

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: P271303

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271303  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24161)  
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-RW-7027-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8648.8 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Medium - 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

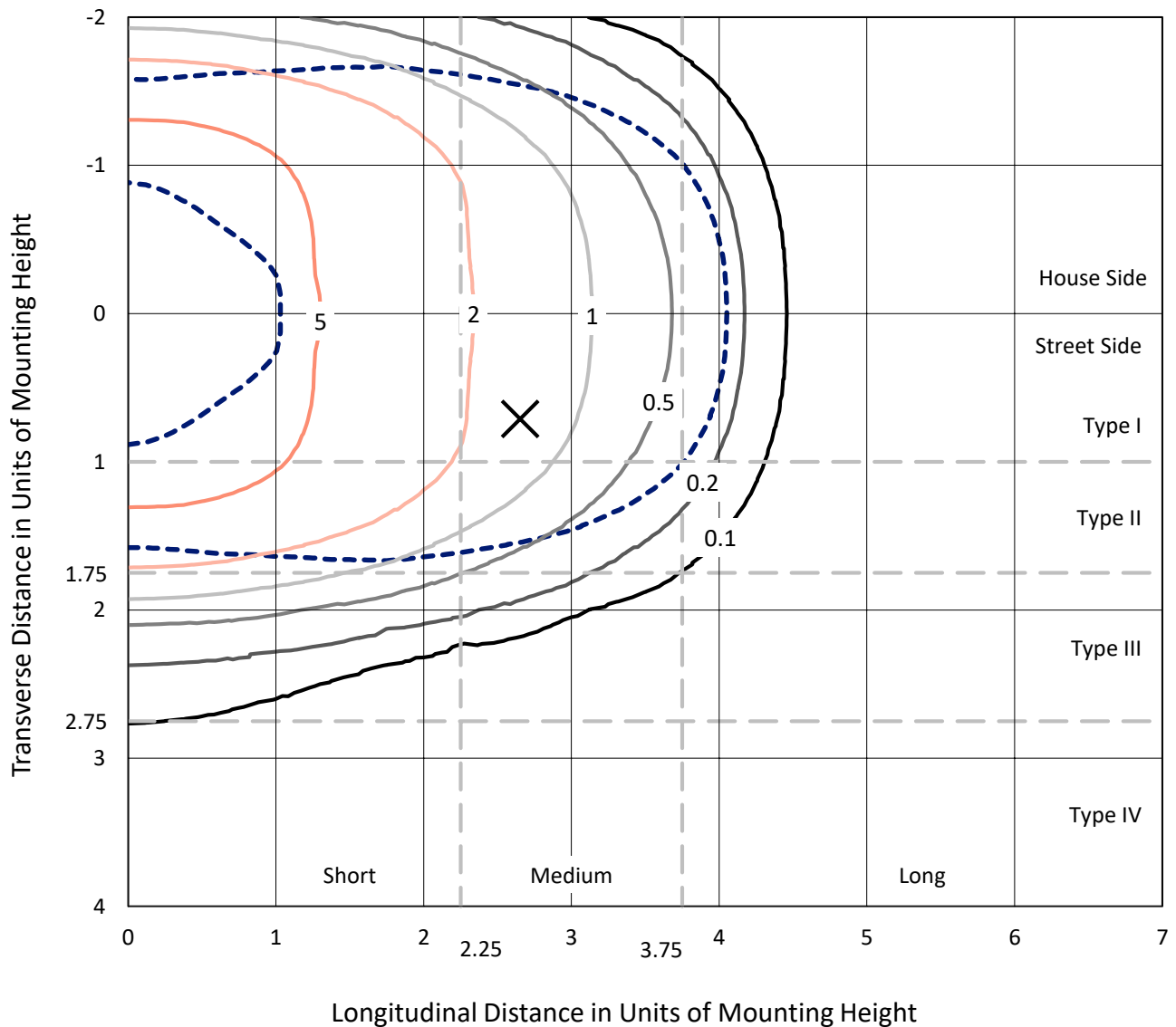


REPORT NUMBER: P271303

CATALOG NUMBER: XNV2-AF-02-LED-U-RW-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

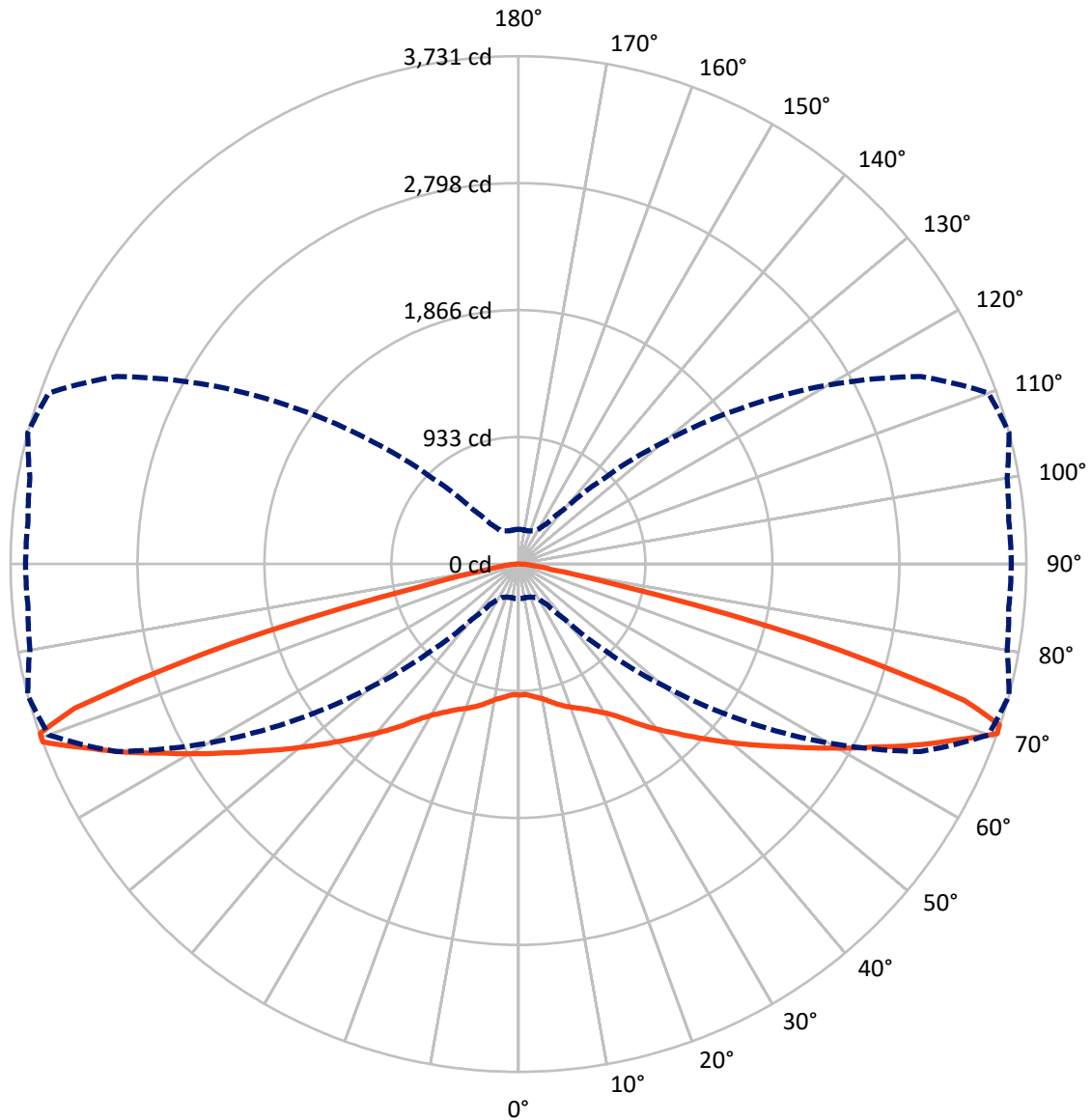


Based on 10 foot mounting height. Maximum calculated value = 9.7 fc  
 Type V - Medium - Full Cutoff

REPORT NUMBER: P271303

CATALOG NUMBER: XNV2-AF-02-LED-U-RW-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P271303

CATALOG NUMBER: XNV2-AF-02-LED-U-RW-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4324.4	0.0	4324.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4324.4	0.0	4324.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	8648.8	0.0	8648.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.4	1.1
10°-20°	286.5	3.3
20°-30°	538.1	6.2
30°-40°	947.9	11.0
40°-50°	1571.0	18.2
50°-60°	2185.4	25.3
60°-70°	2063.1	23.9
70°-80°	881.2	10.2
80°-90°	83.3	1.0
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°	8648.8	100.0
0°-180°	8648.8	100.0

**Coefficient of Utilization**



REPORT NUMBER: P271303

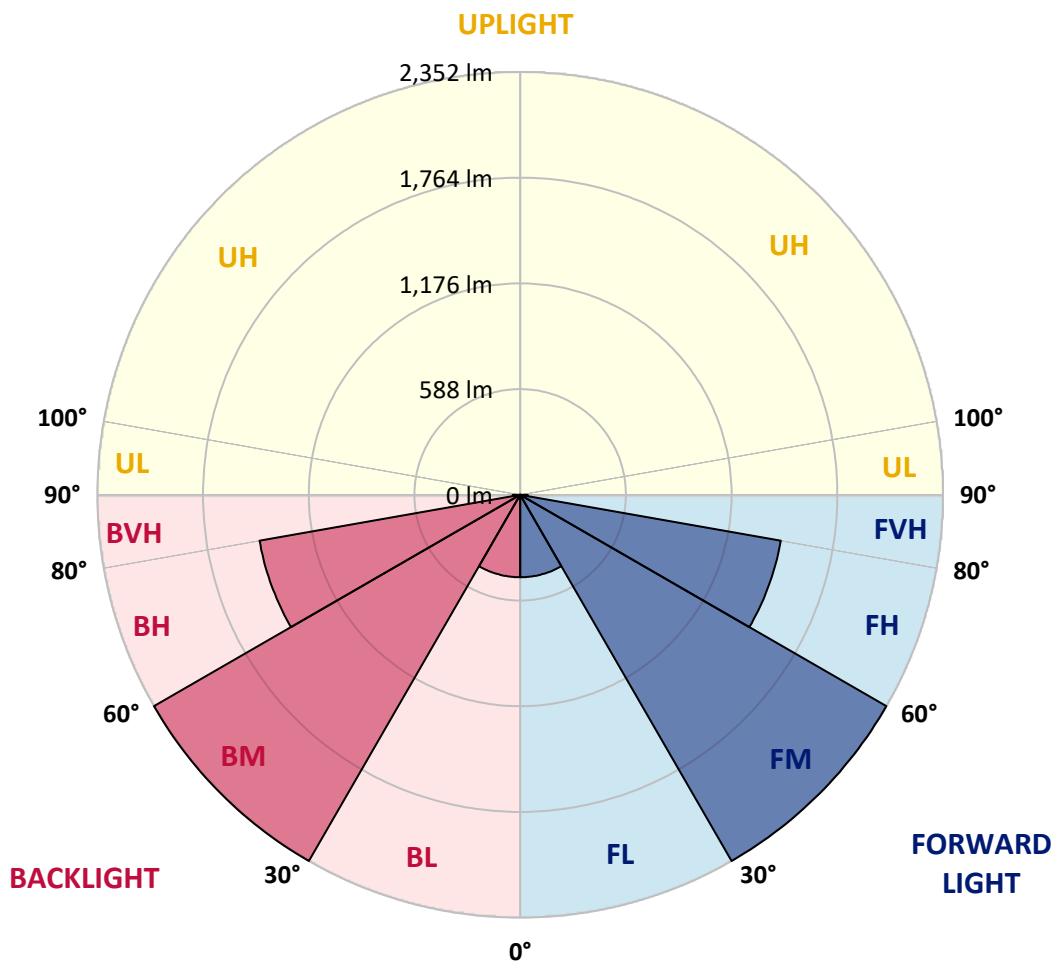
CATALOG NUMBER: XNV2-AF-02-LED-U-RW-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	458.5	5.3			
FM	(30°-60°)	2352.1	27.2			
FH	(60°-80°)	1472.1	17.0			G1/1800
FVH	(80°-90°)	41.6	0.5			G1/100
BL	(0°-30°)	458.5	5.3	B1/500		
BM	(30°-60°)	2352.1	27.2	B2/2500		
BH	(60°-80°)	1472.1	17.0	B3/2500		G1/1800
BVH	(80°-90°)	41.6	0.5			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 Medium





REPORT NUMBER: P271303

CATALOG NUMBER: XNV2-AF-02-LED-U-RW-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	963.2	963.2	963.2	963.2	963.2	963.2	963.2	963.2	963.2	963.2	963.2
2.5°	969.1	968.6	969.1	967.5	968.1	967.5	967.5	965.3	965.3	964.2	962.5
5°	958.2	959.3	959.3	959.3	960.9	960.9	963.2	963.7	965.3	966.9	968.1
7.5°	940.3	941.0	942.5	943.6	946.9	951.2	955.5	960.4	964.8	970.2	976.2
10°	925.2	926.3	928.9	931.7	937.7	943.1	950.6	958.2	965.9	975.1	984.3
12.5°	917.1	918.6	923.0	927.4	936.6	943.6	953.9	965.9	976.2	984.8	995.1
15°	918.2	918.6	924.6	930.6	943.6	953.5	968.1	982.0	994.6	1004.3	1016.3
17.5°	933.9	935.0	941.0	949.6	962.1	974.5	990.2	1004.8	1021.6	1033.1	1047.2
20°	964.8	966.3	972.9	982.0	995.6	1008.6	1025.0	1040.1	1057.5	1071.0	1085.2
22.5°	1004.8	1007.5	1014.6	1026.0	1039.6	1055.2	1072.0	1087.8	1104.0	1117.6	1129.4
25°	1058.6	1061.7	1069.3	1080.8	1094.2	1111.2	1128.5	1144.7	1161.5	1171.7	1181.5
27.5°	1130.5	1136.0	1144.1	1153.3	1165.3	1183.2	1199.4	1213.0	1229.2	1240.6	1247.1
30°	1227.7	1235.2	1241.6	1251.5	1260.1	1279.0	1292.1	1302.9	1315.4	1321.9	1323.6
32.5°	1346.3	1353.3	1359.9	1367.0	1378.9	1396.1	1408.6	1414.7	1421.1	1420.0	1414.1
35°	1480.1	1485.5	1489.4	1501.8	1521.4	1532.8	1542.0	1544.1	1545.3	1533.9	1522.4
37.5°	1621.1	1627.5	1630.9	1650.4	1668.8	1681.8	1686.2	1691.0	1687.7	1668.8	1648.2
40°	1773.4	1780.5	1790.2	1807.0	1828.7	1841.2	1846.6	1846.0	1843.3	1821.1	1787.4
42.5°	1923.0	1931.6	1939.8	1969.1	1987.1	2008.2	2010.9	2010.2	2004.3	1978.8	1939.8
45°	2049.8	2060.2	2076.9	2109.5	2138.1	2163.7	2174.0	2177.8	2171.8	2144.8	2100.2
47.5°	2154.4	2161.5	2182.6	2222.1	2259.1	2296.4	2317.1	2331.7	2331.1	2311.6	2264.4
50°	2226.0	2234.2	2260.1	2304.6	2350.7	2394.5	2435.1	2468.3	2484.0	2469.9	2426.1
52.5°	2246.7	2256.9	2291.0	2344.1	2397.8	2456.9	2517.6	2576.1	2611.4	2620.0	2586.0
55°	2159.9	2171.3	2221.1	2294.8	2383.2	2470.3	2562.5	2646.0	2718.7	2752.2	2738.8
57.5°	1907.3	1915.5	1978.8	2074.2	2200.5	2353.9	2508.8	2661.8	2786.5	2873.7	2888.9
60°	1508.3	1518.7	1588.1	1688.9	1832.5	2026.5	2243.3	2493.8	2738.2	2938.1	3037.3
62.5°	1017.9	1025.0	1091.6	1183.7	1340.9	1527.8	1769.7	2086.8	2435.1	2792.4	3072.1
65°	534.4	534.4	579.3	643.8	769.0	936.6	1184.2	1509.4	1924.1	2370.2	2837.8
67.5°	310.1	309.5	319.7	334.3	374.0	441.7	578.2	817.4	1209.7	1729.0	2261.3
70°	255.7	254.2	252.6	252.6	258.5	268.9	294.9	360.4	527.3	891.6	1391.4
71°	244.5	243.4	238.9	237.4	240.0	245.5	256.9	287.3	374.6	608.2	1039.0
72.5°	230.9	228.2	221.7	218.9	219.5	221.7	224.9	236.9	263.5	345.8	592.4
75°	210.4	203.7	195.7	191.9	190.3	189.7	189.7	193.0	199.0	208.6	242.8
77.5°	186.5	177.2	168.5	164.7	162.1	160.4	159.4	157.2	156.0	160.4	173.0
80°	157.7	148.0	140.9	138.8	137.1	133.8	129.5	125.3	122.4	124.7	132.2
82.5°	122.0	112.2	113.2	113.8	111.1	105.7	101.4	96.5	91.5	90.5	94.3
85°	96.9	92.2	88.9	95.8	90.0	83.5	77.6	69.3	58.0	47.7	52.0
87.5°	41.7	42.3	60.6	91.5	80.2	64.5	53.7	43.4	27.7	20.7	21.1
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: P271303

CATALOG NUMBER: XNV2-AF-02-LED-U-RW-7027-800

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	963.2	963.2	963.2	963.2	963.2	963.2	963.2	963.2
2.5°	962.1	962.1	960.4	959.3	959.3	959.3	958.2	958.9
5°	968.6	969.6	970.7	970.2	971.7	973.5	972.9	972.3
7.5°	979.4	982.7	985.9	987.5	989.8	991.9	992.4	990.8
10°	990.2	996.7	1001.6	1005.9	1008.6	1010.9	1012.5	1011.9
12.5°	1003.8	1013.0	1021.6	1030.4	1036.4	1039.6	1042.8	1041.8
15°	1026.0	1036.4	1047.2	1058.6	1067.7	1072.7	1077.4	1076.3
17.5°	1056.3	1065.6	1074.3	1085.6	1097.0	1102.4	1107.8	1107.3
20°	1094.2	1101.3	1106.3	1112.7	1123.6	1129.4	1134.4	1132.8
22.5°	1137.7	1139.8	1140.4	1142.6	1151.2	1158.3	1164.7	1166.4
25°	1184.9	1183.2	1180.0	1178.2	1184.2	1191.8	1200.0	1202.1
27.5°	1243.3	1238.0	1229.8	1223.3	1224.8	1234.7	1244.0	1246.0
30°	1317.0	1304.6	1287.2	1274.8	1272.5	1282.9	1292.8	1296.0
32.5°	1401.0	1384.3	1360.5	1341.4	1333.4	1342.5	1351.2	1356.1
35°	1500.8	1482.4	1453.6	1429.3	1416.3	1422.1	1437.4	1442.8
37.5°	1618.9	1593.5	1561.6	1530.6	1509.0	1510.1	1526.3	1532.8
40°	1749.5	1712.7	1672.0	1633.6	1602.1	1600.1	1614.7	1619.5
42.5°	1885.6	1838.4	1790.7	1740.3	1701.3	1694.4	1713.2	1713.7
45°	2032.0	1971.2	1912.1	1853.7	1813.0	1800.6	1819.0	1821.1
47.5°	2188.0	2112.2	2042.2	1978.8	1934.9	1915.5	1933.3	1936.6
50°	2350.7	2272.1	2190.7	2120.3	2068.7	2044.9	2066.1	2068.3
52.5°	2511.7	2437.5	2356.7	2275.9	2213.6	2186.5	2211.4	2219.0
55°	2673.6	2602.1	2526.3	2445.5	2366.9	2343.0	2370.2	2378.4
57.5°	2842.2	2773.3	2704.5	2623.3	2546.9	2510.6	2539.8	2551.1
60°	3028.1	2967.5	2902.5	2820.6	2745.2	2702.9	2727.9	2740.9
62.5°	3210.8	3198.3	3139.2	3054.1	2958.7	2916.4	2937.6	2946.8
65°	3226.0	3428.1	3425.4	3340.8	3207.6	3136.5	3142.5	3146.9
67.5°	2815.6	3279.6	3576.2	3602.7	3454.2	3343.0	3330.0	3332.7
70°	1993.5	2630.2	3259.6	3672.6	3731.1	3645.0	3616.8	3621.1
71°	1597.2	2256.9	2949.6	3505.0	3726.8	3701.8	3686.1	3697.6
72.5°	1019.4	1662.9	2337.1	3001.5	3427.0	3549.1	3566.9	3573.9
75°	370.2	715.4	1210.8	1734.9	2199.0	2518.0	2693.7	2707.9
77.5°	199.0	256.3	396.2	591.9	743.6	825.0	834.6	838.5
80°	146.3	169.6	194.0	221.7	238.9	242.3	236.3	223.9
82.5°	103.6	117.0	126.8	136.6	143.5	137.7	114.4	87.2
85°	60.1	66.1	71.5	76.4	77.6	73.2	48.1	39.5
87.5°	23.9	26.1	25.5	28.7	27.7	25.5	19.0	16.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)