

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: P960780

Luminaire Tested: **NAV-SB1D-722-U-SLL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960780  
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-SB1D-722-U-SLL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

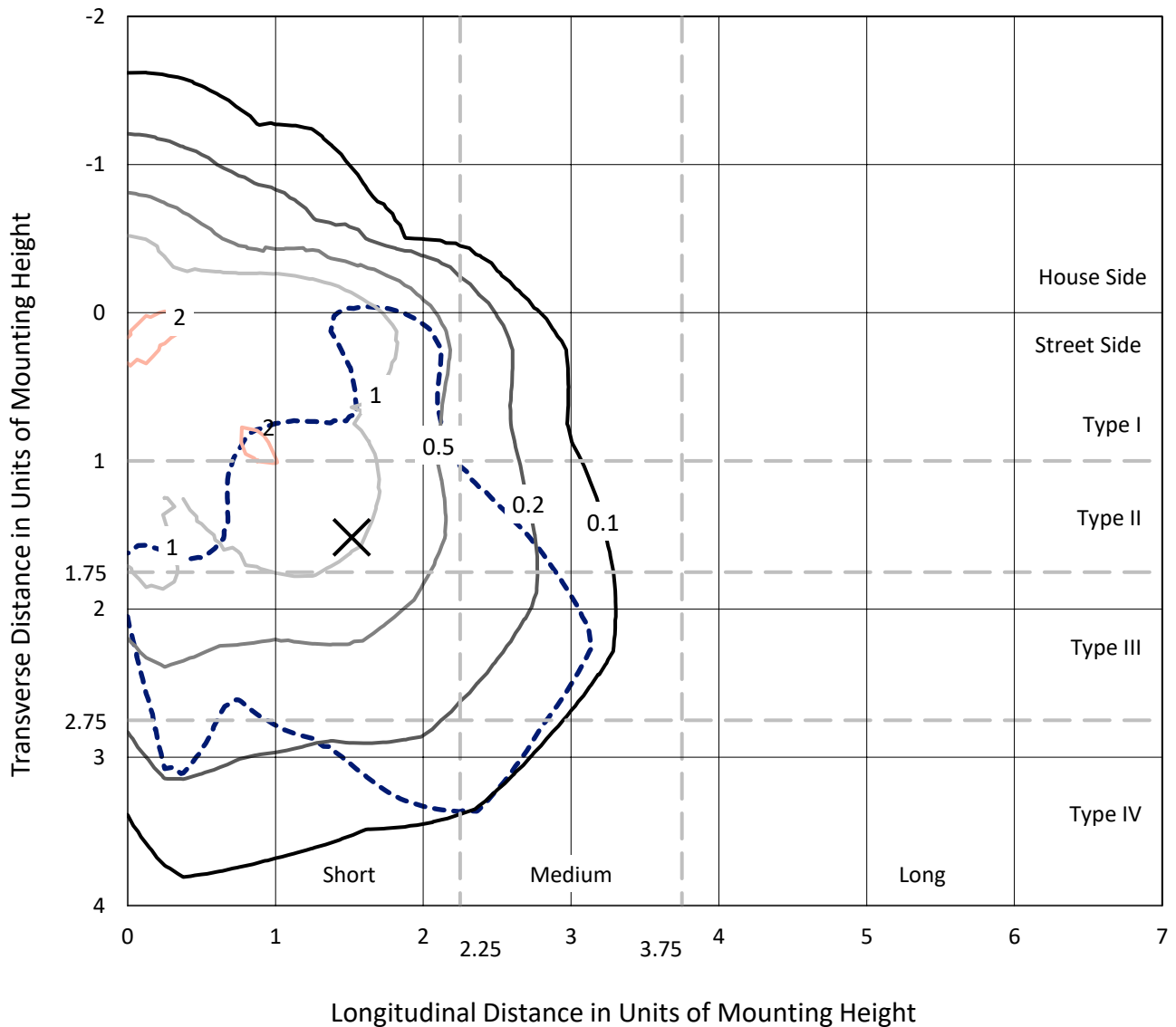
Lumens per Lamp: N/A  
Luminaire Lumens: 6578.5 lumens  
Efficiency: N/A  
Efficacy: 82.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



REPORT NUMBER: P960780  
 CATALOG NUMBER: NAV-SB1D-722-U-SLL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

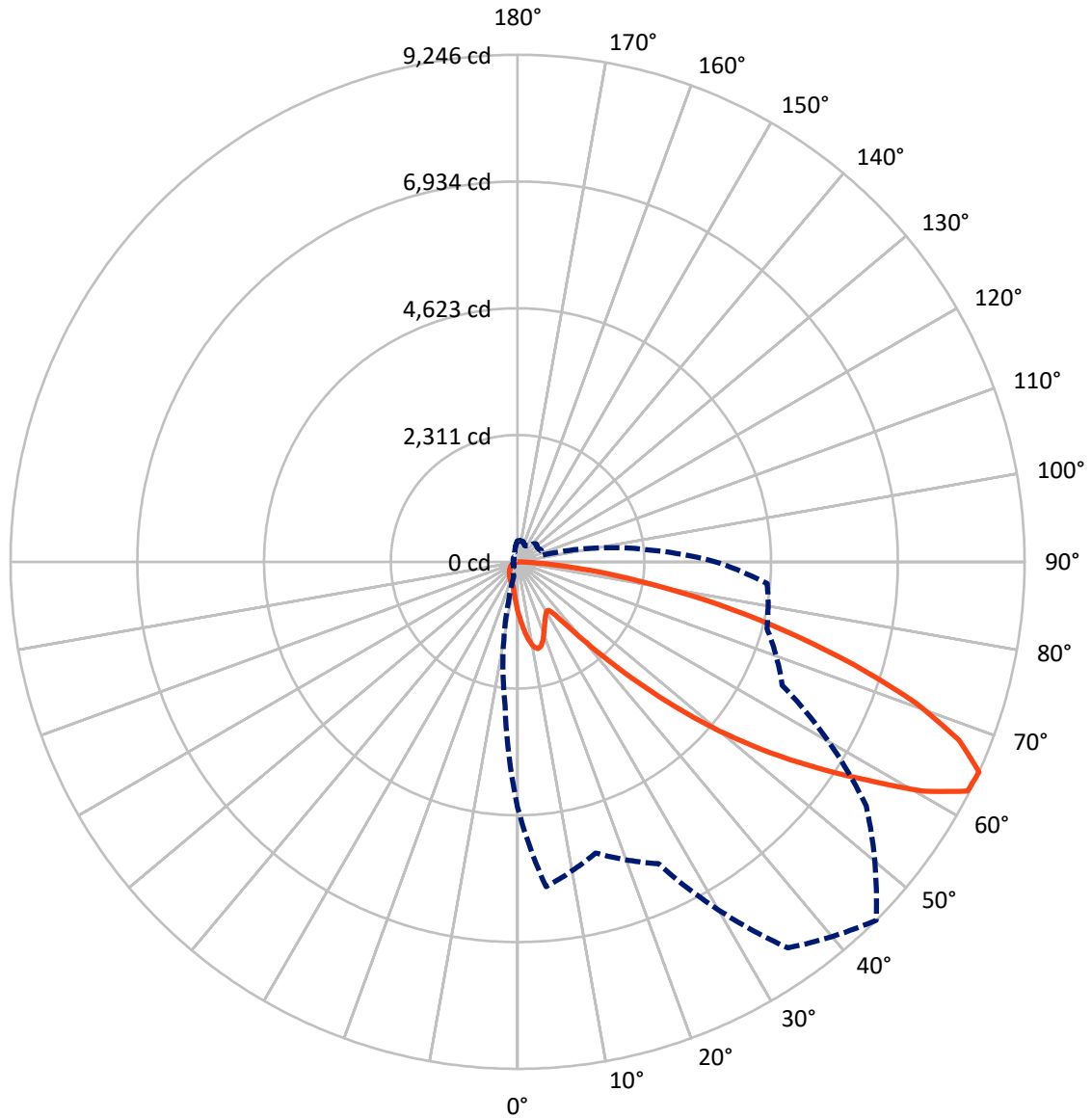
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type IV - Short - N/A

REPORT NUMBER: P960780  
CATALOG NUMBER: NAV-SB1D-722-U-SLL-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P960780  
 CATALOG NUMBER: NAV-SB1D-722-U-SLL-HSS

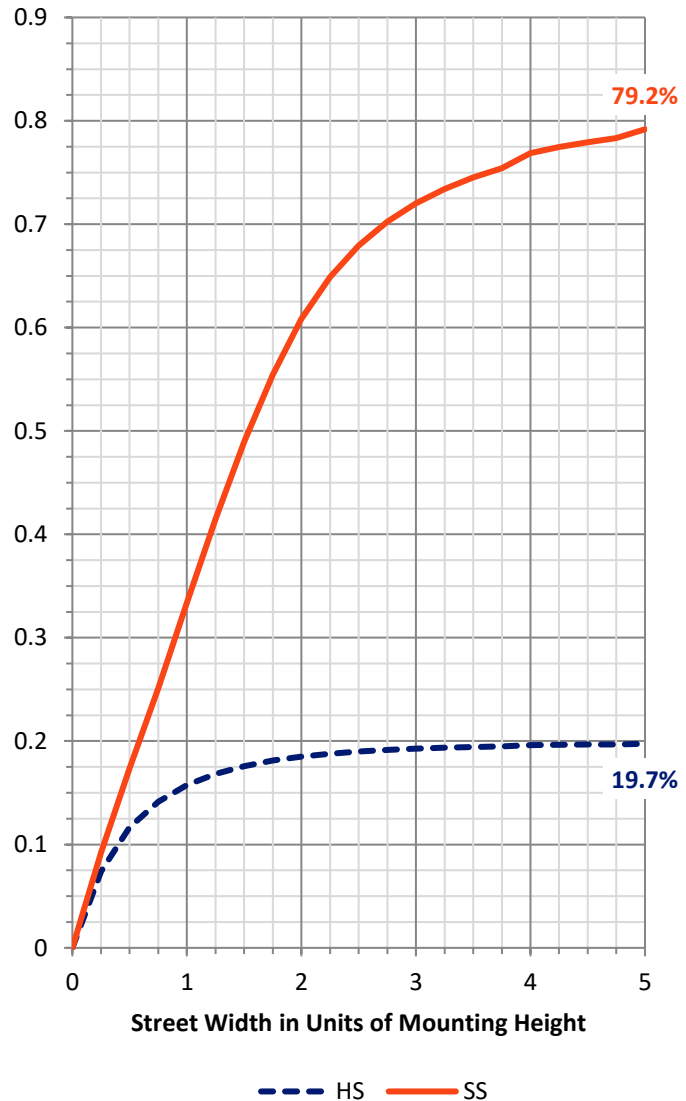
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1307.6	0.0	1307.6
	% Fixture	19.9	0.0	19.9
<b>Street Side</b>	Lumens	5270.9	0.0	5270.9
	% Fixture	80.1	0.0	80.1
<b>Total</b>	Lumens	6578.5	0.0	6578.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	1.4
10°-20°	268.8	4.1
20°-30°	396.1	6.0
30°-40°	508.8	7.7
40°-50°	822.9	12.5
50°-60°	1443.1	21.9
60°-70°	1805.7	27.4
70°-80°	1055.2	16.0
80°-90°	188.3	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°	6578.5	100.0
0°-180°	6578.5	100.0

**Coefficient of Utilization**

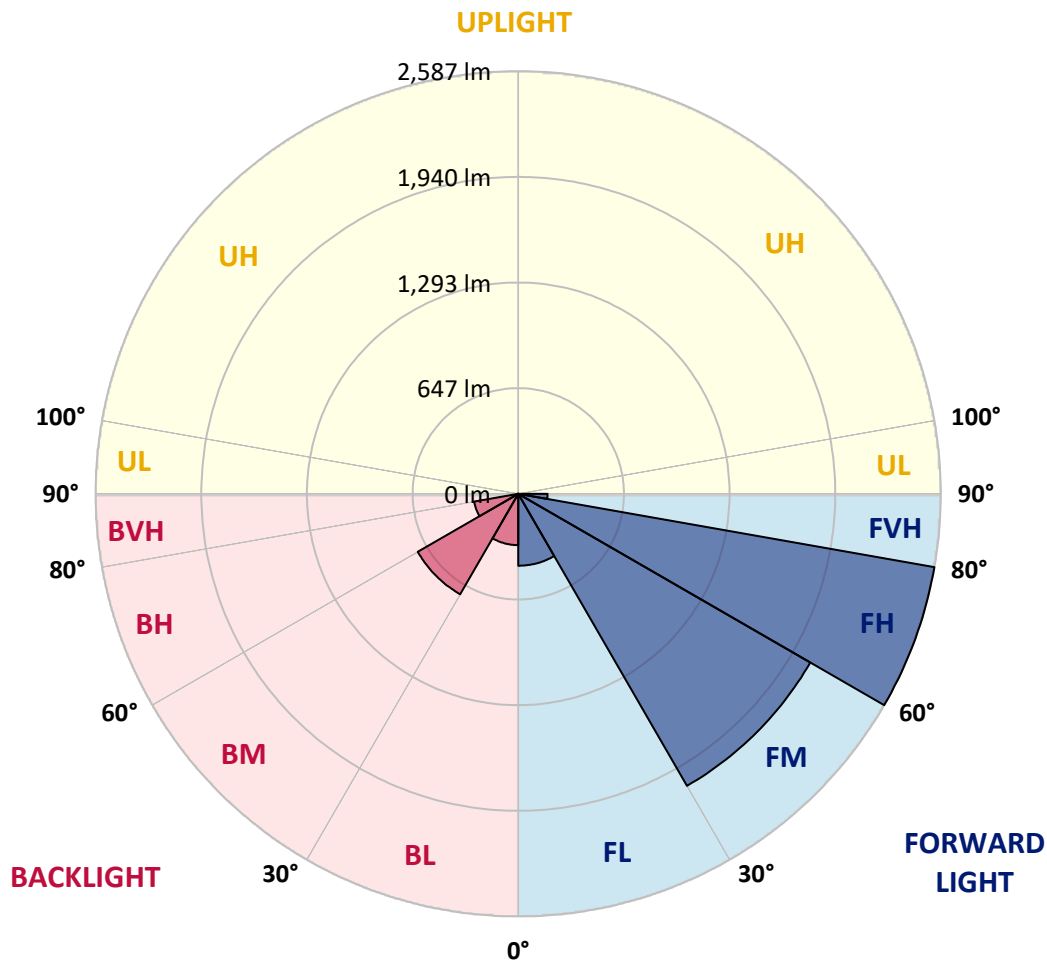


REPORT NUMBER: P960780  
 CATALOG NUMBER: NAV-SB1D-722-U-SLL-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	440.2	6.7			
FM (30°-60°)	2064.4	31.4			
FH (60°-80°)	2586.9	39.3			G2/5000
FVH (80°-90°)	179.4	2.7			G2/225
BL (0°-30°)	314.4	4.8	B1/500		
BM (30°-60°)	710.4	10.8	B1/1000		
BH (60°-80°)	274.0	4.2	B1/500		G1/500
BVH (80°-90°)	8.8	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: P960780  
 CATALOG NUMBER: NAV-SB1D-722-U-SLL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9
2.5°	1020.6	1028.3	1045.5	1054.5	1068.6	1069.5	1069.5	1057.3	1056.9	1031.9	1029.2
5°	1140.6	1158.8	1199.6	1241.7	1250.8	1253.1	1248.6	1224.1	1205.9	1157.4	1147.0
7.5°	1259.8	1294.8	1356.8	1413.1	1431.2	1431.2	1420.2	1380.4	1343.3	1273.0	1246.7
10°	1358.6	1402.6	1486.9	1549.9	1570.7	1566.2	1544.0	1493.7	1442.5	1357.3	1322.9
12.5°	1423.9	1473.3	1565.8	1616.5	1637.8	1626.1	1600.6	1551.7	1497.8	1408.0	1369.1
15°	1456.5	1508.2	1588.4	1615.2	1609.2	1597.1	1593.9	1570.3	1529.5	1445.7	1403.0
17.5°	1470.6	1518.6	1574.4	1557.6	1507.8	1498.2	1529.9	1559.8	1549.9	1478.3	1438.4
20°	1483.7	1524.1	1540.9	1466.5	1379.5	1370.9	1431.6	1516.8	1560.4	1508.7	1471.9
22.5°	1501.8	1526.7	1492.3	1370.4	1276.6	1256.6	1323.8	1452.0	1563.5	1547.1	1510.4
25°	1526.7	1533.6	1438.9	1279.3	1185.1	1165.1	1227.6	1380.0	1558.1	1588.9	1557.6
27.5°	1556.7	1542.6	1387.6	1203.2	1112.1	1093.6	1156.1	1310.6	1542.6	1630.6	1608.3
30°	1595.7	1554.4	1336.9	1144.3	1060.0	1046.4	1106.7	1250.8	1523.7	1683.6	1671.4
32.5°	1635.1	1559.4	1289.8	1109.9	1048.3	1053.2	1102.6	1218.6	1502.8	1734.3	1740.2
35°	1677.7	1575.3	1266.7	1143.8	1146.6	1190.0	1210.4	1248.6	1499.6	1803.2	1826.3
37.5°	1735.7	1610.6	1294.3	1312.9	1407.1	1497.3	1480.5	1394.9	1536.3	1906.1	1949.1
40°	1819.1	1672.7	1414.8	1600.6	1794.2	1940.5	1876.7	1660.9	1648.7	2054.3	2118.7
42.5°	1940.5	1771.5	1628.7	1952.3	2280.4	2521.5	2350.2	2004.0	1845.4	2266.0	2348.0
45°	2120.0	1931.5	1887.5	2323.5	2880.0	3259.8	2903.5	2369.7	2120.9	2586.4	2650.6
47.5°	2368.8	2166.6	2130.0	2714.6	3608.7	4100.0	3517.2	2708.7	2434.5	3023.2	3038.2
50°	2699.1	2483.5	2359.8	3142.4	4407.7	4956.5	4130.3	3035.8	2793.9	3557.1	3539.8
52.5°	3135.2	2925.4	2627.6	3549.8	5229.3	5794.9	4746.3	3323.3	3239.8	4176.6	4141.2
55°	3729.8	3590.2	2993.7	3938.7	6050.5	6638.3	5338.1	3594.3	3829.0	4912.5	4698.6
57.5°	4467.5	4567.2	3521.7	4389.6	6788.8	7507.5	5932.7	3973.1	4593.9	5735.5	5022.2
60°	4943.4	5866.5	4532.8	5056.2	7627.5	8490.5	6747.5	4693.7	5397.9	6030.6	4960.6
62.5°	4828.3	6279.8	5743.7	5907.3	8399.0	9205.1	7546.0	5417.4	5549.2	5596.0	4485.6
65°	4475.3	5946.2	5496.7	6072.7	8594.2	9245.5	7759.5	5324.1	4707.2	4568.5	3605.5
67.5°	3989.4	5550.6	4909.9	5634.0	8241.2	8681.6	7362.1	4709.5	3637.7	3428.3	2615.8
70°	3465.1	5112.8	4524.7	5141.8	7568.2	7699.2	6686.3	4142.1	2675.7	2315.4	1678.6
72.5°	2967.5	4657.0	4260.8	4637.4	6670.5	6399.5	5806.7	3640.5	1948.2	1670.0	1193.2
75°	2458.6	3984.4	3885.2	4038.3	5489.9	5040.7	4824.6	3014.1	1529.1	1208.2	823.5
77.5°	1897.1	3113.4	3341.8	3234.0	3864.4	3744.2	3739.7	2265.0	1117.1	806.3	516.2
80°	1298.4	2169.8	2610.8	2281.3	2508.0	2446.8	2816.6	1519.6	810.3	485.3	287.3
82.5°	763.2	1321.0	1817.3	1104.4	1386.7	1423.4	1677.2	739.1	476.7	111.9	62.5
85°	309.5	521.6	710.6	432.3	668.9	564.3	636.7	207.6	132.7	2.8	0.0
87.5°	77.9	166.8	117.0	48.5	77.5	71.1	56.2	25.4	5.4	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: P960780  
 CATALOG NUMBER: NAV-SB1D-722-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9
2.5°	1011.5	1001.1	975.3	949.5	928.5	900.5	881.9	859.7	838.3	819.4	815.7
5°	1118.5	1084.0	1036.9	993.8	949.9	907.3	865.1	820.7	779.9	755.0	739.1
7.5°	1205.5	1144.7	1082.2	1027.4	974.4	924.6	868.8	814.9	750.9	717.0	686.1
10°	1270.3	1190.5	1108.5	1045.5	992.0	943.5	896.4	842.0	765.0	722.4	676.2
12.5°	1312.9	1218.2	1122.1	1050.0	990.3	952.6	931.7	910.4	833.8	784.0	717.0
15°	1342.3	1237.7	1131.6	1039.7	966.2	938.6	959.4	983.9	934.9	877.4	789.9
17.5°	1374.5	1263.0	1135.7	1011.5	919.5	907.7	961.7	1018.3	1016.1	959.0	873.3
20°	1408.5	1285.2	1132.9	966.2	862.8	873.3	942.2	1007.9	1035.6	1004.7	928.5
22.5°	1443.4	1306.6	1122.6	907.3	809.9	842.4	911.3	968.9	1001.5	992.0	934.0
25°	1487.4	1336.5	1107.1	843.9	765.9	811.2	875.6	922.2	944.8	944.4	904.6
27.5°	1540.0	1376.4	1099.0	792.6	734.6	775.8	832.9	874.6	890.5	890.5	858.7
30°	1601.2	1423.4	1089.9	759.1	716.5	739.1	783.5	824.3	840.2	840.2	813.4
32.5°	1669.1	1468.8	1068.2	738.7	702.8	703.4	731.4	768.6	787.6	790.4	771.3
35°	1750.7	1517.3	1020.6	722.4	687.1	668.4	682.0	712.9	735.5	741.4	729.6
37.5°	1857.6	1576.7	952.6	698.3	662.6	631.7	634.9	658.5	683.4	692.5	684.8
40°	2001.3	1646.5	881.9	663.9	628.1	591.4	590.1	607.3	631.7	641.8	637.7
42.5°	2191.1	1730.3	814.4	630.8	586.4	548.8	546.5	560.2	581.5	591.8	590.1
45°	2434.1	1833.1	756.3	605.0	545.6	508.5	507.6	518.9	537.5	548.4	546.1
47.5°	2771.7	1936.0	717.0	591.4	513.4	475.4	477.2	487.2	504.0	511.7	508.5
50°	3211.7	1967.3	697.0	591.4	496.2	446.0	455.0	463.2	475.8	480.4	476.3
52.5°	3634.1	1864.0	678.9	595.0	498.5	421.0	440.5	446.4	457.3	459.1	453.2
55°	3841.2	1602.5	653.9	595.9	512.6	399.7	428.8	439.6	443.6	443.2	433.3
57.5°	3770.1	1295.7	611.8	592.3	522.0	386.1	414.2	435.0	437.8	433.7	415.1
60°	3520.4	954.0	579.6	565.6	518.4	382.0	392.0	425.1	429.2	423.7	393.4
62.5°	3101.6	662.2	554.7	506.7	502.6	380.7	357.1	403.3	413.3	405.6	361.2
65°	2441.8	467.7	477.6	444.1	468.1	373.4	320.8	377.1	390.6	378.8	316.3
67.5°	1652.3	337.6	387.0	402.4	412.4	357.1	294.6	347.2	365.3	349.8	264.2
70°	892.4	237.0	255.6	339.0	350.3	329.0	271.0	316.8	337.6	320.8	215.2
72.5°	527.1	170.4	179.0	272.3	291.8	289.6	244.8	281.5	306.8	286.9	175.0
75°	290.5	115.1	127.8	197.6	237.0	223.4	210.2	238.4	264.2	244.8	135.1
77.5°	130.1	68.9	88.9	129.7	186.2	153.1	162.7	185.8	209.8	189.4	90.2
80°	50.3	38.5	58.9	70.7	135.5	84.8	104.7	136.8	154.1	137.8	54.8
82.5°	6.4	17.2	25.4	27.7	78.8	44.9	60.7	86.1	84.8	73.4	27.7
85°	0.0	3.2	3.6	1.8	34.0	16.3	20.0	28.1	26.2	20.0	2.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	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: P960780  
 CATALOG NUMBER: NAV-SB1D-722-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9
2.5°	793.6	777.3	769.1	762.3	768.6	772.2	772.2	787.6	796.7	800.3	825.7
5°	699.3	668.9	648.5	636.3	640.3	644.9	649.8	669.3	682.5	691.2	730.5
7.5°	624.9	578.7	550.1	535.3	537.5	540.7	544.7	563.8	576.9	588.2	632.2
10°	588.2	523.0	485.3	467.2	464.0	462.3	460.8	472.2	482.2	491.3	534.7
12.5°	590.1	499.0	453.2	431.0	421.5	410.6	402.0	403.7	410.1	421.5	449.2
15°	613.2	491.3	436.4	408.8	392.9	380.2	369.8	367.6	369.8	371.6	388.9
17.5°	644.4	490.4	421.9	387.4	371.2	360.7	351.3	348.1	348.5	350.8	355.3
20°	669.3	487.6	405.6	367.1	352.6	343.5	334.0	330.9	331.7	332.2	337.1
22.5°	682.5	483.6	387.4	346.7	334.5	325.4	316.8	316.3	316.3	319.1	322.7
25°	682.5	475.0	371.2	327.2	316.3	308.2	297.8	299.6	300.4	304.1	309.5
27.5°	666.1	458.6	358.0	310.5	299.1	290.9	281.5	283.7	285.1	289.2	295.9
30°	645.3	439.1	343.1	294.6	281.5	275.5	267.4	268.2	270.1	274.6	282.3
32.5°	623.1	416.0	330.9	278.7	265.6	261.1	251.9	253.4	255.1	260.1	268.8
35°	598.7	388.9	316.3	264.2	251.0	247.4	237.0	237.9	240.7	246.1	254.7
37.5°	572.9	366.6	301.9	250.2	236.6	233.0	222.0	222.9	226.1	232.5	240.7
40°	547.5	344.9	286.4	235.2	221.6	218.4	206.6	207.6	211.2	218.0	226.6
42.5°	519.8	328.1	266.5	219.8	205.3	202.1	191.3	192.6	196.7	203.5	212.1
45°	486.8	317.2	244.3	205.3	189.0	185.8	175.8	178.6	183.1	189.9	199.0
47.5°	452.7	312.7	225.7	189.9	172.2	169.5	161.3	165.8	170.9	176.3	186.2
50°	420.1	306.8	206.6	175.4	157.7	155.0	149.5	155.5	160.4	165.4	175.0
52.5°	382.9	294.1	189.4	162.7	145.4	144.5	141.9	147.3	151.8	156.3	164.5
55°	344.4	273.7	174.5	151.4	135.1	135.9	134.6	139.1	142.8	146.9	154.1
57.5°	310.9	247.8	162.7	139.1	126.0	128.7	126.9	129.1	131.4	136.4	142.3
60°	276.9	217.1	149.5	124.6	117.0	120.1	115.1	114.7	115.5	117.0	127.8
62.5°	231.1	184.9	133.2	111.9	106.9	108.3	98.8	91.5	91.5	92.9	109.3
65°	185.8	155.0	115.1	97.5	93.4	92.5	78.8	68.9	68.0	72.1	86.1
67.5°	152.7	128.7	97.0	81.1	78.4	79.3	69.3	59.3	58.4	63.0	73.4
70°	126.5	103.7	77.5	62.5	65.3	69.3	59.3	49.8	48.5	52.6	62.5
72.5°	100.7	81.1	59.3	46.2	53.9	58.9	48.5	39.5	38.5	42.1	51.7
75°	73.9	58.0	40.3	33.5	41.7	46.2	35.4	28.1	26.8	29.9	39.5
77.5°	45.8	32.6	25.4	20.0	28.6	30.9	18.6	16.3	15.9	18.1	24.9
80°	21.3	14.0	12.2	6.8	10.5	12.2	7.7	8.6	9.0	10.9	15.4
82.5°	5.8	2.3	0.4	0.0	0.0	3.6	1.8	3.6	4.5	6.8	9.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.3	4.1	7.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6
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: P960780  
 CATALOG NUMBER: NAV-SB1D-722-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	910.9	910.9	910.9	910.9	910.9	910.9	910.9	910.9
2.5°	844.7	862.8	891.9	921.8	951.2	981.1	1010.1	1020.6
5°	766.3	808.0	865.6	927.2	990.7	1055.0	1114.0	1140.6
7.5°	678.9	738.7	825.2	921.8	1022.8	1123.9	1216.8	1259.8
10°	585.5	661.2	760.0	890.5	1035.6	1175.2	1302.9	1358.6
12.5°	496.7	576.0	685.2	841.5	1025.5	1204.6	1358.2	1423.9
15°	422.4	492.6	610.5	783.5	993.4	1206.4	1384.5	1456.5
17.5°	366.6	412.4	534.3	719.2	951.2	1189.6	1393.6	1470.6
20°	339.0	351.7	435.5	636.7	911.8	1173.7	1402.6	1483.7
22.5°	322.7	325.8	356.2	530.2	864.7	1168.8	1418.5	1501.8
25°	309.5	310.5	318.6	420.1	792.6	1165.6	1443.0	1526.7
27.5°	296.4	296.4	300.9	338.6	694.7	1152.0	1474.7	1556.7
30°	283.2	283.2	286.4	299.6	580.0	1125.2	1512.7	1595.7
32.5°	269.7	269.7	272.3	281.9	463.2	1091.7	1547.6	1635.1
35°	256.0	255.1	258.8	268.8	368.5	1049.1	1582.5	1677.7
37.5°	241.6	241.1	244.8	256.0	318.2	999.7	1608.8	1735.7
40°	226.1	226.1	230.2	242.4	303.6	937.7	1650.5	1819.1
42.5°	212.1	211.2	215.8	230.6	292.7	878.3	1725.3	1940.5
45°	198.5	196.7	200.8	219.4	273.7	857.4	1864.9	2120.0
47.5°	185.8	181.3	184.9	205.7	256.5	935.4	2093.3	2368.8
50°	175.4	166.8	169.9	192.2	243.3	1104.4	2389.7	2699.1
52.5°	164.5	153.1	155.0	175.4	231.5	1265.3	2710.9	3135.2
55°	153.1	140.5	141.3	158.6	214.8	1289.3	3024.6	3729.8
57.5°	140.5	128.7	128.7	143.2	202.5	1117.6	3265.6	4467.5
60°	126.5	118.7	116.4	131.0	213.4	788.5	3293.7	4943.4
62.5°	111.0	106.9	103.7	119.2	221.6	467.2	3067.6	4828.3
65°	93.4	92.5	90.2	131.0	186.8	276.0	2633.4	4475.3
67.5°	78.4	77.1	77.1	137.4	141.9	173.5	2057.5	3989.4
70°	67.5	62.5	62.5	103.7	86.1	120.1	1436.6	3465.1
72.5°	56.7	51.2	47.6	82.9	64.4	87.9	897.8	2967.5
75°	45.3	41.2	36.7	54.8	48.1	66.6	521.6	2458.6
77.5°	32.6	30.9	25.8	40.3	34.8	48.1	310.5	1897.1
80°	16.8	17.2	16.3	23.1	23.6	32.6	176.7	1298.4
82.5°	9.9	7.7	8.6	11.4	13.6	18.6	66.6	763.2
85°	6.4	4.1	4.1	5.4	6.8	7.3	20.4	309.5
87.5°	3.2	1.3	1.8	2.8	2.3	1.8	0.9	77.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)