

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: P198881

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-7050-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198881  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)  
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-SL3-7050-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13212 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

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

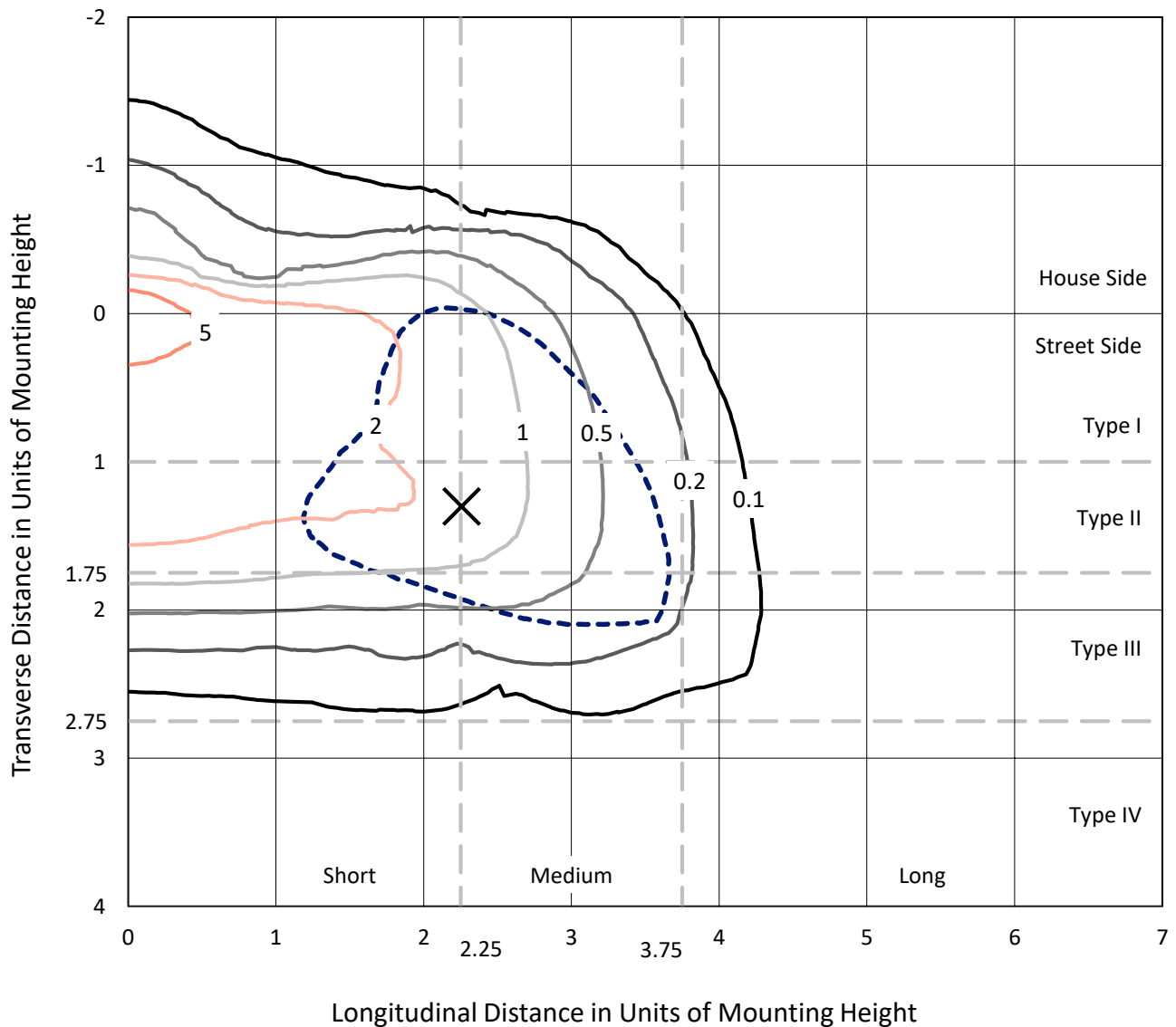


REPORT NUMBER: P198881

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-7050-1200

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

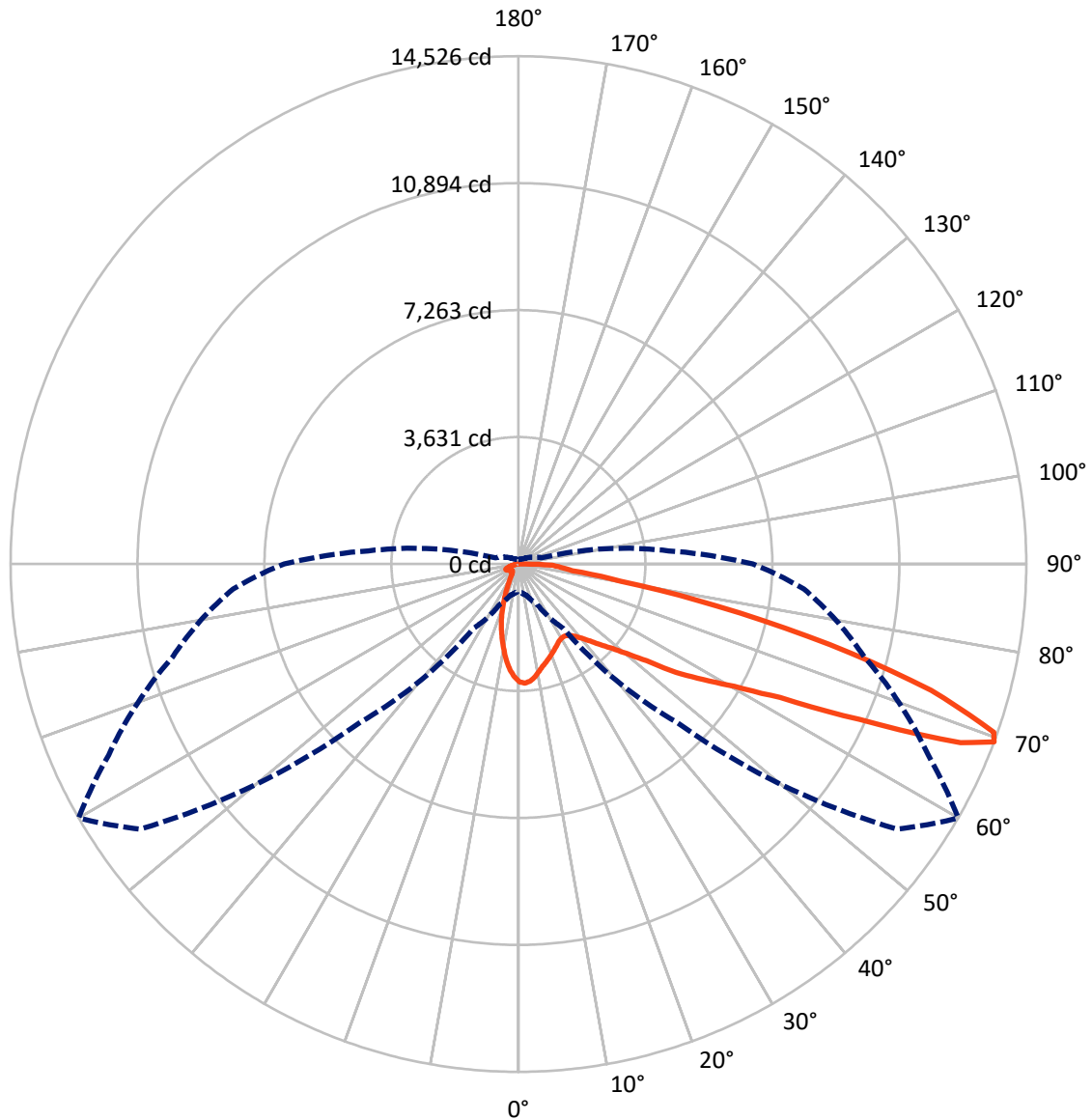


Based on 20 foot mounting height. Maximum calculated value = 8.4 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P198881

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-7050-1200

### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P198881

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-7050-1200

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1884.5	0.0	1884.5
	% Fixture	14.3	0.0	14.3
<b>Street Side</b>	Lumens	11327.5	0.0	11327.5
	% Fixture	85.7	0.0	85.7
<b>Total</b>	Lumens	13212.0	0.0	13212.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.0	2.2
10°-20°	612.3	4.6
20°-30°	781.1	5.9
30°-40°	1074.9	8.1
40°-50°	1741.2	13.2
50°-60°	2732.7	20.7
60°-70°	3643.1	27.6
70°-80°	2026.4	15.3
80°-90°	314.3	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°	13212.0	100.0
0°-180°	13212.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P198881

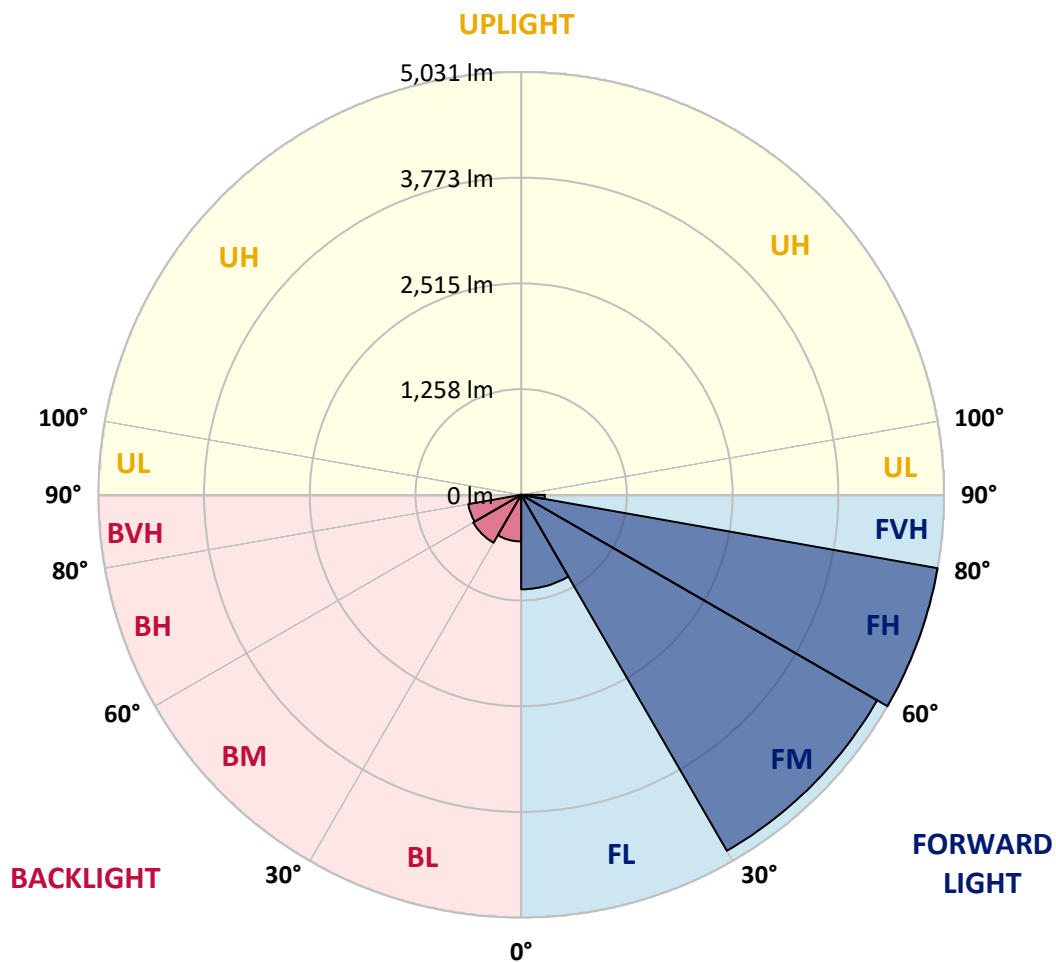
CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-7050-1200

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1124.1	8.5			
FM	(30°-60°)	4890.4	37.0			
FH	(60°-80°)	5030.6	38.1			G3/7500
FVH	(80°-90°)	282.4	2.1			G3/500
BL	(0°-30°)	555.4	4.2	B2/1000		
BM	(30°-60°)	658.3	5.0	B1/1000		
BH	(60°-80°)	638.9	4.8	B2/1000		G2/1000
BVH	(80°-90°)	31.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Medium





REPORT NUMBER: P198881

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-7050-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1
2.5°	3460.9	3470.2	3470.2	3462.6	3458.3	3433.8	3419.4	3409.2	3391.4	3358.4	3328.7
5°	3337.2	3355.0	3362.6	3366.0	3388.0	3380.4	3381.3	3374.5	3359.2	3323.6	3275.3
7.5°	3110.1	3113.5	3127.1	3150.0	3203.3	3240.6	3271.1	3277.0	3273.7	3247.4	3179.6
10°	2886.5	2892.4	2908.5	2947.5	2998.3	3051.7	3117.8	3144.9	3165.2	3156.7	3071.2
12.5°	2700.9	2701.8	2719.6	2764.5	2821.2	2888.2	2978.0	3020.3	3068.6	3088.1	2992.4
15°	2522.2	2534.0	2551.0	2605.2	2675.5	2760.2	2863.6	2922.1	2985.6	3041.5	2931.4
17.5°	2386.6	2395.9	2406.1	2451.0	2532.3	2638.2	2766.2	2828.9	2912.7	2998.3	2868.7
20°	2312.1	2315.4	2307.8	2329.9	2398.5	2512.9	2661.1	2736.5	2836.5	2956.8	2804.3
22.5°	2296.8	2296.8	2268.9	2264.6	2295.1	2391.7	2552.7	2645.0	2767.0	2928.0	2746.7
25°	2368.0	2362.9	2310.4	2262.1	2251.1	2300.2	2449.3	2562.8	2707.7	2927.1	2703.5
27.5°	2502.7	2495.9	2430.7	2349.3	2279.0	2257.8	2369.7	2485.7	2661.1	2955.9	2681.4
30°	2670.4	2667.9	2601.8	2500.1	2384.1	2274.8	2338.3	2445.9	2629.8	3009.3	2680.6
32.5°	2854.3	2842.4	2801.8	2700.1	2549.3	2368.8	2357.0	2447.6	2621.3	3087.3	2700.1
35°	3050.0	3041.5	3031.3	2928.8	2759.4	2534.9	2439.1	2506.1	2662.8	3195.7	2755.2
37.5°	3299.1	3289.8	3306.7	3194.9	3009.3	2752.6	2578.1	2623.0	2747.5	3353.3	2857.7
40°	3742.2	3715.1	3667.6	3495.6	3300.8	3019.5	2778.9	2785.7	2892.4	3564.2	3022.0
42.5°	4469.9	4382.7	4148.0	3832.0	3608.3	3329.6	3040.7	3008.5	3092.3	3843.0	3260.9
45°	5199.4	5101.1	4704.6	4198.8	3926.9	3662.5	3364.3	3287.2	3341.4	4167.5	3568.5
47.5°	5670.4	5622.1	5174.8	4565.7	4260.7	4025.1	3734.5	3607.5	3646.4	4535.2	3948.0
50°	5808.5	5767.0	5415.4	4852.9	4575.8	4463.1	4192.9	4024.3	4031.1	4964.7	4403.0
52.5°	5705.2	5688.2	5455.2	5030.8	4865.6	4924.9	4827.5	4592.8	4536.9	5435.8	4896.1
55°	5567.1	5573.0	5483.2	5209.5	5160.4	5355.3	5657.7	5468.8	5231.6	5926.3	5409.5
57.5°	5132.5	5136.7	5372.2	5550.1	5723.0	5958.5	6304.2	6224.5	5948.3	6455.8	5984.8
60°	4132.7	4165.8	4690.2	5479.8	6366.0	7147.1	7231.9	7094.6	6710.8	7065.8	6732.8
62.5°	2952.6	2982.2	3589.7	4757.1	6290.6	8492.5	8944.9	8399.3	7745.3	7978.3	7785.1
65°	1551.3	1546.2	2016.4	3287.2	5298.5	8804.3	11644.2	10715.6	9488.0	9233.0	8801.8
67.5°	866.7	894.7	1076.8	1658.0	3453.3	7748.7	13368.3	13641.9	11911.0	10228.5	8757.7
69°	801.5	810.8	932.8	1281.8	2251.1	6393.1	13220.0	14525.6	12932.8	10232.7	8193.5
70°	778.6	788.8	899.7	1181.0	1891.0	5238.4	12680.3	14422.2	13181.0	10005.7	7680.0
72.5°	698.1	711.7	819.3	1061.6	1593.6	2700.1	10214.1	12344.0	11939.9	8745.0	5955.1
75°	595.6	618.5	781.1	1053.9	1509.7	1716.5	6811.6	9196.6	8886.5	6254.2	3378.7
77.5°	246.5	249.1	341.4	771.8	1584.3	1642.8	3660.8	5825.5	5157.0	2742.4	1017.5
80°	172.0	168.6	170.3	225.4	1278.5	1653.8	1878.3	2962.7	2302.7	723.5	476.1
82.5°	144.9	143.2	150.0	141.5	432.9	1876.6	1570.7	1544.5	1084.4	389.7	227.1
85°	95.7	93.2	122.8	128.8	205.9	1490.3	1689.4	1214.1	808.2	208.4	96.6
87.5°	46.6	47.4	70.3	87.3	109.3	471.9	1618.2	959.9	624.4	90.7	39.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P198881

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-7050-1200

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1	3371.1
2.5°	3316.9	3291.4	3268.6	3239.8	3217.7	3199.1	3173.7	3172.8	3168.6	3174.5	3176.2
5°	3243.2	3200.8	3136.4	3064.4	3013.6	2946.6	2881.4	2859.4	2834.8	2832.3	2839.9
7.5°	3132.2	3066.1	2955.9	2845.8	2735.7	2623.0	2516.2	2462.0	2409.5	2393.4	2401.0
10°	3008.5	2924.6	2756.0	2576.4	2421.4	2253.6	2090.9	1985.9	1890.1	1849.5	1859.6
12.5°	2911.9	2805.1	2567.9	2334.9	2102.8	1862.2	1647.8	1440.3	1283.5	1213.2	1217.5
15°	2828.9	2692.5	2391.7	2081.6	1791.0	1461.5	1164.1	923.5	786.2	735.4	733.7
17.5°	2739.1	2573.9	2207.9	1846.1	1469.1	1061.6	779.4	637.1	582.9	565.9	565.9
20°	2643.3	2451.9	2015.5	1589.4	1130.2	741.3	586.3	531.2	510.9	505.8	504.9
22.5°	2554.4	2332.4	1822.4	1315.7	817.6	562.6	499.0	477.8	474.4	478.7	478.7
25°	2484.0	2227.3	1626.7	1027.7	594.7	471.1	443.9	441.4	454.1	469.4	471.9
27.5°	2431.5	2133.3	1433.5	750.6	467.7	410.1	400.7	411.7	441.4	471.9	477.8
30°	2395.1	2052.8	1202.2	539.7	389.7	359.2	363.5	382.9	427.8	474.4	487.2
32.5°	2379.0	1987.6	969.2	414.3	333.0	316.0	327.0	352.4	399.0	445.6	460.9
35°	2394.2	1940.1	754.0	344.0	291.4	278.7	291.4	317.7	348.2	371.1	380.4
37.5°	2449.3	1923.2	567.6	305.0	264.3	251.6	261.8	279.6	293.1	301.6	305.8
40°	2565.4	1941.0	444.8	284.7	249.1	234.7	237.2	245.7	255.0	261.8	262.6
42.5°	2750.1	1999.4	395.7	277.0	239.8	221.1	216.9	222.8	233.0	242.3	244.0
45°	2995.8	2096.9	390.6	279.6	235.5	210.1	201.6	207.6	221.1	236.4	238.9
47.5°	3313.5	2251.1	414.3	293.1	238.1	204.2	191.5	197.4	215.2	235.5	238.9
50°	3689.6	2464.6	458.3	313.5	249.9	204.2	187.2	192.3	211.0	233.8	237.2
52.5°	4132.7	2761.9	504.1	333.8	266.9	211.8	188.9	188.1	205.0	226.2	230.4
55°	4621.6	3131.3	548.2	351.6	276.2	222.0	193.2	183.0	196.6	213.5	216.9
57.5°	5196.8	3637.1	625.2	368.5	281.3	229.6	198.2	177.9	185.5	197.4	199.9
60°	5977.1	4380.1	775.2	397.3	290.6	233.0	199.1	172.8	172.0	180.5	181.3
62.5°	6994.6	5250.2	918.4	431.2	309.2	233.8	195.7	169.4	161.0	163.5	163.5
65°	7718.2	5570.5	876.9	460.0	326.2	233.0	192.3	166.9	152.5	148.3	148.3
67.5°	7306.4	4920.6	744.7	467.7	327.9	223.7	184.7	161.0	144.9	134.7	134.7
69°	6701.5	4313.2	683.7	454.1	314.3	212.7	176.2	155.0	139.8	127.9	127.9
70°	6208.4	3853.2	646.4	438.0	298.2	203.3	168.6	149.1	134.7	124.5	123.7
72.5°	4635.1	2571.3	552.4	377.9	244.8	172.0	147.4	133.0	121.2	114.4	114.4
75°	2445.9	1288.6	452.4	308.4	188.9	137.2	121.2	111.8	105.1	104.2	103.4
77.5°	801.5	582.9	325.3	232.1	138.9	106.7	96.6	90.7	89.8	93.2	93.2
80°	432.9	348.2	209.3	156.7	96.6	79.6	74.6	73.7	76.2	81.3	81.3
82.5°	210.1	172.0	124.5	96.6	66.1	58.5	58.5	59.3	62.7	68.6	68.6
85°	90.7	81.3	72.0	54.2	40.7	36.4	41.5	45.7	48.3	52.5	54.2
87.5°	43.2	38.1	33.0	21.2	17.8	18.6	22.0	27.1	32.2	35.6	36.4
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)