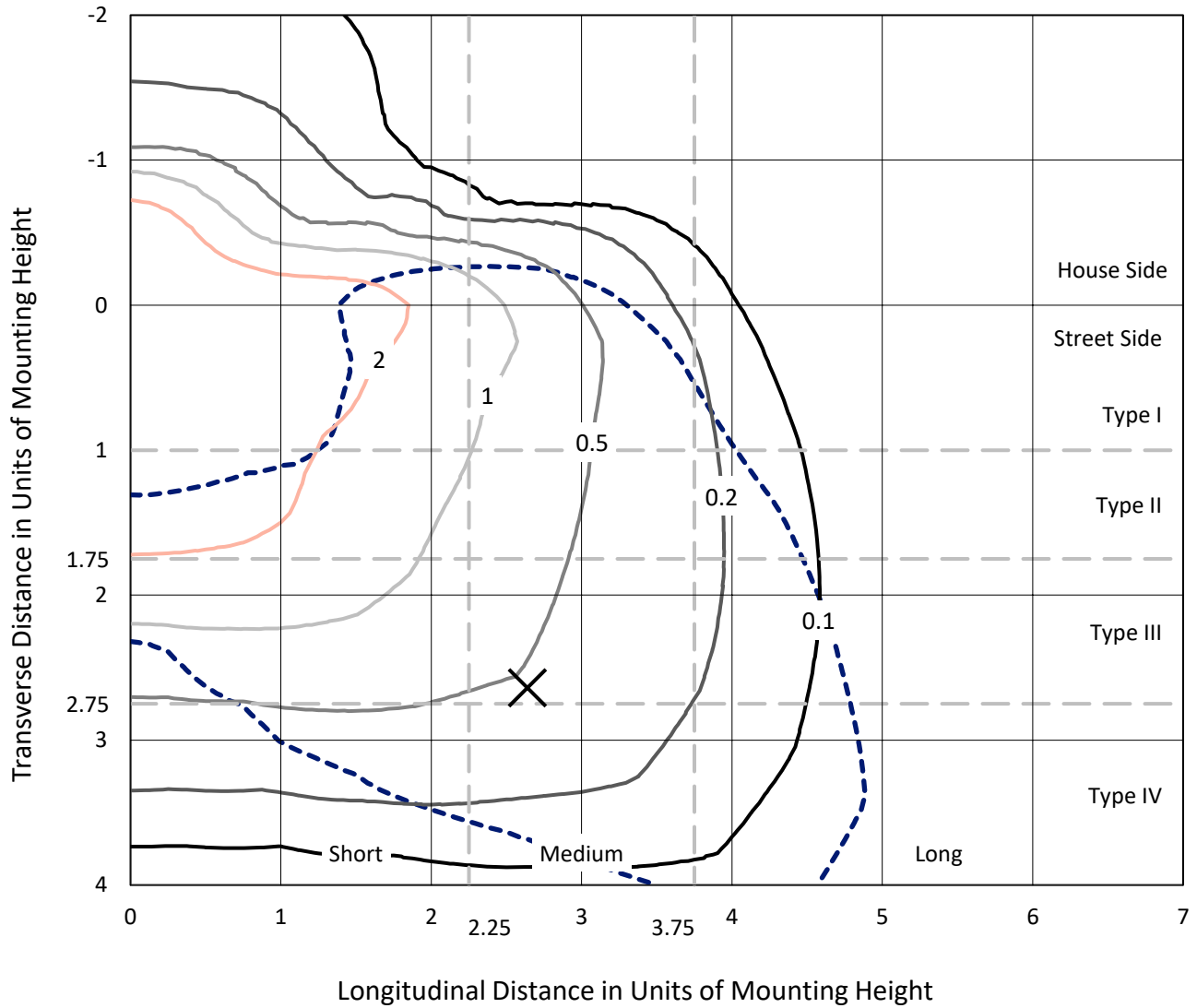
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

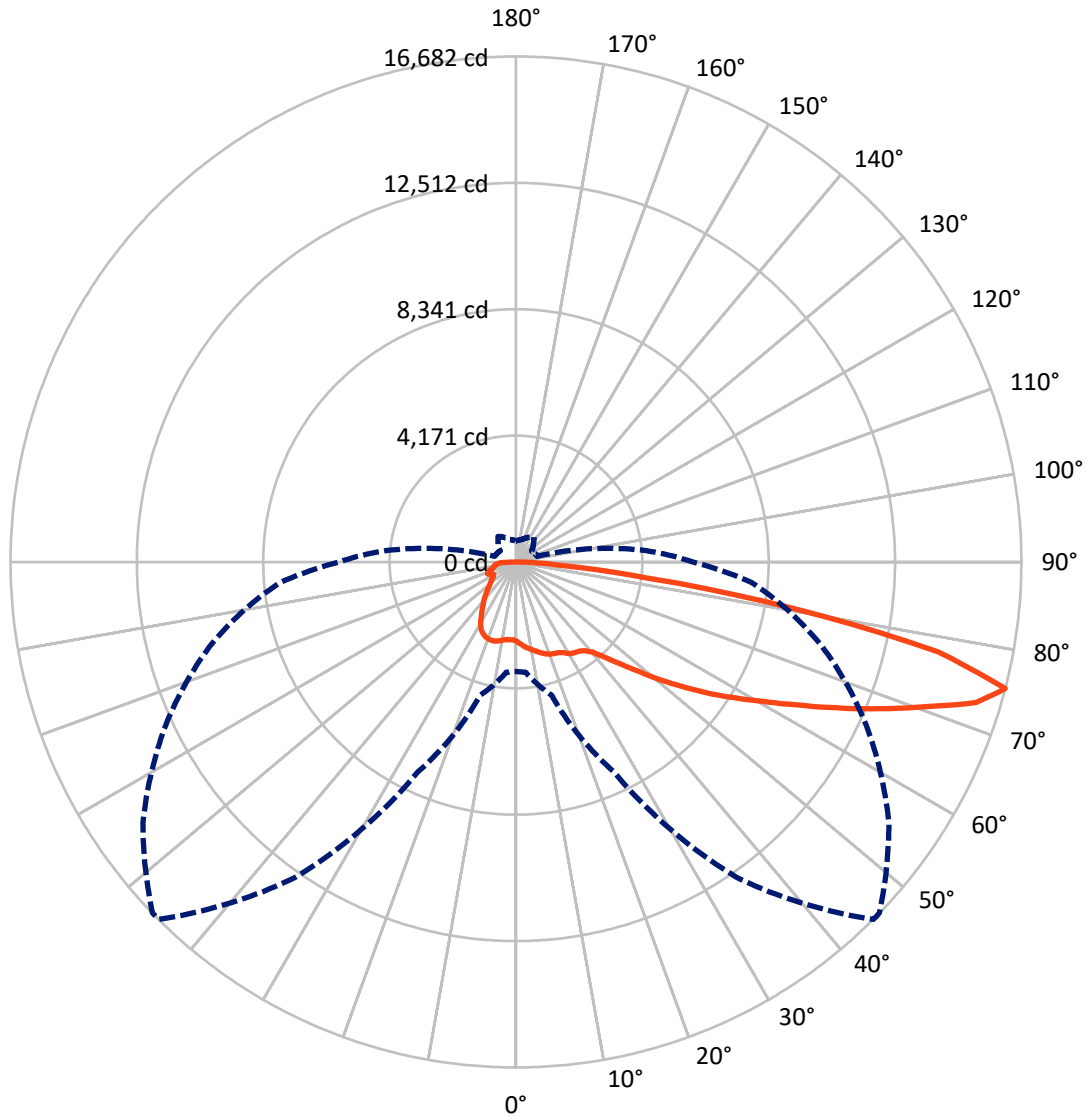
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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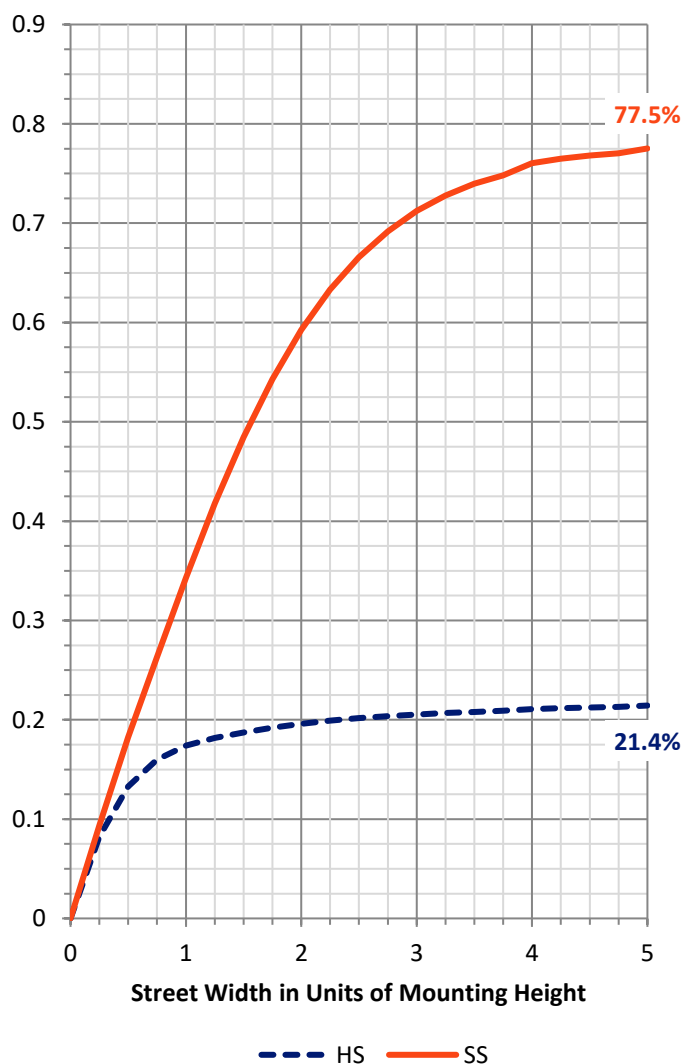
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5504.1	0.0	5504.1
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	19401.9	0.0	19401.9
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	24906.0	0.0	24906.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	258.8	1.0
10°-20°	823.2	3.3
20°-30°	1403.5	5.6
30°-40°	1966.5	7.9
40°-50°	2889.0	11.6
50°-60°	4597.9	18.5
60°-70°	6540.5	26.3
70°-80°	5476.3	22.0
80°-90°	950.4	3.8
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°	24906.0	100.0
0°-180°	24906.0	100.0

**Coefficient of Utilization**



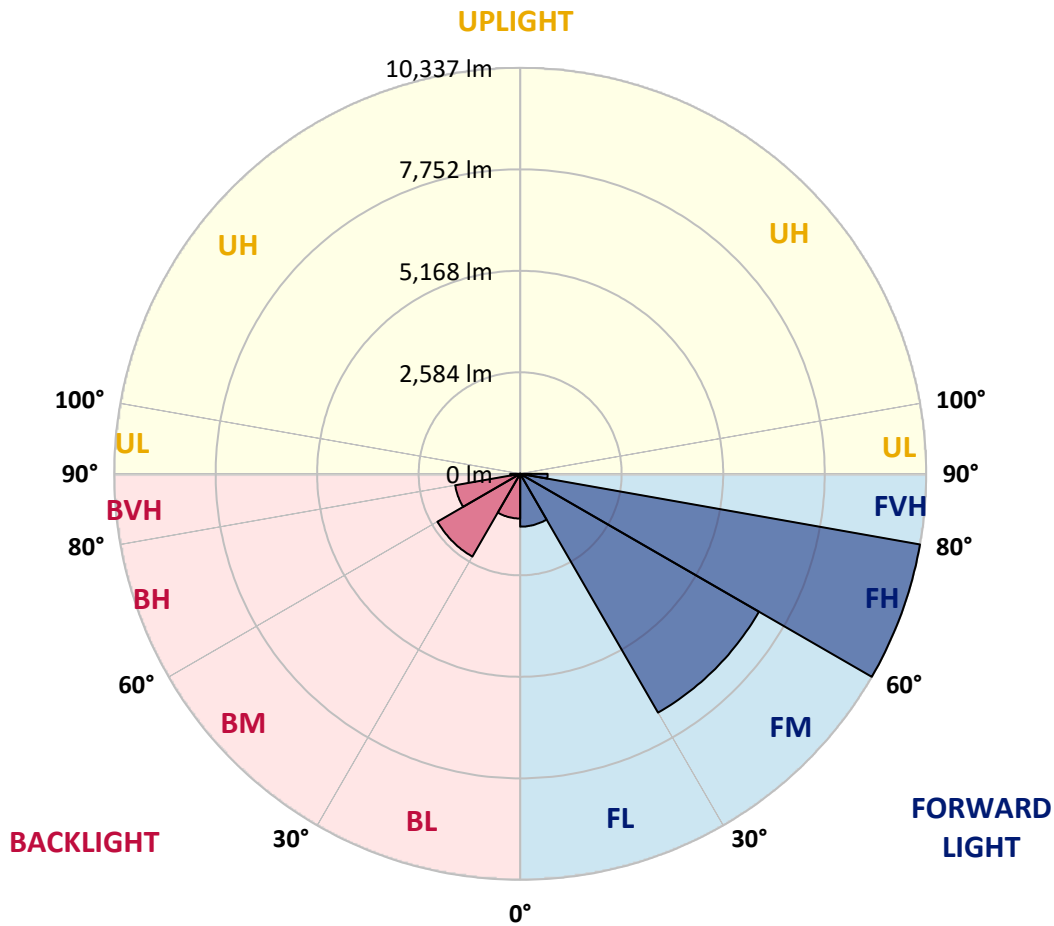
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1346.3	5.4			
FM (30°-60°)	7020.2	28.2			
FH (60°-80°)	10336.6	41.5			G4/12000
FVH (80°-90°)	698.7	2.8			G4/750
BL (0°-30°)	1139.1	4.6	B3/2500		
BM (30°-60°)	2433.1	9.8	B2/2500		
BH (60°-80°)	1680.2	6.7	B3/2500		G3/2500
BVH (80°-90°)	251.7	1.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7
2.5°	2765.4	2752.1	2745.5	2745.5	2718.8	2702.2	2698.9	2675.6	2655.6	2635.6	2619.0
5°	2925.2	2915.2	2895.2	2878.6	2842.0	2795.4	2788.7	2738.8	2688.9	2642.3	2602.4
7.5°	3071.6	3051.6	3028.3	2995.0	2935.1	2871.9	2861.9	2792.1	2722.2	2652.3	2599.0
10°	3194.7	3174.8	3141.5	3094.9	3018.3	2941.8	2931.8	2858.6	2785.4	2702.2	2625.7
12.5°	3311.2	3294.6	3244.6	3181.4	3091.6	3021.7	3011.7	2948.5	2871.9	2778.7	2678.9
15°	3411.0	3394.4	3341.1	3267.9	3164.8	3111.5	3098.2	3038.3	2961.8	2861.9	2758.8
17.5°	3460.9	3460.9	3404.4	3324.5	3228.0	3188.1	3178.1	3104.9	3035.0	2938.5	2835.3
20°	3477.6	3484.2	3444.3	3347.8	3264.6	3248.0	3238.0	3178.1	3098.2	3005.0	2908.5
22.5°	3487.6	3500.9	3467.6	3357.8	3287.9	3277.9	3271.3	3231.3	3168.1	3078.2	2981.7
25°	3520.8	3520.8	3497.6	3374.4	3317.8	3314.5	3314.5	3291.2	3248.0	3171.4	3074.9
27.5°	3570.8	3567.4	3537.5	3411.0	3384.4	3394.4	3391.1	3387.7	3357.8	3281.2	3178.1
30°	3654.0	3654.0	3620.7	3484.2	3467.6	3510.9	3514.2	3520.8	3474.3	3354.5	3271.3
32.5°	3780.4	3767.1	3733.8	3557.5	3530.8	3570.8	3577.4	3574.1	3534.2	3421.0	3381.1
35°	4169.8	4139.8	4020.0	3720.5	3587.4	3610.7	3614.0	3630.7	3637.3	3547.5	3527.5
37.5°	4852.0	4812.0	4629.0	4106.5	3767.1	3710.5	3707.2	3750.5	3787.1	3707.2	3707.2
40°	5594.1	5560.8	5454.3	4772.1	4099.9	3913.5	3900.2	3940.2	3986.7	3930.2	3946.8
42.5°	6233.0	6259.6	6269.6	5477.6	4599.1	4292.9	4256.3	4199.7	4272.9	4223.0	4289.6
45°	6712.2	6698.9	6882.0	6199.7	5244.7	4768.8	4718.9	4565.8	4659.0	4655.6	4802.1
47.5°	7221.4	7198.1	7274.6	6878.6	5980.1	5351.2	5274.6	5048.3	5188.1	5284.6	5527.5
50°	7703.9	7710.6	7737.2	7414.4	6778.8	6060.0	5963.5	5660.6	5860.3	6063.3	6406.1
52.5°	8332.9	8286.3	8253.0	8040.0	7674.0	6798.8	6735.5	6389.4	6669.0	6908.6	7364.5
55°	8882.0	8852.0	8832.1	8822.1	8422.7	7614.1	7547.5	7188.1	7590.8	7760.5	8432.7
57.5°	9467.7	9451.0	9557.5	9727.2	9567.5	8442.7	8372.8	8026.7	8476.0	8595.8	9590.8
60°	9897.0	9907.0	10199.8	10632.4	10522.6	9341.2	9258.0	8951.9	9337.9	9444.4	10748.9
62.5°	9900.3	10000.1	10679.0	11454.4	11580.9	10376.2	10279.7	9946.9	10223.1	10223.1	11787.2
65°	8955.2	9068.3	10592.5	11657.4	12652.4	11607.5	11514.3	10991.8	11095.0	10955.2	12762.2
67.5°	8013.4	8146.5	9580.8	11674.0	13404.5	12925.3	12815.5	12036.8	11860.4	11507.6	13444.4
70°	7387.8	7481.0	8679.0	11457.7	13857.1	14303.0	14219.8	13028.5	12462.7	11970.2	13301.3
72.5°	6219.7	6186.4	7331.2	10429.4	14110.0	15867.1	15797.2	14106.7	12985.2	11750.6	11344.6
75°	3610.7	3650.6	4549.1	7640.7	12719.0	16682.4	16675.8	15028.5	12755.6	10379.5	7817.1
77.5°	1041.6	1071.6	1494.2	3357.8	8043.4	14229.8	14685.7	13743.9	10782.2	7397.8	4053.3
80°	455.9	479.2	648.9	1118.2	3464.3	9294.6	9694.0	9294.6	6502.6	3394.4	1590.7
82.5°	269.6	286.2	422.6	692.2	1660.6	4422.7	4961.8	4332.8	2805.4	1441.0	658.9
85°	153.1	159.7	242.9	439.3	1044.9	1547.4	1737.1	1627.3	1367.7	818.6	346.1
87.5°	69.9	73.2	119.8	206.3	585.7	522.5	542.4	718.8	792.0	499.2	173.0
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°	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7	2615.7
2.5°	2612.3	2602.4	2582.4	2575.7	2565.8	2569.1	2572.4	2572.4	2575.7	2565.8	2565.8
5°	2585.7	2569.1	2549.1	2549.1	2549.1	2575.7	2599.0	2612.3	2619.0	2619.0	2612.3
7.5°	2575.7	2555.8	2532.5	2539.1	2545.8	2579.1	2622.3	2665.6	2678.9	2678.9	2672.2
10°	2595.7	2575.7	2559.1	2569.1	2585.7	2612.3	2645.6	2685.6	2718.8	2722.2	2718.8
12.5°	2642.3	2619.0	2602.4	2622.3	2642.3	2658.9	2675.6	2692.2	2735.5	2742.1	2742.1
15°	2718.8	2695.5	2675.6	2692.2	2698.9	2698.9	2698.9	2698.9	2742.1	2748.8	2748.8
17.5°	2795.4	2775.4	2755.4	2758.8	2738.8	2712.2	2702.2	2698.9	2722.2	2742.1	2745.5
20°	2868.6	2852.0	2832.0	2798.7	2748.8	2698.9	2682.2	2682.2	2695.5	2725.5	2725.5
22.5°	2948.5	2928.5	2895.2	2818.7	2735.5	2665.6	2649.0	2658.9	2675.6	2715.5	2712.2
25°	3038.3	3011.7	2955.1	2812.0	2692.2	2609.0	2612.3	2642.3	2672.2	2715.5	2715.5
27.5°	3138.1	3101.5	2988.4	2758.8	2595.7	2515.8	2545.8	2615.7	2658.9	2705.5	2712.2
30°	3248.0	3214.7	3015.0	2665.6	2439.3	2366.1	2439.3	2552.4	2619.0	2662.3	2672.2
32.5°	3381.1	3354.5	3038.3	2545.8	2236.3	2173.1	2279.6	2419.3	2525.8	2575.7	2585.7
35°	3547.5	3520.8	3068.3	2409.3	2046.6	1980.1	2076.6	2219.7	2359.4	2422.7	2442.6
37.5°	3763.8	3723.8	3094.9	2262.9	1886.9	1810.3	1856.9	1986.7	2113.2	2199.7	2223.0
40°	4040.0	3976.8	3118.2	2096.5	1747.1	1660.6	1677.2	1740.5	1813.7	1890.2	1920.2
42.5°	4429.3	4302.9	3121.5	1920.2	1604.0	1524.1	1517.5	1537.5	1537.5	1537.5	1547.4
45°	4971.8	4732.2	3128.2	1753.8	1457.6	1374.4	1354.4	1347.8	1297.9	1201.3	1194.7
47.5°	5657.3	5294.6	3158.1	1614.0	1304.5	1231.3	1204.7	1178.1	1084.9	985.0	965.1
50°	6535.9	5946.8	3218.0	1480.9	1174.7	1124.8	1091.5	1028.3	925.1	848.6	828.6
52.5°	7547.5	6722.2	3274.6	1341.1	1078.2	1044.9	1005.0	928.5	818.6	772.1	765.4
55°	8708.9	7587.5	3387.7	1218.0	995.0	971.7	935.1	861.9	778.7	745.4	742.1
57.5°	9897.0	8555.9	3547.5	1108.2	915.2	901.8	901.8	838.6	785.4	772.1	772.1
60°	11041.7	9387.8	3424.3	1005.0	841.9	848.6	911.8	895.2	855.3	871.9	881.9
62.5°	11930.3	9877.0	2778.7	921.8	788.7	848.6	1011.7	1011.7	965.1	958.4	958.4
65°	12309.6	9870.3	1953.4	858.6	768.7	931.8	1128.1	1074.9	951.8	905.2	895.2
67.5°	12213.1	9437.7	1347.8	815.3	762.1	1018.3	1181.4	1031.6	891.9	851.9	822.0
70°	11364.5	8522.6	1038.3	775.4	752.1	981.7	1164.7	981.7	845.3	808.7	782.0
72.5°	9168.2	6835.4	861.9	735.5	712.2	908.5	1108.2	935.1	808.7	768.7	742.1
75°	5847.0	4299.6	728.8	682.2	635.6	815.3	1031.6	888.5	768.7	715.5	695.5
77.5°	2812.0	1853.6	635.6	619.0	572.4	755.4	955.1	828.6	715.5	672.2	658.9
80°	1138.1	848.6	552.4	555.7	525.8	718.8	901.8	772.1	662.2	615.6	592.4
82.5°	592.4	492.5	465.9	479.2	479.2	685.5	861.9	725.5	615.6	595.7	519.1
85°	319.5	306.2	359.4	386.0	416.0	619.0	802.0	675.5	562.4	482.5	465.9
87.5°	156.4	199.7	203.0	232.9	289.5	495.8	675.5	565.7	469.2	389.4	382.7
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)