

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: P198643

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198643
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-600
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8656.2 lumens
Efficiency: N/A
Efficacy: 131.2 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

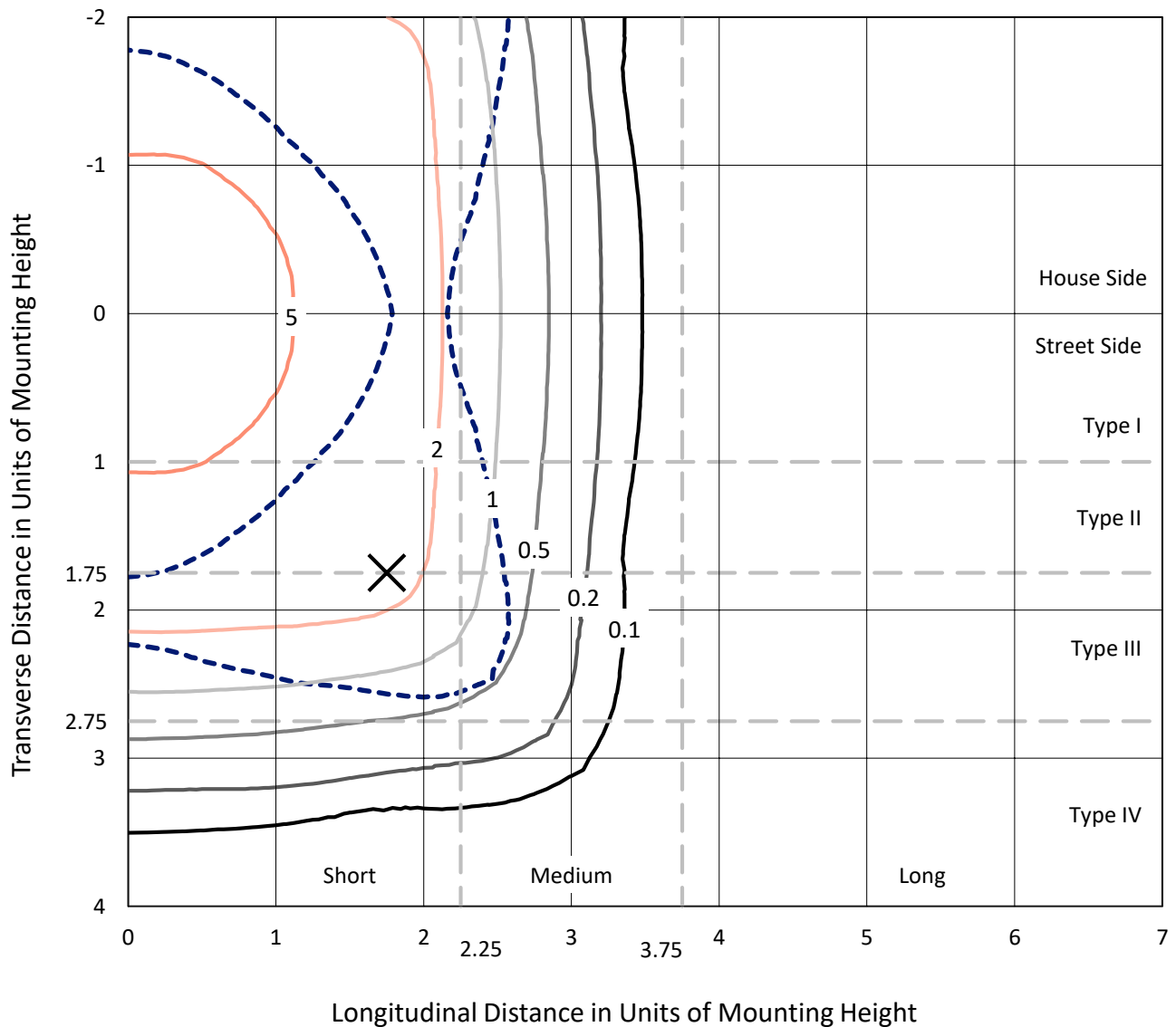
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P198643
 CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-600

Iso-Footcandle Lines of Horizontal Illumination

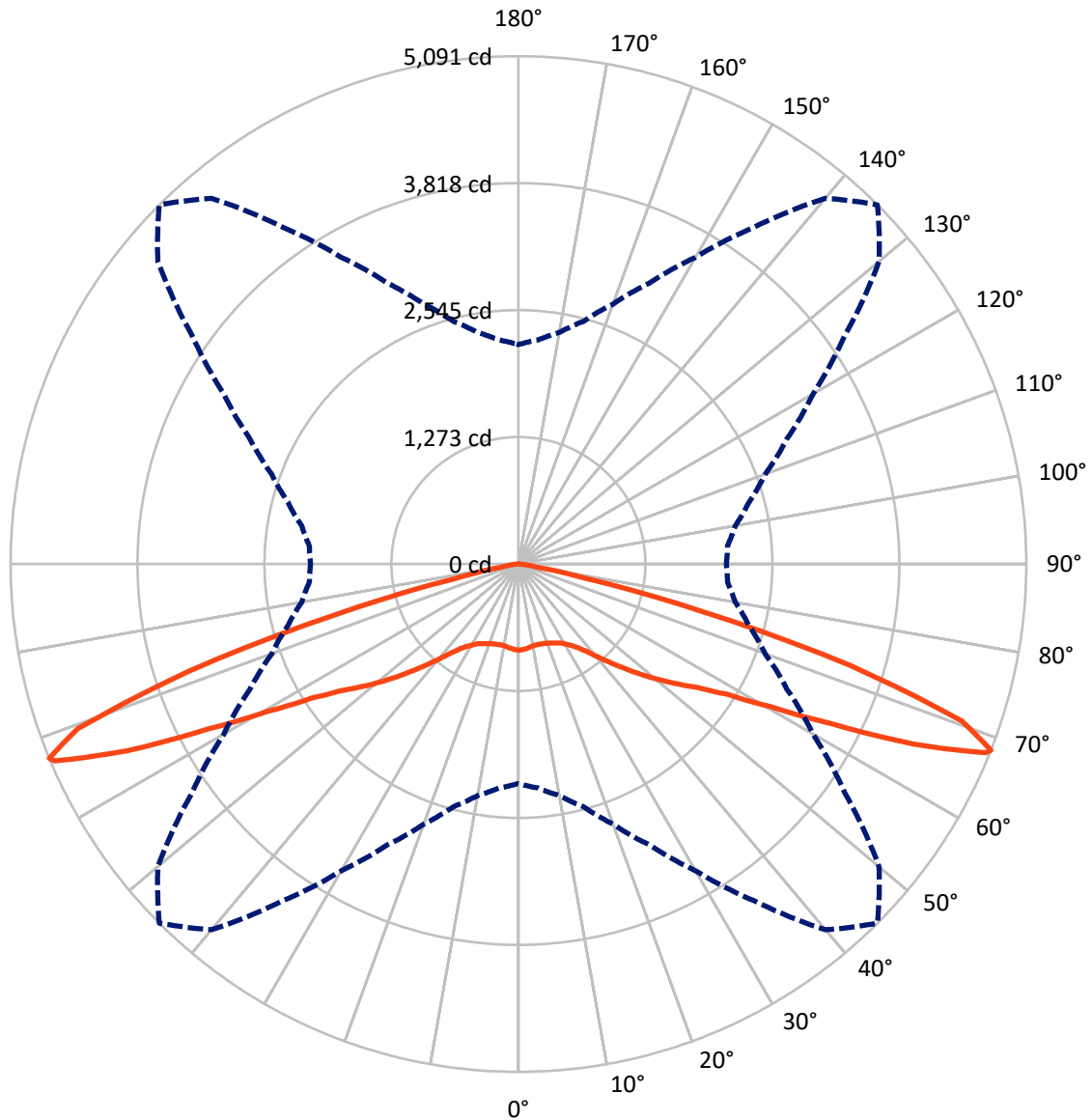
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P198643
CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P198643

CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4328.1	0.0	4328.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4328.1	0.0	4328.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	8656.2	0.0	8656.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	0.9
10°-20°	234.3	2.7
20°-30°	398.4	4.6
30°-40°	652.0	7.5
40°-50°	1165.1	13.5
50°-60°	1967.7	22.7
60°-70°	3051.2	35.2
70°-80°	1049.1	12.1
80°-90°	57.6	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°	8656.2	100.0
0°-180°	8656.2	100.0



REPORT NUMBER: P198643

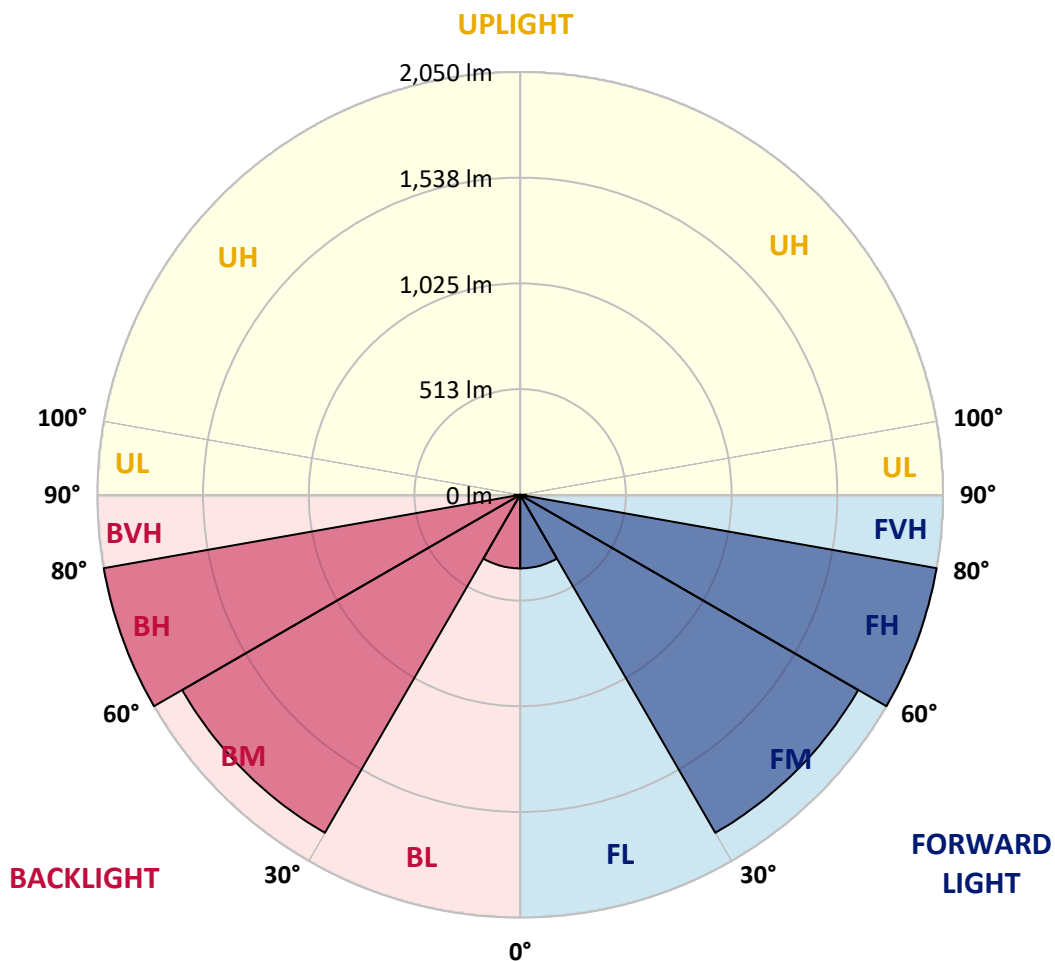
CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	356.8	4.1			
FM	(30°-60°)	1892.4	21.9			
FH	(60°-80°)	2050.1	23.7			G2/5000
FVH	(80°-90°)	28.8	0.3			G1/100
BL	(0°-30°)	356.8	4.1	B1/500		
BM	(30°-60°)	1892.4	21.9	B2/2500		
BH	(60°-80°)	2050.1	23.7	B3/2500		G2/5000
BVH	(80°-90°)	28.8	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: P198643

CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5
2.5°	867.2	867.2	868.3	867.8	866.1	864.5	863.0	861.3	860.3	859.3	858.2
5°	858.2	858.2	859.8	858.7	857.6	856.1	855.0	853.4	852.3	851.3	851.8
7.5°	846.5	847.6	848.6	848.1	846.0	845.5	843.8	843.3	842.3	840.7	841.2
10°	836.5	837.0	838.0	837.5	837.0	835.3	834.8	834.3	833.8	831.7	831.1
12.5°	826.3	827.5	828.5	829.0	828.5	829.0	829.5	830.1	829.5	828.5	828.5
15°	818.5	819.5	821.1	822.7	823.2	826.3	828.5	830.6	832.2	832.8	831.1
17.5°	814.2	815.8	817.8	821.1	823.7	827.5	831.1	834.3	837.0	837.5	836.0
20°	813.7	815.3	818.5	822.1	827.0	831.7	837.5	842.3	845.0	846.5	845.0
22.5°	817.3	819.5	823.7	828.5	834.3	840.7	848.1	853.4	858.7	860.8	859.3
25°	828.0	830.1	834.8	840.7	847.0	855.0	862.4	869.3	874.6	877.3	875.1
27.5°	850.3	850.8	856.1	862.4	869.8	876.8	886.3	889.5	893.6	896.3	893.6
30°	881.5	882.6	887.3	897.4	904.3	913.3	918.6	921.8	926.6	929.2	926.1
32.5°	929.2	930.3	934.5	944.1	950.4	957.3	963.6	965.8	970.6	973.7	970.1
35°	996.6	998.6	1002.4	1008.7	1014.1	1019.4	1024.1	1022.5	1025.7	1029.9	1026.2
37.5°	1088.7	1088.2	1089.3	1094.0	1099.4	1102.5	1110.0	1106.2	1109.4	1113.2	1111.0
40°	1196.3	1196.3	1195.8	1204.3	1206.5	1209.6	1217.6	1212.8	1217.0	1221.3	1217.6
42.5°	1318.8	1320.9	1323.6	1330.4	1336.3	1337.4	1341.1	1338.9	1344.3	1347.9	1344.3
45°	1459.9	1463.0	1466.2	1482.1	1484.7	1486.9	1489.5	1482.6	1488.4	1491.6	1490.5
47.5°	1606.1	1612.0	1618.8	1635.3	1645.8	1650.6	1652.8	1644.8	1645.3	1650.1	1650.6
50°	1771.4	1777.9	1784.7	1803.3	1813.4	1821.9	1824.5	1815.5	1816.6	1820.2	1821.4
52.5°	1924.2	1931.5	1946.4	1971.3	1985.6	2000.5	2001.5	1990.5	1995.2	1997.8	1995.7
55°	2067.8	2077.3	2096.9	2130.4	2156.3	2185.4	2198.7	2186.6	2186.6	2184.4	2183.4
57.5°	2235.4	2245.9	2266.0	2304.7	2340.8	2382.7	2418.7	2430.9	2453.1	2460.6	2448.9
60°	2487.6	2498.8	2519.4	2570.3	2615.9	2676.9	2736.2	2784.5	2862.9	2905.3	2867.1
62.5°	2718.2	2735.2	2784.0	2873.0	2971.6	3084.5	3215.4	3308.7	3451.2	3522.3	3426.4
65°	2665.7	2700.2	2795.6	2935.6	3139.0	3383.9	3650.6	3906.6	4201.4	4352.3	4157.4
67.5°	2328.5	2357.7	2460.6	2623.4	2877.3	3214.8	3629.4	4159.4	4767.5	5050.5	4705.5
68°	2199.8	2254.4	2356.7	2518.4	2774.3	3106.2	3548.8	4121.3	4785.0	5090.8	4718.2
70°	1686.6	1706.3	1804.4	1949.6	2225.7	2551.2	2998.1	3650.6	4400.6	4715.5	4332.3
72.5°	801.5	813.1	876.8	1019.9	1195.3	1460.4	1854.7	2470.1	3146.0	3473.5	3091.4
75°	293.7	296.3	311.2	345.0	410.8	510.5	699.7	1082.4	1602.4	1910.9	1608.8
77.5°	158.5	159.1	164.9	173.3	184.9	198.2	226.9	304.2	490.8	667.9	518.4
80°	99.6	99.1	105.0	111.8	119.8	126.1	128.8	137.8	155.3	181.8	166.9
82.5°	50.8	55.6	68.9	76.3	88.0	90.1	87.5	87.0	92.3	99.6	102.8
85°	28.1	25.0	36.6	48.8	53.0	54.6	55.1	52.0	50.8	49.8	52.5
87.5°	14.3	13.3	15.9	24.3	26.0	21.2	21.7	18.5	12.7	12.7	13.3
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: P198643

CATALOG NUMBER: XNV2-AF-02-LED-U-5MQ-600

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5
2.5°	857.1	857.6	856.6	856.6	856.6	857.1	856.6	856.1
5°	850.3	851.3	851.3	851.8	852.3	852.3	852.3	852.3
7.5°	840.1	840.7	841.8	841.8	841.8	841.8	841.8	841.8
10°	830.6	829.5	829.0	828.0	828.0	826.3	827.0	827.5
12.5°	825.8	823.7	822.7	821.1	820.0	818.5	818.5	819.0
15°	828.0	824.8	821.6	820.5	819.5	818.5	817.3	817.8
17.5°	832.2	828.5	824.8	822.7	820.5	819.0	818.5	819.0
20°	841.2	836.0	830.1	826.3	822.1	821.1	819.5	821.1
22.5°	853.4	847.0	839.6	832.8	828.0	825.8	823.7	825.3
25°	868.3	861.3	854.0	846.0	840.7	839.1	836.5	836.5
27.5°	888.9	883.1	876.8	869.3	864.0	862.4	858.2	858.2
30°	921.8	916.0	910.1	903.8	898.5	896.9	891.6	891.6
32.5°	965.3	958.9	955.2	949.9	945.6	943.0	936.6	936.1
35°	1023.6	1017.7	1017.2	1013.5	1009.2	1009.8	1003.4	1002.4
37.5°	1107.3	1102.5	1104.2	1101.0	1097.2	1100.4	1096.7	1096.7
40°	1214.3	1212.8	1214.3	1212.3	1212.8	1213.3	1210.2	1211.2
42.5°	1343.7	1339.5	1349.1	1347.9	1346.4	1350.6	1343.2	1337.9
45°	1492.7	1491.1	1500.7	1502.2	1499.0	1501.7	1488.4	1487.9
47.5°	1654.3	1654.3	1662.8	1661.8	1658.6	1659.1	1643.2	1633.1
50°	1822.9	1821.9	1830.4	1828.2	1823.9	1823.4	1807.0	1796.9
52.5°	1998.3	1998.3	2010.5	2004.7	1994.7	1989.8	1969.7	1956.5
55°	2192.4	2189.7	2193.4	2174.4	2154.7	2140.4	2115.5	2105.4
57.5°	2437.8	2407.0	2380.5	2356.2	2328.5	2311.7	2282.5	2271.9
60°	2786.0	2703.9	2668.4	2619.6	2574.1	2551.2	2512.6	2491.8
62.5°	3268.4	3132.2	3035.7	2928.1	2824.2	2751.0	2692.2	2666.2
65°	3826.0	3529.2	3283.8	3053.2	2857.6	2702.3	2615.9	2588.9
67.5°	4038.1	3493.2	3069.7	2738.8	2501.4	2316.4	2213.1	2191.3
68°	3993.0	3410.4	2970.5	2631.7	2393.3	2206.7	2103.8	2084.3
70°	3522.3	2877.3	2412.8	2075.8	1853.1	1675.6	1603.0	1571.7
72.5°	2401.2	1847.9	1417.4	1133.8	967.4	855.0	788.2	765.4
75°	1105.2	746.9	498.8	372.7	316.5	289.4	268.7	263.4
77.5°	322.3	234.3	201.4	186.6	175.4	165.9	159.1	158.5
80°	153.2	143.6	139.4	129.9	119.8	110.8	104.4	105.5
82.5°	102.8	100.1	100.1	90.6	74.8	64.1	53.0	47.7
85°	54.6	56.7	59.9	56.7	49.3	36.6	23.8	26.0
87.5°	18.5	21.2	22.3	21.7	19.6	14.8	11.2	11.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)