

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: P196531

Luminaire Tested: **NAV-AF-01-D-UNV-RW-7030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196531  
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-7030-1200  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6624.4 lumens  
Efficiency: N/A  
Efficacy: 98.9 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

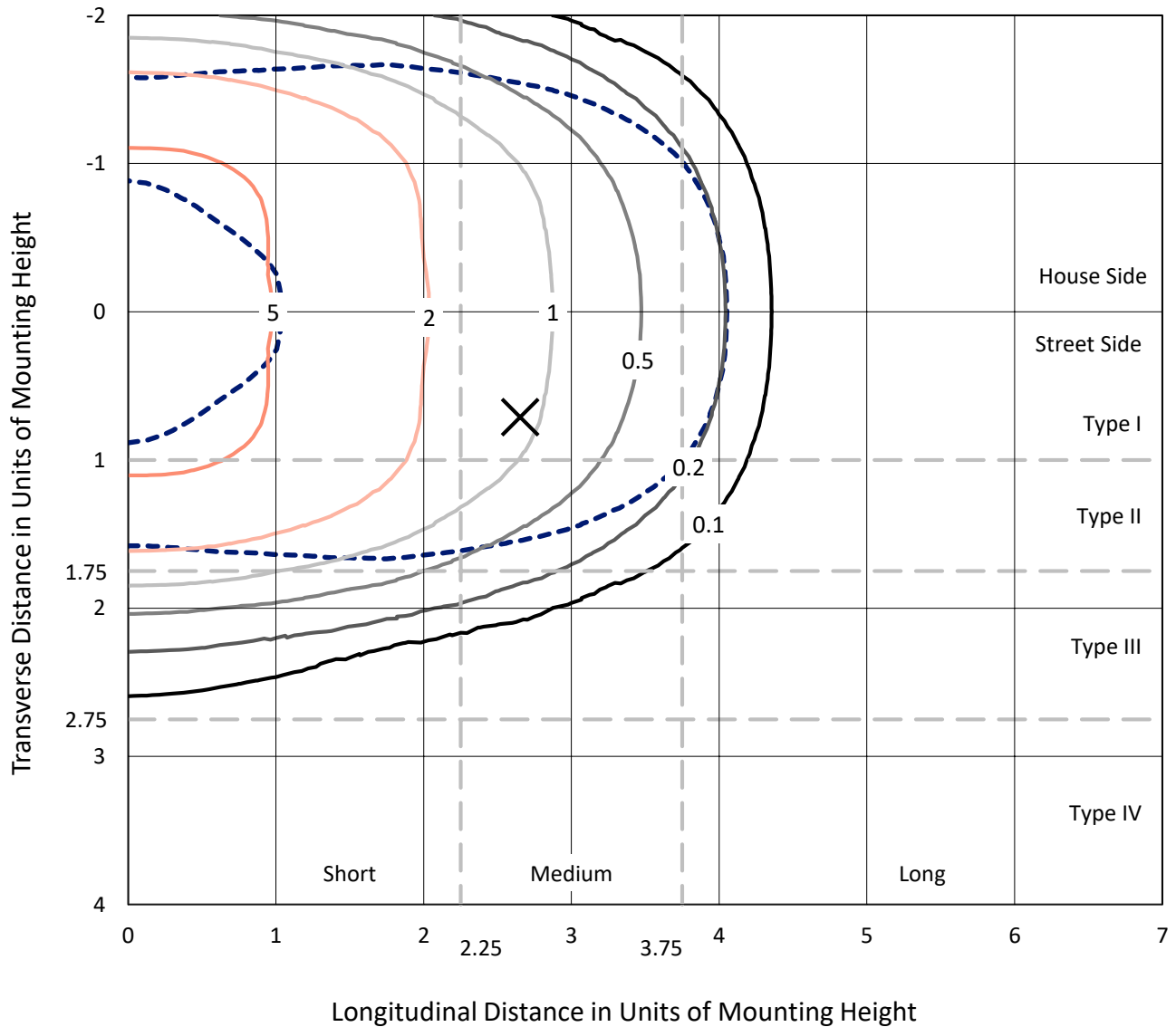
Input Watts (W): 67  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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 CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030-1200

### Iso-Footcandle Lines of Horizontal Illumination

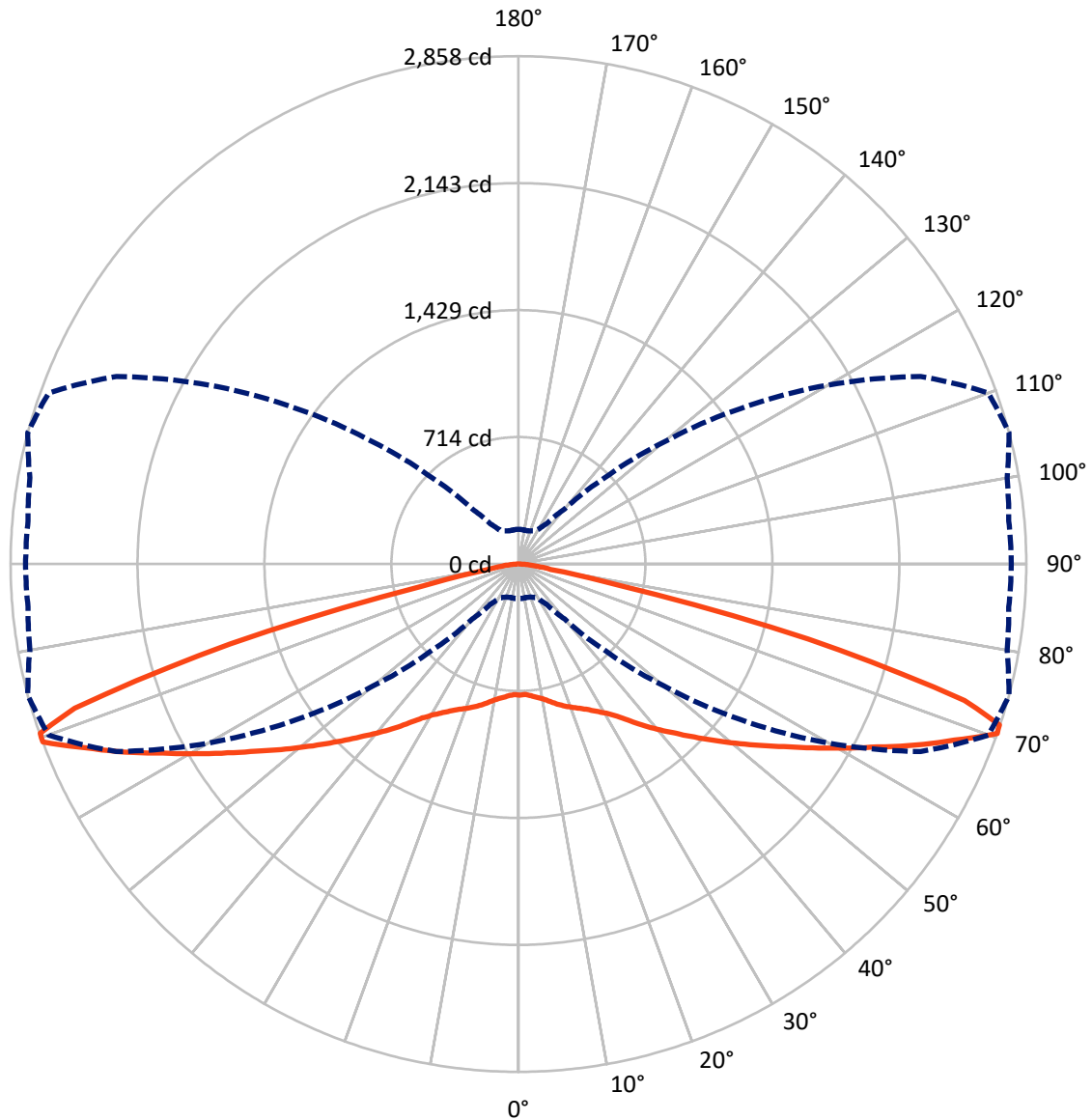
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.4 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P196531  
CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030-1200

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P196531

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030-1200

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3312.2	0.0	3312.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3312.2	0.0	3312.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6624.4	0.0	6624.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.8	1.1
10°-20°	219.4	3.3
20°-30°	412.2	6.2
30°-40°	726.0	11.0
40°-50°	1203.3	18.2
50°-60°	1673.9	25.3
60°-70°	1580.2	23.9
70°-80°	674.9	10.2
80°-90°	63.8	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°	6624.4	100.0
0°-180°	6624.4	100.0

**Coefficient of Utilization**



REPORT NUMBER: P196531

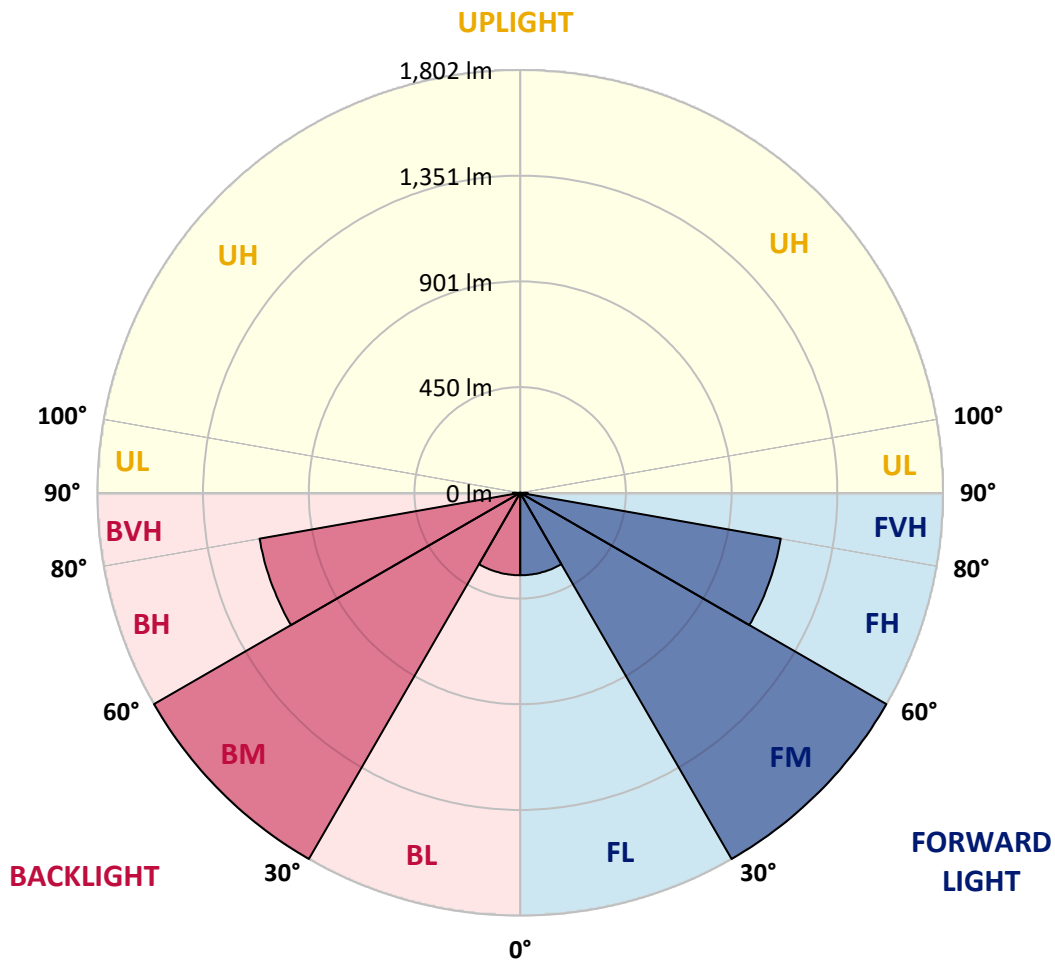
CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030-1200

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	351.2	5.3			
FM	(30°-60°)	1801.6	27.2			
FH	(60°-80°)	1127.6	17.0			G1/1800
FVH	(80°-90°)	31.9	0.5			G1/100
BL	(0°-30°)	351.2	5.3	B1/500		
BM	(30°-60°)	1801.6	27.2	B2/2500		
BH	(60°-80°)	1127.6	17.0	B3/2500		G3/2500
BVH	(80°-90°)	31.9	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: P196531

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7
2.5°	742.3	741.9	742.3	741.0	741.5	741.0	741.0	739.3	739.3	738.5	737.3
5°	734.0	734.8	734.8	734.8	736.1	736.1	737.7	738.1	739.3	740.6	741.5
7.5°	720.2	720.7	721.8	722.8	725.3	728.5	731.9	735.7	738.9	743.1	747.7
10°	708.6	709.4	711.5	713.6	718.2	722.3	728.1	734.0	739.8	746.8	753.9
12.5°	702.4	703.6	707.0	710.3	717.4	722.8	730.6	739.8	747.7	754.3	762.2
15°	703.2	703.6	708.2	712.8	722.8	730.2	741.5	752.2	761.7	769.3	778.4
17.5°	715.3	716.0	720.7	727.3	736.9	746.5	758.5	769.6	782.6	791.2	802.1
20°	738.9	740.2	745.1	752.2	762.6	772.6	785.0	796.6	809.9	820.3	831.1
22.5°	769.6	771.7	777.2	785.8	796.2	808.3	821.1	833.2	845.6	856.0	865.2
25°	810.7	813.2	819.0	827.7	838.1	851.0	864.4	876.8	889.6	897.6	905.0
27.5°	866.0	870.1	876.4	883.4	892.5	906.2	918.7	929.0	941.5	950.2	955.3
30°	940.2	946.0	951.1	958.5	965.2	979.7	989.7	998.0	1007.5	1012.5	1013.7
32.5°	1031.2	1036.6	1041.6	1046.9	1056.1	1069.4	1078.9	1083.6	1088.4	1087.6	1083.1
35°	1133.7	1137.8	1140.7	1150.3	1165.2	1174.0	1181.1	1182.7	1183.5	1174.9	1166.2
37.5°	1241.6	1246.6	1249.2	1264.1	1278.3	1288.1	1291.5	1295.2	1292.7	1278.3	1262.4
40°	1358.3	1363.7	1371.2	1384.1	1400.7	1410.2	1414.4	1414.0	1411.8	1394.8	1369.1
42.5°	1473.0	1479.5	1485.7	1508.3	1521.9	1538.1	1540.1	1539.7	1535.2	1515.7	1485.7
45°	1570.0	1577.9	1590.9	1615.7	1637.7	1657.3	1665.1	1668.0	1663.5	1642.7	1608.7
47.5°	1650.2	1655.5	1671.7	1702.0	1730.2	1759.0	1774.7	1786.0	1785.6	1770.5	1734.4
50°	1705.0	1711.2	1731.1	1765.2	1800.5	1834.0	1865.2	1890.5	1902.5	1891.8	1858.2
52.5°	1720.8	1728.6	1754.8	1795.4	1836.5	1881.8	1928.3	1973.1	2000.1	2006.8	1980.6
55°	1654.3	1663.0	1701.1	1757.7	1825.2	1892.2	1962.8	2026.6	2082.3	2108.0	2097.7
57.5°	1460.9	1467.1	1515.7	1588.7	1685.5	1802.9	1921.7	2038.7	2134.2	2201.0	2212.6
60°	1155.3	1163.2	1216.4	1293.5	1403.6	1552.1	1718.2	1910.1	2097.2	2250.4	2326.3
62.5°	779.6	785.0	836.1	906.7	1027.0	1170.2	1355.4	1598.3	1865.2	2138.8	2353.0
65°	409.2	409.2	443.8	493.2	589.1	717.4	907.1	1156.2	1473.7	1815.4	2173.6
67.5°	237.4	237.1	245.0	256.1	286.5	338.3	442.9	626.0	926.6	1324.2	1732.0
70°	195.9	194.7	193.5	193.5	198.0	206.0	225.8	276.1	403.9	682.9	1065.6
71°	187.3	186.4	183.1	181.8	183.9	188.0	196.7	220.0	286.8	465.8	795.9
72.5°	176.9	174.9	169.8	167.7	168.2	169.8	172.3	181.4	201.8	264.9	453.8
75°	161.0	156.1	149.9	147.0	145.8	145.4	145.4	147.8	152.3	159.8	186.0
77.5°	142.8	135.7	129.2	126.2	124.1	122.9	122.1	120.4	119.5	122.9	132.4
80°	120.8	113.3	107.9	106.3	105.0	102.4	99.2	95.9	93.9	95.5	101.3
82.5°	93.4	86.0	86.8	87.2	85.1	81.0	77.7	73.9	70.2	69.4	72.2
85°	74.3	70.6	68.1	73.5	69.0	63.9	59.3	53.1	44.5	36.5	39.9
87.5°	32.0	32.3	46.6	70.2	61.4	49.3	41.1	33.3	21.2	15.8	16.2
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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CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030-1200

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7
2.5°	736.9	736.9	735.7	734.8	734.8	734.8	734.0	734.3
5°	741.9	742.6	743.5	743.1	744.4	745.5	745.1	744.7
7.5°	750.2	752.7	755.1	756.4	758.0	759.7	760.1	759.0
10°	758.5	763.4	767.2	770.5	772.6	774.2	775.4	775.0
12.5°	768.8	775.8	782.6	789.2	793.8	796.2	798.6	797.9
15°	785.8	793.8	802.1	810.7	817.8	821.5	825.2	824.5
17.5°	809.1	816.1	822.8	831.5	840.2	844.3	848.5	848.1
20°	838.1	843.6	847.3	852.2	860.5	865.2	868.8	867.6
22.5°	871.4	873.0	873.4	875.0	881.7	887.1	892.1	893.4
25°	907.5	906.2	903.8	902.5	907.1	912.9	919.1	920.7
27.5°	952.3	948.2	942.0	937.0	938.2	945.6	952.7	954.4
30°	1008.8	999.1	985.9	976.3	974.7	982.6	990.1	992.6
32.5°	1073.2	1060.3	1042.0	1027.5	1021.2	1028.2	1034.9	1038.6
35°	1149.5	1135.4	1113.4	1094.7	1084.7	1089.4	1100.9	1105.0
37.5°	1240.0	1220.5	1196.0	1172.4	1155.8	1156.5	1169.0	1174.0
40°	1340.1	1311.7	1280.7	1251.2	1227.1	1225.5	1236.7	1240.4
42.5°	1444.3	1408.2	1371.6	1333.0	1303.1	1297.7	1312.2	1312.6
45°	1556.3	1509.9	1464.6	1419.8	1388.5	1379.1	1393.2	1394.8
47.5°	1675.9	1617.8	1564.3	1515.7	1482.0	1467.1	1480.8	1483.3
50°	1800.5	1740.3	1678.0	1624.0	1584.6	1566.3	1582.5	1584.1
52.5°	1923.7	1866.8	1805.0	1743.1	1695.3	1674.6	1693.7	1699.5
55°	2047.8	1993.0	1935.0	1873.0	1812.8	1794.6	1815.4	1821.6
57.5°	2177.0	2124.2	2071.5	2009.3	1950.8	1922.9	1945.4	1954.0
60°	2319.3	2272.8	2223.0	2160.4	2102.7	2070.3	2089.4	2099.3
62.5°	2459.2	2449.7	2404.5	2339.2	2266.2	2233.8	2249.9	2257.1
65°	2470.9	2625.7	2623.7	2558.9	2456.8	2402.4	2407.0	2410.3
67.5°	2156.6	2512.0	2739.0	2759.4	2645.6	2560.5	2550.5	2552.7
70°	1526.9	2014.6	2496.6	2813.0	2857.7	2791.8	2770.2	2773.5
71°	1223.3	1728.6	2259.2	2684.6	2854.4	2835.4	2823.4	2832.0
72.5°	780.8	1273.6	1790.1	2299.1	2624.9	2718.3	2732.0	2737.4
75°	283.5	547.9	927.4	1328.8	1684.2	1928.8	2063.3	2074.0
77.5°	152.3	196.3	303.4	453.3	569.6	631.8	639.2	642.2
80°	112.1	129.9	148.6	169.8	183.1	185.5	181.1	171.4
82.5°	79.3	89.7	97.1	104.6	110.1	105.4	87.6	66.8
85°	46.1	50.7	54.8	58.6	59.3	56.0	36.9	30.3
87.5°	18.2	19.8	19.5	22.0	21.2	19.5	14.5	12.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)