

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: P271305

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271305  
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  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1050mA 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: 10271.2 lumens  
Efficiency: N/A  
Efficacy: 92.5 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

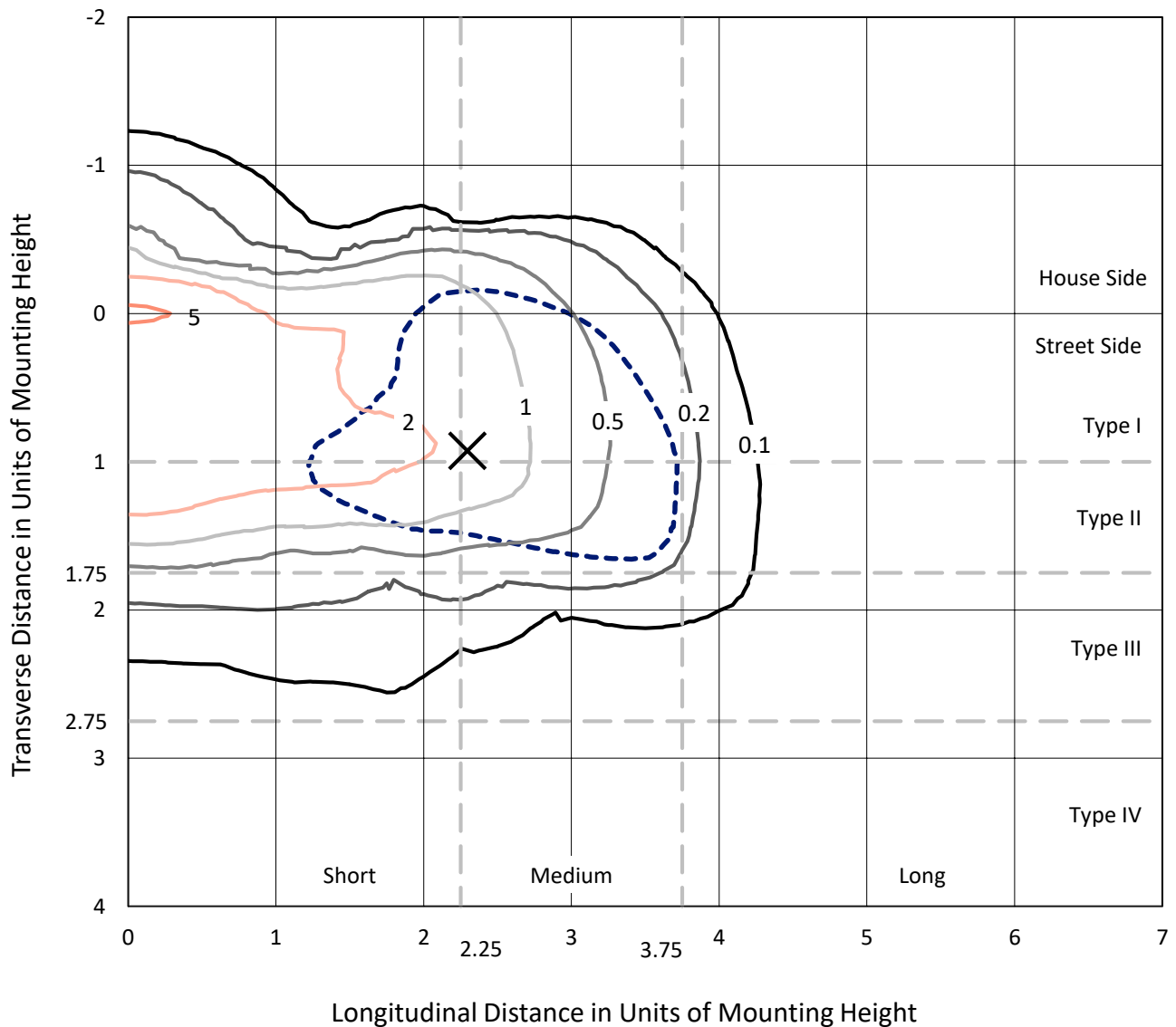
Input Watts (W): 111  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

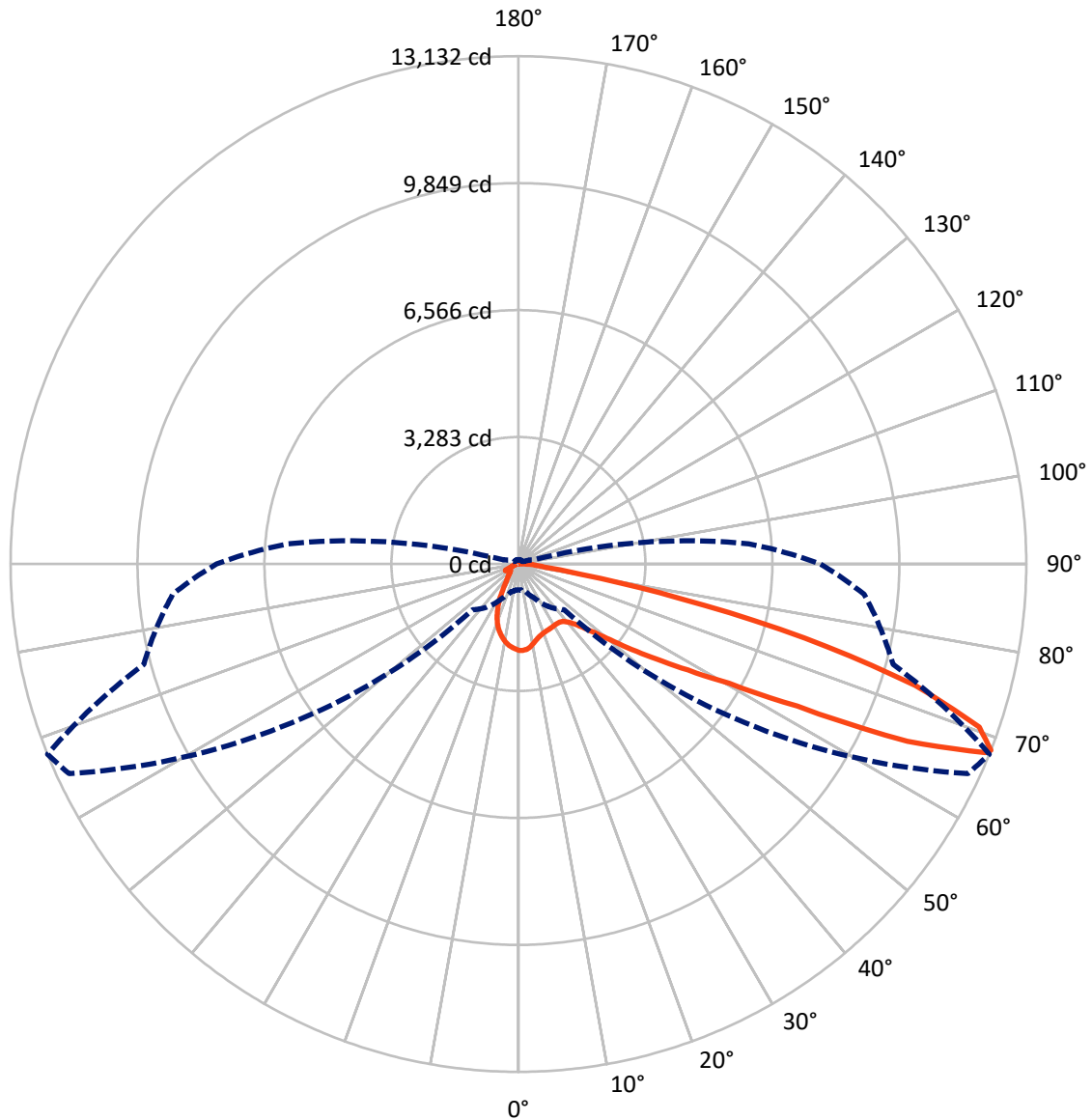
✕ Max cd  
 - - - 1/2 Max cd



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1680.4	0.0	1680.4
	% Fixture	16.4	0.0	16.4
<b>Street Side</b>	Lumens	8590.8	0.0	8590.8
	% Fixture	83.6	0.0	83.6
<b>Total</b>	Lumens	10271.2	0.0	10271.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.5	1.9
10°-20°	444.1	4.3
20°-30°	600.7	5.8
30°-40°	846.9	8.2
40°-50°	1392.7	13.6
50°-60°	2158.8	21.0
60°-70°	2799.1	27.3
70°-80°	1606.2	15.6
80°-90°	231.1	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°	10271.2	100.0
0°-180°	10271.2	100.0



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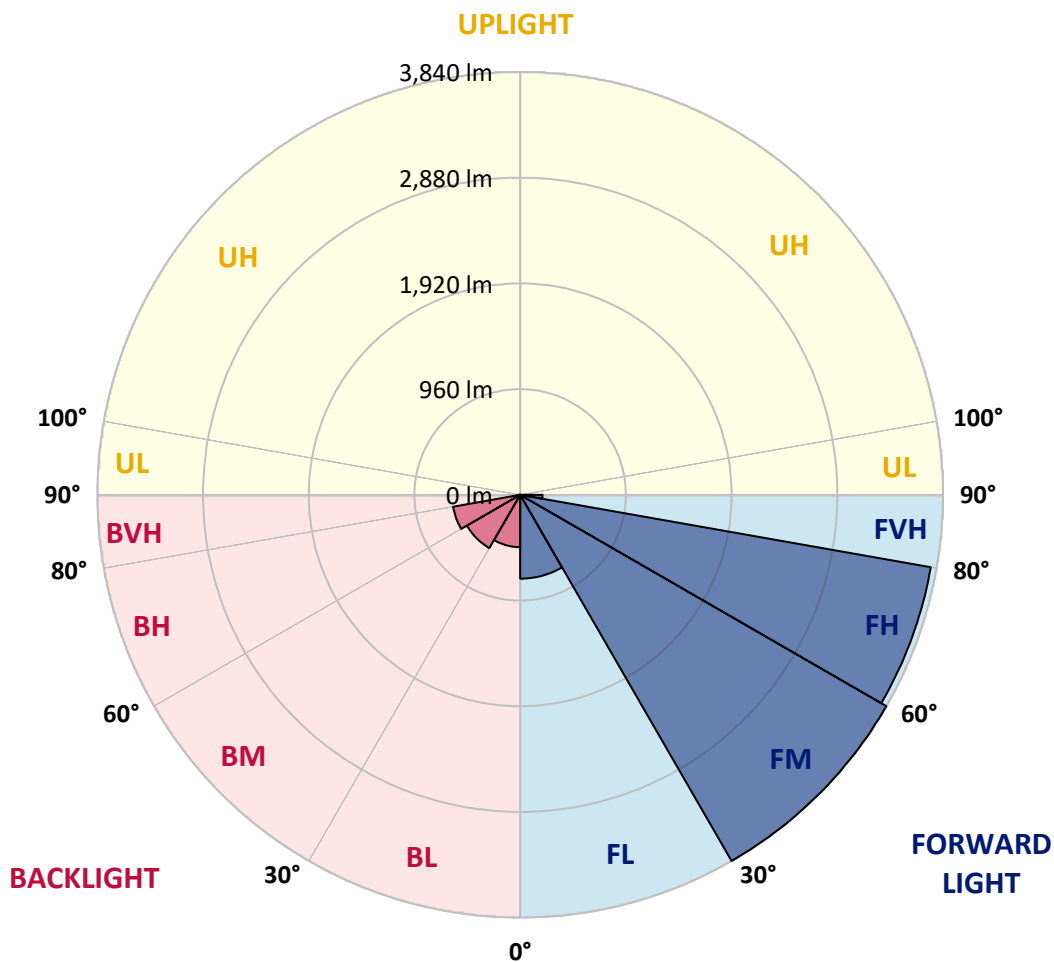
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	761.3	7.4			
FM	(30°-60°)	3839.6	37.4			
FH	(60°-80°)	3786.4	36.9			G2/5000
FVH	(80°-90°)	203.6	2.0			G2/225
BL	(0°-30°)	475.1	4.6	B1/500		
BM	(30°-60°)	558.9	5.4	B1/1000		
BH	(60°-80°)	618.9	6.0	B2/1000		G2/1000
BVH	(80°-90°)	27.5	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0
2.5°	2175.2	2192.7	2192.7	2205.3	2216.7	2226.2	2234.3	2234.3	2234.3	2228.9	2224.3
5°	1946.4	1970.0	1973.2	2005.5	2047.7	2099.3	2157.1	2208.0	2218.2	2236.9	2244.3
7.5°	1787.4	1794.8	1807.5	1829.7	1872.5	1936.3	2026.9	2141.0	2168.5	2227.5	2258.3
10°	1674.7	1680.6	1691.5	1713.5	1752.6	1810.3	1899.5	2047.7	2093.3	2198.1	2259.1
12.5°	1592.2	1596.8	1606.9	1627.0	1666.6	1718.3	1809.5	1963.9	2020.2	2168.5	2268.5
15°	1527.7	1535.8	1543.8	1563.3	1603.6	1653.2	1745.8	1902.8	1963.9	2145.1	2285.8
17.5°	1502.2	1506.3	1507.6	1517.6	1553.9	1604.3	1696.8	1859.9	1922.9	2126.2	2299.3
20°	1518.3	1519.0	1505.6	1498.9	1519.8	1565.9	1655.8	1827.6	1892.1	2109.5	2304.7
22.5°	1588.8	1588.8	1553.9	1524.5	1510.3	1539.2	1628.4	1805.6	1875.3	2096.7	2304.7
25°	1722.9	1716.9	1662.7	1604.3	1541.9	1529.8	1610.9	1791.4	1862.5	2089.9	2296.0
27.5°	1899.5	1894.0	1824.9	1738.4	1625.8	1549.8	1604.9	1780.0	1849.8	2079.9	2277.3
30°	2114.2	2109.5	2031.0	1917.5	1751.2	1613.6	1618.9	1771.9	1839.6	2063.1	2245.7
32.5°	2328.1	2325.5	2263.1	2146.9	1924.3	1721.6	1655.8	1770.6	1834.3	2043.0	2207.4
35°	2543.6	2543.6	2505.4	2407.4	2157.1	1884.0	1733.1	1795.4	1844.4	2032.2	2174.5
37.5°	2861.6	2848.9	2777.6	2676.4	2450.2	2094.7	1857.9	1847.9	1883.3	2050.4	2163.7
40°	3354.0	3317.1	3139.3	2969.0	2770.4	2364.3	2040.3	1949.1	1970.5	2112.2	2189.3
42.5°	3869.4	3811.0	3575.4	3303.1	3101.0	2697.3	2279.9	2113.5	2112.9	2231.6	2270.5
45°	4311.5	4281.3	4026.4	3680.8	3478.9	3071.6	2582.4	2357.7	2333.5	2416.7	2426.9
47.5°	4568.5	4548.4	4394.7	4080.7	3927.0	3513.7	2966.3	2696.5	2650.9	2700.6	2685.2
50°	4497.4	4516.8	4472.5	4312.1	4408.8	4135.1	3455.4	3160.9	3074.3	3123.9	3086.3
52.5°	4123.0	4175.3	4214.8	4245.7	4685.9	4966.3	4070.0	3740.5	3668.8	3660.1	3623.9
55°	3448.7	3531.9	3656.7	3883.5	4611.4	5633.9	5143.4	4441.7	4336.9	4282.0	4296.1
57.5°	2347.0	2473.2	2742.2	3173.6	4224.3	5918.5	6730.9	5347.4	5170.4	4974.5	5020.0
60°	1292.9	1398.2	1718.3	2153.1	3340.6	5876.2	8137.9	6819.6	6261.9	5742.7	5836.6
62.5°	836.7	859.5	1097.6	1470.7	2050.4	5187.7	8919.6	9279.9	8098.3	6755.8	6887.9
65°	672.3	688.5	805.2	1186.2	1428.5	3337.4	8954.5	11832.1	11053.1	8132.5	8136.6
67.5°	656.8	664.2	731.9	997.7	1339.9	1816.9	7740.1	12838.5	13019.0	9757.6	8971.9
68°	666.3	674.9	743.3	966.8	1339.3	1674.7	7153.7	12823.1	13132.4	10029.2	8971.9
70°	587.8	598.5	758.2	1000.4	1282.2	1439.9	4898.5	12142.1	12640.0	10654.0	8513.0
72.5°	307.3	298.5	375.0	789.7	1443.1	1500.2	2587.8	10144.0	10725.0	9867.0	7355.0
75°	239.5	218.1	210.1	312.0	1269.5	1556.0	1503.0	7209.9	7648.8	7112.7	4916.1
77.5°	225.5	199.2	183.9	184.5	558.8	1618.9	1215.8	4243.1	4243.1	3393.0	1568.7
80°	181.2	157.1	147.0	167.8	269.8	1492.2	1268.8	1933.7	1649.2	876.9	432.1
82.5°	119.5	106.7	107.3	136.3	204.6	996.4	1469.4	954.8	717.2	388.4	254.3
85°	75.7	65.0	72.5	95.3	153.0	444.1	1454.6	663.6	475.1	218.1	126.8
87.5°	38.3	29.6	36.2	49.6	93.2	127.5	1197.6	592.4	352.2	90.5	69.1
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°	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0	2235.0
2.5°	2224.3	2209.4	2202.0	2190.0	2175.2	2160.5	2150.5	2145.7	2142.9	2144.3	2143.6
5°	2240.4	2220.8	2189.3	2144.3	2098.0	2049.0	2011.5	1982.6	1964.6	1959.2	1957.9
7.5°	2252.4	2224.3	2165.2	2083.3	2004.1	1918.2	1845.1	1786.6	1747.2	1729.1	1728.3
10°	2250.3	2214.1	2120.9	2000.0	1884.0	1757.9	1643.2	1545.2	1474.1	1439.9	1438.5
12.5°	2252.4	2202.7	2066.6	1902.8	1736.5	1556.0	1385.5	1233.3	1127.3	1076.9	1074.8
15°	2260.4	2190.6	2010.9	1794.2	1563.9	1309.0	1065.5	874.2	777.7	744.8	744.8
17.5°	2259.7	2170.6	1946.4	1668.0	1359.3	1017.8	727.3	609.2	599.8	630.0	634.7
20°	2246.3	2138.3	1863.3	1518.3	1119.2	704.5	493.2	476.5	551.5	634.7	644.2
22.5°	2225.6	2096.7	1767.2	1344.6	839.3	458.9	380.4	405.9	507.9	611.2	625.9
25°	2196.6	2046.3	1657.3	1142.6	558.2	330.0	317.3	348.9	420.6	489.8	500.5
27.5°	2154.4	1982.6	1537.1	923.8	356.3	271.7	276.4	298.5	329.5	359.0	365.0
30°	2101.4	1908.2	1406.2	681.6	270.4	242.9	250.9	264.3	277.8	296.6	300.7
32.5°	2047.7	1832.4	1270.2	468.3	236.2	227.5	235.4	242.9	254.3	267.1	269.8
35°	1999.4	1761.8	1129.9	326.8	221.4	217.4	221.4	226.2	237.5	250.3	251.6
37.5°	1964.6	1704.3	983.6	258.4	212.7	208.6	210.7	212.7	226.2	244.9	246.9
40°	1959.8	1665.9	835.3	232.1	206.0	200.6	199.2	200.6	218.1	239.5	241.6
42.5°	2005.5	1668.0	690.3	221.4	200.6	194.6	189.3	191.9	207.2	224.0	225.5
45°	2113.5	1715.0	564.9	216.8	195.9	191.2	183.2	184.5	191.9	200.6	201.9
47.5°	2304.1	1817.6	468.9	214.1	191.9	187.8	177.9	173.8	174.5	179.1	179.1
50°	2608.7	1989.3	410.6	211.3	188.6	181.2	169.8	161.7	159.7	162.4	163.0
52.5°	3063.0	2283.9	382.5	206.0	182.4	172.5	159.7	151.6	148.3	150.9	150.9
55°	3676.9	2754.3	369.1	198.5	175.1	161.7	150.2	143.5	140.9	142.9	142.9
57.5°	4376.6	3365.5	391.8	188.6	165.7	150.2	142.2	137.5	135.6	137.5	138.2
60°	5207.8	4165.3	548.9	175.8	155.6	140.2	135.6	132.9	131.5	133.5	133.5
62.5°	6312.8	5229.4	849.3	165.7	144.9	130.9	129.4	128.2	126.8	128.8	128.8
65°	7505.9	6197.5	874.2	159.7	135.6	122.8	123.4	123.4	122.1	124.1	124.1
67.5°	7885.6	6113.7	488.5	152.4	124.1	114.8	117.4	117.4	116.7	118.8	118.0
68°	7805.2	5980.8	425.3	150.2	122.1	112.6	115.4	116.2	115.4	117.4	116.7
70°	7205.2	5250.9	279.8	138.9	113.4	106.0	110.0	110.8	110.0	112.6	112.1
72.5°	5947.9	3938.4	206.7	121.5	102.6	97.2	101.2	102.0	102.6	105.3	104.7
75°	3777.5	2175.2	163.0	103.3	91.9	87.2	91.3	93.2	94.6	98.6	96.6
77.5°	1034.6	660.3	132.2	87.9	79.2	77.2	79.8	82.6	83.9	88.6	85.2
80°	362.2	291.9	110.0	74.5	65.8	65.0	67.7	70.4	71.8	75.7	71.8
82.5°	220.1	190.5	87.9	58.4	51.7	51.1	54.3	57.0	58.4	58.4	55.7
85°	114.8	100.6	64.4	41.0	35.6	33.5	39.5	42.9	43.6	42.9	41.0
87.5°	64.4	57.0	34.2	19.5	16.1	16.8	20.8	25.5	27.5	26.8	25.5
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)