

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: P963539

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963539
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-740-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 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: 11138.7 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - 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

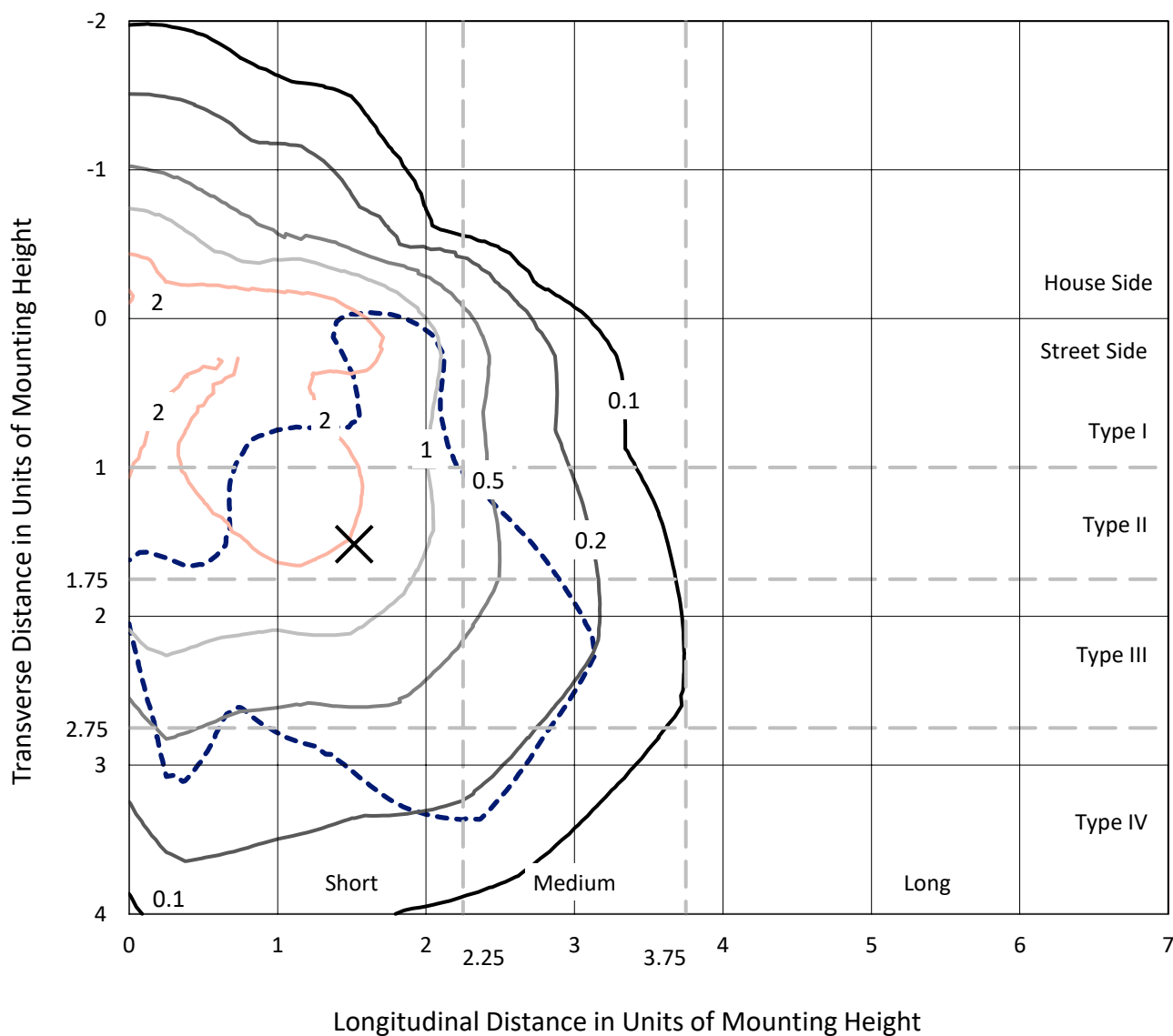


REPORT NUMBER: P963539

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

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

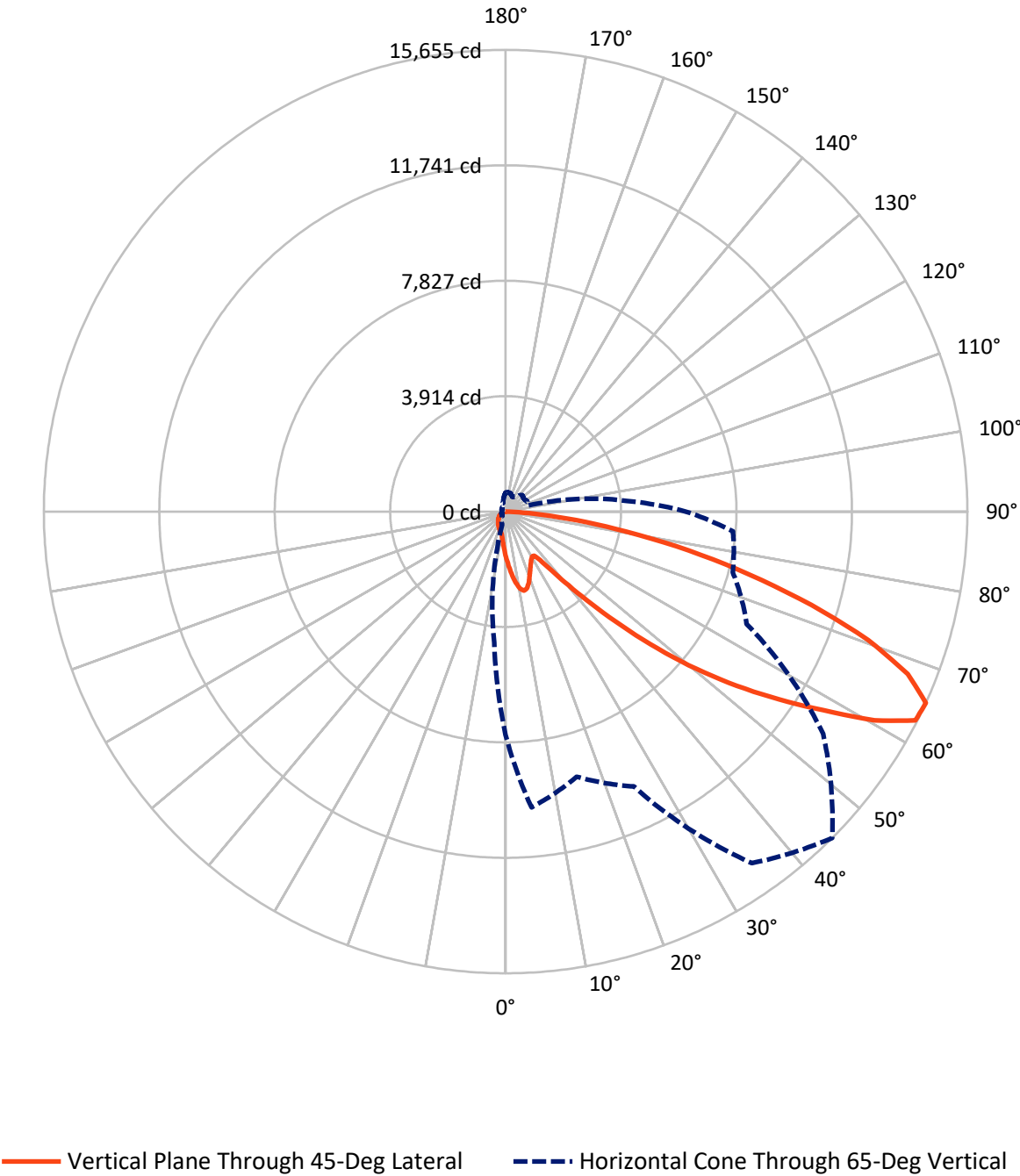


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc

Type IV - Short - N/A

REPORT NUMBER: P963539
CATALOG NUMBER: NAV-SB3A-740-U-SLL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P963539

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

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2214.0	0.0	2214.0
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	8924.6	0.0	8924.6
	% Fixture	80.1	0.0	80.1
Total	Lumens	11138.7	0.0	11138.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.8	1.4
10°-20°	455.2	4.1
20°-30°	670.6	6.0
30°-40°	861.5	7.7
40°-50°	1393.4	12.5
50°-60°	2443.4	21.9
60°-70°	3057.4	27.4
70°-80°	1786.6	16.0
80°-90°	318.7	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°	11138.7	100.0
0°-180°	11138.7	100.0

Coefficient of Utilization



REPORT NUMBER: P963539

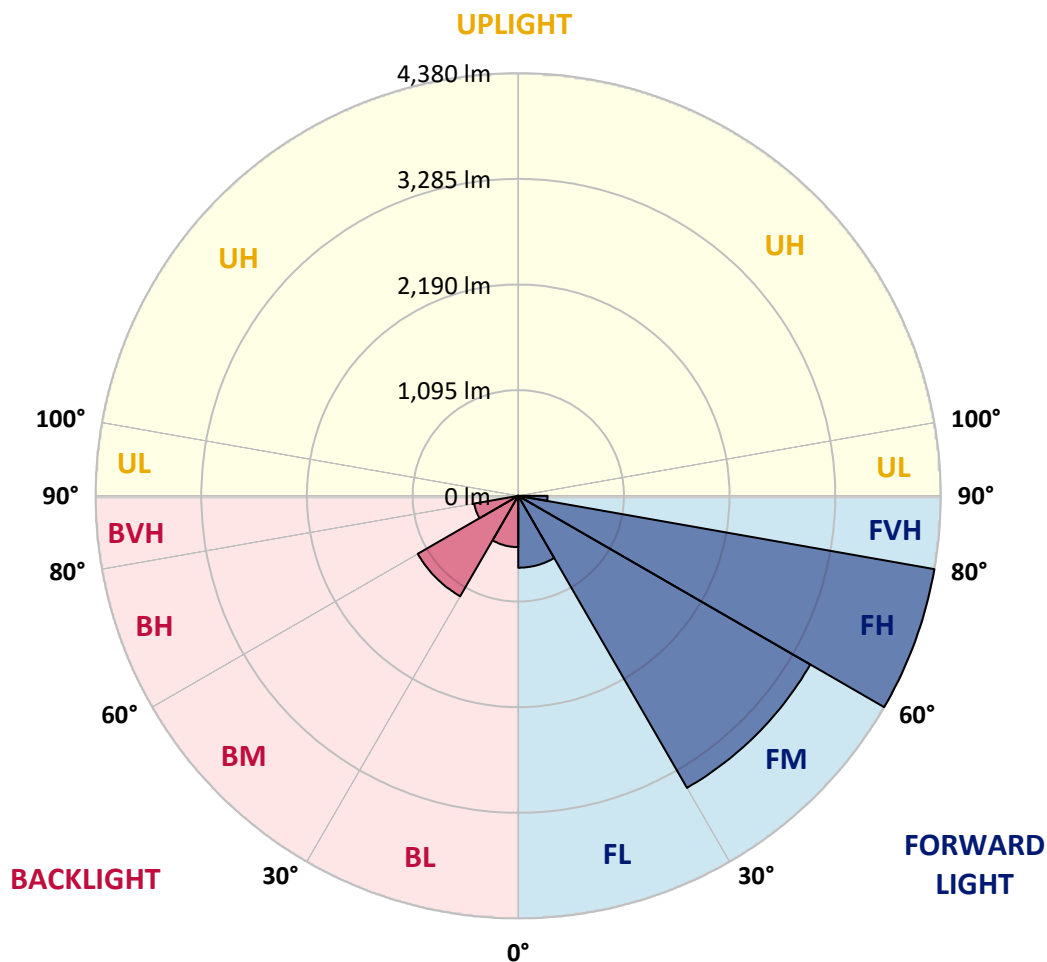
CATALOG NUMBER: NAV-SB3A-740-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	745.3	6.7			
FM	(30°-60°)	3495.5	31.4			
FH	(60°-80°)	4380.1	39.3			G2/5000
FVH	(80°-90°)	303.8	2.7			G3/500
BL	(0°-30°)	532.3	4.8	B2/1000		
BM	(30°-60°)	1202.9	10.8	B2/2500		
BH	(60°-80°)	463.9	4.2	B1/500		G1/500
BVH	(80°-90°)	14.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



REPORT NUMBER: P963539

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3
2.5°	1728.0	1741.1	1770.3	1785.6	1809.4	1810.9	1810.9	1790.2	1789.4	1747.2	1742.6
5°	1931.4	1962.1	2031.1	2102.5	2117.9	2121.6	2114.1	2072.5	2041.9	1959.8	1942.2
7.5°	2133.2	2192.3	2297.4	2392.6	2423.3	2423.3	2404.9	2337.3	2274.4	2155.5	2111.0
10°	2300.5	2374.9	2517.6	2624.3	2659.6	2651.9	2614.4	2529.2	2442.5	2298.2	2239.8
12.5°	2411.0	2494.6	2651.2	2737.1	2773.1	2753.3	2710.2	2627.4	2536.1	2384.1	2318.1
15°	2466.3	2553.7	2689.5	2734.8	2724.9	2704.1	2698.7	2658.8	2589.8	2447.8	2375.6
17.5°	2490.0	2571.3	2665.7	2637.3	2553.0	2536.8	2590.6	2641.2	2624.3	2503.0	2435.5
20°	2512.3	2580.5	2608.9	2483.1	2335.8	2321.2	2424.0	2568.2	2641.9	2554.5	2492.3
22.5°	2542.9	2585.2	2526.8	2320.4	2161.6	2127.8	2241.4	2458.6	2647.3	2619.7	2557.6
25°	2585.2	2596.6	2436.3	2166.2	2006.5	1972.8	2078.7	2336.6	2638.1	2690.3	2637.3
27.5°	2635.8	2612.0	2349.6	2037.3	1883.0	1851.6	1957.4	2219.1	2612.0	2760.8	2723.3
30°	2701.8	2632.0	2263.6	1937.6	1794.8	1771.8	1873.8	2117.9	2579.8	2850.6	2829.9
32.5°	2768.5	2640.4	2183.9	1879.2	1774.9	1783.3	1866.9	2063.3	2544.5	2936.6	2946.6
35°	2840.7	2667.3	2144.7	1936.7	1941.4	2015.0	2049.6	2114.1	2539.1	3053.3	3092.3
37.5°	2938.9	2727.1	2191.6	2223.0	2382.6	2535.2	2506.9	2361.9	2601.2	3227.4	3300.3
40°	3080.1	2832.3	2395.6	2710.2	3037.9	3285.7	3177.5	2812.3	2791.6	3478.3	3587.3
42.5°	3285.7	2999.6	2757.9	3305.7	3861.3	4269.4	3979.5	3393.2	3124.6	3836.7	3975.6
45°	3589.7	3270.4	3196.0	3934.2	4876.4	5519.4	4916.3	4012.4	3591.2	4379.2	4488.2
47.5°	4010.9	3668.7	3606.5	4596.4	6110.3	6942.1	5955.4	4586.4	4122.1	5119.0	5144.3
50°	4570.3	4205.1	3995.6	5320.8	7463.1	8392.4	6993.5	5140.4	4730.7	6022.8	5993.7
52.5°	5308.5	4953.2	4449.0	6010.6	8854.4	9811.9	8036.3	5626.9	5485.7	7071.8	7011.9
55°	6315.2	6078.9	5069.0	6669.0	10244.8	11239.9	9038.4	6085.7	6483.2	8318.0	7955.7
57.5°	7564.4	7733.2	5962.9	7432.5	11494.8	12711.7	10045.2	6727.3	7778.5	9711.5	8503.6
60°	8370.2	9933.2	7674.9	8561.2	12915.1	14376.0	11424.9	7947.3	9139.7	10210.9	8399.3
62.5°	8175.2	10633.0	9725.2	10002.3	14221.1	15586.1	12776.9	9172.7	9396.1	9475.1	7595.1
65°	7577.4	10068.3	9307.0	10282.3	14551.8	15654.5	13138.3	9014.7	7970.3	7735.6	6104.9
67.5°	6754.9	9398.3	8313.4	9539.6	13954.0	14699.9	12465.4	7974.2	6159.4	5804.9	4429.1
70°	5867.1	8657.2	7661.1	8706.2	12814.6	13036.4	11321.3	7013.5	4530.4	3920.3	2842.2
72.5°	5024.5	7885.1	7214.6	7852.2	11294.5	10835.6	9831.9	6164.0	3298.8	2827.7	2020.4
75°	4162.8	6746.4	6578.3	6837.8	9295.5	8535.1	8169.0	5103.6	2589.0	2045.7	1394.2
77.5°	3212.0	5271.6	5658.3	5475.8	6543.1	6339.7	6332.0	3835.1	1891.5	1365.1	874.0
80°	2198.4	3674.0	4420.6	3862.8	4246.5	4142.8	4769.0	2572.9	1372.0	821.8	486.5
82.5°	1292.2	2236.8	3077.0	1870.0	2348.1	2410.2	2840.0	1251.5	807.3	189.5	105.9
85°	524.1	883.2	1203.1	732.1	1132.6	955.3	1078.1	351.5	224.8	4.6	0.0
87.5°	132.0	282.4	197.9	82.1	131.2	120.4	95.1	42.9	9.2	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: P963539

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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3
2.5°	1712.7	1695.0	1651.3	1607.6	1572.2	1524.7	1493.2	1455.6	1419.6	1387.3	1381.2
5°	1893.8	1835.5	1755.6	1682.7	1608.3	1536.2	1464.8	1389.7	1320.6	1278.4	1251.5
7.5°	2041.1	1938.3	1832.4	1739.5	1649.7	1565.4	1471.0	1379.6	1271.5	1213.9	1161.7
10°	2150.9	2015.8	1876.9	1770.3	1679.7	1597.6	1517.8	1425.7	1295.3	1223.1	1144.8
12.5°	2223.0	2062.6	1899.9	1778.0	1676.6	1612.9	1577.7	1541.6	1411.9	1327.5	1213.9
15°	2272.8	2095.6	1916.0	1760.2	1636.0	1589.2	1624.4	1665.9	1583.0	1485.5	1337.4
17.5°	2327.4	2138.6	1922.9	1712.7	1557.0	1537.0	1628.3	1724.3	1720.4	1623.7	1478.7
20°	2384.9	2176.2	1918.4	1636.0	1461.0	1478.7	1595.3	1706.5	1753.4	1701.2	1572.2
22.5°	2444.0	2212.3	1900.7	1536.2	1371.2	1426.5	1543.1	1640.6	1695.9	1679.7	1581.5
25°	2518.4	2262.9	1874.6	1428.7	1296.8	1373.5	1482.5	1561.5	1599.9	1599.1	1531.7
27.5°	2607.4	2330.4	1860.8	1342.0	1243.8	1313.6	1410.4	1480.9	1507.8	1507.8	1454.1
30°	2711.0	2410.2	1845.4	1285.2	1213.2	1251.5	1326.8	1395.7	1422.6	1422.6	1377.4
32.5°	2826.1	2487.0	1808.6	1250.8	1190.1	1190.9	1238.5	1301.4	1333.6	1338.2	1306.1
35°	2964.2	2569.1	1728.0	1223.1	1163.3	1131.8	1154.9	1207.0	1245.4	1255.3	1235.4
37.5°	3145.3	2669.6	1612.9	1182.4	1121.9	1069.7	1075.0	1114.9	1157.1	1172.5	1159.5
40°	3388.5	2787.7	1493.2	1124.1	1063.5	1001.4	999.1	1028.3	1069.7	1086.5	1079.6
42.5°	3710.1	2929.7	1378.9	1068.2	992.9	929.3	925.4	948.4	984.5	1002.1	999.1
45°	4121.4	3103.9	1280.7	1024.4	923.8	861.0	859.5	878.6	910.1	928.4	924.7
47.5°	4693.1	3278.1	1213.9	1001.4	869.4	804.9	808.0	824.9	853.3	866.3	861.0
50°	5438.1	3331.0	1180.2	1001.4	840.2	755.0	770.4	784.2	805.8	813.3	806.5
52.5°	6153.3	3156.1	1149.4	1007.5	844.1	712.9	745.9	755.8	774.3	777.4	767.3
55°	6503.9	2713.3	1107.3	1009.0	867.9	676.8	725.9	744.4	751.2	750.5	733.6
57.5°	6383.5	2193.8	1035.9	1002.9	884.0	653.7	701.3	736.7	741.3	734.3	702.8
60°	5960.7	1615.3	981.4	957.7	877.8	646.9	663.8	719.8	726.6	717.5	666.0
62.5°	5251.7	1121.0	939.2	857.9	851.0	644.5	604.6	683.0	699.8	686.7	611.6
65°	4134.4	791.9	808.7	752.0	792.6	632.3	543.2	638.5	661.4	641.4	535.6
67.5°	2797.7	571.6	655.3	681.4	698.2	604.6	498.8	587.7	618.5	592.3	447.3
70°	1510.8	401.3	432.8	574.0	593.2	557.1	458.9	536.4	571.6	543.2	364.5
72.5°	892.4	288.5	303.1	461.1	494.2	490.4	414.4	476.5	519.5	485.7	296.2
75°	491.9	195.0	216.4	334.6	401.3	378.3	356.1	403.6	447.3	414.4	228.7
77.5°	220.3	116.6	150.4	219.5	315.4	259.3	275.5	314.6	355.3	320.7	152.7
80°	85.2	65.2	99.7	119.7	229.4	143.5	177.2	231.8	260.9	233.3	92.9
82.5°	10.8	29.1	42.9	46.8	133.6	76.0	102.8	145.8	143.5	124.3	46.8
85°	0.0	5.3	6.1	3.1	57.5	27.7	33.7	47.6	44.5	33.7	3.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	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: P963539

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

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3
2.5°	1343.6	1316.0	1302.2	1290.7	1301.4	1307.6	1307.6	1333.6	1349.0	1355.2	1398.1
5°	1184.0	1132.6	1098.1	1077.4	1084.2	1091.9	1100.3	1133.3	1155.6	1170.1	1237.0
7.5°	1058.2	979.9	931.5	906.2	910.1	915.4	922.3	954.6	976.8	996.0	1070.4
10°	996.0	885.5	821.8	791.1	785.8	782.7	780.3	799.6	816.4	831.8	905.5
12.5°	999.1	844.8	767.3	729.7	713.6	695.3	680.6	683.7	694.4	713.6	760.4
15°	1038.2	831.8	738.9	692.2	665.3	643.8	626.2	622.3	626.2	629.2	658.4
17.5°	1091.1	830.2	714.4	656.1	628.4	610.8	594.7	589.3	590.1	593.9	601.6
20°	1133.3	825.6	686.7	621.6	597.0	581.7	565.5	560.2	561.7	562.4	570.9
22.5°	1155.6	818.8	656.1	587.0	566.3	550.9	536.4	535.6	535.6	540.2	546.3
25°	1155.6	804.2	628.4	554.0	535.6	521.8	504.1	507.2	508.7	514.9	524.1
27.5°	1128.0	776.5	606.2	525.6	506.5	492.6	476.5	480.3	482.7	489.5	501.1
30°	1092.6	743.5	580.9	498.8	476.5	466.6	452.7	454.3	457.4	465.0	478.1
32.5°	1055.1	704.4	560.2	471.9	449.7	442.0	426.6	429.0	432.0	440.4	455.0
35°	1013.6	658.4	535.6	447.3	425.1	418.9	401.3	402.8	407.4	416.7	431.2
37.5°	970.0	620.7	511.1	423.5	400.6	394.4	376.0	377.5	382.9	393.6	407.4
40°	926.9	583.9	484.9	398.2	375.3	369.8	349.9	351.5	357.6	369.1	383.7
42.5°	880.2	555.6	451.2	372.2	347.6	342.2	323.8	326.2	333.0	344.5	359.2
45°	824.1	537.1	413.6	347.6	320.0	314.6	297.8	302.4	310.0	321.5	336.8
47.5°	766.6	529.4	382.1	321.5	291.6	287.0	273.2	280.8	289.3	298.5	315.4
50°	711.3	519.5	349.9	296.9	267.0	262.4	253.2	263.2	271.6	280.0	296.2
52.5°	648.4	498.0	320.7	275.5	246.3	244.8	240.2	249.4	257.1	264.8	278.6
55°	583.2	463.5	295.4	256.2	228.7	230.2	227.9	235.5	241.7	248.7	260.9
57.5°	526.4	419.7	275.5	235.5	213.3	217.9	214.8	218.7	222.5	230.9	241.0
60°	468.8	367.6	253.2	211.0	197.9	203.4	195.0	194.1	195.7	197.9	216.4
62.5°	391.3	313.0	225.6	189.5	181.1	183.4	167.3	155.0	155.0	157.3	184.9
65°	314.6	262.4	195.0	165.0	158.1	156.5	133.6	116.6	115.1	122.0	145.8
67.5°	258.6	217.9	164.2	137.4	132.7	134.3	117.4	100.6	99.0	106.7	124.3
70°	214.1	175.7	131.2	105.9	110.5	117.4	100.6	84.4	82.1	89.0	105.9
72.5°	170.4	137.4	100.6	78.3	91.3	99.7	82.1	66.7	65.2	71.3	87.4
75°	125.0	98.2	68.3	56.8	70.6	78.3	59.9	47.6	45.3	50.6	66.7
77.5°	77.5	55.2	42.9	33.7	48.4	52.2	31.5	27.7	26.9	30.6	42.2
80°	36.1	23.8	20.7	11.5	17.6	20.7	13.0	14.6	15.4	18.4	26.1
82.5°	9.9	3.8	0.7	0.0	0.0	6.1	3.1	6.1	7.7	11.5	16.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.8	6.9	12.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	6.1
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: P963539

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

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3	1542.3
2.5°	1430.3	1461.0	1510.1	1560.8	1610.7	1661.3	1710.4	1728.0
5°	1297.5	1368.2	1465.6	1570.0	1677.4	1786.4	1886.1	1931.4
7.5°	1149.4	1250.8	1397.3	1560.8	1731.8	1903.0	2060.4	2133.2
10°	991.4	1119.5	1286.8	1507.8	1753.4	1989.7	2206.1	2300.5
12.5°	841.0	975.3	1160.2	1425.0	1736.5	2039.5	2299.7	2411.0
15°	715.1	834.1	1033.6	1326.8	1682.0	2042.6	2344.2	2466.3
17.5°	620.7	698.2	904.7	1217.8	1610.7	2014.2	2359.5	2490.0
20°	574.0	595.4	737.4	1078.1	1543.9	1987.4	2374.9	2512.3
22.5°	546.3	551.8	603.1	897.8	1464.1	1979.0	2401.8	2542.9
25°	524.1	525.6	539.5	711.3	1342.0	1973.6	2443.2	2585.2
27.5°	501.8	501.8	509.5	573.2	1176.3	1950.6	2496.9	2635.8
30°	479.6	479.6	484.9	507.2	982.2	1905.3	2561.4	2701.8
32.5°	456.5	456.5	461.1	477.2	784.2	1848.5	2620.4	2768.5
35°	433.6	432.0	438.2	455.0	623.8	1776.4	2679.6	2840.7
37.5°	409.0	408.3	414.4	433.6	538.6	1692.8	2724.0	2938.9
40°	382.9	382.9	389.8	410.5	514.1	1587.6	2794.7	3080.1
42.5°	359.2	357.6	365.2	390.5	495.7	1487.1	2921.2	3285.7
45°	336.1	333.0	339.9	371.4	463.5	1451.8	3157.6	3589.7
47.5°	314.6	306.9	313.0	348.4	434.3	1583.8	3544.3	4010.9
50°	296.9	282.4	287.7	325.3	412.0	1870.0	4046.2	4570.3
52.5°	278.6	259.3	262.4	296.9	392.1	2142.5	4590.3	5308.5
55°	259.3	237.9	239.4	268.5	363.7	2183.0	5121.2	6315.2
57.5°	237.9	217.9	217.9	242.5	343.0	1892.3	5529.5	7564.4
60°	214.1	201.0	197.2	221.8	361.4	1335.2	5577.0	8370.2
62.5°	188.0	181.1	175.7	201.8	375.3	791.1	5194.1	8175.2
65°	158.1	156.5	152.7	221.8	316.1	467.3	4459.0	7577.4
67.5°	132.7	130.5	130.5	232.5	240.2	293.9	3483.7	6754.9
70°	114.3	105.9	105.9	175.7	145.8	203.4	2432.4	5867.1
72.5°	95.9	86.7	80.6	140.4	109.0	148.8	1520.1	5024.5
75°	76.8	69.8	62.1	92.9	81.4	112.7	883.2	4162.8
77.5°	55.2	52.2	43.8	68.3	59.0	81.4	525.6	3212.0
80°	28.4	29.1	27.7	39.2	39.9	55.2	299.3	2198.4
82.5°	16.9	13.0	14.6	19.2	23.1	31.5	112.7	1292.2
85°	10.8	6.9	6.9	9.2	11.5	12.3	34.5	524.1
87.5°	5.3	2.3	3.1	4.6	3.8	3.1	1.5	132.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)