

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: P198713

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198713  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24263)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-SL3-1200-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11487.7 lumens  
Efficiency: N/A  
Efficacy: 89.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 128  
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

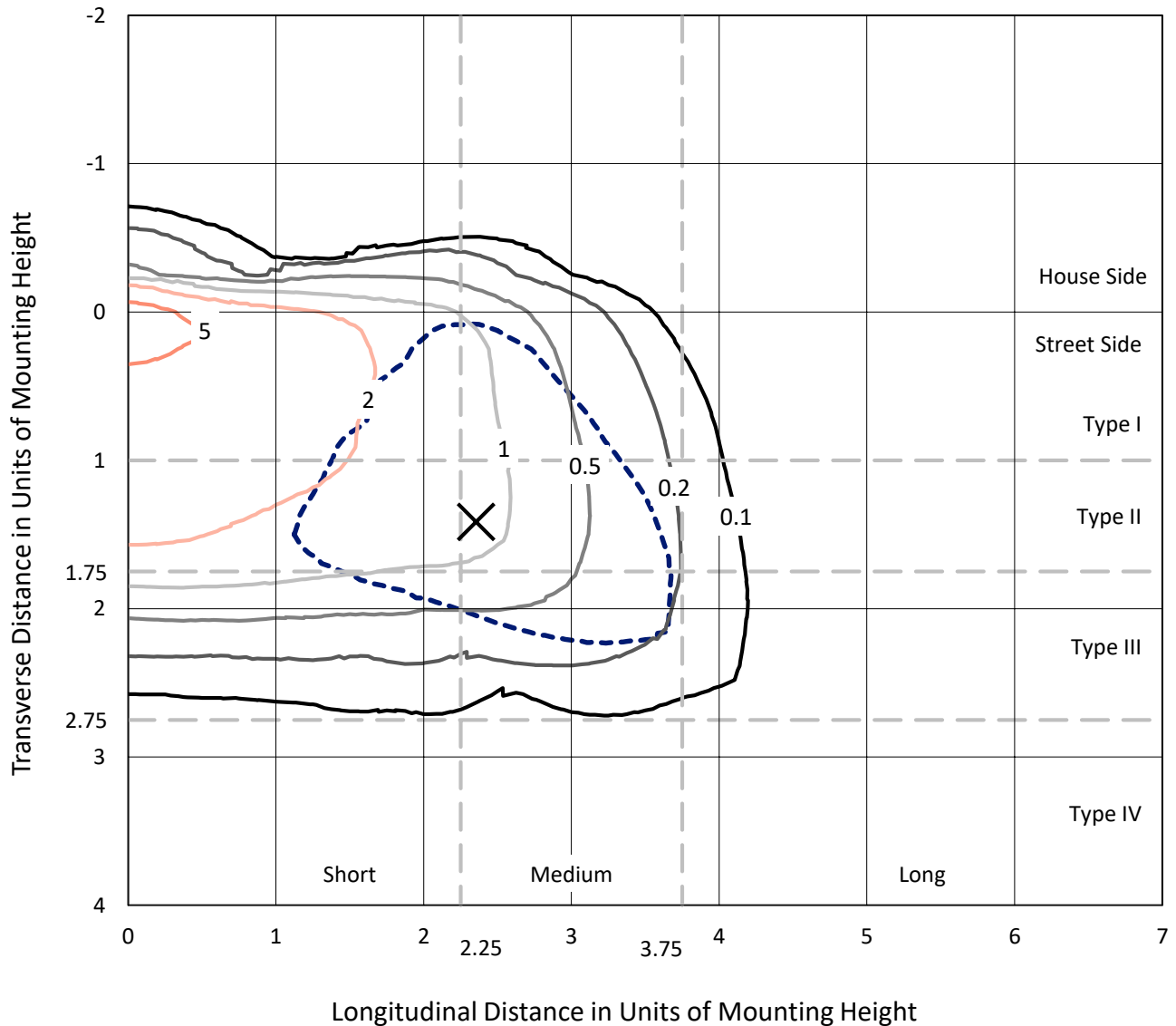


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

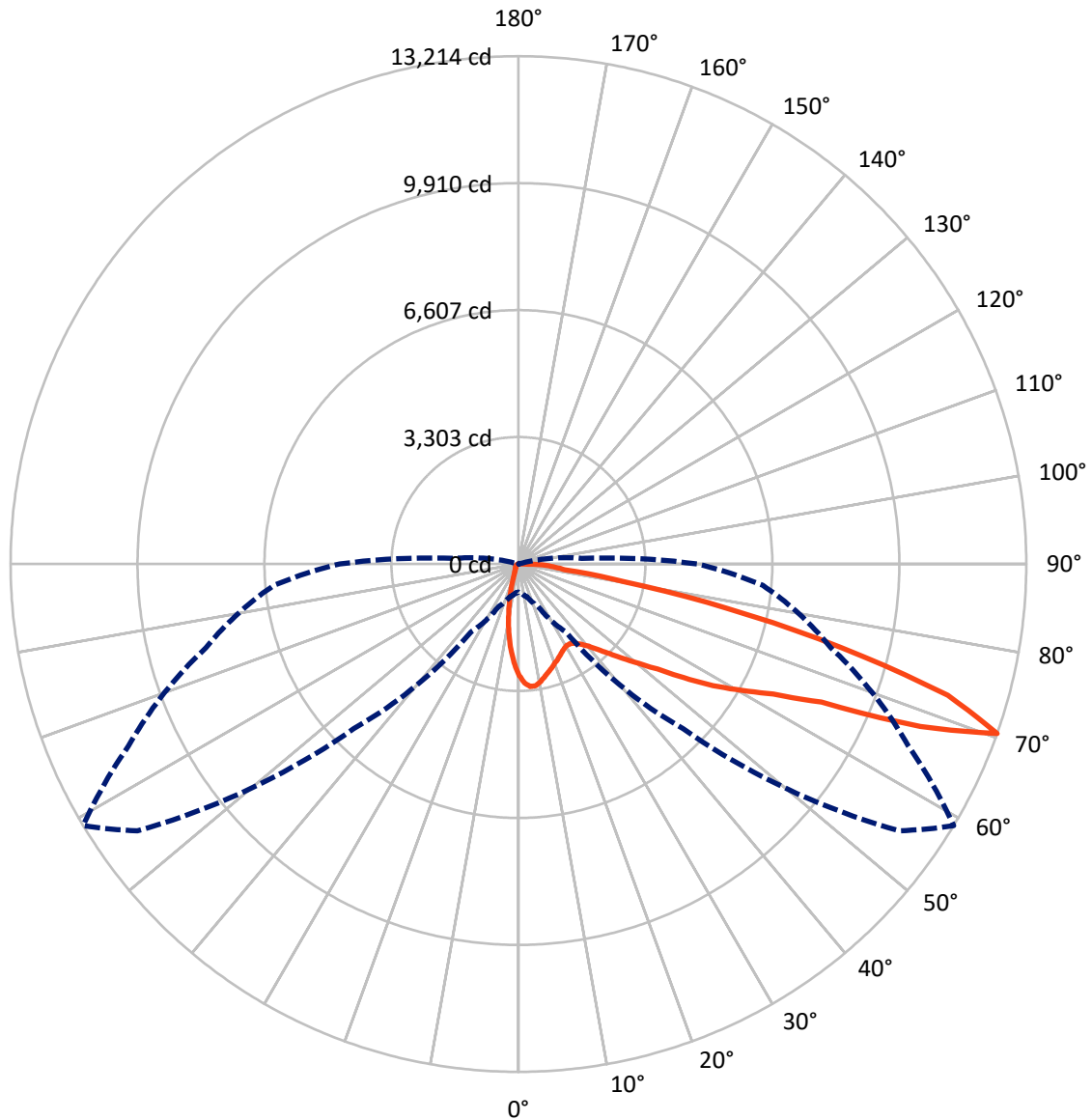


Based on 20 foot mounting height. Maximum calculated value = 7.7 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	883.1	0.0	883.1
	% Fixture	7.7	0.0	7.7
<b>Street Side</b>	Lumens	10604.6	0.0	10604.6
	% Fixture	92.3	0.0	92.3
<b>Total</b>	Lumens	11487.7	0.0	11487.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.9	2.1
10°-20°	501.0	4.4
20°-30°	678.2	5.9
30°-40°	978.7	8.5
40°-50°	1625.5	14.1
50°-60°	2486.3	21.6
60°-70°	3092.4	26.9
70°-80°	1709.5	14.9
80°-90°	177.3	1.5
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°	11487.7	100.0
0°-180°	11487.7	100.0

**Coefficient of Utilization**



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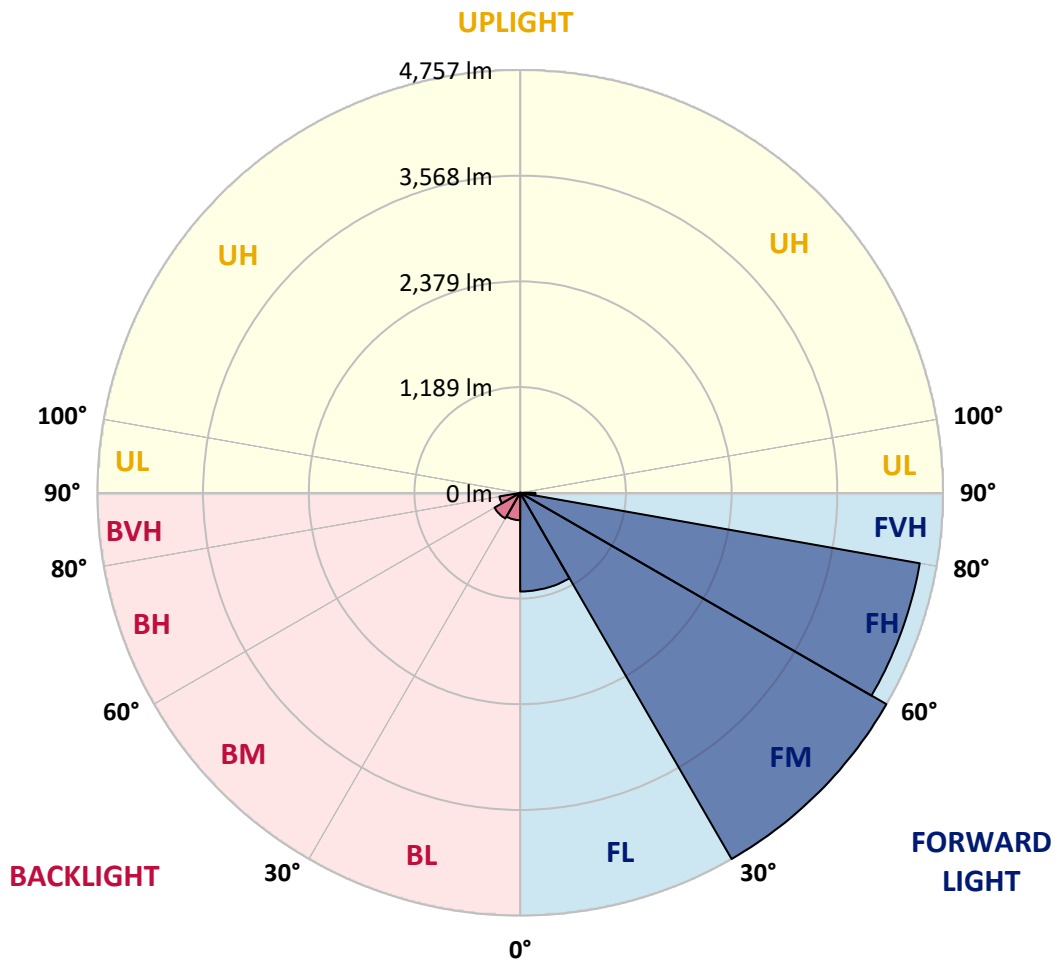
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1110.3	9.7			
FM (30°-60°)	4757.2	41.4			
FH (60°-80°)	4565.0	39.7			G2/5000
FVH (80°-90°)	172.1	1.5			G2/225
BL (0°-30°)	307.7	2.7	B1/500		
BM (30°-60°)	333.3	2.9	B1/1000		
BH (60°-80°)	236.9	2.1	B1/500		G1/500
BVH (80°-90°)	5.1	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-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9
2.5°	3283.6	3278.4	3256.7	3252.4	3228.1	3179.5	3123.2	3100.7	3054.7	2982.0	2901.4
5°	3338.1	3340.8	3342.5	3333.0	3329.5	3289.6	3227.2	3200.3	3138.8	3019.2	2871.9
7.5°	3133.6	3140.6	3162.2	3171.8	3213.4	3228.9	3216.0	3198.6	3150.1	3008.8	2801.8
10°	2917.9	2930.9	2954.3	2969.8	3021.0	3062.5	3115.4	3119.8	3109.4	2974.1	2722.9
12.5°	2732.4	2744.5	2770.6	2801.8	2853.7	2907.4	2986.3	3014.0	3048.7	2951.6	2666.5
15°	2572.9	2576.4	2601.6	2640.5	2709.0	2782.6	2876.2	2916.9	2984.6	2942.9	2623.2
17.5°	2433.4	2434.3	2450.8	2486.3	2569.4	2666.5	2775.7	2829.5	2915.2	2930.9	2585.1
20°	2341.5	2340.7	2341.5	2360.6	2434.3	2549.5	2682.1	2738.4	2848.5	2916.1	2546.0
22.5°	2310.3	2306.0	2286.1	2279.1	2326.0	2427.4	2585.9	2659.6	2788.7	2911.7	2517.5
25°	2348.5	2345.8	2303.4	2263.6	2267.9	2331.1	2488.0	2578.1	2741.9	2927.4	2510.5
27.5°	2471.6	2466.3	2401.4	2323.3	2273.9	2285.2	2415.2	2509.7	2704.7	2965.5	2520.0
30°	2632.8	2633.6	2564.2	2469.8	2353.7	2289.6	2376.2	2465.5	2679.5	3022.7	2540.9
32.5°	2812.1	2811.3	2761.9	2652.6	2504.5	2369.3	2393.5	2468.9	2683.0	3106.7	2580.7
35°	2997.6	2988.0	2971.6	2875.4	2702.0	2508.8	2472.4	2527.9	2719.4	3217.7	2648.3
37.5°	3211.7	3208.2	3224.6	3123.2	2946.4	2714.2	2611.1	2648.3	2811.3	3381.5	2757.5
40°	3552.2	3533.2	3540.9	3403.2	3222.0	2990.6	2805.1	2814.8	2957.7	3598.1	2929.9
42.5°	4201.3	4124.1	3979.4	3721.2	3525.3	3297.4	3059.1	3042.7	3164.8	3860.7	3157.0
45°	4976.9	4888.5	4523.6	4072.2	3828.6	3626.7	3372.8	3328.6	3419.6	4173.5	3449.9
47.5°	5624.2	5528.8	5045.3	4438.7	4137.1	3966.4	3720.3	3668.3	3724.7	4536.7	3801.8
50°	5845.2	5792.4	5367.7	4743.7	4448.2	4347.7	4156.2	4069.5	4083.4	4928.4	4212.5
52.5°	5743.8	5725.7	5441.4	4952.6	4736.0	4768.9	4633.7	4542.7	4527.1	5356.5	4666.6
55°	5529.8	5521.1	5382.5	5068.7	4989.9	5154.5	5303.6	5224.7	5077.4	5811.4	5041.8
57.5°	5223.8	5256.7	5356.5	5292.3	5301.9	5561.8	5925.7	5966.6	5746.4	6173.6	5320.1
60°	4406.7	4495.1	4951.7	5532.3	5976.9	6239.5	6592.2	6668.5	6313.1	6421.5	5641.6
62.5°	3257.6	3384.0	4034.9	5101.7	6348.7	7528.1	7478.7	7444.9	6853.9	6753.4	6226.5
65°	1913.4	2061.7	2611.9	3986.3	5788.0	8356.6	9133.9	8665.9	7678.1	7443.2	7158.1
67.5°	953.3	954.1	1202.9	2104.1	4277.6	7778.6	11550.0	11279.7	9430.3	8459.7	7525.5
70°	733.1	753.1	890.0	1222.7	2163.0	6058.4	12103.8	13213.9	11191.3	8414.7	6385.1
72.5°	621.3	634.3	792.1	1064.2	1617.1	3326.0	10478.0	11680.1	10679.1	7109.6	4706.5
75°	447.1	457.6	701.0	965.4	1488.8	1650.0	7187.6	8662.6	8012.6	5001.1	2590.2
77.5°	110.9	110.1	244.4	783.4	1332.0	1374.4	4124.1	5554.9	4597.3	2047.7	665.5
80°	49.4	47.7	55.4	164.7	1239.2	1297.3	1813.8	2805.1	1763.6	331.9	203.7
82.5°	34.7	32.9	34.7	60.7	414.2	1203.7	1096.3	1215.9	645.6	113.5	86.6
85°	11.3	10.4	19.0	51.1	116.1	694.2	1069.4	908.2	480.1	48.5	58.1
87.5°	1.7	1.7	7.0	27.7	33.8	231.4	627.4	629.1	215.7	28.6	26.0
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°	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9	2904.9
2.5°	2860.7	2809.5	2737.6	2665.6	2600.6	2534.0	2480.2	2455.1	2443.8	2428.2	2394.4
5°	2794.8	2702.0	2544.3	2389.2	2244.5	2105.8	1987.1	1919.5	1846.7	1843.3	1807.8
7.5°	2689.0	2557.4	2308.6	2067.7	1846.7	1635.3	1453.3	1335.5	1254.9	1204.5	1169.9
10°	2571.2	2402.2	2072.9	1734.1	1433.4	1150.8	916.9	764.3	671.6	624.8	597.9
12.5°	2477.6	2265.3	1840.7	1414.3	1037.3	713.2	495.7	384.7	335.3	316.3	307.6
15°	2397.0	2139.6	1623.1	1128.3	692.4	409.9	286.8	250.4	242.6	242.6	241.8
17.5°	2315.6	2018.3	1411.7	847.5	435.9	268.6	226.2	221.0	221.9	224.4	224.4
20°	2238.4	1903.1	1208.0	604.1	286.0	214.9	205.4	203.7	206.2	209.7	208.9
22.5°	2176.0	1801.6	1017.4	415.1	220.1	195.0	188.9	186.3	188.0	190.7	189.8
25°	2131.8	1715.0	842.3	289.4	191.5	177.7	170.7	167.3	165.5	167.3	166.4
27.5°	2104.9	1642.2	677.7	217.5	171.5	160.3	151.7	144.7	140.3	140.3	138.6
30°	2087.6	1573.7	531.2	180.2	155.1	143.0	130.8	121.3	114.4	112.6	111.8
32.5°	2086.7	1514.8	396.9	159.5	139.5	125.6	110.9	98.8	91.0	89.3	88.4
35°	2108.4	1467.1	292.1	143.8	125.6	109.1	92.7	79.7	72.8	72.8	71.9
37.5°	2164.8	1439.4	221.0	131.8	114.4	95.3	77.9	65.9	59.8	61.5	61.5
40°	2269.6	1434.2	180.2	122.1	104.9	83.2	63.2	53.7	51.1	53.7	53.7
42.5°	2429.9	1462.0	160.3	115.3	96.2	71.1	52.9	45.9	45.1	47.7	47.7
45°	2638.8	1516.5	149.0	109.1	86.6	58.9	44.2	39.9	39.0	42.5	42.5
47.5°	2891.9	1590.2	138.6	102.3	77.1	48.5	37.2	33.8	33.8	37.2	38.2
50°	3191.7	1689.9	128.3	95.3	69.4	40.7	31.2	28.6	29.5	32.9	33.8
52.5°	3536.5	1812.1	118.8	89.3	60.7	32.9	26.0	24.2	25.2	28.6	29.5
55°	3833.8	1918.6	107.4	83.2	49.4	26.9	21.7	20.8	21.7	26.0	26.0
57.5°	4092.9	2020.9	97.1	73.7	39.0	21.7	17.3	17.3	19.0	23.4	24.2
60°	4436.9	2182.1	88.4	62.4	29.5	16.5	13.9	14.7	17.3	20.8	21.7
62.5°	5046.2	2455.9	77.1	52.0	21.7	13.0	11.3	12.2	15.5	19.9	20.8
65°	5808.8	2715.0	64.1	43.4	16.5	9.5	8.7	11.3	15.5	19.9	20.8
67.5°	5730.8	2361.5	50.2	34.7	12.2	7.8	7.0	10.4	14.7	19.9	20.8
70°	4647.6	1655.2	37.2	23.4	9.5	7.0	7.0	10.4	14.7	19.0	19.9
72.5°	3223.7	921.2	28.6	15.5	8.7	7.0	6.0	9.5	13.9	19.0	19.9
75°	1533.9	282.5	22.5	11.3	7.8	6.0	5.2	9.5	13.9	19.0	19.9
77.5°	294.6	71.9	18.2	9.5	7.0	6.0	5.2	8.7	13.9	18.2	19.0
80°	99.6	32.0	14.7	8.7	7.0	6.0	5.2	8.7	13.0	17.3	18.2
82.5°	54.6	18.2	13.0	7.8	7.0	5.2	4.3	7.8	12.2	17.3	18.2
85°	42.5	13.0	10.4	7.8	7.0	5.2	4.3	7.8	12.2	16.5	17.3
87.5°	21.7	9.5	8.7	7.8	7.0	5.2	4.3	7.0	11.3	15.5	17.3
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)