

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: P959319

Luminaire Tested: **NAV-SB1A-740-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959319
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3918.6 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

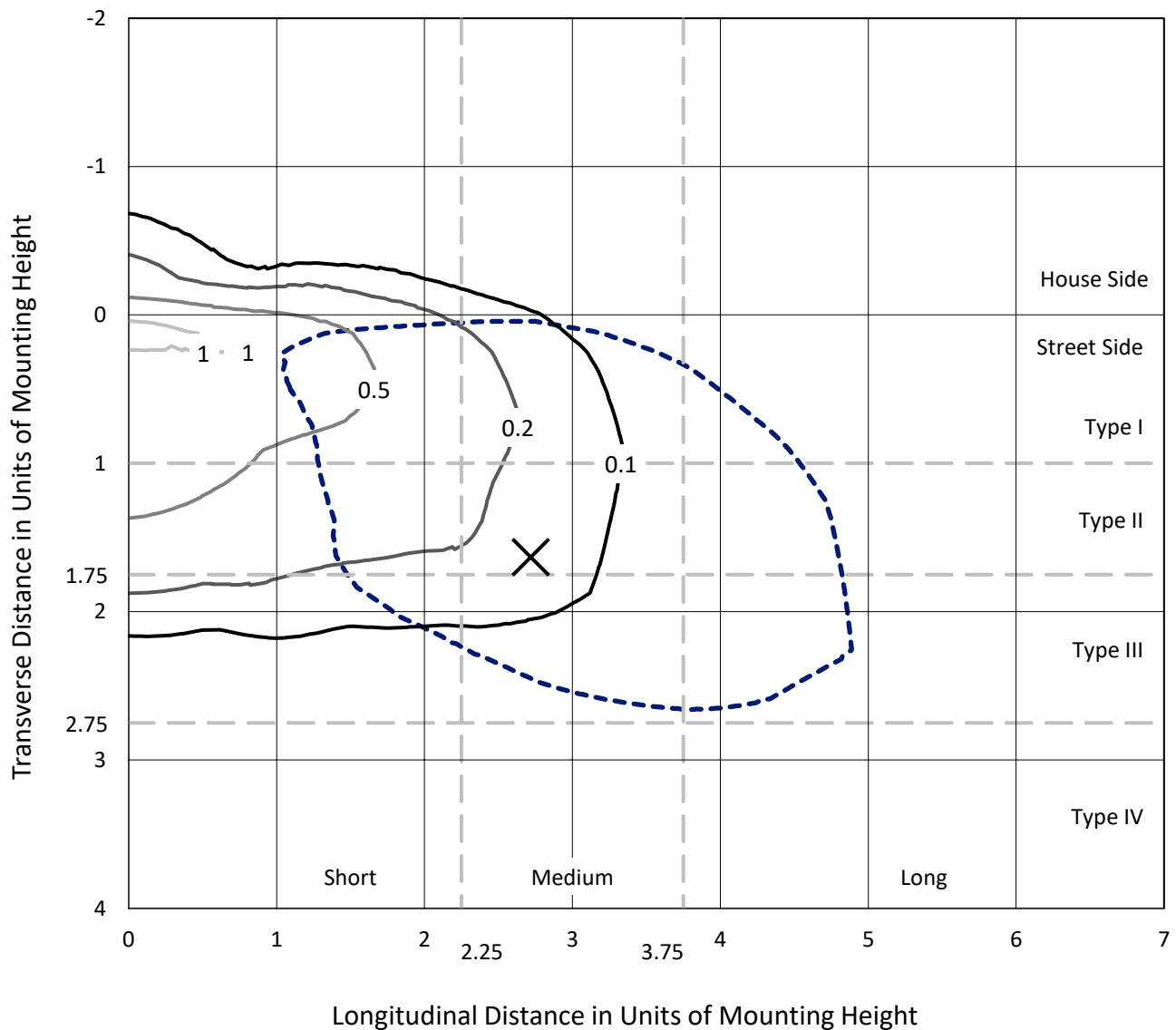
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959319
 CATALOG NUMBER: NAV-SB1A-740-U-SL3-HSS

Iso-Footcandle Lines of Horizontal Illumination

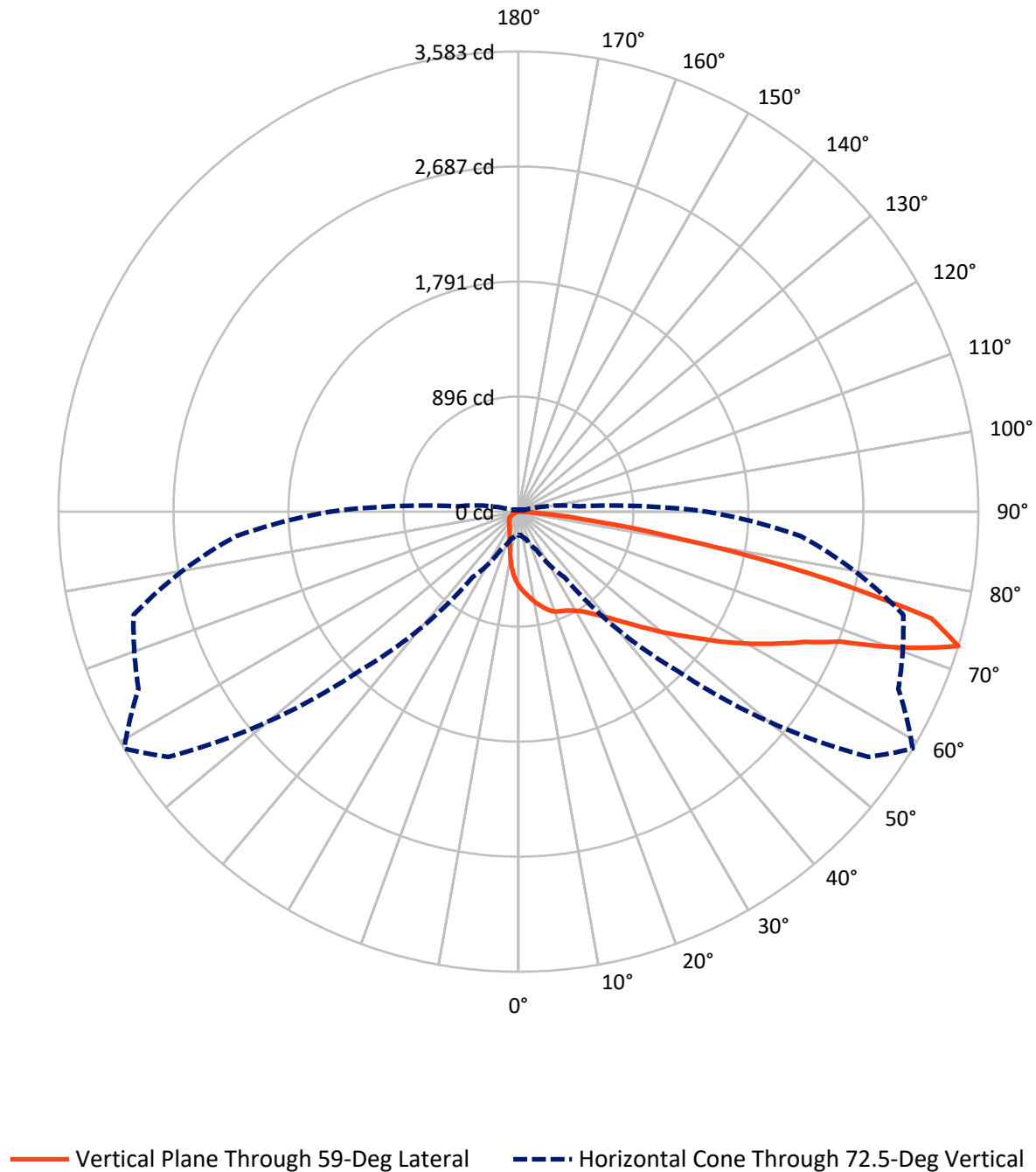
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Medium - N/A

REPORT NUMBER: P959319
CATALOG NUMBER: NAV-SB1A-740-U-SL3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P959319

CATALOG NUMBER: NAV-SB1A-740-U-SL3-HSS

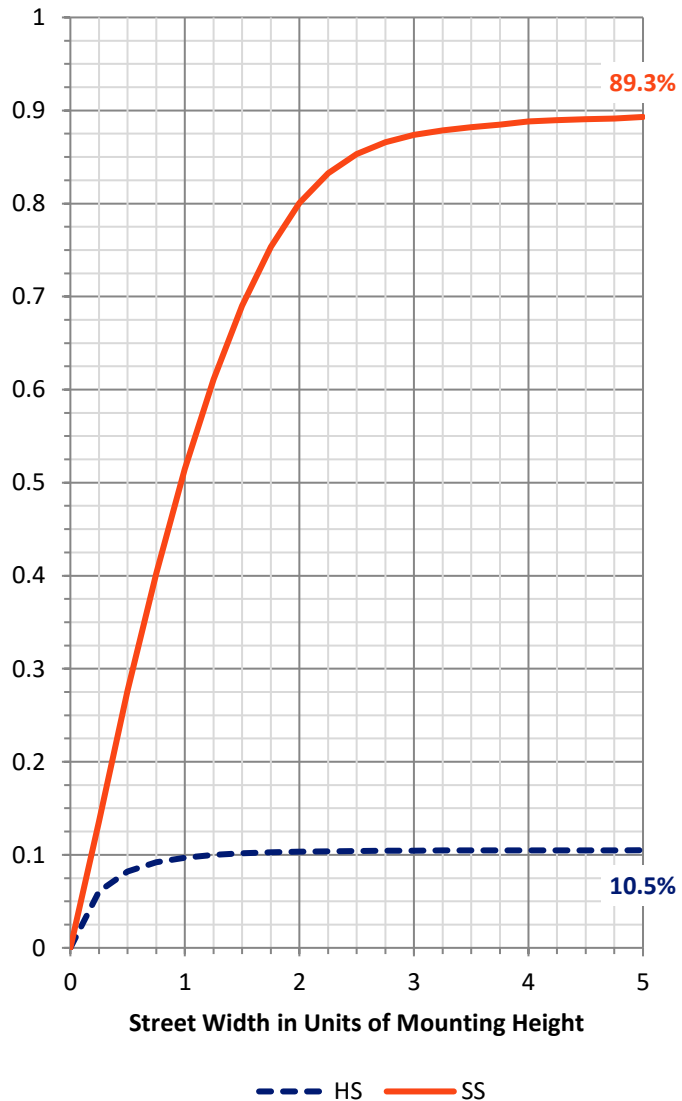
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	413.9	0.0	413.9
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	3504.7	0.0	3504.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	3918.6	0.0	3918.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	1.3
10°-20°	139.3	3.6
20°-30°	220.7	5.6
30°-40°	354.2	9.0
40°-50°	565.7	14.4
50°-60°	819.0	20.9
60°-70°	972.0	24.8
70°-80°	721.6	18.4
80°-90°	73.8	1.9
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°	3918.6	100.0
0°-180°	3918.6	100.0

Coefficient of Utilization



REPORT NUMBER: P959319

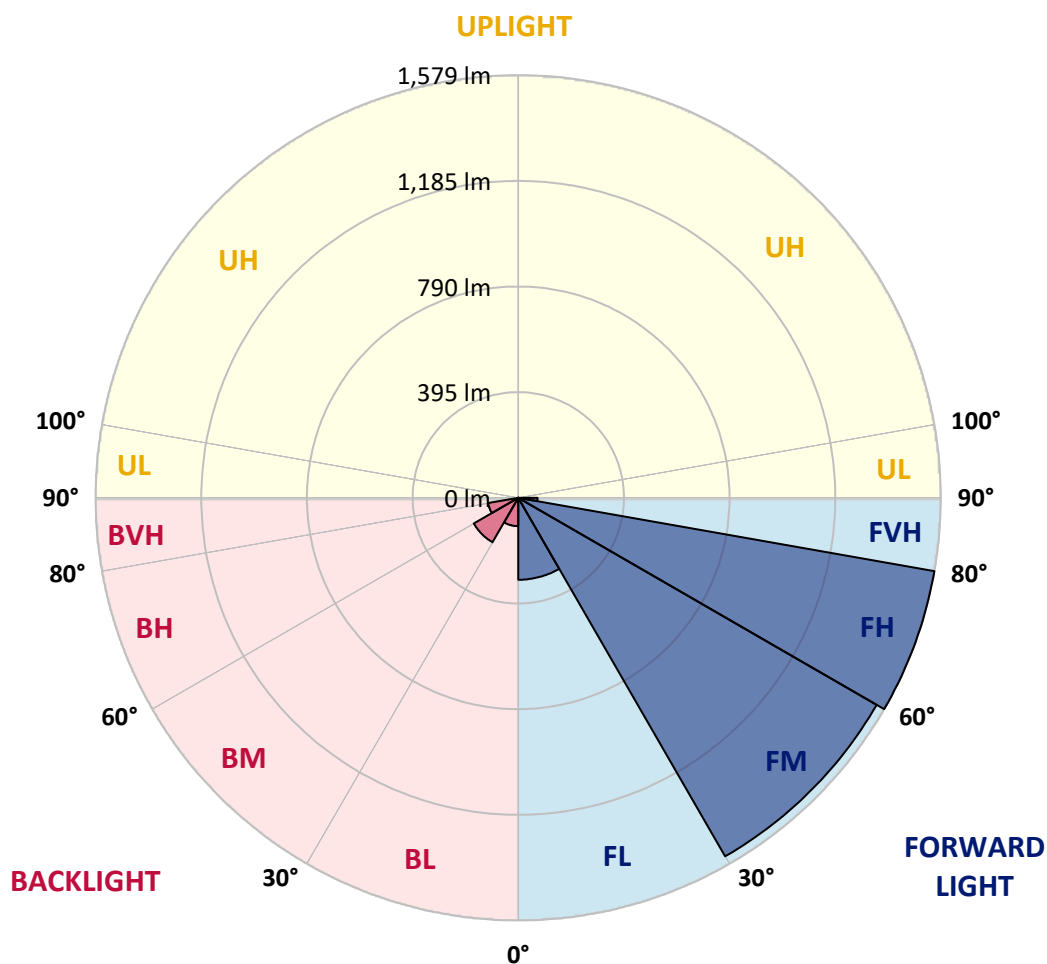
CATALOG NUMBER: NAV-SB1A-740-U-SL3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	306.3	7.8			
FM	(30°-60°)	1547.0	39.5			
FH	(60°-80°)	1579.4	40.3			G1/1800
FVH	(80°-90°)	71.9	1.8			G1/100
BL	(0°-30°)	106.0	2.7	B0/110		
BM	(30°-60°)	191.9	4.9	B0/220		
BH	(60°-80°)	114.1	2.9	B1/500		G1/500
BVH	(80°-90°)	1.8	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-G1

Type III Medium



REPORT NUMBER: P959319

CATALOG NUMBER: NAV-SB1A-740-U-SL3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	579.4	579.4	579.4	579.4	579.4	579.4	579.4	579.4	579.4	579.4	579.4
2.5°	642.9	639.3	639.8	633.7	629.3	624.7	615.8	614.5	608.1	596.9	585.4
5°	698.9	696.6	694.5	687.7	678.8	667.5	652.4	647.0	635.2	615.8	593.3
7.5°	739.8	737.1	738.1	731.1	724.1	711.5	690.7	680.8	665.1	635.5	601.5
10°	747.8	746.3	753.0	755.5	755.5	747.5	727.3	717.4	694.5	656.7	609.9
12.5°	703.3	703.6	720.2	740.2	766.2	773.7	760.0	749.4	726.8	679.3	620.6
15°	651.4	651.6	667.7	693.3	736.1	778.8	789.5	782.6	759.3	703.6	633.1
17.5°	620.1	618.9	629.7	650.6	695.4	755.5	807.4	812.0	793.0	730.4	647.0
20°	615.8	613.5	619.1	629.7	661.6	726.3	809.4	831.2	827.9	760.9	662.9
22.5°	642.4	638.8	635.7	636.2	649.8	702.0	804.3	841.9	863.7	797.4	684.6
25°	695.1	689.5	679.5	666.7	663.9	696.9	800.7	853.7	897.0	844.3	713.3
27.5°	759.5	751.6	732.5	713.3	696.9	711.2	808.2	872.4	934.6	898.7	746.5
30°	830.5	820.7	801.6	765.2	739.1	743.2	825.8	897.0	982.7	960.4	788.2
32.5°	934.6	912.0	878.5	823.0	788.4	777.8	852.4	928.1	1042.2	1042.5	848.6
35°	1023.9	1011.3	977.5	908.5	837.6	823.5	887.4	972.2	1124.9	1151.3	933.1
37.5°	1082.4	1065.3	1035.7	983.7	913.9	870.6	934.3	1026.1	1212.4	1275.1	1037.2
40°	1147.9	1131.1	1091.6	1042.7	1002.3	951.4	993.4	1088.3	1308.3	1402.2	1156.1
42.5°	1227.0	1205.0	1158.5	1105.7	1063.5	1057.9	1070.7	1165.8	1406.8	1540.4	1279.9
45°	1319.9	1299.1	1245.7	1179.2	1142.1	1132.1	1167.9	1256.1	1516.6	1691.9	1405.1
47.5°	1406.8	1382.8	1325.2	1264.5	1223.4	1192.0	1271.2	1362.8	1640.9	1850.2	1523.3
50°	1480.8	1456.2	1403.5	1338.8	1310.9	1269.7	1372.8	1481.7	1764.2	2011.2	1631.2
52.5°	1531.5	1509.7	1447.8	1403.7	1384.9	1364.1	1491.8	1607.9	1887.0	2158.4	1737.9
55°	1519.9	1500.5	1446.0	1442.9	1441.7	1463.4	1634.1	1750.9	2012.2	2297.9	1844.1
57.5°	1483.3	1461.3	1393.3	1440.1	1485.3	1551.8	1788.0	1920.0	2149.2	2429.4	1946.4
60°	1375.7	1368.0	1326.5	1434.7	1503.8	1638.7	1964.0	2089.9	2297.6	2545.1	2037.2
62.5°	1147.7	1154.4	1154.0	1446.0	1537.1	1737.4	2123.9	2261.9	2442.7	2656.3	2118.1
65°	859.4	882.4	911.8	1344.7	1581.6	1913.7	2315.1	2448.3	2590.1	2785.7	2200.2
67.5°	577.4	595.8	615.8	1103.1	1449.0	2098.9	2632.5	2704.0	2766.6	2929.3	2292.5
70°	330.6	336.4	364.3	689.0	1116.9	2047.7	3149.6	3175.4	3029.8	3106.1	2359.9
72.5°	185.2	183.2	220.1	327.0	624.2	1753.5	3330.7	3582.7	3265.4	3103.3	2209.6
75°	123.8	124.1	151.5	206.2	243.3	1227.5	2870.2	3322.0	3124.2	2751.7	1805.4
77.5°	84.5	87.2	111.3	159.4	112.5	598.9	1898.8	2327.1	2529.4	2124.9	1246.4
80°	36.6	36.8	73.4	114.4	76.0	190.5	984.4	1246.7	1586.4	1193.2	493.7
82.5°	19.0	21.5	46.8	73.9	47.9	66.7	465.1	544.7	665.6	350.2	101.3
85°	6.7	7.9	28.9	36.3	24.1	23.8	162.0	165.0	140.9	52.7	27.9
87.5°	0.0	1.2	11.3	8.9	3.1	2.8	19.2	16.1	12.8	7.4	9.2
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: P959319

CATALOG NUMBER: NAV-SB1A-740-U-SL3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	579.4	579.4	579.4	579.4	579.4	579.4	579.4	579.4	579.4	579.4	579.4
2.5°	579.9	573.1	561.8	548.0	531.9	523.2	510.7	503.0	496.1	496.3	501.9
5°	580.8	569.2	540.6	510.1	476.3	451.5	423.9	404.5	389.6	386.0	391.4
7.5°	583.0	563.6	516.8	466.2	409.8	368.2	330.0	306.0	292.4	288.8	292.4
10°	586.1	557.5	489.9	412.4	342.6	292.4	260.7	245.4	239.2	234.6	237.4
12.5°	588.7	551.0	456.1	356.9	282.7	243.5	219.6	206.7	201.3	198.0	199.8
15°	593.1	542.6	419.5	305.2	242.3	210.3	187.6	178.0	176.5	177.0	177.8
17.5°	597.4	534.4	378.6	264.8	212.6	181.1	167.3	165.7	167.8	169.8	170.7
20°	602.2	522.6	337.2	234.3	185.2	160.9	157.3	158.4	159.4	163.0	164.0
22.5°	609.4	507.8	300.8	208.5	162.5	151.2	149.4	150.2	151.0	154.6	155.6
25°	619.6	492.0	271.4	184.7	148.1	143.3	141.4	141.4	142.5	145.9	147.1
27.5°	630.4	469.4	247.6	162.7	139.7	134.6	131.5	131.5	132.7	136.6	138.2
30°	642.4	449.0	229.0	146.4	132.5	125.9	121.8	120.7	122.3	127.1	128.4
32.5°	664.1	435.7	215.7	138.7	126.1	118.0	112.3	109.5	111.0	116.6	118.2
35°	697.1	432.7	206.4	134.8	120.0	110.8	102.8	98.5	99.7	105.7	107.4
37.5°	735.7	439.0	197.5	129.7	114.1	103.8	93.4	87.7	89.8	95.1	96.7
40°	791.3	465.7	190.5	125.9	108.2	95.6	83.9	78.3	81.6	86.2	87.0
42.5°	858.3	512.9	188.8	122.3	101.1	87.0	75.2	71.1	73.7	78.0	78.8
45°	941.5	573.3	197.0	117.7	93.2	78.5	68.3	66.0	66.7	71.1	73.2
47.5°	1030.7	635.2	219.6	113.6	86.2	71.6	62.9	60.9	60.4	64.5	67.0
50°	1121.0	690.2	246.1	110.5	81.4	66.0	58.8	56.3	55.0	57.6	58.6
52.5°	1210.3	734.0	263.5	105.4	76.5	60.4	55.2	51.5	49.1	50.4	51.5
55°	1300.9	772.3	264.6	97.7	71.9	56.8	51.7	47.4	44.5	44.5	45.0
57.5°	1385.6	806.2	249.5	87.5	65.5	53.5	46.8	43.3	40.2	39.2	39.4
60°	1460.5	831.2	224.4	76.0	59.9	49.1	41.9	39.2	35.3	33.2	32.7
62.5°	1527.4	843.5	190.0	64.2	53.0	44.0	37.3	34.2	29.2	26.6	26.3
65°	1583.8	831.0	154.3	53.2	47.0	38.3	32.0	28.9	23.3	20.2	20.2
67.5°	1639.9	773.7	116.6	44.8	40.9	32.2	26.3	23.6	19.5	16.9	16.9
70°	1647.1	653.1	81.6	37.6	34.0	24.8	21.2	19.5	15.9	13.5	13.3
72.5°	1466.2	470.0	49.6	30.7	26.6	17.6	16.9	15.4	11.8	10.2	9.9
75°	1172.0	288.0	29.2	23.1	17.6	12.5	12.5	11.0	7.9	6.7	6.7
77.5°	810.0	150.7	17.1	14.9	10.5	7.4	8.2	6.7	3.8	3.1	3.1
80°	324.4	57.3	9.2	6.9	4.8	3.3	2.8	1.5	0.7	0.5	0.7
82.5°	64.7	15.1	3.1	1.7	1.7	0.7	0.0	0.0	0.0	0.0	0.0
85°	16.6	3.3	0.7	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.1	0.0	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)