

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: P961307

Luminaire Tested: **NAV-SB2A-722-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961307
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-722-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5797.4 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

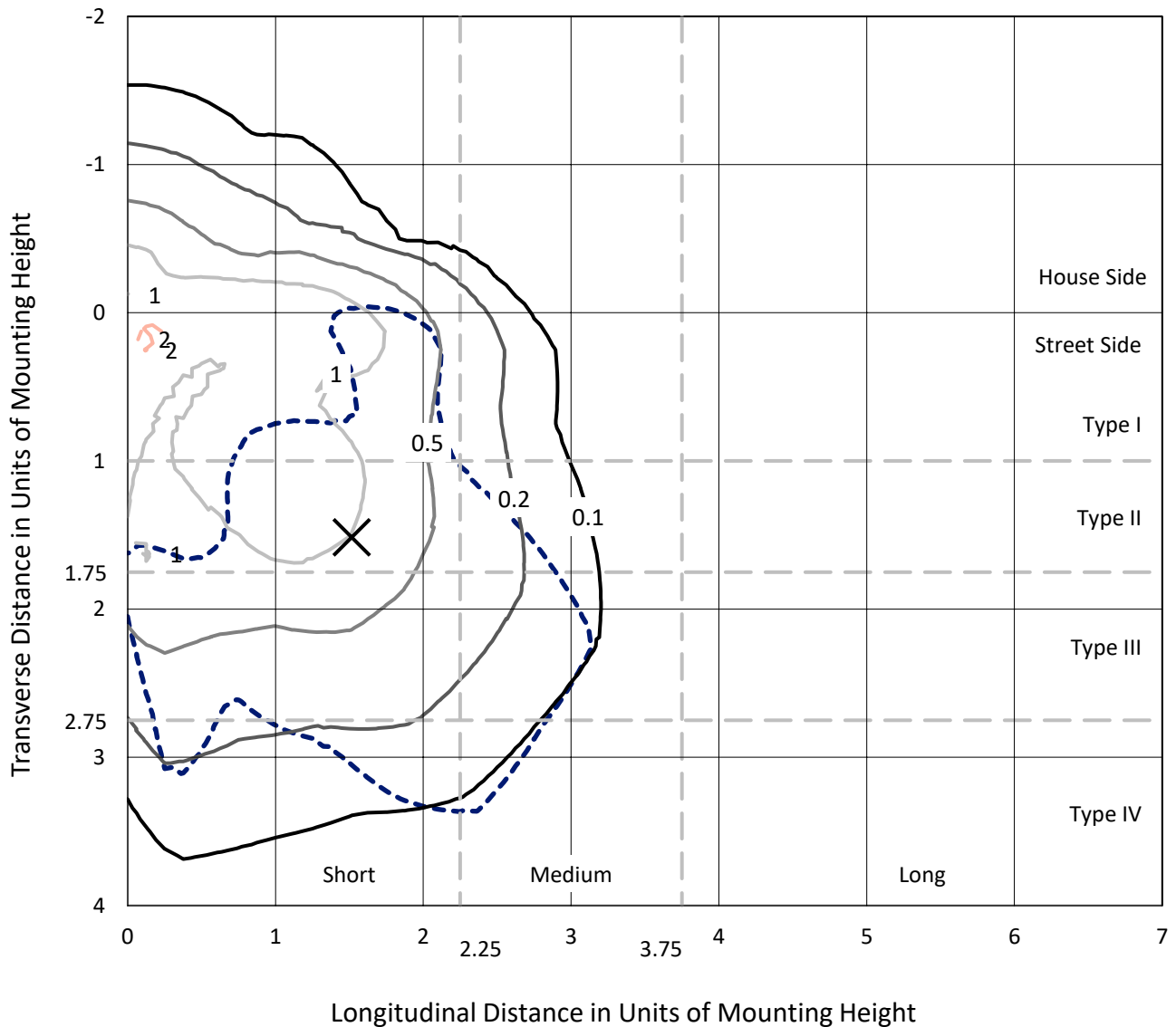
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P961307
 CATALOG NUMBER: NAV-SB2A-722-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

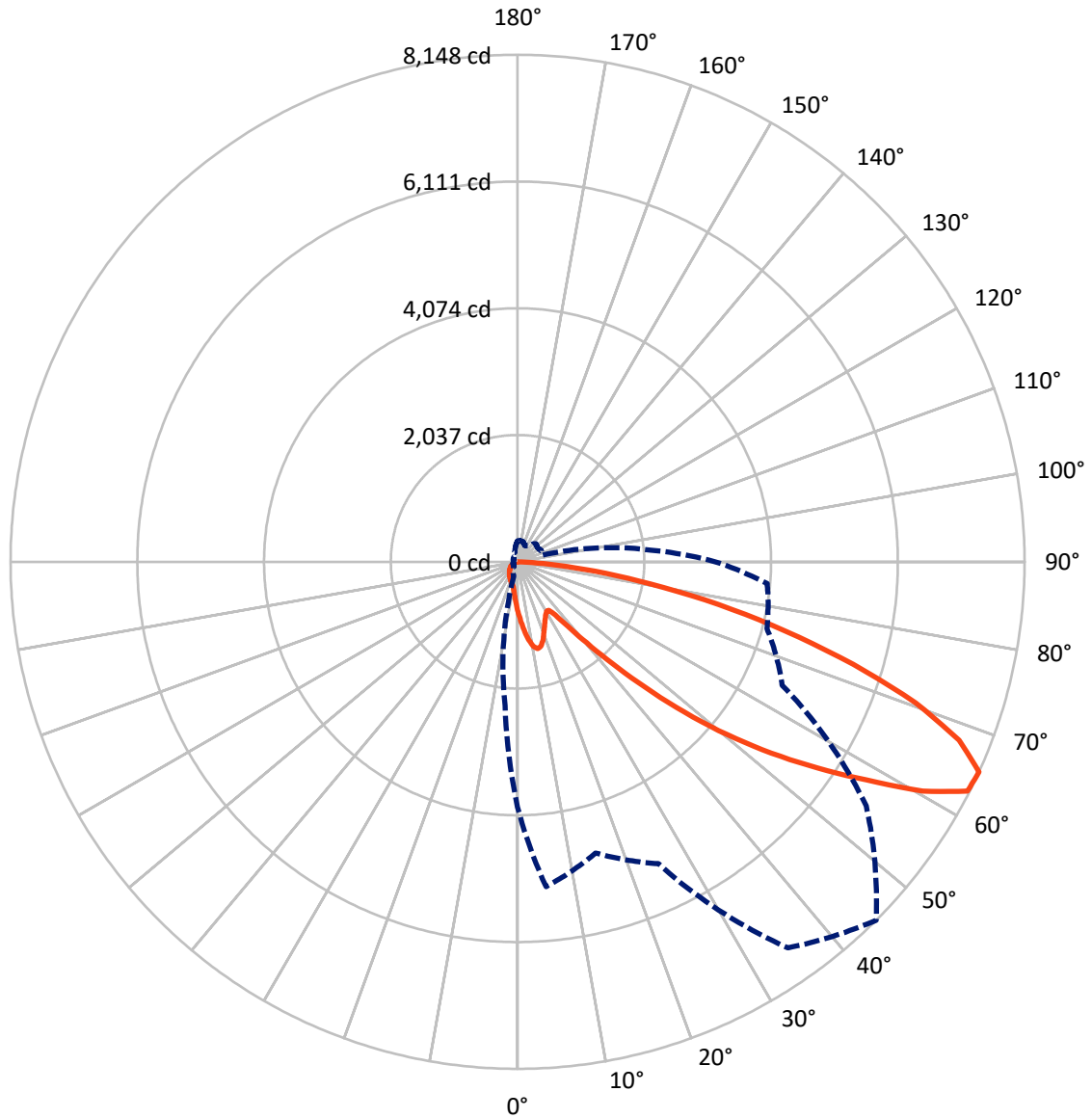
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Short - N/A

REPORT NUMBER: P961307
CATALOG NUMBER: NAV-SB2A-722-U-SLL-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P961307
 CATALOG NUMBER: NAV-SB2A-722-U-SLL-HSS

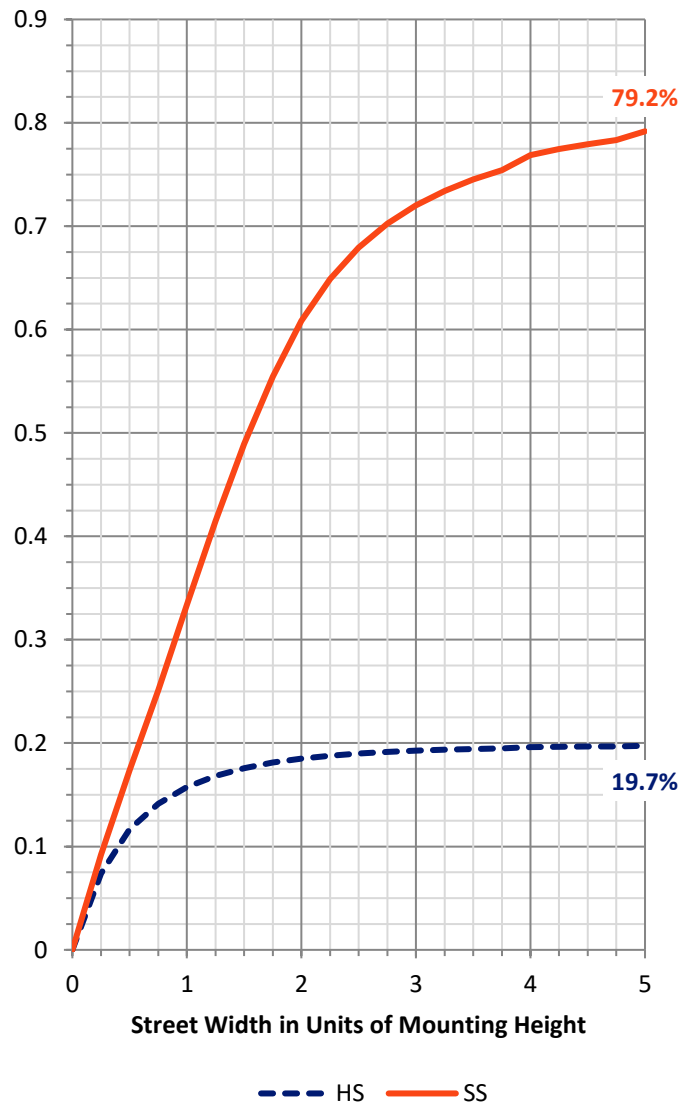
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1152.3	0.0	1152.3
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	4645.1	0.0	4645.1
	% Fixture	80.1	0.0	80.1
Total	Lumens	5797.4	0.0	5797.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.0	1.4
10°-20°	236.9	4.1
20°-30°	349.0	6.0
30°-40°	448.4	7.7
40°-50°	725.2	12.5
50°-60°	1271.7	21.9
60°-70°	1591.3	27.4
70°-80°	929.9	16.0
80°-90°	165.9	2.9
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°	5797.4	100.0
0°-180°	5797.4	100.0

Coefficient of Utilization



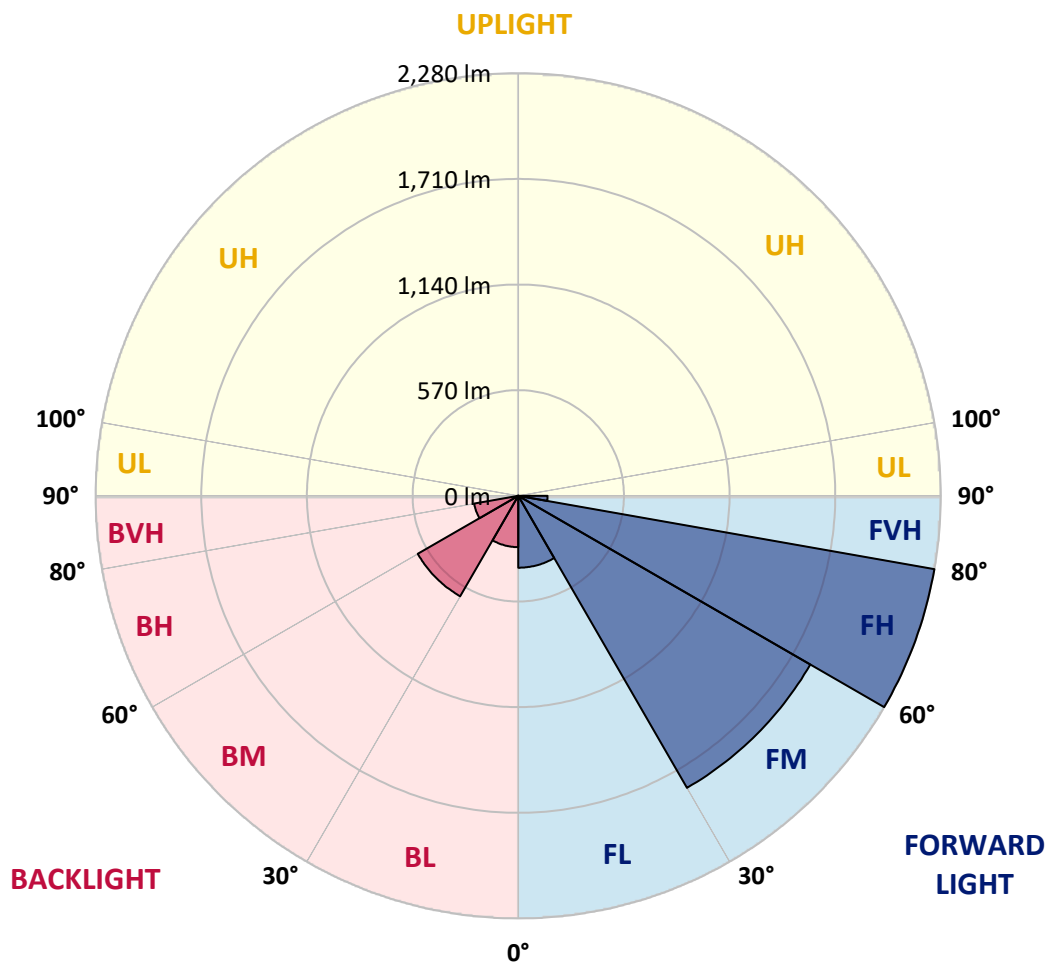
REPORT NUMBER: P961307
 CATALOG NUMBER: NAV-SB2A-722-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	387.9	6.7			
FM (30°-60°)	1819.3	31.4			
FH (60°-80°)	2279.7	39.3			G2/5000
FVH (80°-90°)	158.1	2.7			G2/225
BL (0°-30°)	277.1	4.8	B1/500		
BM (30°-60°)	626.1	10.8	B1/1000		
BH (60°-80°)	241.4	4.2	B1/500		G1/500
BVH (80°-90°)	7.8	0.1			G0/10
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 Short



REPORT NUMBER: P961307
 CATALOG NUMBER: NAV-SB2A-722-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8
2.5°	899.4	906.2	921.4	929.4	941.8	942.5	942.5	931.7	931.3	909.4	907.0
5°	1005.2	1021.2	1057.2	1094.3	1102.3	1104.3	1100.3	1078.7	1062.7	1020.0	1010.9
7.5°	1110.3	1141.0	1195.8	1245.3	1261.3	1261.3	1251.6	1216.5	1183.8	1121.9	1098.7
10°	1197.3	1236.0	1310.4	1365.9	1384.3	1380.3	1360.7	1316.4	1271.2	1196.2	1165.8
12.5°	1254.8	1298.4	1379.9	1424.5	1443.4	1432.9	1410.6	1367.5	1320.0	1240.9	1206.5
15°	1283.6	1329.1	1399.8	1423.4	1418.2	1407.4	1404.7	1383.9	1347.9	1274.0	1236.5
17.5°	1296.0	1338.3	1387.4	1372.7	1328.7	1320.3	1348.3	1374.6	1365.9	1302.8	1267.6
20°	1307.6	1343.2	1357.9	1292.4	1215.8	1208.2	1261.7	1336.7	1375.0	1329.5	1297.1
22.5°	1323.6	1345.5	1315.2	1207.8	1125.0	1107.5	1166.6	1279.6	1377.9	1363.5	1331.2
25°	1345.5	1351.5	1268.0	1127.5	1044.4	1026.8	1081.9	1216.2	1373.1	1400.3	1372.7
27.5°	1371.9	1359.5	1222.9	1060.4	980.1	963.7	1018.8	1155.0	1359.5	1436.9	1417.4
30°	1406.2	1369.9	1178.1	1008.4	934.2	922.2	975.3	1102.3	1342.7	1483.7	1472.9
32.5°	1440.9	1374.2	1136.6	978.1	923.7	928.1	971.7	1073.9	1324.3	1528.4	1533.6
35°	1478.5	1388.3	1116.2	1008.0	1010.4	1048.8	1066.7	1100.3	1321.5	1589.2	1609.5
37.5°	1529.6	1419.4	1140.6	1157.0	1240.0	1319.6	1304.8	1229.3	1353.9	1679.8	1717.7
40°	1603.1	1474.2	1246.9	1410.6	1581.2	1710.1	1653.8	1463.7	1452.9	1810.4	1867.1
42.5°	1710.1	1561.2	1435.4	1720.6	2009.7	2222.2	2071.2	1766.1	1626.3	1996.9	2069.2
45°	1868.3	1702.1	1663.4	2047.6	2538.1	2872.8	2558.8	2088.3	1869.1	2279.3	2336.0
47.5°	2087.5	1909.5	1877.1	2392.2	3180.3	3613.2	3099.6	2387.1	2145.4	2664.3	2677.4
50°	2378.7	2188.6	2079.6	2769.3	3884.3	4368.0	3640.0	2675.5	2462.2	3134.8	3119.6
52.5°	2762.9	2578.0	2315.6	3128.3	4608.4	5106.9	4182.7	2928.6	2855.1	3680.7	3649.5
55°	3286.9	3163.9	2638.4	3471.1	5332.2	5850.1	4704.3	3167.5	3374.4	4329.3	4140.8
57.5°	3937.1	4025.0	3103.6	3868.3	5982.7	6616.2	5228.3	3501.4	4048.5	5054.6	4426.0
60°	4356.5	5170.0	3994.6	4455.9	6722.0	7482.4	5946.3	4136.4	4757.0	5314.5	4371.6
62.5°	4255.0	5534.2	5061.8	5205.9	7401.7	8112.3	6650.1	4774.1	4890.4	4931.6	3953.0
65°	3943.9	5240.3	4844.0	5351.7	7573.8	8147.7	6838.2	4691.9	4148.4	4026.2	3177.5
67.5°	3515.7	4891.6	4326.9	4965.1	7262.7	7650.9	6487.9	4150.3	3205.8	3021.3	2305.2
70°	3053.7	4505.8	3987.5	4531.3	6669.7	6785.1	5892.4	3650.3	2357.9	2040.5	1479.3
72.5°	2615.2	4104.0	3755.0	4086.9	5878.5	5639.7	5117.2	3208.2	1717.0	1471.7	1051.5
75°	2166.6	3511.3	3423.9	3558.9	4838.1	4442.3	4251.8	2656.3	1347.5	1064.8	725.7
77.5°	1671.8	2743.7	2945.0	2850.0	3405.6	3299.7	3295.7	1996.1	984.5	710.5	454.9
80°	1144.2	1912.2	2300.8	2010.4	2210.2	2156.3	2482.1	1339.2	714.1	427.7	253.2
82.5°	672.6	1164.2	1601.6	973.3	1222.1	1254.5	1478.2	651.4	420.1	98.6	55.1
85°	272.8	459.7	626.3	381.0	589.5	497.2	561.1	183.0	117.1	2.4	0.0
87.5°	68.7	147.0	103.0	42.7	68.3	62.7	49.5	22.3	4.8	0.0	0.0
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: P961307
 CATALOG NUMBER: NAV-SB2A-722-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8
2.5°	891.4	882.2	859.5	836.7	818.4	793.6	777.2	757.6	738.8	722.1	718.9
5°	985.6	955.3	913.8	875.9	837.1	799.6	762.4	723.2	687.4	665.3	651.4
7.5°	1062.3	1008.8	953.8	905.4	858.6	814.8	765.6	718.1	661.7	631.8	604.6
10°	1119.5	1049.2	976.9	921.4	874.2	831.5	790.0	742.0	674.1	636.6	595.8
12.5°	1157.0	1073.6	988.8	925.4	872.7	839.5	821.1	802.4	734.8	691.0	631.8
15°	1183.0	1090.7	997.2	916.1	851.5	827.1	845.5	867.0	823.9	773.2	696.1
17.5°	1211.3	1113.0	1000.8	891.4	810.4	799.9	847.5	897.4	895.4	845.1	769.6
20°	1241.3	1132.6	998.5	851.5	760.4	769.6	830.4	888.3	912.6	885.4	818.4
22.5°	1272.0	1151.4	989.2	799.6	713.7	742.4	803.2	853.8	882.6	874.2	823.1
25°	1310.8	1177.7	975.7	743.6	675.0	714.9	771.6	812.7	832.7	832.3	797.1
27.5°	1357.1	1212.9	968.5	698.5	647.4	683.8	734.1	770.8	784.7	784.7	756.9
30°	1411.0	1254.5	960.5	668.9	631.4	651.4	690.5	726.5	740.5	740.5	716.9
32.5°	1470.9	1294.4	941.4	651.0	619.4	619.8	644.6	677.3	694.1	696.5	679.8
35°	1542.8	1337.1	899.4	636.6	605.5	589.1	601.1	628.2	648.2	653.3	643.0
37.5°	1637.0	1389.5	839.5	615.4	583.9	556.8	559.5	580.3	602.3	610.3	603.4
40°	1763.6	1451.0	777.2	585.1	553.5	521.2	520.0	535.2	556.8	565.5	561.9
42.5°	1931.0	1524.8	717.7	556.0	516.8	483.7	481.6	493.6	512.4	521.6	520.0
45°	2145.1	1615.5	666.6	533.2	480.8	448.1	447.3	457.3	473.7	483.3	481.2
47.5°	2442.6	1706.1	631.8	521.2	452.5	418.9	420.6	429.4	444.1	450.9	448.1
50°	2830.4	1733.7	614.3	521.2	437.4	393.0	401.0	408.2	419.3	423.3	419.7
52.5°	3202.6	1642.7	598.3	524.4	439.3	371.0	388.2	393.4	402.9	404.6	399.3
55°	3385.2	1412.2	576.3	525.2	451.7	352.3	377.8	387.4	391.0	390.6	381.8
57.5°	3322.4	1141.8	539.2	522.0	460.1	340.3	365.0	383.5	385.8	382.2	365.8
60°	3102.4	840.7	510.8	498.5	456.8	336.7	345.4	374.6	378.2	373.4	346.7
62.5°	2733.4	583.5	488.8	446.5	442.9	335.5	314.7	355.5	364.3	357.4	318.3
65°	2151.9	412.2	421.0	391.3	412.6	329.1	282.8	332.3	344.3	333.8	278.8
67.5°	1456.1	297.6	341.1	354.6	363.5	314.7	259.6	306.0	321.8	308.3	232.9
70°	786.4	208.9	225.3	298.8	308.7	290.0	238.8	279.2	297.6	282.8	189.7
72.5°	464.5	150.2	157.7	240.1	257.2	255.2	215.7	248.0	270.4	252.8	154.2
75°	256.0	101.5	112.6	174.1	208.9	196.9	185.3	210.1	232.9	215.7	119.0
77.5°	114.6	60.7	78.3	114.2	164.1	135.0	143.4	163.8	184.9	167.0	79.4
80°	44.3	33.9	52.0	62.3	119.4	74.7	92.2	120.6	135.8	121.5	48.3
82.5°	5.6	15.2	22.3	24.4	69.5	39.6	53.5	75.8	74.7	64.7	24.4
85°	0.0	2.8	3.2	1.6	29.9	14.3	17.5	24.8	23.2	17.5	1.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
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: P961307
 CATALOG NUMBER: NAV-SB2A-722-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8
2.5°	699.4	684.9	677.7	671.8	677.3	680.5	680.5	694.1	702.1	705.3	727.6
5°	616.2	589.5	571.5	560.8	564.4	568.4	572.7	589.9	601.5	609.1	643.8
7.5°	550.7	510.0	484.8	471.7	473.7	476.4	480.0	496.8	508.4	518.4	557.1
10°	518.4	460.8	427.7	411.7	409.0	407.3	406.2	416.2	425.0	433.0	471.3
12.5°	520.0	439.7	399.3	379.8	371.5	361.8	354.2	355.9	361.4	371.5	395.8
15°	540.4	433.0	384.6	360.3	346.2	335.1	325.8	323.9	325.8	327.5	342.7
17.5°	568.0	432.1	371.9	341.4	327.1	318.0	309.5	306.7	307.1	309.1	313.1
20°	589.9	429.8	357.4	323.5	310.7	302.7	294.4	291.5	292.3	292.7	297.1
22.5°	601.5	426.1	341.4	305.6	294.8	286.8	279.2	278.8	278.8	281.2	284.3
25°	601.5	418.5	327.1	288.3	278.8	271.6	262.4	264.0	264.8	267.9	272.8
27.5°	587.1	404.2	315.5	273.6	263.6	256.4	248.0	250.0	251.2	254.8	260.8
30°	568.7	387.0	302.4	259.6	248.0	242.8	235.6	236.5	238.0	242.0	248.8
32.5°	549.2	366.6	291.5	245.6	234.0	230.0	222.0	223.2	224.9	229.3	236.9
35°	527.6	342.7	278.8	232.9	221.3	218.0	208.9	209.7	212.1	216.9	224.5
37.5°	504.8	323.1	266.0	220.5	208.5	205.3	195.7	196.5	199.3	204.9	212.1
40°	482.5	303.9	252.5	207.3	195.3	192.5	182.1	183.0	186.1	192.1	199.7
42.5°	458.1	289.2	234.8	193.7	180.9	178.1	168.5	169.7	173.3	179.3	187.0
45°	429.0	279.5	215.2	180.9	166.6	163.8	155.0	157.3	161.3	167.4	175.4
47.5°	398.9	275.6	198.8	167.4	151.8	149.3	142.2	146.2	150.6	155.4	164.1
50°	370.2	270.4	182.1	154.6	139.0	136.6	131.8	136.9	141.3	145.8	154.2
52.5°	337.4	259.2	167.0	143.4	128.2	127.4	125.0	129.8	133.8	137.8	144.9
55°	303.5	241.2	153.8	133.4	119.0	119.8	118.6	122.6	125.8	129.4	135.8
57.5°	274.0	218.4	143.4	122.6	111.0	113.5	111.8	113.8	115.8	120.2	125.4
60°	244.1	191.3	131.8	109.9	103.0	105.9	101.5	101.1	101.9	103.0	112.6
62.5°	203.7	163.0	117.5	98.6	94.3	95.4	87.0	80.7	80.7	81.9	96.2
65°	163.8	136.6	101.5	85.9	82.3	81.5	69.5	60.7	59.9	63.6	75.8
67.5°	134.6	113.5	85.5	71.4	69.1	69.9	61.1	52.3	51.6	55.6	64.7
70°	111.4	91.4	68.3	55.1	57.5	61.1	52.3	44.0	42.7	46.3	55.1
72.5°	88.7	71.4	52.3	40.7	47.6	52.0	42.7	34.7	33.9	37.1	45.5
75°	65.1	51.1	35.6	29.5	36.7	40.7	31.2	24.8	23.6	26.3	34.7
77.5°	40.4	28.8	22.3	17.5	25.1	27.2	16.4	14.3	13.9	16.0	21.9
80°	18.8	12.4	10.8	5.9	9.2	10.8	6.8	7.6	8.0	9.6	13.5
82.5°	5.2	1.9	0.4	0.0	0.0	3.2	1.6	3.2	4.0	5.9	8.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.9	3.6	6.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.2
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: P961307
 CATALOG NUMBER: NAV-SB2A-722-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	802.8	802.8	802.8	802.8	802.8	802.8	802.8	802.8
2.5°	744.5	760.4	786.0	812.3	838.3	864.7	890.2	899.4
5°	675.4	712.1	762.8	817.1	873.1	929.8	981.6	1005.2
7.5°	598.3	651.0	727.2	812.3	901.4	990.5	1072.4	1110.3
10°	516.0	582.7	669.7	784.7	912.6	1035.6	1148.2	1197.3
12.5°	437.7	507.6	603.8	741.7	903.8	1061.6	1196.9	1254.8
15°	372.2	434.1	537.9	690.5	875.5	1063.1	1220.1	1283.6
17.5°	323.1	363.5	470.9	633.9	838.3	1048.4	1228.1	1296.0
20°	298.8	310.0	383.8	561.1	803.6	1034.4	1236.0	1307.6
22.5°	284.3	287.2	314.0	467.3	762.0	1030.0	1250.1	1323.6
25°	272.8	273.6	280.7	370.2	698.5	1027.3	1271.6	1345.5
27.5°	261.2	261.2	265.2	298.4	612.2	1015.3	1299.6	1371.9
30°	249.6	249.6	252.5	264.0	511.2	991.7	1333.1	1406.2
32.5°	237.6	237.6	240.1	248.5	408.2	962.1	1363.9	1440.9
35°	225.6	224.9	228.1	236.9	324.7	924.6	1394.6	1478.5
37.5°	212.9	212.5	215.7	225.6	280.3	881.0	1417.8	1529.6
40°	199.3	199.3	202.8	213.7	267.6	826.4	1454.6	1603.1
42.5°	187.0	186.1	190.1	203.3	258.0	774.0	1520.5	1710.1
45°	175.0	173.3	176.9	193.3	241.2	755.6	1643.5	1868.3
47.5°	163.8	159.8	163.0	181.3	226.0	824.3	1844.7	2087.5
50°	154.6	147.0	149.8	169.3	214.4	973.3	2106.0	2378.7
52.5°	144.9	135.0	136.6	154.6	204.1	1115.1	2389.1	2762.9
55°	135.0	123.8	124.6	139.8	189.3	1136.2	2665.5	3286.9
57.5°	123.8	113.5	113.5	126.2	178.6	984.9	2877.9	3937.1
60°	111.4	104.7	102.6	115.4	188.1	694.9	2902.7	4356.5
62.5°	97.9	94.3	91.4	105.1	195.3	411.7	2703.4	4255.0
65°	82.3	81.5	79.4	115.4	164.5	243.2	2320.8	3943.9
67.5°	69.1	67.9	67.9	121.1	125.0	152.9	1813.2	3515.7
70°	59.6	55.1	55.1	91.4	75.8	105.9	1266.1	3053.7
72.5°	49.9	45.1	41.9	73.1	56.7	77.5	791.2	2615.2
75°	40.0	36.4	32.4	48.3	42.3	58.7	459.7	2166.6
77.5°	28.8	27.2	22.8	35.6	30.7	42.3	273.6	1671.8
80°	14.8	15.2	14.3	20.4	20.8	28.8	155.8	1144.2
82.5°	8.8	6.8	7.6	9.9	12.0	16.4	58.7	672.6
85°	5.6	3.6	3.6	4.8	5.9	6.4	17.9	272.8
87.5°	2.8	1.2	1.6	2.4	1.9	1.6	0.8	68.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)