

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: P400440

Luminaire Tested: **ARCH-L-PA3-280-740-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400440  
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-PA3-280-740-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 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: 25822 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G5

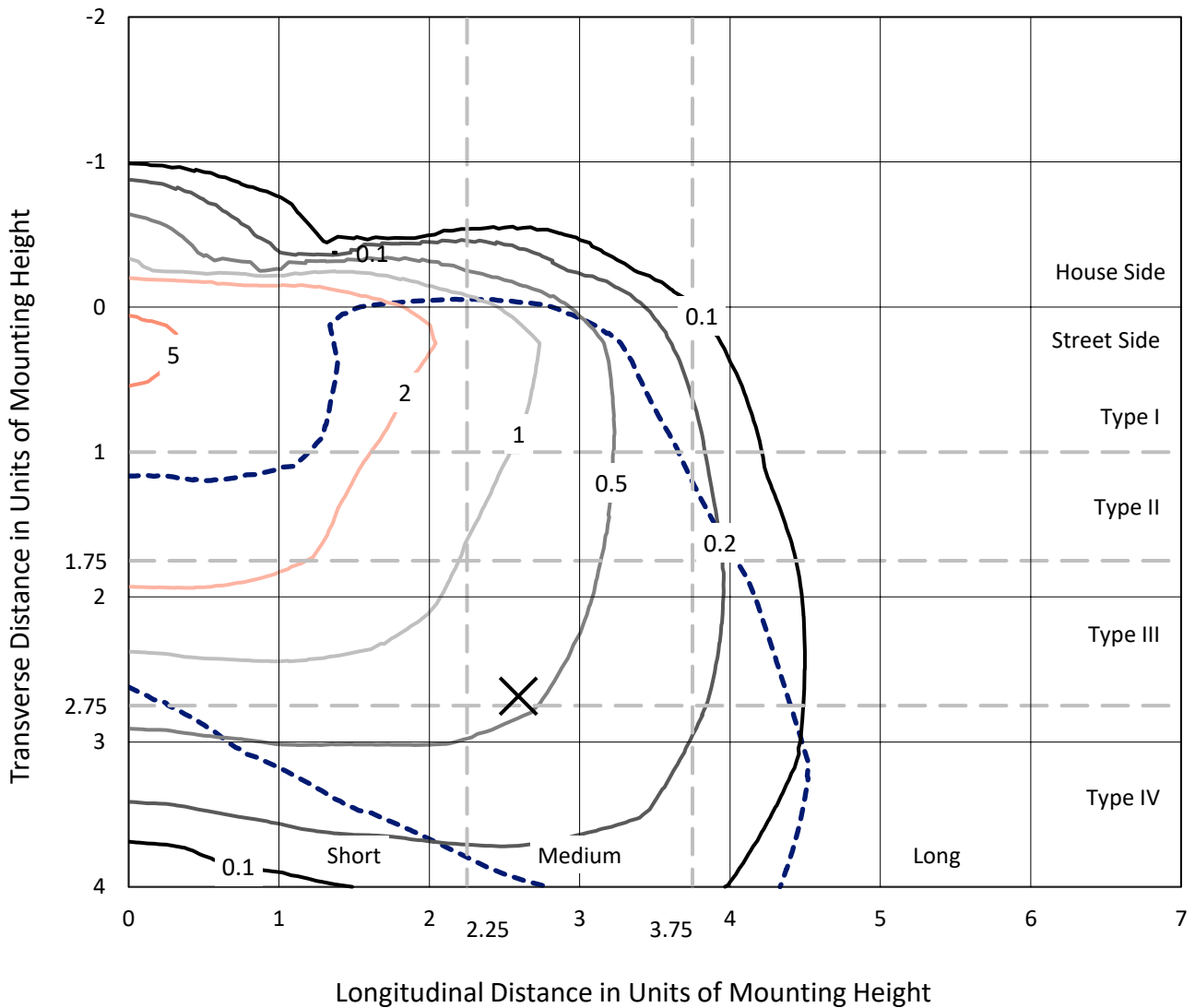
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

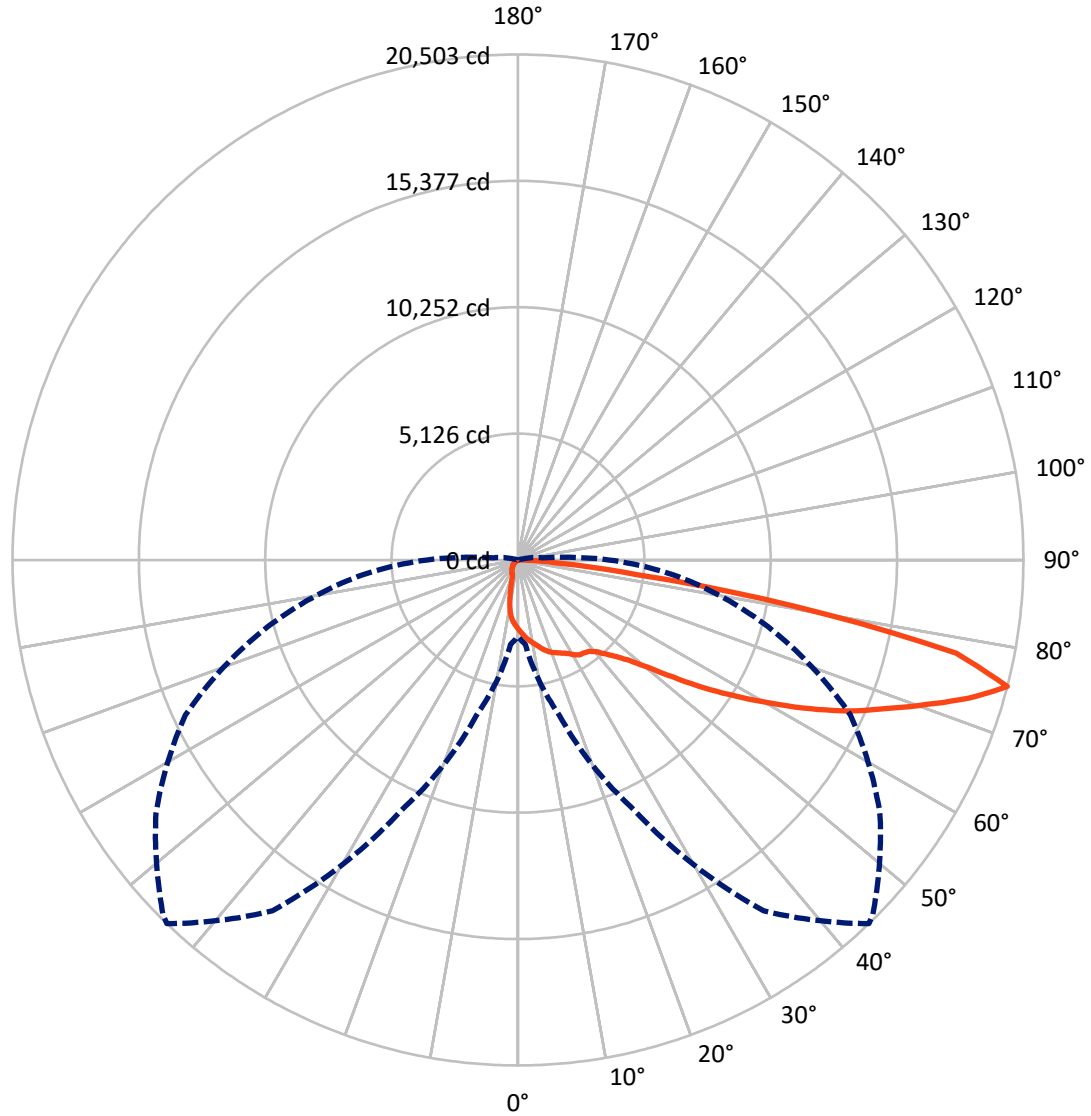
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 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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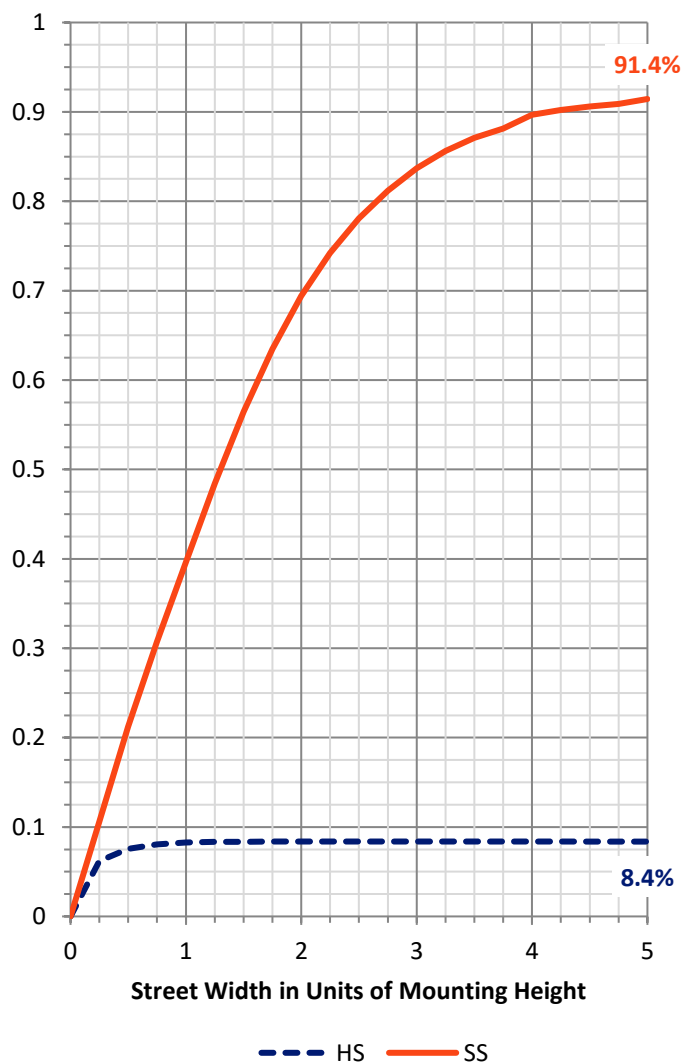
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2177.7	0.0	2177.7
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	23644.4	0.0	23644.4
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	25822.0	0.0	25822.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	265.1	1.0
10°-20°	742.7	2.9
20°-30°	1225.7	4.7
30°-40°	1779.0	6.9
40°-50°	2891.9	11.2
50°-60°	5098.1	19.7
60°-70°	7327.0	28.4
70°-80°	5867.3	22.7
80°-90°	625.1	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°	25822.0	100.0
0°-180°	25822.0	100.0

**Coefficient of Utilization**



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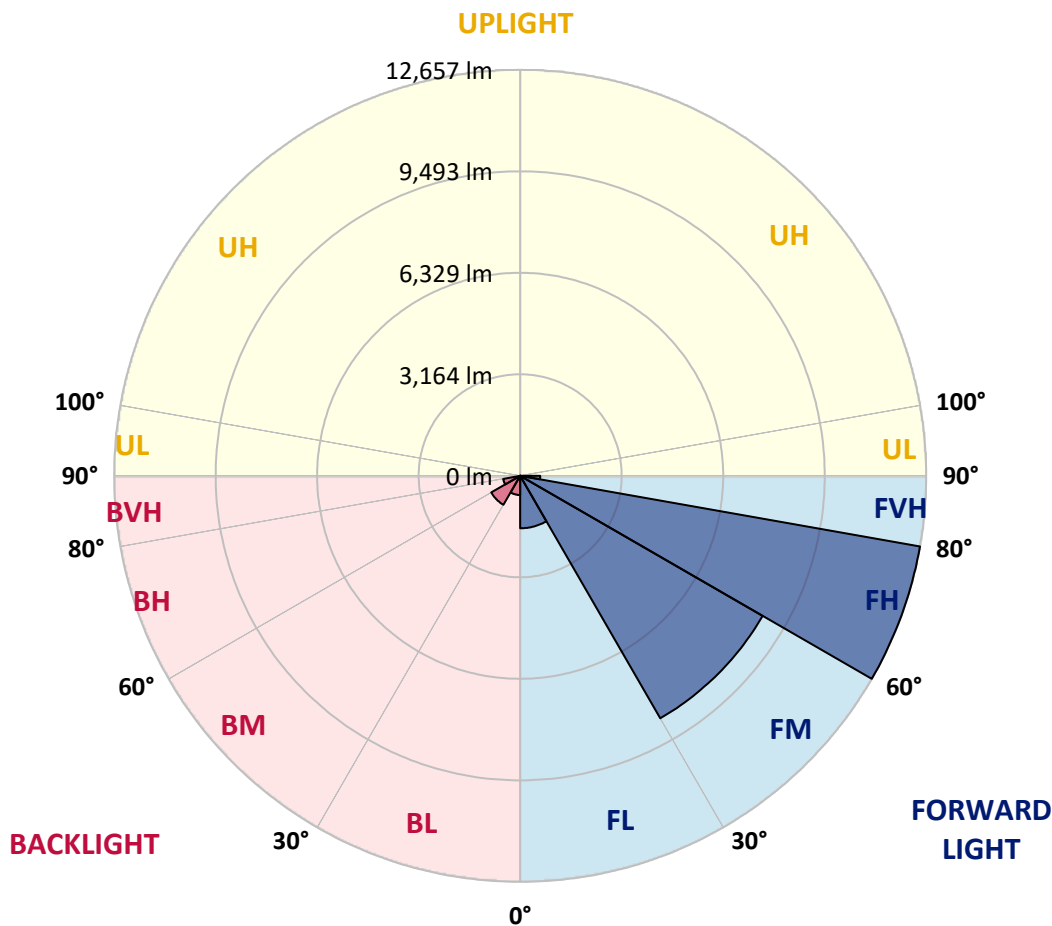
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1635.3	6.3			
FM (30°-60°)	8728.1	33.8			
FH (60°-80°)	12657.5	49.0			G5
FVH (80°-90°)	623.5	2.4			G4/750
BL (0°-30°)	598.3	2.3	B2/1000		
BM (30°-60°)	1041.0	4.0	B2/2500		
BH (60°-80°)	536.8	2.1	B2/1000		G2/1000
BVH (80°-90°)	1.6	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-G5**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6
2.5°	3063.1	3058.3	3044.1	3020.2	2996.4	2972.6	2967.8	2929.7	2886.8	2853.5	2824.9
5°	3334.6	3329.9	3306.1	3253.7	3201.3	3139.3	3134.6	3044.1	2963.1	2872.6	2796.3
7.5°	3615.7	3606.2	3563.3	3482.3	3391.8	3296.5	3287.0	3153.6	3034.5	2915.4	2805.9
10°	3834.8	3825.3	3763.4	3668.1	3544.2	3425.2	3410.9	3272.7	3153.6	3001.2	2853.5
12.5°	4049.2	4030.2	3949.2	3844.4	3691.9	3577.6	3563.3	3420.4	3277.5	3120.3	2939.2
15°	4249.3	4225.5	4149.2	4015.9	3853.9	3744.3	3734.8	3582.4	3434.7	3253.7	3053.6
17.5°	4387.4	4377.9	4287.4	4139.7	3982.5	3892.0	3882.5	3725.3	3577.6	3387.0	3172.7
20°	4458.9	4458.9	4373.1	4211.2	4068.3	4006.3	3992.0	3844.4	3701.5	3520.4	3296.5
22.5°	4473.2	4487.5	4420.8	4244.5	4139.7	4087.3	4077.8	3949.2	3811.0	3644.3	3434.7
25°	4501.8	4501.8	4468.4	4277.9	4201.6	4187.4	4182.6	4068.3	3944.4	3777.7	3572.8
27.5°	4535.1	4535.1	4511.3	4325.5	4296.9	4292.2	4287.4	4235.0	4135.0	3939.6	3734.8
30°	4620.9	4625.6	4606.6	4420.8	4401.7	4454.1	4463.7	4435.1	4311.2	4068.3	3901.5
32.5°	4835.2	4792.4	4740.0	4487.5	4520.8	4587.5	4592.3	4535.1	4401.7	4206.4	4101.6
35°	5373.5	5121.1	4882.9	4544.6	4558.9	4625.6	4635.2	4630.4	4549.4	4382.7	4330.3
37.5°	5873.7	5516.5	5178.2	4678.0	4630.4	4701.8	4720.9	4801.9	4740.0	4625.6	4639.9
40°	6164.3	6026.2	5788.0	5044.8	4773.3	4882.9	4901.9	5025.8	5002.0	4954.3	5044.8
42.5°	7059.9	7069.4	6812.2	5592.7	5035.3	5211.6	5235.4	5335.4	5368.8	5392.6	5611.7
45°	8098.4	8131.8	8069.8	6578.8	5530.7	5587.9	5621.3	5754.6	5878.5	6030.9	6431.1
47.5°	9346.5	9317.9	9089.3	7784.0	6393.0	6073.8	6097.6	6354.9	6569.2	6902.7	7474.4
50°	10451.7	10523.2	10089.7	8908.3	7607.7	6840.8	6817.0	7069.4	7455.3	7922.2	8641.5
52.5°	11566.4	11461.6	10875.7	10023.0	9046.4	7884.0	7812.6	7950.7	8493.8	9046.4	9784.8
55°	11861.8	11871.3	11671.2	11242.5	10246.9	9151.2	9032.1	9022.6	9699.0	10075.4	10985.3
57.5°	12443.0	12466.8	12514.4	12600.2	12128.6	10418.4	10294.5	10161.1	10818.5	11037.7	12190.5
60°	13033.7	13062.3	13352.9	13814.9	13500.5	11785.6	11652.2	11337.8	11704.6	11999.9	13457.7
62.5°	12957.5	13157.5	14000.7	14920.1	14882.0	13286.2	13119.4	12362.0	12595.4	12852.7	14620.0
65°	11699.8	11914.2	13810.2	15225.0	16268.3	14767.7	14496.2	13419.6	13433.8	13743.5	15739.5
67.5°	10575.6	10809.0	12619.2	15096.4	17182.9	16096.8	15815.7	14481.9	14258.0	14772.5	16339.7
70°	9927.7	10161.1	11671.2	14696.2	17440.2	17568.8	17325.8	15696.6	15239.3	15710.9	15668.1
72.5°	7769.7	8136.5	10461.2	13934.0	17716.5	19145.6	18955.1	17235.3	16073.0	14729.6	11928.5
75°	3096.5	3434.7	6531.1	11213.9	17368.7	20503.3	20355.6	17926.1	14877.3	10518.4	6107.2
77.5°	933.7	1000.4	1815.0	5545.0	12733.6	18178.6	18130.9	15072.6	10527.9	4882.9	1667.3
80°	309.6	343.0	557.4	1529.2	5811.8	11356.8	11571.2	9603.8	4782.8	1119.5	338.2
82.5°	128.6	142.9	281.1	614.5	2058.0	4892.4	4820.9	4301.7	1667.3	695.5	123.9
85°	33.3	42.9	128.6	352.5	752.7	1686.4	1772.1	1443.4	943.2	576.4	38.1
87.5°	0.0	0.0	61.9	142.9	338.2	509.7	533.5	438.3	533.5	433.5	19.1
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°	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6
2.5°	2801.1	2777.3	2734.4	2705.8	2667.7	2658.2	2639.1	2615.3	2610.5	2586.7	2591.5
5°	2753.5	2715.4	2639.1	2586.7	2524.8	2505.7	2472.4	2448.6	2429.5	2396.2	2400.9
7.5°	2743.9	2686.8	2582.0	2481.9	2381.9	2310.4	2210.4	2129.4	2062.7	1991.3	2005.5
10°	2777.3	2705.8	2558.1	2420.0	2239.0	2010.3	1748.3	1576.8	1491.1	1405.3	1414.8
12.5°	2844.0	2758.2	2567.7	2358.1	1991.3	1600.6	1238.6	1005.2	943.2	905.1	909.9
15°	2944.0	2839.2	2596.3	2239.0	1657.8	1157.6	824.1	724.1	747.9	762.2	762.2
17.5°	3048.8	2929.7	2620.1	2024.6	1281.5	809.8	671.7	662.2	695.5	728.9	728.9
20°	3177.4	3025.0	2624.8	1753.1	924.2	657.4	633.6	633.6	657.4	695.5	695.5
22.5°	3301.3	3129.8	2582.0	1443.4	705.0	609.8	609.8	609.8	624.1	662.2	666.9
25°	3449.0	3258.4	2491.5	1114.7	605.0	581.2	581.2	585.9	595.5	628.8	633.6
27.5°	3606.2	3391.8	2339.0	814.6	552.6	547.8	552.6	557.4	562.1	595.5	605.0
30°	3787.2	3539.5	2143.7	609.8	505.0	505.0	519.3	528.8	528.8	557.4	566.9
32.5°	3996.8	3734.8	1910.3	505.0	457.3	452.6	476.4	490.7	490.7	514.5	524.0
35°	4258.8	3934.9	1629.2	447.8	419.2	409.7	419.2	443.0	452.6	471.6	476.4
37.5°	4606.6	4173.1	1329.1	414.4	390.6	371.6	371.6	376.3	395.4	414.4	419.2
40°	5049.6	4435.1	1033.7	390.6	362.0	343.0	328.7	323.9	319.2	333.5	343.0
42.5°	5607.0	4730.4	771.7	366.8	338.2	309.6	290.6	271.5	247.7	243.0	247.7
45°	6321.5	5092.5	571.7	347.8	323.9	281.1	247.7	214.4	171.5	157.2	162.0
47.5°	7164.7	5468.8	447.8	328.7	314.4	247.7	204.8	147.7	104.8	95.3	100.0
50°	8060.3	5830.9	381.1	304.9	295.4	214.4	147.7	90.5	61.9	61.9	66.7
52.5°	8822.5	6035.7	347.8	285.8	266.8	176.3	95.3	52.4	38.1	38.1	42.9
55°	9560.9	6145.3	323.9	266.8	228.7	123.9	52.4	33.3	23.8	23.8	23.8
57.5°	10323.1	6192.9	295.4	243.0	181.0	76.2	28.6	19.1	14.3	14.3	14.3
60°	10999.6	6102.4	252.5	200.1	119.1	38.1	14.3	14.3	9.5	4.8	4.8
62.5°	11566.4	5930.9	176.3	142.9	71.5	19.1	9.5	4.8	0.0	0.0	0.0
65°	11914.2	5654.6	114.3	95.3	42.9	14.3	4.8	0.0	0.0	0.0	0.0
67.5°	11814.2	5135.3	71.5	61.9	19.1	9.5	4.8	0.0	0.0	0.0	0.0
70°	10661.3	4211.2	52.4	38.1	14.3	4.8	0.0	0.0	0.0	0.0	0.0
72.5°	7684.0	2848.7	38.1	23.8	9.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	3696.7	1014.7	23.8	19.1	4.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	905.1	223.9	14.3	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	200.1	42.9	9.5	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	66.7	19.1	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	23.8	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.3	4.8	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)