

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: P963545

Luminaire Tested: **NAV-SB3A-740-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12357.4 lumens
Efficiency: N/A
Efficacy: 145.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

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

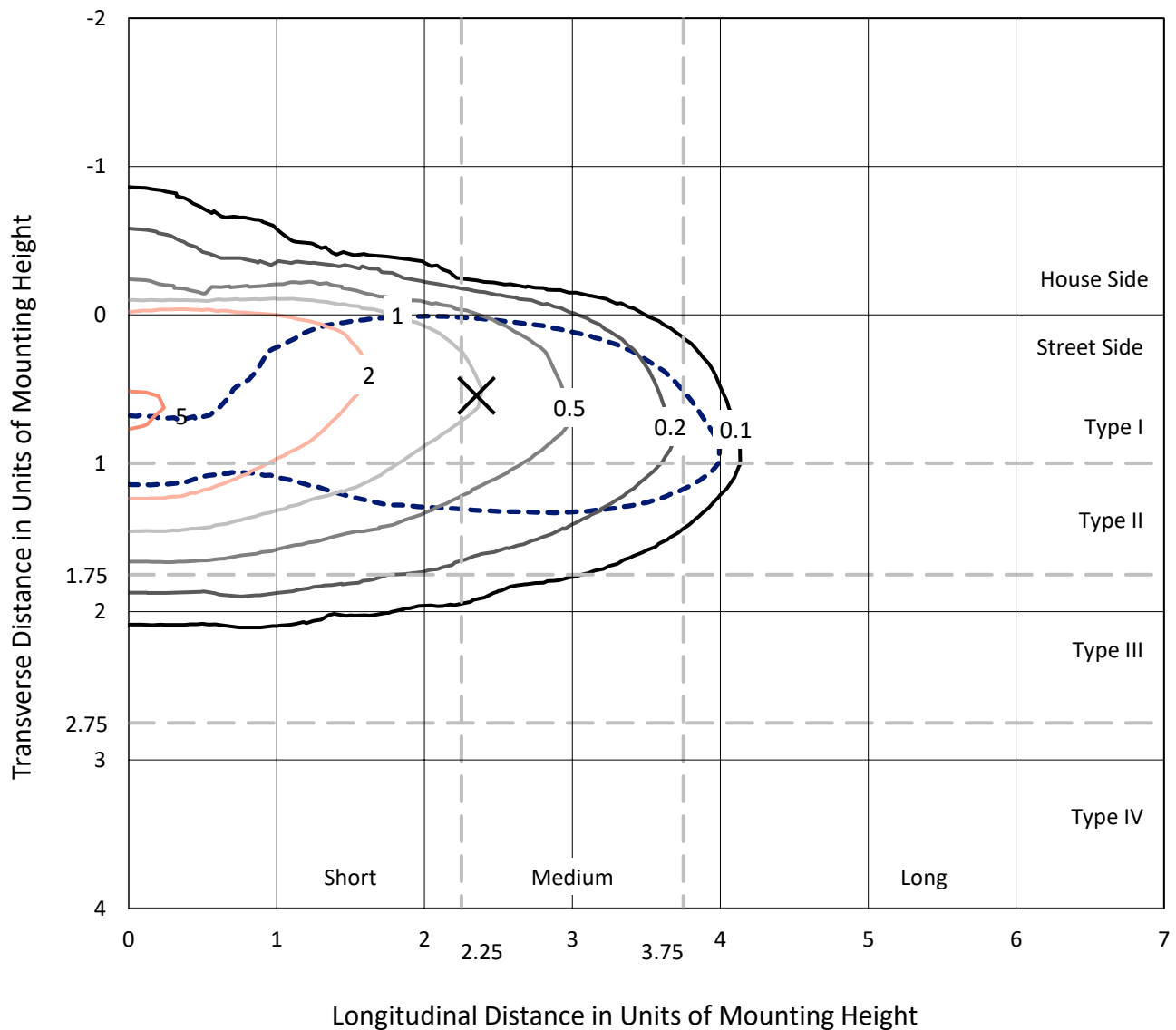


REPORT NUMBER: P963545

CATALOG NUMBER: NAV-SB3A-740-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

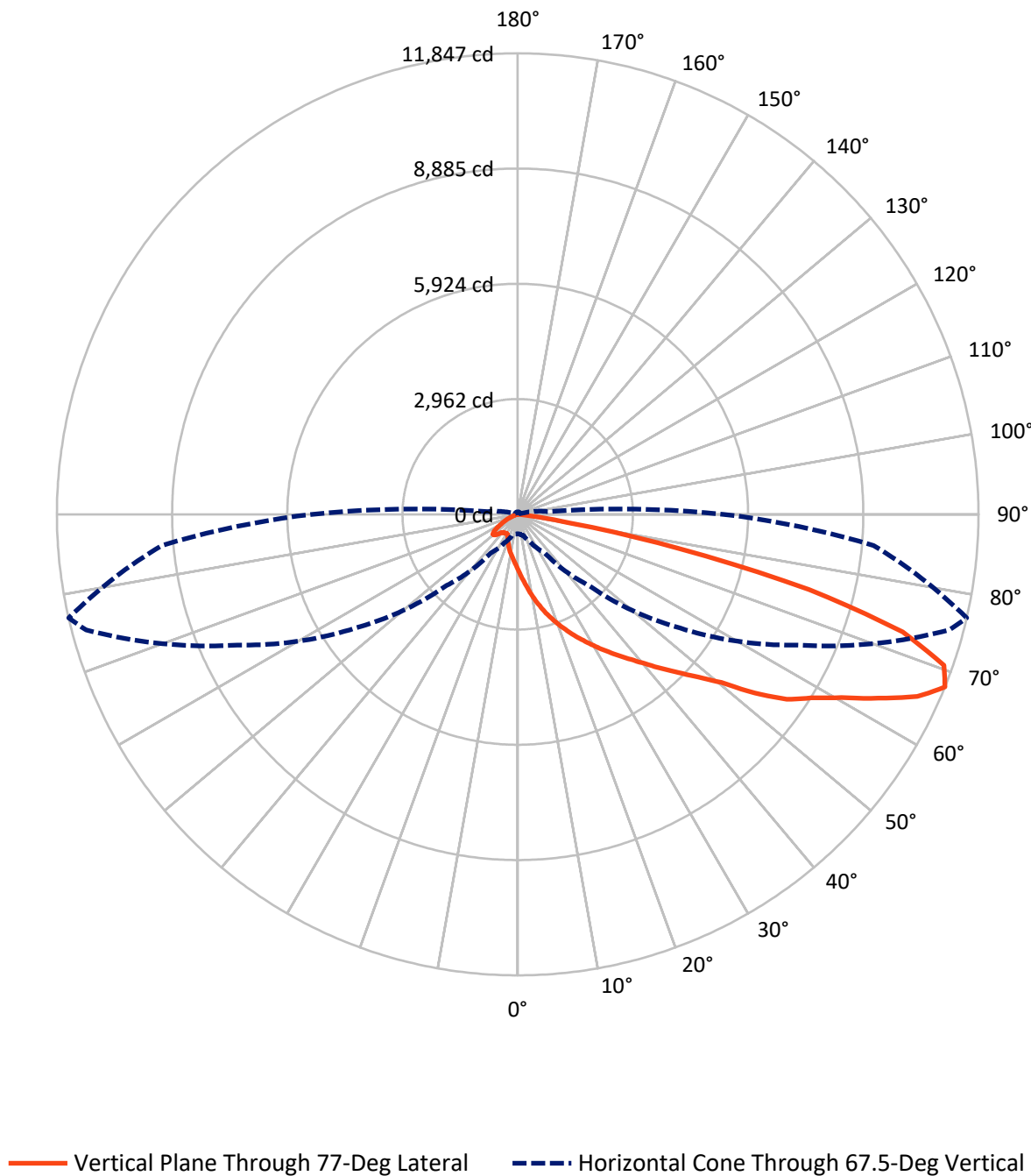
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
Type II - Medium - N/A

REPORT NUMBER: P963545
CATALOG NUMBER: NAV-SB3A-740-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P963545

CATALOG NUMBER: NAV-SB3A-740-U-T2R-HSS

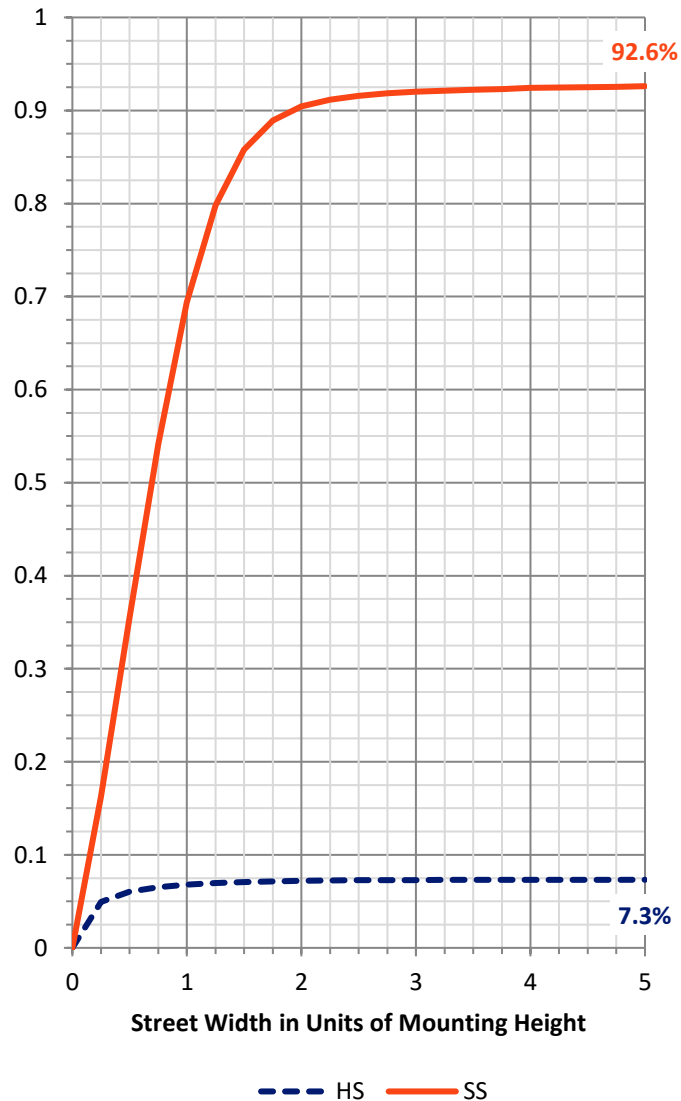
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	909.1	0.0	909.1
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	11448.3	0.0	11448.3
	% Fixture	92.6	0.0	92.6
Total	Lumens	12357.4	0.0	12357.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.4	1.2
10°-20°	509.3	4.1
20°-30°	982.9	8.0
30°-40°	1706.3	13.8
40°-50°	2477.5	20.0
50°-60°	2845.1	23.0
60°-70°	2470.0	20.0
70°-80°	1163.4	9.4
80°-90°	57.5	0.5
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°	12357.4	100.0
0°-180°	12357.4	100.0

Coefficient of Utilization



REPORT NUMBER: P963545

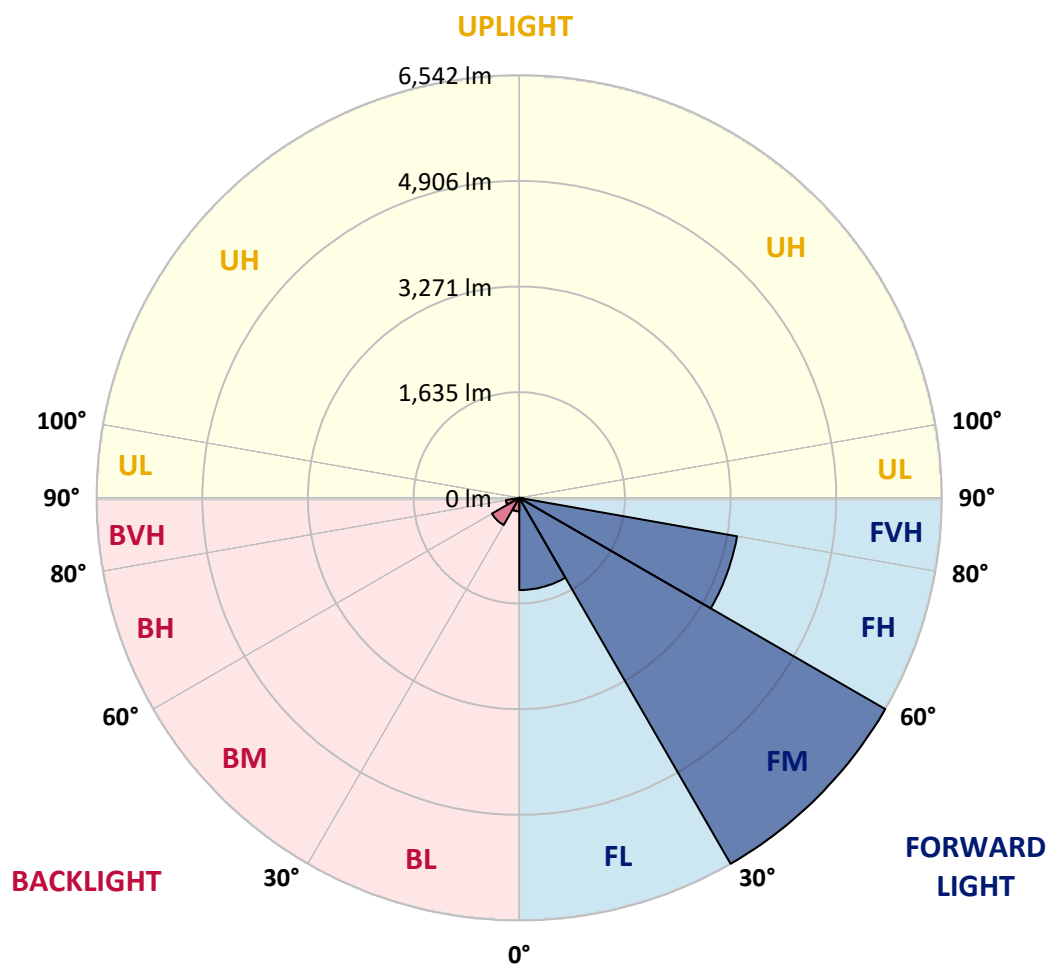
CATALOG NUMBER: NAV-SB3A-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1427.1	11.5			
FM	(30°-60°)	6541.7	52.9			
FH	(60°-80°)	3423.0	27.7			G2/5000
FVH	(80°-90°)	56.5	0.5			G1/100
BL	(0°-30°)	210.5	1.7	B1/500		
BM	(30°-60°)	487.1	3.9	B1/1000		
BH	(60°-80°)	210.5	1.7	B1/500		G1/500
BVH	(80°-90°)	1.1	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-G2

Type II Medium



REPORT NUMBER: P963545

CATALOG NUMBER: NAV-SB3A-740-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0
2.5°	1972.9	1985.1	1967.5	1933.8	1883.1	1850.1	1769.6	1693.6	1609.1	1582.3	1497.9
5°	2405.0	2415.6	2395.7	2358.8	2291.4	2226.9	2121.0	1962.2	1797.1	1744.2	1594.6
7.5°	2724.9	2731.0	2723.3	2689.6	2625.1	2552.2	2434.1	2246.1	2001.3	1943.0	1713.5
10°	2955.1	2975.1	2972.8	2959.7	2916.7	2857.7	2731.8	2517.7	2230.0	2154.8	1847.8
12.5°	3107.8	3130.0	3143.2	3172.3	3170.0	3132.4	3021.9	2795.5	2457.8	2369.6	1999.0
15°	3152.3	3176.1	3226.0	3293.5	3353.4	3372.6	3295.1	3067.9	2708.8	2596.0	2153.9
17.5°	3127.0	3163.9	3223.7	3330.3	3461.5	3548.2	3539.8	3331.1	2936.7	2807.8	2305.9
20°	3183.0	3218.3	3265.1	3354.9	3507.7	3664.9	3727.8	3582.8	3163.0	3028.1	2465.5
22.5°	3493.0	3486.8	3491.5	3506.1	3597.3	3753.1	3882.8	3811.5	3387.1	3249.0	2634.4
25°	3984.2	3956.5	3909.7	3830.6	3807.7	3882.8	4017.9	4014.1	3623.5	3475.4	2807.0
27.5°	4547.4	4542.8	4433.0	4242.8	4135.3	4106.2	4170.6	4211.3	3857.5	3699.4	2980.4
30°	5086.9	5099.1	4951.1	4739.2	4542.0	4427.7	4369.4	4398.5	4095.4	3941.1	3159.3
32.5°	5556.4	5569.5	5408.4	5160.5	4916.5	4778.3	4655.5	4583.5	4354.8	4186.7	3355.6
35°	5953.2	5966.2	5781.3	5507.3	5247.2	5122.1	4983.2	4786.0	4615.7	4459.2	3574.4
37.5°	6307.7	6303.9	6056.0	5779.8	5524.2	5425.2	5352.3	5035.4	4884.2	4733.0	3816.9
40°	6517.2	6533.3	6321.5	6016.9	5769.0	5696.8	5692.2	5344.7	5194.3	5047.7	4082.4
42.5°	6578.6	6606.9	6453.5	6203.3	5978.5	5900.2	6020.7	5679.2	5554.9	5412.2	4382.4
45°	6468.1	6495.7	6425.9	6252.5	6121.2	6070.6	6303.1	6026.1	5940.2	5798.9	4720.8
47.5°	6145.8	6180.3	6197.3	6160.4	6158.8	6210.3	6556.3	6391.4	6397.5	6253.2	5112.9
50°	5522.0	5580.2	5735.3	5865.7	6067.5	6320.8	6802.6	6787.3	6913.1	6788.9	5624.0
52.5°	4387.8	4470.6	5004.8	5361.6	5815.0	6300.1	7073.5	7422.6	7817.9	7636.0	6344.5
55°	3526.0	3526.0	3960.4	4628.0	5322.4	6163.4	7191.7	7835.5	8434.1	8391.1	6851.8
57.5°	2874.5	2909.1	3186.1	3776.2	4609.5	5838.1	7264.6	8094.9	8930.5	8899.0	7347.5
60°	1774.2	1848.6	2372.0	2954.4	3798.4	5258.8	7218.6	8357.3	9532.9	9558.2	7944.5
62.5°	999.1	1026.7	1260.0	2125.5	2953.5	4479.9	6866.4	8503.9	10303.4	10410.8	8559.9
65°	689.8	703.7	793.5	1323.0	2047.3	3566.7	6178.0	8412.6	11075.3	11292.5	9081.7
67.5°	501.1	508.0	564.1	808.0	1214.7	2586.0	5099.1	7952.2	11484.3	11847.3	9181.4
70°	385.2	389.8	430.5	531.1	717.5	1596.1	3703.3	7036.7	11188.1	11621.7	8670.4
72.5°	313.0	317.6	349.1	392.9	475.8	943.8	2244.5	5714.6	9880.6	10348.6	7381.2
75°	263.9	270.1	298.5	326.9	372.9	606.2	1052.8	3979.6	7430.3	7737.3	5132.9
77.5°	146.6	135.1	242.5	270.9	314.6	383.7	492.6	2342.0	4161.4	4246.6	2277.5
80°	91.3	94.4	192.6	217.9	241.7	193.4	225.6	901.7	1442.7	1370.5	441.3
82.5°	5.3	12.3	148.1	157.3	165.7	82.9	85.2	306.2	347.6	319.2	78.3
85°	0.0	0.0	67.5	54.5	57.5	23.8	24.6	71.3	46.8	50.6	15.4
87.5°	0.0	0.0	0.0	1.5	0.0	2.3	4.6	6.1	2.3	3.1	5.3
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: P963545

CATALOG NUMBER: NAV-SB3A-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0	1425.0
2.5°	1444.2	1390.4	1281.5	1174.9	1088.1	1007.6	950.0	895.5	867.9	866.3	864.8
5°	1487.9	1375.1	1157.2	964.5	809.5	685.2	604.6	547.1	517.9	508.0	506.5
7.5°	1549.3	1379.8	1048.2	780.4	597.8	491.1	445.1	426.6	420.6	413.6	412.0
10°	1626.8	1390.4	950.8	628.4	471.2	417.5	399.0	391.3	386.7	382.1	380.6
12.5°	1713.5	1400.5	854.0	521.8	414.4	386.7	373.7	364.5	358.3	353.0	351.5
15°	1798.0	1406.6	753.6	447.4	385.2	363.0	349.1	339.2	330.8	324.6	323.8
17.5°	1881.6	1415.0	659.2	402.8	361.4	339.2	325.3	313.0	306.2	299.3	298.5
20°	1974.5	1413.5	570.1	371.4	337.6	315.4	300.8	289.3	282.4	274.7	274.0
22.5°	2060.4	1405.8	491.9	344.5	313.0	291.6	275.5	263.9	257.1	250.9	250.2
25°	2159.4	1399.6	426.6	320.0	290.1	268.5	250.9	240.2	232.5	227.1	226.4
27.5°	2254.5	1390.4	379.0	297.8	267.8	247.1	230.2	217.9	211.0	207.2	207.2
30°	2348.2	1388.2	361.4	276.2	247.8	227.1	210.2	198.7	193.4	191.9	191.1
32.5°	2460.9	1394.3	369.1	268.5	229.4	208.7	192.6	184.2	178.8	178.8	178.8
35°	2581.4	1392.8	380.6	275.5	217.2	190.3	178.0	172.6	167.3	167.3	167.3
37.5°	2732.5	1395.0	389.8	287.0	212.6	175.0	168.1	161.1	158.1	158.1	158.1
40°	2958.1	1471.1	385.2	296.9	211.0	164.2	150.4	148.1	145.8	145.8	145.8
42.5°	3234.4	1636.0	391.3	297.8	210.2	156.5	138.2	142.7	137.4	136.6	135.8
45°	3536.8	1816.3	430.5	281.7	209.5	152.7	132.0	137.4	128.9	128.9	128.9
47.5°	3836.8	1995.2	470.4	258.6	207.2	151.9	126.6	123.5	121.3	122.0	122.0
50°	4250.4	2140.9	485.7	227.1	201.8	150.4	116.6	117.4	115.8	117.4	117.4
52.5°	4700.9	2171.7	467.3	191.9	186.4	145.8	109.8	112.9	112.0	113.6	113.6
55°	4981.7	2138.7	386.0	159.6	162.7	127.4	102.8	109.0	109.0	109.0	109.0
57.5°	5271.8	1998.2	274.0	129.7	135.1	104.3	96.7	105.2	104.3	103.6	103.6
60°	5480.5	1771.1	180.3	106.7	107.4	85.9	89.8	99.0	98.2	94.4	94.4
62.5°	5636.3	1520.2	115.8	90.5	82.1	77.5	82.1	89.8	86.7	78.3	76.8
65°	5618.6	1172.5	89.0	77.5	67.5	67.5	71.3	78.3	69.1	55.2	53.7
67.5°	5290.9	793.5	73.7	65.2	56.8	56.1	59.0	65.2	59.0	46.8	45.3
70°	4705.5	518.8	59.0	50.6	45.3	41.4	47.6	56.1	49.9	37.6	36.1
72.5°	3819.2	316.1	44.5	36.8	33.0	26.9	37.6	46.0	39.9	27.7	26.1
75°	2470.9	161.1	30.6	23.8	17.6	16.1	27.7	34.5	27.7	16.9	14.6
77.5°	945.4	67.5	16.9	10.8	9.2	7.7	15.4	20.7	11.5	3.8	3.1
80°	181.8	28.4	8.4	5.3	4.6	3.1	2.3	1.5	0.0	0.0	0.0
82.5°	31.5	9.2	3.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	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)