

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: P271310

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-7027-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271310  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24257)  
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-SL2-7027-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11266.4 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

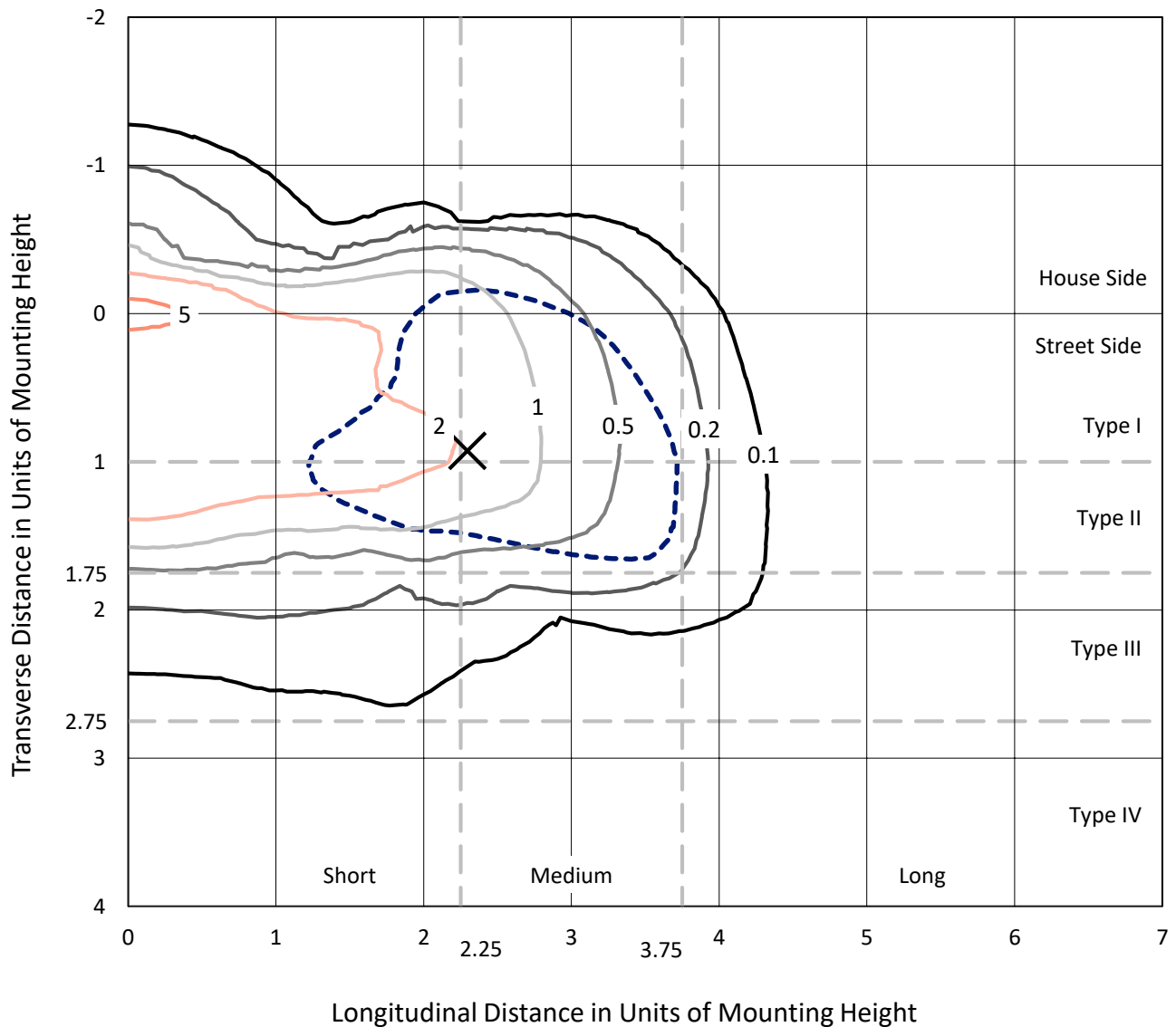
Input Watts (W): 128  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P271310  
 CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7027-1200

### Iso-Footcandle Lines of Horizontal Illumination

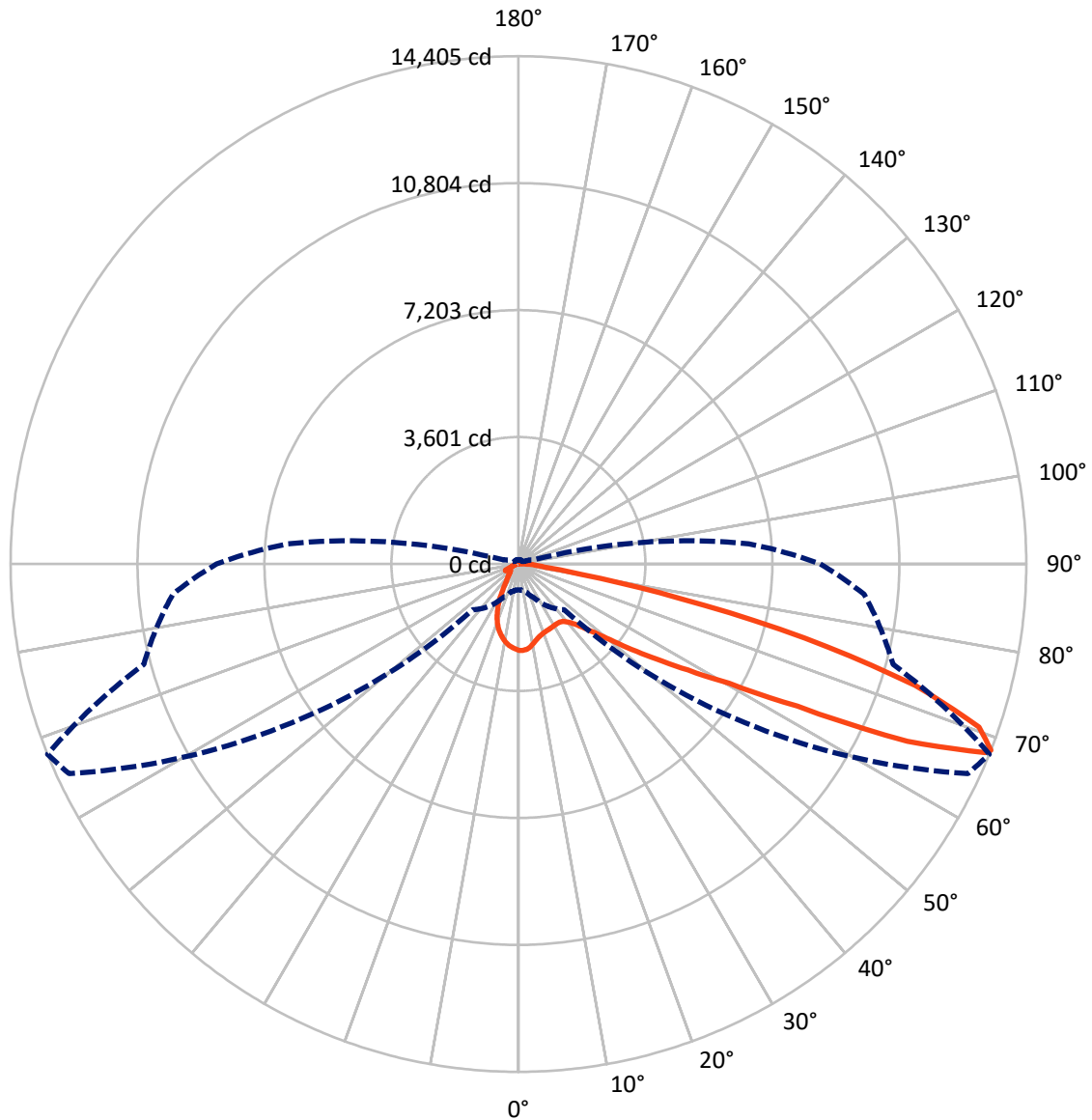
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.1 fc  
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P271310  
CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7027-1200

### Luminous Intensity Polar Plot



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



REPORT NUMBER: P271310

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7027-1200

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1843.2	0.0	1843.2
	% Fixture	16.4	0.0	16.4
<b>Street Side</b>	Lumens	9423.2	0.0	9423.2
	% Fixture	83.6	0.0	83.6
<b>Total</b>	Lumens	11266.4	0.0	11266.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.0	1.9
10°-20°	487.2	4.3
20°-30°	658.9	5.8
30°-40°	929.0	8.2
40°-50°	1527.7	13.6
50°-60°	2368.0	21.0
60°-70°	3070.3	27.3
70°-80°	1761.9	15.6
80°-90°	253.5	2.2
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°	11266.4	100.0
0°-180°	11266.4	100.0

**Coefficient of Utilization**



REPORT NUMBER: P271310

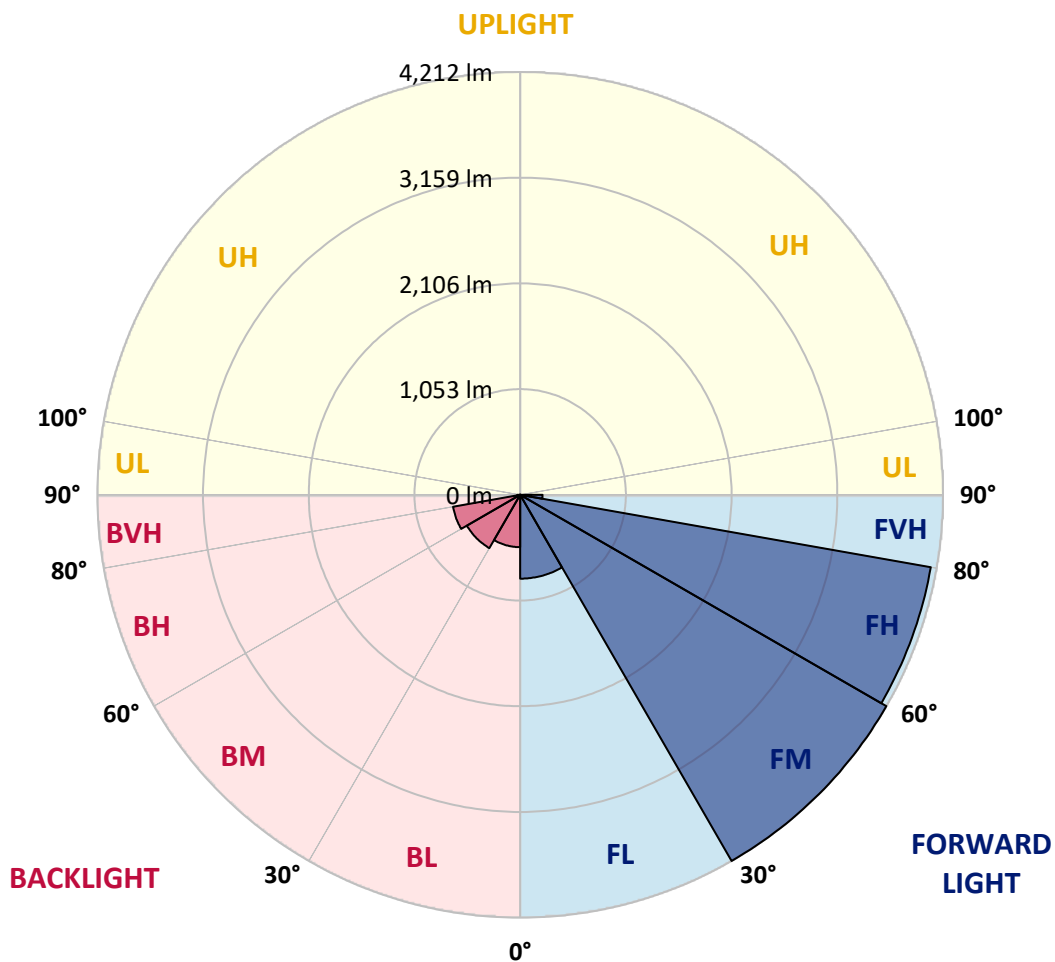
CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7027-1200

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	835.0	7.4			
FM (30°-60°)	4211.6	37.4			
FH (60°-80°)	4153.3	36.9			G2/5000
FVH (80°-90°)	223.3	2.0			G2/225
BL (0°-30°)	521.1	4.6	B2/1000		
BM (30°-60°)	613.1	5.4	B1/1000		
BH (60°-80°)	678.8	6.0	B2/1000		G2/1000
BVH (80°-90°)	30.2	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium





REPORT NUMBER: P271310

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7027-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5
2.5°	2386.0	2405.1	2405.1	2419.0	2431.6	2442.0	2450.8	2450.8	2450.8	2444.8	2439.6
5°	2135.0	2160.8	2164.5	2199.8	2246.1	2302.8	2366.0	2422.0	2433.1	2453.7	2461.7
7.5°	1960.6	1968.6	1982.6	2007.0	2054.1	2124.0	2223.3	2348.3	2378.6	2443.4	2477.3
10°	1836.9	1843.6	1855.4	1879.7	1922.4	1985.7	2083.4	2246.1	2296.2	2411.1	2478.0
12.5°	1746.5	1751.5	1762.7	1784.8	1828.1	1884.7	1984.8	2154.1	2215.9	2378.6	2488.2
15°	1675.8	1684.6	1693.5	1714.8	1758.9	1813.4	1914.9	2087.2	2154.1	2352.8	2507.3
17.5°	1647.9	1652.3	1653.7	1664.6	1704.4	1759.7	1861.3	2040.1	2109.3	2332.3	2522.1
20°	1665.5	1666.1	1651.4	1644.1	1667.0	1717.6	1816.4	2004.7	2075.4	2313.9	2528.0
22.5°	1742.7	1742.7	1704.4	1672.0	1656.7	1688.3	1786.2	1980.5	2056.9	2299.9	2528.0
25°	1889.9	1883.2	1823.6	1759.7	1691.1	1677.9	1767.1	1965.0	2043.0	2292.6	2518.5
27.5°	2083.4	2077.6	2001.9	1906.8	1783.2	1700.0	1760.4	1952.5	2029.0	2281.4	2497.8
30°	2319.1	2313.9	2227.7	2103.4	1920.8	1770.0	1775.9	1943.7	2018.0	2263.1	2463.2
32.5°	2553.8	2550.8	2482.3	2355.0	2110.7	1888.4	1816.4	1942.1	2012.2	2241.0	2421.3
35°	2790.0	2790.0	2748.1	2640.6	2366.0	2066.6	1901.0	1969.4	2023.2	2229.2	2385.2
37.5°	3138.9	3124.8	3047.0	2935.8	2687.6	2297.7	2037.8	2026.8	2065.8	2249.0	2373.4
40°	3679.1	3638.6	3443.6	3256.6	3038.7	2593.4	2238.0	2138.0	2161.5	2316.8	2401.3
42.5°	4244.2	4180.3	3921.9	3623.1	3401.6	2958.6	2500.8	2318.3	2317.5	2447.8	2490.6
45°	4729.2	4696.2	4416.4	4037.4	3815.9	3369.3	2832.6	2586.1	2559.7	2650.9	2661.9
47.5°	5011.1	4989.0	4820.6	4476.1	4307.6	3854.2	3253.8	2957.8	2907.8	2962.3	2945.4
50°	4933.1	4954.4	4906.0	4729.9	4835.9	4535.7	3790.2	3467.1	3372.1	3426.7	3385.4
52.5°	4522.4	4579.9	4623.2	4657.2	5139.9	5447.5	4464.2	4103.0	4024.1	4014.6	3974.9
55°	3782.9	3874.1	4010.9	4259.8	5058.3	6179.8	5641.9	4872.0	4757.2	4696.9	4712.2
57.5°	2574.5	2712.7	3007.9	3481.1	4633.5	6492.0	7383.1	5865.7	5671.3	5456.3	5506.4
60°	1418.2	1533.8	1884.7	2361.6	3664.4	6445.5	8926.4	7480.2	6868.7	6299.1	6402.1
62.5°	917.8	942.7	1204.0	1613.3	2249.0	5690.5	9783.8	10179.1	8883.0	7410.4	7555.4
65°	737.4	755.0	883.2	1301.1	1566.9	3660.7	9822.1	12978.6	12124.2	8920.6	8924.9
67.5°	720.5	728.5	802.9	1094.3	1469.6	1993.0	8490.1	14082.5	14280.5	10703.0	9841.2
68°	730.9	740.4	815.4	1060.4	1469.0	1836.9	7846.8	14065.7	14405.0	11001.2	9841.2
70°	644.8	656.5	831.7	1097.3	1406.4	1579.4	5373.2	13318.6	13864.7	11686.3	9337.8
72.5°	337.0	327.5	411.5	866.2	1583.1	1645.5	2838.6	11126.9	11764.3	10823.0	8067.6
75°	262.8	239.2	230.3	342.3	1392.5	1706.7	1648.5	7908.6	8389.9	7801.9	5392.3
77.5°	247.3	218.6	201.7	202.4	613.1	1775.9	1333.5	4654.2	4654.2	3721.8	1720.7
80°	198.7	172.2	161.2	184.1	295.8	1636.8	1391.7	2121.0	1808.9	961.8	473.9
82.5°	131.1	117.0	117.8	149.4	224.4	1092.9	1611.7	1047.2	786.7	426.2	279.0
85°	83.2	71.3	79.5	104.6	167.9	487.2	1595.6	727.8	521.0	239.2	139.1
87.5°	42.0	32.3	39.7	54.4	102.2	139.9	1313.7	649.8	386.5	99.4	75.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271310

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7027-1200

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5	2451.5
2.5°	2439.6	2423.4	2415.5	2402.2	2386.0	2369.8	2358.7	2353.6	2350.7	2352.1	2351.4
5°	2457.4	2436.1	2401.3	2352.1	2301.4	2247.6	2206.3	2174.7	2154.9	2148.9	2147.5
7.5°	2470.6	2439.6	2374.8	2285.2	2198.3	2104.1	2023.9	1959.8	1916.4	1896.5	1895.9
10°	2468.5	2428.7	2326.4	2193.9	2066.6	1928.2	1802.4	1694.9	1616.9	1579.4	1578.0
12.5°	2470.6	2416.1	2266.8	2087.2	1904.6	1706.7	1519.8	1352.7	1236.3	1181.2	1178.9
15°	2479.4	2402.8	2205.7	1967.9	1715.6	1435.9	1168.8	958.9	853.0	816.9	816.9
17.5°	2478.8	2380.8	2135.0	1829.6	1491.0	1116.5	797.8	668.2	658.0	691.1	696.2
20°	2464.1	2345.6	2043.7	1665.5	1227.5	772.7	540.9	522.5	605.0	696.2	706.4
22.5°	2441.1	2299.9	1938.5	1474.8	920.8	503.4	417.4	445.3	557.0	670.5	686.7
25°	2409.6	2244.7	1817.8	1253.3	612.4	362.0	348.2	382.7	461.5	537.2	549.0
27.5°	2363.1	2174.7	1686.1	1013.4	390.9	298.1	303.2	327.5	361.4	393.7	400.4
30°	2305.1	2093.1	1542.6	747.7	296.6	266.3	275.2	290.0	304.6	325.2	329.7
32.5°	2246.1	2009.9	1393.2	513.7	259.0	249.5	258.4	266.3	279.0	292.8	295.8
35°	2193.1	1932.7	1239.3	358.5	242.8	238.4	242.8	248.0	260.5	274.5	276.0
37.5°	2154.9	1869.4	1079.0	283.3	233.3	228.9	231.1	233.3	248.0	268.7	270.7
40°	2149.7	1827.4	916.4	254.6	226.0	220.1	218.6	220.1	239.2	262.8	264.9
42.5°	2199.8	1829.6	757.4	242.8	220.1	213.4	207.6	210.6	227.5	245.7	247.3
45°	2318.3	1881.1	619.7	237.7	215.0	209.8	201.0	202.4	210.6	220.1	221.5
47.5°	2527.3	1993.7	514.4	234.7	210.6	206.2	195.0	190.6	191.3	196.5	196.5
50°	2861.5	2182.2	450.4	231.9	206.8	198.7	186.2	177.3	175.2	178.1	178.9
52.5°	3359.7	2505.3	419.5	226.0	200.2	189.2	175.2	166.4	162.7	165.6	165.6
55°	4033.0	3021.1	404.7	217.8	192.1	177.3	164.8	157.6	154.6	156.8	156.8
57.5°	4800.6	3691.6	429.7	206.8	181.7	164.8	156.0	150.8	148.7	150.8	151.6
60°	5712.5	4568.8	602.0	192.9	170.8	153.8	148.7	145.7	144.3	146.5	146.5
62.5°	6924.7	5736.0	931.7	181.7	159.0	143.5	142.0	140.6	139.1	141.4	141.4
65°	8233.1	6798.1	958.9	175.2	148.7	134.7	135.5	135.5	133.9	136.2	136.2
67.5°	8649.7	6706.0	535.7	167.1	136.2	125.9	128.7	128.7	128.1	130.3	129.5
68°	8561.3	6560.3	466.6	164.8	133.9	123.6	126.7	127.3	126.7	128.7	128.1
70°	7903.5	5759.7	307.0	152.4	124.3	116.3	120.7	121.5	120.7	123.6	122.9
72.5°	6524.3	4320.0	226.7	133.2	112.6	106.7	111.1	111.8	112.6	115.5	114.9
75°	4143.4	2386.0	178.9	113.4	100.8	95.7	100.2	102.2	103.8	108.2	106.0
77.5°	1134.9	724.2	144.9	96.4	86.9	84.6	87.6	90.5	91.9	97.1	93.5
80°	397.4	320.2	120.7	81.7	72.1	71.3	74.3	77.3	78.7	83.2	78.7
82.5°	241.4	209.0	96.4	64.0	56.7	56.0	59.6	62.5	64.0	64.0	61.1
85°	125.9	110.4	70.6	44.8	38.9	36.8	43.4	47.2	47.8	47.2	44.8
87.5°	70.6	62.5	37.5	21.3	17.6	18.3	22.7	27.9	30.2	29.5	27.9
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)