

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: P960793

Luminaire Tested: **NAV-SB1D-722-U-T3R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960793  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1D-722-U-T3R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

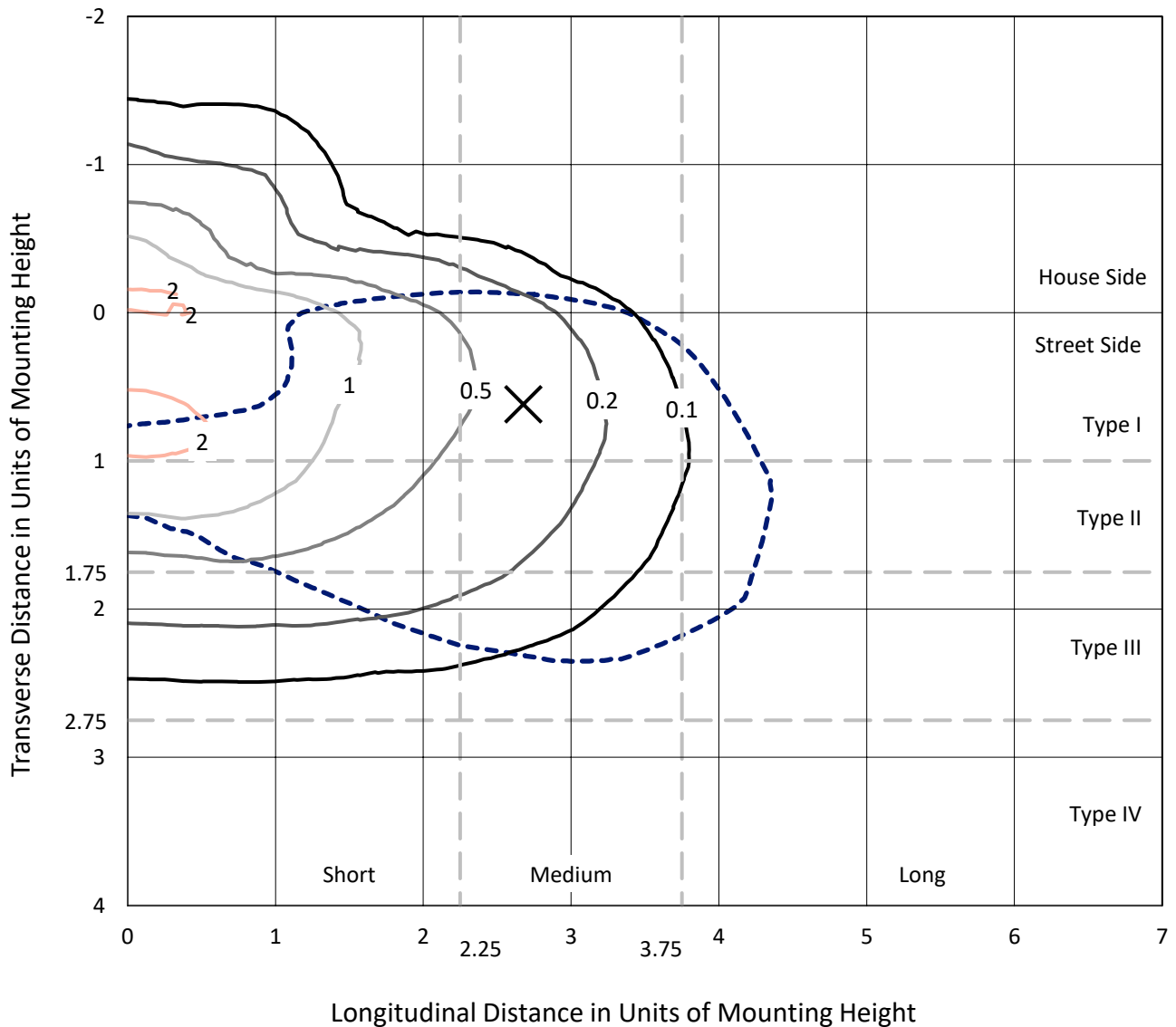
Lumens per Lamp: N/A  
Luminaire Lumens: 8848.8 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): NR  
Input Current (Ain): 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: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

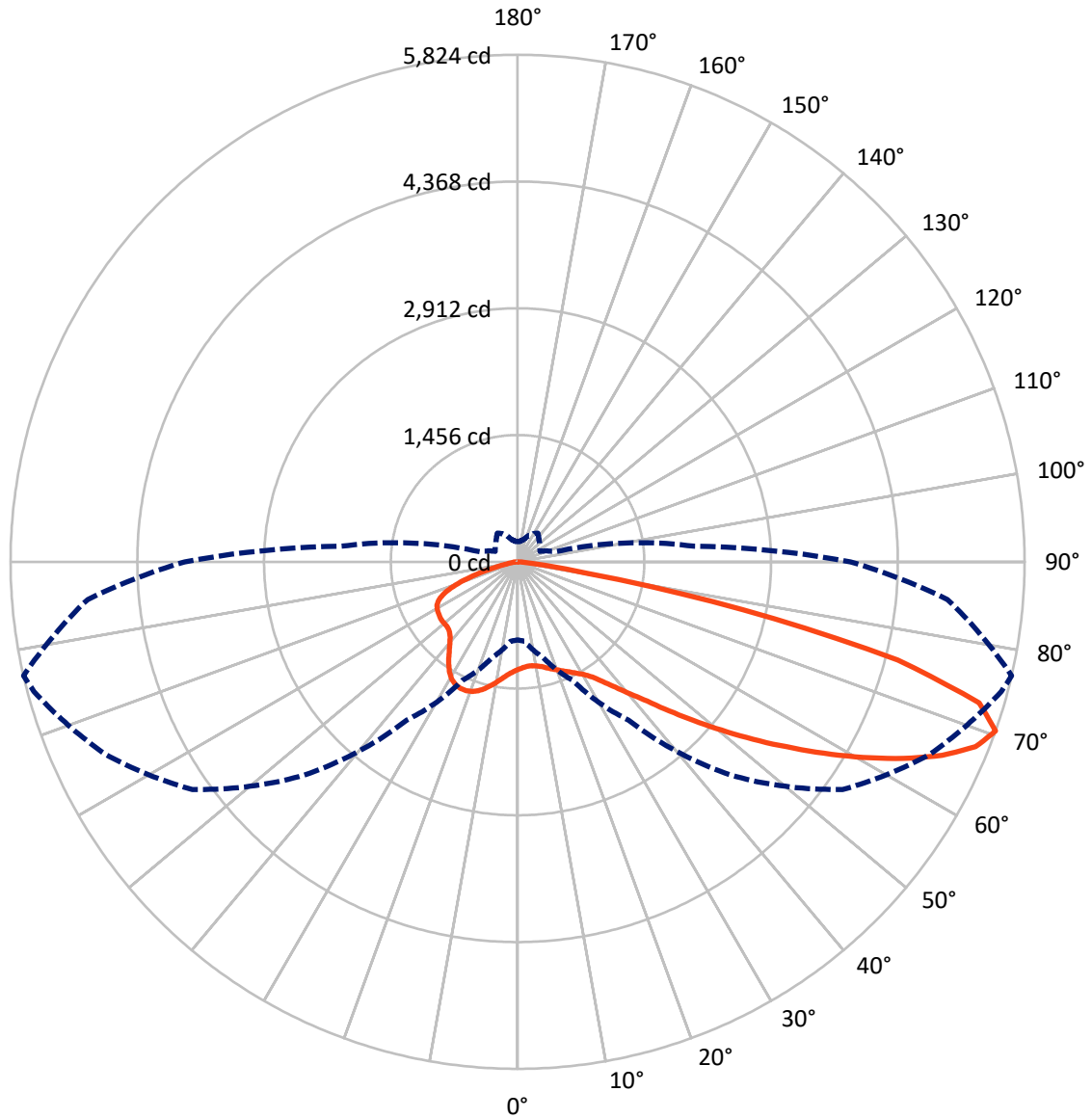
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type III - Medium - N/A

REPORT NUMBER: P960793  
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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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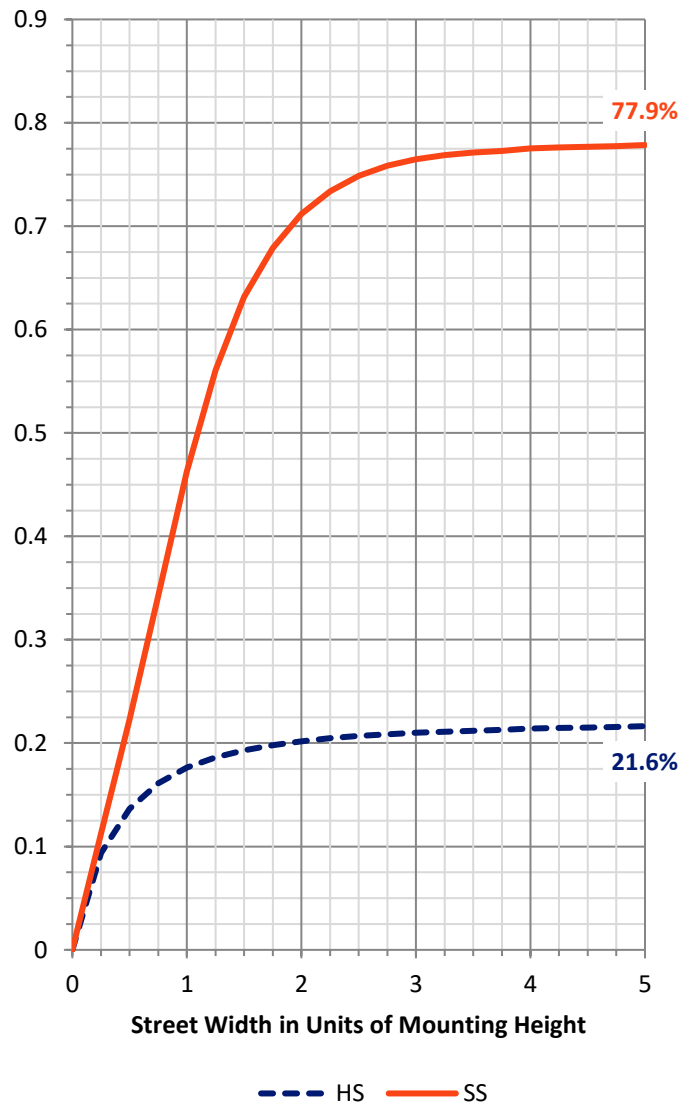
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1937.8	0.0	1937.8
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	6911.1	0.0	6911.1
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	8848.8	0.0	8848.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.7	1.3
10°-20°	339.8	3.8
20°-30°	581.1	6.6
30°-40°	934.5	10.6
40°-50°	1459.0	16.5
50°-60°	1948.8	22.0
60°-70°	2077.2	23.5
70°-80°	1278.7	14.5
80°-90°	112.0	1.3
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°	8848.8	100.0
0°-180°	8848.8	100.0

**Coefficient of Utilization**

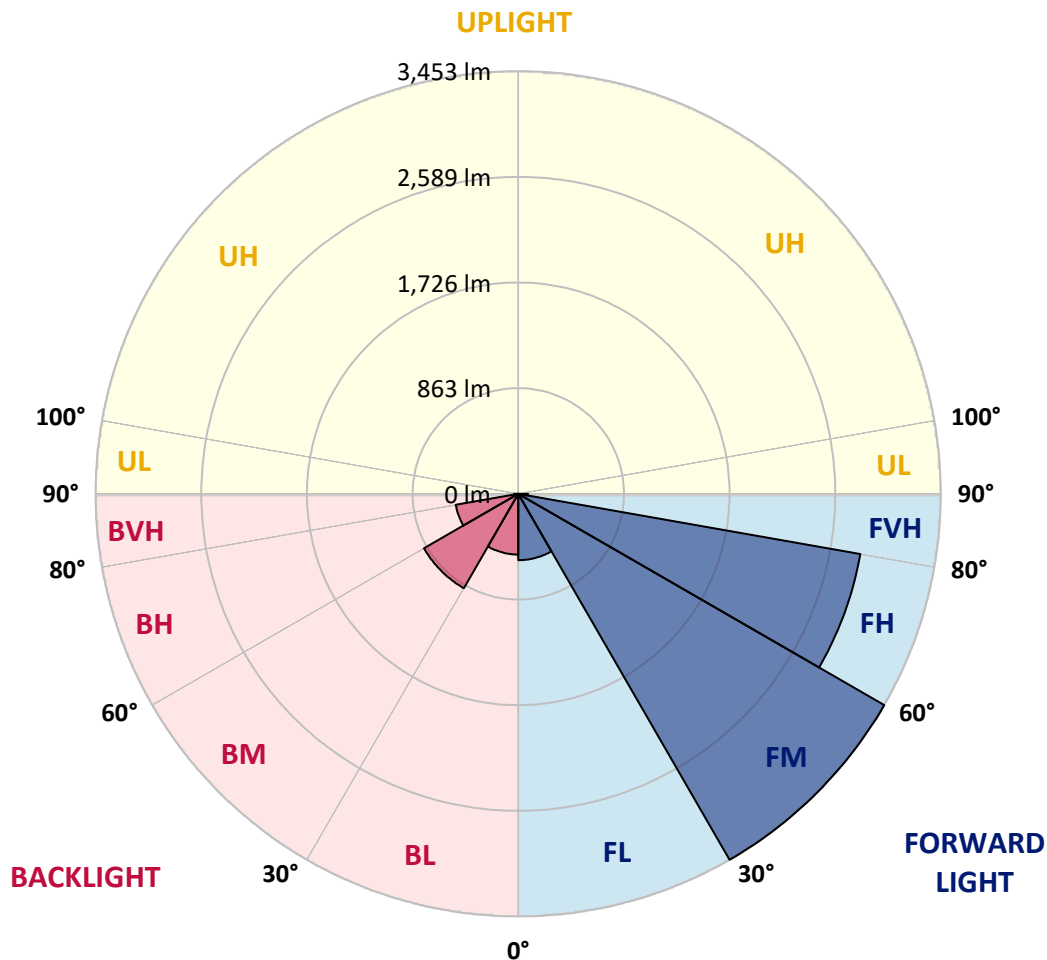


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 CATALOG NUMBER: NAV-SB1D-722-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	542.1	6.1			
FM (30°-60°)	3452.6	39.0			
FH (60°-80°)	2838.0	32.1			G2/5000
FVH (80°-90°)	78.3	0.9			G1/100
BL (0°-30°)	496.5	5.6	B1/500		
BM (30°-60°)	889.7	10.1	B1/1000		
BH (60°-80°)	517.9	5.9	B2/1000		G2/1000
BVH (80°-90°)	33.7	0.4			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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5
2.5°	1138.0	1137.5	1143.4	1145.2	1156.1	1163.8	1178.3	1193.7	1213.6	1216.0	1228.2
5°	1072.3	1072.3	1079.0	1086.3	1100.3	1115.7	1138.0	1164.7	1199.1	1204.6	1234.9
7.5°	1016.5	1020.2	1026.0	1040.1	1056.4	1078.6	1112.5	1150.7	1196.0	1204.6	1253.6
10°	971.6	975.7	983.0	994.2	1018.7	1049.6	1094.0	1143.0	1203.7	1217.3	1280.7
12.5°	957.6	961.7	965.8	974.4	997.0	1033.3	1086.3	1146.6	1222.2	1235.8	1317.8
15°	990.3	995.2	992.0	989.7	1001.5	1034.6	1089.9	1159.7	1245.4	1264.8	1363.7
17.5°	1065.5	1067.2	1060.1	1038.7	1036.9	1054.6	1107.1	1177.8	1274.4	1295.7	1409.9
20°	1186.9	1183.8	1168.8	1126.7	1102.6	1099.0	1136.6	1205.0	1304.3	1327.0	1459.7
22.5°	1351.9	1348.3	1318.4	1251.7	1198.2	1162.9	1179.2	1240.4	1337.8	1363.1	1508.2
25°	1557.6	1552.7	1508.7	1418.0	1335.1	1247.6	1237.2	1287.1	1379.0	1402.6	1559.0
27.5°	1797.8	1793.7	1746.2	1626.5	1506.9	1363.7	1309.2	1341.9	1422.1	1448.8	1616.1
30°	2056.1	2067.9	1983.6	1854.9	1703.6	1515.1	1406.3	1409.4	1477.8	1501.8	1685.4
32.5°	2359.8	2380.2	2278.7	2115.5	1908.9	1679.6	1528.6	1503.7	1559.0	1578.9	1772.8
35°	2660.7	2683.8	2599.5	2419.1	2181.2	1873.5	1656.4	1612.0	1666.9	1688.6	1888.9
37.5°	2920.8	2951.6	2908.1	2751.3	2472.6	2107.3	1823.2	1739.3	1799.6	1826.9	2044.8
40°	3126.1	3173.2	3170.1	3072.1	2816.1	2391.0	2034.8	1896.6	1964.6	1994.0	2233.8
42.5°	3292.9	3333.7	3369.0	3364.0	3174.6	2713.3	2283.6	2100.9	2152.7	2186.6	2446.4
45°	3408.0	3451.5	3527.6	3609.6	3519.4	3058.1	2568.6	2343.5	2390.6	2441.8	2699.6
47.5°	3510.8	3560.2	3659.0	3789.1	3812.3	3404.3	2881.0	2625.7	2668.8	2721.9	2953.9
50°	3520.0	3562.5	3715.7	3900.1	4020.3	3737.0	3216.2	2942.6	2982.9	3039.5	3226.3
52.5°	3301.0	3368.2	3635.5	3896.9	4115.9	4015.2	3549.4	3272.0	3317.3	3385.4	3508.2
55°	2562.3	2660.7	3400.3	3775.5	4081.9	4195.2	3866.2	3622.4	3680.4	3751.5	3791.9
57.5°	2207.0	2250.1	2699.2	3554.4	3926.9	4241.9	4133.5	3976.3	4069.7	4147.6	4091.9
60°	1983.6	2019.5	2285.0	3210.4	3723.0	4168.0	4340.2	4306.2	4467.6	4560.4	4398.7
62.5°	1744.3	1778.3	2019.9	2680.6	3461.9	4045.2	4470.7	4610.8	4875.4	4977.0	4687.8
65°	1506.9	1535.9	1767.4	2252.3	3130.1	3922.4	4538.3	4874.1	5252.9	5358.1	4928.0
67.5°	1242.2	1266.2	1485.1	1900.2	2726.8	3754.3	4571.8	5081.1	5581.5	5671.6	5046.7
70°	896.4	915.0	1141.1	1502.8	2220.7	3465.1	4558.2	5228.0	5751.9	5823.9	4957.0
72.5°	423.7	440.5	706.1	975.7	1568.5	2902.2	4283.1	5111.6	5578.8	5543.0	4407.7
75°	226.1	240.7	405.6	535.3	828.4	1989.5	3505.0	4403.2	4684.7	4510.6	3257.6
77.5°	153.1	164.5	251.0	321.3	378.4	944.4	2252.8	3048.7	2933.0	2645.7	1631.5
80°	121.5	133.2	205.7	217.5	183.1	341.2	930.9	1411.2	1013.8	810.8	464.0
82.5°	93.4	106.5	173.1	157.7	99.7	140.0	271.0	446.4	259.6	197.6	112.4
85°	57.1	71.1	135.9	100.7	56.2	63.9	92.0	124.1	79.3	66.2	40.4
87.5°	29.0	40.8	68.9	36.7	25.4	15.0	24.5	24.5	20.8	18.1	10.5
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: P960793  
 CATALOG NUMBER: NAV-SB1D-722-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5
2.5°	1239.0	1248.0	1263.5	1278.0	1289.3	1300.2	1311.1	1317.0	1318.8	1326.0	1330.1
5°	1253.6	1270.3	1300.2	1328.3	1345.9	1356.9	1364.6	1369.1	1370.0	1372.3	1375.9
7.5°	1280.2	1307.0	1348.7	1376.8	1389.9	1389.1	1385.9	1374.5	1370.0	1365.9	1366.8
10°	1317.8	1353.2	1404.5	1423.9	1415.7	1394.0	1365.9	1332.8	1317.4	1302.5	1298.0
12.5°	1364.6	1409.4	1459.7	1458.8	1418.5	1362.7	1297.4	1246.7	1214.5	1191.5	1186.0
15°	1421.2	1472.8	1511.4	1480.6	1392.2	1292.0	1196.4	1130.3	1101.3	1075.8	1073.2
17.5°	1479.7	1534.9	1552.7	1473.7	1326.0	1187.4	1079.0	1026.9	998.4	984.8	988.8
20°	1536.8	1591.6	1577.1	1434.8	1225.4	1068.7	972.1	943.5	937.7	940.8	939.5
22.5°	1597.1	1645.9	1582.1	1359.6	1097.2	947.2	894.1	895.0	908.2	917.7	919.9
25°	1658.7	1691.8	1569.0	1250.8	959.4	857.9	844.7	859.3	885.1	903.6	908.7
27.5°	1718.0	1732.6	1540.4	1116.2	841.1	794.0	796.2	826.2	865.1	890.9	897.3
30°	1785.1	1768.8	1485.5	964.8	759.1	739.1	758.2	793.0	832.1	855.2	860.6
32.5°	1860.8	1800.1	1398.5	824.8	701.1	695.2	726.4	749.2	766.4	773.2	776.7
35°	1955.1	1844.1	1287.1	726.4	648.9	663.0	692.9	681.6	674.8	671.2	674.8
37.5°	2077.5	1903.4	1156.5	662.6	606.8	639.9	652.1	616.7	590.1	576.9	580.0
40°	2224.8	1990.4	1031.0	613.2	580.0	619.9	598.7	556.1	522.0	503.5	504.8
42.5°	2388.4	2081.5	925.4	576.0	565.1	603.6	559.2	508.5	453.7	447.7	453.7
45°	2560.0	2175.4	853.3	547.5	557.9	589.6	536.6	454.6	415.5	439.6	452.3
47.5°	2731.8	2261.5	809.9	526.1	554.2	573.7	516.6	424.7	397.0	431.9	448.2
50°	2923.1	2338.4	790.4	510.8	550.2	567.4	486.8	417.0	377.5	400.6	417.9
52.5°	3112.9	2398.3	775.8	495.4	544.3	562.4	472.2	407.8	353.9	355.3	364.8
55°	3302.4	2437.2	760.0	475.0	531.2	551.6	470.9	397.9	336.3	329.9	334.5
57.5°	3504.5	2459.5	740.6	452.3	508.5	523.9	469.6	390.2	330.9	320.4	321.7
60°	3710.3	2492.1	715.1	424.7	478.2	490.8	466.4	387.4	327.7	310.0	311.3
62.5°	3894.7	2503.5	684.8	398.3	439.1	458.2	459.5	385.2	319.1	288.6	288.6
65°	4015.7	2454.5	631.7	368.5	397.0	424.7	446.4	377.5	303.6	273.3	273.3
67.5°	4010.7	2314.9	548.8	329.9	356.2	387.4	427.3	364.4	285.1	254.2	255.6
70°	3824.1	2039.3	443.7	285.1	311.3	347.6	402.9	344.9	262.8	233.4	236.2
72.5°	3279.7	1596.1	322.3	232.5	259.2	306.4	371.2	321.3	240.2	214.8	213.4
75°	2343.0	1010.1	218.4	178.6	201.7	259.6	331.7	293.7	219.4	215.8	203.5
77.5°	1196.9	482.7	144.5	130.5	140.5	204.8	278.7	262.4	222.5	178.1	158.6
80°	389.3	178.1	91.1	88.9	93.4	136.4	215.8	215.2	168.6	121.1	106.9
82.5°	124.1	76.6	59.3	57.1	54.8	85.7	150.5	170.4	113.8	76.6	76.2
85°	49.4	45.8	34.8	32.2	23.1	40.4	78.8	113.3	84.8	55.2	56.7
87.5°	18.1	18.1	9.5	6.8	5.0	13.6	21.3	34.0	48.5	28.6	28.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)