

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: P198717

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198717  
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-SL3-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 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: 9954.3 lumens  
Efficiency: N/A  
Efficacy: 117.1 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

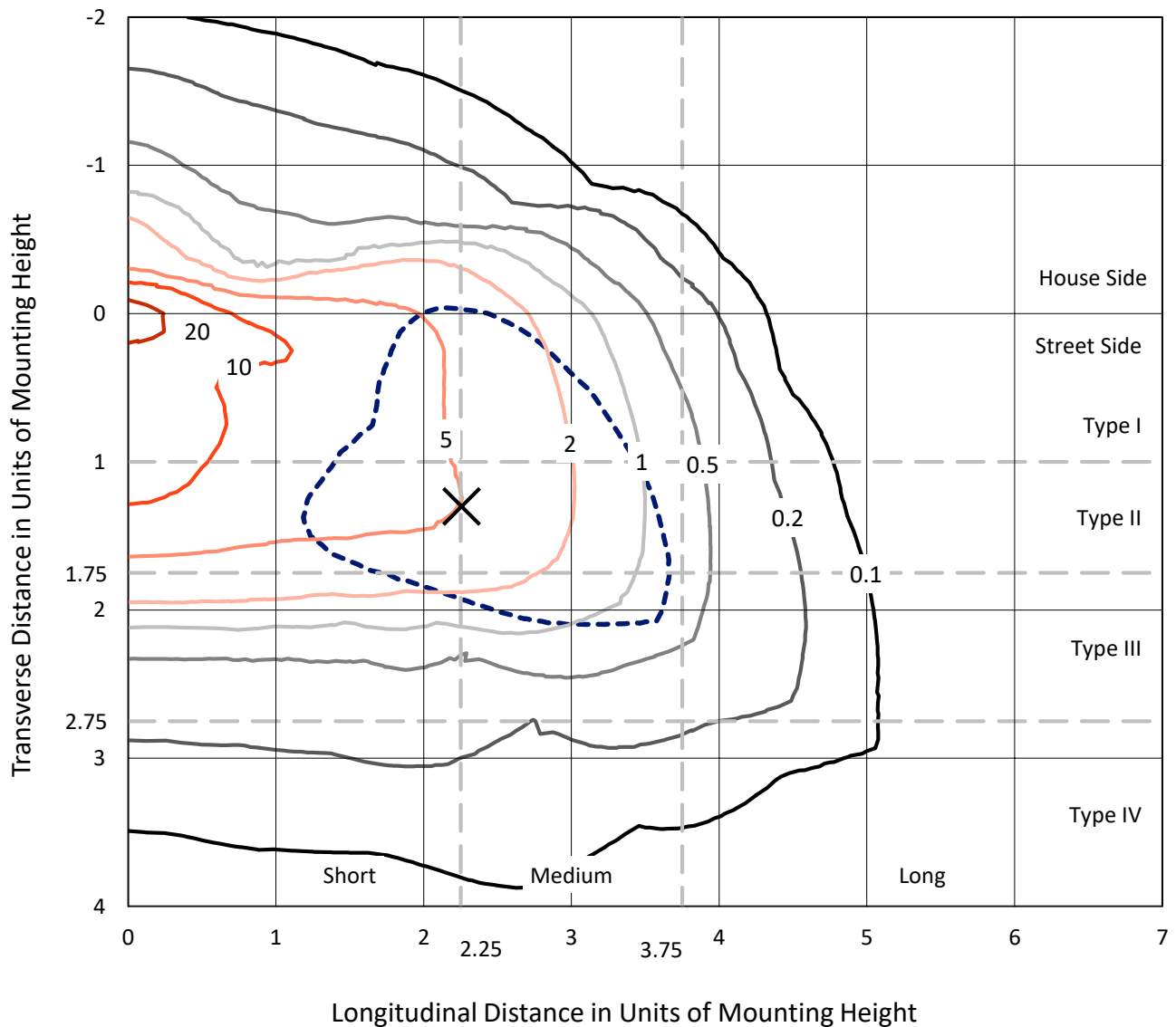
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

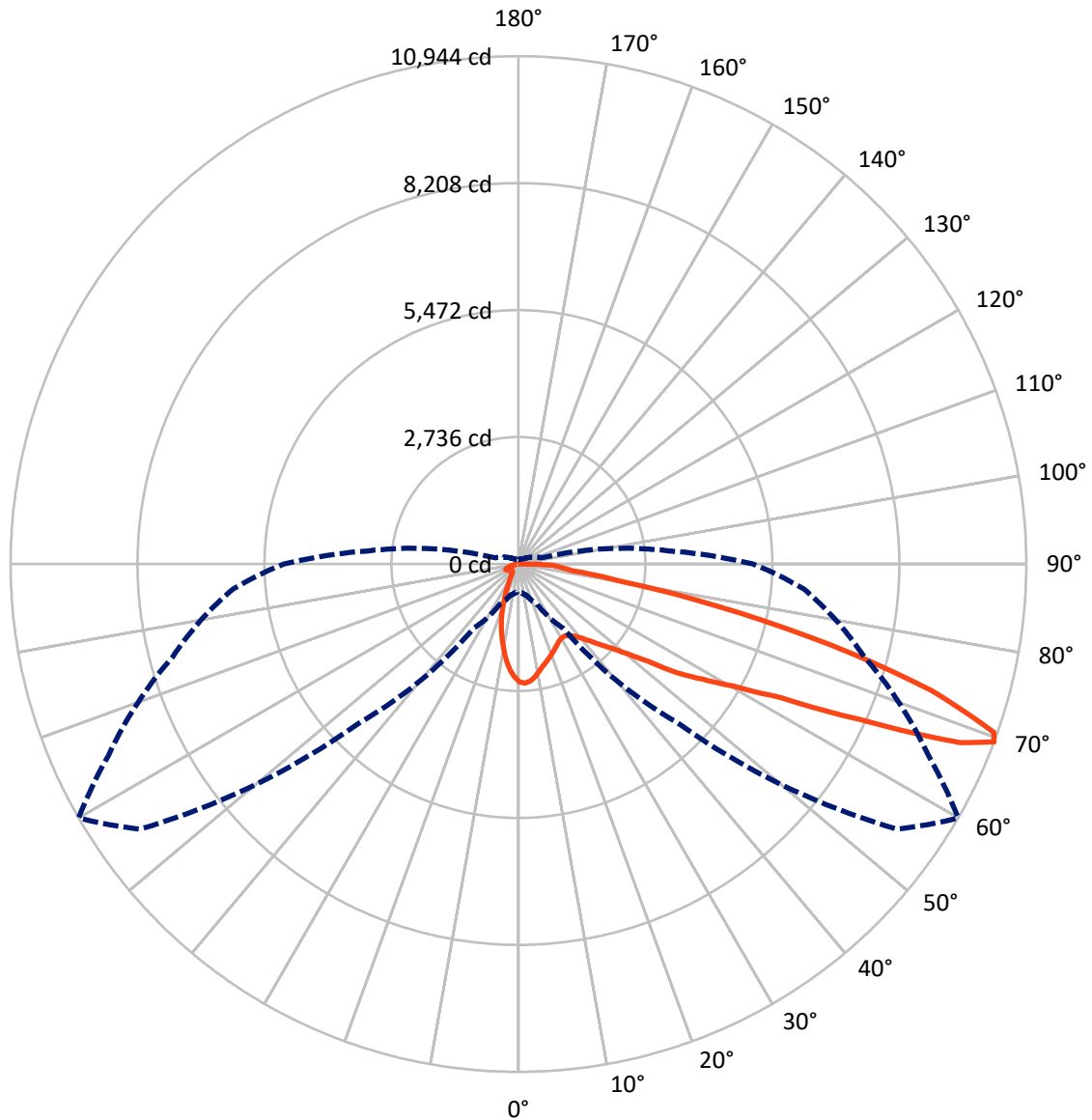
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 25.4 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	1419.8	0.0	1419.8
	% Fixture	14.3	0.0	14.3
<b>Street Side</b>	Lumens	8534.5	0.0	8534.5
	% Fixture	85.7	0.0	85.7
<b>Total</b>	Lumens	9954.3	0.0	9954.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.5	2.2
10°-20°	461.3	4.6
20°-30°	588.5	5.9
30°-40°	809.9	8.1
40°-50°	1311.8	13.2
50°-60°	2058.9	20.7
60°-70°	2744.8	27.6
70°-80°	1526.8	15.3
80°-90°	236.8	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°	9954.3	100.0
0°-180°	9954.3	100.0

**Coefficient of Utilization**



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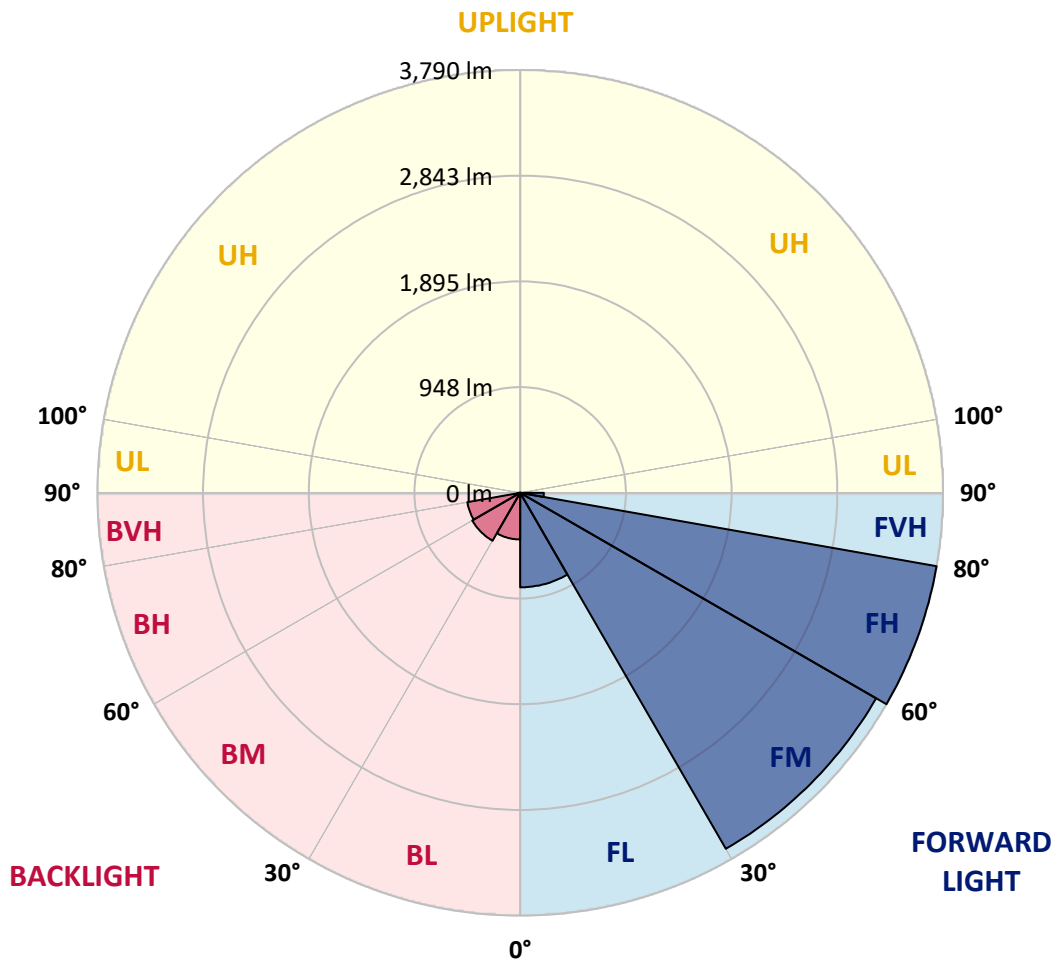
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	846.9	8.5			
FM	(30°-60°)	3684.6	37.0			
FH	(60°-80°)	3790.2	38.1			G2/5000
FVH	(80°-90°)	212.8	2.1			G2/225
BL	(0°-30°)	418.4	4.2	B1/500		
BM	(30°-60°)	496.0	5.0	B1/1000		
BH	(60°-80°)	481.4	4.8	B1/500		G1/500
BVH	(80°-90°)	24.0	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°	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9
2.5°	2607.5	2614.6	2614.6	2608.8	2605.7	2587.1	2576.3	2568.6	2555.2	2530.3	2508.0
5°	2514.3	2527.7	2533.5	2536.1	2552.7	2546.9	2547.6	2542.4	2531.0	2504.2	2467.8
7.5°	2343.3	2345.8	2356.1	2373.2	2413.4	2441.6	2464.6	2469.0	2466.4	2446.7	2395.6
10°	2174.8	2179.2	2191.4	2220.7	2259.0	2299.2	2349.0	2369.5	2384.8	2378.4	2313.9
12.5°	2035.0	2035.6	2049.0	2082.8	2125.6	2176.0	2243.7	2275.7	2312.0	2326.7	2254.6
15°	1900.2	1909.2	1922.0	1962.8	2015.8	2079.7	2157.5	2201.6	2249.5	2291.6	2208.6
17.5°	1798.1	1805.2	1812.9	1846.6	1907.9	1987.7	2084.2	2131.3	2194.5	2259.0	2161.4
20°	1742.0	1744.5	1738.8	1755.4	1807.0	1893.3	2005.0	2061.8	2137.1	2227.8	2112.8
22.5°	1730.5	1730.5	1709.5	1706.3	1729.2	1802.0	1923.2	1992.8	2084.8	2206.0	2069.4
25°	1784.1	1780.2	1740.7	1704.3	1696.1	1733.1	1845.4	1930.9	2040.1	2205.4	2036.9
27.5°	1885.6	1880.5	1831.4	1770.1	1717.1	1701.2	1785.4	1872.8	2005.0	2227.1	2020.3
30°	2011.9	2010.1	1960.3	1883.7	1796.2	1713.9	1761.7	1842.8	1981.4	2267.3	2019.6
32.5°	2150.5	2141.5	2111.0	2034.3	1920.7	1784.7	1775.8	1844.1	1975.0	2326.1	2034.3
35°	2298.0	2291.6	2283.9	2206.7	2079.0	1909.8	1837.7	1888.2	2006.2	2407.7	2075.8
37.5°	2485.7	2478.6	2491.4	2407.1	2267.3	2073.9	1942.4	1976.2	2070.0	2526.5	2153.1
40°	2819.5	2799.0	2763.3	2633.7	2486.9	2274.9	2093.7	2098.8	2179.2	2685.5	2276.9
42.5°	3367.8	3302.1	3125.2	2887.2	2718.6	2508.6	2290.9	2266.7	2329.9	2895.5	2456.9
45°	3917.4	3843.3	3544.6	3163.5	2958.6	2759.5	2534.8	2476.7	2517.6	3139.9	2688.6
47.5°	4272.3	4235.9	3898.9	3439.9	3210.1	3032.6	2813.7	2718.0	2747.3	3417.0	2974.5
50°	4376.3	4345.1	4080.1	3656.3	3447.5	3362.6	3159.1	3032.0	3037.1	3740.5	3317.3
52.5°	4298.4	4285.7	4110.1	3790.3	3665.8	3710.5	3637.2	3460.3	3418.2	4095.5	3688.9
55°	4194.4	4198.9	4131.2	3925.1	3888.0	4034.8	4262.7	4120.3	3941.6	4465.1	4075.6
57.5°	3867.0	3870.1	4047.6	4181.6	4311.8	4489.3	4749.8	4689.7	4481.6	4864.0	4509.1
60°	3113.8	3138.6	3533.8	4128.6	4796.3	5384.9	5448.7	5345.3	5056.1	5323.6	5072.7
62.5°	2224.5	2246.9	2704.6	3584.2	4739.5	6398.6	6739.4	6328.3	5835.5	6011.1	5865.5
65°	1168.7	1164.9	1519.2	2476.7	3992.1	6633.4	8773.1	8073.5	7148.6	6956.5	6631.5
67.5°	653.1	674.0	811.3	1249.2	2601.8	5838.1	10072.1	10278.2	8974.1	7706.5	6598.3
69°	603.8	610.9	702.8	965.8	1696.1	4816.8	9960.4	10944.0	9744.0	7709.7	6173.2
70°	586.7	594.2	677.9	889.9	1424.8	3946.7	9553.7	10866.1	9931.0	7538.5	5786.4
72.5°	526.0	536.2	617.2	799.8	1200.6	2034.3	7695.6	9300.4	8995.8	6588.7	4486.8
75°	448.8	466.0	588.5	794.1	1137.5	1293.2	5132.1	6929.0	6695.3	4712.1	2545.6
77.5°	185.8	187.7	257.3	581.5	1193.7	1237.7	2758.2	4389.1	3885.5	2066.3	766.6
80°	129.6	127.1	128.3	169.8	963.2	1246.0	1415.2	2232.2	1734.9	545.1	358.7
82.5°	109.1	107.9	112.9	106.6	326.2	1413.9	1183.5	1163.7	817.0	293.6	171.0
85°	72.1	70.2	92.6	97.0	155.1	1122.8	1272.9	914.7	609.0	157.0	72.7
87.5°	35.1	35.7	53.0	65.8	82.3	355.6	1219.2	723.2	470.5	68.3	29.4
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°	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9
2.5°	2499.1	2479.8	2462.7	2441.0	2424.4	2410.3	2391.1	2390.5	2387.4	2391.8	2393.1
5°	2443.5	2411.6	2363.0	2308.8	2270.5	2220.1	2170.9	2154.3	2135.8	2133.9	2139.6
7.5°	2359.8	2310.1	2227.1	2144.1	2061.1	1976.2	1895.8	1854.9	1815.4	1803.3	1809.0
10°	2266.7	2203.4	2076.5	1941.2	1824.3	1697.9	1575.3	1496.3	1424.0	1393.5	1401.1
12.5°	2193.9	2113.5	1934.7	1759.2	1584.3	1403.1	1241.6	1085.1	967.1	914.1	917.3
15°	2131.3	2028.6	1802.0	1568.4	1349.4	1101.1	877.1	695.8	592.4	554.0	552.8
17.5°	2063.7	1939.2	1663.4	1390.9	1106.8	799.8	587.3	480.0	439.2	426.4	426.4
20°	1991.6	1847.3	1518.6	1197.5	851.5	558.5	441.7	400.2	384.9	381.0	380.4
22.5°	1924.6	1757.3	1373.0	991.3	616.0	423.8	375.9	360.0	357.4	360.7	360.7
25°	1871.6	1678.2	1225.6	774.3	448.1	354.9	334.5	332.6	342.2	353.6	355.6
27.5°	1832.0	1607.3	1080.0	565.6	352.3	308.9	302.0	310.3	332.6	355.6	360.0
30°	1804.5	1546.7	905.8	406.6	293.6	270.7	273.8	288.5	322.3	357.4	367.0
32.5°	1792.4	1497.5	730.3	312.1	250.8	238.1	246.4	265.6	300.6	335.7	347.3
35°	1803.9	1461.8	568.1	259.1	219.6	210.0	219.6	239.4	262.4	279.6	286.6
37.5°	1845.4	1449.0	427.7	229.8	199.2	189.6	197.2	210.6	220.9	227.2	230.5
40°	1932.9	1462.4	335.1	214.5	187.7	176.8	178.7	185.2	192.1	197.2	197.8
42.5°	2072.0	1506.4	298.1	208.7	180.7	166.6	163.4	167.9	175.5	182.6	183.8
45°	2257.1	1579.8	294.3	210.6	177.5	158.4	151.9	156.4	166.6	178.1	180.0
47.5°	2496.5	1696.1	312.1	220.9	179.3	153.9	144.2	148.7	162.1	177.5	180.0
50°	2779.9	1856.9	345.3	236.2	188.3	153.9	141.1	144.8	159.0	176.2	178.7
52.5°	3113.8	2080.9	379.8	251.5	201.1	159.6	142.4	141.7	154.5	170.4	173.6
55°	3482.0	2359.2	413.0	264.9	208.1	167.3	145.6	137.9	148.1	160.8	163.4
57.5°	3915.4	2740.3	471.1	277.6	212.0	173.0	149.4	134.0	139.8	148.7	150.7
60°	4503.3	3300.1	584.1	299.4	218.9	175.5	150.0	130.2	129.6	136.0	136.6
62.5°	5269.9	3955.6	691.9	324.9	233.0	176.2	147.4	127.7	121.3	123.2	123.2
65°	5815.1	4197.0	660.6	346.6	245.7	175.5	144.8	125.7	114.9	111.7	111.7
67.5°	5504.9	3707.4	561.1	352.3	247.0	168.5	139.1	121.3	109.1	101.5	101.5
69°	5049.1	3249.7	515.2	342.2	236.8	160.2	132.8	116.8	105.4	96.4	96.4
70°	4677.6	2903.1	487.0	330.0	224.6	153.2	127.1	112.3	101.5	93.8	93.2
72.5°	3492.3	1937.3	416.1	284.7	184.4	129.6	111.1	100.2	91.2	86.1	86.1
75°	1842.8	970.9	340.8	232.3	142.4	103.4	91.2	84.3	79.2	78.6	77.8
77.5°	603.8	439.2	245.1	174.9	104.6	80.4	72.7	68.3	67.6	70.2	70.2
80°	326.2	262.4	157.6	118.0	72.7	60.0	56.2	55.5	57.5	61.3	61.3
82.5°	158.4	129.6	93.8	72.7	49.8	44.1	44.1	44.7	47.3	51.7	51.7
85°	68.3	61.3	54.2	40.8	30.7	27.4	31.3	34.5	36.4	39.6	40.8
87.5°	32.5	28.7	24.9	16.0	13.4	14.0	16.6	20.5	24.2	26.8	27.4
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)