

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: P271287

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271287
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)
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-5NQ-7027-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8701.8 lumens
Efficiency: N/A
Efficacy: 102.4 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 - G1

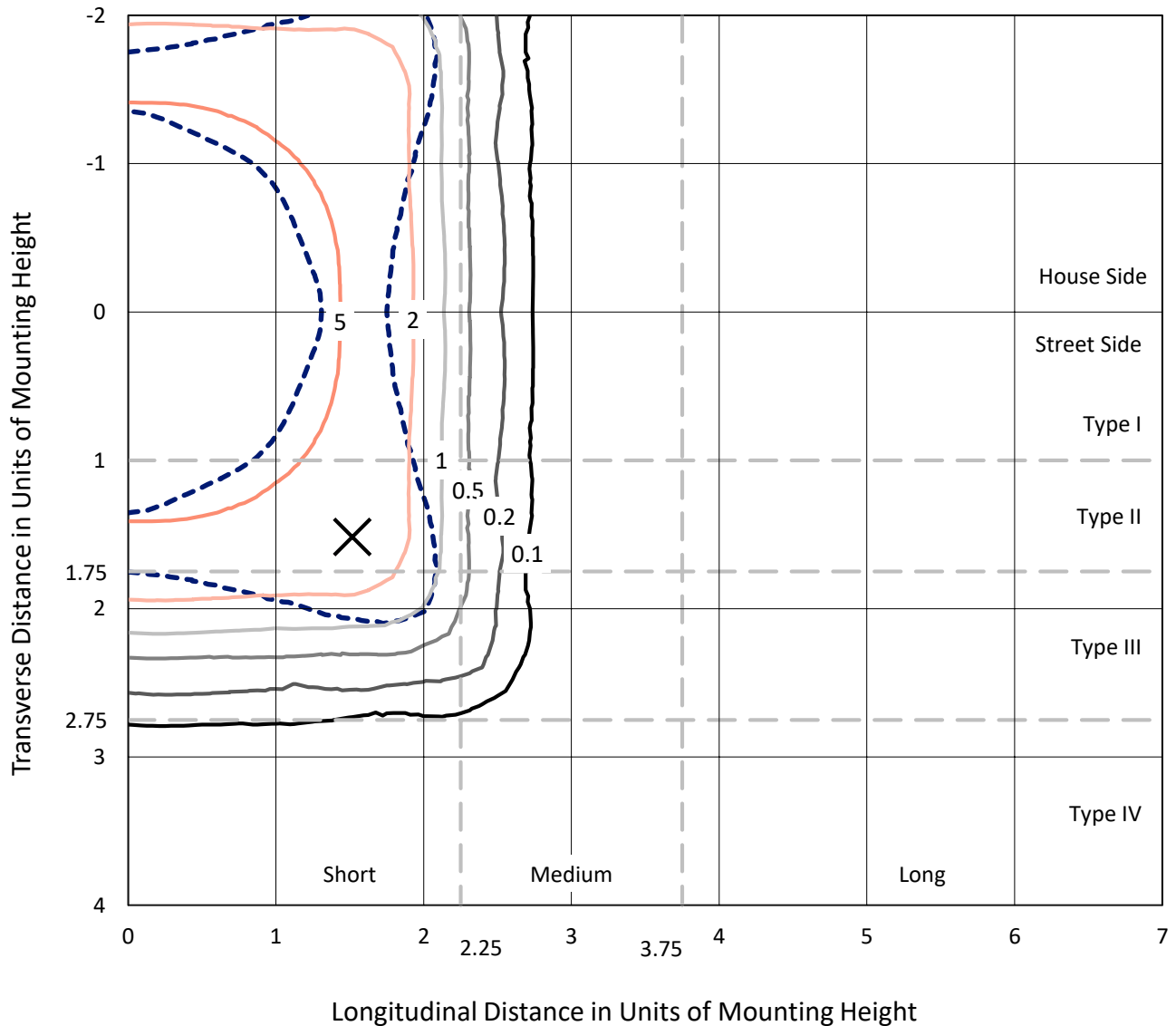
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

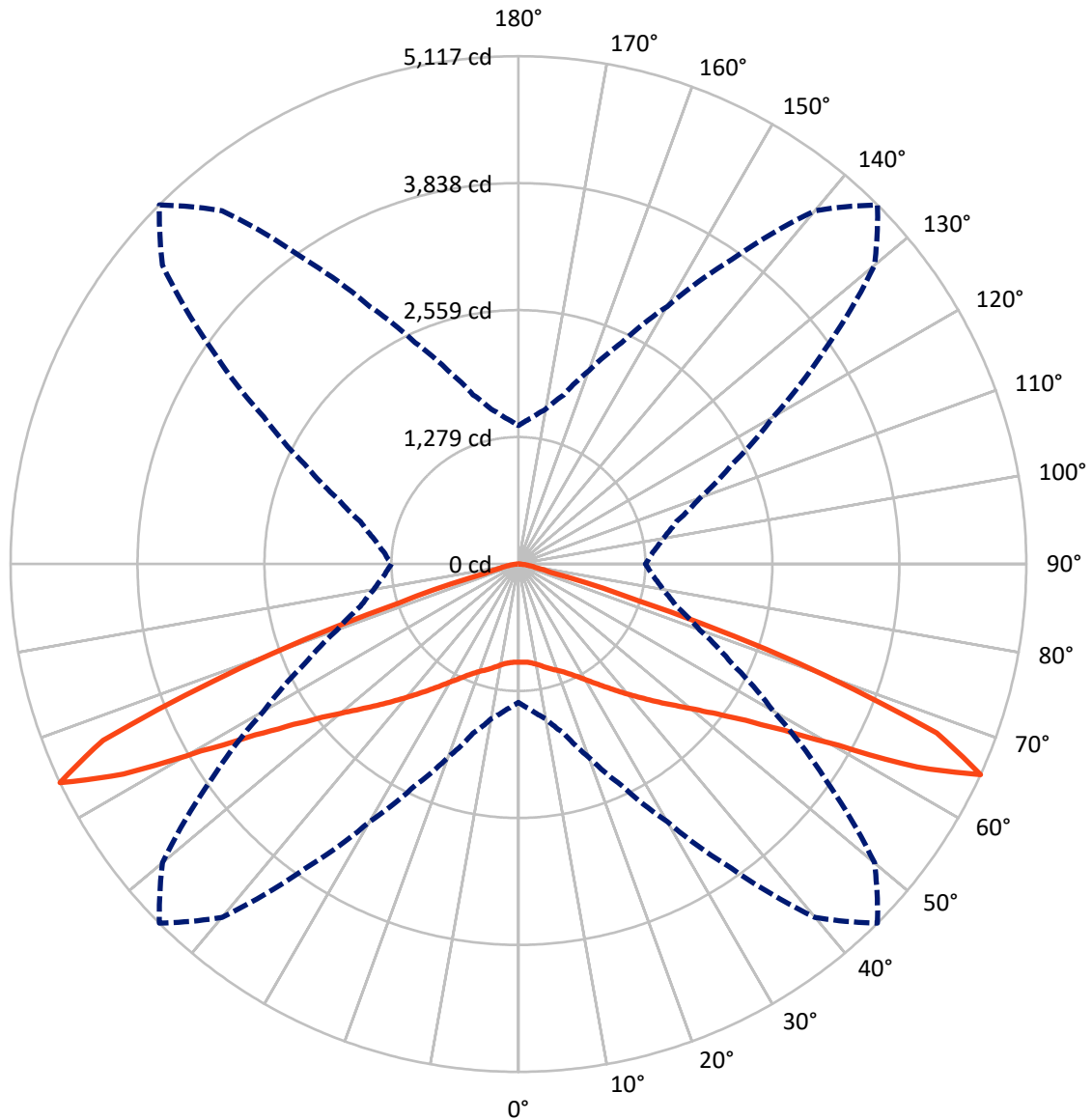
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4350.9	0.0	4350.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4350.9	0.0	4350.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	8701.8	0.0	8701.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	1.1
10°-20°	308.9	3.6
20°-30°	576.3	6.6
30°-40°	971.7	11.2
40°-50°	1578.4	18.1
50°-60°	2473.1	28.4
60°-70°	2334.5	26.8
70°-80°	314.6	3.6
80°-90°	47.9	0.6
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°	8701.8	100.0
0°-180°	8701.8	100.0

Coefficient of Utilization



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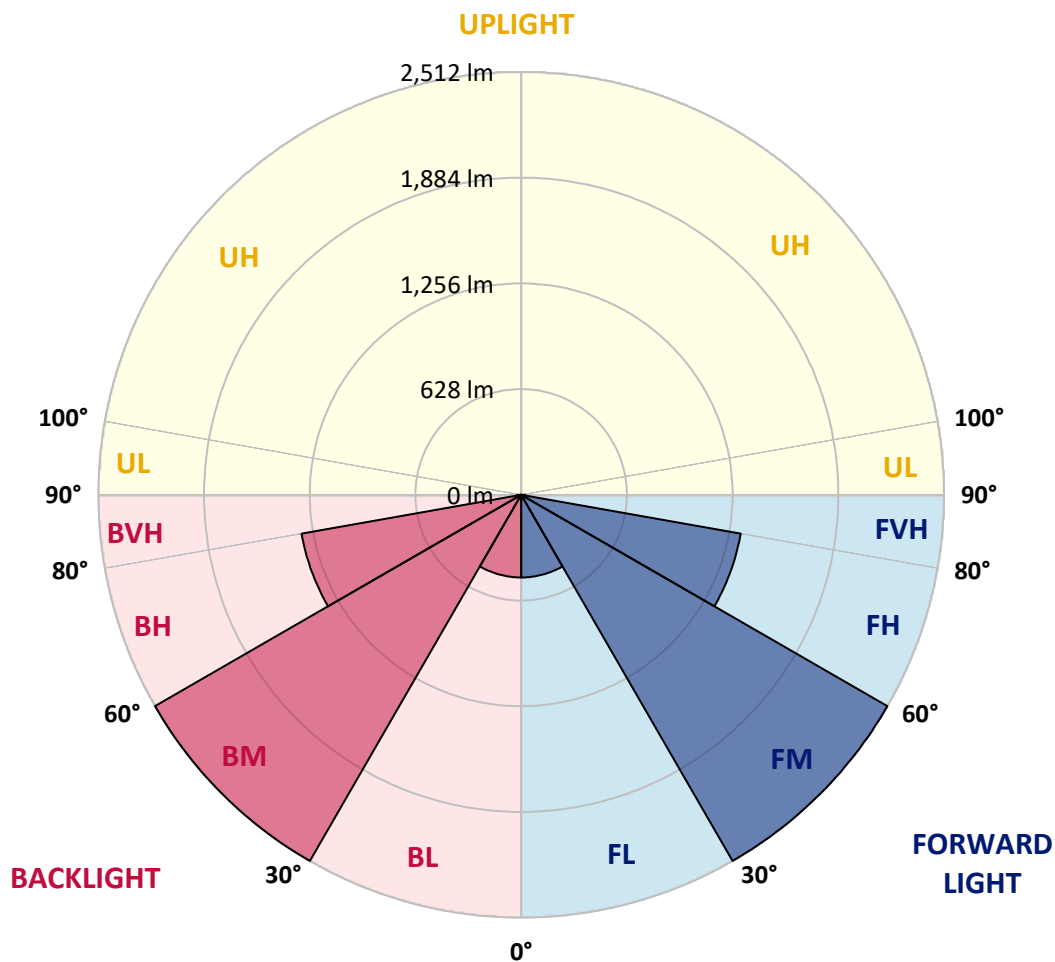
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	490.8	5.6			
FM	(30°-60°)	2511.6	28.9			
FH	(60°-80°)	1324.5	15.2			G1/1800
FVH	(80°-90°)	24.0	0.3			G1/100
BL	(0°-30°)	490.8	5.6	B1/500		
BM	(30°-60°)	2511.6	28.9	B3/5000		
BH	(60°-80°)	1324.5	15.2	B3/2500		G1/1800
BVH	(80°-90°)	24.0	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-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8
2.5°	997.9	997.9	999.5	999.0	996.8	995.2	993.6	991.5	990.3	989.3	988.8
5°	1003.3	1003.3	1005.1	1004.5	1002.9	1000.6	999.5	997.9	996.3	995.2	995.9
7.5°	1016.9	1017.5	1018.0	1017.5	1015.9	1014.2	1012.0	1011.5	1009.3	1007.7	1008.7
10°	1037.5	1037.5	1038.1	1038.6	1037.5	1033.7	1033.7	1032.6	1030.4	1028.3	1028.9
12.5°	1060.3	1060.3	1060.8	1060.8	1060.8	1058.7	1059.2	1058.7	1056.0	1054.9	1056.0
15°	1082.5	1083.0	1083.0	1084.2	1084.2	1084.7	1086.9	1086.9	1085.8	1085.2	1085.2
17.5°	1108.6	1109.6	1110.1	1111.8	1112.3	1113.4	1115.5	1116.1	1116.7	1115.1	1115.5
20°	1143.3	1143.7	1145.3	1146.0	1148.2	1148.2	1149.2	1148.7	1147.6	1145.3	1145.3
22.5°	1182.3	1183.3	1186.7	1186.7	1189.3	1187.6	1188.2	1186.7	1183.8	1182.8	1181.7
25°	1233.3	1234.8	1237.5	1236.4	1237.5	1234.8	1234.8	1234.8	1233.3	1231.5	1231.0
27.5°	1297.7	1294.9	1297.7	1295.5	1294.9	1292.8	1293.4	1292.3	1290.7	1290.1	1288.0
30°	1365.0	1361.7	1363.3	1363.8	1362.8	1362.2	1360.0	1358.4	1355.7	1356.4	1354.6
32.5°	1441.9	1438.6	1440.3	1440.8	1439.8	1440.8	1440.3	1436.5	1433.2	1435.4	1435.4
35°	1533.5	1531.3	1535.7	1537.3	1534.0	1532.4	1530.3	1526.0	1521.0	1524.3	1524.9
37.5°	1643.5	1640.8	1644.1	1648.4	1642.6	1639.2	1630.6	1624.0	1620.8	1622.3	1624.6
40°	1758.0	1758.5	1767.7	1768.8	1762.2	1758.5	1749.8	1740.0	1730.9	1730.9	1733.5
42.5°	1878.3	1880.0	1890.8	1894.5	1892.4	1885.4	1873.3	1861.5	1849.5	1851.8	1855.0
45°	2014.3	2012.2	2023.5	2032.8	2031.2	2029.0	2017.7	1995.9	1985.1	1984.5	1989.9
47.5°	2157.4	2161.9	2173.7	2189.3	2188.9	2183.5	2168.8	2148.7	2128.8	2130.3	2136.9
50°	2324.5	2330.4	2350.4	2366.1	2368.3	2366.7	2349.3	2326.0	2297.9	2299.4	2308.1
52.5°	2474.0	2482.6	2506.0	2538.5	2558.6	2567.7	2556.3	2534.7	2506.0	2507.6	2516.8
55°	2609.5	2623.1	2657.7	2702.2	2742.3	2779.7	2796.6	2796.1	2774.9	2779.7	2791.7
57.5°	2694.6	2713.6	2766.2	2837.7	2917.4	2992.8	3057.8	3119.1	3132.6	3158.1	3158.1
60°	2580.2	2624.7	2694.6	2817.2	2973.7	3142.9	3326.2	3504.5	3619.5	3709.9	3661.1
62.5°	2154.8	2220.3	2318.4	2480.0	2723.9	3025.9	3393.8	3808.5	4241.2	4505.7	4311.7
65°	1394.2	1476.6	1583.4	1765.0	2072.3	2460.9	2997.1	3742.5	4647.7	5117.1	4683.6
67.5°	552.4	608.2	673.3	802.2	1069.0	1450.7	2052.3	2971.7	4104.0	4547.0	4060.7
70°	264.0	273.3	285.8	313.2	380.1	512.8	824.5	1464.1	2516.8	2983.6	2456.7
72.5°	190.8	192.4	198.3	207.6	227.1	254.2	308.9	447.7	867.9	1261.9	868.9
75°	144.7	147.0	150.1	155.0	165.4	178.4	199.0	238.5	297.1	342.7	296.5
77.5°	110.0	112.2	115.0	119.8	125.3	134.4	142.0	157.7	182.6	192.4	191.3
80°	80.2	84.0	88.4	92.6	96.5	100.8	101.4	109.0	123.1	132.3	129.5
82.5°	50.9	54.2	65.5	70.4	71.1	72.1	71.5	72.1	79.7	86.1	84.0
85°	32.5	34.7	40.7	46.1	44.9	47.2	47.2	46.1	42.8	36.9	43.8
87.5°	16.3	16.8	19.6	24.4	23.3	20.7	20.0	20.0	14.6	12.4	13.6
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°	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8
2.5°	987.1	988.1	986.6	986.6	986.0	987.1	985.5	985.5
5°	994.8	996.3	995.9	995.9	996.8	997.9	997.4	996.8
7.5°	1008.3	1009.3	1010.5	1011.0	1012.0	1011.5	1012.6	1012.0
10°	1028.9	1027.8	1029.4	1027.8	1028.3	1027.2	1027.8	1027.8
12.5°	1054.9	1053.3	1052.2	1051.0	1051.0	1049.0	1049.0	1049.4
15°	1084.7	1082.0	1079.9	1078.8	1077.6	1077.6	1076.0	1077.1
17.5°	1114.0	1111.3	1107.4	1107.4	1105.9	1104.7	1103.7	1106.4
20°	1144.9	1142.1	1139.9	1139.4	1136.1	1135.1	1135.6	1139.0
22.5°	1180.6	1178.9	1178.9	1177.9	1175.7	1174.2	1174.2	1177.9
25°	1228.9	1225.6	1226.1	1226.7	1225.6	1225.6	1224.5	1227.3
27.5°	1288.0	1285.3	1286.9	1288.0	1286.9	1288.4	1286.9	1289.1
30°	1357.3	1355.7	1357.3	1359.0	1356.4	1356.4	1355.2	1356.8
32.5°	1440.3	1438.0	1439.3	1439.3	1435.4	1432.2	1427.9	1431.1
35°	1531.3	1528.6	1530.8	1532.4	1528.0	1524.9	1518.3	1521.0
37.5°	1631.6	1632.7	1635.5	1642.6	1641.5	1636.0	1631.1	1633.3
40°	1743.8	1749.3	1761.1	1766.1	1765.0	1759.6	1753.0	1754.1
42.5°	1870.7	1877.7	1890.3	1898.3	1894.5	1887.0	1878.8	1882.0
45°	2008.9	2019.7	2036.0	2044.2	2039.2	2031.2	2019.7	2025.7
47.5°	2155.3	2177.0	2198.6	2209.6	2207.9	2196.4	2181.9	2183.5
50°	2330.4	2359.0	2386.7	2397.5	2389.4	2372.2	2351.6	2351.0
52.5°	2548.3	2579.2	2601.9	2599.2	2579.2	2552.1	2528.8	2527.7
55°	2820.4	2830.6	2827.4	2804.1	2768.8	2726.6	2696.8	2692.0
57.5°	3149.5	3114.8	3063.8	2993.3	2914.2	2834.0	2779.7	2759.8
60°	3551.7	3395.0	3212.9	3021.0	2845.9	2714.7	2631.8	2581.3
62.5°	3883.9	3430.2	3023.2	2689.7	2417.1	2255.0	2141.6	2071.9
65°	3770.0	2963.5	2373.7	1943.8	1646.2	1478.8	1359.0	1279.2
67.5°	2912.6	1980.1	1377.9	955.1	724.3	613.1	535.6	485.2
70°	1468.5	759.4	460.2	324.6	277.5	258.1	245.0	237.4
72.5°	430.9	287.8	239.0	211.5	194.7	182.6	175.1	171.2
75°	238.5	194.7	171.8	156.1	145.3	137.1	132.3	128.9
77.5°	164.2	141.5	130.2	119.8	111.1	105.1	101.4	98.2
80°	115.0	103.6	98.6	93.2	86.7	81.8	76.4	74.3
82.5°	76.4	71.5	70.4	66.1	62.3	57.0	47.2	43.8
85°	44.9	44.5	44.5	42.8	40.2	35.3	28.1	28.1
87.5°	15.7	16.3	16.8	17.8	17.3	14.6	11.9	11.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)