

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: P271283

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271283  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)  
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-5MQ-7027-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9014.9 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - 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

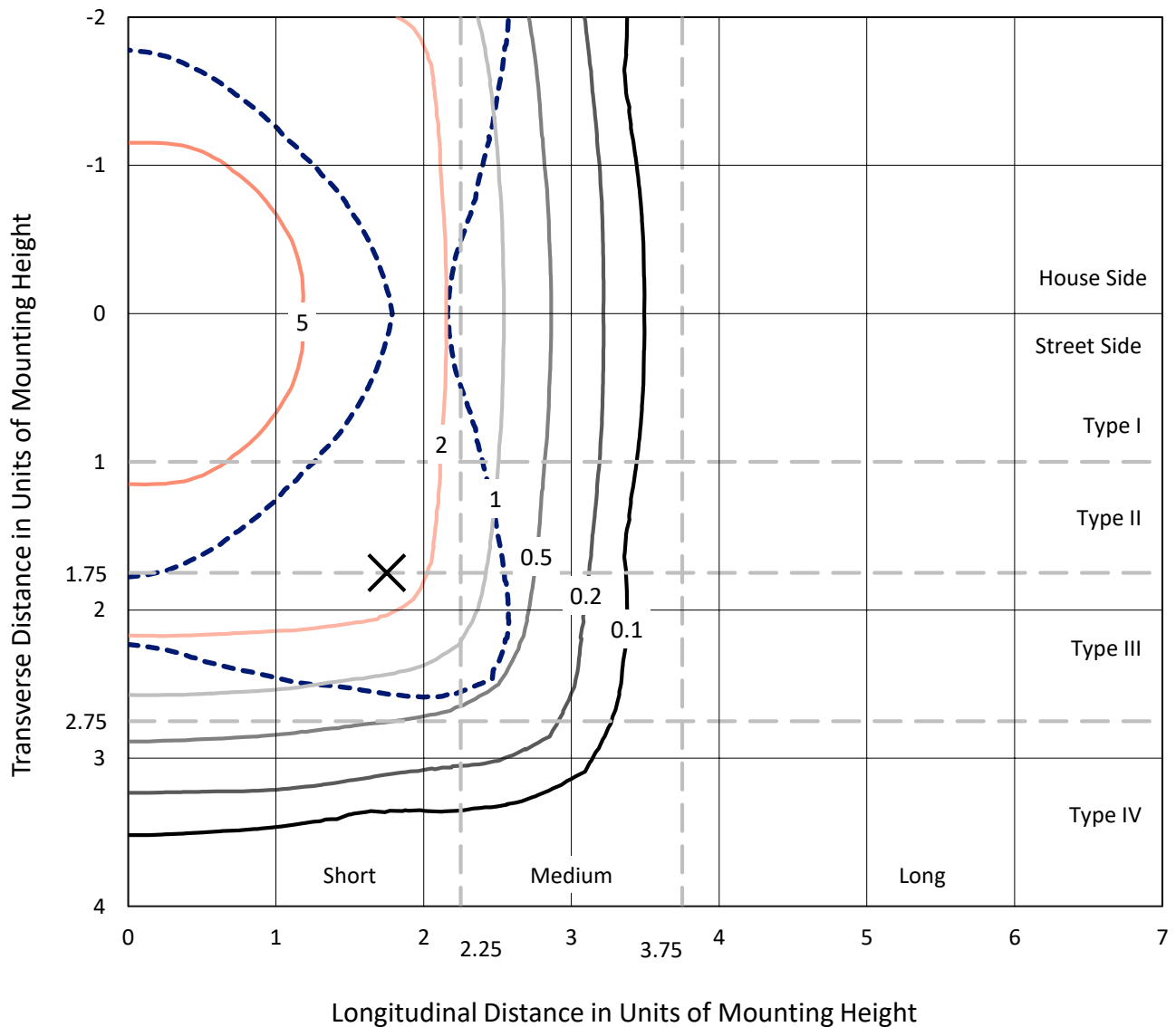


REPORT NUMBER: P271283

CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

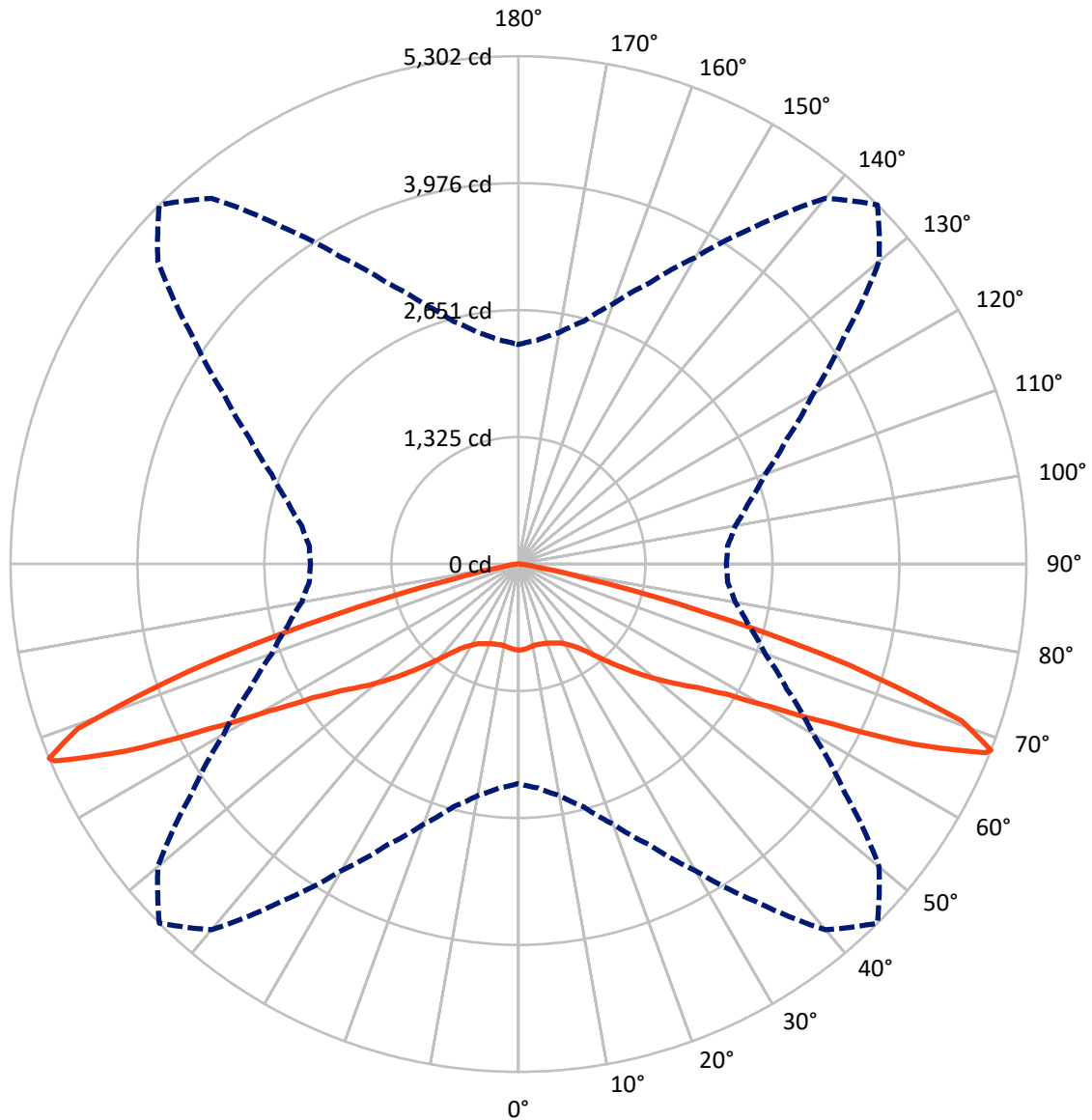


Based on 10 foot mounting height. Maximum calculated value = 9 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P271283

CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4507.4	0.0	4507.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4507.4	0.0	4507.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	9014.9	0.0	9014.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.1	0.9
10°-20°	244.0	2.7
20°-30°	414.9	4.6
30°-40°	679.0	7.5
40°-50°	1213.4	13.5
50°-60°	2049.2	22.7
60°-70°	3177.6	35.2
70°-80°	1092.5	12.1
80°-90°	60.1	0.7
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°	9014.9	100.0
0°-180°	9014.9	100.0



REPORT NUMBER: P271283

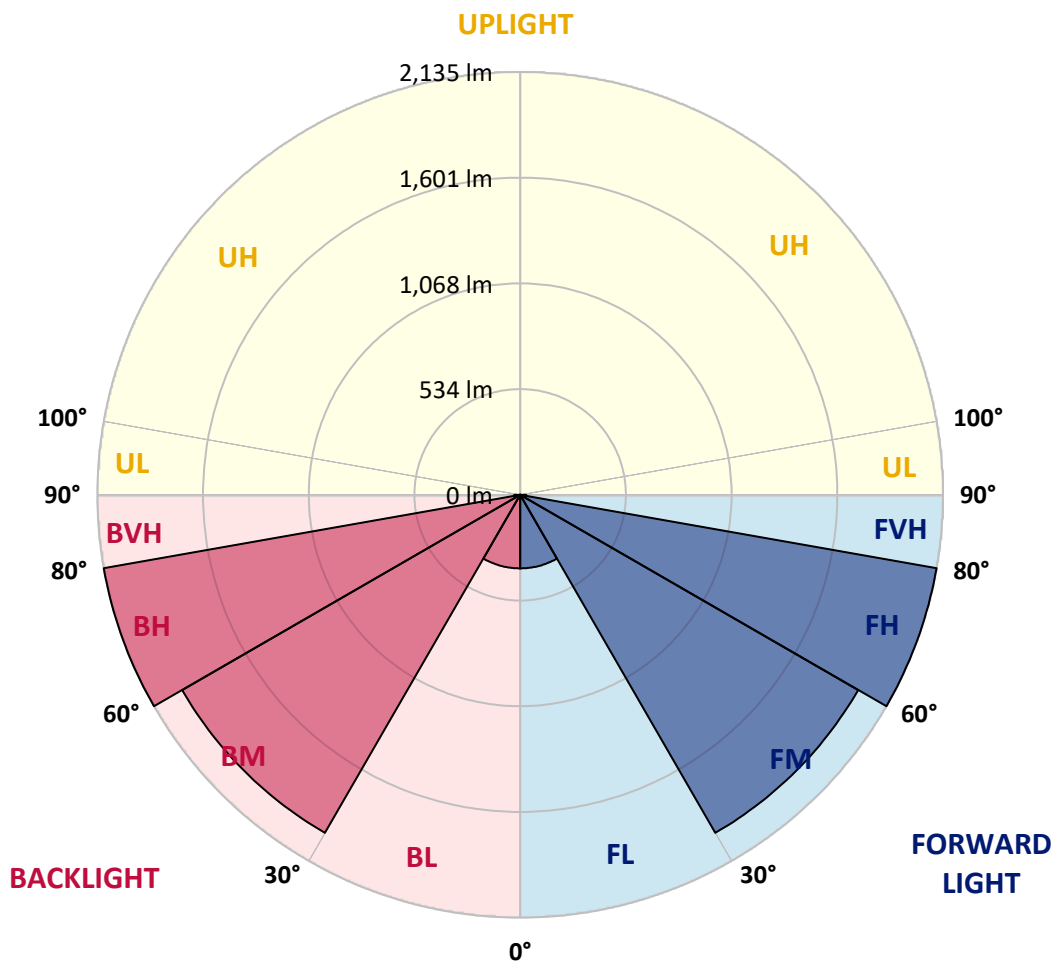
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	371.5	4.1			
FM	(30°-60°)	1970.8	21.9			
FH	(60°-80°)	2135.1	23.7			G2/5000
FVH	(80°-90°)	30.0	0.3			G1/100
BL	(0°-30°)	371.5	4.1	B1/500		
BM	(30°-60°)	1970.8	21.9	B2/2500		
BH	(60°-80°)	2135.1	23.7	B3/2500		G2/5000
BVH	(80°-90°)	30.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type V Short





REPORT NUMBER: P271283

CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	899.3	899.3	899.3	899.3	899.3	899.3	899.3	899.3	899.3	899.3	899.3
2.5°	903.2	903.2	904.2	903.7	902.0	900.5	898.8	897.0	896.0	894.8	893.8
5°	893.8	893.8	895.4	894.4	893.2	891.6	890.4	888.8	887.6	886.5	887.2
7.5°	881.5	882.8	883.8	883.3	881.1	880.5	878.8	878.4	877.1	875.5	876.0
10°	871.0	871.6	872.8	872.3	871.6	870.0	869.5	868.9	868.3	866.1	865.5
12.5°	860.7	861.7	862.8	863.5	862.8	863.5	863.9	864.4	863.9	862.8	862.8
15°	852.3	853.4	855.0	856.8	857.3	860.7	862.8	865.1	866.7	867.3	865.5
17.5°	847.9	849.5	851.9	855.0	857.8	861.7	865.5	868.9	871.6	872.3	870.5
20°	847.5	849.0	852.3	856.3	861.1	866.1	872.3	877.1	879.9	881.5	879.9
22.5°	851.2	853.4	857.8	862.8	868.9	875.5	883.3	888.8	894.4	896.5	894.8
25°	862.3	864.4	869.5	875.5	882.1	890.4	898.1	905.3	910.8	913.7	911.4
27.5°	885.5	886.0	891.6	898.1	905.9	913.0	923.0	926.3	930.7	933.5	930.7
30°	918.1	919.1	924.0	934.5	941.8	951.1	956.7	960.0	965.0	967.7	964.4
32.5°	967.7	968.8	973.3	983.1	989.8	996.9	1003.5	1005.8	1010.8	1014.0	1010.2
35°	1037.8	1040.1	1043.9	1050.5	1056.0	1061.5	1066.6	1064.9	1068.2	1072.5	1068.8
37.5°	1133.9	1133.3	1134.4	1139.4	1144.9	1148.3	1155.9	1152.0	1155.4	1159.3	1157.0
40°	1245.9	1245.9	1245.4	1254.3	1256.4	1259.8	1268.0	1263.0	1267.5	1271.9	1268.0
42.5°	1373.5	1375.7	1378.4	1385.5	1391.7	1392.8	1396.7	1394.3	1400.0	1403.8	1400.0
45°	1520.3	1523.6	1526.8	1543.5	1546.3	1548.5	1551.3	1544.0	1550.1	1553.3	1552.4
47.5°	1672.6	1678.8	1685.8	1703.0	1714.1	1719.0	1721.2	1713.0	1713.4	1718.5	1719.0
50°	1844.8	1851.5	1858.8	1878.0	1888.4	1897.3	1900.2	1890.8	1891.8	1895.8	1896.9
52.5°	2003.8	2011.7	2027.0	2053.0	2067.9	2083.3	2084.4	2072.8	2077.9	2080.7	2078.4
55°	2153.4	2163.4	2183.9	2218.6	2245.7	2276.0	2289.8	2277.2	2277.2	2275.0	2273.8
57.5°	2328.0	2338.9	2359.9	2400.2	2437.8	2481.4	2518.9	2531.7	2554.8	2562.5	2550.4
60°	2590.7	2602.3	2623.8	2676.8	2724.3	2787.8	2849.7	2899.8	2981.6	3025.8	2986.0
62.5°	2830.7	2848.4	2899.3	2992.1	3094.8	3212.2	3348.6	3445.8	3594.3	3668.3	3568.3
65°	2776.2	2812.1	2911.4	3057.1	3269.1	3524.2	3801.8	4068.6	4375.5	4532.8	4329.7
67.5°	2425.1	2455.4	2562.5	2732.0	2996.4	3348.2	3779.8	4331.7	4965.0	5259.8	4900.4
68°	2290.9	2347.8	2454.3	2622.7	2889.4	3234.9	3695.8	4292.0	4983.2	5301.7	4913.6
70°	1756.5	1776.9	1879.2	2030.3	2317.9	2656.9	3122.2	3801.8	4583.1	4910.9	4511.7
72.5°	834.6	846.8	913.0	1062.2	1244.8	1520.8	1931.5	2572.4	3276.3	3617.5	3219.4
75°	305.9	308.6	324.1	359.4	427.9	531.5	728.6	1127.3	1668.8	1990.0	1675.3
77.5°	165.1	165.6	171.7	180.5	192.6	206.5	236.3	316.8	511.1	695.6	539.9
80°	103.8	103.2	109.4	116.5	124.8	131.4	134.1	143.5	161.8	189.4	173.9
82.5°	53.0	58.0	71.8	79.5	91.6	93.9	91.1	90.5	96.1	103.8	107.1
85°	29.3	26.0	38.1	50.8	55.2	56.9	57.4	54.1	53.0	51.9	54.6
87.5°	14.9	13.8	16.6	25.4	27.0	22.1	22.6	19.4	13.2	13.2	13.8
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: P271283

CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-7027-800

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	899.3	899.3	899.3	899.3	899.3	899.3	899.3	899.3
2.5°	892.6	893.2	892.0	892.0	892.0	892.6	892.0	891.6
5°	885.5	886.5	886.5	887.2	887.6	887.6	887.6	887.6
7.5°	874.9	875.5	876.7	876.7	876.7	876.7	876.7	876.7
10°	865.1	863.9	863.5	862.3	862.3	860.7	861.1	861.7
12.5°	860.0	857.8	856.8	855.0	854.0	852.3	852.3	852.9
15°	862.3	859.0	855.6	854.6	853.4	852.3	851.2	851.9
17.5°	866.7	862.8	859.0	856.8	854.6	852.9	852.3	852.9
20°	876.0	870.5	864.4	860.7	856.3	855.0	853.4	855.0
22.5°	888.8	882.1	874.4	867.3	862.3	860.0	857.8	859.5
25°	904.2	897.0	889.3	881.1	875.5	874.0	871.0	871.0
27.5°	925.8	919.7	913.0	905.3	899.8	898.1	893.8	893.8
30°	960.0	953.9	947.8	941.2	935.8	934.1	928.5	928.5
32.5°	1005.3	998.6	994.8	989.3	984.8	982.0	975.4	974.9
35°	1066.0	1059.9	1059.3	1055.5	1051.0	1051.6	1045.0	1043.9
37.5°	1153.2	1148.3	1149.9	1146.5	1142.7	1146.0	1142.1	1142.1
40°	1264.8	1263.0	1264.8	1262.5	1263.0	1263.6	1260.3	1261.4
42.5°	1399.4	1395.0	1404.9	1403.8	1402.2	1406.6	1398.8	1393.4
45°	1554.5	1552.9	1562.8	1564.5	1561.2	1563.9	1550.1	1549.5
47.5°	1722.9	1722.9	1731.8	1730.7	1727.4	1727.9	1711.4	1700.9
50°	1898.5	1897.3	1906.2	1904.0	1899.6	1898.9	1881.9	1871.3
52.5°	2081.2	2081.2	2093.9	2087.8	2077.3	2072.3	2051.4	2037.5
55°	2283.2	2280.4	2284.3	2264.4	2244.1	2229.1	2203.2	2192.8
57.5°	2538.8	2506.8	2479.2	2453.8	2425.1	2407.4	2377.1	2366.0
60°	2901.4	2815.9	2778.9	2728.2	2680.7	2656.9	2616.7	2595.2
62.5°	3403.9	3261.9	3161.6	3049.4	2941.2	2865.1	2803.8	2776.8
65°	3984.6	3675.4	3419.8	3179.7	2976.1	2814.3	2724.3	2696.2
67.5°	4205.3	3637.9	3196.8	2852.4	2605.1	2412.4	2304.7	2282.1
68°	4158.4	3551.8	3093.7	2740.9	2492.4	2298.1	2191.1	2170.7
70°	3668.3	2996.4	2512.9	2161.9	1929.9	1745.0	1669.3	1636.8
72.5°	2500.7	1924.3	1476.2	1180.8	1007.4	890.4	821.0	797.2
75°	1151.0	777.8	519.5	388.1	329.6	301.4	279.9	274.3
77.5°	335.6	244.0	209.8	194.4	182.7	172.7	165.6	165.1
80°	159.4	149.6	145.2	135.3	124.8	115.4	108.8	109.9
82.5°	107.1	104.4	104.4	94.4	77.9	66.8	55.2	49.6
85°	56.9	59.1	62.4	59.1	51.4	38.1	24.9	27.0
87.5°	19.4	22.1	23.1	22.6	20.4	15.5	11.6	11.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)