

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: P959229

Luminaire Tested: **NAV-SB1A-727-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959229
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4229.2 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

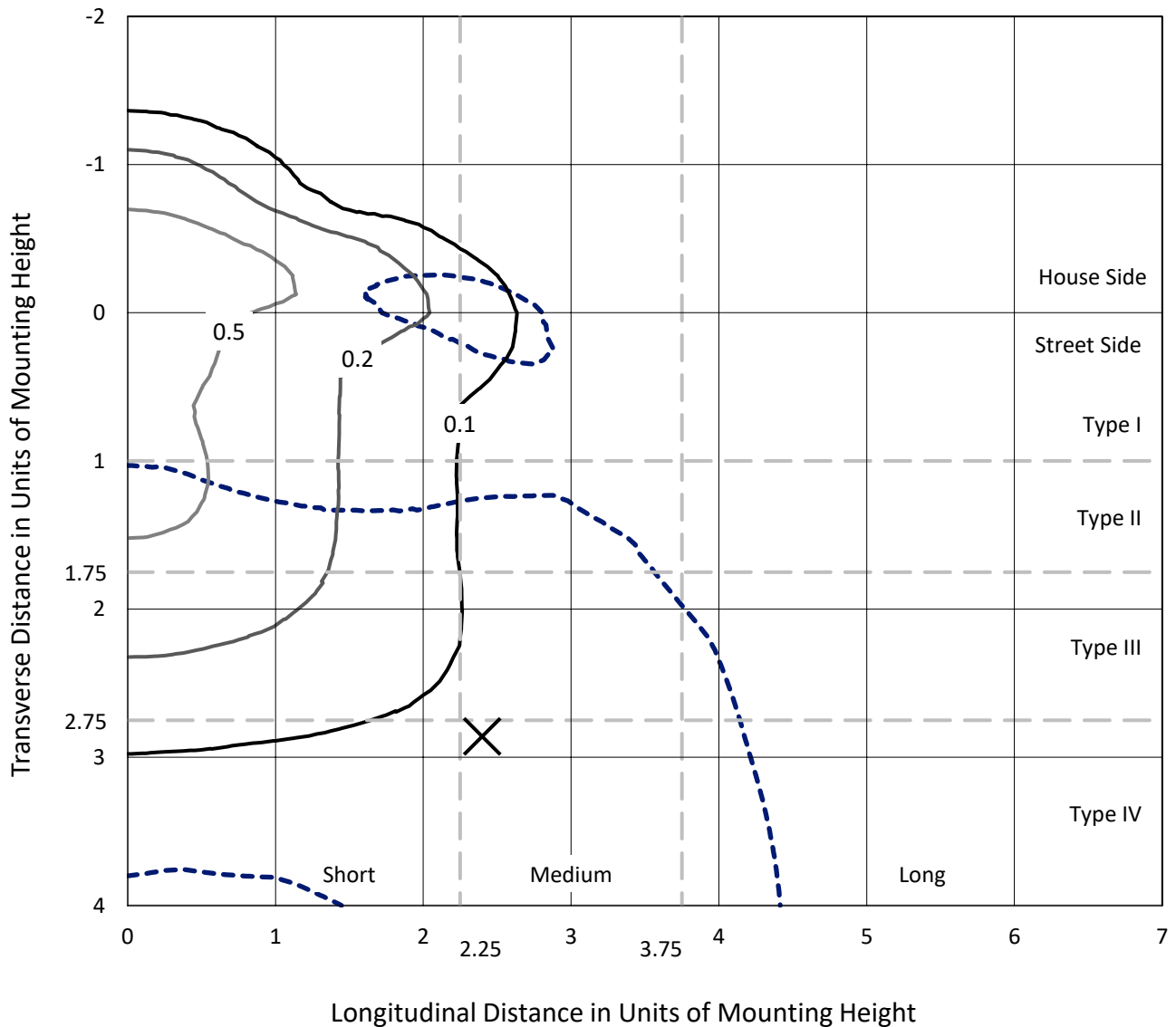
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959229
 CATALOG NUMBER: NAV-SB1A-727-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

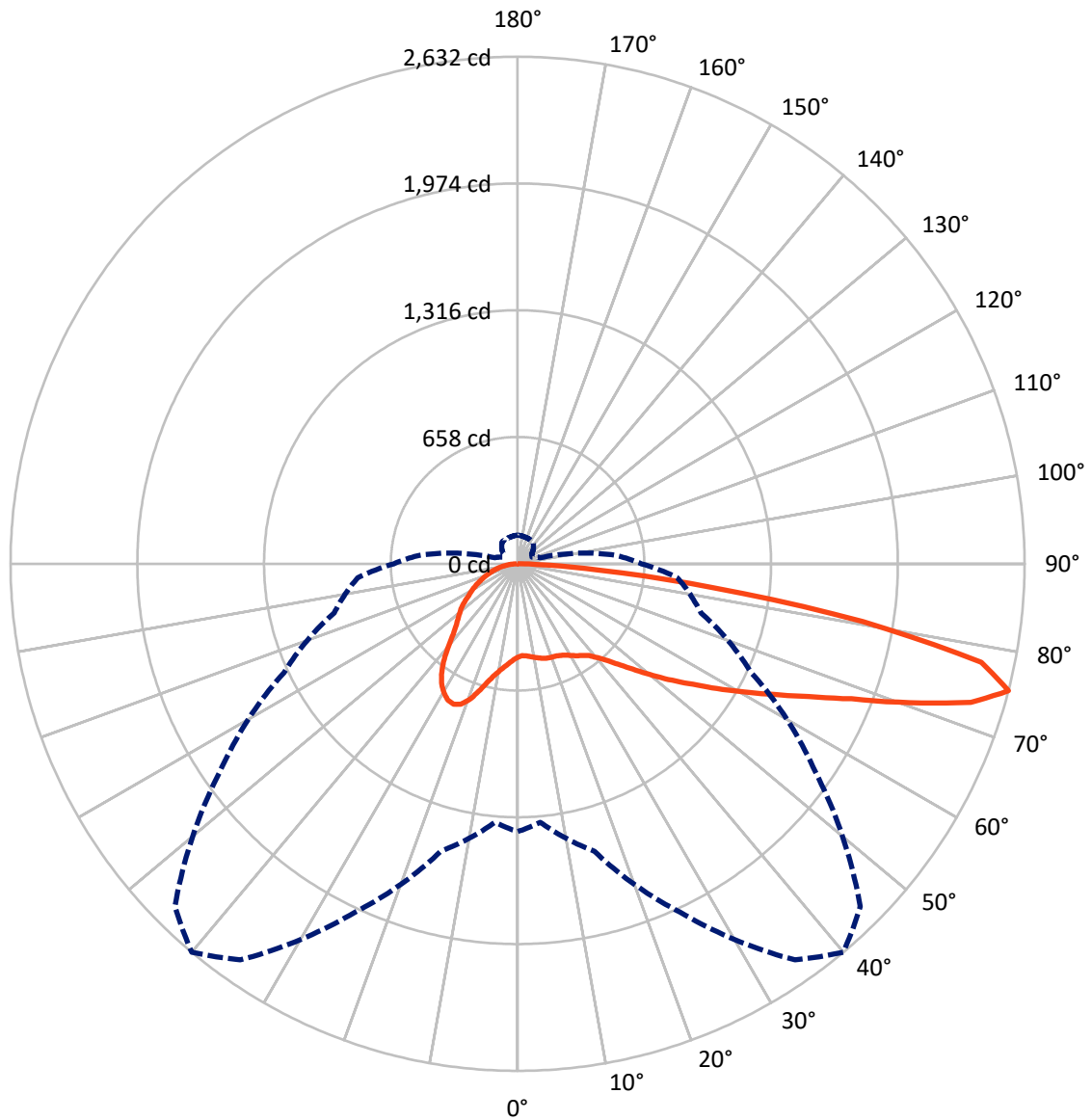
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Medium - N/A

REPORT NUMBER: P959229
CATALOG NUMBER: NAV-SB1A-727-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P959229
 CATALOG NUMBER: NAV-SB1A-727-U-SL4

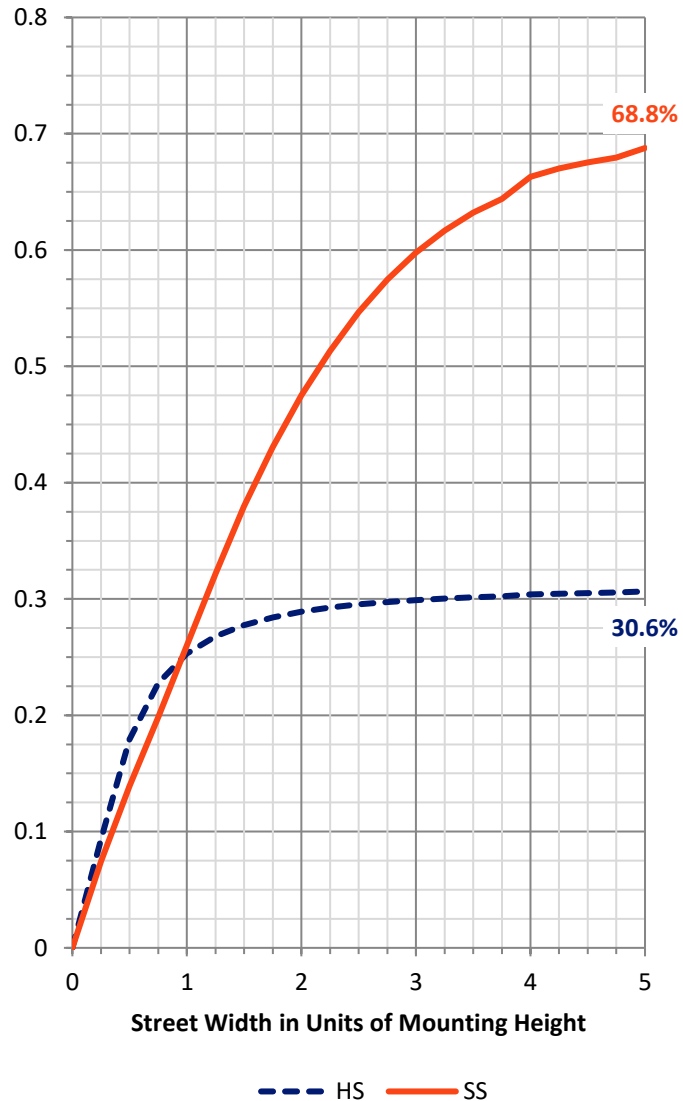
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1310.3	0.0	1310.3
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	2918.8	0.0	2918.8
	% Fixture	69.0	0.0	69.0
Total	Lumens	4229.2	0.0	4229.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	1.1
10°-20°	162.1	3.8
20°-30°	295.9	7.0
30°-40°	419.7	9.9
40°-50°	566.8	13.4
50°-60°	762.4	18.0
60°-70°	967.7	22.9
70°-80°	878.3	20.8
80°-90°	128.0	3.0
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°	4229.2	100.0
0°-180°	4229.2	100.0

Coefficient of Utilization

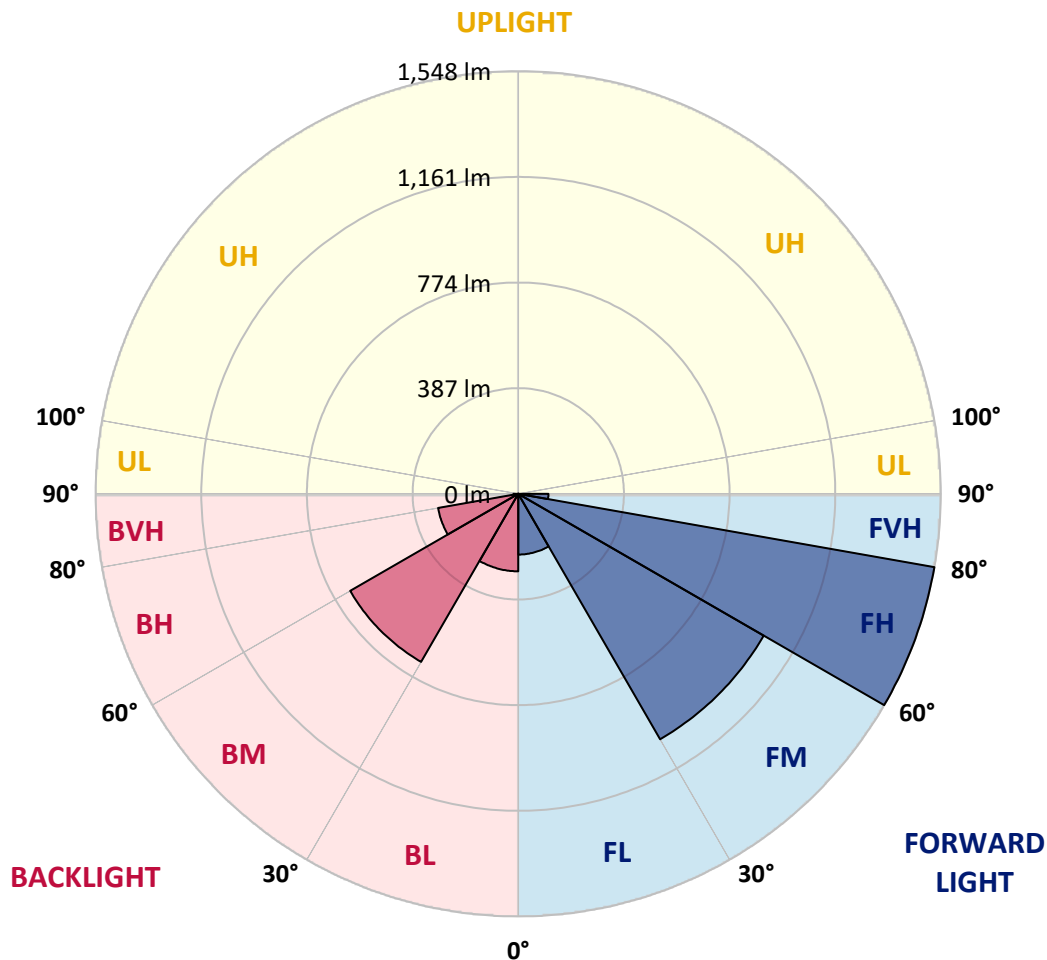


REPORT NUMBER: P959229
 CATALOG NUMBER: NAV-SB1A-727-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	222.5	5.3			
FM (30°-60°)	1038.2	24.5			
FH (60°-80°)	1547.8	36.6			G1/1800
FVH (80°-90°)	110.4	2.6			G2/225
BL (0°-30°)	283.8	6.7	B1/500		
BM (30°-60°)	710.7	16.8	B1/1000		
BH (60°-80°)	298.1	7.0	B1/500		G1/500
BVH (80°-90°)	17.6	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type IV Medium



REPORT NUMBER: P959229
 CATALOG NUMBER: NAV-SB1A-727-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6
2.5°	476.2	478.9	478.3	477.3	477.3	477.5	477.3	478.9	480.4	482.1	484.5
5°	481.1	483.8	482.5	481.3	480.4	480.2	479.6	479.4	480.2	482.3	485.6
7.5°	490.8	493.4	491.5	489.4	487.7	486.8	485.8	484.5	483.8	484.9	489.6
10°	501.5	504.2	501.7	498.2	495.3	494.2	493.2	491.9	491.0	491.7	496.8
12.5°	512.3	515.1	511.7	506.8	502.9	502.2	501.1	500.6	500.4	500.2	505.3
15°	522.4	524.7	520.4	514.6	510.6	509.4	508.3	508.9	510.0	511.4	517.2
17.5°	530.2	532.5	526.2	518.6	514.8	514.3	513.6	515.9	519.1	522.4	529.6
20°	537.4	539.7	531.6	521.3	516.8	516.8	517.0	521.7	526.2	531.2	541.0
22.5°	547.6	549.3	539.5	525.3	518.9	519.3	521.1	525.8	531.4	538.1	551.8
25°	562.5	564.0	551.8	533.0	525.5	526.8	528.5	530.7	536.1	544.0	562.3
27.5°	586.8	587.9	571.9	546.4	535.2	537.4	539.7	538.1	540.6	547.3	570.8
30°	620.8	621.6	601.4	567.5	551.6	552.7	553.2	546.6	541.9	547.3	576.9
32.5°	661.2	661.0	637.0	593.1	570.2	569.1	565.3	552.5	541.5	546.2	582.3
35°	723.9	721.4	690.4	628.9	591.3	584.4	575.3	558.9	543.8	545.1	587.0
37.5°	827.5	819.9	777.1	687.8	622.7	605.0	591.7	569.5	548.7	544.6	592.7
40°	944.3	934.7	887.5	768.2	669.7	641.3	620.0	584.6	556.8	546.6	601.0
42.5°	1082.9	1069.3	1018.5	863.2	729.5	688.2	656.1	603.6	568.7	553.2	612.1
45°	1253.2	1235.0	1163.3	970.2	804.6	749.7	706.8	632.5	586.8	565.7	628.9
47.5°	1425.3	1429.8	1327.7	1092.6	894.7	825.4	770.3	676.1	613.3	585.9	656.1
50°	1608.0	1611.2	1491.2	1228.4	997.0	911.1	841.6	724.8	650.1	614.6	696.7
52.5°	1750.7	1751.2	1639.7	1370.3	1103.6	1005.3	918.5	780.3	692.7	652.7	750.7
55°	1840.0	1838.8	1743.7	1504.7	1226.1	1104.2	1003.8	843.6	744.7	697.6	818.8
57.5°	1904.9	1901.5	1815.6	1620.2	1356.6	1221.2	1100.2	915.4	806.2	751.0	908.3
60°	1929.5	1927.5	1864.3	1720.0	1493.9	1350.3	1211.4	995.7	876.0	814.1	1023.3
62.5°	1938.9	1942.8	1912.0	1816.7	1640.8	1493.4	1333.7	1091.7	954.5	885.4	1144.6
65°	1972.1	1979.1	1972.8	1943.2	1806.8	1661.0	1495.9	1205.9	1040.1	961.9	1271.4
67.5°	2037.8	2044.8	2047.4	2094.6	2009.6	1869.8	1698.2	1348.1	1140.4	1041.2	1366.7
70°	2036.3	2034.2	2081.8	2215.0	2263.5	2159.0	1971.0	1523.0	1259.9	1107.2	1378.8
72.5°	1853.5	1837.3	1949.7	2213.7	2474.8	2460.9	2304.1	1748.8	1363.1	1115.3	1196.5
75°	1390.5	1347.5	1545.9	1995.0	2510.0	2632.3	2515.9	1888.7	1338.6	985.4	832.6
77.5°	594.6	551.3	785.4	1476.8	2246.5	2460.6	2321.6	1647.8	1068.6	651.6	408.9
80°	155.7	155.5	237.3	669.5	1527.8	1817.1	1594.2	1064.2	610.6	232.9	112.9
82.5°	64.4	62.8	87.2	260.5	746.5	1019.7	832.2	474.7	220.5	63.0	37.4
85°	24.0	23.8	42.4	90.0	263.3	420.6	304.4	121.4	54.9	30.7	16.8
87.5°	6.8	6.5	9.2	31.2	64.2	97.4	52.1	20.0	15.5	12.1	4.9
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: P959229
 CATALOG NUMBER: NAV-SB1A-727-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6	483.6
2.5°	485.1	486.3	488.3	489.8	491.9	494.2	497.3	499.3	501.3	502.7	501.7
5°	487.2	489.6	494.9	500.0	506.0	511.7	518.1	522.9	526.6	527.8	528.3
7.5°	491.7	495.7	504.5	513.2	522.9	532.1	541.5	549.6	556.1	558.5	558.7
10°	499.6	504.9	517.2	529.6	542.3	556.5	568.7	580.3	589.5	593.3	593.5
12.5°	509.4	516.1	532.3	549.3	567.0	586.6	602.3	616.6	628.0	633.2	633.2
15°	522.2	530.9	551.6	574.4	600.4	627.6	647.6	663.5	676.3	682.5	682.1
17.5°	536.1	547.8	573.8	608.3	645.5	681.2	704.6	716.2	729.5	735.5	735.2
20°	549.6	564.0	601.2	651.4	701.0	738.9	757.7	760.9	761.8	762.4	764.2
22.5°	563.4	582.7	635.5	705.7	758.8	785.0	787.8	774.3	755.4	746.7	749.2
25°	578.7	604.2	680.3	765.6	808.6	811.8	791.1	758.4	722.7	706.3	708.8
27.5°	593.5	629.1	734.2	822.8	844.5	816.9	772.5	726.1	683.1	665.7	667.8
30°	608.3	657.6	793.6	872.8	860.9	804.1	743.1	691.4	648.0	629.9	631.9
32.5°	623.3	690.8	862.0	908.9	858.0	777.1	706.5	652.3	614.2	595.1	597.6
35°	640.4	731.6	926.8	928.6	838.4	737.1	658.4	605.7	572.5	557.2	560.6
37.5°	662.6	783.5	984.0	933.6	804.4	678.6	598.5	550.4	523.1	516.1	521.1
40°	690.2	845.8	1027.8	925.7	753.9	607.4	533.0	494.6	479.1	480.7	486.1
42.5°	726.1	915.6	1058.5	905.5	683.7	534.1	475.5	458.5	465.9	472.2	478.0
45°	772.7	988.1	1077.6	871.2	604.2	471.9	441.7	445.7	451.3	452.0	456.4
47.5°	832.4	1061.4	1090.2	819.4	523.3	428.2	420.1	421.1	419.9	415.2	418.8
50°	906.9	1132.7	1101.4	750.7	454.5	400.9	390.1	386.9	371.5	356.2	358.2
52.5°	991.7	1198.2	1106.1	665.5	400.9	377.9	360.5	340.7	311.8	307.1	308.6
55°	1085.9	1258.8	1094.0	560.8	355.8	348.6	322.2	298.4	295.2	291.2	291.8
57.5°	1198.4	1324.1	1069.3	443.9	309.5	314.3	288.4	291.2	285.6	279.3	278.2
60°	1321.6	1391.6	1026.0	337.3	261.8	271.4	279.7	279.5	277.9	272.8	271.0
62.5°	1432.4	1436.0	940.7	258.4	219.9	238.2	260.9	260.7	259.3	256.4	255.2
65°	1498.3	1429.3	798.6	203.5	185.3	210.8	235.3	237.1	237.3	237.1	237.1
67.5°	1486.8	1350.5	603.4	162.0	156.8	183.1	209.9	212.4	214.2	214.6	215.1
70°	1354.8	1177.6	393.4	129.3	131.4	158.6	185.9	188.4	190.0	191.8	192.7
72.5°	1056.1	865.8	225.2	104.6	109.3	137.5	162.2	165.1	165.9	169.3	170.7
75°	643.5	509.2	121.6	82.3	89.7	117.6	138.6	142.0	143.6	147.6	148.0
77.5°	306.0	220.5	69.3	64.2	72.3	96.0	117.1	121.0	116.6	118.9	117.1
80°	103.4	81.9	43.8	48.9	55.1	74.9	93.8	97.6	88.6	88.1	87.2
82.5°	36.1	33.2	27.8	32.5	35.7	53.6	70.9	75.8	65.9	65.7	62.6
85°	14.1	13.4	15.5	17.7	21.3	33.0	46.6	49.1	40.6	32.8	32.3
87.5°	2.9	3.2	3.8	4.0	6.5	11.5	16.8	20.6	16.4	13.9	12.8
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)