

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: P198821

Luminaire Tested: **XNV2-AF-02-LED-U-5WQ-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198821  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24131)  
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-5WQ-7050-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10136 lumens  
Efficiency: N/A  
Efficacy: 119.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

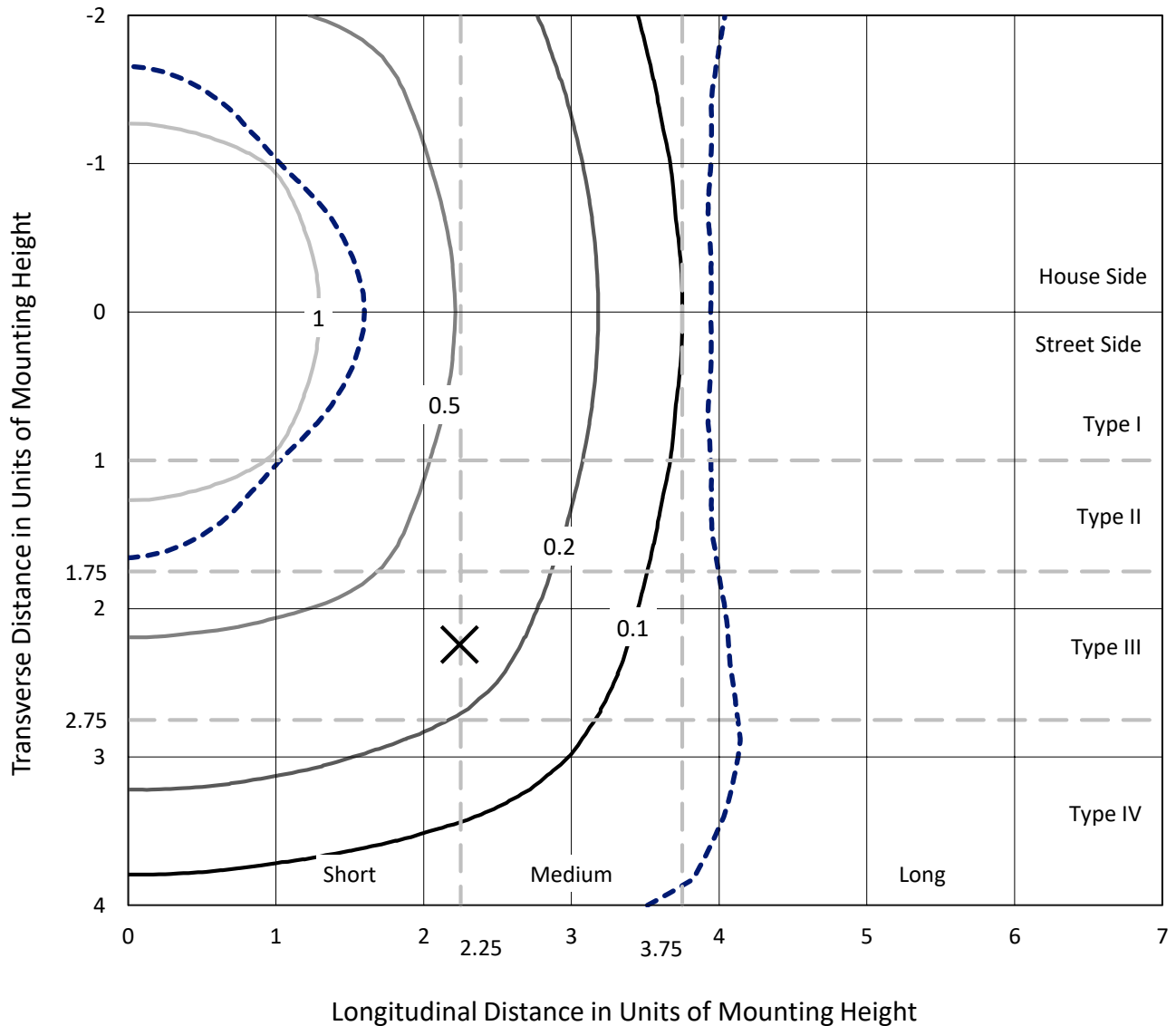
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

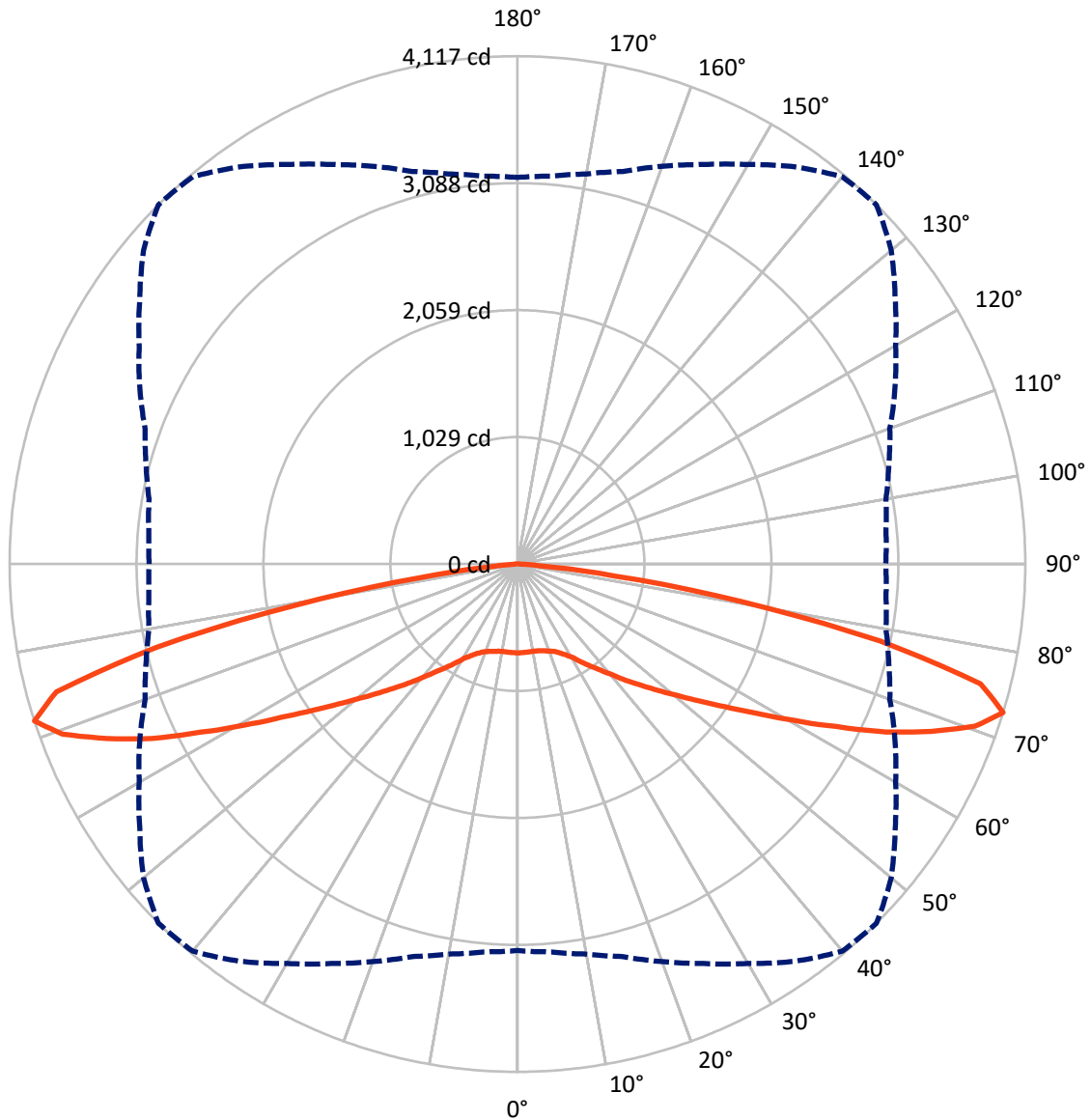


Based on 20 foot mounting height. Maximum calculated value = 1.8 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5068.0	0.0	5068.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5068.0	0.0	5068.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10136.0	0.0	10136.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.8	0.7
10°-20°	208.2	2.1
20°-30°	375.8	3.7
30°-40°	641.0	6.3
40°-50°	1091.3	10.8
50°-60°	1756.2	17.3
60°-70°	2920.7	28.8
70°-80°	2825.4	27.9
80°-90°	248.7	2.5
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°	10136.0	100.0
0°-180°	10136.0	100.0



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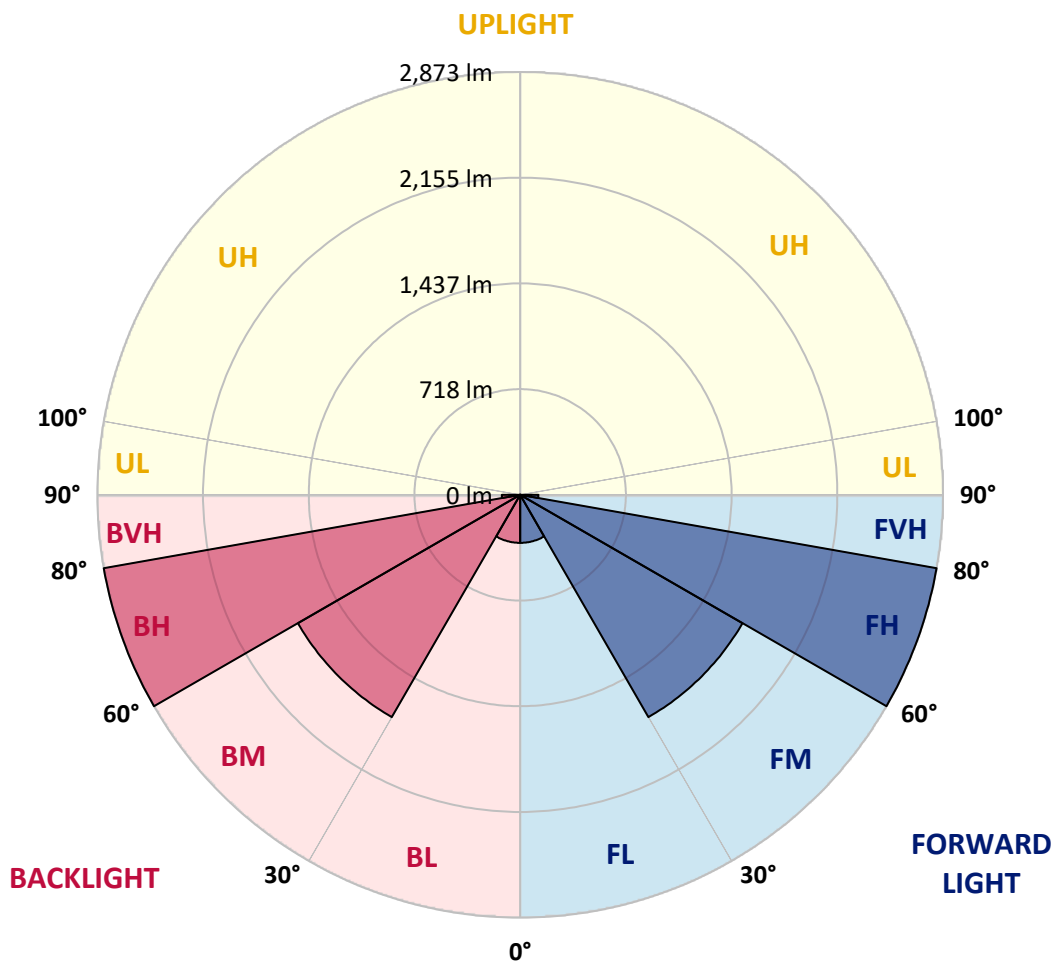
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	326.4	3.2			
FM	(30°-60°)	1744.3	17.2			
FH	(60°-80°)	2873.1	28.3			G2/5000
FVH	(80°-90°)	124.3	1.2			G2/225
BL	(0°-30°)	326.4	3.2	B1/500		
BM	(30°-60°)	1744.3	17.2	B2/2500		
BH	(60°-80°)	2873.1	28.3	B4/5000		G2/5000
BVH	(80°-90°)	124.3	1.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6
2.5°	726.2	726.2	726.8	726.2	725.0	724.3	722.5	721.2	720.0	719.3	718.1
5°	726.8	726.8	727.5	726.8	725.6	724.3	723.1	721.2	720.0	718.7	718.1
7.5°	729.3	730.0	730.6	730.0	727.5	726.2	724.3	722.5	720.0	718.7	717.5
10°	734.3	734.3	734.3	733.7	731.8	729.3	726.8	725.0	721.8	718.7	716.9
12.5°	738.1	738.7	738.7	737.4	734.9	731.8	729.3	727.5	725.0	722.5	720.6
15°	743.7	743.7	743.1	740.6	736.8	734.3	733.1	732.4	731.8	730.6	728.7
17.5°	754.9	754.3	752.4	748.7	744.3	742.4	741.2	741.2	741.2	740.6	739.3
20°	771.1	771.1	768.6	762.4	758.7	756.8	754.9	754.9	754.9	753.0	751.2
22.5°	797.3	798.0	794.2	786.7	781.7	778.0	775.5	773.6	771.8	770.5	767.4
25°	832.9	832.3	827.9	818.5	814.8	811.1	806.1	802.9	800.5	798.6	794.8
27.5°	870.3	869.7	864.7	856.6	854.1	848.5	844.7	840.4	837.3	834.1	830.4
30°	918.4	915.2	911.5	905.3	904.0	899.7	894.7	888.4	883.4	878.4	874.1
32.5°	961.4	961.4	955.8	952.7	955.2	953.3	953.9	950.2	947.1	945.2	940.8
35°	1021.3	1021.3	1018.8	1015.1	1015.7	1011.3	1010.7	1011.3	1013.8	1013.8	1008.8
37.5°	1101.2	1102.4	1094.3	1093.1	1089.9	1083.7	1080.6	1081.8	1087.4	1090.6	1083.7
40°	1200.4	1202.9	1200.4	1192.3	1188.5	1177.9	1171.7	1171.7	1176.0	1179.2	1176.7
42.5°	1298.3	1302.7	1298.3	1292.1	1289.0	1280.8	1277.7	1280.2	1285.8	1289.6	1285.8
45°	1407.5	1410.6	1405.0	1397.5	1393.8	1389.4	1387.5	1389.4	1395.6	1399.4	1398.1
47.5°	1514.8	1519.2	1512.3	1509.2	1509.2	1504.8	1509.8	1514.8	1520.4	1529.2	1525.4
50°	1619.6	1625.2	1620.9	1621.5	1626.5	1634.6	1644.0	1653.9	1663.9	1673.3	1674.5
52.5°	1713.2	1721.9	1722.6	1733.8	1749.4	1761.9	1788.1	1809.9	1833.6	1841.7	1838.0
55°	1811.8	1823.6	1839.2	1856.7	1881.7	1907.2	1951.5	1990.8	2022.0	2041.4	2038.3
57.5°	1952.8	1964.6	1980.9	2009.6	2047.0	2081.9	2142.4	2203.6	2251.0	2280.3	2266.0
60°	2135.6	2148.1	2169.3	2199.8	2248.5	2295.9	2378.9	2466.9	2540.5	2574.2	2548.0
62.5°	2377.6	2389.5	2403.2	2443.8	2498.1	2559.2	2663.4	2776.3	2869.9	2902.3	2865.5
65°	2722.7	2737.0	2741.4	2774.4	2827.5	2884.2	2996.5	3123.8	3230.5	3283.5	3209.9
67.5°	3111.3	3117.0	3134.4	3173.1	3227.4	3278.5	3367.1	3487.5	3589.9	3619.2	3540.6
70°	3339.1	3350.3	3380.9	3434.5	3499.4	3579.9	3676.6	3806.4	3922.4	3936.1	3836.3
72.5°	3133.2	3156.3	3210.5	3294.1	3430.1	3573.0	3739.6	3931.1	4097.7	4117.1	3956.7
75°	2513.0	2539.2	2604.1	2695.8	2856.8	3068.9	3309.7	3597.4	3846.9	3878.7	3666.6
77.5°	1339.5	1371.9	1466.1	1589.7	1819.3	2100.0	2390.1	2718.3	2930.4	3002.2	2849.3
80°	337.5	355.0	400.5	472.9	628.3	854.7	1104.9	1458.0	1721.3	1833.0	1721.3
82.5°	131.0	144.1	156.6	165.3	180.3	211.5	292.0	476.0	641.4	789.8	683.8
85°	50.5	53.7	77.4	88.0	88.0	96.7	111.1	131.0	162.2	177.2	148.5
87.5°	20.0	21.8	26.8	41.2	42.4	37.4	39.9	44.9	34.3	28.7	32.4
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6
2.5°	717.5	716.9	715.6	716.2	715.6	715.6	715.6	715.6
5°	716.9	716.9	715.6	715.6	715.6	716.2	715.6	715.6
7.5°	716.2	715.6	714.4	713.7	713.7	713.1	713.1	713.1
10°	715.0	713.7	712.5	711.9	711.9	710.6	710.6	710.6
12.5°	718.1	716.2	715.0	714.4	714.4	714.4	715.0	715.0
15°	726.8	723.1	721.2	720.6	721.2	722.5	723.1	723.7
17.5°	736.2	732.4	729.3	728.1	728.7	730.6	732.4	733.7
20°	748.0	744.9	741.2	739.9	739.9	742.4	743.7	745.5
22.5°	764.9	762.4	759.3	757.4	756.2	759.3	761.1	762.4
25°	791.7	789.2	786.7	784.9	784.2	787.3	788.6	789.2
27.5°	827.3	824.8	823.5	822.9	821.0	822.3	824.2	823.5
30°	873.4	875.3	873.4	873.4	870.3	871.6	870.3	869.1
32.5°	935.2	933.3	927.7	924.0	919.6	919.6	917.7	915.9
35°	997.0	990.7	987.6	989.5	987.6	988.9	985.7	982.6
37.5°	1070.0	1066.2	1065.6	1071.2	1070.0	1071.2	1071.2	1066.9
40°	1166.7	1164.2	1168.5	1177.9	1181.6	1181.0	1182.3	1176.7
42.5°	1277.7	1273.4	1275.2	1283.3	1287.7	1289.0	1288.3	1283.3
45°	1388.8	1390.0	1390.0	1398.8	1403.1	1405.6	1401.3	1399.4
47.5°	1514.2	1516.1	1511.7	1517.3	1518.5	1522.9	1519.2	1516.1
50°	1658.9	1652.1	1642.1	1644.0	1644.0	1642.7	1638.3	1634.6
52.5°	1820.5	1804.9	1786.2	1780.0	1773.1	1766.2	1757.5	1750.6
55°	2004.6	1977.7	1944.0	1928.4	1915.3	1899.7	1879.8	1872.9
57.5°	2217.9	2171.8	2126.8	2098.8	2065.1	2044.5	2018.9	2017.7
60°	2471.2	2408.8	2329.6	2287.8	2254.1	2229.8	2210.4	2203.0
62.5°	2763.8	2656.5	2571.1	2526.1	2486.8	2471.9	2447.5	2450.6
65°	3063.9	2954.7	2871.8	2835.6	2798.8	2788.8	2766.3	2774.4
67.5°	3389.0	3299.1	3208.0	3174.4	3140.7	3130.7	3107.6	3114.5
70°	3680.3	3566.2	3462.6	3396.5	3339.1	3292.9	3263.6	3251.7
72.5°	3738.4	3540.6	3377.7	3212.4	3117.0	3033.4	2999.0	2985.9
75°	3359.0	3052.1	2820.0	2626.0	2518.6	2397.0	2383.9	2365.8
77.5°	2612.9	2263.5	1982.7	1733.2	1589.0	1440.6	1389.4	1350.7
80°	1558.5	1197.9	928.3	650.7	530.9	427.4	401.8	375.0
82.5°	557.8	357.5	240.8	187.8	167.8	154.7	144.7	131.6
85°	134.8	113.5	107.3	97.3	96.1	81.7	58.0	51.8
87.5°	43.0	39.3	39.9	38.1	39.9	29.9	24.3	21.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)