

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: LUMARK

Report Number: P195565

Luminaire Tested: **NAV-AF-01-D-UNV-RW-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P195565  
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: LUMARK  
Catalog Number: NAV-AF-01-D-UNV-RW-7050  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6243 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G3

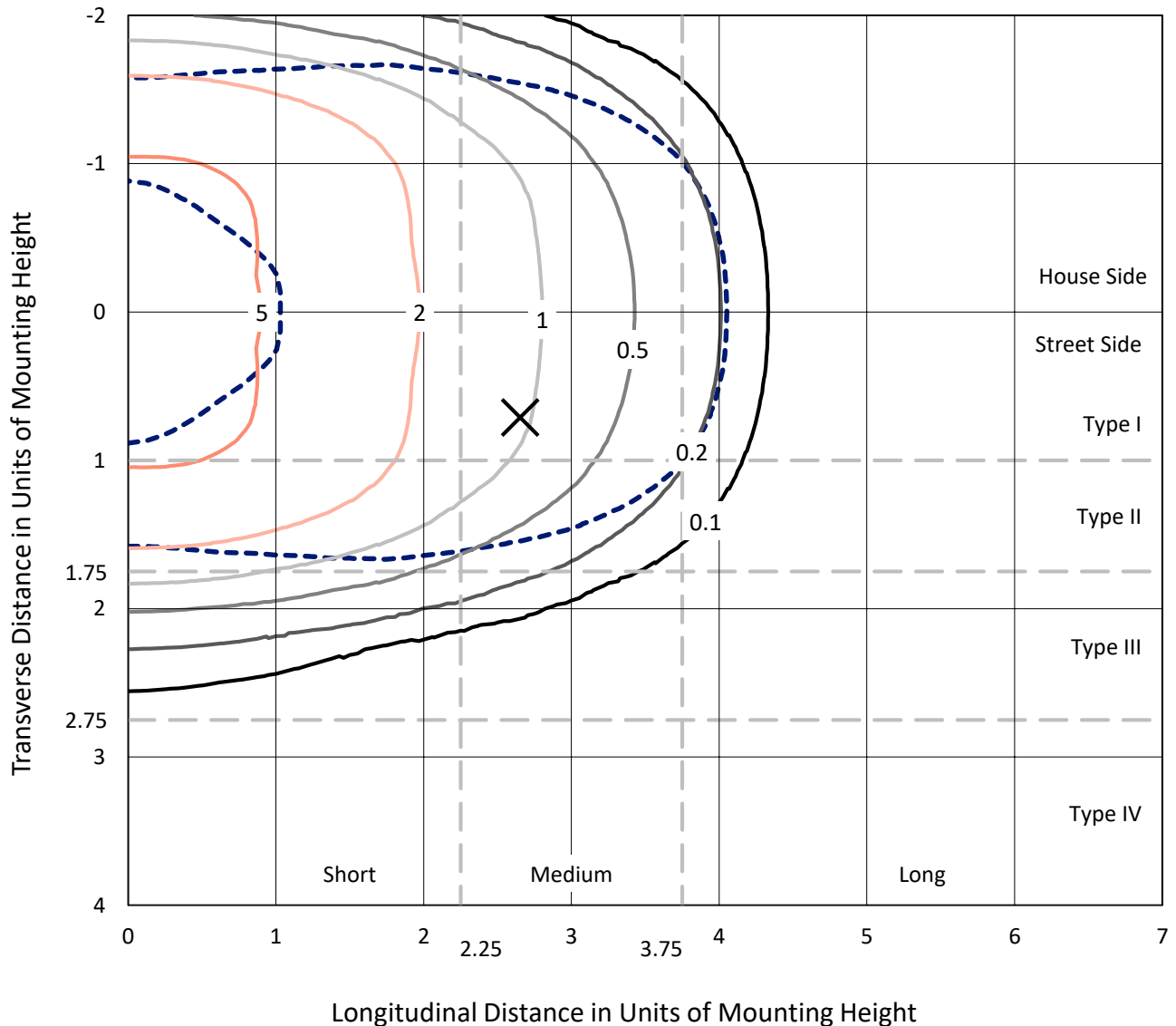
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P195565  
 CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7050

### Iso-Footcandle Lines of Horizontal Illumination

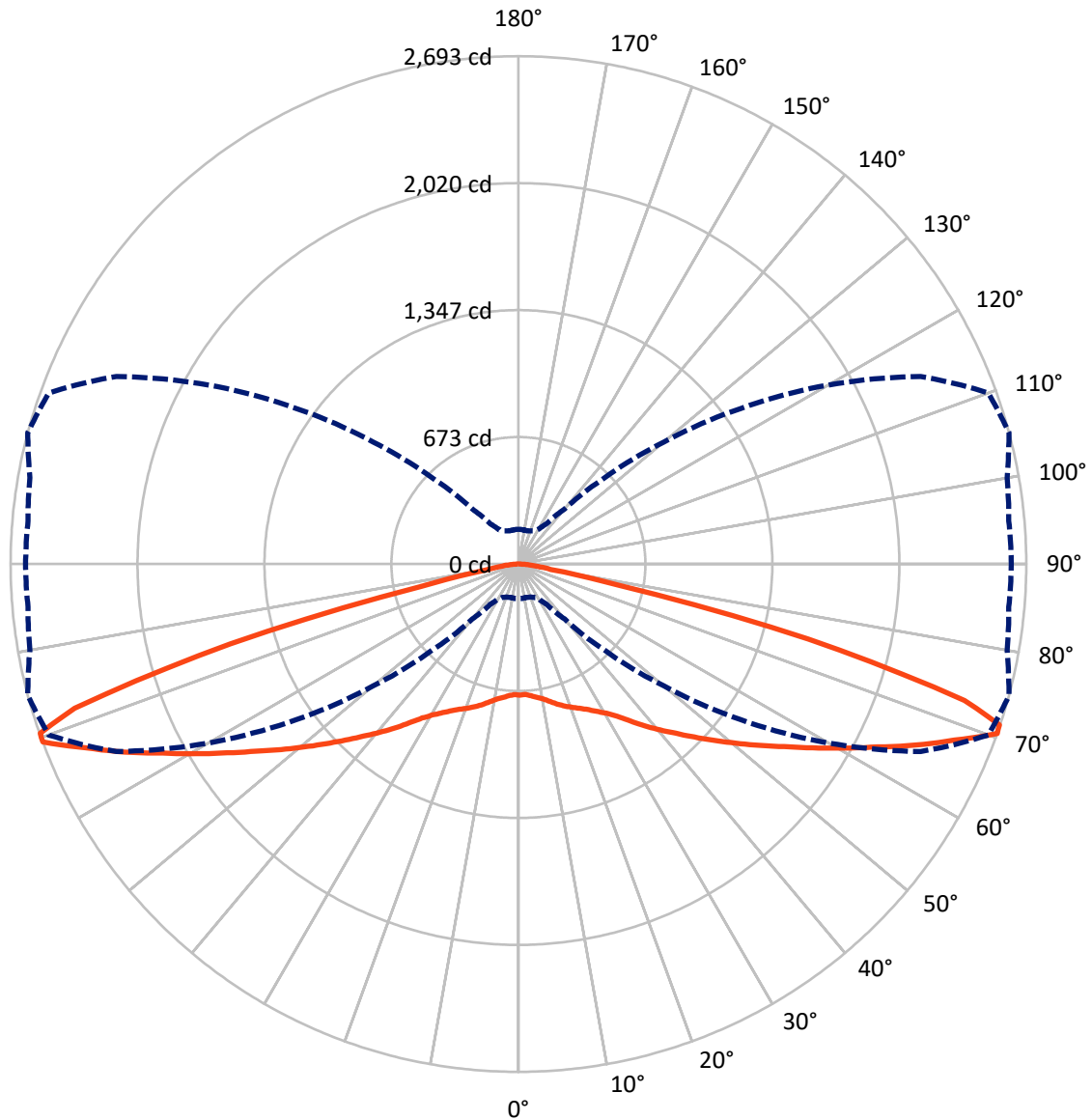
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P195565  
CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7050

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P195565

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7050

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3121.5	0.0	3121.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3121.5	0.0	3121.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6243.0	0.0	6243.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.7	1.1
10°-20°	206.8	3.3
20°-30°	388.4	6.2
30°-40°	684.2	11.0
40°-50°	1134.0	18.2
50°-60°	1577.5	25.3
60°-70°	1489.2	23.9
70°-80°	636.1	10.2
80°-90°	60.1	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°	6243.0	100.0
0°-180°	6243.0	100.0



REPORT NUMBER: P195565

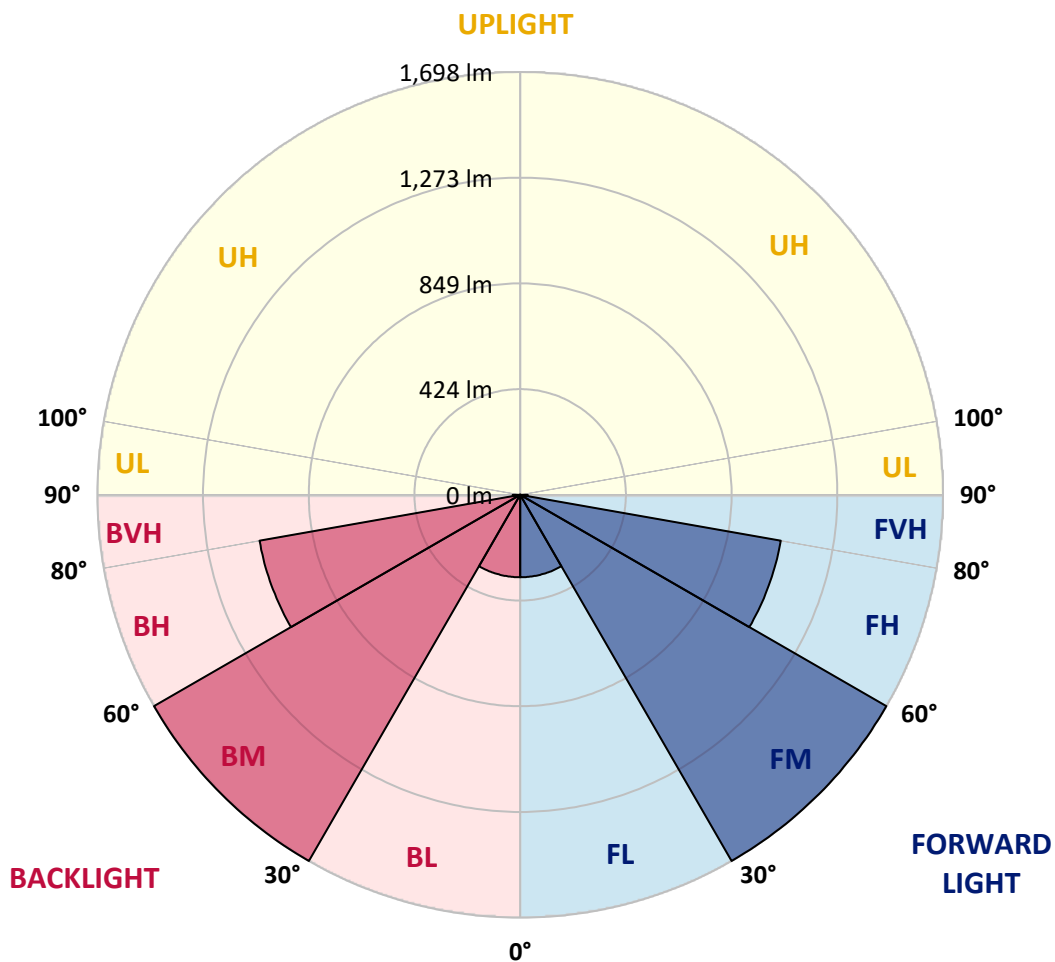
CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7050

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	331.0	5.3			
FM	(30°-60°)	1697.9	27.2			
FH	(60°-80°)	1062.6	17.0			G1/1800
FVH	(80°-90°)	30.1	0.5			G1/100
BL	(0°-30°)	331.0	5.3	B1/500		
BM	(30°-60°)	1697.9	27.2	B2/2500		
BH	(60°-80°)	1062.6	17.0	B3/2500		G3/2500
BVH	(80°-90°)	30.1	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-G3**

Type II Medium





REPORT NUMBER: P195565

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	695.2	695.2	695.2	695.2	695.2	695.2	695.2	695.2	695.2	695.2	695.2
2.5°	699.5	699.1	699.5	698.3	698.7	698.3	698.3	696.8	696.8	696.0	694.8
5°	691.7	692.5	692.5	692.5	693.7	693.7	695.2	695.6	696.8	698.0	698.7
7.5°	678.8	679.2	680.4	681.1	683.5	686.6	689.7	693.3	696.4	700.3	704.6
10°	667.8	668.6	670.6	672.5	676.8	680.7	686.2	691.7	697.2	703.8	710.5
12.5°	662.0	663.1	666.3	669.4	676.0	681.1	688.6	697.2	704.6	710.9	718.3
15°	662.7	663.1	667.4	671.7	681.1	688.2	698.7	708.9	717.9	725.0	733.6
17.5°	674.1	674.9	679.2	685.4	694.4	703.4	714.8	725.3	737.5	745.7	755.9
20°	696.4	697.6	702.3	708.9	718.7	728.1	739.8	750.8	763.3	773.1	783.2
22.5°	725.3	727.3	732.4	740.6	750.4	761.7	773.9	785.2	796.9	806.7	815.3
25°	764.1	766.4	771.9	780.1	789.9	802.0	814.5	826.3	838.4	845.8	852.9
27.5°	816.1	820.0	825.9	832.5	841.1	854.1	865.8	875.6	887.3	895.5	900.2
30°	886.1	891.6	896.3	903.4	909.6	923.3	932.7	940.5	949.5	954.2	955.4
32.5°	971.8	976.9	981.6	986.7	995.3	1007.8	1016.8	1021.1	1025.8	1025.0	1020.7
35°	1068.5	1072.4	1075.1	1084.1	1098.2	1106.4	1113.1	1114.6	1115.4	1107.2	1099.0
37.5°	1170.2	1174.9	1177.2	1191.3	1204.6	1214.0	1217.1	1220.6	1218.3	1204.6	1189.7
40°	1280.1	1285.2	1292.2	1304.4	1320.0	1329.0	1332.9	1332.5	1330.6	1314.5	1290.3
42.5°	1388.1	1394.4	1400.2	1421.3	1434.3	1449.5	1451.5	1451.1	1446.8	1428.4	1400.2
45°	1479.6	1487.1	1499.2	1522.7	1543.4	1561.8	1569.2	1572.0	1567.7	1548.1	1516.0
47.5°	1555.1	1560.2	1575.5	1604.1	1630.7	1657.6	1672.5	1683.1	1682.7	1668.6	1634.6
50°	1606.8	1612.7	1631.4	1663.5	1696.8	1728.5	1757.8	1781.7	1793.0	1782.8	1751.2
52.5°	1621.7	1629.1	1653.7	1692.1	1730.8	1773.5	1817.3	1859.5	1885.0	1891.2	1866.6
55°	1559.1	1567.3	1603.3	1656.5	1720.2	1783.2	1849.7	1910.0	1962.4	1986.7	1976.9
57.5°	1376.7	1382.6	1428.4	1497.2	1588.4	1699.1	1811.0	1921.3	2011.3	2074.3	2085.3
60°	1088.8	1096.2	1146.3	1219.1	1322.8	1462.8	1619.3	1800.1	1976.5	2120.9	2192.5
62.5°	734.7	739.8	787.9	854.5	967.9	1102.9	1277.4	1506.2	1757.8	2015.6	2217.5
65°	385.8	385.8	418.2	464.8	555.2	676.0	854.8	1089.6	1388.9	1710.9	2048.5
67.5°	223.8	223.4	230.8	241.4	269.9	318.9	417.4	590.0	873.2	1248.0	1632.2
70°	184.7	183.5	182.3	182.3	186.6	194.1	212.8	260.2	380.7	643.6	1004.3
71°	176.4	175.7	172.5	171.4	173.3	177.2	185.4	207.4	270.3	439.0	750.0
72.5°	166.7	164.7	160.0	158.1	158.4	160.0	162.4	171.0	190.1	249.6	427.6
75°	151.8	147.1	141.2	138.5	137.3	136.9	136.9	139.3	143.6	150.6	175.3
77.5°	134.6	127.9	121.7	118.9	117.0	115.8	115.0	113.5	112.7	115.8	124.8
80°	113.8	106.8	101.7	100.2	99.0	96.6	93.5	90.4	88.4	90.0	95.5
82.5°	88.0	81.0	81.8	82.2	80.2	76.3	73.2	69.6	66.1	65.3	68.1
85°	70.0	66.5	64.2	69.2	64.9	60.2	55.9	50.1	41.9	34.4	37.6
87.5°	30.1	30.5	43.8	66.1	57.9	46.6	38.7	31.3	20.0	14.9	15.3
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: P195565

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7050

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	695.2	695.2	695.2	695.2	695.2	695.2	695.2	695.2
2.5°	694.4	694.4	693.3	692.5	692.5	692.5	691.7	692.1
5°	699.1	699.9	700.7	700.3	701.5	702.7	702.3	701.9
7.5°	707.0	709.3	711.7	712.8	714.4	716.0	716.3	715.2
10°	714.8	719.5	723.0	726.1	728.1	729.6	730.8	730.4
12.5°	724.6	731.2	737.5	743.7	748.0	750.4	752.7	751.9
15°	740.6	748.0	755.9	764.1	770.7	774.2	777.8	777.0
17.5°	762.5	769.2	775.4	783.6	791.9	795.8	799.7	799.3
20°	789.9	795.0	798.5	803.2	811.0	815.3	818.8	817.7
22.5°	821.2	822.8	823.2	824.7	831.0	836.1	840.8	841.9
25°	855.2	854.1	851.7	850.5	854.8	860.3	866.2	867.8
27.5°	897.5	893.6	887.7	883.0	884.2	891.2	897.9	899.4
30°	950.7	941.7	929.2	920.2	918.6	926.0	933.1	935.4
32.5°	1011.3	999.2	982.0	968.3	962.4	969.1	975.3	978.9
35°	1083.3	1070.0	1049.3	1031.7	1022.3	1026.6	1037.5	1041.5
37.5°	1168.6	1150.2	1127.1	1104.8	1089.2	1090.0	1101.7	1106.4
40°	1262.9	1236.3	1207.0	1179.2	1156.5	1154.9	1165.5	1169.0
42.5°	1361.1	1327.1	1292.6	1256.2	1228.1	1223.0	1236.7	1237.1
45°	1466.7	1422.9	1380.3	1338.0	1308.7	1299.7	1313.0	1314.5
47.5°	1579.4	1524.6	1474.2	1428.4	1396.7	1382.6	1395.5	1397.9
50°	1696.8	1640.0	1581.4	1530.5	1493.3	1476.1	1491.4	1492.9
52.5°	1813.0	1759.4	1701.1	1642.8	1597.8	1578.2	1596.2	1601.7
55°	1929.9	1878.3	1823.5	1765.2	1708.5	1691.3	1710.9	1716.7
57.5°	2051.6	2001.9	1952.2	1893.6	1838.4	1812.2	1833.3	1841.5
60°	2185.8	2142.0	2095.0	2036.0	1981.6	1951.1	1969.1	1978.5
62.5°	2317.7	2308.7	2266.0	2204.6	2135.7	2105.2	2120.5	2127.1
65°	2328.6	2474.5	2472.6	2411.6	2315.3	2264.1	2268.4	2271.5
67.5°	2032.4	2367.3	2581.3	2600.5	2493.3	2413.1	2403.7	2405.7
70°	1439.0	1898.6	2352.9	2651.0	2693.2	2631.0	2610.7	2613.8
71°	1153.0	1629.1	2129.1	2530.1	2690.1	2672.1	2660.8	2669.0
72.5°	735.9	1200.3	1687.0	2166.6	2473.8	2561.8	2574.7	2579.8
75°	267.2	516.4	874.0	1252.3	1587.2	1817.7	1944.4	1954.6
77.5°	143.6	185.1	286.0	427.2	536.8	595.5	602.5	605.2
80°	105.6	122.5	140.1	160.0	172.5	174.9	170.6	161.6
82.5°	74.7	84.5	91.5	98.6	103.7	99.4	82.5	63.0
85°	43.4	47.7	51.6	55.2	55.9	52.8	34.8	28.6
87.5°	17.2	18.8	18.4	20.7	20.0	18.4	13.7	11.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)