

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: P199133

Luminaire Tested: **XNV2-AF-02-LED-U-5NQ-8030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199133  
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-8030-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 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: 8173 lumens  
Efficiency: N/A  
Efficacy: 96.2 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 - G1

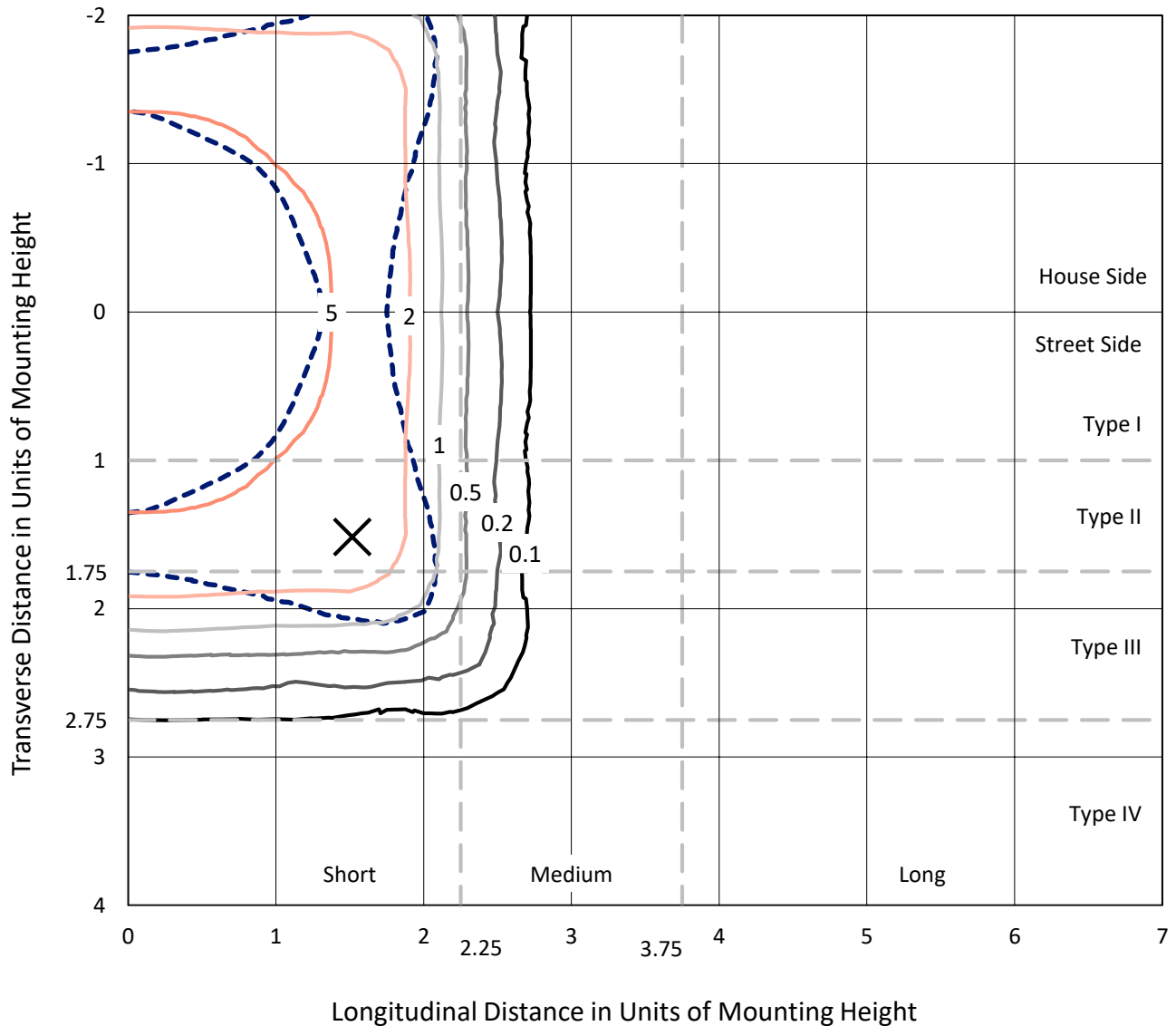
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

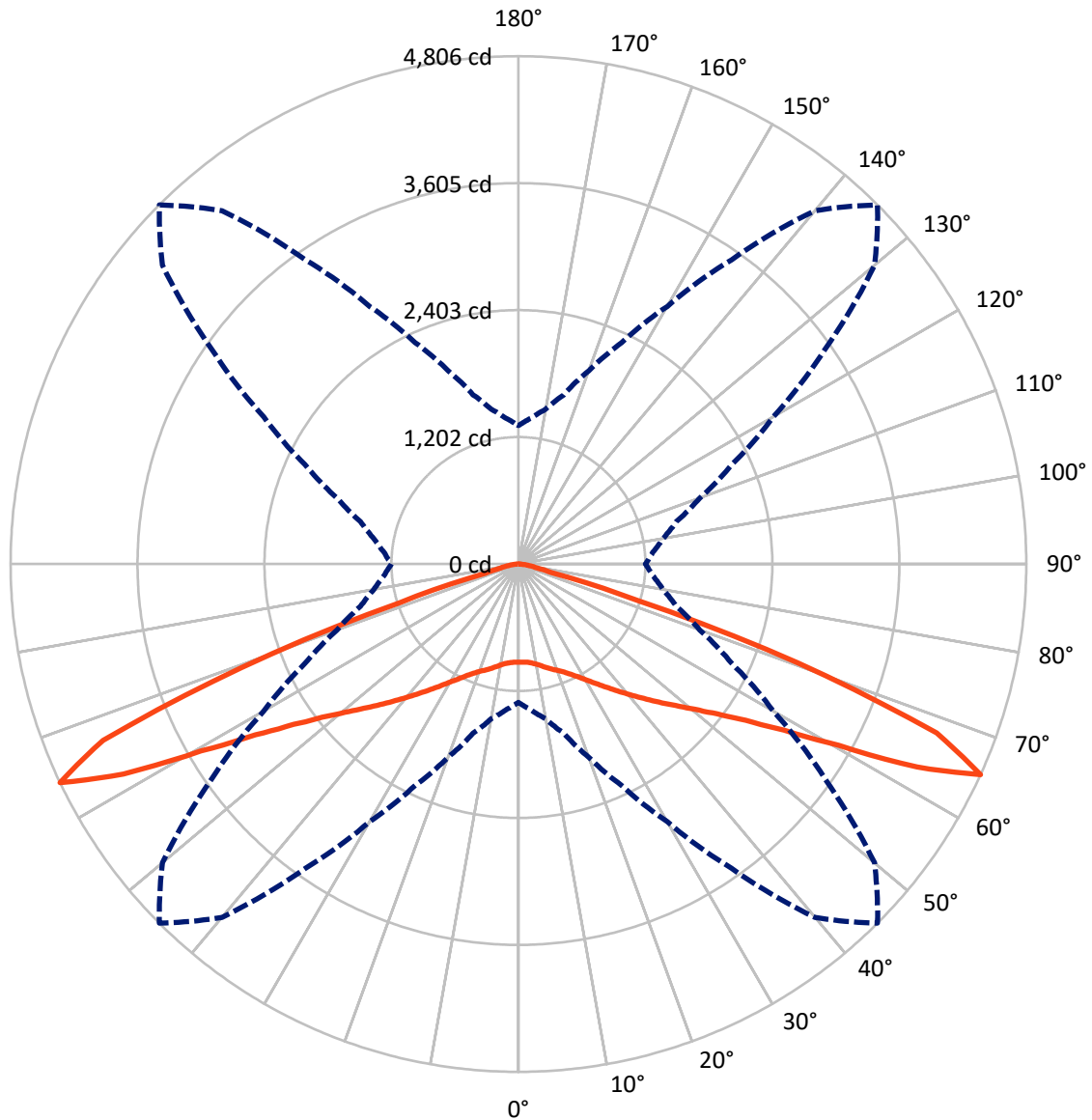
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 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
<b>House Side</b>	Lumens	4086.5	0.0	4086.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4086.5	0.0	4086.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	8173.0	0.0	8173.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.5	1.1
10°-20°	290.2	3.6
20°-30°	541.3	6.6
30°-40°	912.7	11.2
40°-50°	1482.5	18.1
50°-60°	2322.8	28.4
60°-70°	2192.6	26.8
70°-80°	295.5	3.6
80°-90°	45.0	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°	8173.0	100.0
0°-180°	8173.0	100.0

**Coefficient of Utilization**



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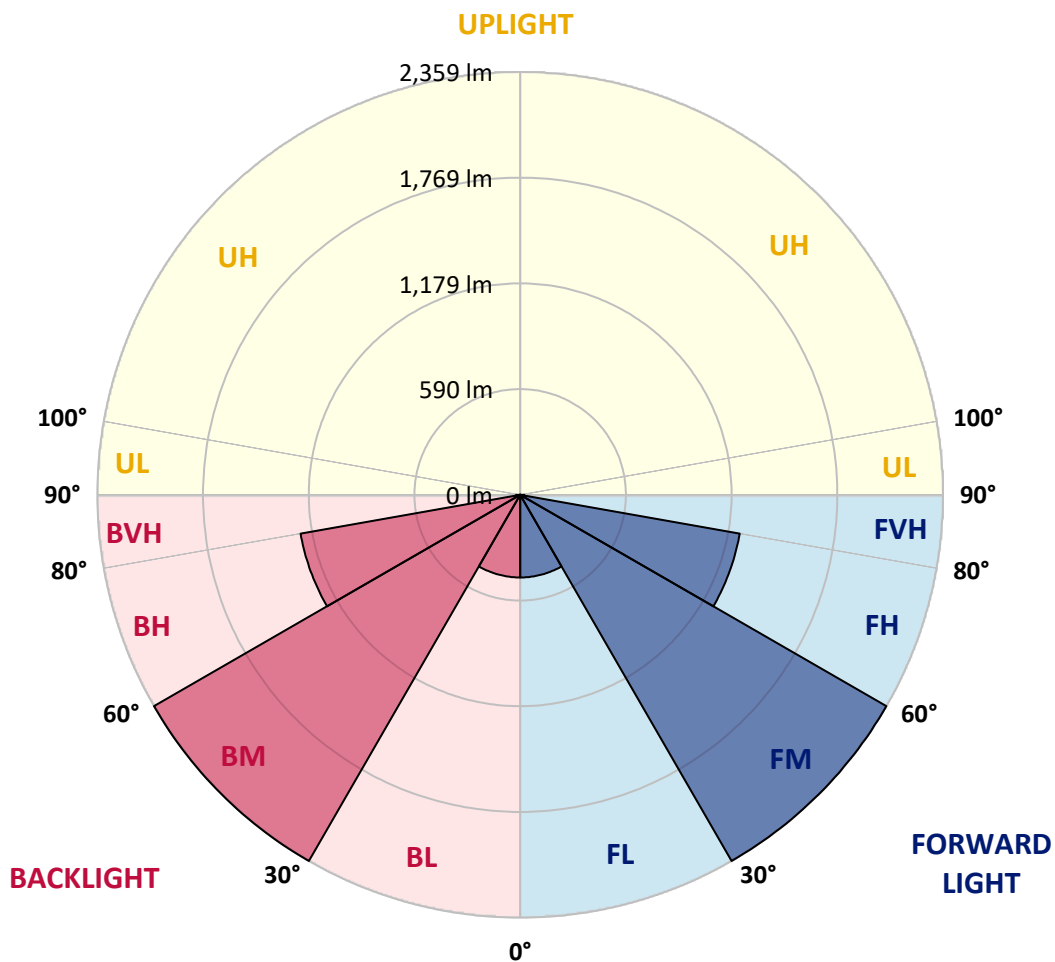
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	461.0	5.6			
FM (30°-60°)	2359.0	28.9			
FH (60°-80°)	1244.0	15.2			G1/1800
FVH (80°-90°)	22.5	0.3			G1/100
BL (0°-30°)	461.0	5.6	B1/500		
BM (30°-60°)	2359.0	28.9	B2/2500		
BH (60°-80°)	1244.0	15.2	B3/2500		G1/1800
BVH (80°-90°)	22.5	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°	929.7	929.7	929.7	929.7	929.7	929.7	929.7	929.7	929.7	929.7	929.7
2.5°	937.3	937.3	938.8	938.3	936.3	934.8	933.2	931.2	930.2	929.2	928.7
5°	942.4	942.4	943.9	943.4	941.9	939.9	938.8	937.3	935.8	934.8	935.3
7.5°	955.1	955.6	956.1	955.6	954.1	952.6	950.5	950.0	948.0	946.5	947.5
10°	974.5	974.5	975.0	975.5	974.5	970.9	970.9	969.9	967.9	965.8	966.3
12.5°	995.9	995.9	996.4	996.4	996.4	994.3	994.8	994.3	991.8	990.8	991.8
15°	1016.7	1017.2	1017.2	1018.3	1018.3	1018.8	1020.8	1020.8	1019.8	1019.3	1019.3
17.5°	1041.2	1042.2	1042.7	1044.2	1044.7	1045.8	1047.8	1048.3	1048.8	1047.3	1047.8
20°	1073.8	1074.3	1075.8	1076.3	1078.3	1078.3	1079.4	1078.8	1077.8	1075.8	1075.8
22.5°	1110.4	1111.4	1114.5	1114.5	1117.0	1115.5	1116.0	1114.5	1111.9	1110.9	1109.9
25°	1158.3	1159.8	1162.3	1161.3	1162.3	1159.8	1159.8	1159.8	1158.3	1156.7	1156.2
27.5°	1218.9	1216.3	1218.9	1216.8	1216.3	1214.3	1214.8	1213.8	1212.2	1211.7	1209.7
30°	1282.0	1278.9	1280.5	1281.0	1279.9	1279.4	1277.4	1275.9	1273.3	1273.8	1272.3
32.5°	1354.3	1351.2	1352.8	1353.3	1352.2	1353.3	1352.8	1349.2	1346.1	1348.2	1348.2
35°	1440.3	1438.3	1442.4	1443.9	1440.8	1439.3	1437.3	1433.2	1428.6	1431.7	1432.2
37.5°	1543.7	1541.1	1544.2	1548.3	1542.7	1539.6	1531.5	1525.3	1522.3	1523.8	1525.9
40°	1651.1	1651.6	1660.3	1661.3	1655.2	1651.6	1643.5	1634.3	1625.6	1625.6	1628.2
42.5°	1764.1	1765.7	1775.8	1779.4	1777.4	1770.7	1759.5	1748.3	1737.1	1739.2	1742.2
45°	1891.9	1889.9	1900.6	1909.2	1907.7	1905.7	1895.0	1874.6	1864.4	1863.9	1869.0
47.5°	2026.3	2030.4	2041.6	2056.4	2055.9	2050.8	2037.0	2018.2	1999.3	2000.9	2007.0
50°	2183.1	2188.7	2207.6	2222.3	2224.4	2222.9	2206.6	2184.7	2158.2	2159.7	2167.9
52.5°	2323.7	2331.8	2353.7	2384.2	2403.1	2411.7	2401.1	2380.7	2353.7	2355.2	2363.9
55°	2450.9	2463.7	2496.3	2538.0	2575.7	2610.8	2626.6	2626.1	2606.2	2610.8	2622.0
57.5°	2530.9	2548.7	2598.1	2665.3	2740.1	2810.9	2872.0	2929.5	2942.3	2966.2	2966.2
60°	2423.5	2465.2	2530.9	2645.9	2793.1	2951.9	3124.0	3291.5	3399.5	3484.5	3438.7
62.5°	2023.8	2085.4	2177.5	2329.3	2558.4	2842.0	3187.7	3577.1	3983.4	4231.9	4049.6
65°	1309.5	1386.9	1487.2	1657.7	1946.4	2311.4	2815.0	3515.0	4365.3	4806.2	4398.9
67.5°	518.8	571.2	632.3	753.5	1004.0	1362.4	1927.6	2791.0	3854.6	4270.6	3813.9
70°	247.9	256.6	268.3	294.3	356.9	481.6	774.4	1375.2	2363.9	2802.2	2307.4
72.5°	179.2	180.7	186.3	195.0	213.3	238.8	290.2	420.5	815.1	1185.3	816.1
75°	135.9	138.0	141.0	145.6	155.3	167.5	186.9	224.0	279.0	321.8	278.5
77.5°	103.4	105.4	107.9	112.5	117.6	126.3	133.4	148.2	171.6	180.7	179.7
80°	75.4	78.9	83.0	87.1	90.6	94.7	95.2	102.3	115.6	124.2	121.7
82.5°	47.9	50.9	61.6	66.2	66.7	67.7	67.2	67.7	74.8	81.0	78.9
85°	30.5	32.6	38.2	43.3	42.3	44.3	44.3	43.3	40.2	34.6	41.2
87.5°	15.3	15.8	18.3	22.9	21.9	19.3	18.8	18.8	13.7	11.7	12.7
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°	929.7	929.7	929.7	929.7	929.7	929.7	929.7	929.7
2.5°	927.1	928.1	926.6	926.6	926.1	927.1	925.6	925.6
5°	934.3	935.8	935.3	935.3	936.3	937.3	936.8	936.3
7.5°	947.0	948.0	949.0	949.5	950.5	950.0	951.1	950.5
10°	966.3	965.3	966.8	965.3	965.8	964.8	965.3	965.3
12.5°	990.8	989.2	988.2	987.2	987.2	985.2	985.2	985.7
15°	1018.8	1016.2	1014.2	1013.2	1012.1	1012.1	1010.6	1011.6
17.5°	1046.3	1043.7	1040.1	1040.1	1038.6	1037.6	1036.6	1039.1
20°	1075.3	1072.7	1070.7	1070.2	1067.1	1066.1	1066.6	1069.7
22.5°	1108.9	1107.4	1107.4	1106.3	1104.3	1102.8	1102.8	1106.3
25°	1154.2	1151.1	1151.6	1152.2	1151.1	1151.1	1150.1	1152.7
27.5°	1209.7	1207.1	1208.7	1209.7	1208.7	1210.2	1208.7	1210.7
30°	1274.9	1273.3	1274.9	1276.4	1273.8	1273.8	1272.8	1274.3
32.5°	1352.8	1350.7	1351.7	1351.7	1348.2	1345.1	1341.0	1344.1
35°	1438.3	1435.7	1437.8	1439.3	1435.2	1432.2	1426.1	1428.6
37.5°	1532.5	1533.5	1536.0	1542.7	1541.6	1536.6	1532.0	1534.0
40°	1637.9	1643.0	1654.2	1658.7	1657.7	1652.6	1646.5	1647.5
42.5°	1757.0	1763.6	1775.3	1783.0	1779.4	1772.3	1764.6	1767.7
45°	1886.8	1897.0	1912.3	1919.9	1915.3	1907.7	1897.0	1902.6
47.5°	2024.3	2044.7	2065.0	2075.2	2073.7	2063.0	2049.2	2050.8
50°	2188.7	2215.7	2241.7	2251.9	2244.2	2227.9	2208.6	2208.1
52.5°	2393.4	2422.4	2443.8	2441.3	2422.4	2397.0	2375.1	2374.1
55°	2649.0	2658.7	2655.6	2633.7	2600.6	2560.9	2532.9	2528.3
57.5°	2958.0	2925.5	2877.6	2811.4	2737.1	2661.7	2610.8	2592.0
60°	3335.8	3188.7	3017.6	2837.4	2672.9	2549.7	2471.8	2424.5
62.5°	3647.9	3221.8	2839.4	2526.3	2270.2	2118.0	2011.6	1945.9
65°	3541.0	2783.4	2229.5	1825.7	1546.2	1388.9	1276.4	1201.5
67.5°	2735.5	1859.8	1294.2	897.1	680.2	575.8	503.0	455.7
70°	1379.2	713.3	432.3	305.0	260.7	242.3	230.1	223.0
72.5°	404.8	270.3	224.5	198.6	182.8	171.6	164.4	160.9
75°	224.0	182.8	161.4	146.6	136.4	128.8	124.2	121.2
77.5°	154.3	132.9	122.2	112.5	104.4	98.8	95.2	92.2
80°	107.9	97.2	92.7	87.6	81.5	76.9	71.8	69.8
82.5°	71.8	67.2	66.2	62.1	58.5	53.5	44.3	41.2
85°	42.3	41.7	41.7	40.2	37.7	33.1	26.5	26.5
87.5°	14.8	15.3	15.8	16.8	16.3	13.7	11.2	10.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)