

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: P198869

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-7050-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198869  
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-SL3-7050-800-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 800mA 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: 8270 lumens  
Efficiency: N/A  
Efficacy: 97.3 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): 85  
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

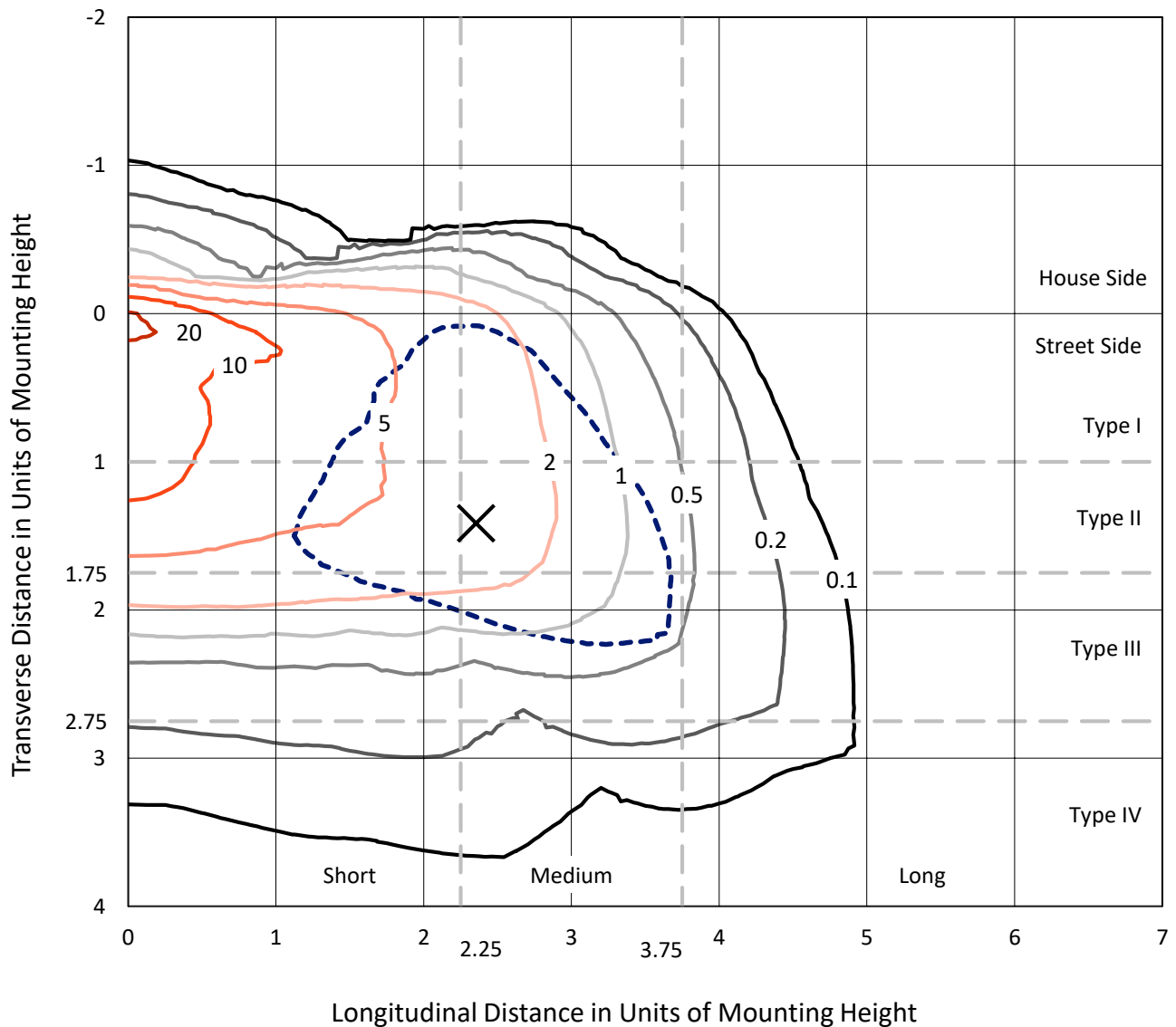


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

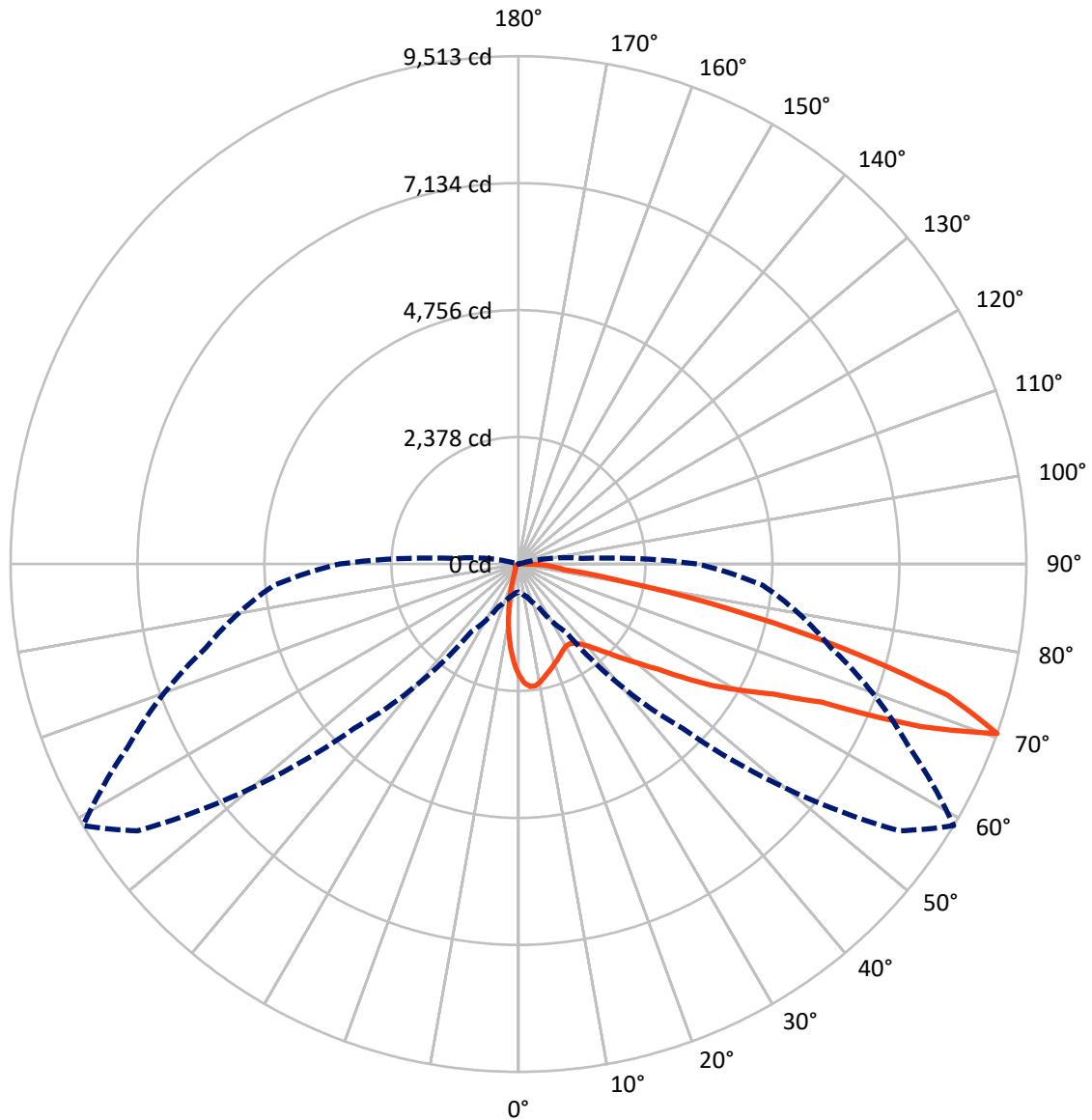


Based on 10 foot mounting height. Maximum calculated value = 22.3 fc  
 Type III - Medium - Non-Cutoff

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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	635.7	0.0	635.7
	% Fixture	7.7	0.0	7.7
<b>Street Side</b>	Lumens	7634.2	0.0	7634.2
	% Fixture	92.3	0.0	92.3
<b>Total</b>	Lumens	8270.0	0.0	8270.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.0	2.1
10°-20°	360.7	4.4
20°-30°	488.2	5.9
30°-40°	704.6	8.5
40°-50°	1170.2	14.1
50°-60°	1789.9	21.6
60°-70°	2226.2	26.9
70°-80°	1230.6	14.9
80°-90°	127.6	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°	8270.0	100.0
0°-180°	8270.0	100.0



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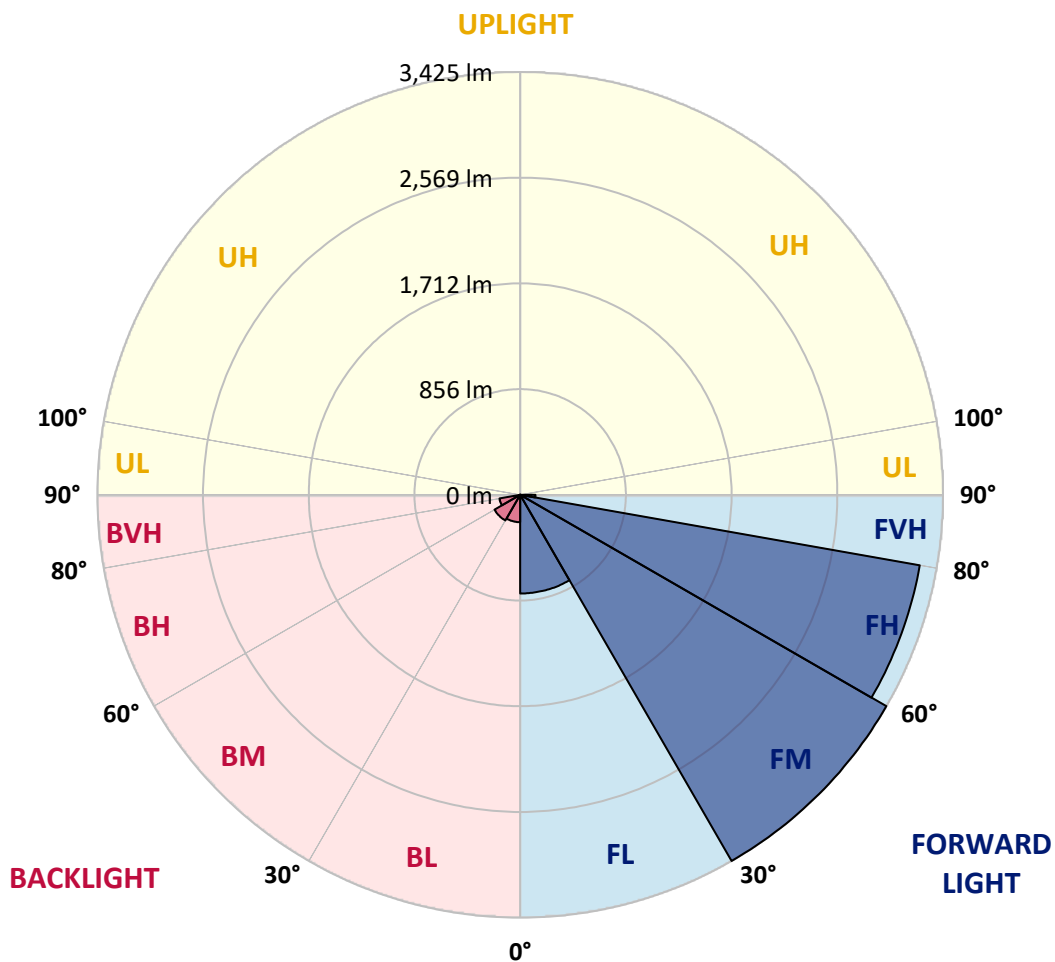
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	799.3	9.7			
FM	(30°-60°)	3424.7	41.4			
FH	(60°-80°)	3286.3	39.7			G2/5000
FVH	(80°-90°)	123.9	1.5			G2/225
BL	(0°-30°)	221.5	2.7	B1/500		
BM	(30°-60°)	240.0	2.9	B1/1000		
BH	(60°-80°)	170.5	2.1	B1/500		G1/500
BVH	(80°-90°)	3.7	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°	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2
2.5°	2363.8	2360.1	2344.5	2341.4	2323.9	2288.9	2248.4	2232.2	2199.1	2146.7	2088.7
5°	2403.1	2405.0	2406.2	2399.4	2396.9	2368.2	2323.3	2303.9	2259.6	2173.5	2067.5
7.5°	2255.9	2260.9	2276.5	2283.3	2313.3	2324.5	2315.2	2302.7	2267.7	2166.0	2016.9
10°	2100.5	2109.9	2126.7	2138.0	2174.8	2204.7	2242.8	2245.9	2238.4	2141.1	1960.2
12.5°	1967.0	1975.8	1994.5	2016.9	2054.4	2093.1	2149.8	2169.8	2194.7	2124.9	1919.6
15°	1852.2	1854.7	1872.8	1900.9	1950.2	2003.2	2070.6	2099.9	2148.6	2118.6	1888.4
17.5°	1751.8	1752.4	1764.3	1789.9	1849.8	1919.6	1998.2	2036.9	2098.7	2109.9	1861.0
20°	1685.7	1685.1	1685.7	1699.4	1752.4	1835.4	1930.9	1971.4	2050.6	2099.3	1832.9
22.5°	1663.2	1660.1	1645.7	1640.8	1674.4	1747.4	1861.6	1914.6	2007.6	2096.2	1812.3
25°	1690.7	1688.8	1658.2	1629.5	1632.6	1678.2	1791.1	1856.0	1973.9	2107.4	1807.3
27.5°	1779.3	1775.5	1728.7	1672.6	1637.0	1645.1	1738.7	1806.7	1947.1	2134.9	1814.2
30°	1895.3	1895.9	1846.0	1778.0	1694.4	1648.2	1710.6	1774.9	1929.0	2176.0	1829.2
32.5°	2024.4	2023.8	1988.2	1909.6	1803.0	1705.6	1723.1	1777.4	1931.5	2236.5	1857.9
35°	2157.9	2151.1	2139.2	2070.0	1945.2	1806.1	1779.9	1819.8	1957.7	2316.4	1906.5
37.5°	2312.0	2309.5	2321.4	2248.4	2121.1	1953.9	1879.7	1906.5	2023.8	2434.3	1985.1
40°	2557.2	2543.5	2549.1	2449.9	2319.5	2152.9	2019.4	2026.3	2129.2	2590.3	2109.3
42.5°	3024.5	2969.0	2864.8	2678.9	2537.9	2373.8	2202.2	2190.4	2278.3	2779.3	2272.7
45°	3582.8	3519.2	3256.6	2931.5	2756.2	2610.9	2428.1	2396.3	2461.8	3004.5	2483.6
47.5°	4048.9	3980.2	3632.1	3195.4	2978.3	2855.4	2678.2	2640.8	2681.4	3265.9	2736.9
50°	4207.9	4169.9	3864.2	3415.0	3202.3	3129.9	2992.0	2929.7	2939.6	3547.9	3032.6
52.5°	4135.0	4121.9	3917.2	3565.4	3409.4	3433.1	3335.8	3270.3	3259.1	3856.1	3359.5
55°	3980.9	3974.6	3874.8	3649.0	3592.2	3710.7	3818.0	3761.3	3655.2	4183.6	3629.6
57.5°	3760.6	3784.3	3856.1	3809.9	3816.8	4003.9	4266.0	4295.3	4136.8	4444.4	3829.9
60°	3172.3	3236.0	3564.7	3982.7	4302.8	4491.8	4745.7	4800.6	4544.8	4622.8	4061.3
62.5°	2345.1	2436.2	2904.7	3672.7	4570.4	5419.5	5383.9	5359.6	4934.1	4861.8	4482.4
65°	1377.5	1484.2	1880.3	2869.8	4166.8	6015.9	6575.5	6238.6	5527.4	5358.4	5153.1
67.5°	686.2	686.9	865.9	1514.7	3079.4	5599.8	8314.8	8120.2	6788.9	6090.1	5417.6
70°	527.8	542.1	640.7	880.3	1557.2	4361.4	8713.5	9512.6	8056.6	6057.7	4596.6
72.5°	447.3	456.7	570.2	766.1	1164.1	2394.4	7543.1	8408.4	7687.9	5118.2	3388.2
75°	321.9	329.4	504.7	695.0	1071.8	1187.8	5174.3	6236.1	5768.2	3600.3	1864.7
77.5°	79.9	79.2	175.9	564.0	958.9	989.4	2969.0	3999.0	3309.6	1474.2	479.1
80°	35.6	34.3	39.9	118.5	892.1	933.9	1305.7	2019.4	1269.6	238.9	146.6
82.5°	25.0	23.7	25.0	43.7	298.2	866.5	789.2	875.3	464.8	81.7	62.4
85°	8.1	7.5	13.7	36.8	83.6	499.7	769.8	653.8	345.6	34.9	41.8
87.5°	1.2	1.2	5.0	20.0	24.3	166.6	451.7	452.9	155.3	20.6	18.7
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°	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2	2091.2
2.5°	2059.4	2022.6	1970.8	1919.0	1872.2	1824.2	1785.5	1767.4	1759.3	1748.1	1723.7
5°	2012.0	1945.2	1831.7	1720.0	1615.8	1516.0	1430.5	1381.9	1329.4	1327.0	1301.4
7.5°	1935.8	1841.0	1662.0	1488.5	1329.4	1177.2	1046.2	961.4	903.4	867.2	842.2
10°	1851.0	1729.3	1492.3	1248.3	1031.9	828.5	660.0	550.2	483.5	449.8	430.5
12.5°	1783.6	1630.8	1325.1	1018.1	746.8	513.4	356.8	277.0	241.4	227.7	221.5
15°	1725.6	1540.3	1168.5	812.3	498.5	295.1	206.5	180.3	174.7	174.7	174.1
17.5°	1667.0	1453.0	1016.3	610.1	313.8	193.4	162.8	159.1	159.7	161.6	161.6
20°	1611.4	1370.0	869.7	434.8	205.9	154.7	147.9	146.6	148.5	151.0	150.4
22.5°	1566.5	1297.0	732.4	298.8	158.5	140.4	136.0	134.1	135.4	137.2	136.6
25°	1534.7	1234.6	606.4	208.4	137.9	127.9	122.9	120.4	119.2	120.4	119.8
27.5°	1515.4	1182.2	487.9	156.6	123.5	115.4	109.2	104.2	101.1	101.1	99.8
30°	1502.9	1132.9	382.4	129.8	111.7	102.9	94.2	87.3	82.3	81.1	80.5
32.5°	1502.3	1090.5	285.7	114.8	100.4	90.5	79.9	71.1	65.5	64.3	63.6
35°	1517.9	1056.2	210.2	103.6	90.5	78.6	66.8	57.4	52.4	52.4	51.8
37.5°	1558.4	1036.2	159.1	94.8	82.3	68.6	56.1	47.4	43.0	44.3	44.3
40°	1633.9	1032.5	129.8	88.0	75.5	59.9	45.5	38.7	36.8	38.7	38.7
42.5°	1749.3	1052.5	115.4	83.0	69.2	51.2	38.1	33.1	32.4	34.3	34.3
45°	1899.7	1091.8	107.3	78.6	62.4	42.4	31.8	28.7	28.1	30.6	30.6
47.5°	2081.8	1144.8	99.8	73.6	55.5	34.9	26.8	24.3	24.3	26.8	27.4
50°	2297.7	1216.5	92.3	68.6	49.9	29.3	22.5	20.6	21.2	23.7	24.3
52.5°	2546.0	1304.5	85.5	64.3	43.7	23.7	18.7	17.5	18.1	20.6	21.2
55°	2760.0	1381.2	77.4	59.9	35.6	19.3	15.6	15.0	15.6	18.7	18.7
57.5°	2946.5	1454.8	69.9	53.0	28.1	15.6	12.5	12.5	13.7	16.8	17.5
60°	3194.2	1570.9	63.6	44.9	21.2	11.9	10.0	10.6	12.5	15.0	15.6
62.5°	3632.7	1768.0	55.5	37.4	15.6	9.4	8.1	8.7	11.2	14.3	15.0
65°	4181.7	1954.6	46.2	31.2	11.9	6.9	6.2	8.1	11.2	14.3	15.0
67.5°	4125.6	1700.0	36.2	25.0	8.7	5.6	5.0	7.5	10.6	14.3	15.0
70°	3345.8	1191.6	26.8	16.8	6.9	5.0	5.0	7.5	10.6	13.7	14.3
72.5°	2320.8	663.2	20.6	11.2	6.2	5.0	4.4	6.9	10.0	13.7	14.3
75°	1104.2	203.4	16.2	8.1	5.6	4.4	3.7	6.9	10.0	13.7	14.3
77.5°	212.1	51.8	13.1	6.9	5.0	4.4	3.7	6.2	10.0	13.1	13.7
80°	71.7	23.1	10.6	6.2	5.0	4.4	3.7	6.2	9.4	12.5	13.1
82.5°	39.3	13.1	9.4	5.6	5.0	3.7	3.1	5.6	8.7	12.5	13.1
85°	30.6	9.4	7.5	5.6	5.0	3.7	3.1	5.6	8.7	11.9	12.5
87.5°	15.6	6.9	6.2	5.6	5.0	3.7	3.1	5.0	8.1	11.2	12.5
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)