

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: P963003

Luminaire Tested: **NAV-SB2D-740-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963003
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-740-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

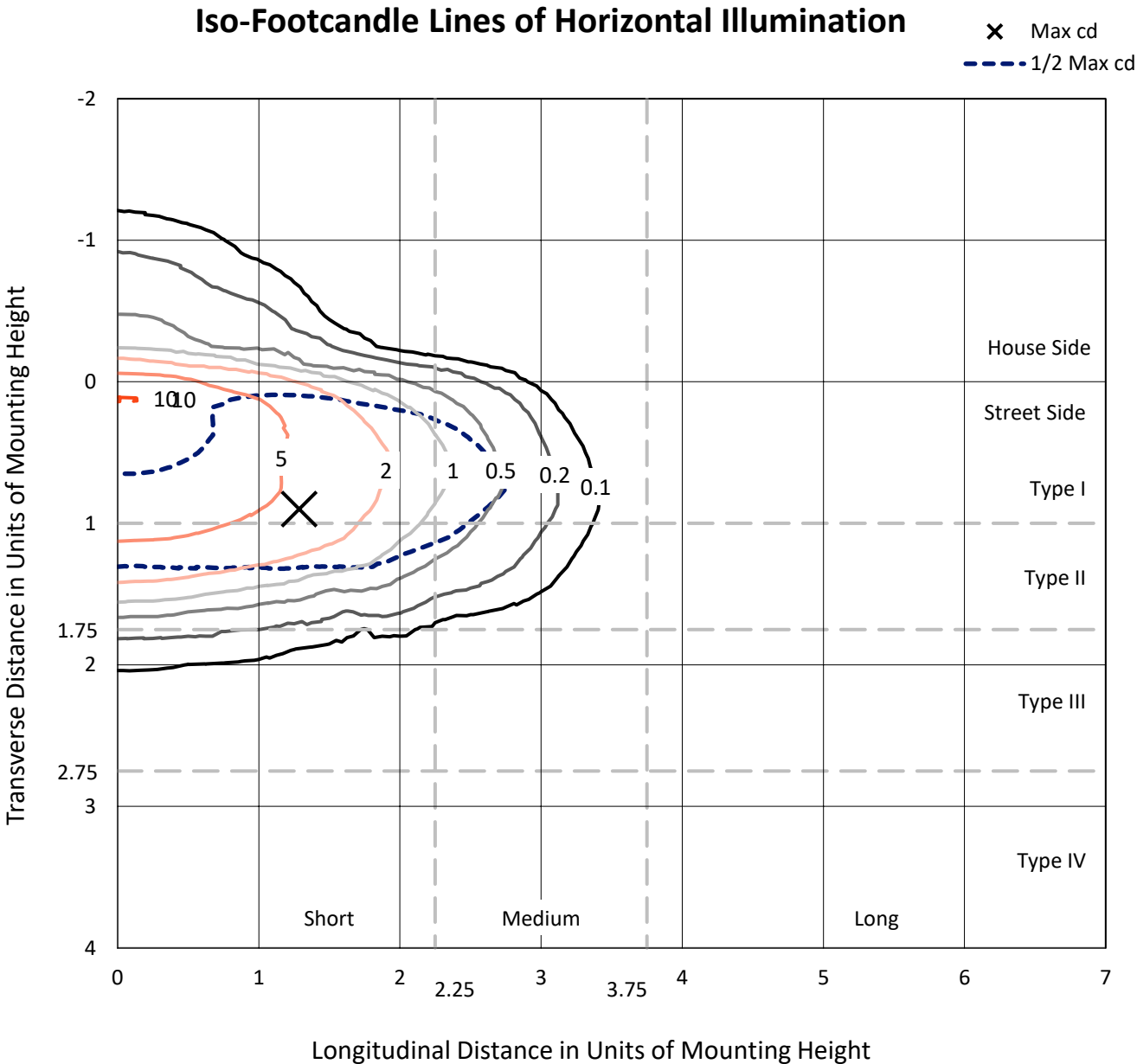
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18815.9 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 147.6
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



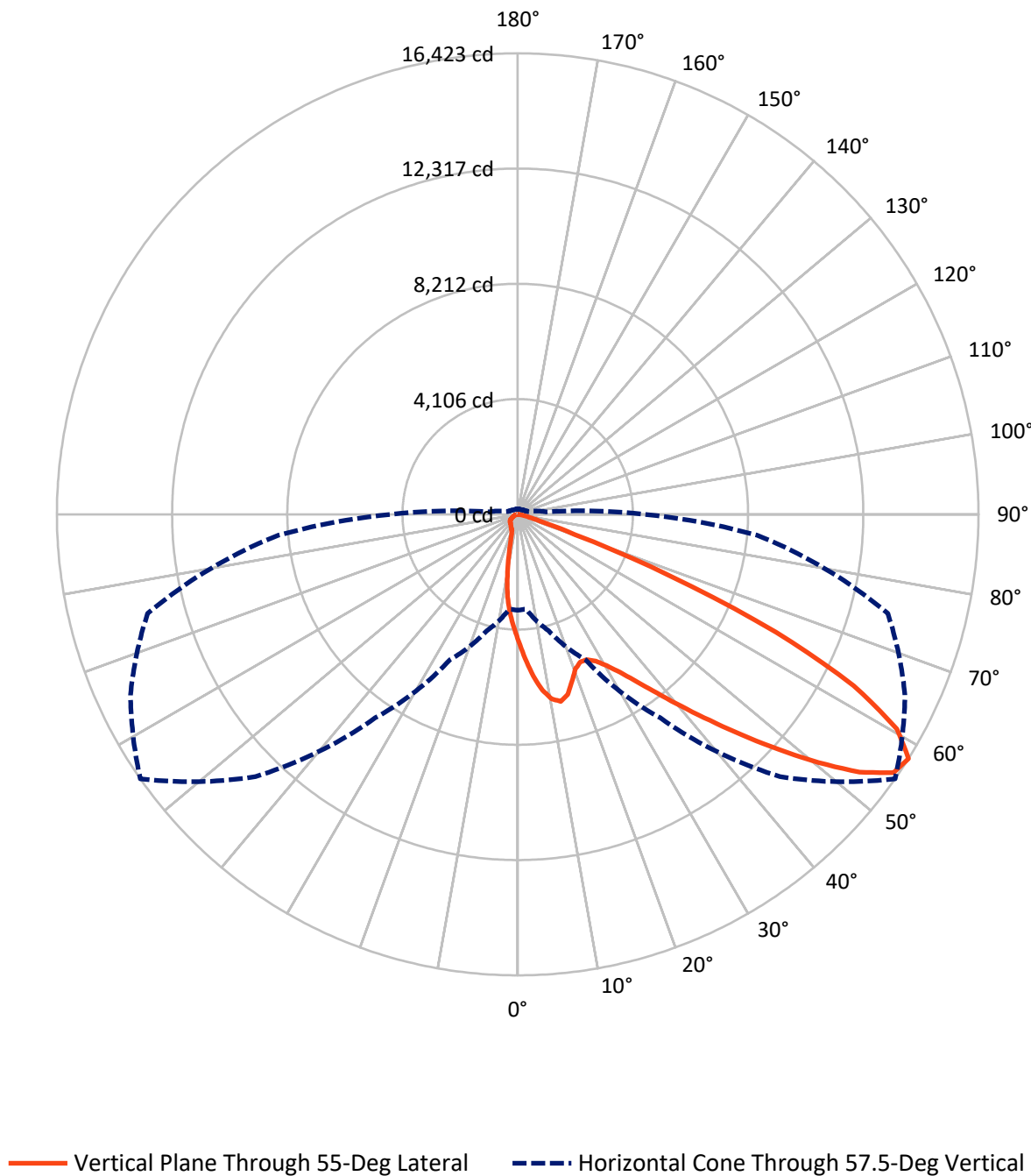
REPORT NUMBER: P963003
CATALOG NUMBER: NAV-SB2D-740-U-AFL-HSS



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
Type II - Short - N/A

REPORT NUMBER: P963003
CATALOG NUMBER: NAV-SB2D-740-U-AFL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P963003

CATALOG NUMBER: NAV-SB2D-740-U-AFL-HSS

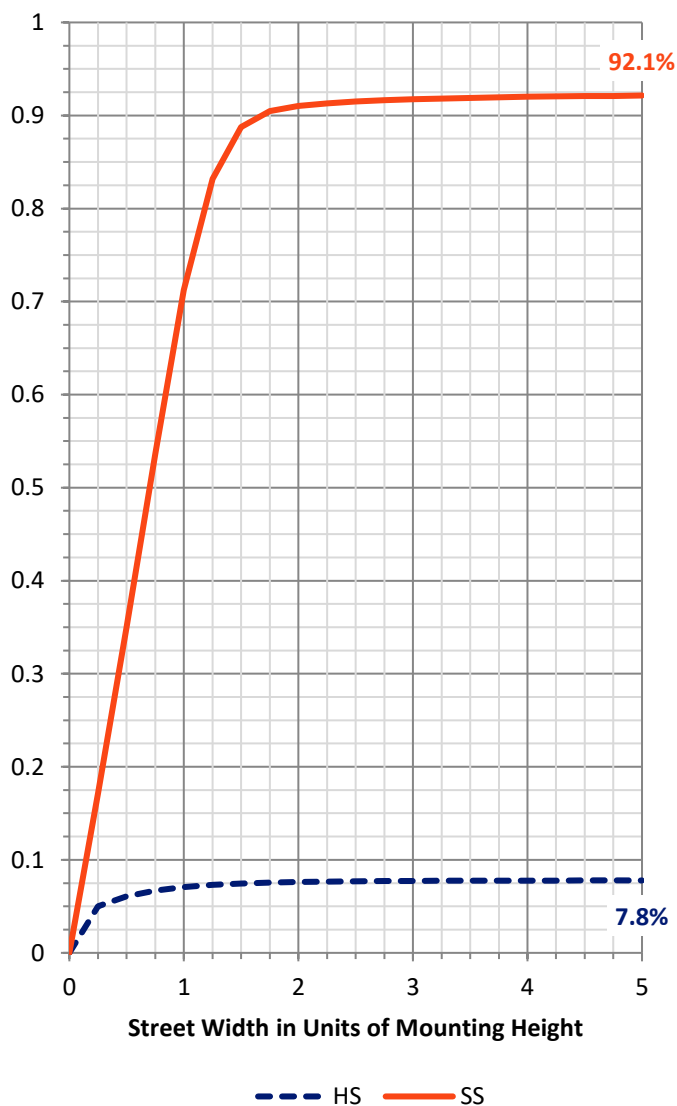
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1469.4	0.0	1469.4
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	17346.5	0.0	17346.5
	% Fixture	92.2	0.0	92.2
Total	Lumens	18815.9	0.0	18815.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.9	2.2
10°-20°	1019.1	5.4
20°-30°	1630.5	8.7
30°-40°	2759.7	14.7
40°-50°	4530.8	24.1
50°-60°	4979.7	26.5
60°-70°	2856.3	15.2
70°-80°	583.6	3.1
80°-90°	34.4	0.2
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°	18815.9	100.0
0°-180°	18815.9	100.0

Coefficient of Utilization



REPORT NUMBER: P963003

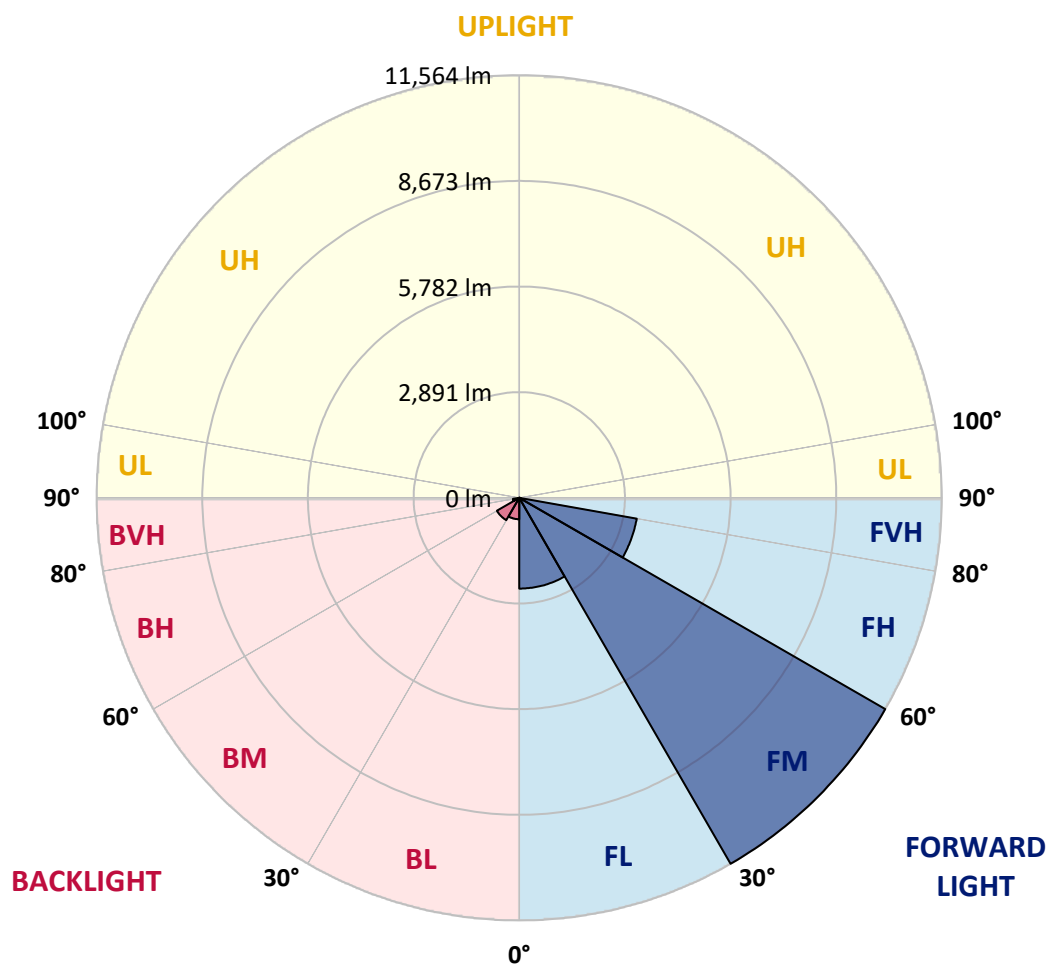
CATALOG NUMBER: NAV-SB2D-740-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2484.8	13.2			
FM	(30°-60°)	11564.4	61.5			
FH	(60°-80°)	3265.2	17.4			G2/5000
FVH	(80°-90°)	32.1	0.2			G1/100
BL	(0°-30°)	586.6	3.1	B2/1000		
BM	(30°-60°)	705.7	3.8	B1/1000		
BH	(60°-80°)	174.8	0.9	B1/500		G1/500
BVH	(80°-90°)	2.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



REPORT NUMBER: P963003

CATALOG NUMBER: NAV-SB2D-740-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2
2.5°	5625.9	5555.2	5544.7	5530.8	5396.2	5295.3	5149.1	4989.0	4809.2	4625.8	4544.6
5°	6499.6	6443.9	6433.5	6368.5	6215.4	6043.6	5783.8	5455.4	5120.1	4725.7	4556.2
7.5°	6669.0	6658.5	6706.2	6703.8	6682.9	6547.2	6327.8	5936.9	5433.3	4848.6	4586.4
10°	5913.7	5940.4	6081.9	6206.1	6541.3	6736.3	6688.7	6366.2	5755.9	4989.0	4620.0
12.5°	5225.7	5194.4	5295.3	5435.7	5825.5	6405.6	6838.4	6724.7	6124.9	5148.0	4669.9
15°	4794.0	4781.3	4838.2	4903.1	5200.1	5784.9	6664.3	7015.9	6479.8	5335.8	4745.3
17.5°	4656.0	4645.5	4662.9	4679.2	4871.8	5324.3	6250.1	7194.6	6819.8	5550.6	4828.9
20°	4768.5	4754.7	4752.3	4739.5	4819.5	5128.2	5875.4	7207.4	7125.0	5745.4	4900.8
22.5°	5096.9	5080.6	5023.8	4972.8	4979.7	5154.9	5708.3	7079.7	7354.7	5927.6	4946.0
25°	5692.1	5665.4	5547.1	5375.3	5266.2	5340.6	5733.8	6911.5	7573.9	6070.4	4924.0
27.5°	6437.0	6402.2	6250.1	5994.9	5745.4	5654.9	5918.3	6795.4	7756.2	6179.4	4876.4
30°	7166.7	7121.5	6971.8	6773.4	6409.1	6123.7	6251.3	6846.5	7973.1	6293.1	4813.8
32.5°	7954.5	7911.6	7713.2	7467.2	7165.6	6781.5	6707.3	7096.0	8238.7	6452.1	4769.7
35°	8951.1	8883.9	8601.9	8266.6	7946.4	7557.7	7324.5	7526.4	8592.7	6694.5	4794.0
37.5°	10085.9	9995.4	9691.4	9228.5	8810.8	8375.7	8076.4	8118.1	9111.3	7019.4	4869.5
40°	11155.6	11073.2	10792.4	10356.2	9831.8	9303.9	8984.8	8892.0	9827.2	7415.1	5001.8
42.5°	11797.2	11722.9	11604.6	11420.1	10978.1	10439.7	10037.1	9836.4	10674.1	7888.4	5163.0
45°	11833.2	11768.2	11927.1	12141.8	12054.8	11696.3	11205.5	10837.7	11524.6	8332.7	5330.1
47.5°	11257.7	11213.6	11696.3	12445.8	12819.4	12970.2	12517.7	11755.4	12226.5	8651.8	5398.6
50°	9689.1	9672.8	10665.9	12042.0	13110.6	14086.4	13901.9	12609.3	12770.7	8816.5	5333.6
52.5°	8401.2	8342.1	8921.0	10749.5	12687.1	14673.4	15254.7	13447.1	13151.2	8847.9	5181.6
55°	6372.0	6319.7	7046.1	8586.8	11321.5	14464.6	16244.4	14311.5	13423.8	8767.8	4908.9
57.5°	3418.1	3385.6	4303.3	5715.3	8850.3	13211.5	16423.1	15225.7	13653.6	8555.6	4527.2
60°	1330.8	1325.0	1668.4	2772.9	5378.8	10748.4	15521.6	15774.4	13797.4	8294.5	4208.1
62.5°	805.2	822.6	878.3	1245.0	2376.2	6677.2	13443.6	15150.2	13893.8	8055.5	3944.8
65°	665.9	667.2	674.1	855.1	1138.2	2793.8	10120.6	13096.6	13655.9	7629.7	3571.2
67.5°	570.8	581.3	607.9	678.8	802.9	1225.2	5826.7	10145.0	12209.1	6638.8	2988.8
70°	450.2	464.1	497.7	558.1	619.6	766.9	2153.4	6750.2	9327.1	5004.0	2260.1
72.5°	379.4	378.2	395.6	453.7	491.9	539.5	828.4	3782.4	5420.6	2388.9	1118.5
75°	293.6	305.1	327.2	379.4	402.6	391.0	449.1	1381.8	1942.3	724.0	380.6
77.5°	229.7	239.0	258.7	309.8	333.0	277.3	258.7	494.3	624.2	259.9	171.7
80°	103.2	111.4	176.4	228.6	271.5	191.5	140.4	253.0	277.3	118.4	87.0
82.5°	18.6	31.4	103.2	120.6	139.2	124.1	73.1	131.1	135.7	47.6	30.1
85°	1.1	2.4	36.0	44.1	55.7	40.6	22.0	52.2	45.2	16.2	11.6
87.5°	0.0	0.0	0.0	1.1	1.1	5.8	7.0	9.3	7.0	5.8	4.6
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: P963003

CATALOG NUMBER: NAV-SB2D-740-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2	4534.2
2.5°	4461.1	4296.3	4136.2	4005.1	3928.5	3798.5	3712.8	3698.8	3662.8	3694.2
5°	4375.2	4080.5	3782.4	3515.4	3296.2	3013.1	2801.9	2712.7	2634.9	2661.5
7.5°	4334.6	3869.4	3405.3	2949.3	2480.6	2028.1	1691.7	1551.2	1444.5	1459.6
10°	4280.1	3650.1	2922.6	2226.5	1598.8	1152.1	920.0	834.2	786.6	787.8
12.5°	4238.3	3387.8	2362.2	1509.4	973.4	735.5	663.7	642.8	628.8	630.0
15°	4217.5	3079.2	1808.8	1005.9	696.2	623.0	605.7	596.3	587.1	585.9
17.5°	4182.6	2735.8	1323.8	734.4	609.2	583.6	568.5	558.1	546.4	544.2
20°	4130.4	2346.0	967.6	620.7	570.8	551.1	530.2	516.3	502.4	500.1
22.5°	4034.1	1934.1	743.7	574.3	542.9	520.9	495.4	479.2	465.2	462.9
25°	3855.4	1547.7	626.5	545.3	518.6	491.9	464.1	442.1	429.3	427.0
27.5°	3629.2	1216.0	568.5	518.6	487.3	462.9	431.6	410.7	399.1	396.8
30°	3362.3	936.3	534.8	488.4	450.2	429.3	401.4	384.1	377.1	377.1
32.5°	3074.6	748.4	520.9	458.3	417.7	394.5	372.4	365.5	363.2	362.0
35°	2804.3	649.7	513.9	433.9	388.7	366.6	357.3	358.5	363.2	363.2
37.5°	2564.1	618.4	510.4	416.6	363.2	343.5	349.2	359.7	355.1	355.1
40°	2347.1	621.9	508.2	403.7	342.2	330.7	342.2	334.2	322.6	321.3
42.5°	2181.2	650.9	503.6	393.3	329.5	321.3	316.7	304.0	302.8	305.1
45°	2060.6	676.4	502.4	388.7	315.6	300.5	294.7	282.0	305.1	311.0
47.5°	1917.9	676.4	502.4	372.4	292.3	286.6	277.3	263.3	286.6	292.3
50°	1733.4	633.4	482.7	353.8	273.8	270.3	254.1	236.7	232.1	235.5
52.5°	1500.2	555.8	432.8	328.3	255.2	248.3	228.6	215.8	212.3	212.3
55°	1234.5	465.2	365.5	291.2	235.5	222.7	208.8	203.1	199.6	197.2
57.5°	1003.6	381.7	293.6	258.7	217.0	200.7	196.1	189.1	183.3	179.8
60°	823.8	300.5	242.5	229.7	198.4	183.3	182.1	172.9	157.7	155.5
62.5°	635.8	220.5	204.2	199.6	179.8	167.1	164.7	146.2	123.0	118.4
65°	449.1	171.7	164.7	175.2	160.1	148.5	142.7	114.9	90.5	87.0
67.5°	315.6	143.9	130.0	153.1	139.2	124.1	120.6	97.5	75.4	73.1
70°	225.1	117.2	106.7	131.1	111.4	109.1	102.1	81.2	61.5	59.1
72.5°	159.0	89.4	82.4	113.7	76.6	94.0	83.5	62.6	46.4	44.1
75°	117.2	63.9	58.0	66.1	55.7	70.7	59.1	41.7	29.0	27.9
77.5°	85.9	40.6	34.8	32.5	32.5	44.1	32.5	17.4	12.8	11.6
80°	60.4	18.6	16.2	13.9	12.8	10.5	4.6	2.4	1.1	1.1
82.5°	36.0	8.1	8.1	5.8	3.5	0.0	0.0	0.0	0.0	0.0
85°	8.1	3.5	3.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	1.1	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

(END OF REPORT)