

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: P961400

Luminaire Tested: **NAV-SB2A-735-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961400
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-735-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 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: 7017.2 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

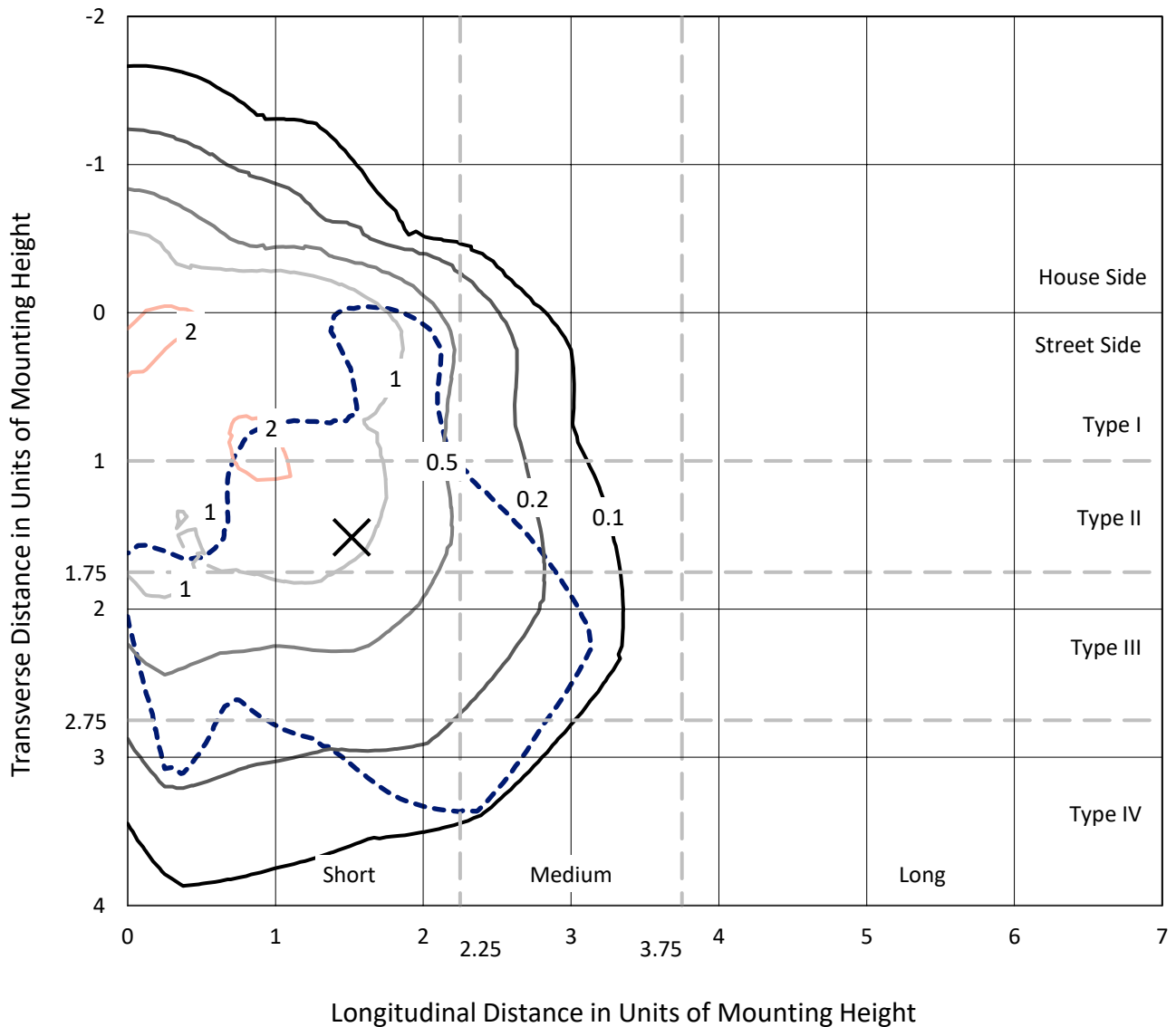
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P961400
 CATALOG NUMBER: NAV-SB2A-735-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

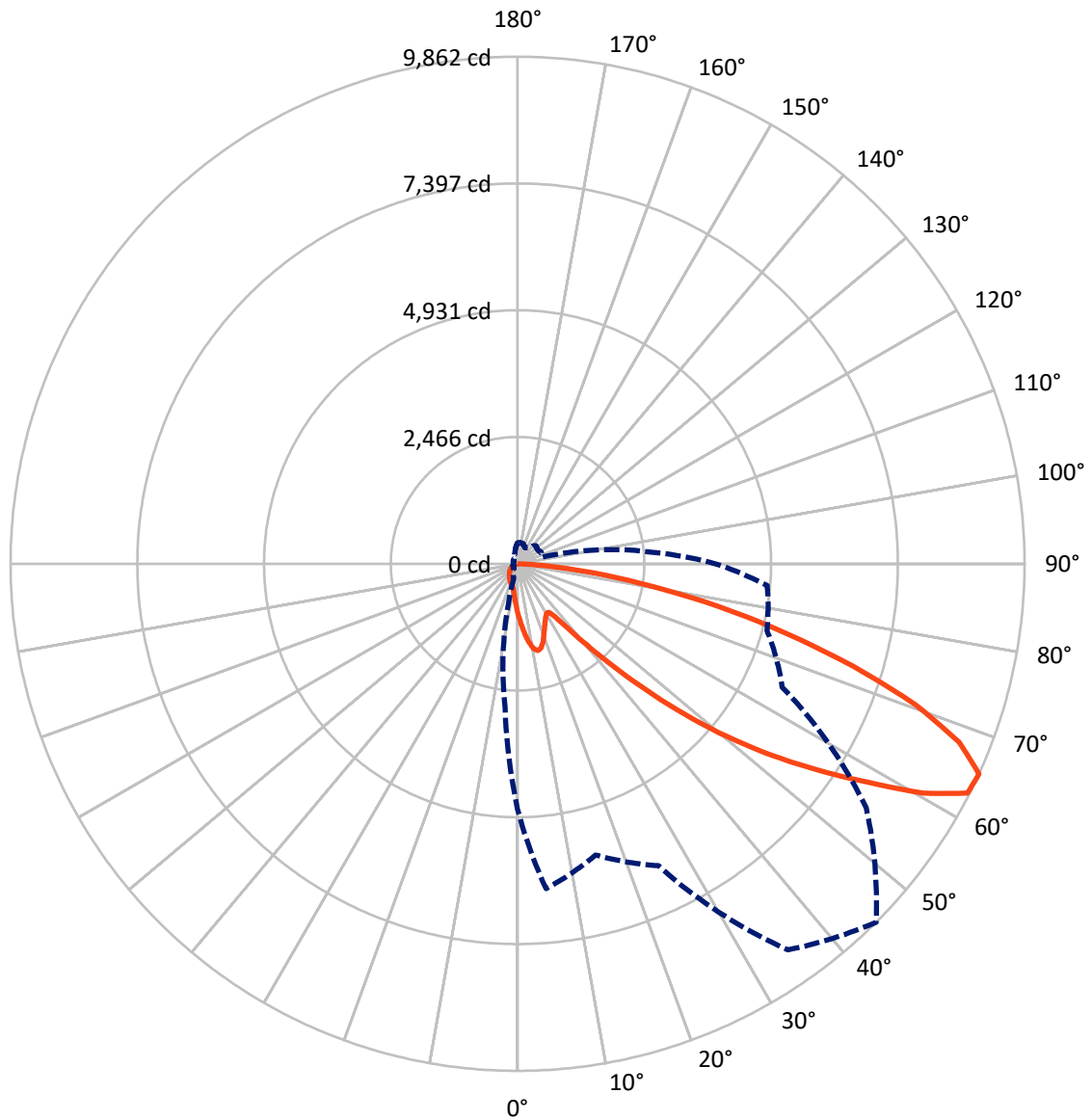
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P961400
CATALOG NUMBER: NAV-SB2A-735-U-SLL-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P961400
 CATALOG NUMBER: NAV-SB2A-735-U-SLL-HSS

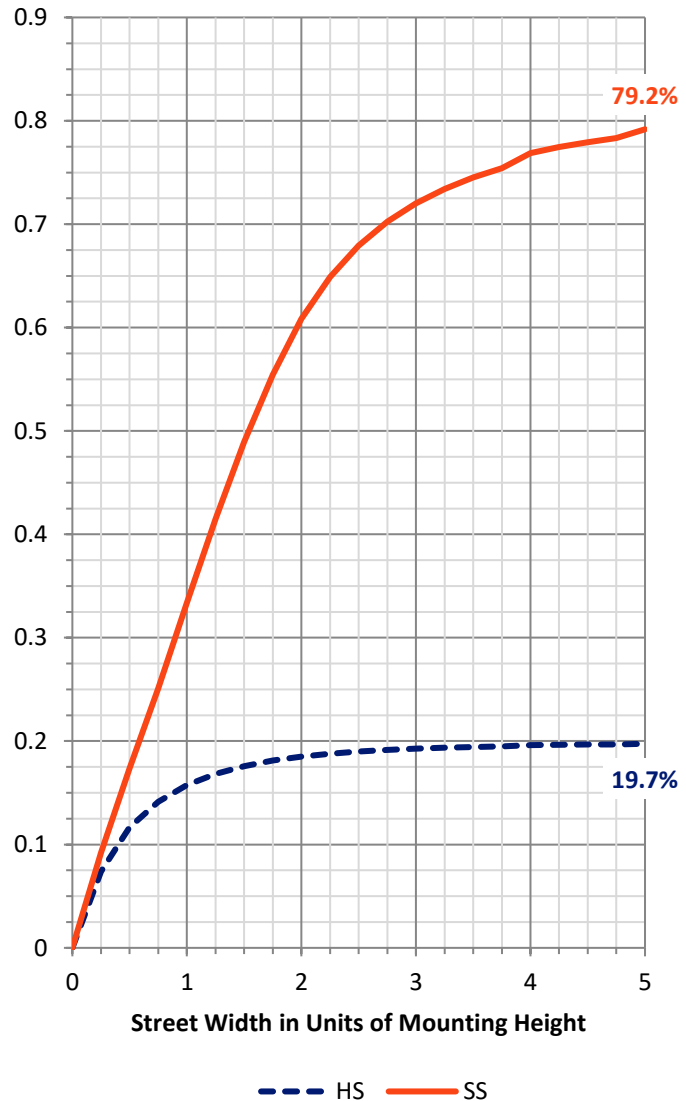
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1394.8	0.0	1394.8
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	5622.4	0.0	5622.4
	% Fixture	80.1	0.0	80.1
Total	Lumens	7017.2	0.0	7017.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.7	1.4
10°-20°	286.8	4.1
20°-30°	422.5	6.0
30°-40°	542.8	7.7
40°-50°	877.8	12.5
50°-60°	1539.3	21.9
60°-70°	1926.1	27.4
70°-80°	1125.5	16.0
80°-90°	200.8	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°	7017.2	100.0
0°-180°	7017.2	100.0

Coefficient of Utilization



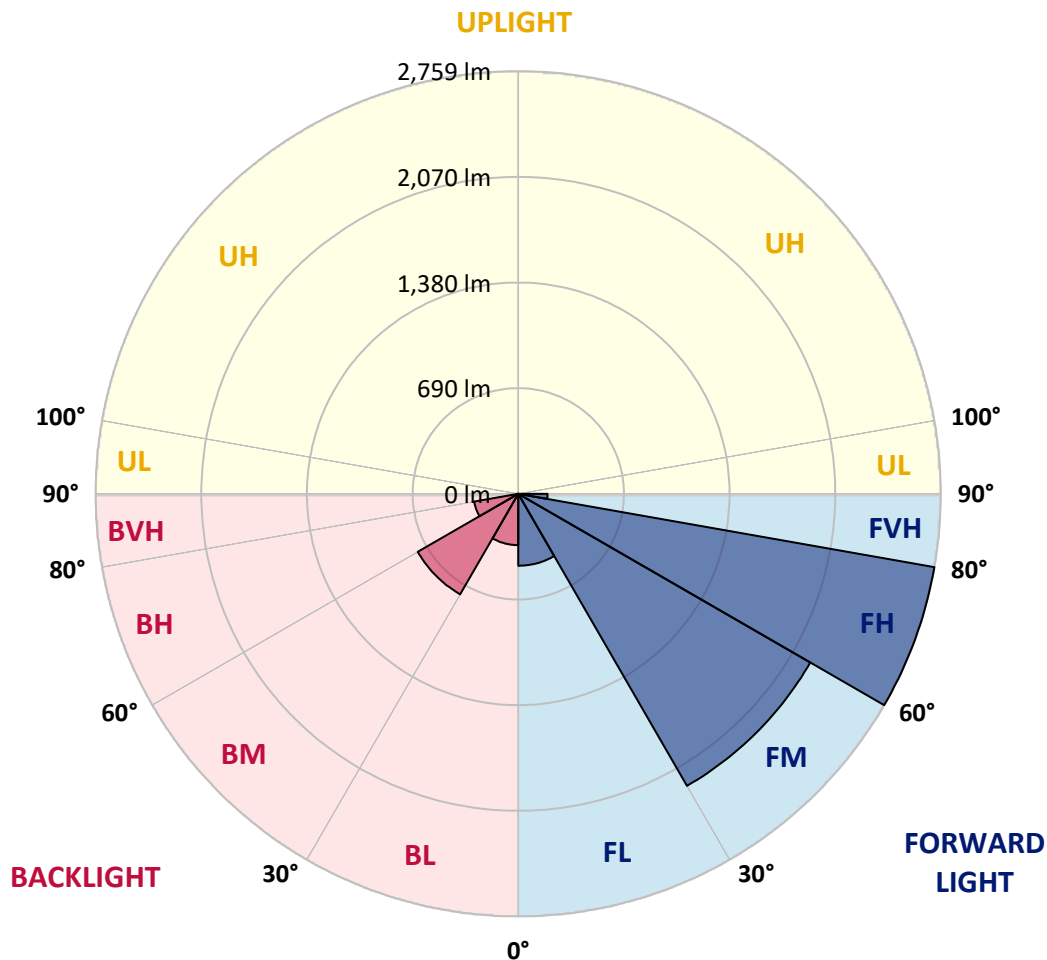
REPORT NUMBER: P961400
 CATALOG NUMBER: NAV-SB2A-735-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	469.5	6.7			
FM (30°-60°)	2202.1	31.4			
FH (60°-80°)	2759.4	39.3			G2/5000
FVH (80°-90°)	191.4	2.7			G2/225
BL (0°-30°)	335.4	4.8	B1/500		
BM (30°-60°)	757.8	10.8	B1/1000		
BH (60°-80°)	292.2	4.2	B1/500		G1/500
BVH (80°-90°)	9.4	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: P961400
 CATALOG NUMBER: NAV-SB2A-735-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7
2.5°	1088.7	1096.9	1115.2	1124.9	1139.9	1140.8	1140.8	1127.8	1127.3	1100.7	1097.8
5°	1216.8	1236.0	1279.6	1324.5	1334.2	1336.6	1331.8	1305.6	1286.4	1234.6	1223.5
7.5°	1343.9	1381.1	1447.3	1507.3	1526.6	1526.6	1515.1	1472.4	1432.8	1357.9	1329.8
10°	1449.2	1496.2	1586.1	1653.2	1675.5	1670.6	1647.0	1593.4	1538.7	1447.8	1411.1
12.5°	1518.8	1571.5	1670.1	1724.4	1747.0	1734.5	1707.4	1655.2	1597.7	1501.9	1460.4
15°	1553.7	1608.7	1694.3	1722.8	1716.6	1703.6	1700.2	1675.1	1631.5	1542.1	1496.6
17.5°	1568.7	1619.9	1679.4	1661.5	1608.3	1598.2	1632.0	1663.9	1653.2	1576.9	1534.3
20°	1582.7	1625.8	1643.6	1564.4	1471.5	1462.3	1527.0	1618.0	1664.4	1609.2	1570.1
22.5°	1602.0	1628.6	1591.8	1461.9	1361.7	1340.5	1412.0	1548.9	1667.8	1650.4	1611.2
25°	1628.6	1635.9	1534.8	1364.7	1264.1	1242.8	1309.5	1472.0	1661.9	1694.8	1661.5
27.5°	1660.5	1645.5	1480.2	1283.4	1186.3	1166.4	1233.2	1398.0	1645.5	1739.3	1715.6
30°	1702.1	1658.0	1426.1	1220.6	1130.7	1116.2	1180.5	1334.2	1625.2	1795.9	1782.8
32.5°	1744.1	1663.4	1375.8	1183.9	1118.2	1123.4	1176.1	1299.9	1603.0	1850.0	1856.3
35°	1789.5	1680.3	1351.2	1220.2	1223.0	1269.5	1291.2	1331.8	1599.6	1923.5	1948.1
37.5°	1851.5	1718.0	1380.6	1400.5	1501.0	1597.2	1579.3	1487.9	1638.8	2033.2	2079.1
40°	1940.4	1784.2	1509.2	1707.4	1913.8	2070.0	2001.8	1771.7	1758.6	2191.2	2259.9
42.5°	2070.0	1889.7	1737.4	2082.5	2432.5	2689.7	2506.9	2137.6	1968.4	2417.1	2504.6
45°	2261.4	2060.2	2013.4	2478.4	3072.0	3477.1	3097.2	2527.8	2262.4	2758.8	2827.5
47.5°	2526.7	2311.2	2272.0	2895.6	3849.4	4373.4	3751.7	2889.4	2596.8	3224.9	3240.7
50°	2879.2	2649.1	2517.1	3352.0	4701.7	5287.1	4405.8	3238.4	2980.2	3794.2	3775.9
52.5°	3344.3	3120.4	2802.8	3786.6	5578.0	6181.4	5062.8	3544.9	3455.9	4455.1	4417.3
55°	3978.4	3829.6	3193.4	4201.3	6454.0	7081.0	5694.1	3833.9	4084.3	5240.1	5011.9
57.5°	4765.4	4871.8	3756.5	4682.3	7241.4	8008.1	6328.2	4238.1	4900.3	6118.0	5357.2
60°	5273.0	6257.7	4835.0	5393.3	8136.2	9056.7	7197.4	5006.6	5757.8	6432.7	5291.4
62.5°	5150.2	6698.6	6126.7	6301.2	8959.0	9819.0	8049.2	5778.6	5919.4	5969.1	4784.8
65°	4773.6	6342.8	5863.3	6477.7	9167.4	9862.0	8276.9	5679.1	5021.2	4873.3	3846.0
67.5°	4255.5	5920.8	5237.2	6009.8	8790.8	9260.7	7852.9	5023.6	3880.3	3657.0	2790.3
70°	3696.2	5453.8	4826.3	5484.8	8072.9	8212.6	7132.3	4418.4	2854.0	2469.7	1790.6
72.5°	3165.4	4967.5	4545.1	4946.8	7115.2	6826.2	6193.9	3883.2	2078.2	1781.3	1272.8
75°	2622.5	4250.2	4144.3	4307.7	5856.0	5376.9	5146.3	3215.1	1631.0	1288.7	878.3
77.5°	2023.6	3321.0	3564.6	3449.6	4122.0	3993.9	3989.1	2416.0	1191.6	860.0	550.6
80°	1385.0	2314.6	2784.9	2433.5	2675.1	2610.0	3004.4	1620.8	864.4	517.7	306.5
82.5°	814.1	1409.2	1938.5	1178.0	1479.3	1518.4	1789.1	788.4	508.5	119.4	66.7
85°	330.2	556.4	758.0	461.1	713.5	601.9	679.2	221.4	141.7	2.9	0.0
87.5°	83.1	177.9	124.7	51.8	82.6	75.8	60.0	27.1	5.8	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: P961400
 CATALOG NUMBER: NAV-SB2A-735-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7
2.5°	1079.0	1067.8	1040.3	1012.7	990.5	960.5	940.7	917.1	894.3	874.0	870.1
5°	1193.1	1156.3	1106.1	1060.2	1013.2	967.8	922.8	875.5	832.0	805.3	788.4
7.5°	1285.9	1221.1	1154.4	1095.9	1039.4	986.2	926.7	869.2	801.0	764.8	731.8
10°	1354.9	1269.9	1182.4	1115.2	1058.2	1006.4	956.2	898.2	816.0	770.6	721.3
12.5°	1400.5	1299.4	1196.9	1120.0	1056.3	1016.1	993.8	971.2	889.5	836.3	764.8
15°	1431.8	1320.2	1207.0	1108.9	1030.6	1001.1	1023.4	1049.5	997.2	935.9	842.6
17.5°	1466.2	1347.3	1211.4	1079.0	980.8	968.3	1025.8	1086.2	1083.8	1022.8	931.5
20°	1502.4	1370.9	1208.5	1030.6	920.4	931.5	1005.0	1075.1	1104.5	1071.7	990.5
22.5°	1539.7	1393.7	1197.4	967.8	863.9	898.6	972.1	1033.5	1068.4	1058.2	996.3
25°	1586.5	1425.6	1181.0	900.2	816.9	865.3	934.0	983.7	1007.9	1007.5	964.8
27.5°	1642.7	1468.1	1172.3	845.5	783.6	827.6	888.5	933.0	949.9	949.9	916.0
30°	1707.9	1518.4	1162.6	809.7	764.2	788.4	835.8	879.3	896.3	896.3	867.8
32.5°	1780.4	1566.7	1139.4	787.9	749.8	750.3	780.2	819.9	840.2	843.1	822.8
35°	1867.4	1618.5	1088.7	770.6	732.9	713.0	727.5	760.4	784.5	790.9	778.3
37.5°	1981.5	1681.8	1016.1	745.0	706.7	673.8	677.2	702.4	729.0	738.6	730.4
40°	2134.8	1756.2	940.7	708.2	670.0	630.9	629.3	647.8	673.8	684.5	680.2
42.5°	2337.3	1845.6	868.7	672.9	625.6	585.4	583.0	597.5	620.2	631.3	629.3
45°	2596.4	1955.4	806.8	645.3	582.0	542.4	541.4	553.5	573.3	585.0	582.5
47.5°	2956.5	2065.2	764.8	630.9	547.7	507.1	509.0	519.7	537.5	545.8	542.4
50°	3426.0	2098.5	743.4	630.9	529.3	475.7	485.3	494.0	507.6	512.4	508.1
52.5°	3876.4	1988.3	724.2	634.7	531.8	449.1	469.9	476.1	487.8	489.6	483.4
55°	4097.3	1709.3	697.5	635.7	546.7	426.4	457.4	468.9	473.2	472.7	462.2
57.5°	4021.5	1382.1	652.6	631.8	556.9	411.8	441.9	464.1	467.0	462.6	442.8
60°	3755.1	1017.6	618.3	603.3	553.0	407.5	418.1	453.5	457.8	452.0	419.6
62.5°	3308.5	706.2	591.7	540.5	536.1	406.1	380.9	430.2	440.9	432.7	385.3
65°	2604.6	498.9	509.5	473.8	499.4	398.3	342.2	402.2	416.7	404.2	337.4
67.5°	1762.5	360.2	412.9	429.3	439.9	380.9	314.3	370.3	389.6	373.2	281.9
70°	951.8	252.9	272.6	361.6	373.7	351.0	289.0	337.9	360.2	342.2	229.6
72.5°	562.2	181.7	191.0	290.5	311.3	308.9	261.1	300.2	327.3	306.0	186.5
75°	309.9	122.8	136.3	210.7	252.9	238.3	224.3	254.3	281.9	261.1	144.0
77.5°	138.8	73.5	94.7	138.3	198.6	163.4	173.5	198.2	223.9	202.0	96.2
80°	53.6	41.1	62.8	75.4	144.5	90.4	111.6	146.0	164.4	147.0	58.5
82.5°	6.8	18.3	27.1	29.5	84.2	47.9	64.8	91.8	90.4	78.3	29.5
85°	0.0	3.4	3.9	1.9	36.3	17.4	21.3	29.9	28.1	21.3	2.5
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: P961400
 CATALOG NUMBER: NAV-SB2A-735-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7
2.5°	846.4	829.0	820.3	813.1	819.9	823.7	823.7	840.2	849.8	853.7	880.8
5°	745.9	713.5	691.8	678.8	683.1	687.9	693.2	714.0	728.1	737.2	779.2
7.5°	666.7	617.4	586.8	570.9	573.3	576.7	581.1	601.4	615.4	627.5	674.3
10°	627.5	557.8	517.7	498.4	495.0	493.1	491.6	503.7	514.3	524.0	570.4
12.5°	629.3	532.3	483.4	459.7	449.6	438.0	428.8	430.7	437.5	449.6	479.1
15°	654.1	524.0	465.6	436.0	419.1	405.6	394.4	392.1	394.4	396.4	414.7
17.5°	687.4	523.1	450.1	413.3	396.0	384.8	374.6	371.3	371.8	374.1	378.9
20°	714.0	520.2	432.7	391.5	376.1	366.4	356.3	352.9	353.8	354.3	359.7
22.5°	728.1	515.8	413.3	369.8	356.8	347.1	337.9	337.4	337.4	340.3	344.2
25°	728.1	506.7	396.0	349.0	337.4	328.7	317.6	319.5	320.5	324.4	330.2
27.5°	710.6	489.2	381.9	331.2	319.1	310.4	300.2	302.6	304.0	308.4	315.7
30°	688.4	468.4	365.9	314.3	300.2	293.9	285.3	286.2	288.1	292.9	301.1
32.5°	664.7	443.7	352.9	297.2	283.3	278.5	268.8	270.2	272.1	277.5	286.7
35°	638.6	414.7	337.4	281.9	267.8	263.9	252.9	253.8	256.7	262.5	271.6
37.5°	611.0	391.0	322.0	266.8	252.4	248.5	236.9	237.8	241.2	247.9	256.7
40°	583.9	367.9	305.6	250.9	236.4	233.0	220.5	221.4	225.3	232.5	241.7
42.5°	554.4	350.0	284.2	234.4	218.9	215.6	204.0	205.4	209.8	217.1	226.2
45°	519.2	338.4	260.6	218.9	201.6	198.2	187.6	190.4	195.3	202.5	212.2
47.5°	482.9	333.5	240.8	202.5	183.7	180.8	172.1	176.9	182.2	188.1	198.6
50°	448.1	327.3	220.5	187.1	168.2	165.3	159.5	165.8	171.2	176.4	186.5
52.5°	408.5	313.8	202.0	173.5	155.2	154.2	151.3	157.1	162.0	166.8	175.5
55°	367.4	292.0	186.1	161.4	144.0	145.0	143.6	148.4	152.3	156.6	164.4
57.5°	331.6	264.4	173.5	148.4	134.4	137.2	135.4	137.8	140.2	145.5	151.8
60°	295.4	231.5	159.5	132.9	124.7	128.1	122.8	122.3	123.3	124.7	136.3
62.5°	246.5	197.2	142.2	119.4	114.1	115.5	105.4	97.7	97.7	99.1	116.5
65°	198.2	165.3	122.8	103.9	99.6	98.6	84.2	73.5	72.5	76.9	91.8
67.5°	162.9	137.2	103.4	86.5	83.6	84.6	74.0	63.3	62.3	67.2	78.3
70°	134.9	110.7	82.6	66.7	69.6	74.0	63.3	53.2	51.8	56.1	66.7
72.5°	107.3	86.5	63.3	49.3	57.5	62.8	51.8	42.0	41.1	45.0	55.1
75°	78.8	61.9	43.0	35.8	44.5	49.3	37.7	29.9	28.5	31.9	42.0
77.5°	48.8	34.8	27.1	21.3	30.4	32.9	19.8	17.4	16.9	19.4	26.5
80°	22.8	15.0	13.0	7.3	11.1	13.0	8.2	9.2	9.6	11.6	16.4
82.5°	6.3	2.5	0.5	0.0	0.0	3.9	1.9	3.9	4.8	7.3	10.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.5	4.3	7.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.9
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: P961400
 CATALOG NUMBER: NAV-SB2A-735-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	971.7	971.7	971.7	971.7	971.7	971.7	971.7	971.7
2.5°	901.1	920.4	951.3	983.3	1014.6	1046.6	1077.5	1088.7
5°	817.4	861.9	923.3	989.0	1056.8	1125.3	1188.2	1216.8
7.5°	724.2	787.9	880.3	983.3	1091.0	1198.8	1298.0	1343.9
10°	624.5	705.3	810.7	949.9	1104.5	1253.5	1389.8	1449.2
12.5°	529.8	614.4	730.9	897.7	1094.0	1284.9	1448.7	1518.8
15°	450.5	525.4	651.2	835.8	1059.6	1286.8	1476.8	1553.7
17.5°	391.0	439.9	569.9	767.2	1014.6	1268.9	1486.5	1568.7
20°	361.6	375.2	464.5	679.2	972.6	1252.0	1496.2	1582.7
22.5°	344.2	347.6	380.0	565.6	922.3	1246.7	1513.1	1602.0
25°	330.2	331.2	339.8	448.1	845.5	1243.3	1539.1	1628.6
27.5°	316.1	316.1	321.0	361.1	741.1	1228.9	1573.0	1660.5
30°	302.2	302.2	305.6	319.5	618.8	1200.3	1613.7	1702.1
32.5°	287.6	287.6	290.5	300.6	494.0	1164.5	1650.9	1744.1
35°	273.2	272.1	276.0	286.7	393.0	1119.1	1688.1	1789.5
37.5°	257.7	257.2	261.1	273.2	339.4	1066.4	1716.1	1851.5
40°	241.2	241.2	245.6	258.6	323.9	1000.2	1760.5	1940.4
42.5°	226.2	225.3	230.1	246.1	312.3	936.8	1840.3	2070.0
45°	211.8	209.8	214.1	234.0	292.0	914.6	1989.2	2261.4
47.5°	198.2	193.3	197.2	219.5	273.6	997.7	2232.9	2526.7
50°	187.1	177.9	181.3	205.0	259.6	1178.0	2549.0	2879.2
52.5°	175.5	163.4	165.3	187.1	247.0	1349.7	2891.7	3344.3
55°	163.4	149.9	150.8	169.2	229.1	1375.3	3226.3	3978.4
57.5°	149.9	137.2	137.2	152.7	216.1	1192.1	3483.5	4765.4
60°	134.9	126.7	124.2	139.7	227.7	841.1	3513.4	5273.0
62.5°	118.4	114.1	110.7	127.1	236.4	498.4	3272.2	5150.2
65°	99.6	98.6	96.2	139.7	199.2	294.4	2809.1	4773.6
67.5°	83.6	82.2	82.2	146.5	151.3	185.1	2194.6	4255.5
70°	72.1	66.7	66.7	110.7	91.8	128.1	1532.4	3696.2
72.5°	60.5	54.6	50.7	88.5	68.7	93.8	957.7	3165.4
75°	48.4	44.0	39.2	58.5	51.2	71.0	556.4	2622.5
77.5°	34.8	32.9	27.6	43.0	37.2	51.2	331.2	2023.6
80°	17.8	18.3	17.4	24.7	25.1	34.8	188.5	1385.0
82.5°	10.7	8.2	9.2	12.1	14.5	19.8	71.0	814.1
85°	6.8	4.3	4.3	5.8	7.3	7.7	21.7	330.2
87.5°	3.4	1.4	1.9	2.9	2.5	1.9	0.9	83.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)