

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: P198695

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)
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-SL2-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10063.8 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

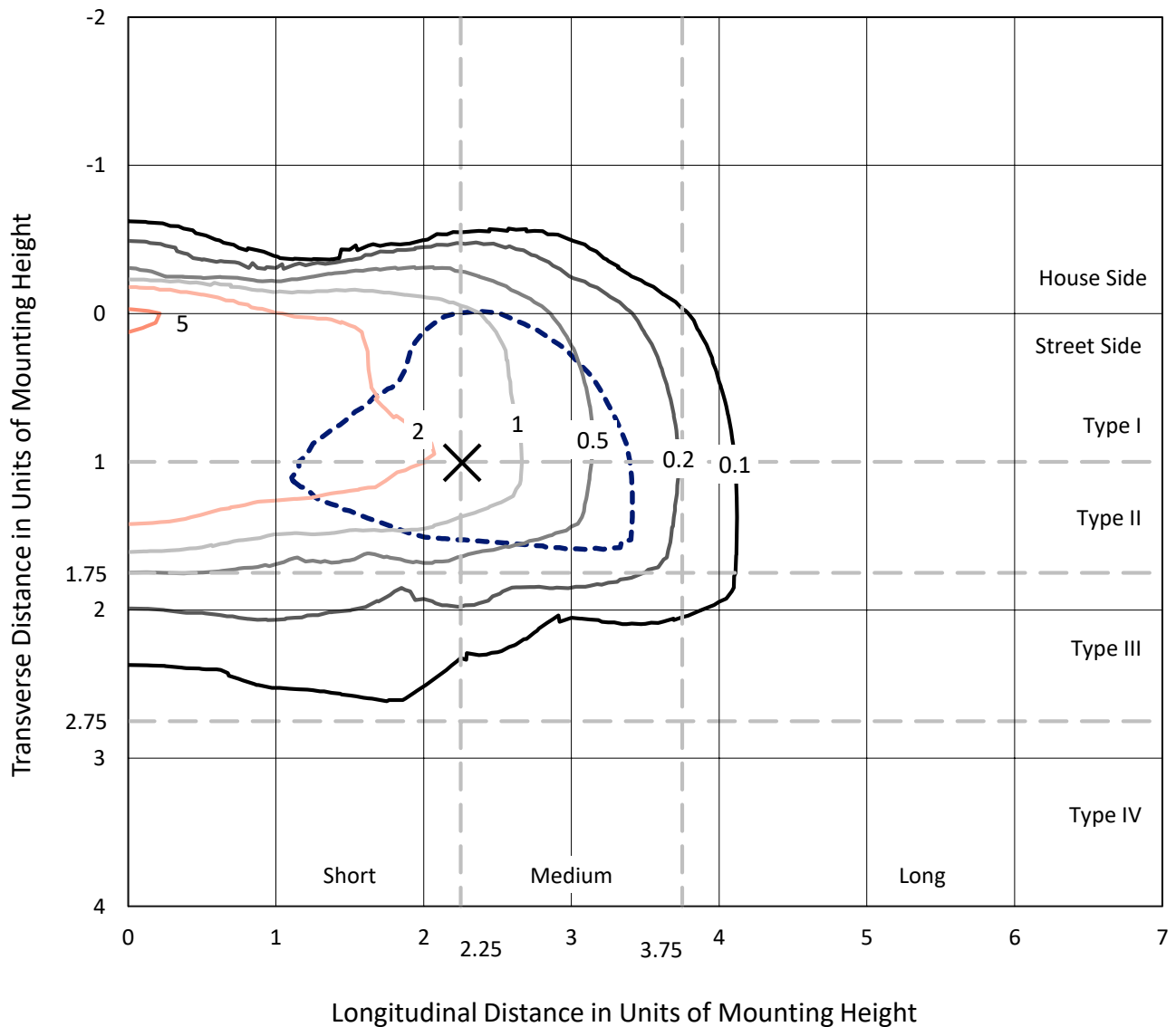
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

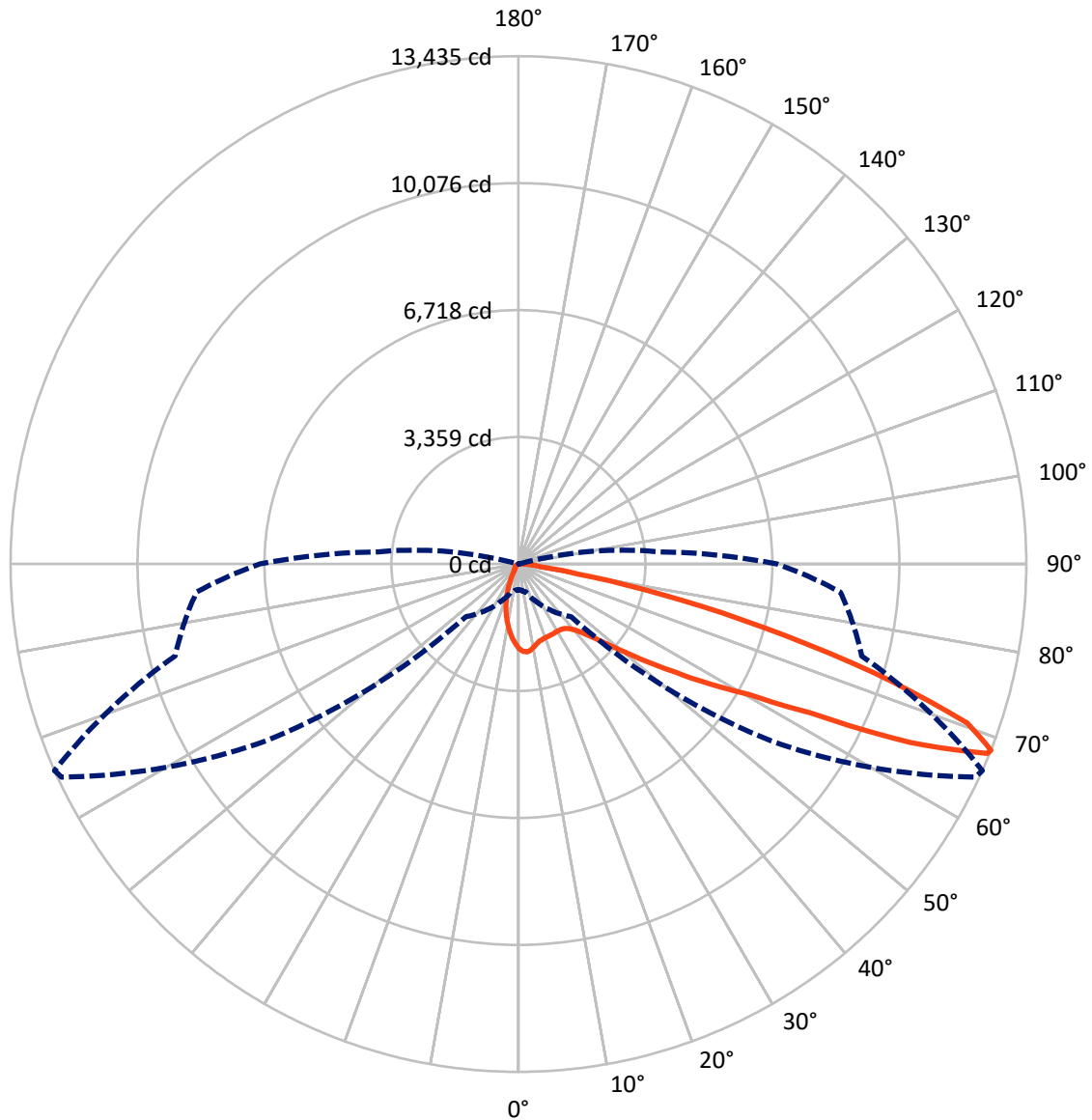
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.6 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1019.4	0.0	1019.4
	% Fixture	10.1	0.0	10.1
Street Side	Lumens	9044.4	0.0	9044.4
	% Fixture	89.9	0.0	89.9
Total	Lumens	10063.8	0.0	10063.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.8	1.8
10°-20°	395.5	3.9
20°-30°	573.1	5.7
30°-40°	877.3	8.7
40°-50°	1500.5	14.9
50°-60°	2347.3	23.3
60°-70°	2702.8	26.9
70°-80°	1352.5	13.4
80°-90°	131.0	1.3
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°	10063.8	100.0
0°-180°	10063.8	100.0



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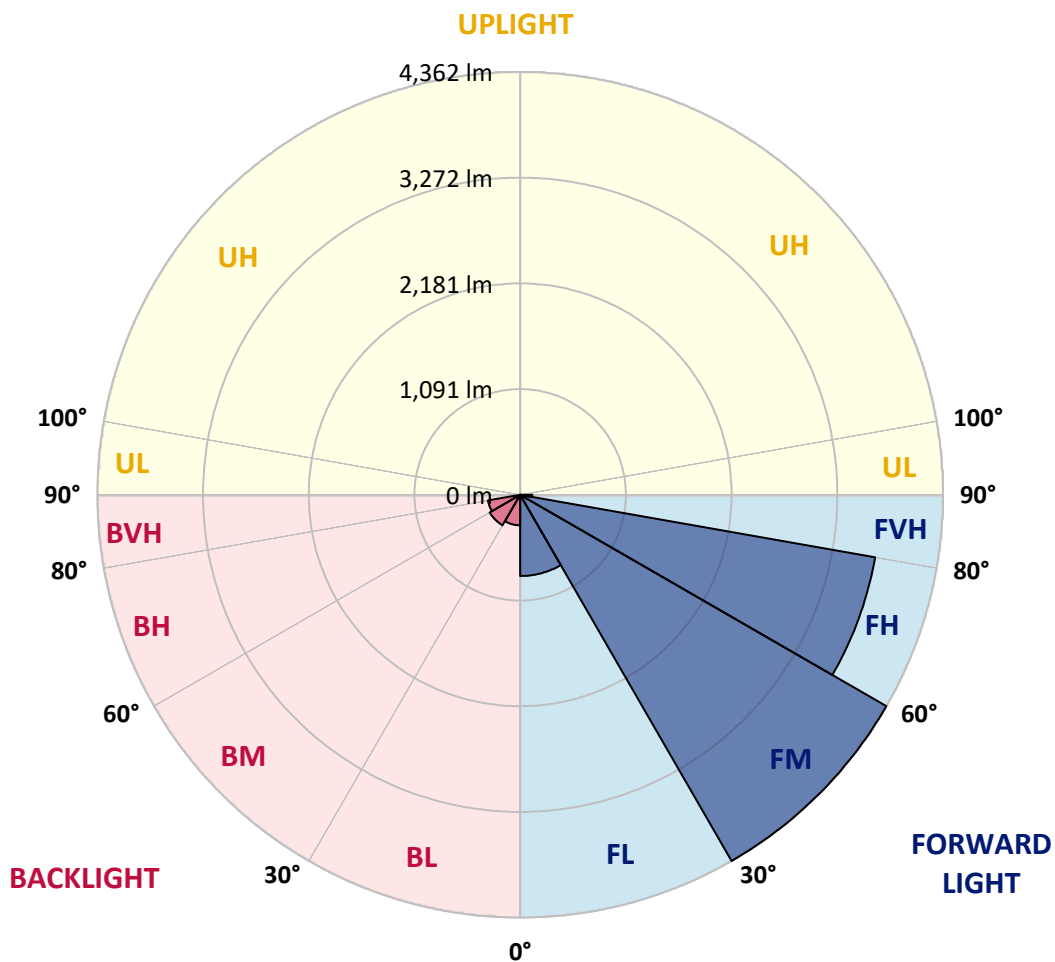
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	837.8	8.3			
FM (30°-60°)	4362.1	43.3			
FH (60°-80°)	3718.5	36.9			G2/5000
FVH (80°-90°)	126.0	1.3			G2/225
BL (0°-30°)	314.6	3.1	B1/500		
BM (30°-60°)	363.0	3.6	B1/1000		
BH (60°-80°)	336.8	3.3	B1/500		G1/500
BVH (80°-90°)	5.0	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1
2.5°	2358.2	2359.8	2359.0	2361.4	2359.8	2348.0	2335.3	2308.5	2310.8	2276.1	2237.4
5°	2192.4	2205.8	2219.2	2232.6	2265.0	2293.5	2327.4	2335.3	2335.3	2305.3	2248.4
7.5°	2023.3	2024.1	2039.0	2057.3	2100.7	2152.8	2231.9	2303.0	2304.5	2312.4	2250.0
10°	1896.0	1900.0	1910.3	1930.1	1973.5	2024.8	2113.3	2224.7	2233.4	2291.9	2234.2
12.5°	1797.3	1802.0	1813.1	1836.0	1875.6	1928.5	2021.7	2148.9	2160.8	2272.2	2229.5
15°	1721.5	1727.8	1736.5	1759.4	1802.0	1858.2	1960.1	2098.4	2112.6	2264.2	2244.5
17.5°	1689.9	1689.9	1689.1	1704.8	1747.5	1804.5	1911.1	2071.5	2089.7	2270.5	2269.7
20°	1703.3	1701.0	1684.4	1680.4	1706.5	1763.4	1872.4	2054.1	2074.6	2282.4	2300.6
22.5°	1774.4	1769.7	1732.6	1701.8	1693.8	1731.8	1846.3	2042.2	2066.8	2306.9	2341.6
25°	1925.3	1911.1	1859.7	1790.3	1727.8	1723.9	1828.1	2035.9	2062.0	2335.3	2386.6
27.5°	2121.3	2117.3	2035.2	1941.9	1821.8	1750.0	1822.6	2031.2	2057.3	2355.9	2423.1
30°	2364.6	2366.2	2271.4	2149.7	1968.0	1823.4	1840.0	2028.8	2055.6	2357.5	2438.8
32.5°	2615.8	2617.4	2538.4	2408.0	2167.8	1949.8	1889.0	2039.9	2064.3	2351.2	2438.0
35°	2857.5	2860.0	2812.5	2707.4	2434.9	2125.2	1981.5	2077.8	2095.2	2355.1	2436.5
37.5°	3163.3	3172.8	3114.3	3016.4	2769.8	2382.8	2132.3	2154.4	2168.7	2387.5	2448.3
40°	3684.7	3672.1	3504.6	3338.7	3133.3	2696.4	2350.3	2286.4	2291.1	2471.2	2493.3
42.5°	4292.3	4276.4	3989.7	3703.7	3507.0	3074.8	2629.2	2488.6	2487.8	2611.9	2591.3
45°	4815.2	4805.8	4504.0	4122.4	3921.0	3492.8	2972.9	2780.2	2770.7	2855.2	2769.8
47.5°	5186.6	5178.7	4950.4	4568.0	4399.7	3952.6	3401.9	3177.5	3157.7	3173.6	3059.9
50°	5222.9	5214.2	5134.4	4888.7	4959.1	4627.2	3932.0	3698.2	3672.9	3648.4	3498.3
52.5°	4883.2	4882.4	4924.3	4908.5	5350.9	5495.5	4582.2	4342.0	4312.0	4249.6	4100.3
55°	4188.8	4184.8	4343.7	4574.3	5342.3	6391.4	5573.6	5108.4	5068.8	4944.0	4748.1
57.5°	3060.6	3040.0	3371.9	3860.9	4966.9	6783.2	7148.3	6060.4	5994.8	5599.0	5297.1
60°	1689.9	1697.8	2124.4	2703.5	4078.2	6705.9	8597.2	7170.4	6998.1	6163.9	5859.7
62.5°	947.3	967.0	1284.6	1757.0	2600.0	6077.8	9374.5	9080.6	8665.9	6822.8	6570.7
65°	716.6	728.4	888.0	1355.7	1639.3	4247.2	9498.6	11751.8	11393.8	7821.4	7702.8
67.5°	674.7	684.1	762.4	1124.2	1493.2	2202.6	8564.8	13331.8	13376.8	9183.3	8579.8
68°	679.4	691.3	769.5	1081.6	1490.7	1970.3	8166.6	13339.7	13435.3	9403.0	8549.7
70°	624.1	627.3	813.8	1061.0	1445.0	1552.4	5907.8	12425.7	12597.1	9664.5	7761.3
72.5°	238.6	239.4	365.0	918.8	1513.7	1561.1	2976.1	9820.9	9829.6	8410.7	6050.9
75°	124.1	104.2	114.6	287.6	1445.7	1521.6	1493.2	6705.9	6663.9	5688.2	3707.6
77.5°	85.3	72.7	76.6	99.5	601.2	1520.8	1078.4	3856.1	3847.4	2419.9	1057.8
80°	48.2	41.8	45.8	83.8	210.9	1427.6	1004.9	1657.5	1561.9	425.0	171.4
82.5°	24.4	20.6	24.4	70.3	131.1	898.3	977.2	650.2	579.1	101.2	111.4
85°	6.3	6.3	11.9	49.0	81.3	294.7	876.2	469.3	421.9	44.2	79.0
87.5°	1.5	0.8	4.7	18.2	29.3	64.0	485.9	261.5	225.2	22.9	45.8
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°	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1	2242.1
2.5°	2221.5	2199.4	2156.0	2107.0	2072.3	2034.3	2012.2	1985.3	1964.8	1946.7	1960.1
5°	2213.7	2171.0	2074.6	1966.4	1875.6	1788.6	1723.9	1662.2	1615.6	1586.4	1598.3
7.5°	2193.1	2129.9	1973.5	1804.5	1656.0	1516.1	1402.3	1300.4	1221.4	1178.7	1192.1
10°	2158.3	2069.1	1858.9	1624.3	1416.6	1219.1	1050.0	898.3	783.7	730.0	742.7
12.5°	2133.1	2015.4	1740.4	1450.5	1177.1	896.7	672.3	498.5	409.3	355.5	360.3
15°	2122.0	1973.5	1629.9	1267.2	915.6	575.9	363.5	263.1	232.3	221.2	222.0
17.5°	2123.6	1940.3	1524.8	1076.9	651.8	331.0	222.8	200.7	195.9	193.5	193.5
20°	2127.5	1907.2	1415.8	878.5	417.2	213.3	185.7	178.5	176.2	173.0	173.8
22.5°	2139.4	1881.8	1305.9	679.4	256.8	173.8	164.3	158.0	154.1	149.4	150.1
25°	2157.6	1862.9	1197.7	489.1	181.0	151.7	143.0	134.3	127.2	121.6	122.4
27.5°	2168.7	1836.0	1082.4	333.4	150.1	132.7	120.9	109.0	101.2	96.4	95.5
30°	2160.8	1792.6	951.2	218.8	132.7	114.6	100.4	87.0	79.0	75.1	75.1
32.5°	2139.4	1736.5	806.6	159.6	117.7	98.7	81.3	69.6	64.0	61.6	62.4
35°	2115.0	1678.0	652.5	135.1	105.9	83.8	66.4	56.9	54.5	53.7	53.7
37.5°	2101.4	1627.5	504.8	122.4	94.8	69.6	54.5	49.0	46.6	46.6	46.6
40°	2116.5	1588.7	373.7	112.9	83.8	57.7	45.8	41.8	41.1	41.1	41.1
42.5°	2180.5	1575.3	273.3	105.1	72.7	48.2	39.5	36.3	35.6	36.3	36.3
45°	2305.3	1604.6	206.9	97.2	62.4	39.5	34.0	31.6	31.6	32.4	32.4
47.5°	2517.1	1679.6	169.8	89.3	52.2	33.1	29.3	27.6	27.6	28.4	28.4
50°	2845.7	1818.7	152.5	80.6	43.5	28.4	24.4	23.7	23.7	24.4	25.3
52.5°	3345.0	2083.3	143.8	71.9	35.6	23.7	20.6	19.7	20.6	21.4	21.4
55°	3900.4	2422.2	133.5	63.2	30.0	19.7	16.6	16.6	17.4	18.9	18.9
57.5°	4417.9	2749.3	124.1	52.2	26.1	15.8	13.4	13.4	15.0	16.6	16.6
60°	4964.6	3070.1	111.4	41.8	22.1	12.7	11.0	11.0	13.4	15.0	15.8
62.5°	5640.0	3442.9	94.8	33.1	17.4	9.5	7.9	10.2	12.7	15.0	15.0
65°	6616.5	3906.8	74.3	26.1	13.4	7.2	6.3	9.5	11.9	14.2	15.0
67.5°	6971.3	3847.4	56.1	21.4	10.2	5.5	5.5	8.7	11.9	14.2	14.2
68°	6841.7	3717.9	53.7	20.6	9.5	5.5	5.5	8.7	11.9	14.2	14.2
70°	5961.6	3039.3	44.2	15.8	7.9	4.7	4.7	7.9	11.9	13.4	14.2
72.5°	4463.6	2019.3	38.0	10.2	7.2	4.7	4.0	7.9	11.0	13.4	13.4
75°	2560.5	838.2	32.4	7.9	6.3	4.0	4.0	7.2	11.0	13.4	13.4
77.5°	723.6	195.9	26.1	6.3	5.5	4.0	3.2	7.2	10.2	12.7	12.7
80°	132.7	58.5	20.6	5.5	4.7	4.0	3.2	7.2	10.2	12.7	12.7
82.5°	87.7	27.6	15.0	5.5	4.7	4.0	3.2	6.3	9.5	11.9	11.9
85°	65.6	19.7	9.5	5.5	4.7	4.0	3.2	6.3	9.5	11.9	11.9
87.5°	36.3	8.7	7.2	6.3	5.5	4.0	3.2	5.5	8.7	11.0	11.0
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)