

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: P963556

Luminaire Tested: **NAV-SB3A-740-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963556
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11242.2 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

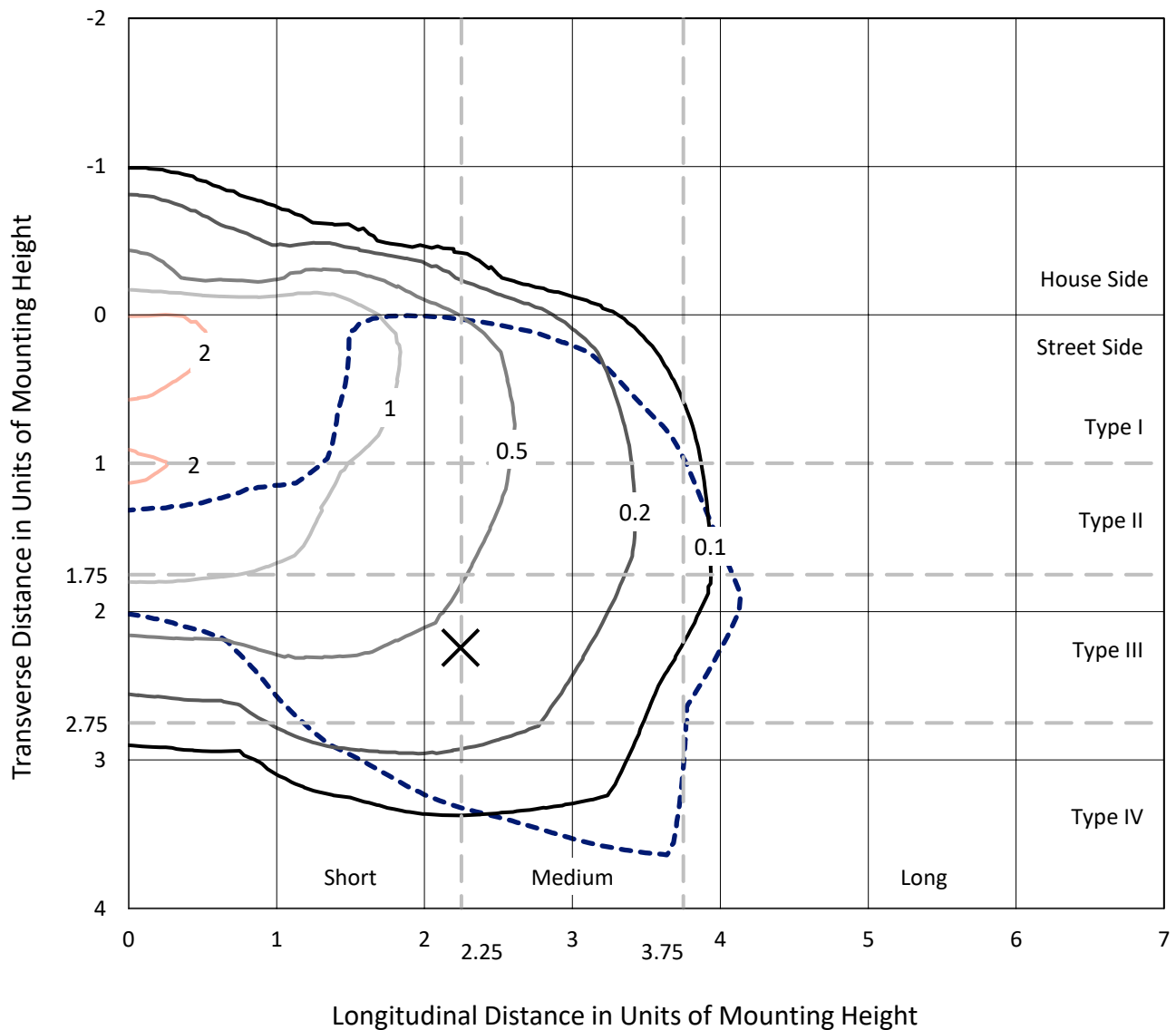
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P963556
CATALOG NUMBER: NAV-SB3A-740-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

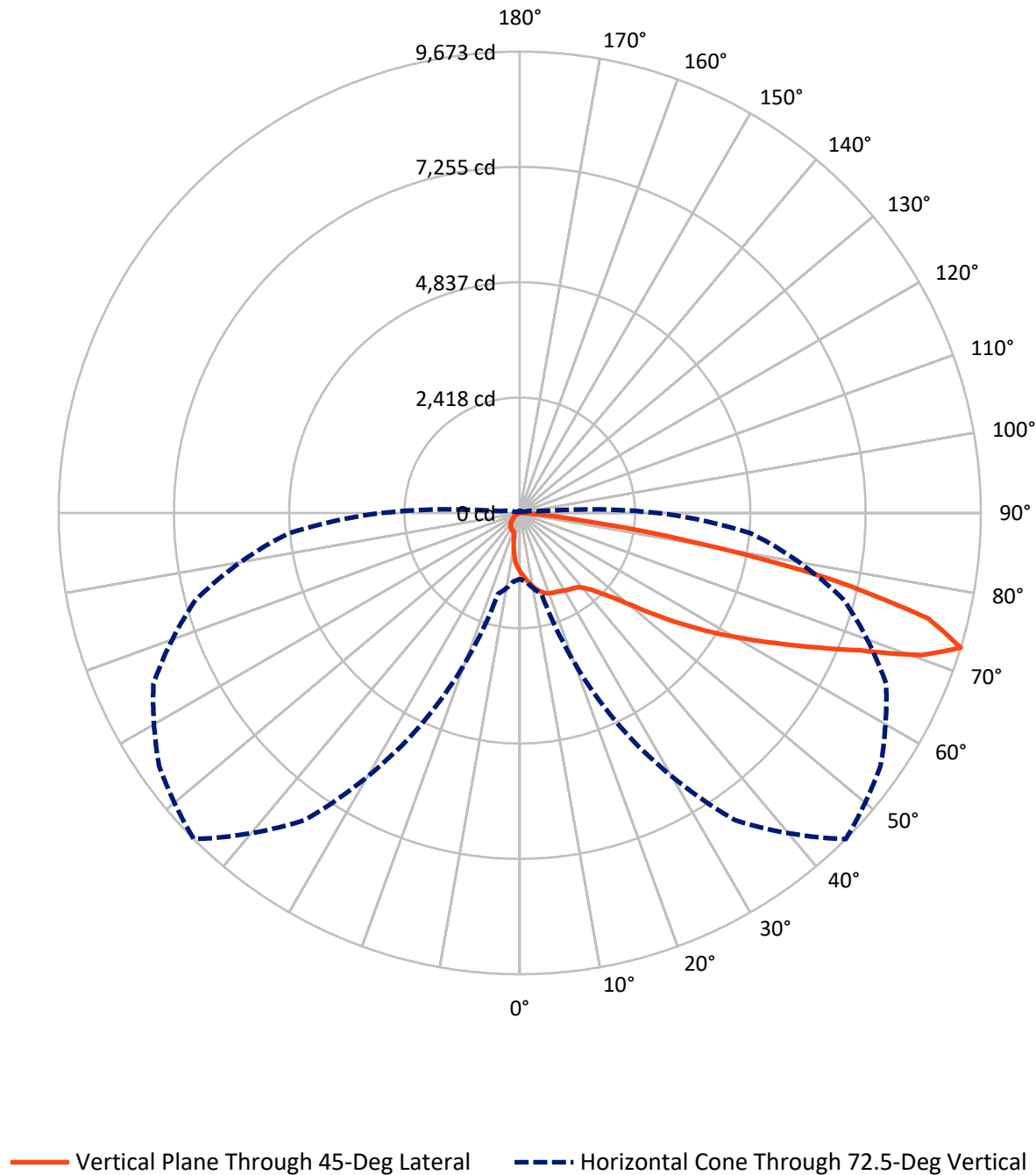
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type IV - Short - N/A

REPORT NUMBER: P963556
CATALOG NUMBER: NAV-SB3A-740-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P963556

CATALOG NUMBER: NAV-SB3A-740-U-T4W-HSS

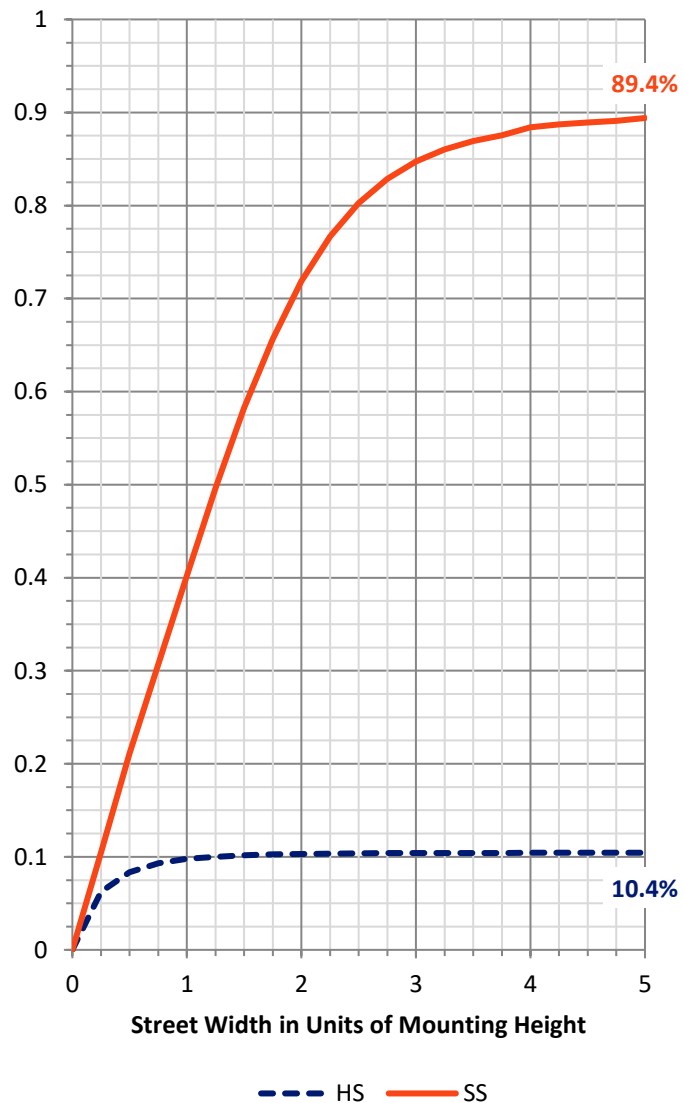
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1181.2	0.0	1181.2
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	10060.9	0.0	10060.9
	% Fixture	89.5	0.0	89.5
Total	Lumens	11242.2	0.0	11242.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.0	1.0
10°-20°	339.1	3.0
20°-30°	556.9	5.0
30°-40°	789.8	7.0
40°-50°	1305.5	11.6
50°-60°	2345.2	20.9
60°-70°	3256.5	29.0
70°-80°	2362.2	21.0
80°-90°	170.8	1.5
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°	11242.2	100.0
0°-180°	11242.2	100.0

Coefficient of Utilization



REPORT NUMBER: P963556

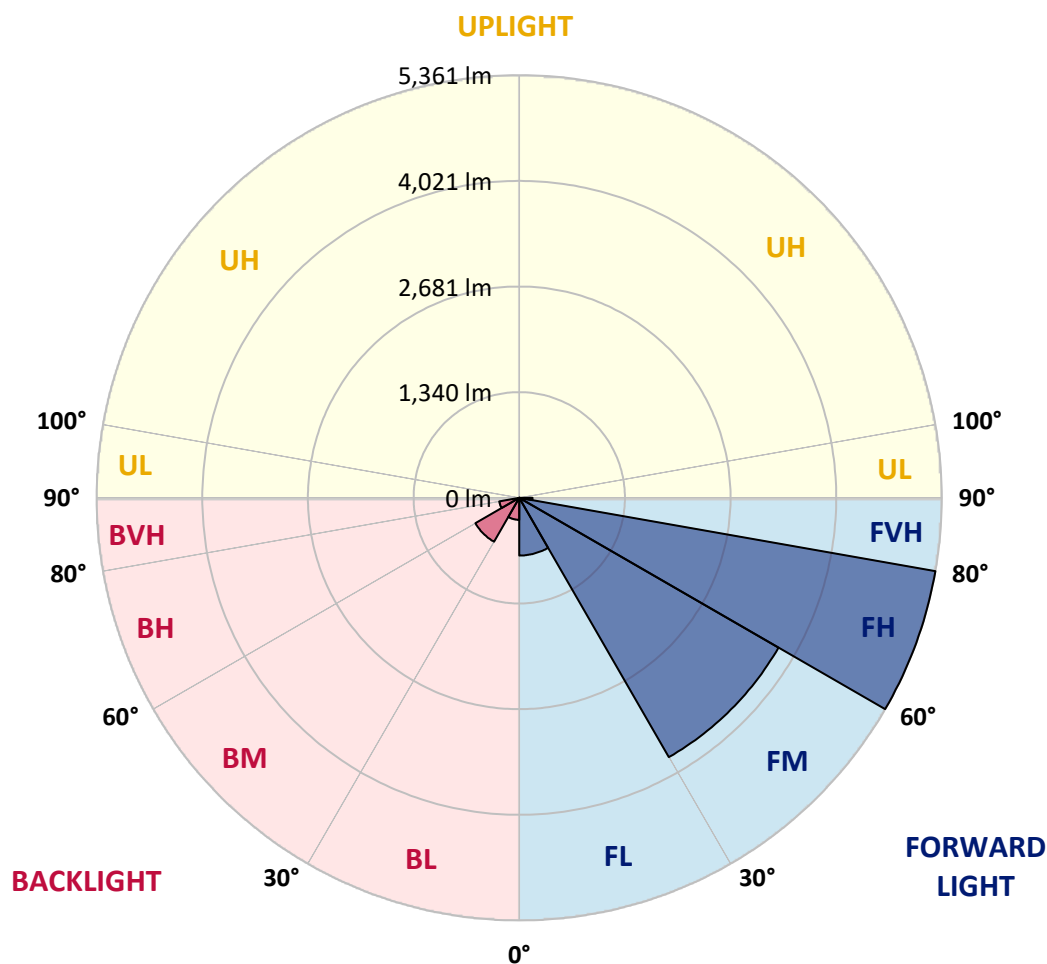
CATALOG NUMBER: NAV-SB3A-740-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	732.3	6.5			
FM	(30°-60°)	3798.2	33.8			
FH	(60°-80°)	5361.1	47.7			G3/7500
FVH	(80°-90°)	169.3	1.5			G2/225
BL	(0°-30°)	279.8	2.5	B1/500		
BM	(30°-60°)	642.4	5.7	B1/1000		
BH	(60°-80°)	257.6	2.3	B1/500		G1/500
BVH	(80°-90°)	1.4	0.0			G0/10
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: P963556

CATALOG NUMBER: NAV-SB3A-740-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6
2.5°	1345.2	1347.5	1345.9	1336.7	1321.4	1312.9	1308.3	1293.0	1283.0	1265.4	1246.9
5°	1468.7	1477.9	1472.5	1454.2	1425.0	1404.2	1398.1	1366.6	1338.2	1305.2	1266.9
7.5°	1599.9	1604.5	1594.6	1570.8	1531.7	1496.3	1491.0	1447.2	1402.0	1351.4	1299.1
10°	1713.5	1718.9	1703.6	1669.0	1624.5	1580.8	1573.1	1524.7	1471.0	1408.9	1342.1
12.5°	1808.6	1814.0	1794.1	1752.6	1703.6	1658.2	1650.6	1599.9	1540.9	1471.8	1388.9
15°	1880.8	1890.7	1863.9	1819.4	1766.5	1721.2	1717.4	1667.5	1609.9	1533.2	1444.9
17.5°	1923.0	1932.9	1907.6	1853.9	1808.6	1770.3	1765.7	1724.3	1670.5	1596.8	1499.4
20°	1929.9	1939.1	1912.2	1865.4	1827.9	1797.1	1794.9	1764.9	1725.8	1655.2	1558.5
22.5°	1909.2	1920.6	1896.1	1858.5	1832.5	1816.3	1813.2	1796.4	1774.2	1714.3	1613.8
25°	1887.7	1896.9	1878.5	1845.5	1831.7	1830.1	1832.5	1829.4	1824.8	1774.2	1678.2
27.5°	1886.2	1896.1	1875.4	1844.0	1836.3	1852.4	1854.7	1869.3	1873.1	1828.6	1740.3
30°	1899.2	1906.1	1886.2	1853.2	1849.3	1886.2	1886.9	1913.1	1919.1	1874.6	1801.7
32.5°	1927.6	1935.3	1915.3	1866.9	1861.6	1913.1	1915.3	1949.9	1959.8	1923.7	1866.2
35°	1994.3	2003.6	1980.5	1905.4	1886.2	1938.4	1945.2	1985.9	2005.8	1975.9	1932.9
37.5°	2160.9	2134.0	2102.6	1982.9	1942.2	1978.2	1989.7	2037.3	2072.7	2038.1	2012.8
40°	2574.5	2490.0	2391.8	2114.9	2040.4	2063.4	2072.7	2120.2	2168.6	2134.8	2122.5
42.5°	3195.2	3095.5	2937.4	2418.7	2188.5	2200.1	2206.9	2248.3	2316.6	2289.7	2292.8
45°	3748.5	3712.4	3551.3	2937.4	2465.5	2408.8	2417.2	2438.7	2539.2	2529.2	2549.2
47.5°	4173.7	4152.9	4028.7	3532.9	2933.7	2664.3	2688.1	2698.0	2843.0	2878.3	2932.1
50°	4500.6	4492.9	4381.6	4062.4	3545.2	3041.1	3049.5	3028.0	3245.1	3332.6	3434.7
52.5°	4809.0	4835.1	4753.0	4554.3	4198.2	3534.4	3532.9	3431.6	3724.7	3856.8	4030.9
55°	5087.6	5096.8	5105.2	5056.1	4855.0	4096.1	4081.6	3915.8	4281.1	4417.6	4606.5
57.5°	5349.3	5353.1	5428.3	5528.8	5538.8	4699.3	4672.5	4473.7	4888.8	4986.3	5102.1
60°	5525.0	5542.6	5701.5	5980.8	6102.7	5321.6	5307.0	5104.5	5507.3	5552.6	5531.1
62.5°	5271.8	5379.2	5779.8	6333.8	6635.3	6011.4	6004.6	5814.2	6158.0	6121.2	5937.0
65°	4267.3	4449.1	5153.6	6572.4	7157.9	6781.9	6791.9	6589.3	6826.4	6706.7	6267.0
67.5°	2985.0	3176.9	4010.2	6591.6	7741.8	7686.6	7744.2	7426.4	7536.2	7267.7	6345.3
70°	2064.1	2163.2	2705.7	6178.8	8196.9	8932.8	8931.2	8454.7	8242.1	7523.2	5946.2
72.5°	1388.2	1439.5	1757.3	4901.9	7862.4	9673.3	9628.7	9240.5	8480.0	7035.9	4858.1
75°	585.5	623.1	813.4	2754.8	6220.2	8850.0	8729.4	8166.2	7534.7	5540.3	3031.0
77.5°	185.7	201.8	320.7	986.0	3426.3	6652.2	6524.8	5099.9	5050.0	2779.4	1108.0
80°	88.3	102.8	180.3	396.0	1348.3	3618.0	3600.4	2313.6	2172.4	750.5	222.5
82.5°	38.3	45.3	99.7	211.8	603.1	1290.7	1316.8	787.3	651.5	284.6	68.3
85°	12.3	16.1	46.0	97.5	254.7	320.7	316.9	187.3	262.4	155.0	23.8
87.5°	0.0	0.0	15.4	22.2	26.1	18.4	20.7	16.1	72.9	42.9	8.4
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: P963556

CATALOG NUMBER: NAV-SB3A-740-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6
2.5°	1237.8	1225.5	1204.0	1184.1	1166.3	1148.7	1138.0	1122.7	1121.1	1121.1	1124.9
5°	1246.2	1226.2	1187.9	1147.2	1100.4	1055.9	1011.4	968.4	954.6	944.6	949.3
7.5°	1270.7	1239.3	1178.6	1101.2	1012.2	914.7	846.4	772.7	744.4	729.0	731.3
10°	1306.1	1263.1	1171.0	1035.1	890.9	758.2	660.7	580.9	550.2	537.1	537.1
12.5°	1345.2	1292.2	1157.1	953.0	758.2	599.3	504.2	467.3	462.7	462.7	462.7
15°	1391.9	1327.5	1133.3	856.4	619.3	474.3	440.4	442.0	446.6	449.7	449.7
17.5°	1440.3	1365.1	1095.8	748.1	496.5	426.6	427.4	429.7	433.6	436.6	436.6
20°	1492.5	1402.7	1045.9	633.0	425.9	412.9	415.1	417.5	420.6	422.1	422.8
22.5°	1548.6	1438.1	986.9	520.3	402.1	401.3	402.1	404.4	408.3	408.3	409.8
25°	1608.4	1477.1	919.3	438.2	389.8	389.8	391.3	392.9	396.0	396.0	396.7
27.5°	1669.7	1513.2	847.9	395.1	379.0	378.3	378.3	380.6	382.1	382.9	383.7
30°	1737.3	1555.4	776.5	386.0	370.6	366.8	364.5	366.0	367.6	368.3	369.8
32.5°	1806.4	1596.1	712.9	389.8	362.2	355.3	347.6	346.0	346.0	349.1	351.5
35°	1883.1	1640.6	663.8	402.8	357.6	338.5	326.2	319.2	320.0	324.6	326.9
37.5°	1975.2	1694.3	627.7	414.4	354.5	319.2	299.3	290.8	285.5	290.8	289.3
40°	2095.6	1773.4	601.6	423.5	350.7	296.9	270.1	256.2	246.3	249.4	247.8
42.5°	2272.9	1897.7	591.6	424.4	342.2	270.9	240.2	221.8	207.2	208.0	204.9
45°	2521.5	2094.1	643.1	414.4	323.8	242.5	208.7	184.2	175.0	172.6	169.5
47.5°	2862.2	2380.4	762.0	393.7	296.9	214.8	178.0	157.3	150.4	146.6	144.2
50°	3318.8	2747.9	894.0	370.6	270.1	188.8	152.7	139.7	135.1	131.2	130.5
52.5°	3848.3	3120.8	1002.1	347.6	243.2	165.7	136.6	128.9	125.0	122.0	121.3
55°	4334.0	3377.9	996.0	323.1	217.2	147.3	125.0	120.4	115.8	112.9	111.3
57.5°	4636.4	3414.0	821.0	296.2	187.3	132.7	114.3	111.3	105.9	102.1	101.3
60°	4775.3	3208.4	575.5	260.9	157.3	118.9	102.8	101.3	94.4	89.0	87.4
62.5°	4800.6	2826.1	383.7	217.2	131.2	105.9	91.3	89.0	79.8	70.6	66.0
65°	4697.8	2279.8	265.5	169.5	112.0	92.0	78.3	73.7	63.7	54.5	51.5
67.5°	4372.4	1600.7	184.9	122.0	95.1	72.9	62.1	60.6	53.0	45.3	42.9
70°	3776.2	912.4	123.5	91.3	75.2	49.9	49.1	50.6	42.9	36.8	33.7
72.5°	2895.2	417.5	76.8	66.7	51.5	33.7	39.2	39.9	33.0	27.7	24.6
75°	1704.3	178.8	48.4	42.9	26.1	22.2	28.4	29.1	22.2	17.6	15.4
77.5°	580.2	67.5	30.6	25.3	13.0	12.3	18.4	18.4	12.3	6.9	5.3
80°	132.0	25.3	15.4	9.9	6.1	5.3	6.1	5.3	3.1	0.7	0.0
82.5°	37.6	9.9	6.1	3.8	2.3	2.3	0.7	0.0	0.0	0.0	0.0
85°	10.8	4.6	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

(END OF REPORT)