

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: P197011

Luminaire Tested: **NAV-AF-01-D-UNV-RW-8030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197011  
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-8030-1200  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 80 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: 5589 lumens  
Efficiency: N/A  
Efficacy: 83.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B2 - U0 - G2

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

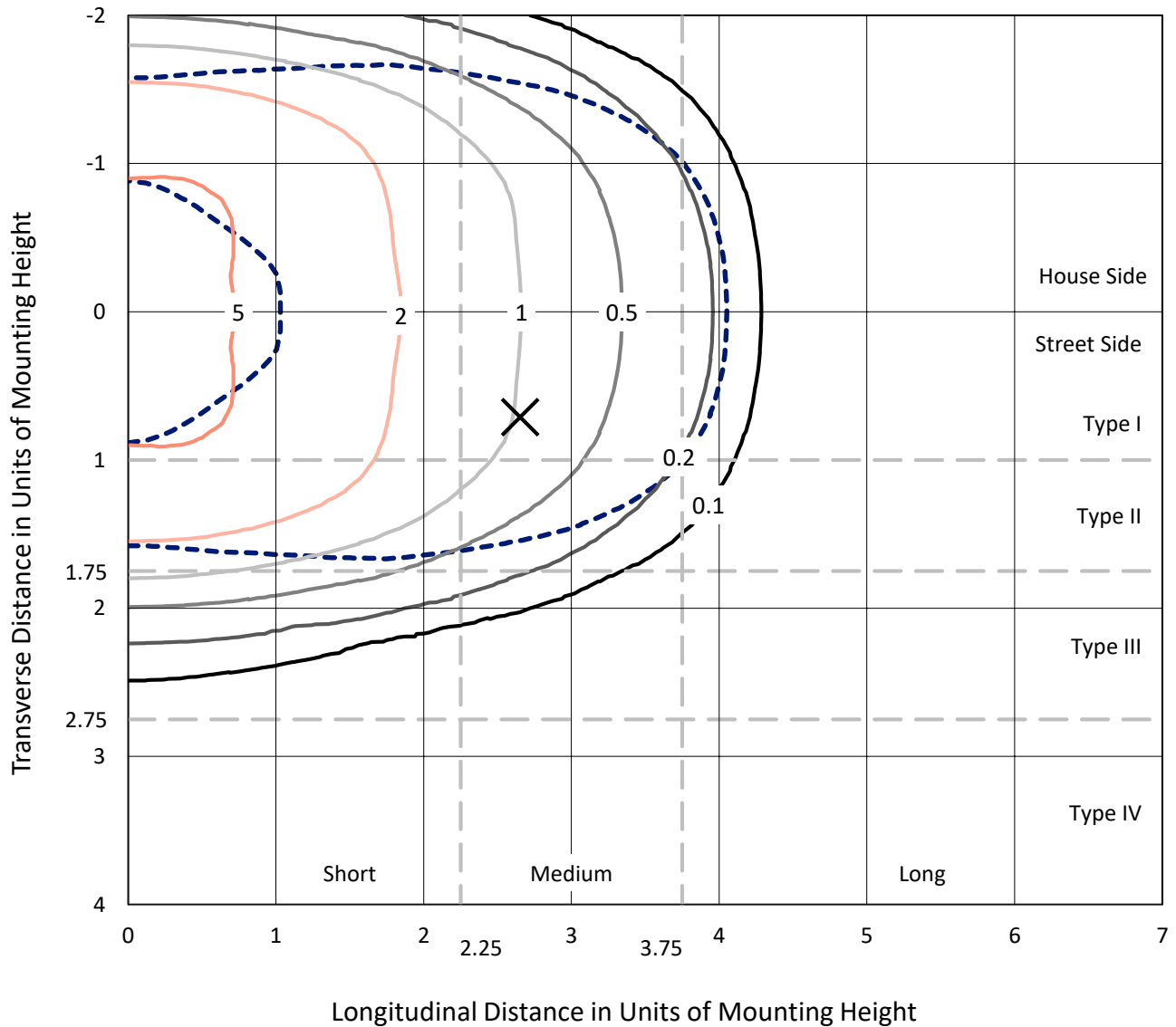


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### Iso-Footcandle Lines of Horizontal Illumination

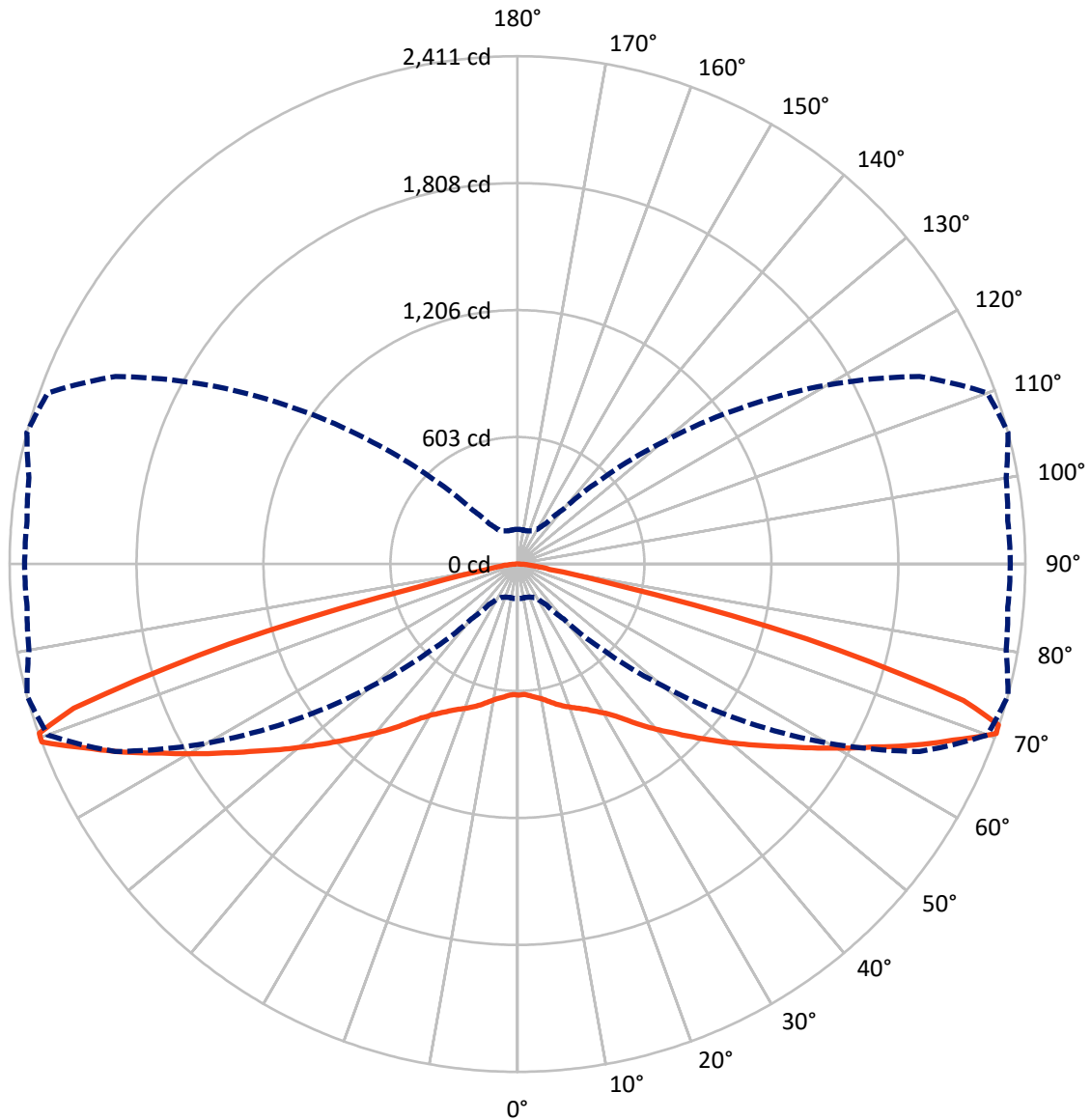
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.3 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



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

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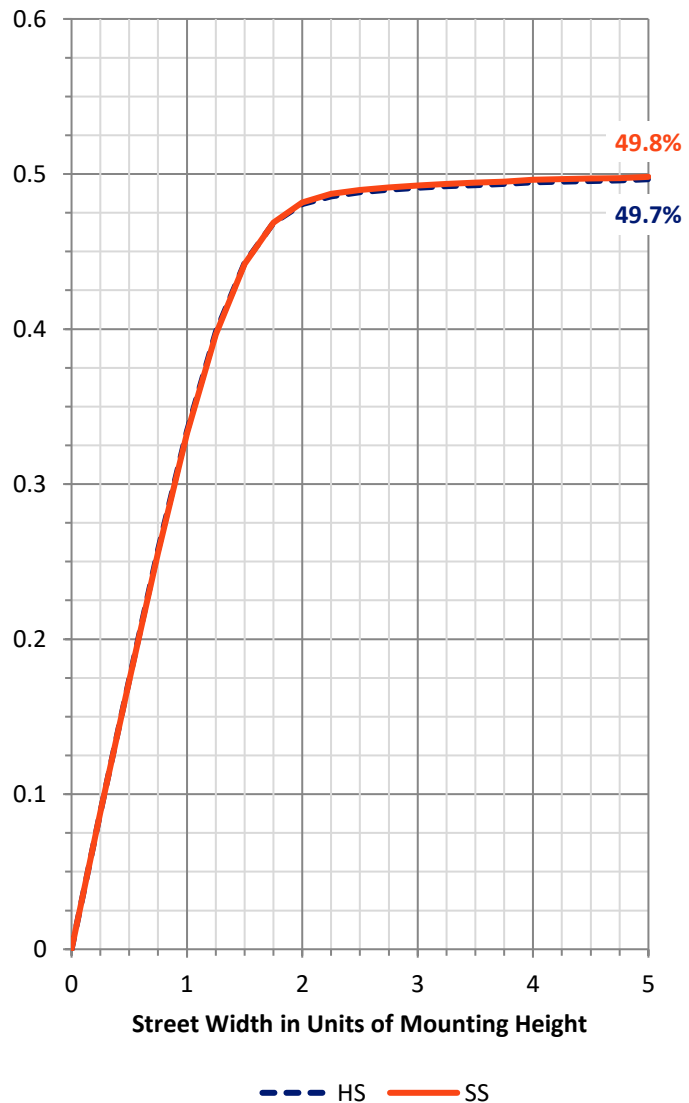
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2794.5	0.0	2794.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2794.5	0.0	2794.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5589.0	0.0	5589.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	1.1
10°-20°	185.1	3.3
20°-30°	347.7	6.2
30°-40°	612.5	11.0
40°-50°	1015.2	18.2
50°-60°	1412.3	25.3
60°-70°	1333.2	23.9
70°-80°	569.4	10.2
80°-90°	53.8	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°	5589.0	100.0
0°-180°	5589.0	100.0

**Coefficient of Utilization**



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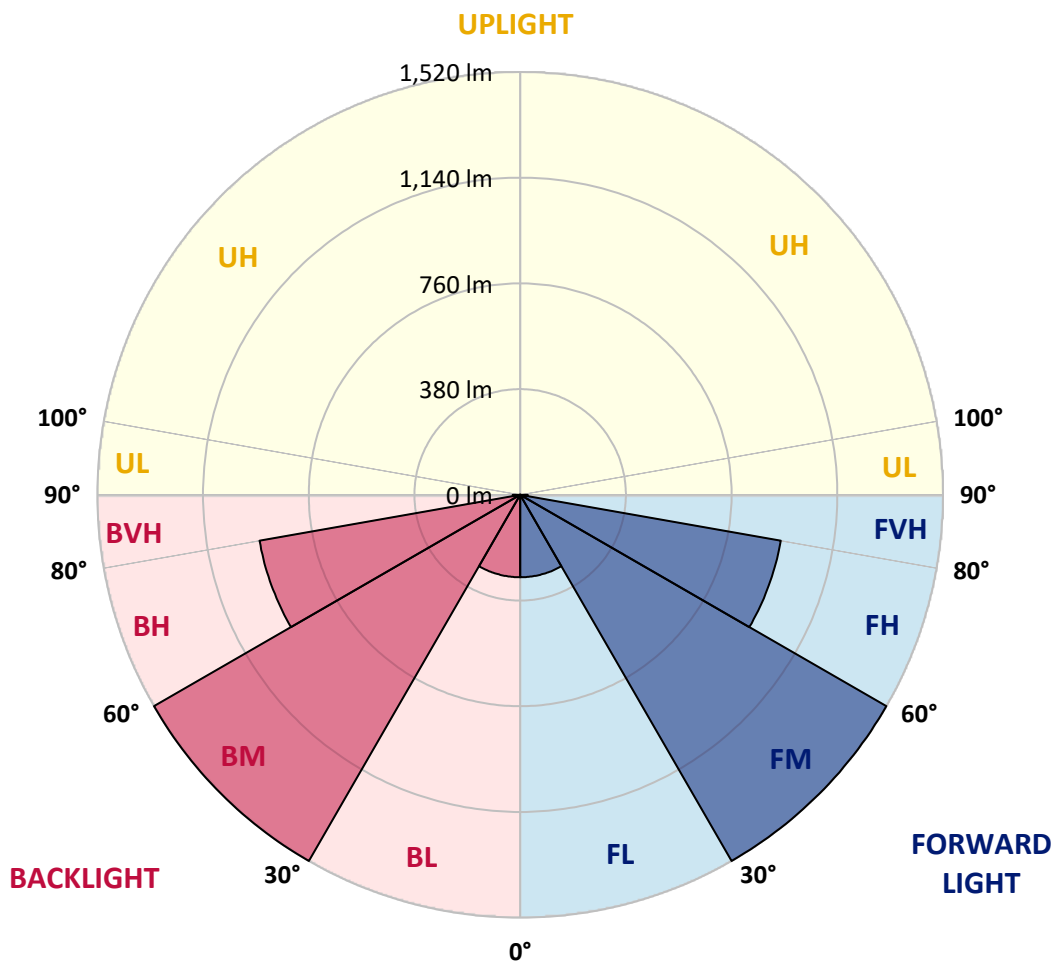
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	296.3	5.3			
FM (30°-60°)	1520.0	27.2			
FH (60°-80°)	951.3	17.0			G1/1800
FVH (80°-90°)	26.9	0.5			G1/100
BL (0°-30°)	296.3	5.3	B1/500		
BM (30°-60°)	1520.0	27.2	B2/2500		
BH (60°-80°)	951.3	17.0	B2/1000		G2/1000
BVH (80°-90°)	26.9	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	622.4	622.4	622.4	622.4	622.4	622.4	622.4	622.4	622.4	622.4	622.4
2.5°	626.2	625.9	626.2	625.2	625.5	625.2	625.2	623.8	623.8	623.1	622.0
5°	619.2	619.9	619.9	619.9	621.0	621.0	622.4	622.7	623.8	624.8	625.5
7.5°	607.7	608.0	609.1	609.8	611.9	614.7	617.5	620.6	623.4	626.9	630.8
10°	597.9	598.6	600.3	602.1	605.9	609.4	614.3	619.2	624.1	630.1	636.0
12.5°	592.6	593.7	596.5	599.3	605.2	609.8	616.4	624.1	630.8	636.4	643.1
15°	593.3	593.7	597.5	601.4	609.8	616.1	625.5	634.6	642.7	649.0	656.7
17.5°	603.5	604.2	608.0	613.6	621.7	629.7	639.9	649.4	660.2	667.6	676.7
20°	623.4	624.5	628.7	634.6	643.4	651.8	662.3	672.1	683.3	692.1	701.2
22.5°	649.4	651.1	655.7	663.0	671.8	681.9	692.8	702.9	713.5	722.2	729.9
25°	684.0	686.1	691.0	698.4	707.1	718.0	729.2	739.7	750.6	757.2	763.5
27.5°	730.6	734.1	739.4	745.3	753.0	764.6	775.1	783.9	794.4	801.7	805.9
30°	793.3	798.2	802.4	808.7	814.3	826.6	835.0	842.0	850.1	854.3	855.3
32.5°	870.0	874.6	878.8	883.3	891.0	902.2	910.3	914.1	918.3	917.6	913.8
35°	956.5	960.0	962.5	970.5	983.1	990.5	996.5	997.9	998.6	991.2	983.8
37.5°	1047.6	1051.8	1053.9	1066.5	1078.4	1086.8	1089.6	1092.8	1090.7	1078.4	1065.1
40°	1146.0	1150.6	1156.9	1167.7	1181.7	1189.8	1193.3	1192.9	1191.2	1176.8	1155.1
42.5°	1242.7	1248.3	1253.5	1272.4	1284.0	1297.7	1299.4	1299.1	1295.2	1278.8	1253.5
45°	1324.6	1331.3	1342.1	1363.2	1381.7	1398.2	1404.8	1407.3	1403.4	1385.9	1357.2
47.5°	1392.2	1396.8	1410.4	1436.0	1459.8	1484.0	1497.3	1506.8	1506.4	1493.8	1463.3
50°	1438.5	1443.7	1460.5	1489.3	1519.0	1547.4	1573.7	1595.0	1605.2	1596.1	1567.7
52.5°	1451.8	1458.4	1480.5	1514.8	1549.5	1587.7	1626.9	1664.7	1687.5	1693.1	1671.0
55°	1395.7	1403.1	1435.3	1482.9	1540.0	1596.4	1656.0	1709.9	1756.8	1778.6	1769.8
57.5°	1232.5	1237.8	1278.8	1340.4	1422.0	1521.1	1621.3	1720.1	1800.6	1857.0	1866.8
60°	974.7	981.4	1026.2	1091.4	1184.2	1309.6	1449.7	1611.5	1769.4	1898.7	1962.8
62.5°	657.8	662.3	705.4	764.9	866.5	987.3	1143.6	1348.5	1573.7	1804.5	1985.2
65°	345.3	345.3	374.4	416.1	497.0	605.2	765.3	975.4	1243.4	1531.6	1833.9
67.5°	200.3	200.0	206.6	216.1	241.7	285.5	373.7	528.2	781.8	1117.3	1461.2
70°	165.3	164.3	163.2	163.2	167.1	173.7	190.5	232.9	340.8	576.2	899.1
71°	158.0	157.3	154.5	153.4	155.2	158.7	166.0	185.6	242.0	393.0	671.4
72.5°	149.2	147.5	143.3	141.5	141.9	143.3	145.4	153.1	170.2	223.5	382.8
75°	135.9	131.7	126.4	124.0	122.9	122.6	122.6	124.7	128.5	134.8	156.9
77.5°	120.5	114.5	108.9	106.5	104.7	103.7	103.0	101.6	100.9	103.7	111.7
80°	101.9	95.6	91.1	89.7	88.6	86.5	83.7	80.9	79.2	80.6	85.5
82.5°	78.8	72.5	73.2	73.6	71.8	68.3	65.5	62.3	59.2	58.5	60.9
85°	62.7	59.5	57.4	62.0	58.1	53.9	50.1	44.8	37.5	30.8	33.6
87.5°	27.0	27.3	39.2	59.2	51.8	41.7	34.7	28.0	17.9	13.3	13.7
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°	622.4	622.4	622.4	622.4	622.4	622.4	622.4	622.4
2.5°	621.7	621.7	620.6	619.9	619.9	619.9	619.2	619.6
5°	625.9	626.6	627.3	626.9	628.0	629.0	628.7	628.3
7.5°	632.9	635.0	637.1	638.2	639.6	641.0	641.3	640.3
10°	639.9	644.1	647.3	650.1	651.8	653.2	654.3	653.9
12.5°	648.7	654.6	660.2	665.8	669.7	671.8	673.9	673.2
15°	663.0	669.7	676.7	684.0	690.0	693.1	696.3	695.6
17.5°	682.6	688.6	694.2	701.5	708.9	712.4	715.9	715.6
20°	707.1	711.7	714.9	719.1	726.1	729.9	733.1	732.0
22.5°	735.2	736.6	736.9	738.3	743.9	748.5	752.7	753.7
25°	765.6	764.6	762.5	761.4	765.3	770.2	775.4	776.8
27.5°	803.5	800.0	794.7	790.5	791.6	797.9	803.8	805.2
30°	851.1	843.0	831.8	823.8	822.4	829.0	835.3	837.4
32.5°	905.4	894.5	879.1	866.9	861.6	867.6	873.2	876.3
35°	969.8	957.9	939.4	923.6	915.2	919.0	928.9	932.4
37.5°	1046.2	1029.7	1009.1	989.1	975.1	975.8	986.3	990.5
40°	1130.6	1106.8	1080.5	1055.6	1035.3	1033.9	1043.4	1046.5
42.5°	1218.5	1188.0	1157.2	1124.6	1099.4	1094.9	1107.1	1107.5
45°	1313.1	1273.8	1235.7	1197.8	1171.6	1163.5	1175.4	1176.8
47.5°	1413.9	1364.9	1319.7	1278.8	1250.4	1237.8	1249.3	1251.4
50°	1519.0	1468.2	1415.7	1370.2	1336.9	1321.5	1335.1	1336.5
52.5°	1623.0	1575.1	1522.9	1470.7	1430.4	1412.9	1429.0	1433.9
55°	1727.8	1681.5	1632.5	1580.3	1529.5	1514.1	1531.6	1536.9
57.5°	1836.7	1792.2	1747.7	1695.2	1645.8	1622.3	1641.3	1648.6
60°	1956.8	1917.6	1875.6	1822.7	1774.0	1746.7	1762.8	1771.2
62.5°	2074.9	2066.8	2028.6	1973.6	1912.0	1884.7	1898.3	1904.3
65°	2084.7	2215.3	2213.6	2158.9	2072.8	2026.9	2030.7	2033.5
67.5°	1819.5	2119.3	2310.9	2328.1	2232.1	2160.3	2151.9	2153.7
70°	1288.2	1699.8	2106.4	2373.3	2411.1	2355.4	2337.2	2340.0
71°	1032.2	1458.4	1906.0	2265.1	2408.3	2392.2	2382.0	2389.4
72.5°	658.8	1074.6	1510.3	1939.7	2214.6	2293.4	2305.0	2309.5
75°	239.2	462.3	782.5	1121.1	1421.0	1627.2	1740.7	1749.8
77.5°	128.5	165.7	256.0	382.5	480.5	533.1	539.4	541.8
80°	94.6	109.6	125.4	143.3	154.5	156.6	152.7	144.7
82.5°	66.9	75.7	82.0	88.3	92.8	89.0	73.9	56.4
85°	38.9	42.7	46.2	49.4	50.1	47.3	31.2	25.6
87.5°	15.4	16.8	16.5	18.6	17.9	16.5	12.3	10.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)