

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: P400391

Luminaire Tested: **ARCH-L-PA3-270-827-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400391
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
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-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17927 lumens
Efficiency: N/A
Efficacy: 65.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

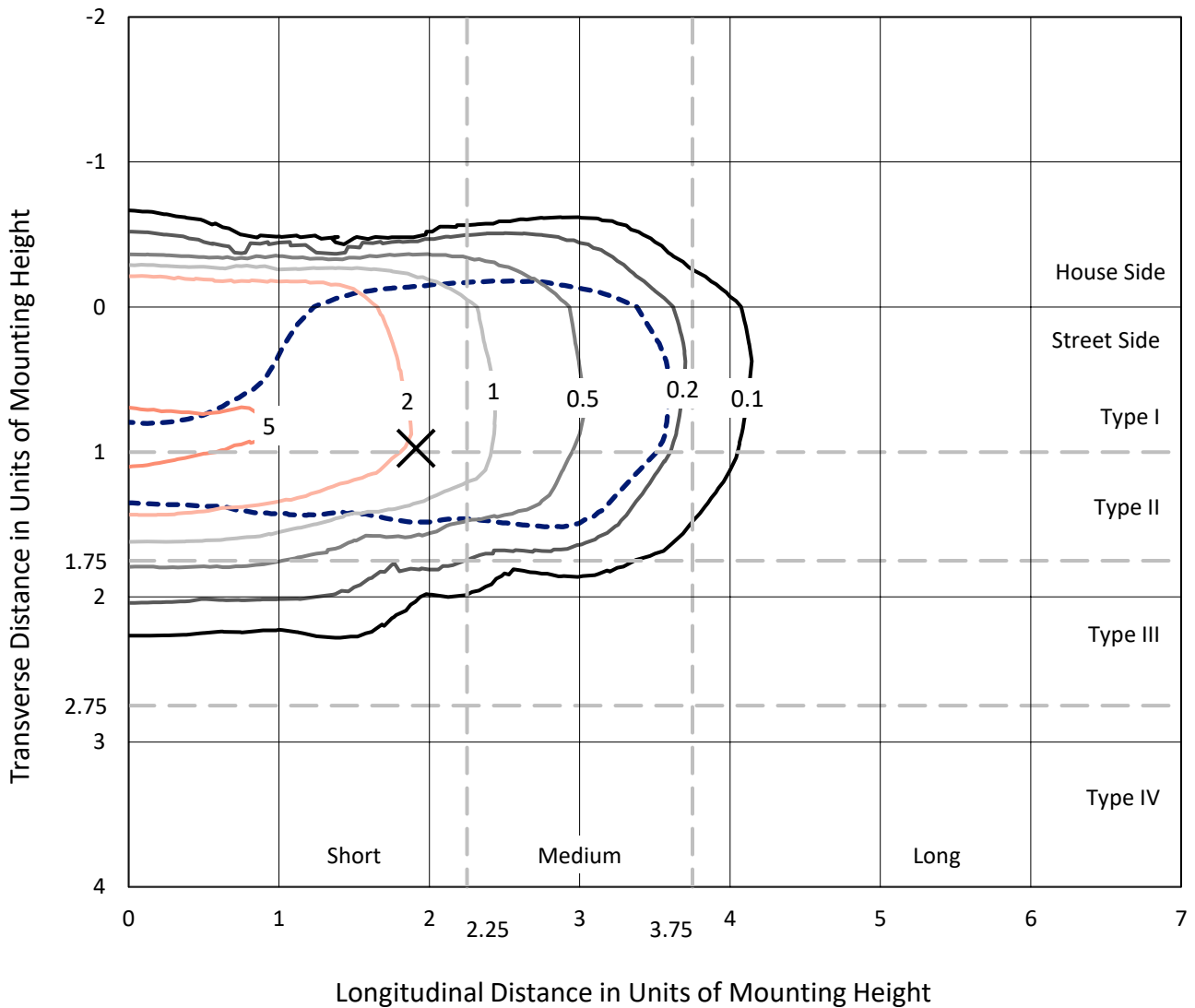
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

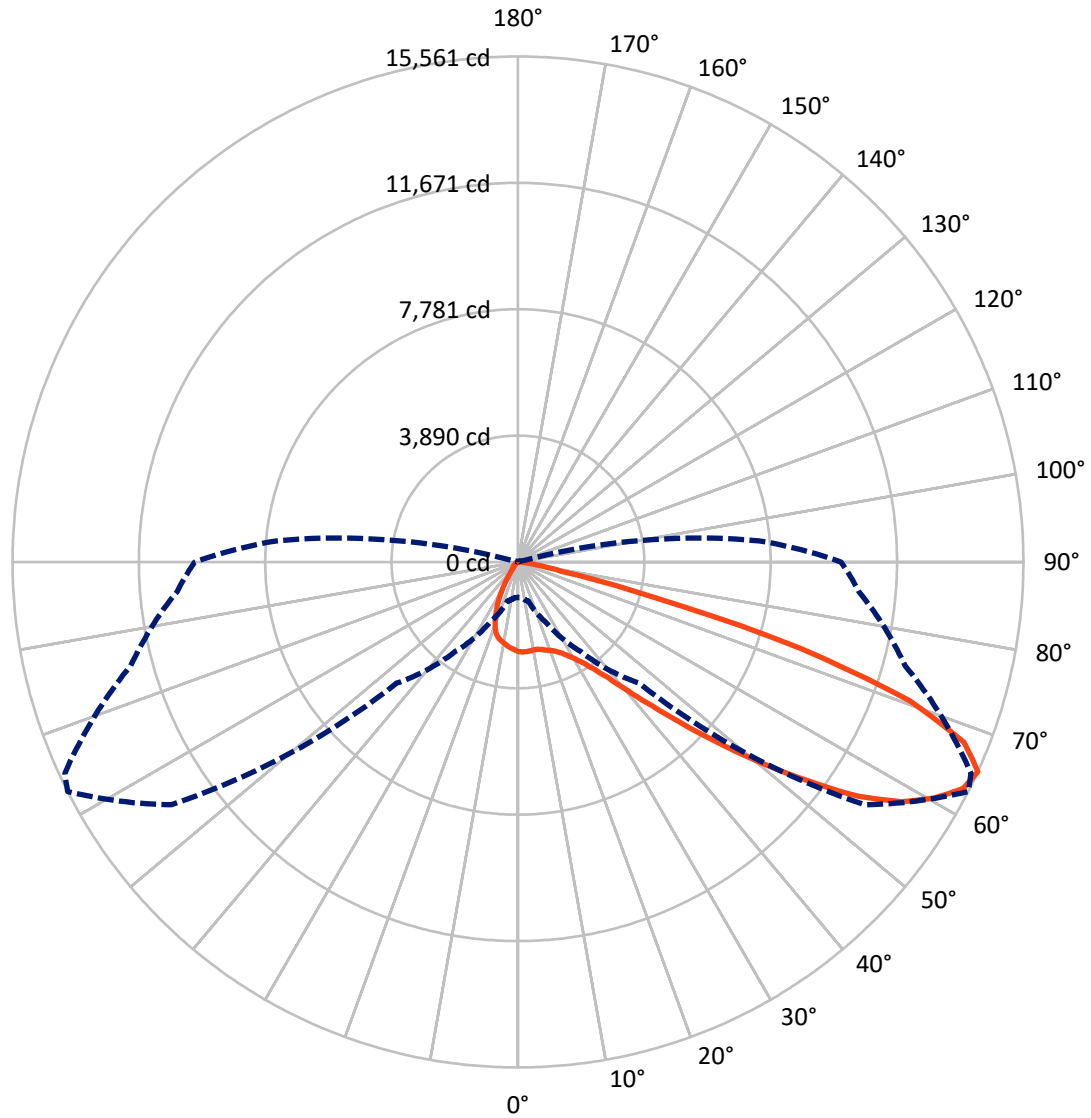
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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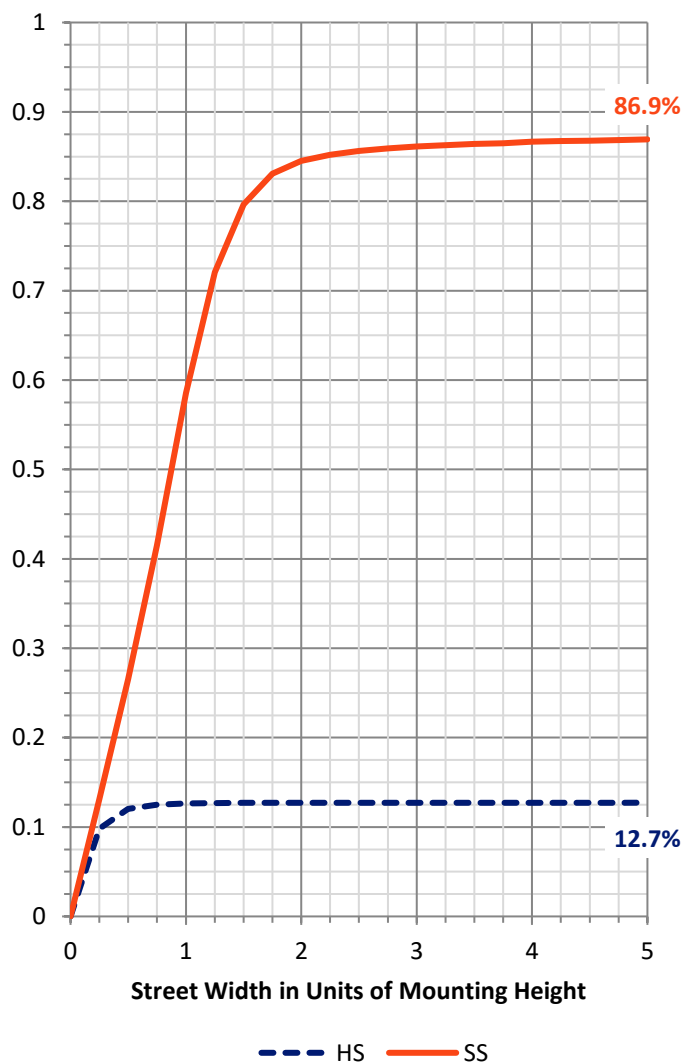
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2307.2	0.0	2307.2
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	15619.8	0.0	15619.8
	% Fixture	87.1	0.0	87.1
Total	Lumens	17927.0	0.0	17927.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.0	1.4
10°-20°	621.6	3.5
20°-30°	921.4	5.1
30°-40°	1710.8	9.5
40°-50°	3624.2	20.2
50°-60°	5011.4	28.0
60°-70°	4011.8	22.4
70°-80°	1666.8	9.3
80°-90°	107.0	0.6
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°	17927.0	100.0
0°-180°	17927.0	100.0

Coefficient of Utilization



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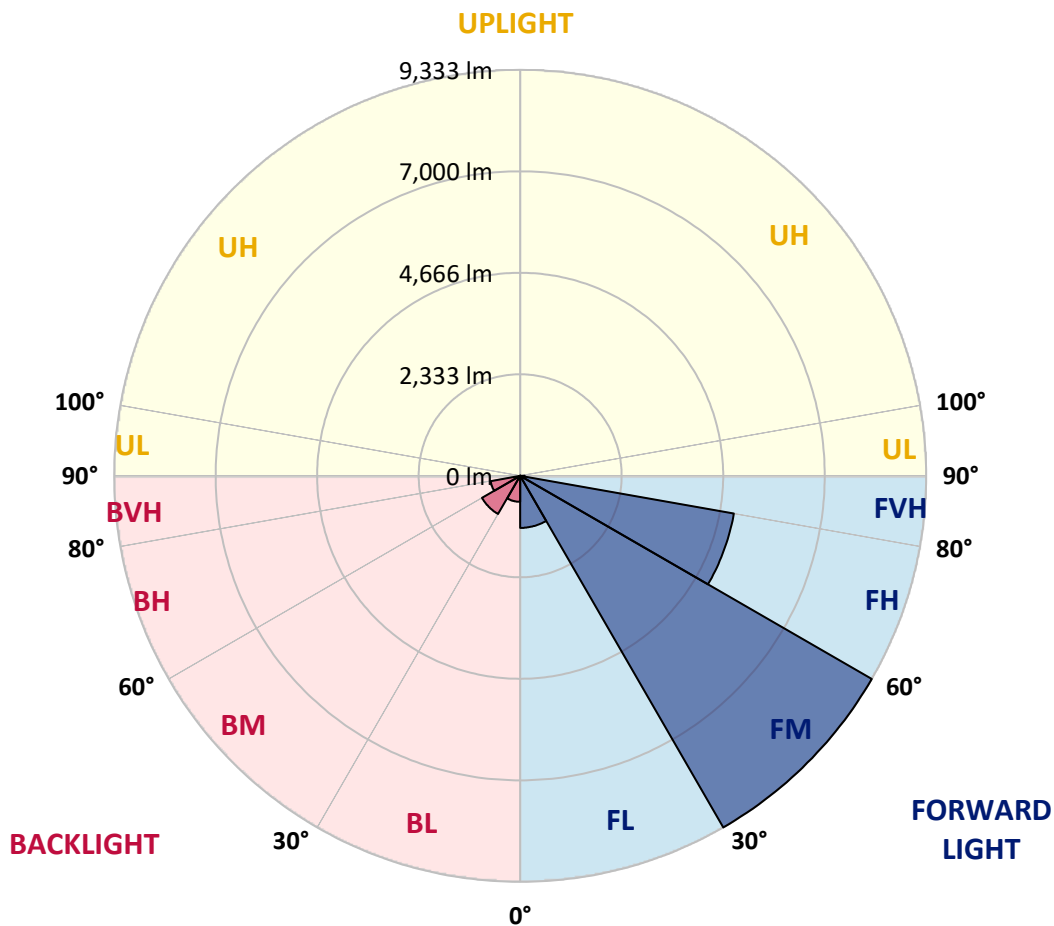
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1197.1	6.7			
FM (30°-60°)	9332.9	52.1			
FH (60°-80°)	4987.7	27.8			G2/5000
FVH (80°-90°)	102.1	0.6			G2/225
BL (0°-30°)	597.9	3.3	B2/1000		
BM (30°-60°)	1013.5	5.7	B2/2500		
BH (60°-80°)	690.9	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.9	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7
2.5°	2809.0	2802.3	2795.5	2792.1	2792.1	2788.7	2775.2	2771.8	2765.0	2758.3	2751.5
5°	2782.0	2771.8	2768.4	2771.8	2775.2	2782.0	2775.2	2775.2	2768.4	2761.7	2748.1
7.5°	2714.3	2707.5	2710.9	2721.1	2724.4	2748.1	2751.5	2761.7	2761.7	2754.9	2744.7
10°	2633.1	2629.7	2629.7	2646.6	2663.5	2697.4	2721.1	2748.1	2751.5	2751.5	2734.6
12.5°	2572.1	2568.8	2578.9	2599.2	2633.1	2677.1	2717.7	2758.3	2765.0	2768.4	2741.4
15°	2534.9	2534.9	2548.4	2589.1	2636.4	2697.4	2744.7	2798.9	2805.7	2802.3	2765.0
17.5°	2501.1	2504.5	2531.5	2599.2	2653.4	2734.6	2792.1	2853.0	2856.4	2853.0	2792.1
20°	2487.5	2494.3	2534.9	2622.9	2683.8	2775.2	2849.7	2910.6	2914.0	2900.4	2819.2
22.5°	2524.8	2528.1	2578.9	2673.7	2731.2	2832.7	2927.5	2985.0	2988.4	2968.1	2859.8
25°	2653.4	2653.4	2697.4	2778.6	2829.4	2930.9	3032.4	3100.1	3100.1	3076.4	2951.2
27.5°	2954.6	2927.5	2917.3	2941.0	2958.0	3066.3	3174.6	3259.2	3255.8	3221.9	3069.6
30°	3536.7	3469.0	3360.7	3238.9	3177.9	3252.4	3353.9	3462.2	3458.8	3404.7	3215.2
32.5°	4514.8	4416.6	4159.4	3837.9	3577.3	3492.7	3587.5	3705.9	3709.3	3645.0	3448.7
35°	5885.5	5729.8	5269.5	4822.8	4227.1	3905.6	3932.7	4061.3	4101.9	4068.0	3841.3
37.5°	7205.4	7063.2	6623.3	6003.9	5195.0	4538.5	4423.4	4535.1	4582.5	4582.5	4342.2
40°	8535.4	8369.6	7980.4	7357.7	6504.8	5526.7	5113.8	5205.2	5256.0	5266.1	4951.4
42.5°	9601.5	9493.2	9195.4	8711.4	7912.7	7259.5	6108.8	6058.1	6105.4	6068.2	5658.7
45°	10339.3	10254.7	10048.3	9865.5	9476.3	9148.0	7438.9	7097.1	7127.5	6998.9	6454.0
47.5°	10491.6	10396.9	10352.9	10606.7	10884.2	10965.4	9073.6	8332.4	8301.9	8017.6	7279.8
50°	9828.3	9838.4	10000.9	10725.1	11882.6	12613.6	10968.8	9726.7	9615.1	8982.2	8048.1
52.5°	8396.7	8559.1	8968.6	10143.0	12187.2	13811.7	12864.1	11205.7	11033.1	9919.7	8623.4
55°	6569.1	6778.9	7452.4	8802.8	11550.9	14346.4	14461.5	12742.2	12349.6	10623.6	9070.2
57.5°	4883.7	4948.0	5733.2	6965.1	10044.9	13821.9	15280.5	13926.8	13422.5	11185.4	9513.5
60°	3042.6	3083.2	3912.4	5303.3	7608.1	11882.6	15280.5	14742.4	14261.8	11689.7	9919.7
62.5°	1891.9	1905.4	2216.8	3634.8	5171.4	8813.0	14647.6	15375.3	14989.5	12051.8	10268.2
65°	1089.8	1103.3	1248.8	2054.3	3364.1	5276.3	13029.9	15561.4	15388.8	12339.5	10539.0
67.5°	795.3	802.1	859.6	1154.1	2199.9	2710.9	9787.7	14813.5	15030.1	12481.6	10532.2
70°	690.4	700.6	775.0	900.2	1587.3	1665.1	4981.8	12793.0	13398.8	12278.6	10217.5
72.5°	531.3	544.9	656.6	846.1	1164.2	1198.1	1803.9	9104.0	10021.2	11009.4	9354.5
75°	365.5	379.1	490.7	697.2	961.2	896.9	991.6	4189.9	5286.4	7384.7	7120.8
77.5°	233.5	236.9	308.0	507.7	829.2	636.3	680.3	1367.3	1919.0	3340.4	3360.7
80°	155.7	159.1	189.5	328.3	568.6	588.9	419.7	632.9	693.8	974.7	676.9
82.5°	94.8	94.8	128.6	206.4	345.2	487.4	274.1	331.7	355.4	375.7	176.0
85°	37.2	37.2	77.8	135.4	216.6	226.8	172.6	192.9	203.1	220.0	81.2
87.5°	10.2	10.2	44.0	74.5	94.8	104.9	104.9	94.8	101.5	125.2	40.6
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°	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7	2761.7
2.5°	2748.1	2738.0	2724.4	2710.9	2697.4	2687.2	2677.1	2677.1	2670.3	2660.1	2653.4
5°	2741.4	2724.4	2694.0	2670.3	2633.1	2606.0	2585.7	2568.8	2558.6	2534.9	2531.5
7.5°	2731.2	2710.9	2666.9	2619.5	2558.6	2511.2	2463.8	2430.0	2396.1	2369.1	2362.3
10°	2714.3	2690.6	2626.3	2558.6	2474.0	2386.0	2274.3	2145.7	2027.3	1959.6	1939.3
12.5°	2714.3	2683.8	2599.2	2507.8	2386.0	2169.4	1885.1	1600.8	1380.8	1282.7	1255.6
15°	2731.2	2690.6	2578.9	2453.7	2226.9	1787.0	1326.7	951.0	710.7	636.3	619.3
17.5°	2748.1	2690.6	2548.4	2379.2	1935.9	1296.2	754.7	500.9	423.0	406.1	406.1
20°	2754.9	2683.8	2507.8	2240.5	1546.7	805.5	450.1	375.7	345.2	335.1	335.1
22.5°	2782.0	2687.2	2477.4	2040.8	1123.6	473.8	355.4	314.7	284.3	274.1	274.1
25°	2849.7	2727.8	2484.1	1787.0	720.9	358.7	301.2	260.6	230.1	216.6	216.6
27.5°	2958.0	2819.2	2521.4	1492.5	453.5	308.0	253.8	209.8	186.1	172.6	172.6
30°	3079.8	2920.7	2538.3	1154.1	338.4	260.6	206.4	165.8	148.9	138.8	135.4
32.5°	3293.0	3096.7	2524.8	791.9	277.5	220.0	165.8	132.0	118.5	115.1	115.1
35°	3634.8	3404.7	2497.7	497.5	230.1	176.0	132.0	108.3	98.1	94.8	91.4
37.5°	4098.5	3854.8	2416.5	328.3	189.5	138.8	108.3	91.4	81.2	77.8	77.8
40°	4663.7	4369.3	2260.8	250.4	162.5	111.7	91.4	77.8	71.1	67.7	67.7
42.5°	5310.1	4941.2	2013.7	216.6	135.4	94.8	77.8	64.3	60.9	57.5	57.5
45°	6017.4	5540.2	1671.9	192.9	115.1	77.8	64.3	57.5	50.8	50.8	47.4
47.5°	6768.8	6142.7	1286.1	169.2	98.1	67.7	57.5	47.4	44.0	40.6	40.6
50°	7493.0	6680.8	903.6	145.5	81.2	57.5	47.4	40.6	37.2	33.8	33.8
52.5°	8004.1	7005.7	639.7	125.2	67.7	50.8	37.2	30.5	27.1	27.1	27.1
55°	8413.6	7208.8	446.7	104.9	57.5	44.0	30.5	23.7	23.7	20.3	20.3
57.5°	8799.4	7340.7	328.3	88.0	47.4	33.8	23.7	16.9	16.9	13.5	13.5
60°	9198.8	7411.8	250.4	71.1	40.6	27.1	16.9	13.5	10.2	10.2	10.2
62.5°	9601.5	7455.8	192.9	57.5	33.8	20.3	13.5	10.2	6.8	3.4	3.4
65°	9953.5	7469.4	148.9	44.0	27.1	13.5	10.2	3.4	0.0	0.0	0.0
67.5°	10058.4	7313.7	115.1	33.8	20.3	10.2	6.8	0.0	0.0	0.0	0.0
70°	9774.1	6900.8	88.0	27.1	16.9	6.8	3.4	0.0	0.0	0.0	0.0
72.5°	8674.2	5787.3	67.7	16.9	13.5	6.8	3.4	0.0	0.0	0.0	0.0
75°	6207.0	3086.6	47.4	13.5	10.2	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	2856.4	1194.7	33.8	10.2	6.8	3.4	0.0	0.0	0.0	0.0	0.0
80°	558.4	297.8	13.5	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	128.6	50.8	6.8	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	44.0	16.9	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.9	6.8	3.4	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)