

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: P963632

Luminaire Tested: **NAV-SB3A-827-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963632
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-SB3A-827-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 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: 9155.3 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

Input Watts (W): 84.7
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



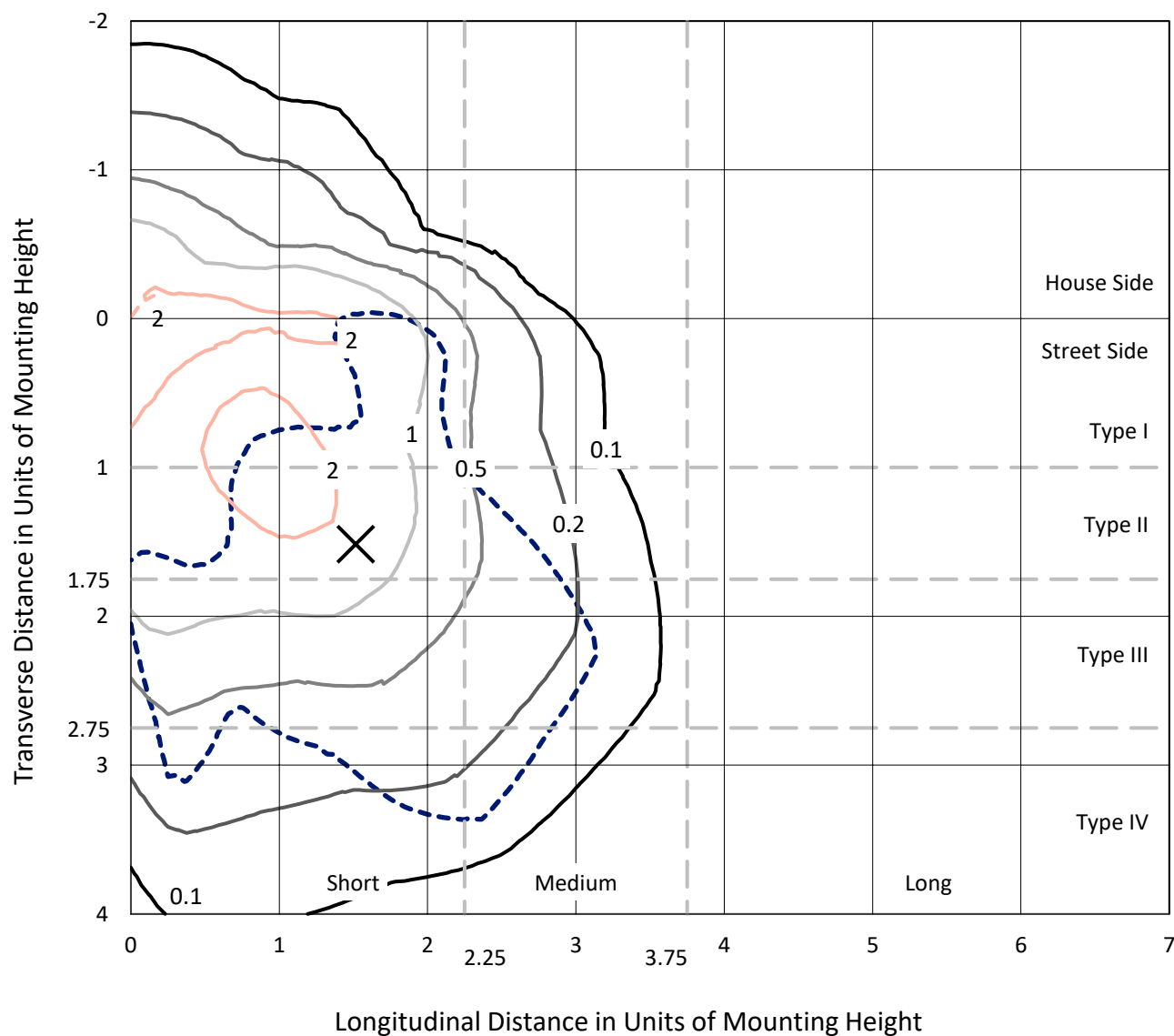
REPORT NUMBER: P963632

CATALOG NUMBER: NAV-SB3A-827-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

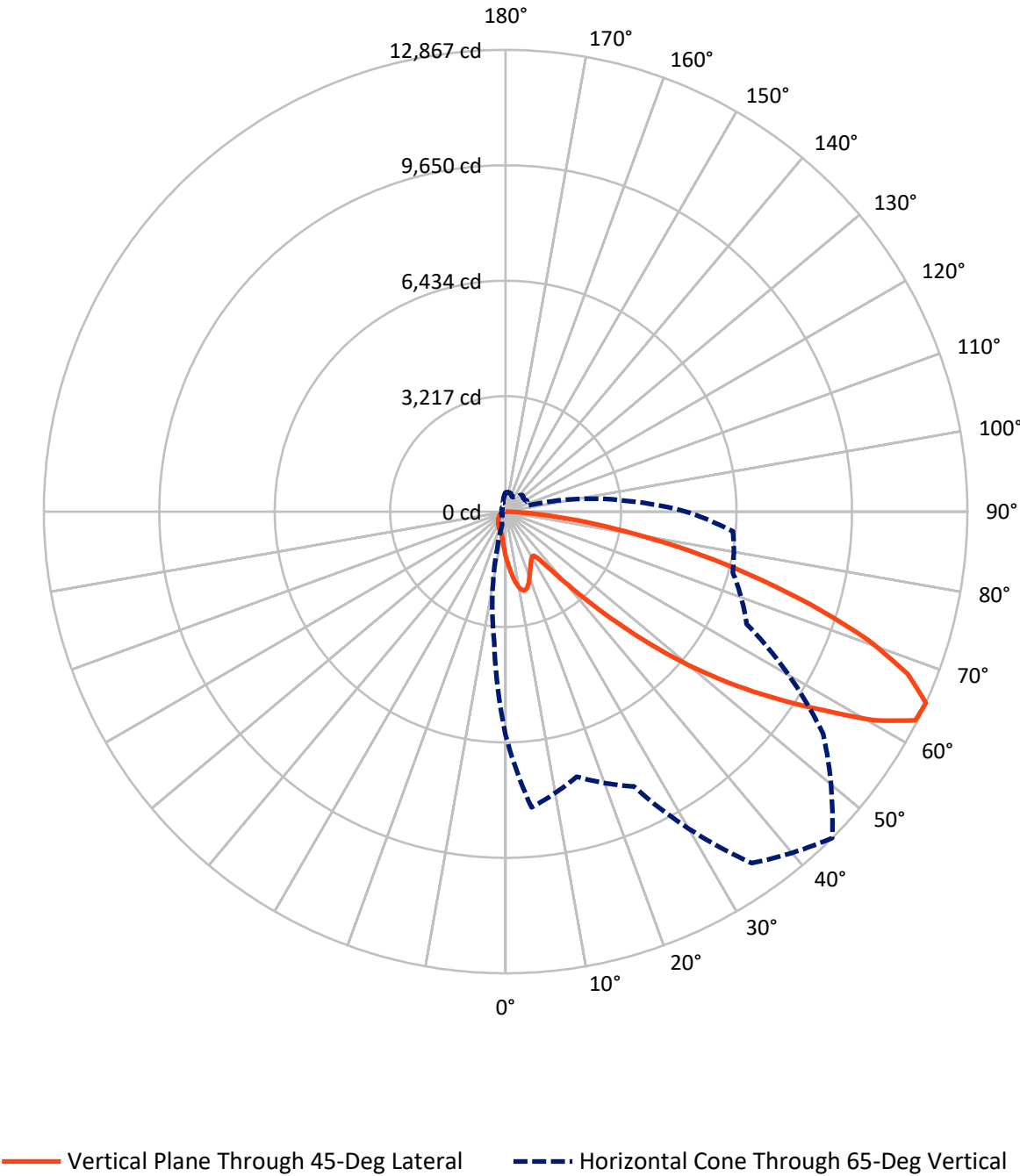


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc

Type IV - Short - N/A

REPORT NUMBER: P963632
CATALOG NUMBER: NAV-SB3A-827-U-SLL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P963632

CATALOG NUMBER: NAV-SB3A-827-U-SLL-HSS

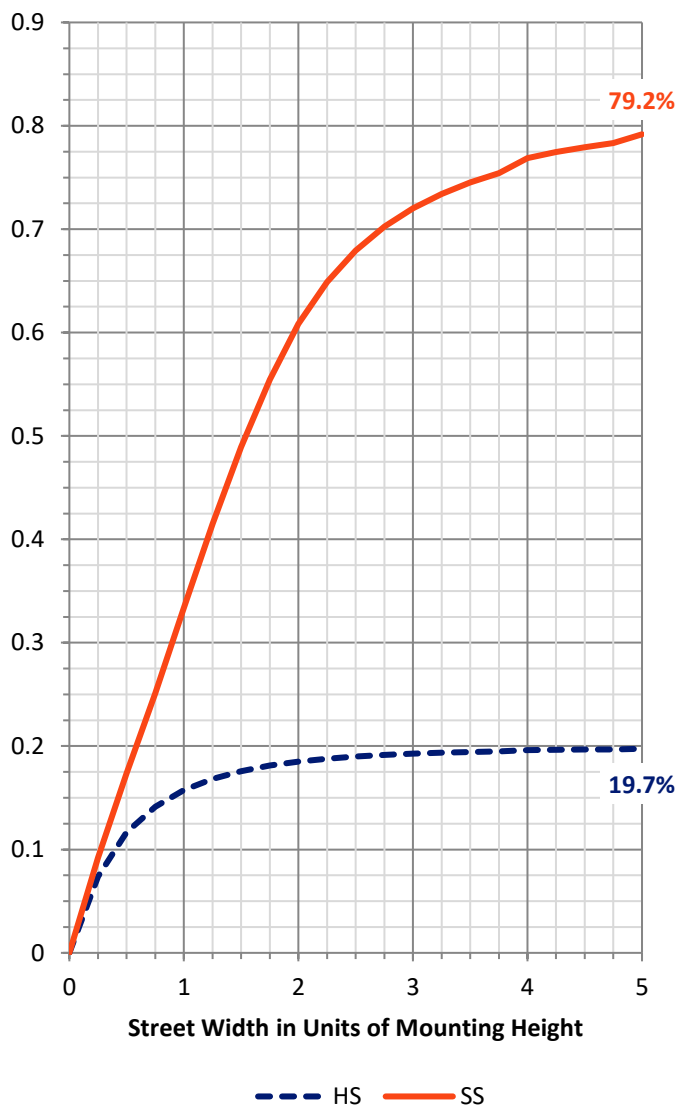
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1819.8	0.0	1819.8
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	7335.5	0.0	7335.5
	% Fixture	80.1	0.0	80.1
Total	Lumens	9155.3	0.0	9155.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.8	1.4
10°-20°	374.1	4.1
20°-30°	551.2	6.0
30°-40°	708.1	7.7
40°-50°	1145.3	12.5
50°-60°	2008.3	21.9
60°-70°	2513.0	27.4
70°-80°	1468.5	16.0
80°-90°	262.0	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°	9155.3	100.0
0°-180°	9155.3	100.0

Coefficient of Utilization



REPORT NUMBER: P963632

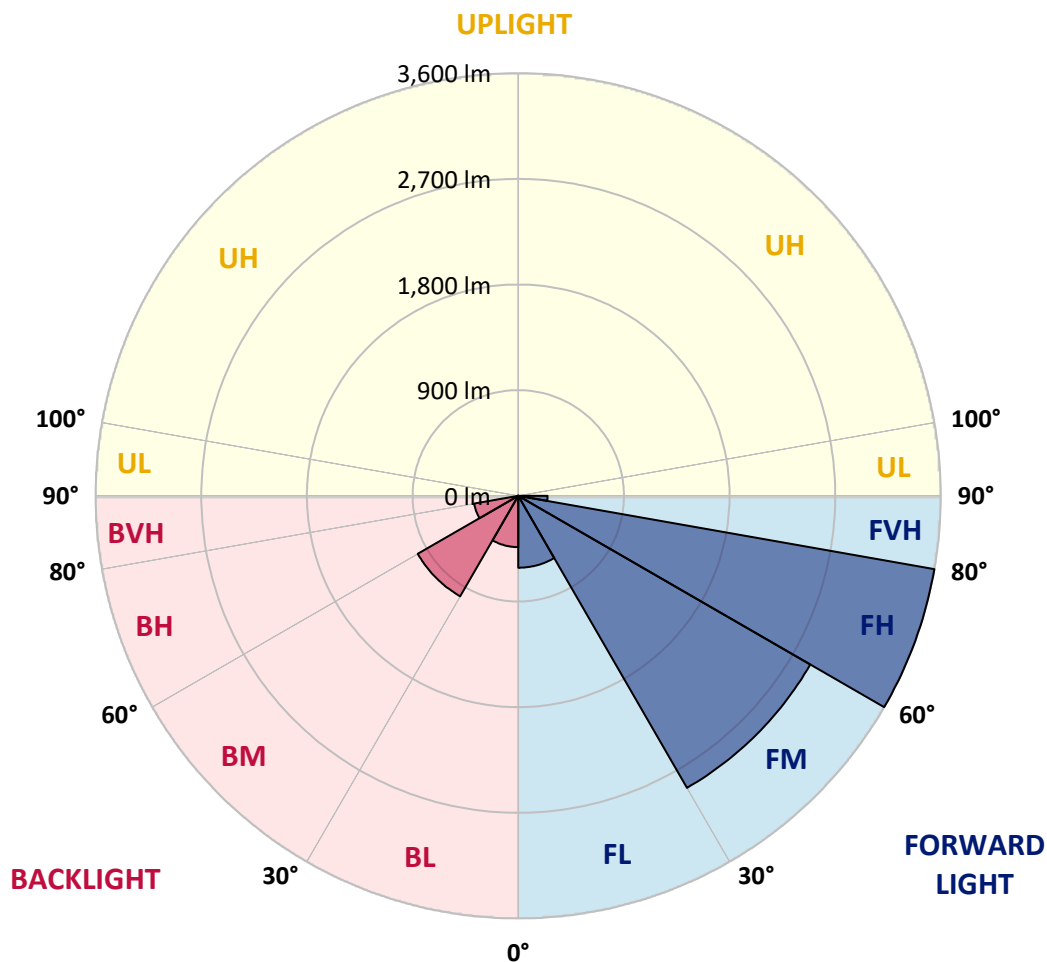
CATALOG NUMBER: NAV-SB3A-827-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	612.6	6.7			
FM	(30°-60°)	2873.0	31.4			
FH	(60°-80°)	3600.1	39.3			G2/5000
FVH	(80°-90°)	249.7	2.7			G3/500
BL	(0°-30°)	437.6	4.8	B1/500		
BM	(30°-60°)	988.7	10.8	B1/1000		
BH	(60°-80°)	381.3	4.2	B1/500		G1/500
BVH	(80°-90°)	12.3	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short



REPORT NUMBER: P963632

CATALOG NUMBER: NAV-SB3A-827-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7
2.5°	1420.3	1431.1	1455.0	1467.7	1487.2	1488.5	1488.5	1471.4	1470.8	1436.1	1432.3
5°	1587.5	1612.7	1669.5	1728.2	1740.8	1743.9	1737.6	1703.6	1678.3	1610.8	1596.3
7.5°	1753.4	1802.0	1888.4	1966.6	1991.8	1991.8	1976.6	1921.2	1869.4	1771.6	1735.0
10°	1890.8	1952.0	2069.4	2157.0	2186.0	2179.8	2148.8	2078.8	2007.6	1889.0	1841.0
12.5°	1981.6	2050.4	2179.0	2249.8	2279.4	2263.0	2227.6	2159.6	2084.4	1959.6	1905.4
15°	2027.0	2099.0	2210.6	2247.8	2239.6	2222.6	2218.2	2185.4	2128.6	2012.0	1952.6
17.5°	2046.6	2113.4	2191.0	2167.8	2098.4	2085.2	2129.2	2170.8	2157.0	2057.4	2001.8
20°	2065.0	2121.0	2144.4	2041.0	1919.8	1907.8	1992.4	2111.0	2171.6	2099.6	2048.6
22.5°	2090.2	2124.8	2077.0	1907.2	1776.7	1749.0	1842.3	2020.8	2176.0	2153.2	2102.2
25°	2124.8	2134.3	2002.4	1780.5	1649.3	1621.6	1708.6	1920.5	2168.4	2211.2	2167.8
27.5°	2166.4	2147.0	1931.2	1674.5	1547.7	1521.9	1608.9	1824.0	2147.0	2269.2	2238.4
30°	2220.7	2163.4	1860.6	1592.5	1475.2	1456.3	1540.2	1740.8	2120.4	2343.0	2326.0
32.5°	2275.6	2170.2	1795.0	1544.6	1458.8	1465.7	1534.5	1696.0	2091.4	2413.7	2421.9
35°	2334.8	2192.4	1762.8	1591.9	1595.7	1656.2	1684.6	1737.6	2087.0	2509.6	2541.7
37.5°	2415.6	2241.6	1801.3	1827.2	1958.4	2083.8	2060.6	1941.4	2138.0	2652.7	2712.7
40°	2531.6	2328.0	1969.0	2227.6	2497.0	2700.7	2611.7	2311.6	2294.5	2859.0	2948.5
42.5°	2700.7	2465.4	2266.8	2717.1	3173.7	3509.2	3270.9	2789.0	2568.2	3153.5	3267.7
45°	2950.5	2688.1	2626.9	3233.7	4008.2	4536.6	4041.0	3297.9	2951.7	3599.4	3689.0
47.5°	3296.7	3015.4	2964.3	3777.9	5022.3	5706.0	4894.9	3769.7	3388.1	4207.4	4228.2
50°	3756.5	3456.3	3284.1	4373.3	6134.2	6898.0	5748.2	4225.0	3888.3	4950.4	4926.5
52.5°	4363.2	4071.2	3656.8	4940.3	7277.7	8064.8	6605.4	4625.0	4508.9	5812.6	5763.4
55°	5190.7	4996.5	4166.4	5481.5	8420.6	9238.5	7429.1	5002.1	5328.9	6836.9	6539.2
57.5°	6217.4	6356.2	4901.2	6109.0	9447.9	10448.2	8256.6	5529.4	6393.4	7982.2	6989.5
60°	6879.7	8164.4	6308.3	7036.7	10615.4	11816.2	9390.5	6532.2	7512.3	8392.8	6903.7
62.5°	6719.5	8739.7	7993.6	8221.2	11688.9	12810.9	10501.8	7539.5	7723.0	7787.9	6242.8
65°	6228.2	8275.4	7649.8	8451.4	11960.7	12867.0	10798.9	7409.5	6551.1	6358.2	5017.9
67.5°	5552.1	7724.9	6833.1	7840.9	11469.3	12082.4	10245.8	6554.3	5062.7	4771.3	3640.4
70°	4822.3	7115.7	6297.0	7155.9	10532.8	10715.0	9305.5	5764.6	3723.7	3222.3	2336.2
72.5°	4129.8	6481.1	5929.9	6454.0	9283.3	8906.2	8081.2	5066.5	2711.4	2324.2	1660.6
75°	3421.6	5545.1	5407.1	5620.2	7640.4	7015.3	6714.5	4194.8	2128.0	1681.4	1145.9
77.5°	2640.1	4333.0	4650.8	4500.7	5378.0	5210.9	5204.5	3152.3	1554.7	1122.1	718.4
80°	1807.0	3019.9	3633.5	3174.9	3490.3	3405.2	3919.8	2114.8	1127.7	675.5	399.9
82.5°	1062.1	1838.5	2529.1	1537.0	1930.0	1981.0	2334.2	1028.7	663.5	155.8	87.0
85°	430.8	725.9	988.9	601.7	930.9	785.3	886.1	288.8	184.8	3.8	0.0
87.5°	108.4	232.1	162.8	67.4	107.8	99.0	78.2	35.4	7.6	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: P963632

CATALOG NUMBER: NAV-SB3A-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7
2.5°	1407.7	1393.2	1357.3	1321.3	1292.3	1253.2	1227.3	1196.5	1166.8	1140.3	1135.3
5°	1556.6	1508.6	1443.1	1383.1	1321.9	1262.7	1204.0	1142.2	1085.5	1050.7	1028.7
7.5°	1677.7	1593.2	1506.1	1429.8	1356.0	1286.7	1209.1	1134.0	1045.1	997.7	954.9
10°	1767.8	1656.8	1542.7	1455.0	1380.6	1313.1	1247.5	1171.9	1064.7	1005.3	941.1
12.5°	1827.2	1695.4	1561.6	1461.3	1378.1	1325.7	1296.7	1267.1	1160.5	1091.1	997.7
15°	1868.2	1722.4	1574.9	1446.8	1344.7	1306.2	1335.2	1369.3	1301.1	1221.1	1099.3
17.5°	1913.0	1757.8	1580.6	1407.7	1279.7	1263.3	1338.3	1417.2	1414.1	1334.6	1215.3
20°	1960.2	1788.7	1576.8	1344.7	1200.9	1215.3	1311.3	1402.7	1441.1	1398.3	1292.3
22.5°	2008.8	1818.4	1562.3	1262.7	1127.1	1172.5	1268.3	1348.5	1393.9	1380.6	1299.9
25°	2070.0	1860.0	1540.8	1174.3	1065.9	1128.9	1218.5	1283.5	1315.0	1314.4	1258.9
27.5°	2143.2	1915.4	1529.5	1103.1	1022.3	1079.7	1159.3	1217.3	1239.3	1239.3	1195.1
30°	2228.2	1981.0	1516.8	1056.5	997.1	1028.7	1090.5	1147.3	1169.3	1169.3	1132.1
32.5°	2322.9	2044.2	1486.6	1028.1	978.3	978.9	1017.9	1069.7	1096.1	1099.9	1073.5
35°	2436.4	2111.6	1420.3	1005.3	956.1	930.3	949.3	992.1	1023.7	1031.9	1015.5
37.5°	2585.3	2194.2	1325.7	971.9	922.1	879.2	883.7	916.5	951.1	963.7	953.0
40°	2785.2	2291.4	1227.3	923.9	874.1	823.1	821.1	845.1	879.2	893.1	887.4
42.5°	3049.5	2408.0	1133.3	877.9	816.1	763.8	760.7	779.5	809.2	823.7	821.1
45°	3387.5	2551.2	1052.7	842.0	759.3	707.7	706.4	722.1	748.0	763.1	760.0
47.5°	3857.4	2694.4	997.7	823.1	714.6	661.6	664.1	678.0	701.3	712.1	707.7
50°	4469.8	2737.9	970.1	823.1	690.6	620.6	633.2	644.6	662.3	668.5	662.9
52.5°	5057.7	2594.1	944.8	828.1	693.8	585.9	613.1	621.3	636.4	638.9	630.7
55°	5345.9	2230.2	910.1	829.3	713.3	556.3	596.7	611.8	617.5	616.8	602.9
57.5°	5246.9	1803.2	851.5	824.3	726.6	537.4	576.5	605.5	609.3	603.6	577.7
60°	4899.3	1327.7	806.7	787.1	721.5	531.7	545.6	591.6	597.3	589.7	547.5
62.5°	4316.6	921.5	772.0	705.1	699.5	529.8	497.0	561.3	575.2	564.5	502.7
65°	3398.3	650.9	664.7	618.1	651.5	519.7	446.5	524.7	543.7	527.3	440.2
67.5°	2299.6	469.9	538.6	560.1	573.9	497.0	410.0	483.1	508.3	486.9	367.7
70°	1241.9	329.8	355.7	471.8	487.5	457.9	377.2	440.9	469.9	446.5	299.6
72.5°	733.5	237.2	249.2	379.0	406.2	403.0	340.6	391.7	427.0	399.2	243.4
75°	404.3	160.2	177.8	275.0	329.8	311.0	292.6	331.8	367.7	340.6	188.0
77.5°	181.0	95.8	123.6	180.4	259.2	213.2	226.4	258.6	292.0	263.6	125.5
80°	70.0	53.6	82.0	98.4	188.6	118.0	145.7	190.4	214.4	191.8	76.4
82.5°	8.8	24.0	35.4	38.4	109.8	62.4	84.6	119.8	118.0	102.2	38.4
85°	0.0	4.4	5.0	2.6	47.3	22.8	27.8	39.1	36.6	27.8	3.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	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: P963632

CATALOG NUMBER: NAV-SB3A-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7
2.5°	1104.3	1081.7	1070.3	1060.9	1069.7	1074.7	1074.7	1096.1	1108.7	1113.9	1149.1
5°	973.1	930.9	902.5	885.5	891.1	897.5	904.5	931.5	949.9	961.9	1016.7
7.5°	869.7	805.4	765.7	744.9	748.0	752.5	758.1	784.6	802.9	818.7	879.9
10°	818.7	727.9	675.5	650.3	645.9	643.3	641.4	657.2	671.1	683.7	744.3
12.5°	821.1	694.4	630.7	599.8	586.5	571.4	559.4	562.0	570.8	586.5	625.0
15°	853.3	683.7	607.4	568.9	546.8	529.2	514.7	511.5	514.7	517.2	541.1
17.5°	896.9	682.4	587.2	539.3	516.5	502.0	488.8	484.4	485.0	488.2	494.5
20°	931.5	678.7	564.5	510.9	490.7	478.1	464.8	460.4	461.7	462.3	469.2
22.5°	949.9	672.9	539.3	482.5	465.5	452.8	440.9	440.2	440.2	444.0	449.1
25°	949.9	661.0	516.5	455.4	440.2	428.9	414.4	416.9	418.2	423.2	430.8
27.5°	927.1	638.3	498.3	432.0	416.3	404.9	391.7	394.8	396.7	402.4	411.8
30°	898.1	611.1	477.4	410.0	391.7	383.5	372.1	373.4	375.9	382.2	392.9
32.5°	867.3	579.0	460.4	387.9	369.6	363.3	350.7	352.6	355.1	362.0	374.0
35°	833.1	541.1	440.2	367.7	349.4	344.4	329.8	331.1	334.9	342.5	354.4
37.5°	797.2	510.2	420.0	348.2	329.2	324.2	309.0	310.3	314.7	323.6	334.9
40°	761.9	480.0	398.6	327.4	308.4	304.0	287.6	288.8	293.9	303.4	315.4
42.5°	723.4	456.6	370.8	305.9	285.7	281.3	266.2	268.0	273.7	283.2	295.2
45°	677.4	441.5	340.0	285.7	263.0	258.6	244.7	248.5	254.8	264.2	276.9
47.5°	630.1	435.2	314.1	264.2	239.6	235.9	224.6	230.8	237.8	245.4	259.2
50°	584.7	427.0	287.6	244.1	219.5	215.7	208.2	216.4	223.2	230.2	243.4
52.5°	532.9	409.3	263.6	226.4	202.4	201.2	197.4	205.0	211.3	217.6	229.0
55°	479.3	381.0	242.8	210.6	188.0	189.2	187.4	193.6	198.6	204.4	214.4
57.5°	432.7	345.0	226.4	193.6	175.4	179.2	176.6	179.8	182.9	189.8	198.0
60°	385.4	302.1	208.2	173.4	162.8	167.2	160.2	159.6	160.8	162.8	177.8
62.5°	321.6	257.4	185.4	155.8	148.8	150.8	137.5	127.4	127.4	129.3	152.0
65°	258.6	215.7	160.2	135.6	130.0	128.6	109.8	95.8	94.6	100.2	119.8
67.5°	212.6	179.2	135.0	112.9	109.2	110.4	96.5	82.6	81.4	87.6	102.2
70°	176.0	144.4	107.8	87.0	90.8	96.5	82.6	69.4	67.4	73.2	87.0
72.5°	140.0	112.9	82.6	64.4	75.0	82.0	67.4	54.8	53.6	58.6	71.9
75°	102.8	80.8	56.2	46.6	58.0	64.4	49.2	39.1	37.2	41.6	54.8
77.5°	63.7	45.4	35.4	27.8	39.8	42.8	25.8	22.8	22.0	25.2	34.6
80°	29.6	19.6	17.0	9.4	14.6	17.0	10.8	12.0	12.6	15.2	21.4
82.5°	8.2	3.2	0.6	0.0	0.0	5.0	2.6	5.0	6.4	9.4	13.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	3.2	5.6	10.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	5.0
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: P963632

CATALOG NUMBER: NAV-SB3A-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7	1267.7
2.5°	1175.7	1200.9	1241.3	1282.9	1323.9	1365.5	1405.9	1420.3
5°	1066.5	1124.5	1204.7	1290.4	1378.7	1468.3	1550.3	1587.5
7.5°	944.8	1028.1	1148.5	1282.9	1423.5	1564.1	1693.4	1753.4
10°	814.9	920.2	1057.7	1239.3	1441.1	1635.4	1813.2	1890.8
12.5°	691.3	801.7	953.7	1171.3	1427.3	1676.4	1890.2	1981.6
15°	587.8	685.6	849.5	1090.5	1382.5	1679.0	1926.8	2027.0
17.5°	510.2	573.9	743.6	1000.9	1323.9	1655.6	1939.4	2046.6
20°	471.8	489.4	606.1	886.1	1268.9	1633.5	1952.0	2065.0
22.5°	449.1	453.5	495.7	737.9	1203.4	1626.6	1974.2	2090.2
25°	430.8	432.0	443.4	584.7	1103.1	1622.2	2008.2	2124.8
27.5°	412.5	412.5	418.8	471.1	966.9	1603.2	2052.4	2166.4
30°	394.2	394.2	398.6	416.9	807.3	1566.0	2105.2	2220.7
32.5°	375.3	375.3	379.0	392.3	644.6	1519.4	2153.8	2275.6
35°	356.4	355.1	360.1	374.0	512.8	1460.1	2202.4	2334.8
37.5°	336.2	335.6	340.6	356.4	442.8	1391.3	2239.0	2415.6
40°	314.7	314.7	320.4	337.4	422.6	1304.9	2297.0	2531.6
42.5°	295.2	293.9	300.2	321.0	407.4	1222.3	2401.1	2700.7
45°	276.2	273.7	279.4	305.2	381.0	1193.3	2595.3	2950.5
47.5°	258.6	252.3	257.4	286.4	357.0	1301.8	2913.3	3296.7
50°	244.1	232.1	236.5	267.4	338.7	1537.0	3325.7	3756.5
52.5°	229.0	213.2	215.7	244.1	322.3	1761.0	3772.9	4363.2
55°	213.2	195.5	196.8	220.8	299.0	1794.4	4209.4	5190.7
57.5°	195.5	179.2	179.2	199.3	281.9	1555.3	4544.8	6217.4
60°	176.0	165.2	162.1	182.2	297.0	1097.5	4584.0	6879.7
62.5°	154.6	148.8	144.4	165.8	308.4	650.3	4269.2	6719.5
65°	130.0	128.6	125.5	182.2	259.8	384.1	3665.0	6228.2
67.5°	109.2	107.2	107.2	191.1	197.4	241.6	2863.4	5552.1
70°	94.0	87.0	87.0	144.4	119.8	167.2	1999.4	4822.3
72.5°	78.8	71.2	66.2	115.4	89.6	122.4	1249.5	4129.8
75°	63.0	57.4	51.0	76.4	66.8	92.8	725.9	3421.6
77.5°	45.4	42.8	36.0	56.2	48.6	66.8	432.0	2640.1
80°	23.4	24.0	22.8	32.2	32.8	45.4	246.0	1807.0
82.5°	13.8	10.8	12.0	15.8	19.0	25.8	92.8	1062.1
85°	8.8	5.6	5.6	7.6	9.4	10.0	28.4	430.8
87.5°	4.4	1.8	2.6	3.8	3.2	2.6	1.2	108.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)