

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: P961351

Luminaire Tested: **NAV-SB2A-727-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961351
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-SB2A-727-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8755.5 lumens
Efficiency: N/A
Efficacy: 152.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

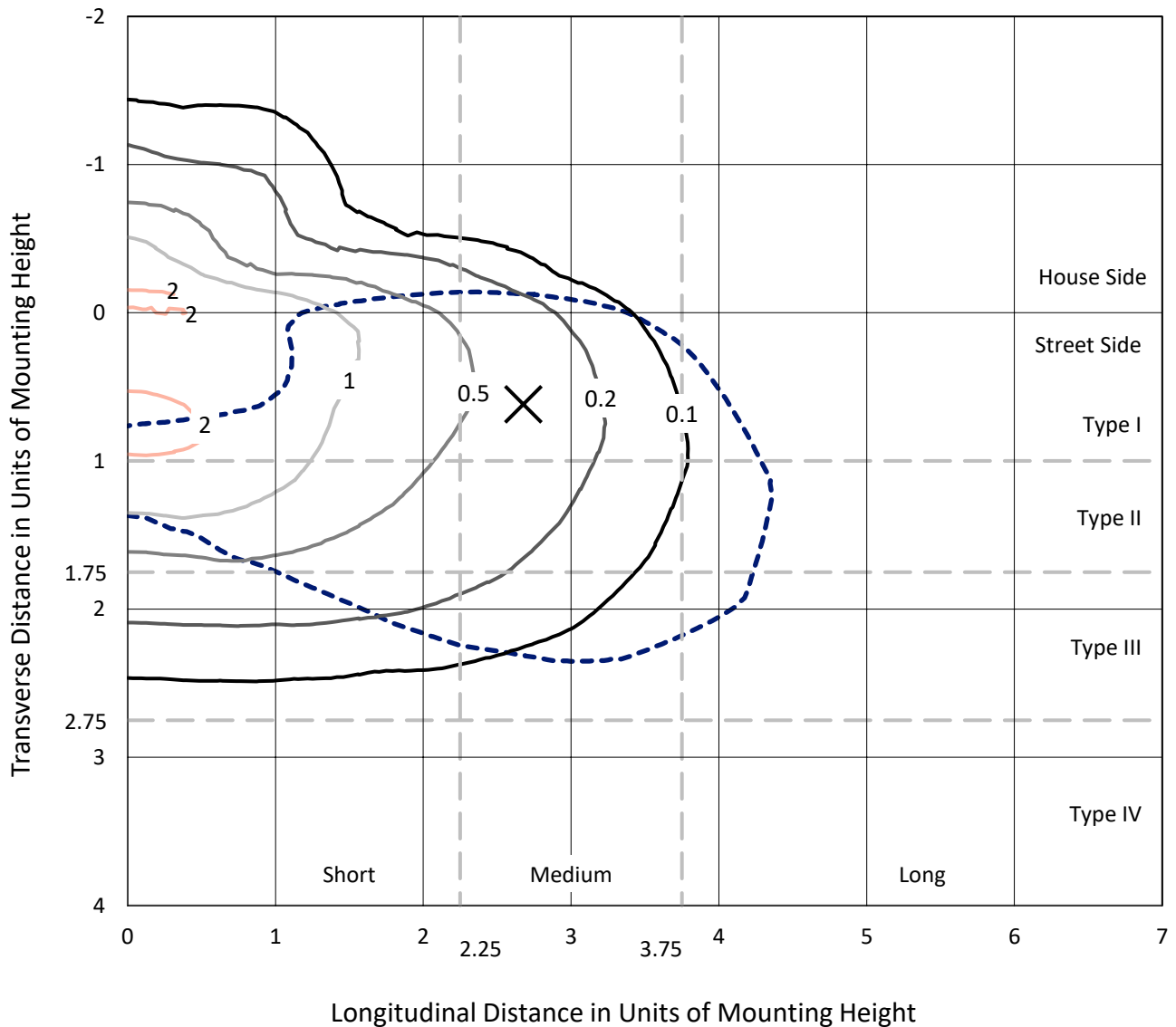
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P961351
 CATALOG NUMBER: NAV-SB2A-727-U-T3R

Iso-Footcandle Lines of Horizontal Illumination

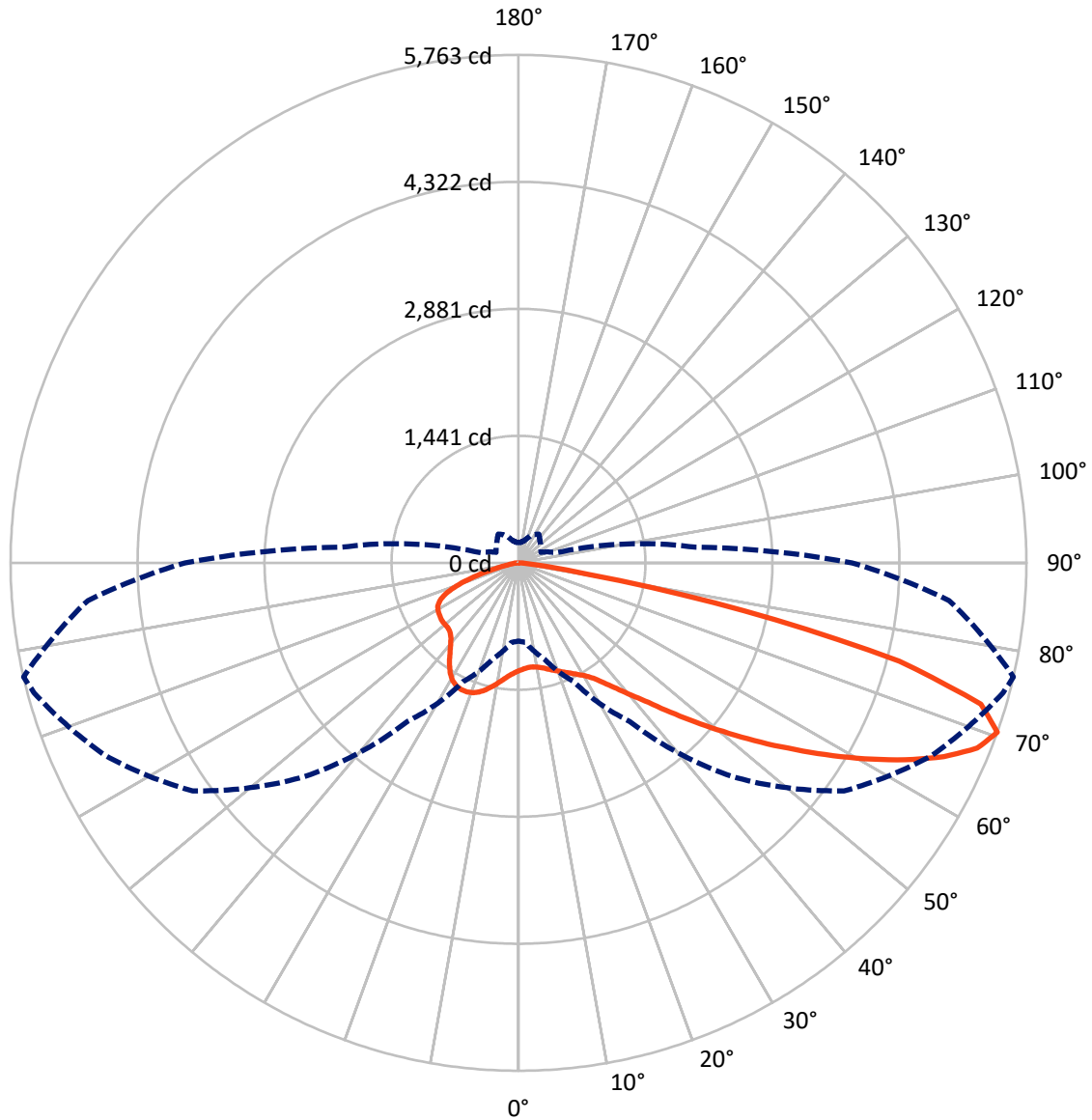
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P961351
CATALOG NUMBER: NAV-SB2A-727-U-T3R

Luminous Intensity Polar Plot



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

REPORT NUMBER: P961351
 CATALOG NUMBER: NAV-SB2A-727-U-T3R

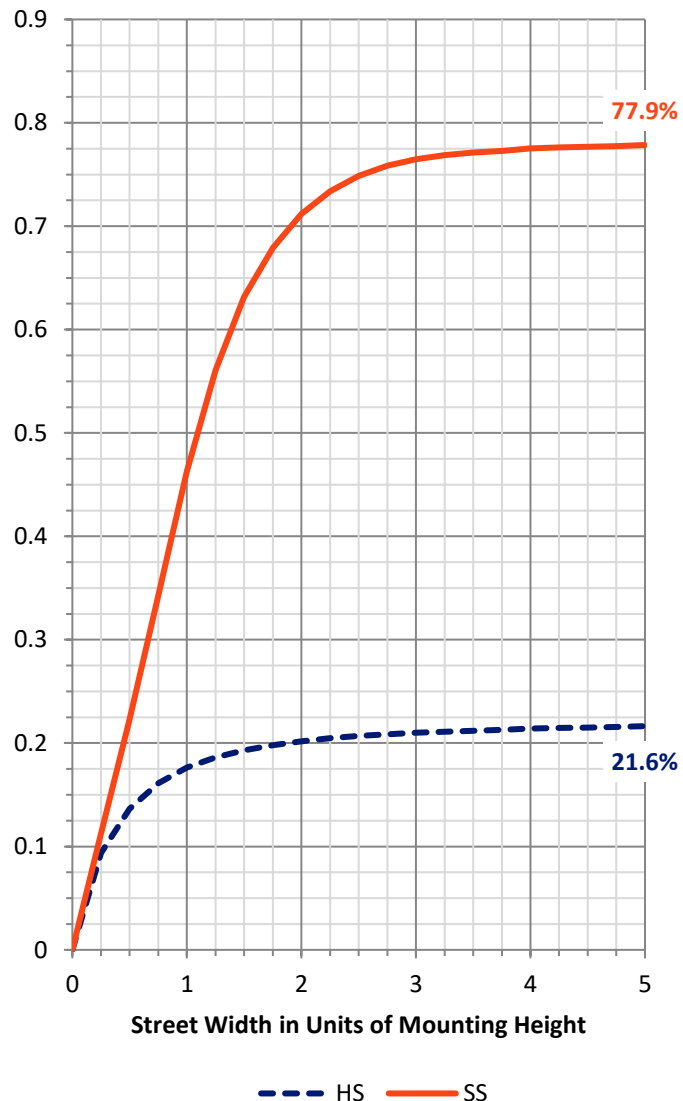
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1917.3	0.0	1917.3
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	6838.2	0.0	6838.2
	% Fixture	78.1	0.0	78.1
Total	Lumens	8755.5	0.0	8755.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	1.3
10°-20°	336.2	3.8
20°-30°	575.0	6.6
30°-40°	924.6	10.6
40°-50°	1443.6	16.5
50°-60°	1928.3	22.0
60°-70°	2055.3	23.5
70°-80°	1265.2	14.5
80°-90°	110.9	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°	8755.5	100.0
0°-180°	8755.5	100.0

Coefficient of Utilization

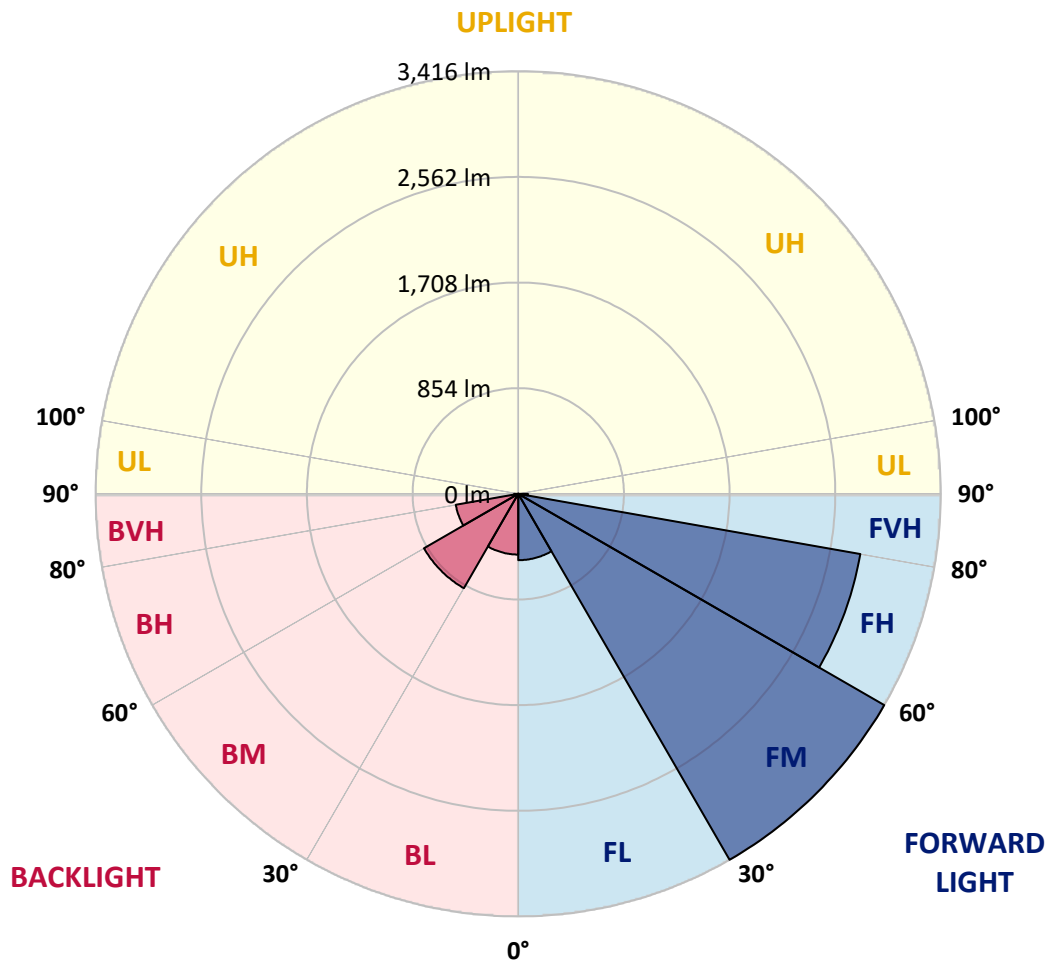


REPORT NUMBER: P961351
 CATALOG NUMBER: NAV-SB2A-727-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	536.4	6.1			
FM (30°-60°)	3416.2	39.0			
FH (60°-80°)	2808.1	32.1			G2/5000
FVH (80°-90°)	77.5	0.9			G1/100
BL (0°-30°)	491.3	5.6	B1/500		
BM (30°-60°)	880.3	10.1	B1/1000		
BH (60°-80°)	512.4	5.9	B2/1000		G2/1000
BVH (80°-90°)	33.3	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



REPORT NUMBER: P961351
 CATALOG NUMBER: NAV-SB2A-727-U-T3R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5
2.5°	1126.0	1125.6	1131.4	1133.1	1143.9	1151.5	1165.8	1181.1	1200.9	1203.1	1215.2
5°	1061.0	1061.0	1067.6	1074.8	1088.8	1104.0	1126.0	1152.4	1186.5	1191.9	1221.9
7.5°	1005.8	1009.4	1015.2	1029.1	1045.3	1067.2	1100.8	1138.6	1183.4	1191.9	1240.4
10°	961.4	965.4	972.6	983.8	1008.0	1038.5	1082.5	1130.9	1190.9	1204.5	1267.2
12.5°	947.5	951.5	955.6	964.1	986.5	1022.3	1074.8	1134.5	1209.4	1222.8	1304.0
15°	979.8	984.7	981.5	979.3	991.0	1023.8	1078.4	1147.5	1232.3	1251.5	1349.3
17.5°	1054.2	1056.1	1048.9	1027.8	1025.9	1043.4	1095.5	1165.4	1261.0	1282.0	1395.0
20°	1174.4	1171.3	1156.5	1114.8	1091.0	1087.4	1124.6	1192.4	1290.6	1312.9	1444.3
22.5°	1337.6	1334.0	1304.4	1238.5	1185.6	1150.7	1166.8	1227.3	1323.7	1348.8	1492.3
25°	1541.2	1536.3	1492.8	1403.1	1321.0	1234.5	1224.2	1273.5	1364.5	1387.8	1542.5
27.5°	1778.9	1774.8	1727.7	1609.4	1491.0	1349.3	1295.5	1327.8	1407.1	1433.6	1599.0
30°	2034.4	2046.1	1962.7	1835.4	1685.6	1499.1	1391.4	1394.6	1462.3	1486.0	1667.7
32.5°	2334.8	2355.0	2254.6	2093.2	1888.8	1661.8	1512.5	1487.8	1542.5	1562.3	1754.2
35°	2632.6	2655.5	2572.1	2393.7	2158.2	1853.7	1639.0	1595.0	1649.2	1670.7	1869.0
37.5°	2890.0	2920.5	2877.5	2722.3	2446.6	2085.2	1804.0	1721.0	1780.6	1807.6	2023.2
40°	3093.1	3139.8	3136.7	3039.8	2786.5	2365.8	2013.4	1876.6	1943.9	1973.0	2210.2
42.5°	3258.2	3298.6	3333.5	3328.6	3141.1	2684.7	2259.5	2078.8	2130.0	2163.6	2420.5
45°	3372.0	3415.1	3490.4	3571.6	3482.3	3025.9	2541.6	2318.8	2365.4	2416.0	2671.1
47.5°	3473.8	3522.7	3620.5	3749.1	3772.1	3368.5	2850.5	2598.1	2640.7	2693.2	2922.8
50°	3482.8	3525.0	3676.6	3859.0	3977.9	3697.6	3182.4	2911.5	2951.5	3007.6	3192.3
52.5°	3266.3	3332.6	3597.1	3855.9	4072.5	3972.9	3512.0	3237.6	3282.4	3349.7	3471.2
55°	2535.3	2632.6	3364.5	3735.7	4038.9	4150.9	3825.4	3584.2	3641.5	3711.9	3751.9
57.5°	2183.8	2226.4	2670.7	3516.9	3885.5	4197.2	4090.0	3934.4	4026.7	4103.9	4048.7
60°	1962.7	1998.1	2260.9	3176.6	3683.7	4124.1	4294.4	4260.8	4420.4	4512.4	4352.4
62.5°	1725.9	1759.6	1998.5	2652.4	3425.4	4002.5	4423.6	4562.2	4824.1	4924.5	4638.4
65°	1491.0	1519.7	1748.9	2228.7	3097.2	3881.1	4490.4	4822.7	5197.6	5301.6	4876.0
67.5°	1229.1	1252.9	1469.4	1880.2	2698.1	3714.7	4523.6	5027.6	5522.7	5611.9	4993.5
70°	886.9	905.4	1129.1	1487.0	2197.2	3428.5	4510.1	5172.9	5691.3	5762.5	4904.7
72.5°	419.2	435.8	698.6	965.4	1552.0	2871.6	4238.0	5057.7	5519.9	5484.6	4361.3
75°	223.8	238.1	401.3	529.6	819.7	1968.5	3468.0	4356.8	4635.3	4463.1	3223.2
77.5°	151.6	162.8	248.5	318.0	374.4	934.5	2229.1	3016.5	2902.2	2617.8	1614.3
80°	120.1	131.8	203.6	215.2	181.1	337.6	921.1	1396.4	1003.1	802.2	459.2
82.5°	92.4	105.4	171.3	156.0	98.6	138.6	268.1	441.7	257.0	195.5	111.2
85°	56.5	70.4	134.5	99.5	55.6	63.2	91.0	122.9	78.5	65.5	39.9
87.5°	28.7	40.4	68.2	36.3	25.1	14.8	24.2	24.2	20.6	17.9	10.4
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: P961351
 CATALOG NUMBER: NAV-SB2A-727-U-T3R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5
2.5°	1226.0	1234.9	1250.2	1264.5	1275.7	1286.5	1297.2	1303.1	1304.9	1312.1	1316.1
5°	1240.4	1256.9	1286.5	1314.3	1331.8	1342.5	1350.1	1354.6	1355.6	1357.8	1361.4
7.5°	1266.8	1293.2	1334.4	1362.3	1375.2	1374.4	1371.2	1360.1	1355.6	1351.6	1352.4
10°	1304.0	1339.0	1389.6	1409.0	1400.9	1379.3	1351.6	1318.8	1303.5	1288.7	1284.2
12.5°	1350.1	1394.6	1444.3	1443.4	1403.5	1348.4	1283.8	1233.6	1201.7	1178.9	1173.5
15°	1406.2	1457.3	1495.5	1464.9	1377.5	1278.4	1183.8	1118.4	1089.7	1064.6	1061.8
17.5°	1464.1	1518.7	1536.3	1458.3	1312.1	1174.9	1067.6	1016.1	987.9	974.4	978.5
20°	1520.6	1574.8	1560.5	1419.7	1212.5	1057.4	961.9	933.6	927.7	930.9	929.6
22.5°	1580.2	1628.6	1565.4	1345.2	1085.6	937.2	884.7	885.6	898.6	908.0	910.3
25°	1641.2	1673.9	1552.4	1237.6	949.3	848.8	835.9	850.2	875.8	894.1	899.0
27.5°	1700.0	1714.3	1524.2	1104.4	832.3	785.7	787.8	817.4	856.0	881.6	887.9
30°	1766.3	1750.2	1469.8	954.7	751.1	731.3	750.2	784.7	823.3	846.1	851.6
32.5°	1841.2	1781.1	1383.9	816.1	693.7	687.9	718.8	741.2	758.3	765.0	768.5
35°	1934.5	1824.6	1273.5	718.8	642.2	656.0	685.6	674.4	667.7	664.1	667.7
37.5°	2055.5	1883.3	1144.3	655.6	600.4	633.1	645.2	610.3	583.8	570.8	574.0
40°	2201.3	1969.4	1020.2	606.7	574.0	613.5	592.3	550.2	516.6	498.2	499.5
42.5°	2363.1	2059.5	915.6	569.9	559.1	597.3	553.3	503.1	448.8	443.0	448.8
45°	2533.1	2152.4	844.4	541.7	552.0	583.4	530.9	449.8	411.2	435.0	447.5
47.5°	2703.0	2237.6	801.3	520.6	548.4	567.6	511.2	420.1	392.8	427.3	443.5
50°	2892.2	2313.8	782.1	505.3	544.4	561.4	481.6	412.6	373.5	396.4	413.5
52.5°	3080.1	2373.0	767.7	490.2	538.5	556.5	467.3	403.5	350.2	351.6	361.0
55°	3267.6	2411.6	751.9	470.0	525.5	545.7	465.9	393.7	332.7	326.5	331.0
57.5°	3467.6	2433.6	732.7	447.5	503.1	518.3	464.5	386.1	327.4	317.0	318.4
60°	3671.1	2465.8	707.6	420.1	473.0	485.6	461.5	383.3	324.2	306.7	308.0
62.5°	3853.7	2477.0	677.5	394.1	434.5	453.4	454.7	381.2	315.7	285.7	285.7
65°	3973.4	2428.6	625.0	364.6	392.8	420.1	441.7	373.5	300.4	270.4	270.4
67.5°	3968.5	2290.5	543.0	326.5	352.5	383.3	422.8	360.5	282.1	251.5	252.9
70°	3783.7	2017.8	439.0	282.1	308.0	343.9	398.6	341.2	260.0	230.9	233.6
72.5°	3245.1	1579.3	318.8	230.0	256.5	303.1	367.3	318.0	237.7	212.6	211.3
75°	2318.3	999.5	216.2	176.7	199.6	257.0	328.2	290.6	217.0	213.4	201.3
77.5°	1184.3	477.5	143.1	129.1	139.0	202.6	275.7	259.6	220.2	176.2	156.9
80°	385.2	176.2	90.1	87.8	92.4	135.0	213.4	213.0	166.8	119.7	105.8
82.5°	122.9	75.7	58.7	56.5	54.2	84.8	148.8	168.6	112.5	75.7	75.3
85°	48.9	45.3	34.5	31.9	22.9	39.9	78.0	112.1	83.8	54.7	56.1
87.5°	17.9	17.9	9.4	6.8	4.9	13.4	21.1	33.6	48.0	28.3	27.8
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)