

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: P198551

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198551  
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-SL3-7030-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 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: 9062 lumens  
Efficiency: N/A  
Efficacy: 81.6 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

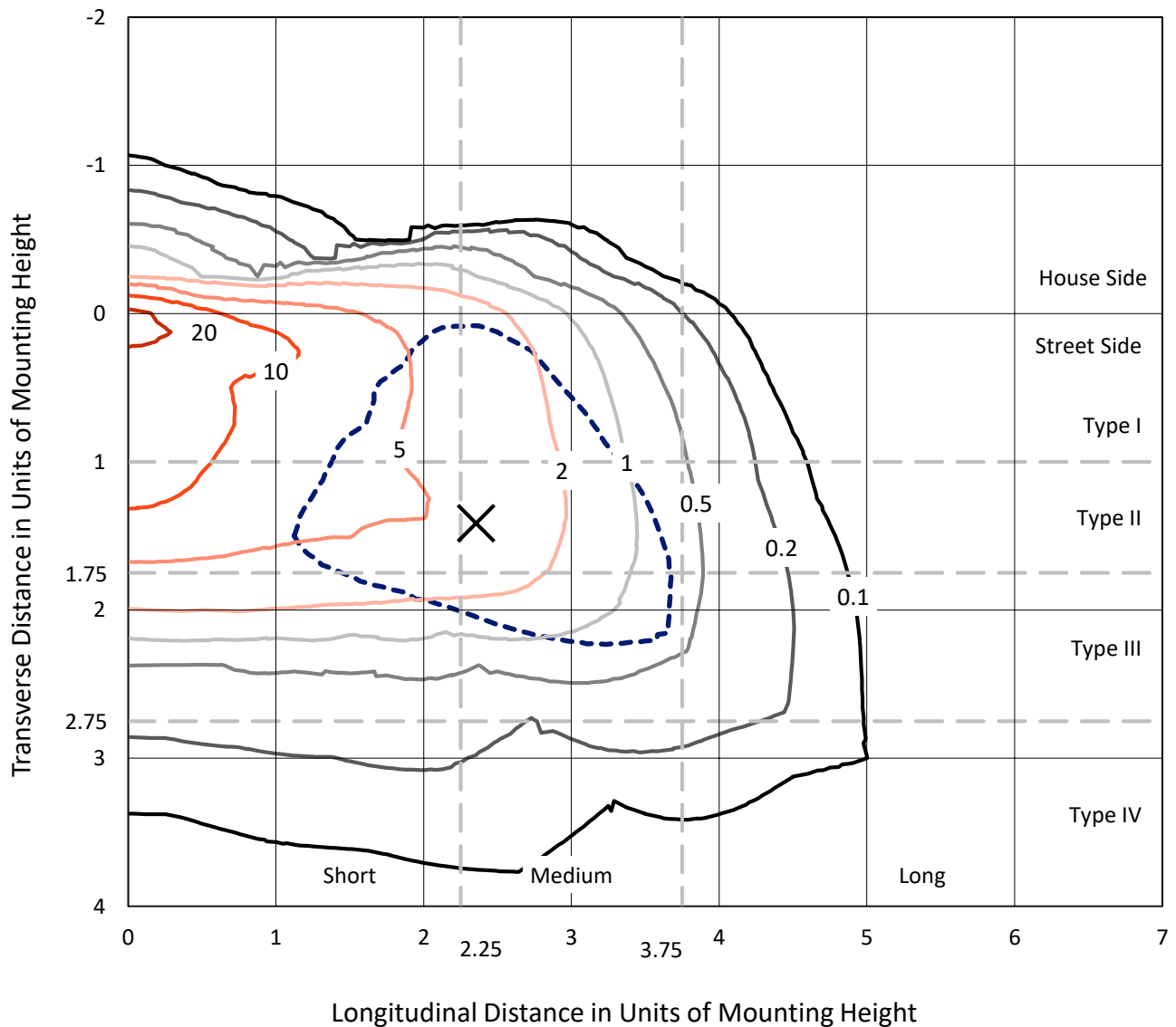


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

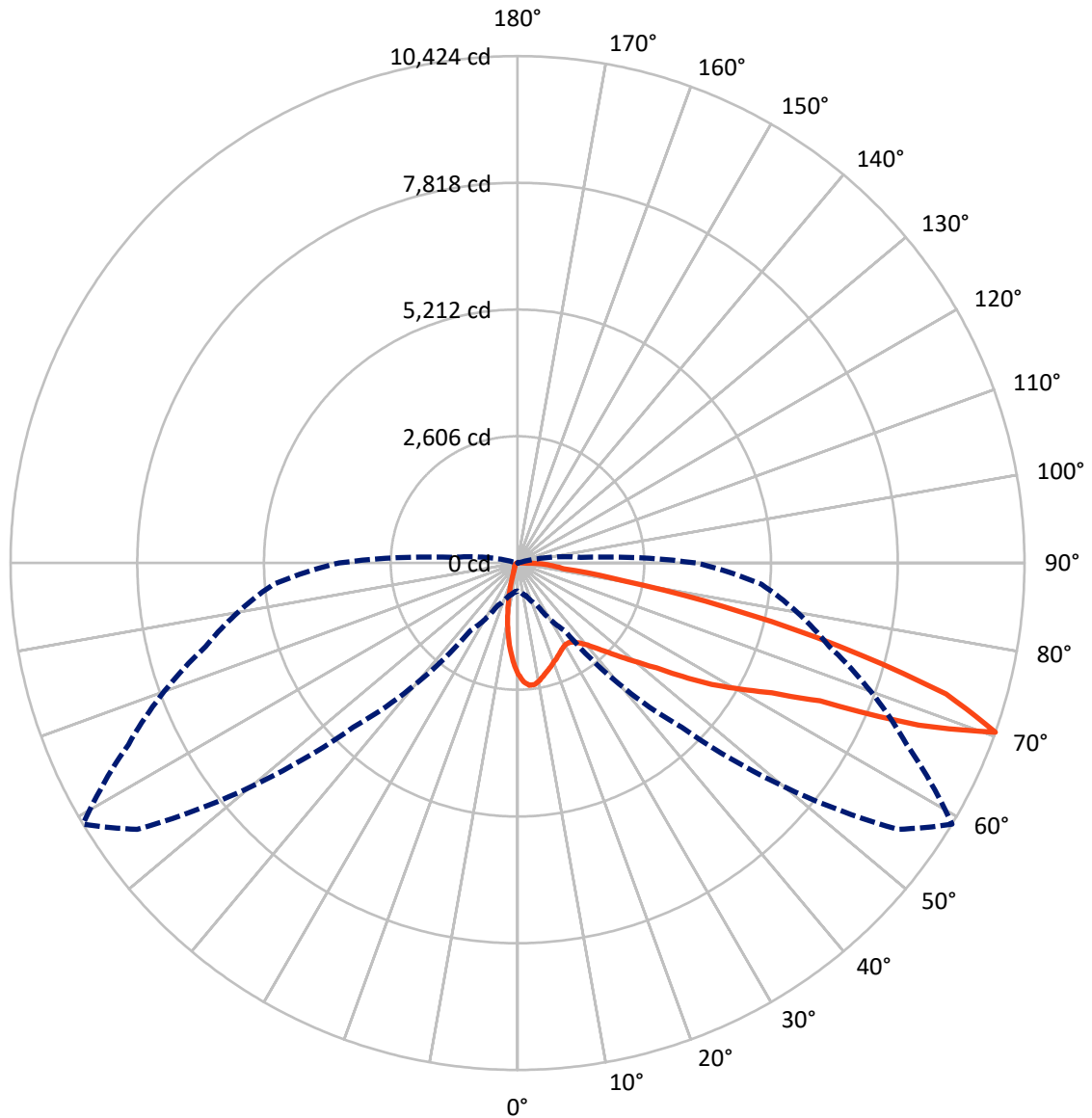


Based on 10 foot mounting height. Maximum calculated value = 24.4 fc  
 Type III - Medium - Non-Cutoff

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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	696.6	0.0	696.6
	% Fixture	7.7	0.0	7.7
<b>Street Side</b>	Lumens	8365.4	0.0	8365.4
	% Fixture	92.3	0.0	92.3
<b>Total</b>	Lumens	9062.0	0.0	9062.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.4	2.1
10°-20°	395.2	4.4
20°-30°	535.0	5.9
30°-40°	772.1	8.5
40°-50°	1282.2	14.1
50°-60°	1961.3	21.6
60°-70°	2439.4	26.9
70°-80°	1348.5	14.9
80°-90°	139.8	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°	9062.0	100.0
0°-180°	9062.0	100.0

**Coefficient of Utilization**



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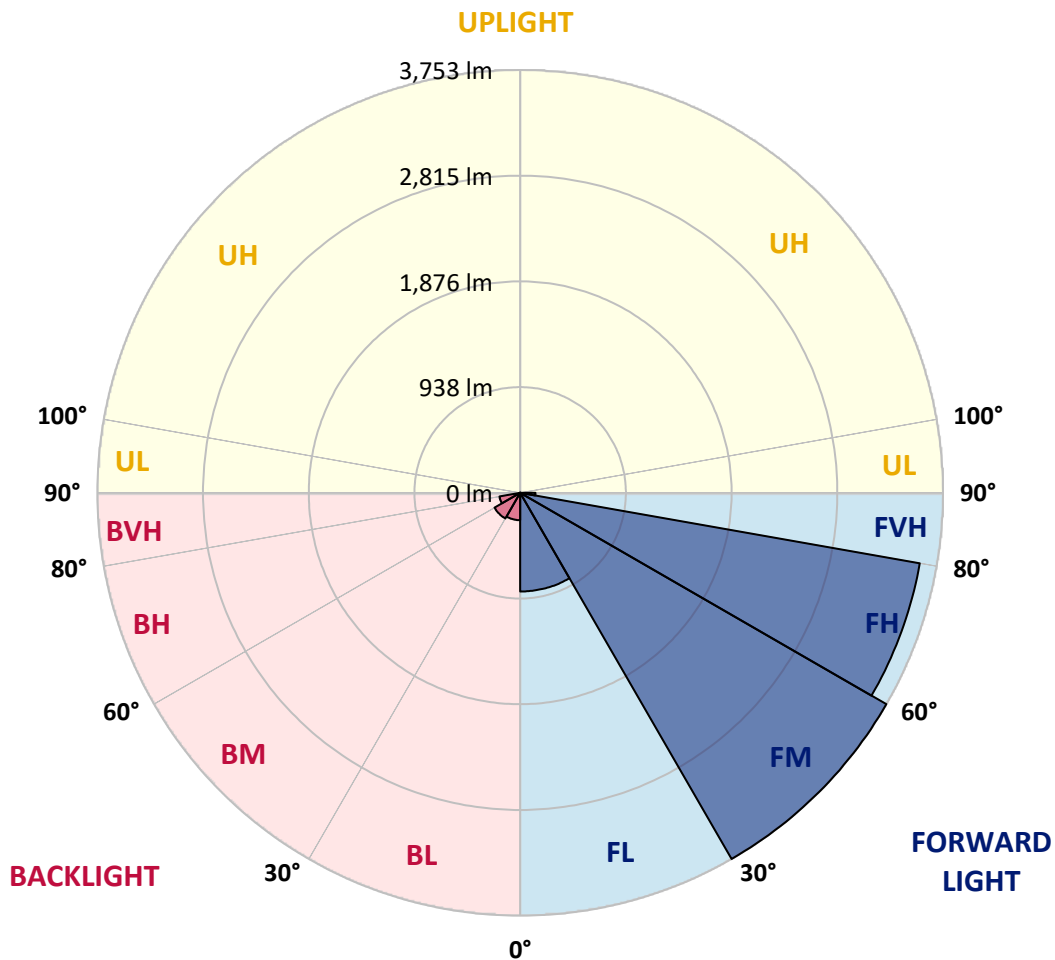
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	875.9	9.7			
FM	(30°-60°)	3752.7	41.4			
FH	(60°-80°)	3601.0	39.7			G2/5000
FVH	(80°-90°)	135.8	1.5			G2/225
BL	(0°-30°)	242.8	2.7	B1/500		
BM	(30°-60°)	263.0	2.9	B1/1000		
BH	(60°-80°)	186.9	2.1	B1/500		G1/500
BVH	(80°-90°)	4.0	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5
2.5°	2590.2	2586.1	2569.0	2565.6	2546.4	2508.2	2463.7	2445.9	2409.7	2352.3	2288.7
5°	2633.3	2635.3	2636.7	2629.2	2626.4	2595.0	2545.8	2524.6	2476.0	2381.7	2265.5
7.5°	2471.9	2477.4	2494.5	2502.0	2534.8	2547.1	2536.9	2523.2	2484.9	2373.5	2210.1
10°	2301.7	2312.0	2330.4	2342.7	2383.1	2415.9	2457.6	2461.0	2452.8	2346.1	2147.9
12.5°	2155.4	2165.0	2185.5	2210.1	2251.1	2293.5	2355.7	2377.6	2404.9	2328.4	2103.5
15°	2029.6	2032.4	2052.2	2083.0	2137.0	2195.1	2268.9	2301.0	2354.3	2321.5	2069.3
17.5°	1919.6	1920.3	1933.2	1961.3	2026.9	2103.5	2189.6	2232.0	2299.7	2312.0	2039.2
20°	1847.1	1846.4	1847.1	1862.1	1920.3	2011.2	2115.8	2160.2	2247.0	2300.3	2008.4
22.5°	1822.5	1819.1	1803.4	1797.9	1834.8	1914.8	2039.9	2098.0	2199.9	2296.9	1985.9
25°	1852.6	1850.5	1817.0	1785.6	1789.0	1838.9	1962.6	2033.7	2162.9	2309.2	1980.4
27.5°	1949.6	1945.5	1894.3	1832.8	1793.8	1802.7	1905.2	1979.7	2133.5	2339.3	1987.9
30°	2076.8	2077.5	2022.8	1948.3	1856.7	1806.1	1874.5	1944.9	2113.7	2384.4	2004.3
32.5°	2218.3	2217.6	2178.7	2092.5	1975.6	1869.0	1888.1	1947.6	2116.5	2450.7	2035.8
35°	2364.6	2357.1	2344.1	2268.2	2131.5	1979.0	1950.3	1994.1	2145.2	2538.2	2089.1
37.5°	2533.5	2530.7	2543.7	2463.7	2324.3	2141.1	2059.7	2089.1	2217.6	2667.4	2175.2
40°	2802.1	2787.1	2793.2	2684.5	2541.7	2359.1	2212.8	2220.4	2333.2	2838.3	2311.3
42.5°	3314.1	3253.3	3139.1	2935.4	2780.9	2601.1	2413.1	2400.1	2496.5	3045.5	2490.4
45°	3926.0	3856.2	3568.4	3212.3	3020.2	2860.9	2660.6	2625.7	2697.5	3292.3	2721.4
47.5°	4436.6	4361.4	3980.0	3501.4	3263.5	3128.9	2934.7	2893.7	2938.1	3578.7	2999.0
50°	4610.9	4569.2	4234.3	3742.1	3509.0	3429.7	3278.6	3210.2	3221.2	3887.7	3323.0
52.5°	4531.0	4516.6	4292.4	3906.8	3735.9	3761.9	3655.3	3583.5	3571.2	4225.4	3681.2
55°	4362.1	4355.3	4245.9	3998.4	3936.2	4066.1	4183.7	4121.5	4005.3	4584.3	3977.2
57.5°	4120.8	4146.8	4225.4	4174.8	4182.3	4387.4	4674.5	4706.6	4533.0	4870.0	4196.7
60°	3476.1	3545.9	3906.1	4364.2	4714.8	4922.0	5200.2	5260.4	4980.1	5065.5	4450.3
62.5°	2569.7	2669.5	3182.9	4024.4	5008.1	5938.5	5899.5	5872.9	5406.7	5327.4	4911.7
65°	1509.4	1626.3	2060.4	3144.6	4565.8	6592.0	7205.2	6836.1	6056.8	5871.5	5646.6
67.5°	752.0	752.7	948.8	1659.8	3374.3	6136.1	9111.1	8897.8	7439.0	6673.4	5936.5
70°	578.3	594.1	702.1	964.6	1706.3	4779.1	9548.0	10423.7	8828.1	6637.8	5036.8
72.5°	490.1	500.4	624.8	839.5	1275.6	2623.7	8265.5	9213.7	8424.1	5608.3	3712.7
75°	352.7	360.9	553.0	761.5	1174.4	1301.6	5669.8	6833.3	6320.6	3945.1	2043.3
77.5°	87.5	86.8	192.8	618.0	1050.7	1084.2	3253.3	4381.9	3626.5	1615.4	525.0
80°	39.0	37.6	43.8	129.9	977.6	1023.4	1430.8	2212.8	1391.1	261.8	160.6
82.5°	27.3	26.0	27.3	47.9	326.8	949.5	864.8	959.1	509.3	89.6	68.4
85°	8.9	8.2	15.0	40.3	91.6	547.6	843.6	716.4	378.7	38.3	45.8
87.5°	1.4	1.4	5.5	21.9	26.7	182.5	494.9	496.3	170.2	22.6	20.5
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°	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5	2291.5
2.5°	2256.6	2216.3	2159.5	2102.8	2051.5	1998.9	1956.5	1936.7	1927.8	1915.5	1888.8
5°	2204.6	2131.5	2007.1	1884.7	1770.5	1661.2	1567.5	1514.2	1456.8	1454.0	1426.0
7.5°	2121.2	2017.3	1821.1	1631.1	1456.8	1290.0	1146.4	1053.4	989.9	950.2	922.9
10°	2028.3	1895.0	1635.2	1367.9	1130.7	907.8	723.3	602.9	529.8	492.9	471.7
12.5°	1954.4	1787.0	1452.0	1115.6	818.3	562.6	391.0	303.5	264.6	249.5	242.7
15°	1890.9	1687.8	1280.4	890.1	546.2	323.3	226.3	197.6	191.4	191.4	190.7
17.5°	1826.6	1592.1	1113.6	668.6	343.9	211.9	178.4	174.3	175.0	177.1	177.1
20°	1765.8	1501.2	952.9	476.5	225.6	169.5	162.0	160.6	162.7	165.4	164.7
22.5°	1716.5	1421.2	802.6	327.4	173.6	153.8	149.0	147.0	148.3	150.4	149.7
25°	1681.7	1352.9	664.5	228.3	151.1	140.1	134.7	131.9	130.6	131.9	131.3
27.5°	1660.5	1295.4	534.6	171.6	135.4	126.5	119.6	114.2	110.7	110.7	109.4
30°	1646.8	1241.4	419.1	142.2	122.4	112.8	103.2	95.7	90.2	88.9	88.2
32.5°	1646.1	1194.9	313.1	125.8	110.1	99.1	87.5	77.9	71.8	70.4	69.7
35°	1663.2	1157.3	230.4	113.5	99.1	86.1	73.1	62.9	57.4	57.4	56.7
37.5°	1707.7	1135.5	174.3	103.9	90.2	75.2	61.5	52.0	47.2	48.5	48.5
40°	1790.4	1131.4	142.2	96.4	82.7	65.6	49.9	42.4	40.3	42.4	42.4
42.5°	1916.8	1153.2	126.5	90.9	75.9	56.1	41.7	36.2	35.5	37.6	37.6
45°	2081.6	1196.3	117.6	86.1	68.4	46.5	34.9	31.4	30.8	33.5	33.5
47.5°	2281.2	1254.4	109.4	80.7	60.8	38.3	29.4	26.7	26.7	29.4	30.1
50°	2517.7	1333.0	101.2	75.2	54.7	32.1	24.6	22.6	23.2	26.0	26.7
52.5°	2789.8	1429.4	93.7	70.4	47.9	26.0	20.5	19.1	19.8	22.6	23.2
55°	3024.3	1513.5	84.8	65.6	39.0	21.2	17.1	16.4	17.1	20.5	20.5
57.5°	3228.7	1594.2	76.6	58.1	30.8	17.1	13.7	13.7	15.0	18.5	19.1
60°	3500.1	1721.3	69.7	49.2	23.2	13.0	10.9	11.6	13.7	16.4	17.1
62.5°	3980.6	1937.3	60.8	41.0	17.1	10.3	8.9	9.6	12.3	15.7	16.4
65°	4582.2	2141.7	50.6	34.2	13.0	7.5	6.8	8.9	12.3	15.7	16.4
67.5°	4520.7	1862.8	39.6	27.3	9.6	6.2	5.5	8.2	11.6	15.7	16.4
70°	3666.2	1305.7	29.4	18.5	7.5	5.5	5.5	8.2	11.6	15.0	15.7
72.5°	2543.0	726.7	22.6	12.3	6.8	5.5	4.8	7.5	10.9	15.0	15.7
75°	1210.0	222.9	17.8	8.9	6.2	4.8	4.1	7.5	10.9	15.0	15.7
77.5°	232.4	56.7	14.4	7.5	5.5	4.8	4.1	6.8	10.9	14.4	15.0
80°	78.6	25.3	11.6	6.8	5.5	4.8	4.1	6.8	10.3	13.7	14.4
82.5°	43.1	14.4	10.3	6.2	5.5	4.1	3.4	6.2	9.6	13.7	14.4
85°	33.5	10.3	8.2	6.2	5.5	4.1	3.4	6.2	9.6	13.0	13.7
87.5°	17.1	7.5	6.8	6.2	5.5	4.1	3.4	5.5	8.9	12.3	13.7
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)