

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: P271316

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271316  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)  
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-SL3-7027-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8454.5 lumens  
Efficiency: N/A  
Efficacy: 99.5 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

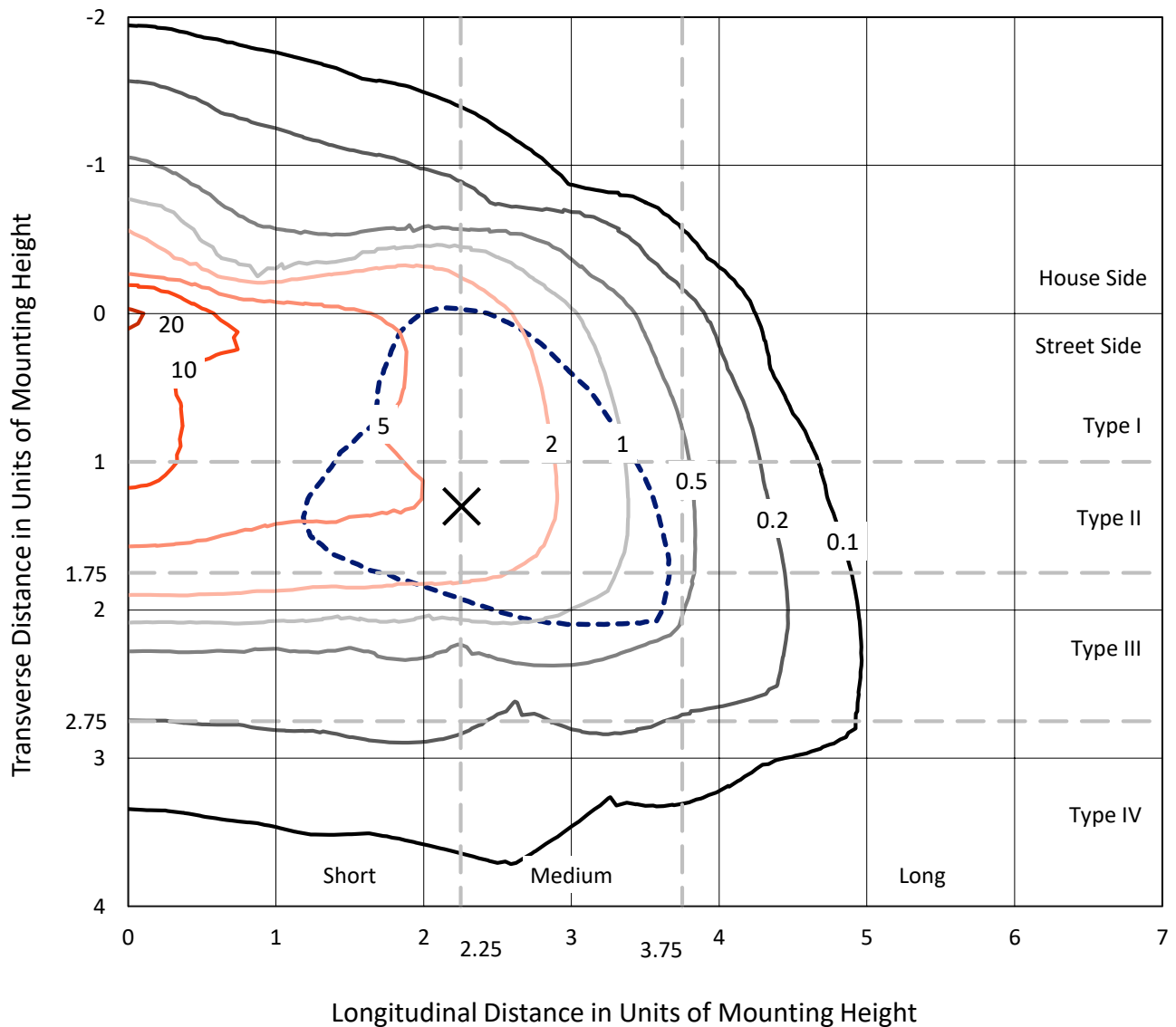


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

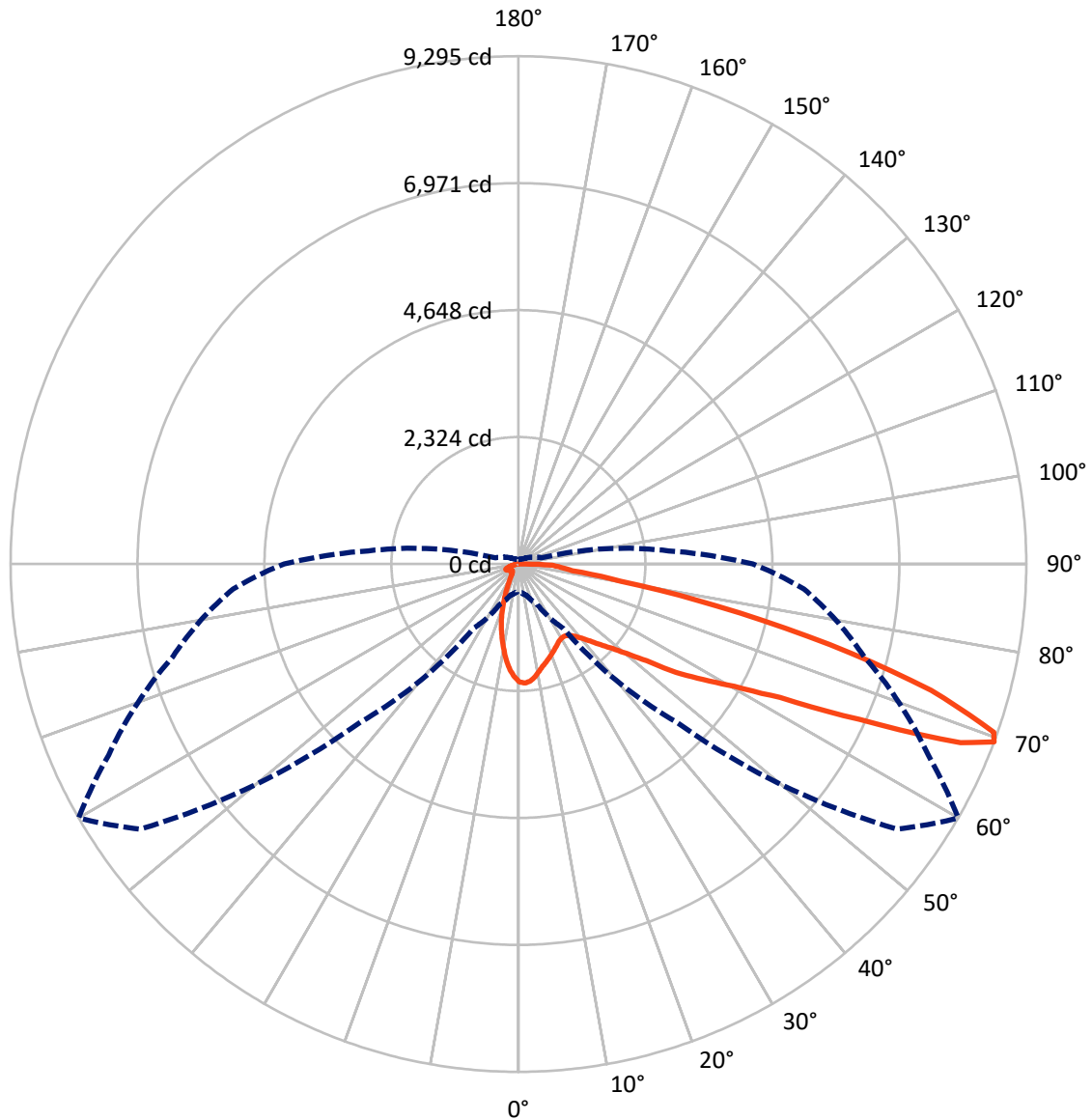


Based on 10 foot mounting height. Maximum calculated value = 21.6 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1205.9	0.0	1205.9
	% Fixture	14.3	0.0	14.3
<b>Street Side</b>	Lumens	7248.6	0.0	7248.6
	% Fixture	85.7	0.0	85.7
<b>Total</b>	Lumens	8454.5	0.0	8454.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.0	2.2
10°-20°	391.8	4.6
20°-30°	499.9	5.9
30°-40°	687.8	8.1
40°-50°	1114.2	13.2
50°-60°	1748.7	20.7
60°-70°	2331.3	27.6
70°-80°	1296.7	15.3
80°-90°	201.1	2.4
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°	8454.5	100.0
0°-180°	8454.5	100.0

**Coefficient of Utilization**



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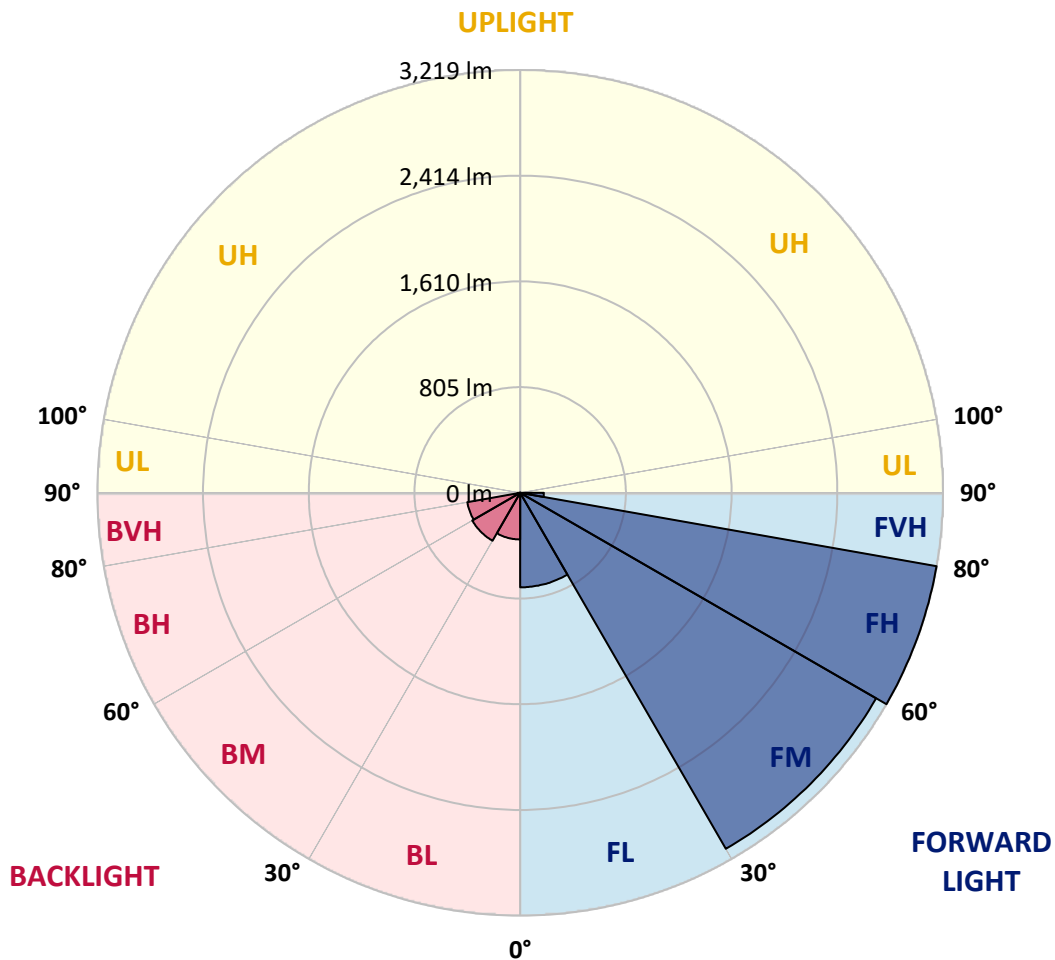
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	719.3	8.5			
FM	(30°-60°)	3129.4	37.0			
FH	(60°-80°)	3219.1	38.1			G2/5000
FVH	(80°-90°)	180.7	2.1			G2/225
BL	(0°-30°)	355.4	4.2	B1/500		
BM	(30°-60°)	421.3	5.0	B1/1000		
BH	(60°-80°)	408.9	4.8	B1/500		G1/500
BVH	(80°-90°)	20.4	0.2			G1/100
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°	60°	65°	75°	85°
0°	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2
2.5°	2214.6	2220.6	2220.6	2215.7	2213.1	2197.3	2188.1	2181.5	2170.1	2149.0	2130.2
5°	2135.5	2146.9	2151.8	2154.0	2168.0	2163.2	2163.7	2159.3	2149.6	2126.8	2095.9
7.5°	1990.3	1992.4	2001.1	2015.6	2049.8	2073.6	2093.2	2097.1	2094.8	2078.0	2034.8
10°	1847.0	1850.9	1861.2	1886.1	1918.6	1952.7	1995.0	2012.5	2025.5	2020.0	1965.2
12.5°	1728.3	1728.9	1740.2	1769.0	1805.4	1848.2	1905.7	1932.8	1963.7	1976.1	1914.8
15°	1614.0	1621.5	1632.4	1667.1	1712.1	1766.2	1832.5	1869.8	1910.5	1946.3	1875.8
17.5°	1527.2	1533.1	1539.7	1568.4	1620.5	1688.3	1770.1	1810.3	1864.0	1918.6	1835.6
20°	1479.5	1481.7	1476.9	1490.8	1534.8	1608.0	1702.8	1751.2	1815.0	1892.1	1794.5
22.5°	1469.7	1469.7	1451.9	1449.1	1468.6	1530.4	1633.5	1692.5	1770.6	1873.7	1757.7
25°	1515.4	1512.0	1478.4	1447.4	1440.5	1472.0	1567.4	1639.9	1732.7	1873.1	1730.0
27.5°	1601.5	1597.1	1555.4	1503.4	1458.4	1444.8	1516.3	1590.7	1702.8	1891.6	1715.9
30°	1708.8	1707.1	1664.9	1599.9	1525.6	1455.7	1496.2	1565.1	1682.9	1925.6	1715.4
32.5°	1826.4	1818.9	1792.8	1727.8	1631.3	1515.8	1508.3	1566.3	1677.3	1975.6	1727.8
35°	1951.7	1946.3	1939.8	1874.3	1765.8	1622.1	1560.8	1603.7	1703.9	2044.9	1763.1
37.5°	2111.0	2105.2	2116.0	2044.5	1925.6	1761.4	1649.7	1678.5	1758.2	2145.8	1828.7
40°	2394.6	2377.4	2346.9	2236.9	2112.2	1932.3	1778.3	1782.5	1850.9	2280.7	1933.8
42.5°	2860.4	2804.5	2654.3	2452.2	2309.1	2130.6	1945.8	1925.2	1978.8	2459.2	2086.8
45°	3327.1	3264.3	3010.5	2686.9	2512.7	2343.7	2152.9	2103.6	2138.2	2666.8	2283.5
47.5°	3628.6	3597.6	3311.4	2921.6	2726.4	2575.7	2389.9	2308.5	2333.3	2902.1	2526.5
50°	3716.9	3690.3	3465.4	3105.4	2928.1	2856.0	2683.1	2575.3	2579.6	3176.9	2817.5
52.5°	3650.8	3639.9	3490.9	3219.3	3113.5	3151.4	3089.1	2939.0	2903.2	3478.3	3133.1
55°	3562.4	3566.2	3508.8	3333.6	3302.2	3426.9	3620.3	3499.5	3347.8	3792.3	3461.6
57.5°	3284.4	3287.0	3437.8	3551.5	3662.2	3812.9	4034.1	3983.2	3806.4	4131.1	3829.7
60°	2644.6	2665.7	3001.2	3506.5	4073.6	4573.5	4627.7	4539.9	4294.3	4521.4	4308.5
62.5°	1889.3	1908.4	2297.1	3044.1	4025.5	5434.4	5723.9	5374.7	4956.3	5105.3	4981.7
65°	992.6	989.5	1290.2	2103.6	3390.6	5634.0	7451.3	6857.0	6071.5	5908.3	5632.4
67.5°	554.7	572.5	689.1	1061.0	2209.8	4958.5	8554.5	8729.5	7621.9	6545.3	5604.2
69°	512.8	518.9	597.0	820.2	1440.5	4091.1	8459.6	9295.0	8275.8	6548.0	5243.0
70°	498.2	504.8	575.8	755.7	1210.0	3352.0	8114.3	9228.8	8434.6	6402.7	4914.5
72.5°	446.7	455.4	524.3	679.3	1019.8	1727.8	6536.1	7899.1	7640.4	5596.0	3810.7
75°	381.2	395.8	499.8	674.4	966.0	1098.4	4358.8	5884.9	5686.5	4002.0	2162.1
77.5°	157.7	159.4	218.5	493.9	1013.7	1051.1	2342.6	3727.7	3300.1	1754.8	651.1
80°	110.0	107.8	109.0	144.2	818.0	1058.3	1201.9	1895.9	1473.5	462.9	304.6
82.5°	92.7	91.6	95.9	90.5	277.0	1200.9	1005.2	988.3	693.9	249.4	145.3
85°	61.3	59.6	78.6	82.5	131.7	953.6	1081.0	776.9	517.2	133.4	61.9
87.5°	29.9	30.4	44.9	55.9	70.0	302.0	1035.4	614.3	399.6	58.0	25.0
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°	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2	2157.2
2.5°	2122.4	2106.3	2091.7	2073.2	2059.1	2047.1	2030.9	2030.3	2027.7	2031.3	2032.4
5°	2075.4	2048.2	2007.1	1960.9	1928.4	1885.6	1843.9	1829.8	1813.9	1812.4	1817.4
7.5°	2004.3	1962.0	1891.6	1821.0	1750.5	1678.5	1610.1	1575.4	1541.9	1531.6	1536.5
10°	1925.2	1871.4	1763.6	1648.7	1549.4	1442.0	1338.0	1270.8	1209.5	1183.4	1190.1
12.5°	1863.4	1795.1	1643.2	1494.2	1345.7	1191.6	1054.5	921.7	821.3	776.3	779.1
15°	1810.3	1722.9	1530.4	1332.0	1146.1	935.1	745.0	590.9	503.1	470.6	469.5
17.5°	1752.8	1647.0	1412.9	1181.4	940.0	679.3	498.7	407.7	372.9	362.1	362.1
20°	1691.5	1569.0	1289.7	1017.2	723.2	474.3	375.1	339.9	327.0	323.7	323.1
22.5°	1634.6	1492.5	1166.2	841.9	523.2	360.0	319.3	305.8	303.5	306.3	306.3
25°	1589.6	1425.3	1041.0	657.6	380.6	301.4	284.0	282.4	290.6	300.4	302.0
27.5°	1556.0	1365.2	917.3	480.4	299.2	262.3	256.5	263.6	282.4	302.0	305.8
30°	1532.7	1313.6	769.3	345.4	249.4	229.8	232.7	245.1	273.8	303.5	311.7
32.5°	1522.4	1271.9	620.2	265.1	213.1	202.2	209.2	225.6	255.4	285.1	295.0
35°	1532.1	1241.5	482.5	220.2	186.5	178.4	186.5	203.2	222.8	237.4	243.4
37.5°	1567.4	1230.7	363.3	195.2	169.2	161.1	167.5	178.9	187.6	193.0	195.7
40°	1641.7	1242.0	284.7	182.1	159.4	150.1	151.9	157.3	163.2	167.5	168.1
42.5°	1759.8	1279.5	253.2	177.2	153.4	141.6	138.8	142.7	149.1	155.0	156.1
45°	1917.1	1341.8	249.9	178.9	150.7	134.4	129.0	132.8	141.6	151.3	152.9
47.5°	2120.3	1440.5	265.1	187.6	152.4	130.7	122.4	126.3	137.7	150.7	152.9
50°	2361.0	1577.2	293.2	200.6	159.9	130.7	119.8	123.1	134.9	149.7	151.9
52.5°	2644.6	1767.3	322.6	213.5	170.8	135.6	120.9	120.4	131.2	144.7	147.4
55°	2957.4	2003.8	350.8	224.9	176.7	142.0	123.5	117.0	125.9	136.6	138.8
57.5°	3325.5	2327.4	400.1	235.9	180.0	147.0	126.9	113.8	118.8	126.3	128.0
60°	3824.9	2802.9	496.0	254.3	185.9	149.1	127.4	110.6	110.0	115.5	116.1
62.5°	4476.0	3359.8	587.8	276.0	197.8	149.7	125.3	108.4	103.0	104.7	104.7
65°	4938.9	3564.6	561.1	294.4	208.8	149.1	123.1	106.8	97.6	95.0	95.0
67.5°	4675.5	3148.7	476.6	299.2	209.8	143.1	118.1	103.0	92.7	86.1	86.1
69°	4288.4	2760.0	437.6	290.6	201.1	136.1	112.7	99.3	89.4	81.8	81.8
70°	3972.8	2465.7	413.7	280.4	190.8	130.2	107.8	95.4	86.1	79.7	79.1
72.5°	2966.1	1645.3	353.5	241.9	156.7	110.0	94.3	85.1	77.6	73.2	73.2
75°	1565.1	824.6	289.6	197.4	120.9	87.9	77.6	71.5	67.3	66.7	66.1
77.5°	512.8	372.9	208.1	148.6	88.9	68.4	61.9	58.0	57.5	59.6	59.6
80°	277.0	222.8	133.8	100.3	61.9	50.9	47.7	47.3	48.8	52.0	52.0
82.5°	134.4	110.0	79.7	61.9	42.3	37.4	37.4	38.0	40.2	43.8	43.8
85°	58.0	52.0	46.2	34.8	26.1	23.4	26.6	29.3	30.9	33.5	34.8
87.5°	27.7	24.4	21.1	13.6	11.4	11.9	14.2	17.3	20.7	22.7	23.4
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)