

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: P198823

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198823  
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  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12545 lumens  
Efficiency: N/A  
Efficacy: 113.0 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): 111  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

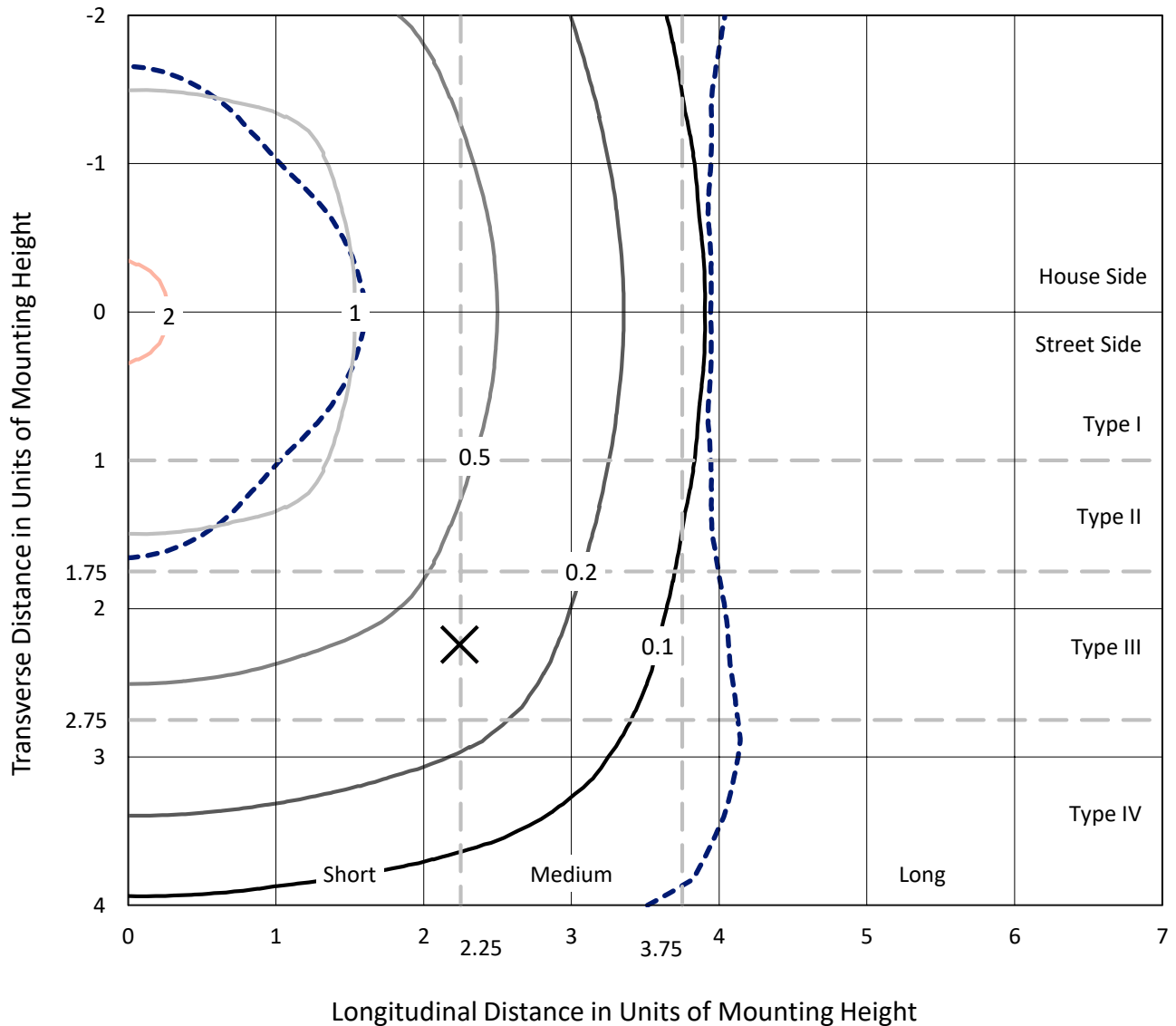


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

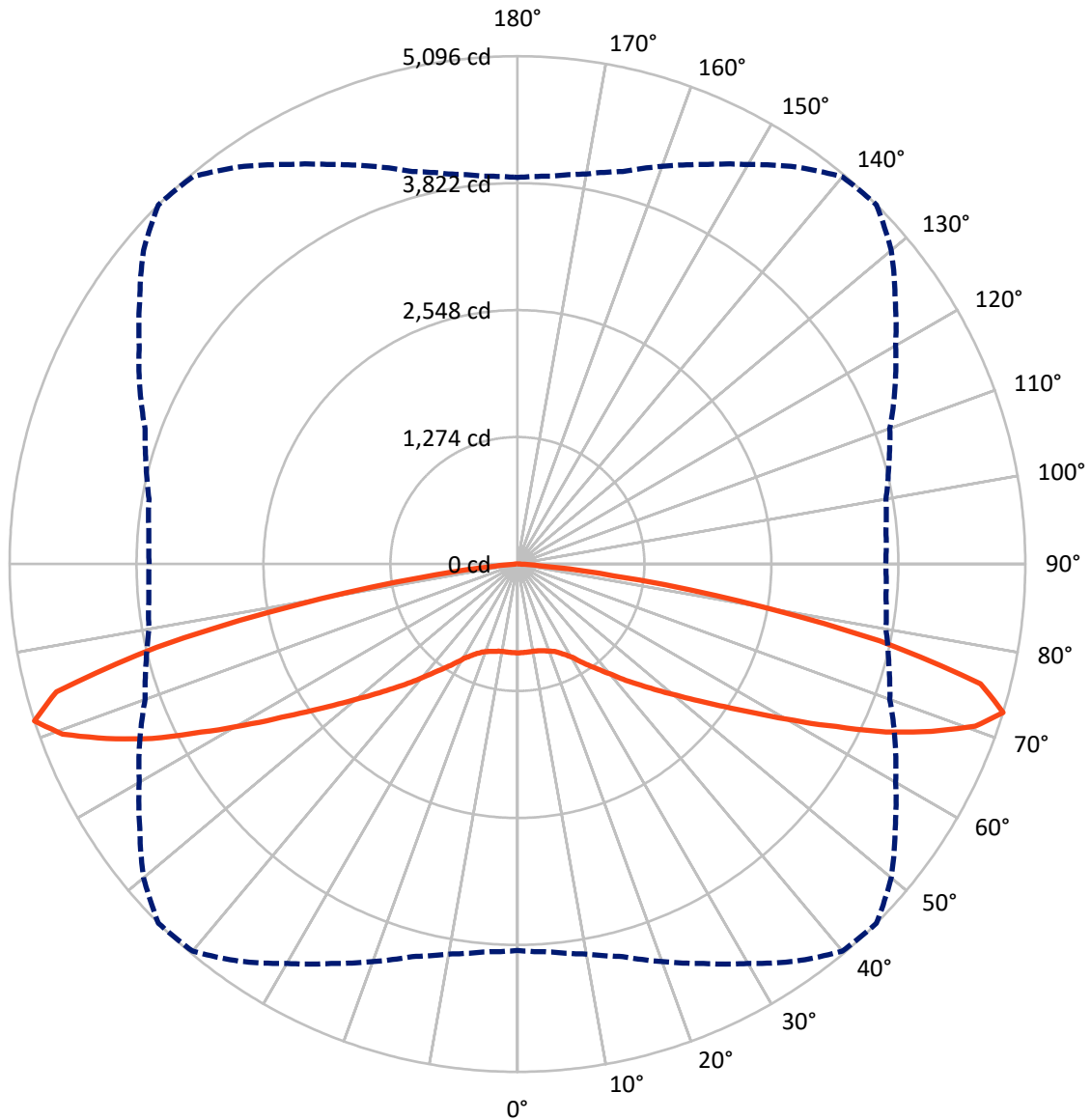


Based on 20 foot mounting height. Maximum calculated value = 2.2 fc  
 Type V - Short - Semi-Cutoff

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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	6272.5	0.0	6272.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6272.5	0.0	6272.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12545.0	0.0	12545.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.1	0.7
10°-20°	257.6	2.1
20°-30°	465.1	3.7
30°-40°	793.3	6.3
40°-50°	1350.6	10.8
50°-60°	2173.7	17.3
60°-70°	3614.8	28.8
70°-80°	3496.9	27.9
80°-90°	307.8	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°	12545.0	100.0
0°-180°	12545.0	100.0



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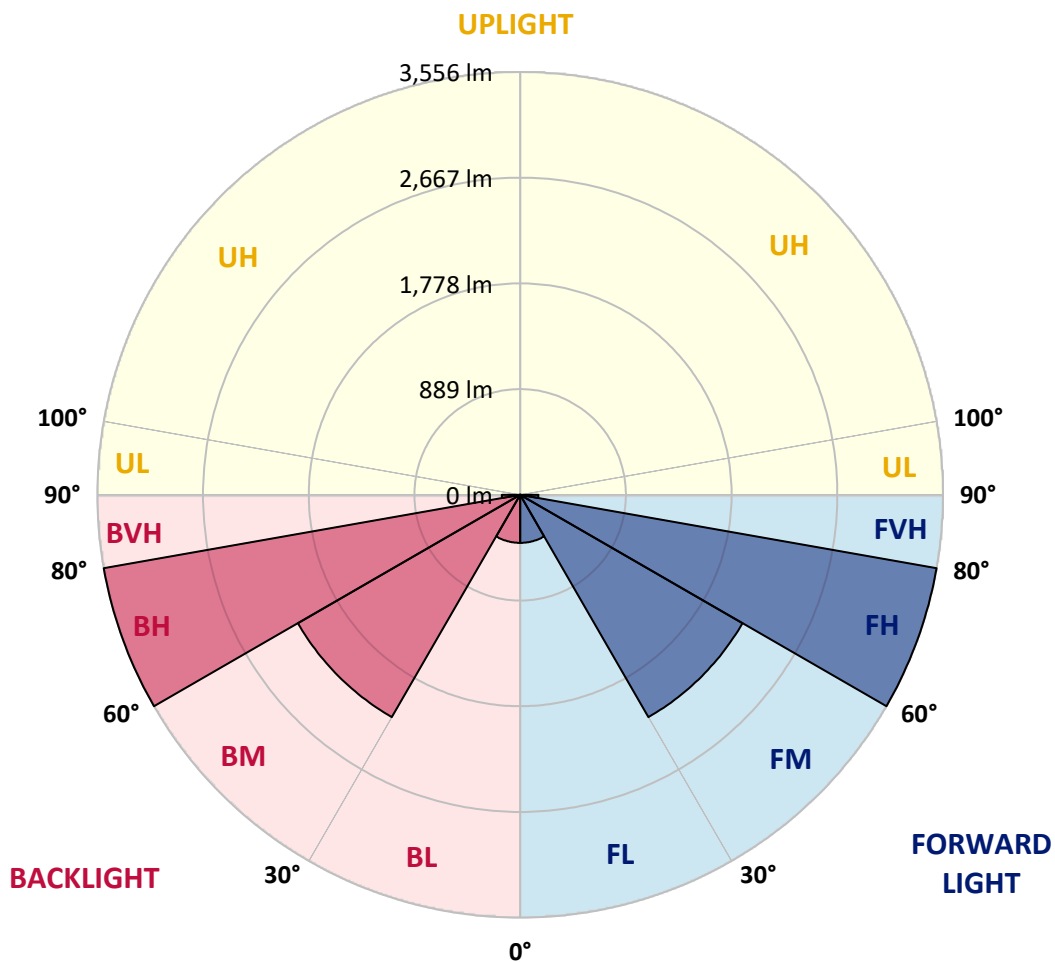
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	403.9	3.2			
FM	(30°-60°)	2158.8	17.2			
FH	(60°-80°)	3555.9	28.3			G2/5000
FVH	(80°-90°)	153.9	1.2			G2/225
BL	(0°-30°)	403.9	3.2	B1/500		
BM	(30°-60°)	2158.8	17.2	B2/2500		
BH	(60°-80°)	3555.9	28.3	B4/5000		G2/5000
BVH	(80°-90°)	153.9	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°	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9
2.5°	898.8	898.8	899.6	898.8	897.3	896.5	894.2	892.6	891.1	890.3	888.8
5°	899.6	899.6	900.3	899.6	898.0	896.5	894.9	892.6	891.1	889.5	888.8
7.5°	902.7	903.4	904.2	903.4	900.3	898.8	896.5	894.2	891.1	889.5	888.0
10°	908.8	908.8	908.8	908.1	905.8	902.7	899.6	897.3	893.4	889.5	887.2
12.5°	913.5	914.2	914.2	912.7	909.6	905.8	902.7	900.3	897.3	894.2	891.9
15°	920.4	920.4	919.7	916.6	911.9	908.8	907.3	906.5	905.8	904.2	901.9
17.5°	934.3	933.6	931.2	926.6	921.2	918.9	917.3	917.3	917.3	916.6	915.0
20°	954.4	954.4	951.3	943.6	939.0	936.6	934.3	934.3	934.3	932.0	929.7
22.5°	986.8	987.6	983.0	973.7	967.5	962.9	959.8	957.5	955.2	953.6	949.8
25°	1030.8	1030.1	1024.7	1013.1	1008.5	1003.8	997.6	993.8	990.7	988.4	983.7
27.5°	1077.2	1076.4	1070.2	1060.2	1057.1	1050.1	1045.5	1040.1	1036.3	1032.4	1027.8
30°	1136.6	1132.8	1128.1	1120.4	1118.9	1113.5	1107.3	1099.6	1093.4	1087.2	1081.8
32.5°	1189.9	1189.9	1183.0	1179.1	1182.2	1179.9	1180.6	1176.0	1172.2	1169.8	1164.4
35°	1264.0	1264.0	1261.0	1256.3	1257.1	1251.7	1250.9	1251.7	1254.8	1254.8	1248.6
37.5°	1362.9	1364.4	1354.4	1352.8	1349.0	1341.3	1337.4	1338.9	1345.9	1349.8	1341.3
40°	1485.7	1488.7	1485.7	1475.6	1471.0	1457.9	1450.1	1450.1	1455.5	1459.4	1456.3
42.5°	1606.9	1612.3	1606.9	1599.2	1595.3	1585.3	1581.4	1584.5	1591.4	1596.1	1591.4
45°	1742.0	1745.9	1738.9	1729.7	1725.0	1719.6	1717.3	1719.6	1727.3	1732.0	1730.4
47.5°	1874.8	1880.2	1871.7	1867.9	1867.9	1862.5	1868.6	1874.8	1881.8	1892.6	1888.0
50°	2004.6	2011.5	2006.1	2006.9	2013.0	2023.1	2034.7	2047.0	2059.4	2071.0	2072.5
52.5°	2120.4	2131.2	2132.0	2145.9	2165.2	2180.6	2213.0	2240.1	2269.4	2279.4	2274.8
55°	2242.4	2257.1	2276.4	2298.0	2328.9	2360.5	2415.3	2464.0	2502.6	2526.5	2522.7
57.5°	2416.9	2431.6	2451.6	2487.2	2533.5	2576.7	2651.6	2727.3	2786.0	2822.3	2804.5
60°	2643.1	2658.6	2684.8	2722.7	2782.9	2841.6	2944.3	3053.2	3144.3	3186.0	3153.5
62.5°	2942.7	2957.4	2974.4	3024.6	3091.8	3167.4	3296.4	3436.2	3552.0	3592.1	3546.6
65°	3369.7	3387.5	3392.9	3433.8	3499.5	3569.7	3708.7	3866.3	3998.3	4063.9	3972.8
67.5°	3850.8	3857.8	3879.4	3927.3	3994.4	4057.7	4167.4	4316.4	4443.1	4479.4	4382.1
70°	4132.6	4146.5	4184.4	4250.8	4331.1	4430.7	4550.4	4711.0	4854.6	4871.6	4748.1
72.5°	3877.8	3906.4	3973.6	4077.1	4245.4	4422.2	4628.4	4865.4	5071.6	5095.5	4897.1
75°	3110.3	3142.7	3223.0	3336.5	3535.8	3798.3	4096.4	4452.3	4761.2	4800.6	4538.0
77.5°	1657.8	1698.0	1814.6	1967.5	2251.6	2599.1	2958.2	3364.3	3626.9	3715.7	3526.5
80°	417.7	439.4	495.7	585.3	777.6	1057.9	1367.5	1804.6	2130.4	2268.6	2130.4
82.5°	162.2	178.4	193.8	204.6	223.2	261.8	361.4	589.2	793.8	977.6	846.3
85°	62.5	66.4	95.7	108.9	108.9	119.7	137.4	162.2	200.8	219.3	183.8
87.5°	24.7	27.0	33.2	51.0	52.5	46.3	49.4	55.6	42.5	35.5	40.2
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°	891.9	891.9	891.9	891.9	891.9	891.9	891.9	891.9
2.5°	888.0	887.2	885.7	886.5	885.7	885.7	885.7	885.7
5°	887.2	887.2	885.7	885.7	885.7	886.5	885.7	885.7
7.5°	886.5	885.7	884.1	883.4	883.4	882.6	882.6	882.6
10°	884.9	883.4	881.8	881.0	881.0	879.5	879.5	879.5
12.5°	888.8	886.5	884.9	884.1	884.1	884.1	884.9	884.9
15°	899.6	894.9	892.6	891.9	892.6	894.2	894.9	895.7
17.5°	911.2	906.5	902.7	901.1	901.9	904.2	906.5	908.1
20°	925.8	922.0	917.3	915.8	915.8	918.9	920.4	922.7
22.5°	946.7	943.6	939.7	937.4	935.9	939.7	942.0	943.6
25°	979.9	976.8	973.7	971.4	970.6	974.5	976.0	976.8
27.5°	1023.9	1020.8	1019.3	1018.5	1016.2	1017.7	1020.0	1019.3
30°	1081.0	1083.4	1081.0	1081.0	1077.2	1078.7	1077.2	1075.6
32.5°	1157.5	1155.2	1148.2	1143.6	1138.2	1138.2	1135.9	1133.5
35°	1233.9	1226.2	1222.3	1224.7	1222.3	1223.9	1220.0	1216.2
37.5°	1324.3	1319.6	1318.9	1325.8	1324.3	1325.8	1325.8	1320.4
40°	1444.0	1440.9	1446.3	1457.9	1462.5	1461.7	1463.3	1456.3
42.5°	1581.4	1576.0	1578.3	1588.4	1593.8	1595.3	1594.5	1588.4
45°	1718.8	1720.4	1720.4	1731.2	1736.6	1739.7	1734.3	1732.0
47.5°	1874.1	1876.4	1871.0	1877.9	1879.5	1884.9	1880.2	1876.4
50°	2053.2	2044.7	2032.3	2034.7	2034.7	2033.1	2027.7	2023.1
52.5°	2253.2	2233.9	2210.7	2203.0	2194.5	2186.0	2175.2	2166.7
55°	2481.0	2447.8	2406.1	2386.8	2370.6	2351.3	2326.5	2318.1
57.5°	2745.1	2687.9	2632.3	2597.6	2555.9	2530.4	2498.7	2497.2
60°	3058.6	2981.3	2883.3	2831.5	2789.8	2759.7	2735.8	2726.5
62.5°	3420.7	3287.9	3182.1	3126.5	3077.9	3059.3	3029.2	3033.1
65°	3792.1	3657.0	3554.3	3509.5	3464.0	3451.6	3423.8	3433.8
67.5°	4194.4	4083.2	3970.5	3928.8	3887.1	3874.7	3846.2	3854.7
70°	4555.0	4413.7	4285.5	4203.7	4132.6	4075.5	4039.2	4024.5
72.5°	4626.8	4382.1	4180.5	3975.9	3857.8	3754.3	3711.8	3695.6
75°	4157.4	3777.5	3490.2	3250.1	3117.2	2966.7	2950.5	2928.1
77.5°	3233.8	2801.4	2454.0	2145.1	1966.7	1782.9	1719.6	1671.7
80°	1928.9	1482.6	1149.0	805.4	657.1	528.9	497.3	464.1
82.5°	690.3	442.5	298.1	232.4	207.7	191.5	179.1	162.9
85°	166.8	140.5	132.8	120.5	118.9	101.2	71.8	64.1
87.5°	53.3	48.6	49.4	47.1	49.4	37.1	30.1	27.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)