

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: P198871

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198871  
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-SL3-7050-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1050mA 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: 10237 lumens  
Efficiency: N/A  
Efficacy: 92.2 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): 111  
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

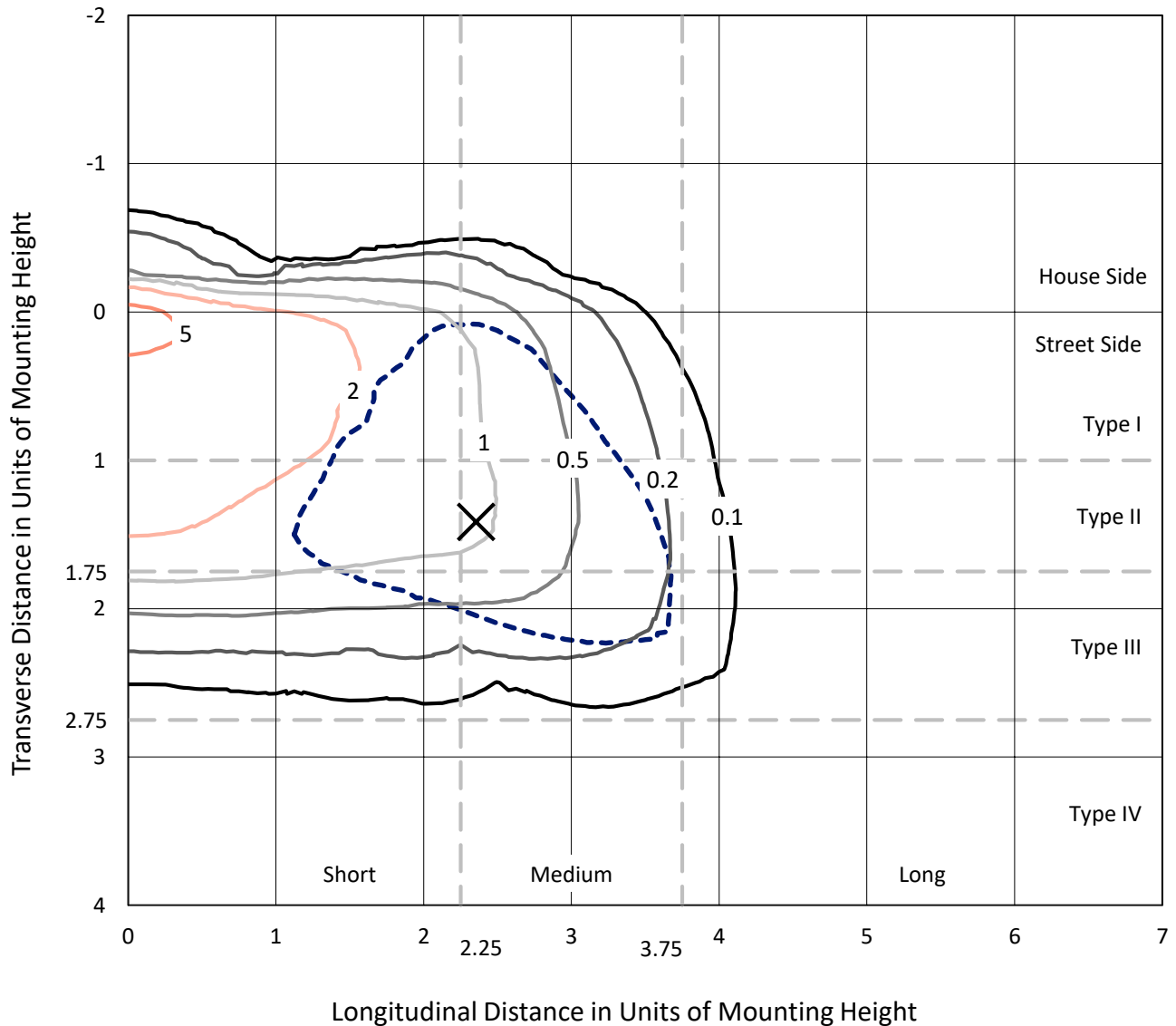


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

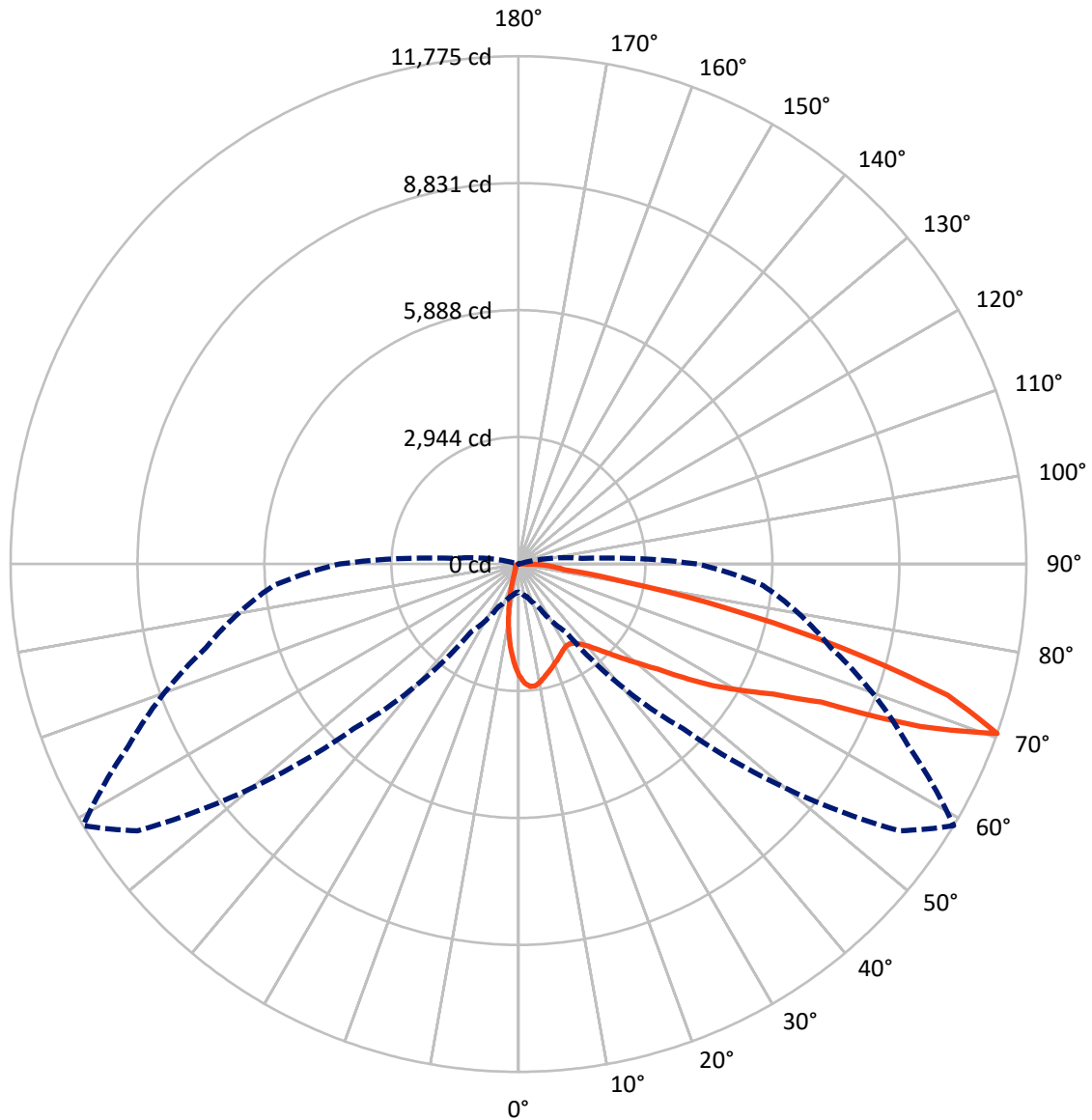


Based on 20 foot mounting height. Maximum calculated value = 6.9 fc  
 Type III - Medium - Non-Cutoff

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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	787.0	0.0	787.0
	% Fixture	7.7	0.0	7.7
<b>Street Side</b>	Lumens	9450.0	0.0	9450.0
	% Fixture	92.3	0.0	92.3
<b>Total</b>	Lumens	10237.0	0.0	10237.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.9	2.1
10°-20°	446.5	4.4
20°-30°	604.4	5.9
30°-40°	872.2	8.5
40°-50°	1448.5	14.1
50°-60°	2215.6	21.6
60°-70°	2755.7	26.9
70°-80°	1523.4	14.9
80°-90°	158.0	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°	10237.0	100.0
0°-180°	10237.0	100.0



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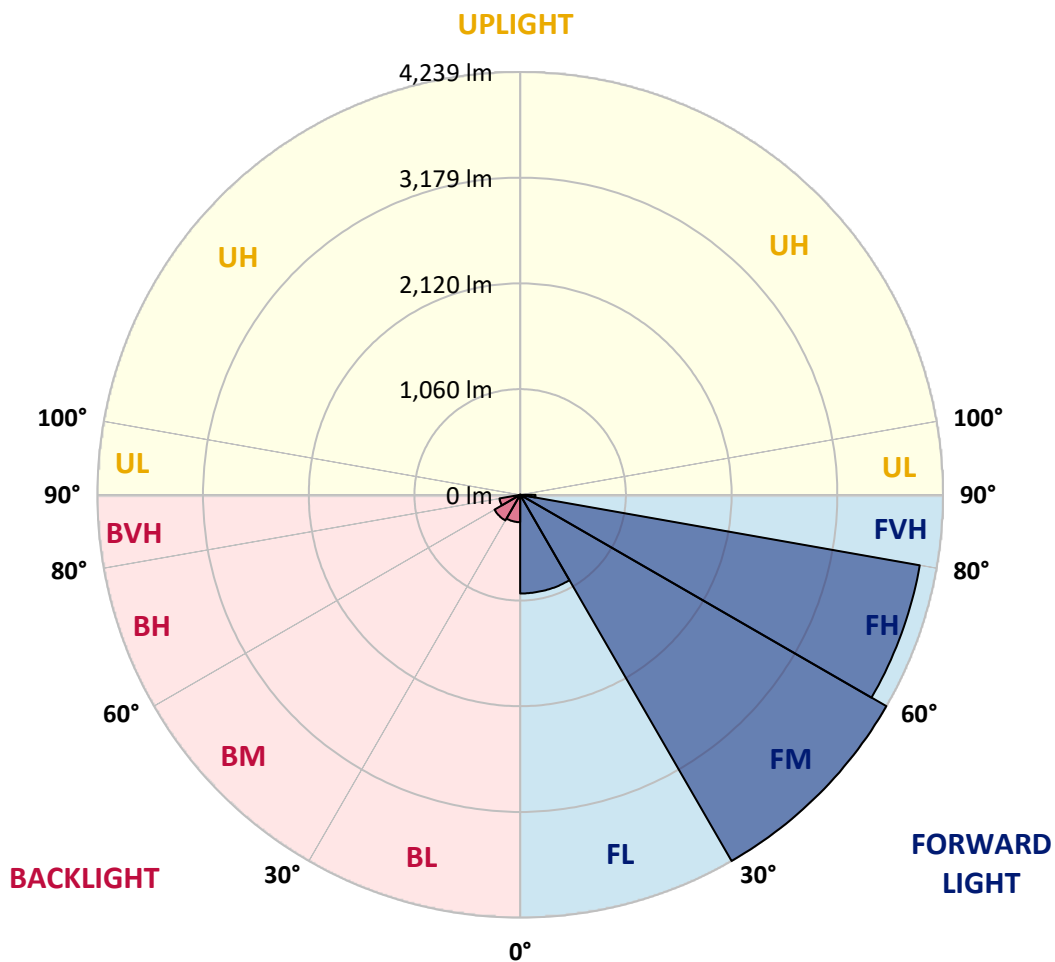
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	989.4	9.7			
FM	(30°-60°)	4239.2	41.4			
FH	(60°-80°)	4068.0	39.7			G2/5000
FVH	(80°-90°)	153.4	1.5			G2/225
BL	(0°-30°)	274.2	2.7	B1/500		
BM	(30°-60°)	297.0	2.9	B1/1000		
BH	(60°-80°)	211.1	2.1	B1/500		G1/500
BVH	(80°-90°)	4.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6
2.5°	2926.0	2921.4	2902.1	2898.2	2876.6	2833.4	2783.2	2763.1	2722.2	2657.3	2585.5
5°	2974.7	2977.0	2978.6	2970.1	2967.0	2931.4	2875.8	2851.9	2797.1	2690.5	2559.2
7.5°	2792.4	2798.6	2817.9	2826.4	2863.5	2877.4	2865.8	2850.4	2807.1	2681.2	2496.7
10°	2600.2	2611.7	2632.6	2646.5	2692.0	2729.1	2776.2	2780.1	2770.8	2650.3	2426.4
12.5°	2434.9	2445.7	2468.9	2496.7	2543.0	2590.9	2661.2	2685.9	2716.8	2630.3	2376.2
15°	2292.8	2295.9	2318.3	2353.0	2414.0	2479.7	2563.1	2599.4	2659.6	2622.5	2337.6
17.5°	2168.5	2169.2	2183.9	2215.6	2289.7	2376.2	2473.5	2521.4	2597.8	2611.7	2303.6
20°	2086.6	2085.8	2086.6	2103.6	2169.2	2271.9	2390.1	2440.3	2538.4	2598.6	2268.9
22.5°	2058.8	2054.9	2037.2	2031.0	2072.7	2163.1	2304.4	2370.0	2485.1	2594.7	2243.4
25°	2092.8	2090.5	2052.6	2017.1	2021.0	2077.3	2217.1	2297.4	2443.4	2608.6	2237.2
27.5°	2202.4	2197.8	2139.9	2070.4	2026.4	2036.4	2152.2	2236.4	2410.2	2642.6	2245.7
30°	2346.1	2346.9	2285.1	2200.9	2097.4	2040.3	2117.5	2197.0	2387.8	2693.6	2264.2
32.5°	2505.9	2505.2	2461.1	2363.8	2231.8	2111.3	2132.9	2200.1	2390.9	2768.5	2299.7
35°	2671.2	2662.7	2648.0	2562.3	2407.9	2235.7	2203.2	2252.6	2423.3	2867.3	2360.0
37.5°	2861.9	2858.9	2873.5	2783.2	2625.6	2418.7	2326.8	2360.0	2505.2	3013.3	2457.3
40°	3165.4	3148.4	3155.4	3032.6	2871.2	2665.0	2499.8	2508.3	2635.7	3206.4	2611.0
42.5°	3743.8	3675.1	3546.2	3316.0	3141.5	2938.4	2726.0	2711.4	2820.2	3440.4	2813.3
45°	4435.0	4356.2	4031.1	3628.8	3411.8	3231.8	3005.6	2966.2	3047.3	3719.1	3074.3
47.5°	5011.9	4926.9	4496.0	3955.4	3686.7	3534.6	3315.3	3268.9	3319.1	4042.7	3387.8
50°	5208.8	5161.7	4783.3	4227.3	3963.9	3874.4	3703.7	3626.5	3638.8	4391.8	3753.9
52.5°	5118.4	5102.2	4848.9	4413.4	4220.3	4249.7	4129.2	4048.1	4034.2	4773.3	4158.5
55°	4927.7	4920.0	4796.4	4516.9	4446.6	4593.3	4726.1	4655.9	4524.6	5178.7	4492.9
57.5°	4655.1	4684.4	4773.3	4716.1	4724.6	4956.3	5280.6	5316.9	5120.8	5501.5	4740.8
60°	3926.9	4005.6	4412.6	4930.0	5326.2	5560.2	5874.5	5942.4	5625.8	5722.3	5027.3
62.5°	2902.9	3015.6	3595.6	4546.2	5657.5	6708.5	6664.5	6634.4	6107.7	6018.1	5548.6
65°	1705.1	1837.2	2327.5	3552.3	5157.8	7446.8	8139.5	7722.5	6842.1	6632.8	6378.8
67.5°	849.5	850.2	1071.9	1875.0	3811.8	6931.7	10292.5	10051.6	8403.6	7538.7	6706.2
70°	653.3	671.1	793.1	1089.6	1927.5	5398.8	10786.0	11775.2	9972.8	7498.5	5689.9
72.5°	553.7	565.3	705.8	948.3	1441.0	2963.9	9337.2	10408.3	9516.4	6335.5	4194.1
75°	398.5	407.7	624.7	860.3	1326.7	1470.4	6405.0	7719.4	7140.2	4456.6	2308.2
77.5°	98.8	98.1	217.8	698.1	1186.9	1224.8	3675.1	4950.1	4096.8	1824.8	593.1
80°	44.0	42.5	49.4	146.7	1104.3	1156.1	1616.3	2499.8	1571.5	295.8	181.5
82.5°	30.9	29.3	30.9	54.1	369.1	1072.6	976.9	1083.5	575.3	101.2	77.2
85°	10.0	9.3	17.0	45.6	103.5	618.6	953.0	809.3	427.8	43.2	51.7
87.5°	1.5	1.5	6.2	24.7	30.1	206.2	559.1	560.7	192.3	25.5	23.2
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°	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6	2588.6
2.5°	2549.2	2503.6	2439.5	2375.4	2317.5	2258.0	2210.2	2187.8	2177.7	2163.8	2133.7
5°	2490.5	2407.9	2267.3	2129.1	2000.1	1876.6	1770.8	1710.5	1645.7	1642.6	1610.9
7.5°	2396.3	2278.9	2057.3	1842.6	1645.7	1457.2	1295.1	1190.0	1118.2	1073.4	1042.5
10°	2291.3	2140.7	1847.2	1545.3	1277.3	1025.5	817.0	681.1	598.5	556.8	532.8
12.5°	2207.9	2018.7	1640.3	1260.3	924.4	635.6	441.7	342.9	298.9	281.9	274.1
15°	2136.0	1906.7	1446.4	1005.5	617.0	365.3	255.6	223.2	216.2	216.2	215.5
17.5°	2063.4	1798.6	1258.0	755.3	388.4	239.4	201.6	196.9	197.7	200.0	200.0
20°	1994.7	1695.9	1076.5	538.3	254.8	191.5	183.0	181.5	183.8	186.9	186.1
22.5°	1939.1	1605.5	906.6	369.9	196.2	173.8	168.3	166.0	167.6	169.9	169.1
25°	1899.7	1528.3	750.6	257.9	170.7	158.3	152.1	149.0	147.5	149.0	148.3
27.5°	1875.8	1463.4	603.9	193.8	152.9	142.9	135.1	129.0	125.1	125.1	123.6
30°	1860.3	1402.4	473.4	160.6	138.2	127.4	116.6	108.1	101.9	100.4	99.6
32.5°	1859.6	1349.9	353.7	142.1	124.3	112.0	98.8	88.0	81.1	79.5	78.8
35°	1878.9	1307.4	260.2	128.2	112.0	97.3	82.6	71.0	64.9	64.9	64.1
37.5°	1929.1	1282.7	196.9	117.4	101.9	84.9	69.5	58.7	53.3	54.8	54.8
40°	2022.5	1278.1	160.6	108.9	93.4	74.1	56.4	47.9	45.6	47.9	47.9
42.5°	2165.4	1302.8	142.9	102.7	85.7	63.3	47.1	40.9	40.2	42.5	42.5
45°	2351.5	1351.4	132.8	97.3	77.2	52.5	39.4	35.5	34.8	37.8	37.8
47.5°	2577.0	1417.1	123.6	91.1	68.7	43.2	33.2	30.1	30.1	33.2	34.0
50°	2844.2	1505.9	114.3	84.9	61.8	36.3	27.8	25.5	26.3	29.3	30.1
52.5°	3151.5	1614.8	105.8	79.5	54.1	29.3	23.2	21.6	22.4	25.5	26.3
55°	3416.4	1709.8	95.8	74.1	44.0	23.9	19.3	18.5	19.3	23.2	23.2
57.5°	3647.3	1800.9	86.5	65.6	34.8	19.3	15.4	15.4	17.0	20.9	21.6
60°	3953.9	1944.5	78.8	55.6	26.3	14.7	12.4	13.1	15.4	18.5	19.3
62.5°	4496.8	2188.5	68.7	46.3	19.3	11.6	10.0	10.8	13.9	17.8	18.5
65°	5176.4	2419.4	57.1	38.6	14.7	8.5	7.7	10.0	13.9	17.8	18.5
67.5°	5106.9	2104.4	44.8	30.9	10.8	7.0	6.2	9.3	13.1	17.8	18.5
70°	4141.6	1475.0	33.2	20.9	8.5	6.2	6.2	9.3	13.1	17.0	17.8
72.5°	2872.8	820.9	25.5	13.9	7.7	6.2	5.4	8.5	12.4	17.0	17.8
75°	1366.9	251.8	20.1	10.0	7.0	5.4	4.6	8.5	12.4	17.0	17.8
77.5°	262.6	64.1	16.2	8.5	6.2	5.4	4.6	7.7	12.4	16.2	17.0
80°	88.8	28.6	13.1	7.7	6.2	5.4	4.6	7.7	11.6	15.4	16.2
82.5°	48.7	16.2	11.6	7.0	6.2	4.6	3.9	7.0	10.8	15.4	16.2
85°	37.8	11.6	9.3	7.0	6.2	4.6	3.9	7.0	10.8	14.7	15.4
87.5°	19.3	8.5	7.7	7.0	6.2	4.6	3.9	6.2	10.0	13.9	15.4
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)