

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: P198879

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198879  
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  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1050mA 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: 12043 lumens  
Efficiency: N/A  
Efficacy: 108.5 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

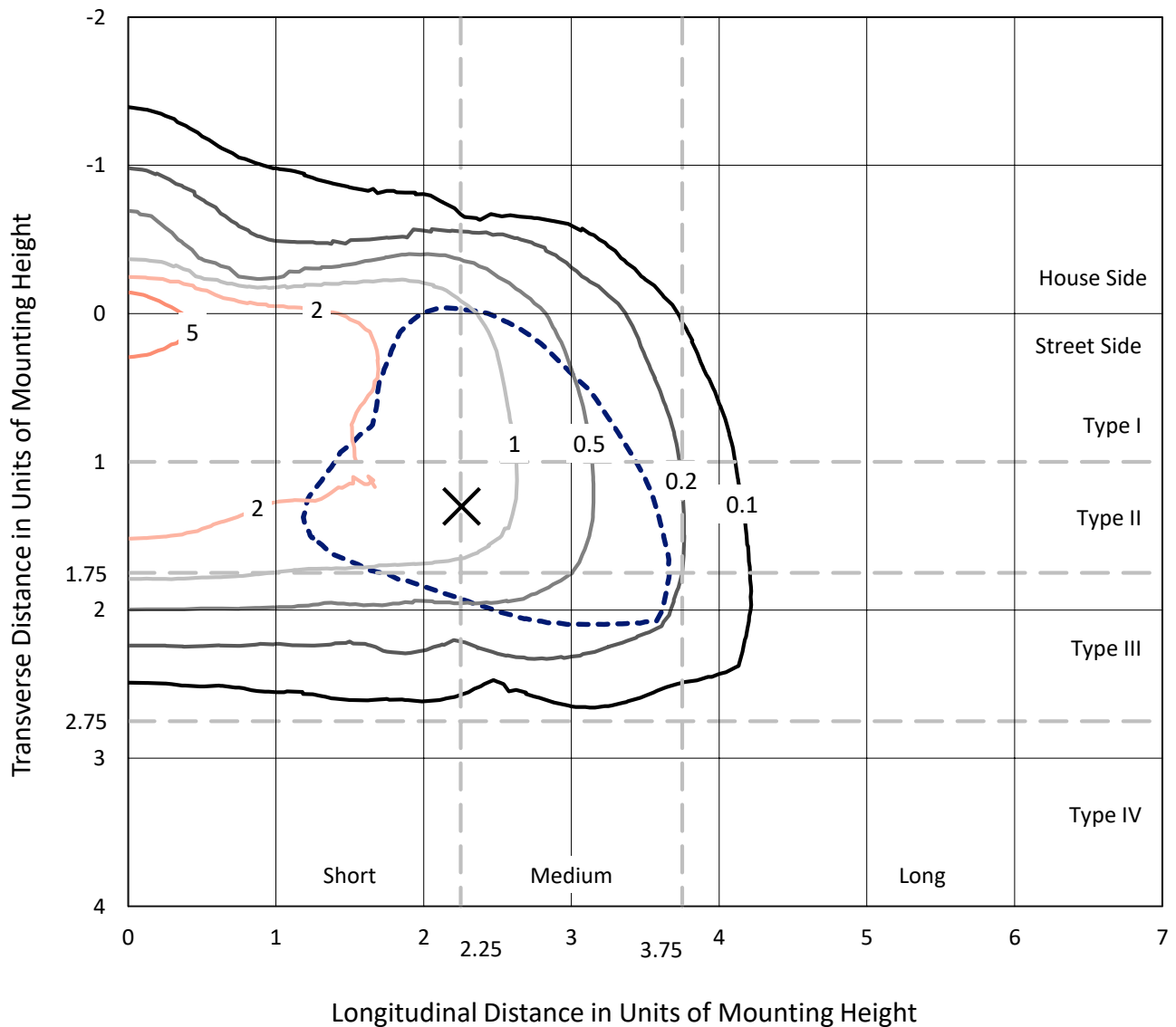
Input Watts (W): 111  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

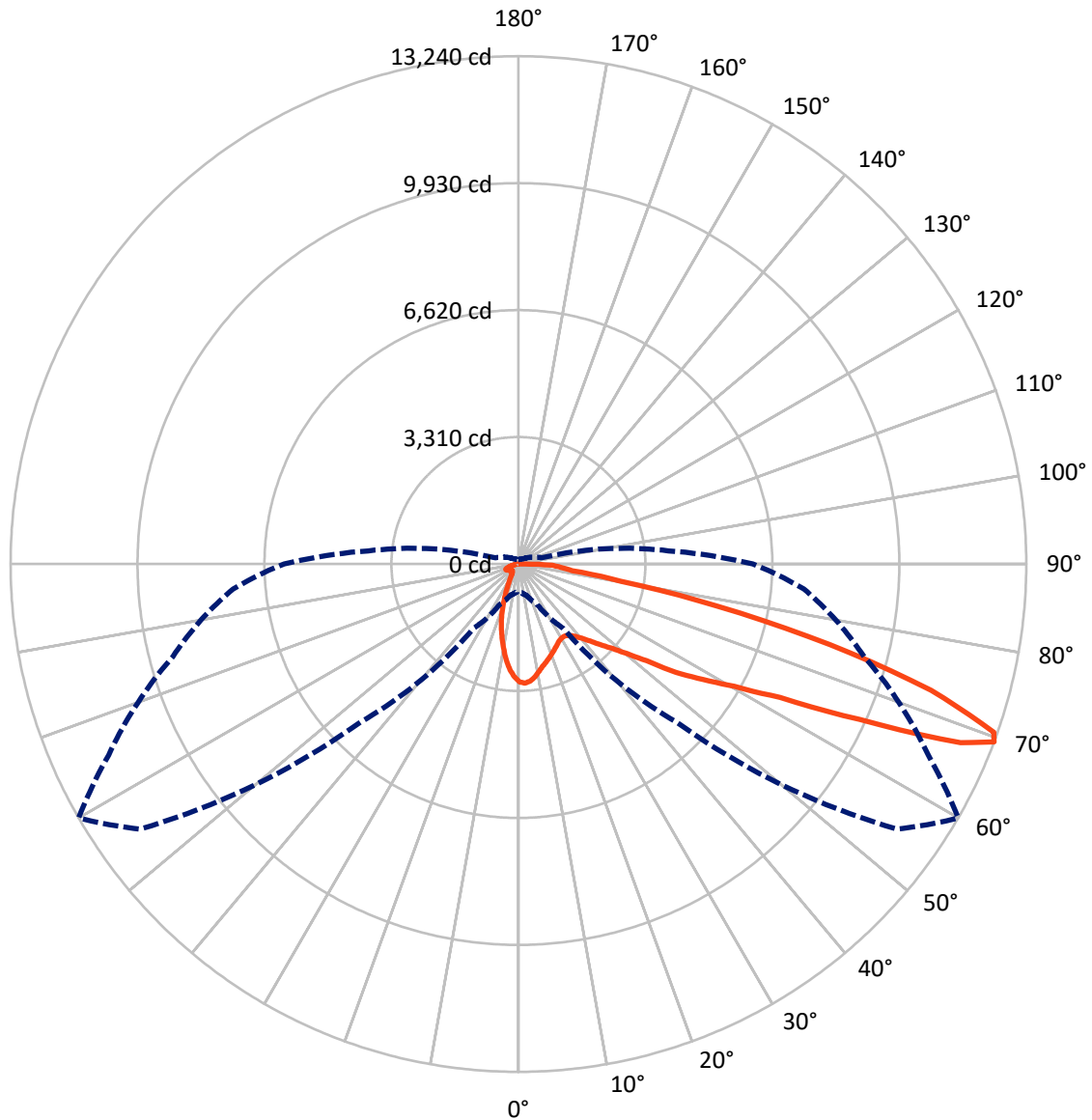
× Max cd  
 - - - 1/2 Max cd



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1717.7	0.0	1717.7
	% Fixture	14.3	0.0	14.3
<b>Street Side</b>	Lumens	10325.3	0.0	10325.3
	% Fixture	85.7	0.0	85.7
<b>Total</b>	Lumens	12043.0	0.0	12043.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	260.7	2.2
10°-20°	558.1	4.6
20°-30°	712.0	5.9
30°-40°	979.8	8.1
40°-50°	1587.1	13.2
50°-60°	2490.9	20.7
60°-70°	3320.8	27.6
70°-80°	1847.1	15.3
80°-90°	286.5	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°	12043.0	100.0
0°-180°	12043.0	100.0

**Coefficient of Utilization**



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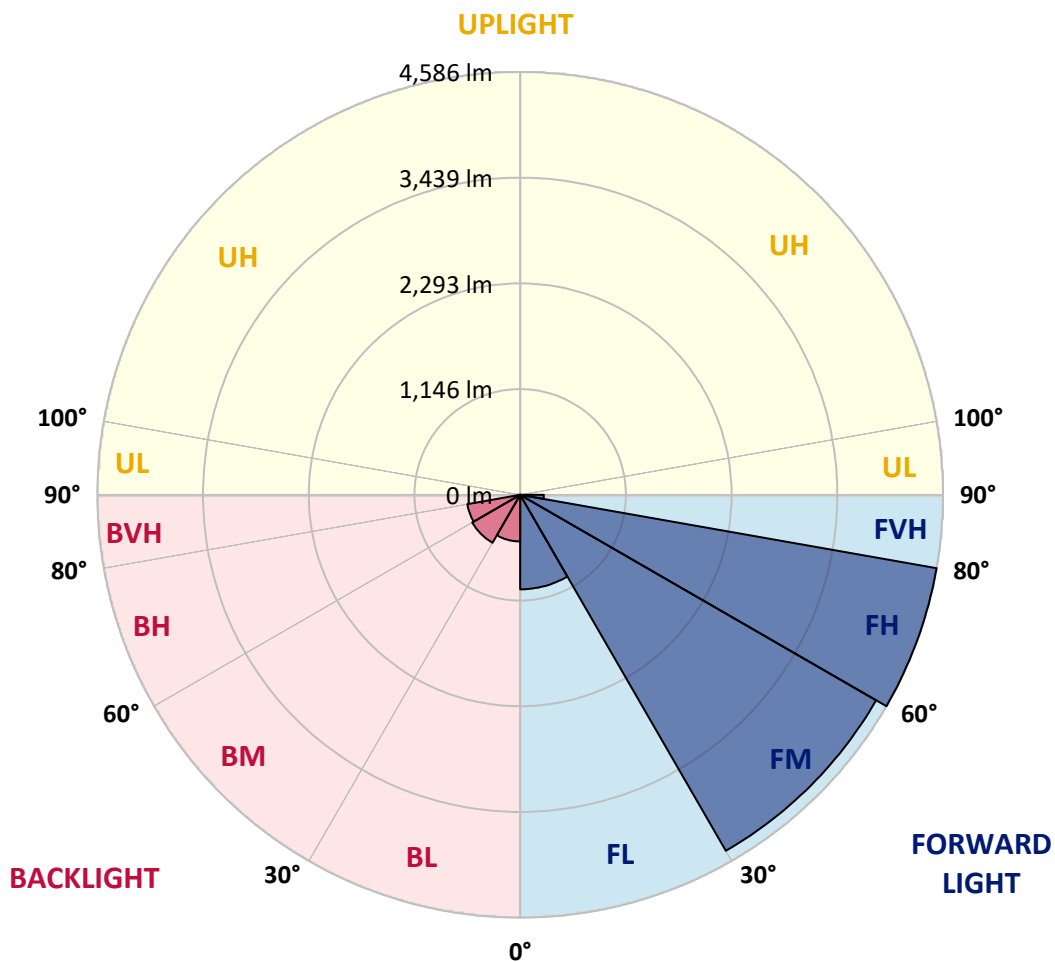
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1024.6	8.5			
FM	(30°-60°)	4457.7	37.0			
FH	(60°-80°)	4585.5	38.1			G2/5000
FVH	(80°-90°)	257.4	2.1			G3/500
BL	(0°-30°)	506.2	4.2	B2/1000		
BM	(30°-60°)	600.1	5.0	B1/1000		
BH	(60°-80°)	582.4	4.8	B2/1000		G2/1000
BVH	(80°-90°)	29.0	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8
2.5°	3154.7	3163.2	3163.2	3156.2	3152.4	3130.0	3116.8	3107.6	3091.3	3061.2	3034.2
5°	3041.9	3058.1	3065.1	3068.2	3088.3	3081.3	3082.1	3075.9	3062.0	3029.6	2985.5
7.5°	2835.0	2838.0	2850.4	2871.3	2919.9	2953.9	2981.7	2987.1	2984.0	2960.1	2898.3
10°	2631.1	2636.5	2651.2	2686.7	2733.0	2781.7	2841.9	2866.6	2885.2	2877.4	2799.4
12.5°	2462.0	2462.7	2478.9	2519.9	2571.6	2632.6	2714.5	2753.1	2797.1	2814.9	2727.6
15°	2299.0	2309.8	2325.3	2374.7	2438.8	2516.0	2610.2	2663.5	2721.4	2772.4	2672.0
17.5°	2175.4	2183.9	2193.2	2234.1	2308.3	2404.8	2521.4	2578.6	2655.0	2733.0	2614.9
20°	2107.5	2110.6	2103.6	2123.7	2186.3	2290.5	2425.7	2494.4	2585.5	2695.2	2556.2
22.5°	2093.6	2093.6	2068.1	2064.2	2092.0	2180.1	2326.8	2411.0	2522.2	2668.9	2503.7
25°	2158.5	2153.8	2105.9	2061.9	2051.9	2096.7	2232.6	2336.1	2468.1	2668.1	2464.3
27.5°	2281.2	2275.1	2215.6	2141.5	2077.4	2058.1	2160.0	2265.8	2425.7	2694.4	2444.2
30°	2434.2	2431.8	2371.6	2278.9	2173.1	2073.5	2131.4	2229.5	2397.1	2743.1	2443.4
32.5°	2601.7	2590.9	2553.9	2461.2	2323.7	2159.2	2148.4	2231.0	2389.4	2814.1	2461.2
35°	2780.1	2772.4	2763.1	2669.7	2515.2	2310.6	2223.3	2284.3	2427.2	2913.0	2511.4
37.5°	3007.2	2998.7	3014.1	2912.2	2743.1	2509.1	2350.0	2390.9	2504.4	3056.6	2604.8
40°	3411.1	3386.3	3343.1	3186.3	3008.7	2752.3	2533.0	2539.2	2636.5	3248.9	2754.6
42.5°	4074.4	3994.9	3781.0	3492.9	3289.0	3035.0	2771.6	2742.3	2818.7	3503.0	2972.4
45°	4739.3	4649.8	4288.3	3827.3	3579.4	3338.5	3066.6	2996.4	3045.8	3798.7	3252.7
47.5°	5168.7	5124.7	4716.9	4161.7	3883.7	3669.0	3404.1	3288.3	3323.8	4133.9	3598.7
50°	5294.6	5256.8	4936.3	4423.5	4171.0	4068.2	3821.9	3668.2	3674.4	4525.4	4013.4
52.5°	5200.4	5184.9	4972.6	4585.7	4435.1	4489.1	4400.3	4186.4	4135.4	4954.8	4462.9
55°	5074.5	5079.9	4998.0	4748.6	4703.8	4881.4	5157.1	4984.9	4768.7	5401.9	4930.9
57.5°	4678.3	4682.2	4896.9	5059.1	5216.6	5431.3	5746.4	5673.8	5422.0	5884.6	5455.2
60°	3767.1	3797.2	4275.2	4995.0	5802.7	6514.8	6592.0	6466.9	6117.0	6440.6	6137.1
62.5°	2691.3	2718.3	3272.1	4336.2	5734.0	7741.1	8153.5	7656.2	7060.0	7272.3	7096.3
65°	1414.0	1409.4	1838.0	2996.4	4829.7	8025.3	10613.9	9767.5	8648.5	8416.1	8023.0
67.5°	790.0	815.5	981.5	1511.3	3147.7	7063.1	12185.4	12434.9	10857.2	9323.5	7982.8
69°	730.6	739.0	850.3	1168.4	2051.9	5827.4	12050.3	13240.3	11788.5	9327.3	7468.5
70°	709.7	719.0	820.1	1076.5	1723.7	4774.9	11558.4	13146.1	12014.8	9120.4	7000.5
72.5°	636.3	648.7	746.8	967.6	1452.6	2461.2	9310.3	11251.8	10883.4	7971.2	5428.2
75°	542.9	563.7	712.0	960.7	1376.2	1564.6	6208.9	8382.8	8100.2	5700.8	3079.8
77.5°	224.7	227.0	311.2	703.5	1444.1	1497.4	3336.9	5310.0	4700.7	2499.8	927.5
80°	156.8	153.7	155.2	205.4	1165.3	1507.4	1712.1	2700.6	2099.0	659.5	434.0
82.5°	132.1	130.5	136.7	129.0	394.6	1710.5	1431.8	1407.8	988.5	355.2	207.0
85°	87.3	84.9	112.0	117.4	187.7	1358.4	1539.9	1106.6	736.7	190.0	88.0
87.5°	42.5	43.2	64.1	79.5	99.6	430.1	1475.0	875.0	569.2	82.6	35.5
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°	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8	3072.8
2.5°	3023.4	3000.2	2979.4	2953.1	2933.0	2916.0	2892.9	2892.1	2888.2	2893.6	2895.2
5°	2956.2	2917.6	2858.9	2793.3	2746.9	2685.9	2626.4	2606.4	2584.0	2581.7	2588.6
7.5°	2855.0	2794.8	2694.4	2594.0	2493.6	2390.9	2293.6	2244.2	2196.3	2181.6	2188.6
10°	2742.3	2665.8	2512.2	2348.4	2207.1	2054.2	1905.9	1810.2	1722.9	1685.8	1695.1
12.5°	2654.2	2556.9	2340.7	2128.3	1916.7	1697.4	1502.0	1312.8	1170.0	1105.9	1109.7
15°	2578.6	2454.2	2180.1	1897.4	1632.6	1332.1	1061.1	841.8	716.7	670.3	668.8
17.5°	2496.7	2346.1	2012.5	1682.7	1339.1	967.6	710.5	580.7	531.3	515.9	515.9
20°	2409.4	2234.9	1837.2	1448.8	1030.2	675.7	534.4	484.2	465.7	461.0	460.3
22.5°	2328.4	2126.0	1661.1	1199.3	745.2	512.8	454.9	435.6	432.5	436.3	436.3
25°	2264.3	2030.3	1482.7	936.7	542.1	429.4	404.7	402.3	413.9	427.8	430.1
27.5°	2216.4	1944.5	1306.7	684.2	426.3	373.8	365.3	375.3	402.3	430.1	435.6
30°	2183.2	1871.2	1095.8	491.9	355.2	327.4	331.3	349.1	390.0	432.5	444.0
32.5°	2168.5	1811.7	883.5	377.6	303.5	288.1	298.1	321.3	363.7	406.2	420.1
35°	2182.4	1768.5	687.3	313.5	265.7	254.1	265.7	289.6	317.4	338.2	346.7
37.5°	2232.6	1753.0	517.4	278.0	240.9	229.4	238.6	254.8	267.2	274.9	278.8
40°	2338.4	1769.2	405.4	259.5	227.0	213.9	216.2	224.0	232.4	238.6	239.4
42.5°	2506.7	1822.5	360.6	252.5	218.5	201.6	197.7	203.1	212.4	220.9	222.4
45°	2730.7	1911.3	356.0	254.8	214.7	191.5	183.8	189.2	201.6	215.5	217.8
47.5°	3020.3	2051.9	377.6	267.2	217.0	186.1	174.5	179.9	196.2	214.7	217.8
50°	3363.2	2246.5	417.8	285.7	227.8	186.1	170.7	175.3	192.3	213.1	216.2
52.5°	3767.1	2517.6	459.5	304.3	243.3	193.1	172.2	171.4	186.9	206.2	210.1
55°	4212.7	2854.3	499.7	320.5	251.8	202.3	176.1	166.8	179.2	194.6	197.7
57.5°	4737.0	3315.3	569.9	335.9	256.4	209.3	180.7	162.2	169.1	179.9	182.3
60°	5448.3	3992.6	706.6	362.2	264.9	212.4	181.5	157.5	156.8	164.5	165.3
62.5°	6375.8	4785.7	837.1	393.1	281.9	213.1	178.4	154.5	146.7	149.0	149.0
65°	7035.3	5077.6	799.3	419.3	297.3	212.4	175.3	152.1	139.0	135.1	135.1
67.5°	6659.9	4485.3	678.8	426.3	298.9	203.9	168.4	146.7	132.1	122.8	122.8
69°	6108.6	3931.6	623.2	413.9	286.5	193.8	160.6	141.3	127.4	116.6	116.6
70°	5659.1	3512.2	589.2	399.3	271.8	185.3	153.7	135.9	122.8	113.5	112.7
72.5°	4225.0	2343.8	503.5	344.4	223.2	156.8	134.4	121.2	110.4	104.3	104.3
75°	2229.5	1174.6	412.4	281.1	172.2	125.1	110.4	101.9	95.8	95.0	94.2
77.5°	730.6	531.3	296.5	211.6	126.7	97.3	88.0	82.6	81.9	84.9	84.9
80°	394.6	317.4	190.7	142.9	88.0	72.6	68.0	67.2	69.5	74.1	74.1
82.5°	191.5	156.8	113.5	88.0	60.2	53.3	53.3	54.1	57.1	62.6	62.6
85°	82.6	74.1	65.6	49.4	37.1	33.2	37.8	41.7	44.0	47.9	49.4
87.5°	39.4	34.8	30.1	19.3	16.2	17.0	20.1	24.7	29.3	32.4	33.2
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)