

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: P196525

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196525  
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  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6037.7 lumens  
Efficiency: N/A  
Efficacy: 102.3 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

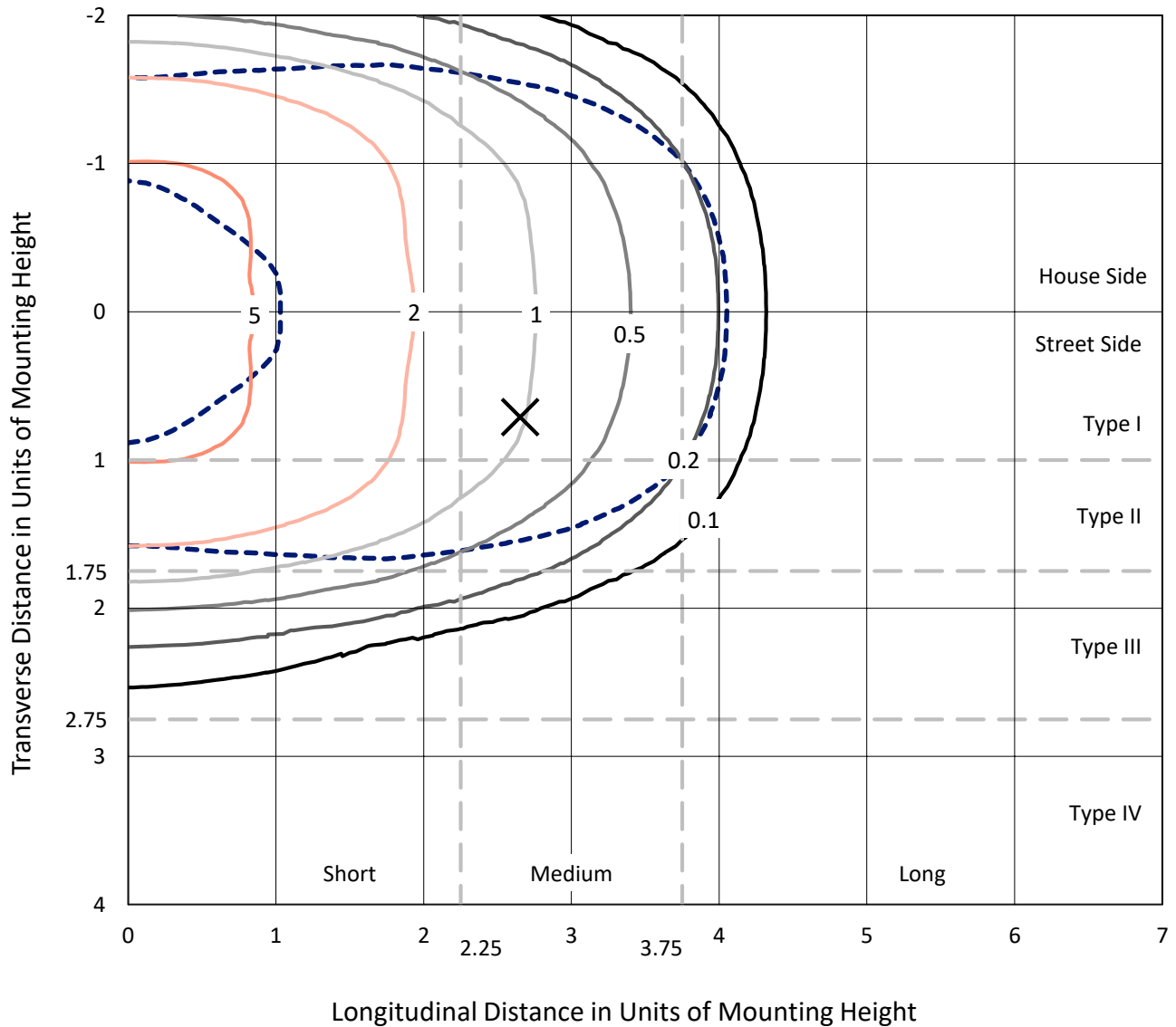
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P196525  
 CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030

### Iso-Footcandle Lines of Horizontal Illumination

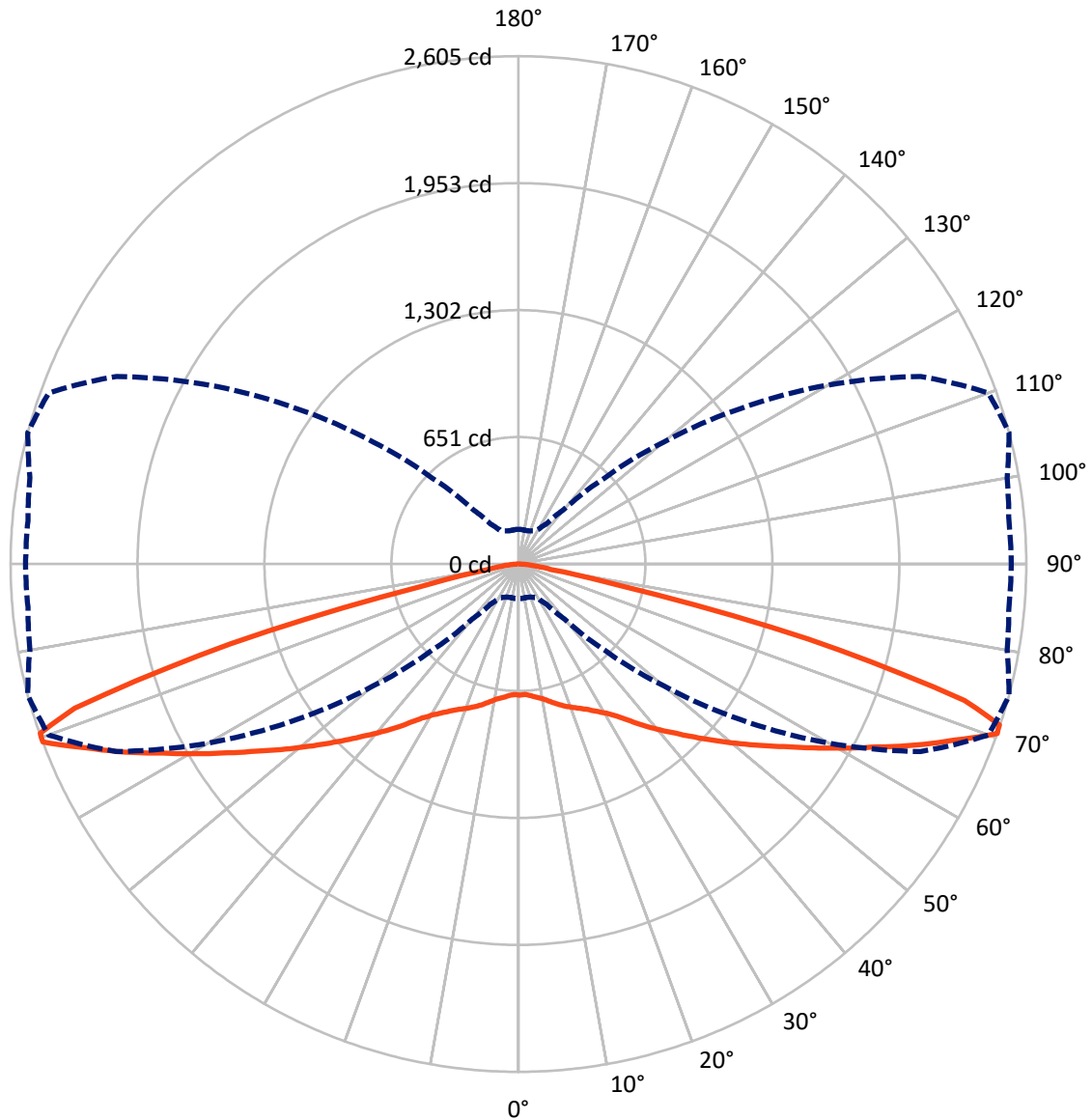
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.8 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P196525  
CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P196525

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

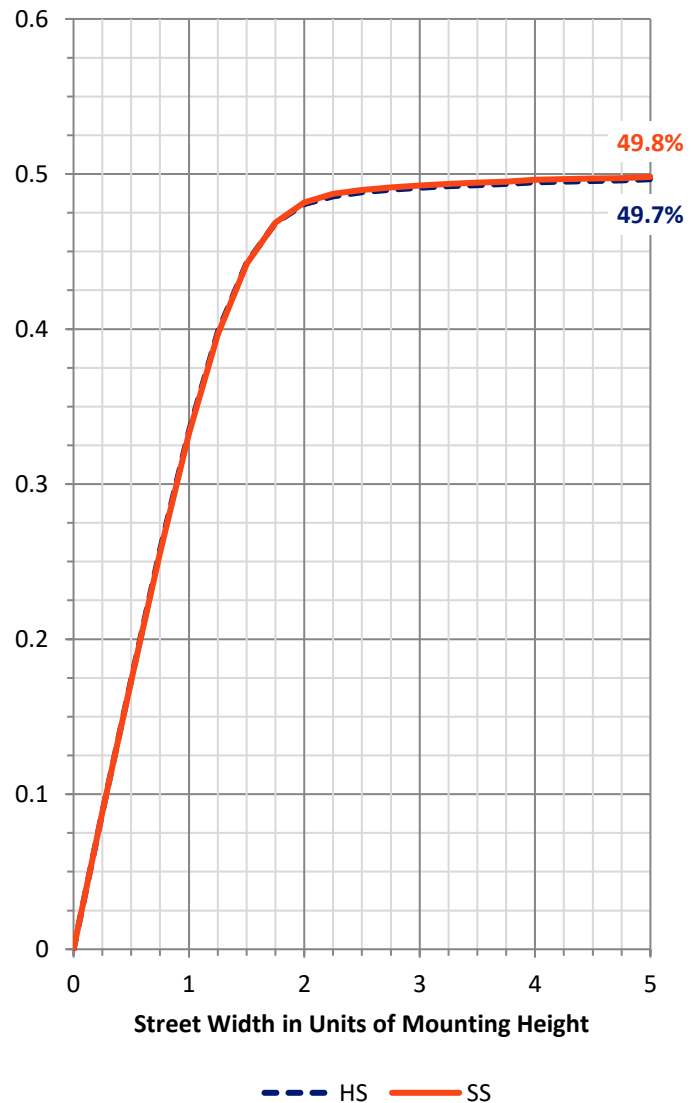
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3018.8	0.0	3018.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3018.8	0.0	3018.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6037.7	0.0	6037.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.5	1.1
10°-20°	200.0	3.3
20°-30°	375.6	6.2
30°-40°	661.7	11.0
40°-50°	1096.7	18.2
50°-60°	1525.6	25.3
60°-70°	1440.2	23.9
70°-80°	615.1	10.2
80°-90°	58.1	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°	6037.7	100.0
0°-180°	6037.7	100.0



REPORT NUMBER: P196525

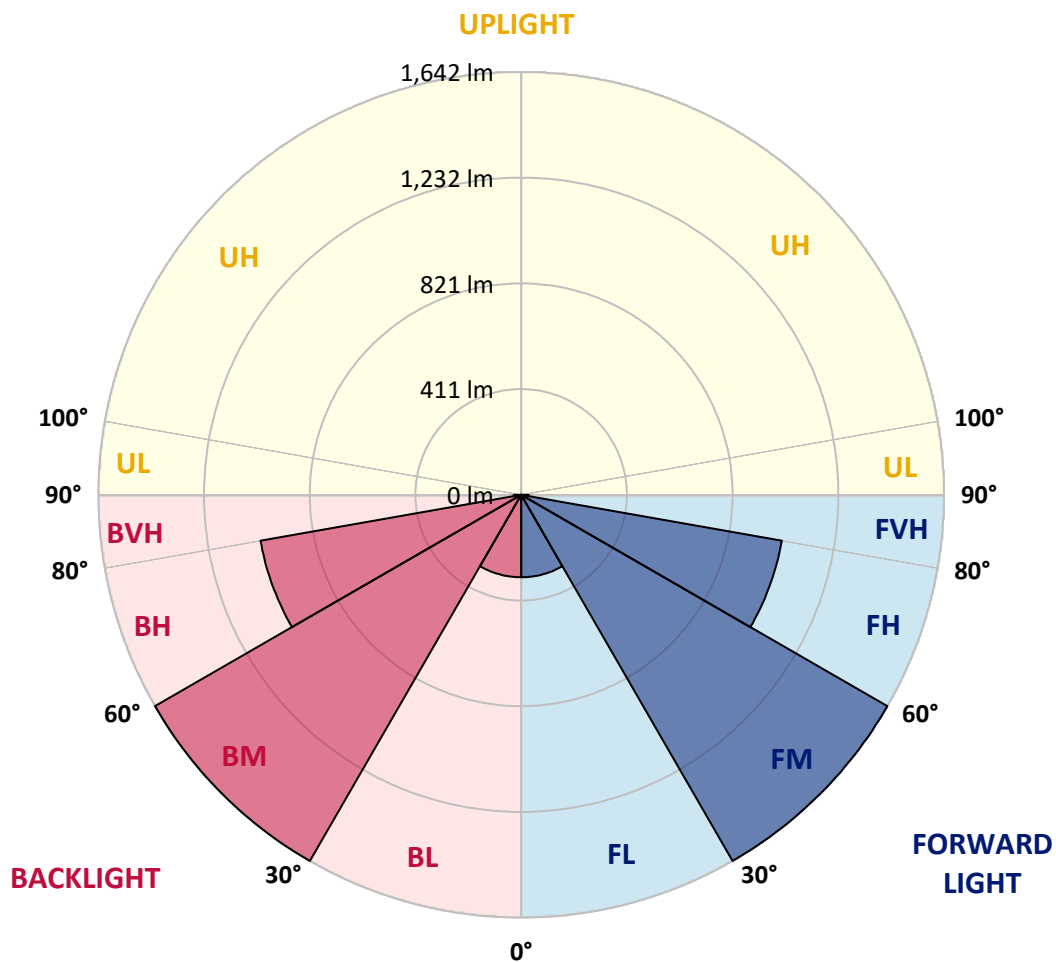
CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	320.1	5.3			
FM	(30°-60°)	1642.0	27.2			
FH	(60°-80°)	1027.7	17.0			G1/1800
FVH	(80°-90°)	29.1	0.5			G1/100
BL	(0°-30°)	320.1	5.3	B1/500		
BM	(30°-60°)	1642.0	27.2	B2/2500		
BH	(60°-80°)	1027.7	17.0	B3/2500		G3/2500
BVH	(80°-90°)	29.1	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: P196525

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

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	672.4	672.4	672.4	672.4	672.4	672.4	672.4	672.4	672.4	672.4	672.4
2.5°	676.6	676.1	676.6	675.3	675.8	675.3	675.3	673.9	673.9	673.1	672.0
5°	669.0	669.6	669.6	669.6	670.9	670.9	672.4	672.7	673.9	675.0	675.8
7.5°	656.4	656.8	658.0	658.8	661.0	664.1	667.0	670.5	673.5	677.3	681.4
10°	645.8	646.6	648.6	650.4	654.6	658.4	663.6	669.0	674.2	680.6	687.1
12.5°	640.1	641.4	644.3	647.4	653.8	658.8	665.9	674.2	681.4	687.5	694.7
15°	641.0	641.4	645.5	649.6	658.8	665.5	675.8	685.6	694.4	701.1	709.4
17.5°	651.9	652.8	656.8	662.8	671.6	680.2	691.3	701.5	713.3	721.1	731.1
20°	673.5	674.6	679.1	685.6	695.1	704.1	715.5	726.0	738.1	747.7	757.5
22.5°	701.5	703.4	708.3	716.2	725.7	736.6	748.4	759.4	770.8	780.2	788.6
25°	738.9	741.3	746.5	754.4	763.9	775.6	787.8	799.1	810.8	818.1	824.8
27.5°	789.3	793.0	798.6	805.1	813.4	826.0	837.4	846.8	858.1	866.1	870.6
30°	857.0	862.3	866.9	873.6	879.6	892.9	902.1	909.6	918.4	922.8	924.0
32.5°	939.8	944.8	949.4	954.3	962.6	974.7	983.4	987.4	992.1	991.3	987.1
35°	1033.3	1037.1	1039.7	1048.5	1062.1	1069.9	1076.4	1078.0	1078.7	1070.7	1062.9
37.5°	1131.7	1136.2	1138.5	1152.1	1165.0	1174.1	1177.0	1180.5	1178.3	1165.0	1150.6
40°	1238.0	1243.0	1249.7	1261.5	1276.5	1285.3	1289.0	1288.7	1286.8	1271.3	1247.8
42.5°	1342.5	1348.5	1354.2	1374.6	1387.0	1401.8	1403.8	1403.3	1399.2	1381.4	1354.2
45°	1431.0	1438.2	1449.9	1472.6	1492.7	1510.4	1517.6	1520.3	1516.1	1497.2	1466.1
47.5°	1504.0	1508.9	1523.6	1551.3	1577.0	1603.2	1617.5	1627.8	1627.3	1613.8	1580.8
50°	1554.0	1559.5	1577.8	1608.9	1641.0	1671.6	1700.0	1723.0	1734.1	1724.2	1693.5
52.5°	1568.3	1575.5	1599.3	1636.3	1673.9	1715.2	1757.6	1798.4	1823.0	1829.0	1805.2
55°	1507.8	1515.8	1550.5	1602.0	1663.7	1724.5	1788.9	1847.1	1897.9	1921.4	1911.9
57.5°	1331.5	1337.2	1381.4	1448.0	1536.1	1643.3	1751.4	1858.2	1945.2	2006.1	2016.7
60°	1053.0	1060.2	1108.7	1179.0	1279.2	1414.7	1566.0	1740.8	1911.5	2051.2	2120.4
62.5°	710.6	715.5	762.0	826.3	936.1	1066.6	1235.4	1456.8	1700.0	1949.3	2144.5
65°	373.1	373.1	404.5	449.5	536.9	653.8	826.8	1053.7	1343.3	1654.6	1981.1
67.5°	216.5	216.0	223.2	233.5	261.0	308.3	403.7	570.6	844.5	1207.0	1578.6
70°	178.6	177.4	176.4	176.4	180.5	187.7	205.9	251.7	368.1	622.4	971.4
71°	170.7	169.9	166.8	165.7	167.6	171.4	179.3	200.5	261.4	424.5	725.4
72.5°	161.1	159.3	154.7	152.9	153.3	154.7	157.0	165.3	183.9	241.4	413.5
75°	146.9	142.2	136.6	134.0	132.9	132.4	132.4	134.7	138.9	145.7	169.5
77.5°	130.1	123.7	117.7	115.0	113.1	112.0	111.2	109.7	108.9	112.0	120.7
80°	110.2	103.2	98.4	96.9	95.7	93.4	90.4	87.4	85.5	87.0	92.4
82.5°	85.1	78.3	79.1	79.4	77.6	73.8	70.8	67.3	63.9	63.2	65.9
85°	67.7	64.4	62.1	66.9	62.9	58.2	54.1	48.4	40.5	33.4	36.3
87.5°	29.2	29.5	42.4	63.9	56.0	45.1	37.4	30.3	19.3	14.4	14.7
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: P196525  
 CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	672.4	672.4	672.4	672.4	672.4	672.4	672.4	672.4
2.5°	671.6	671.6	670.5	669.6	669.6	669.6	669.0	669.3
5°	676.1	676.9	677.6	677.3	678.4	679.6	679.1	678.8
7.5°	683.8	685.9	688.3	689.4	690.8	692.3	692.8	691.6
10°	691.3	695.8	699.3	702.2	704.1	705.6	706.8	706.4
12.5°	700.7	707.1	713.3	719.3	723.4	725.7	728.0	727.2
15°	716.2	723.4	731.1	738.9	745.3	748.8	752.1	751.4
17.5°	737.4	743.8	749.9	757.8	765.8	769.6	773.3	773.0
20°	763.9	768.8	772.3	776.9	784.4	788.6	791.9	790.8
22.5°	794.2	795.7	796.1	797.6	803.6	808.5	813.1	814.2
25°	827.1	826.0	823.7	822.6	826.8	832.0	837.7	839.2
27.5°	867.9	864.1	858.6	854.0	855.1	861.9	868.4	869.8
30°	919.4	910.6	898.6	889.9	888.4	895.6	902.4	904.6
32.5°	978.1	966.3	949.7	936.5	930.8	937.2	943.2	946.6
35°	1047.7	1034.8	1014.8	997.7	988.7	992.8	1003.4	1007.2
37.5°	1130.2	1112.4	1090.1	1068.4	1053.4	1054.2	1065.5	1069.9
40°	1221.4	1195.7	1167.2	1140.3	1118.5	1116.9	1127.1	1130.5
42.5°	1316.3	1283.4	1250.2	1215.0	1187.6	1182.7	1196.1	1196.4
45°	1418.5	1376.1	1334.8	1293.9	1265.7	1256.9	1269.8	1271.3
47.5°	1527.5	1474.5	1425.8	1381.4	1350.8	1337.2	1349.6	1351.9
50°	1641.0	1586.1	1529.3	1480.1	1444.2	1427.6	1442.3	1443.9
52.5°	1753.4	1701.5	1645.1	1588.7	1545.3	1526.4	1543.8	1549.0
55°	1866.4	1816.6	1763.6	1707.1	1652.3	1635.7	1654.6	1660.3
57.5°	1984.1	1936.1	1888.0	1831.3	1777.9	1752.6	1773.1	1780.9
60°	2113.9	2071.5	2026.1	1969.0	1916.4	1886.9	1904.3	1913.3
62.5°	2241.5	2232.7	2191.5	2132.0	2065.4	2035.9	2050.7	2057.2
65°	2252.1	2393.1	2391.2	2332.2	2239.2	2189.5	2193.7	2196.7
67.5°	1965.6	2289.5	2496.5	2515.0	2411.4	2333.8	2324.7	2326.5
70°	1391.6	1836.2	2275.5	2563.8	2604.6	2544.5	2524.9	2527.8
71°	1115.0	1575.5	2059.1	2446.9	2601.7	2584.2	2573.3	2581.2
72.5°	711.8	1160.8	1631.5	2095.4	2392.4	2477.6	2490.0	2494.9
75°	258.4	499.5	845.2	1211.1	1535.0	1757.9	1880.5	1890.3
77.5°	138.9	178.9	276.5	413.2	519.1	575.9	582.7	585.3
80°	102.1	118.4	135.5	154.7	166.8	169.2	165.0	156.2
82.5°	72.2	81.7	88.5	95.4	100.3	96.1	79.9	60.9
85°	41.9	46.1	49.9	53.3	54.1	51.2	33.7	27.7
87.5°	16.6	18.1	17.8	20.1	19.3	17.8	13.2	11.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)