

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: P963011

Luminaire Tested: **NAV-SB2D-740-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-740-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21875.5 lumens
Efficiency: N/A
Efficacy: 148.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

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



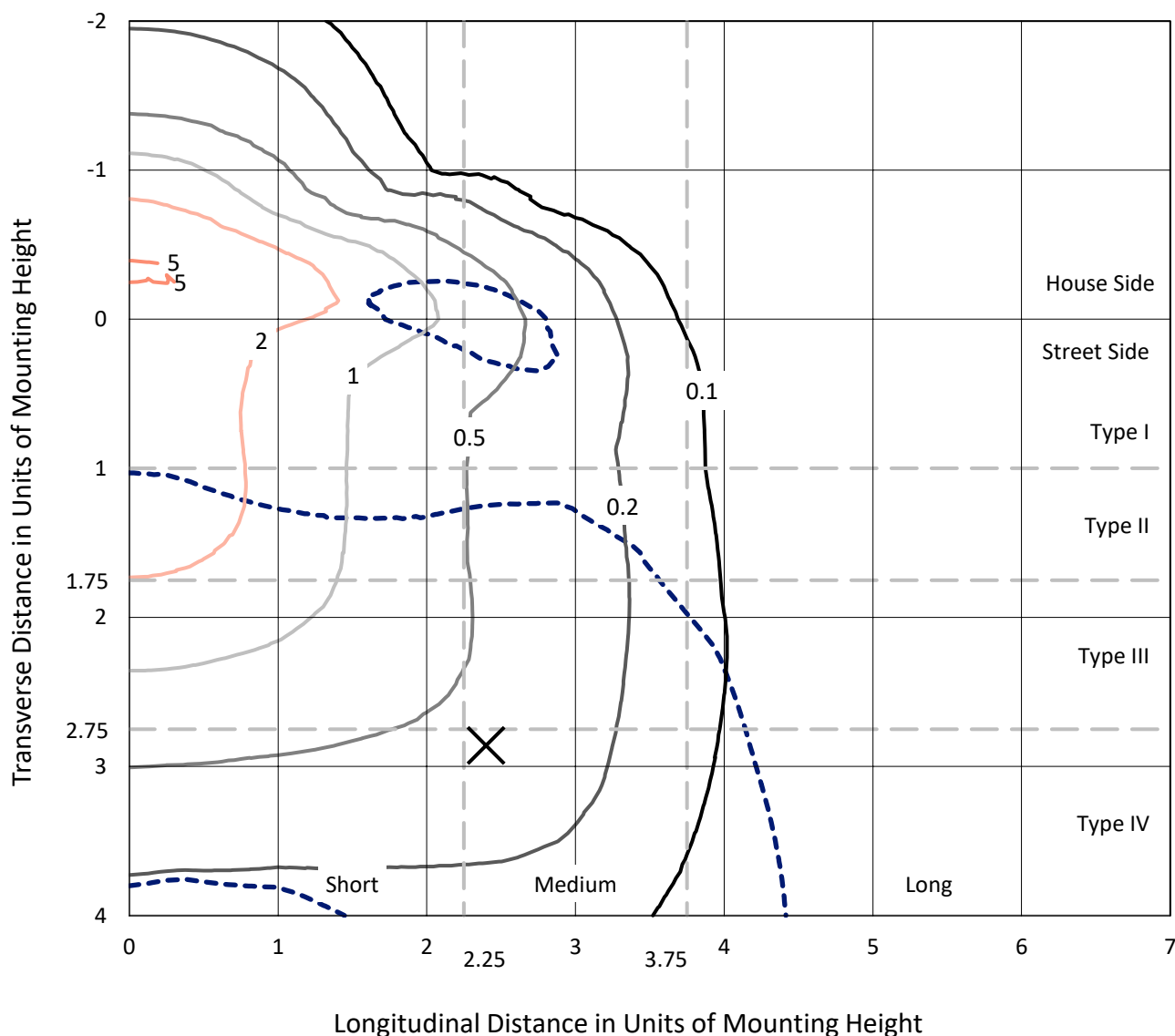
REPORT NUMBER: P963011

CATALOG NUMBER: NAV-SB2D-740-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

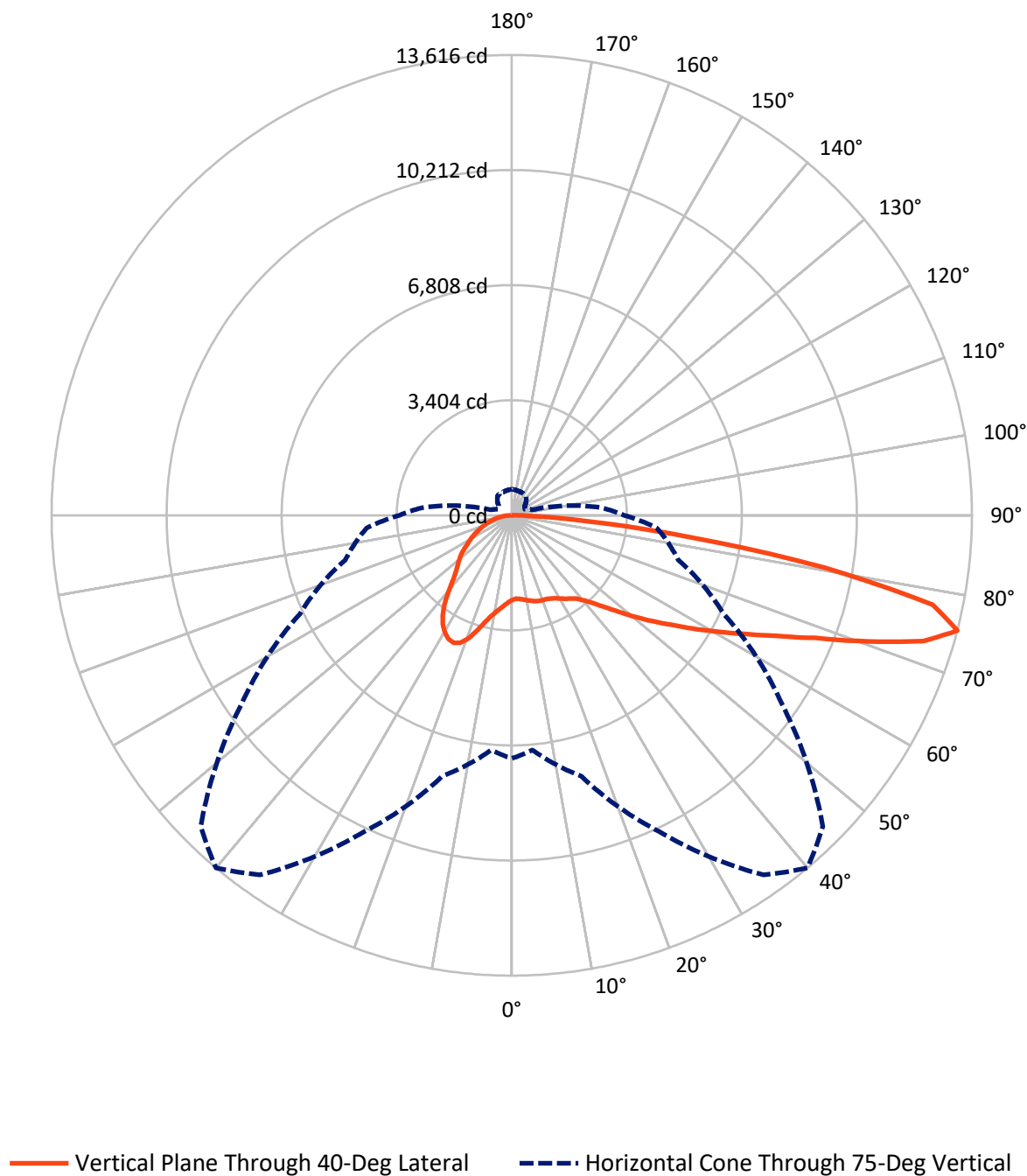
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
Type IV - Medium - N/A

REPORT NUMBER: P963011
CATALOG NUMBER: NAV-SB2D-740-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P963011

CATALOG NUMBER: NAV-SB2D-740-U-SL4

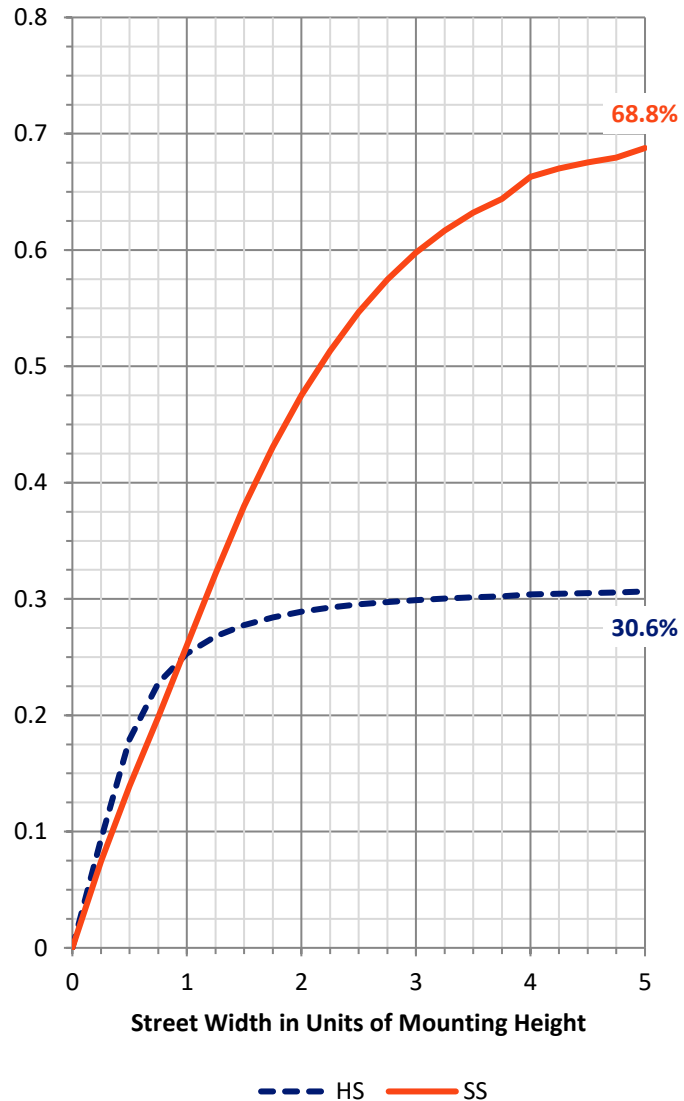
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6777.8	0.0	6777.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	15097.8	0.0	15097.8
	% Fixture	69.0	0.0	69.0
Total	Lumens	21875.5	0.0	21875.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.7	1.1
10°-20°	838.3	3.8
20°-30°	1530.8	7.0
30°-40°	2171.0	9.9
40°-50°	2931.5	13.4
50°-60°	3943.7	18.0
60°-70°	5005.5	22.9
70°-80°	4542.8	20.8
80°-90°	662.2	3.0
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°	21875.5	100.0
0°-180°	21875.5	100.0

Coefficient of Utilization



REPORT NUMBER: P963011

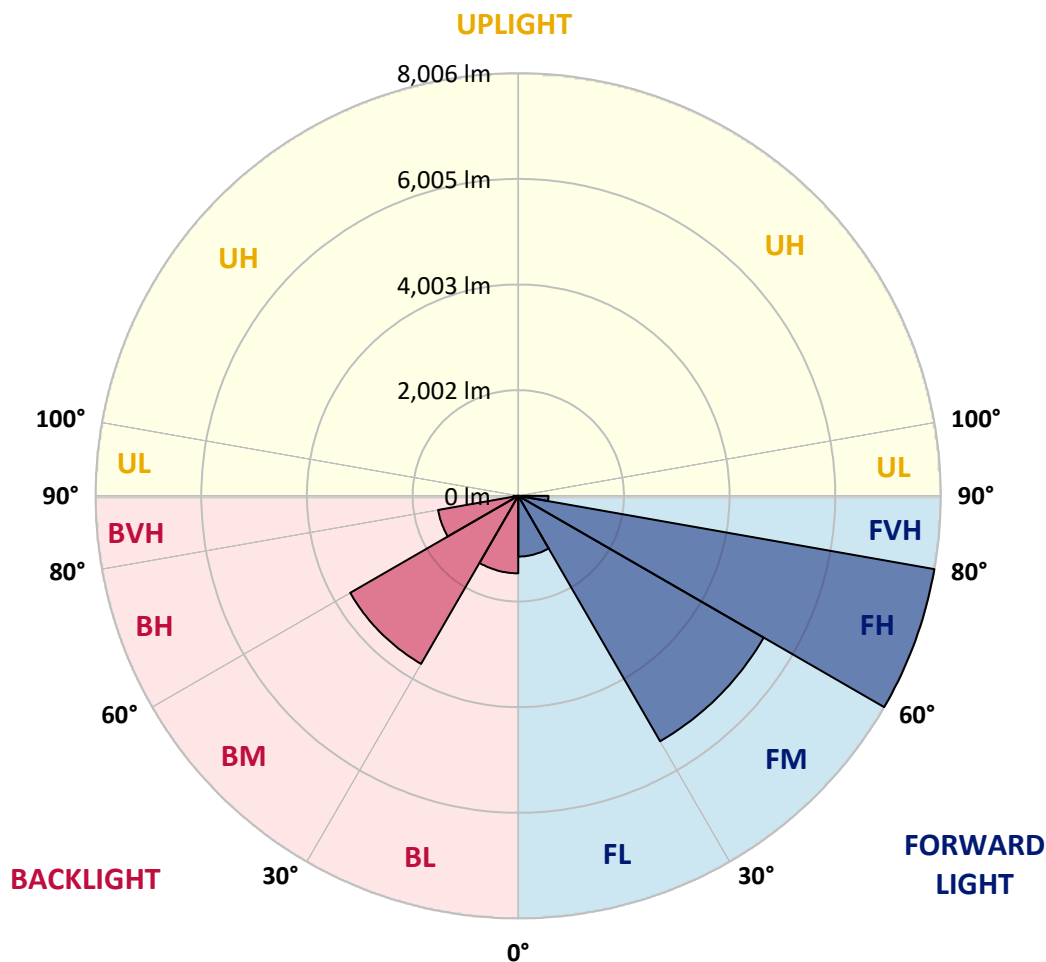
CATALOG NUMBER: NAV-SB2D-740-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1150.7	5.3			
FM	(30°-60°)	5370.0	24.5			
FH	(60°-80°)	8006.1	36.6			G4/12000
FVH	(80°-90°)	571.0	2.6			G4/750
BL	(0°-30°)	1468.1	6.7	B3/2500		
BM	(30°-60°)	3676.3	16.8	B3/5000		
BH	(60°-80°)	1542.1	7.0	B3/2500		G3/2500
BVH	(80°-90°)	91.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium



REPORT NUMBER: P963011

CATALOG NUMBER: NAV-SB2D-740-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5
2.5°	2463.2	2477.1	2473.6	2469.0	2469.0	2470.1	2469.0	2477.1	2485.2	2493.4	2506.1
5°	2488.7	2502.6	2495.7	2489.9	2485.2	2484.1	2480.6	2479.5	2484.1	2494.5	2512.0
7.5°	2538.6	2552.6	2542.1	2531.6	2522.4	2517.7	2513.1	2506.1	2502.6	2508.5	2532.8
10°	2594.3	2608.2	2595.5	2577.0	2561.8	2556.0	2551.4	2544.5	2539.7	2543.2	2570.0
12.5°	2650.0	2664.0	2646.5	2621.0	2601.2	2597.8	2592.0	2589.7	2588.5	2587.4	2614.1
15°	2702.2	2713.8	2691.8	2661.6	2640.7	2635.0	2629.1	2632.6	2638.5	2645.3	2675.6
17.5°	2742.8	2754.5	2722.0	2682.5	2662.7	2660.5	2657.0	2668.6	2684.8	2702.2	2739.3
20°	2780.0	2791.6	2749.8	2696.5	2673.2	2673.2	2674.3	2698.7	2722.0	2747.5	2798.6
22.5°	2832.2	2841.4	2790.4	2717.3	2683.7	2686.0	2695.2	2719.6	2748.6	2783.5	2854.2
25°	2909.9	2916.8	2854.2	2756.7	2718.5	2725.5	2733.6	2745.2	2773.0	2813.6	2908.7
27.5°	3035.2	3041.0	2958.7	2826.3	2768.3	2780.0	2791.6	2783.5	2796.2	2831.0	2952.8
30°	3211.5	3215.0	3110.7	2935.4	2853.1	2858.8	2861.2	2827.6	2803.2	2831.0	2984.2
32.5°	3420.4	3419.3	3295.1	3067.7	2949.3	2943.6	2923.8	2857.7	2800.8	2825.2	3012.0
35°	3744.1	3731.4	3571.2	3253.4	3058.4	3022.4	2976.1	2891.3	2812.4	2819.4	3036.4
37.5°	4280.2	4240.7	4019.1	3557.4	3220.9	3129.2	3060.8	2945.8	2838.0	2817.1	3065.4
40°	4884.6	4834.7	4591.1	3973.8	3464.5	3317.1	3206.9	3023.6	2879.7	2827.6	3108.3
42.5°	5601.7	5530.9	5268.7	4464.6	3773.1	3559.6	3393.8	3122.3	2941.2	2861.2	3166.3
45°	6482.3	6388.3	6017.1	5018.1	4161.8	3877.6	3656.0	3271.9	3035.2	2926.2	3253.4
47.5°	7372.2	7395.5	6867.5	5651.5	4628.3	4269.7	3984.3	3497.0	3172.2	3030.6	3393.8
50°	8317.9	8334.1	7713.3	6353.6	5157.3	4713.0	4353.3	3748.7	3362.4	3179.0	3603.7
52.5°	9055.8	9058.0	8481.5	7088.0	5708.4	5200.2	4751.2	4036.6	3582.9	3376.4	3883.3
55°	9517.5	9511.7	9019.8	7782.9	6341.9	5711.9	5192.1	4363.7	3852.1	3608.4	4234.9
57.5°	9852.8	9835.4	9391.0	8380.5	7017.2	6316.4	5691.0	4735.0	4169.9	3884.5	4697.9
60°	9980.4	9970.1	9642.8	8896.8	7727.3	6984.7	6266.5	5150.3	4530.8	4210.5	5293.1
62.5°	10029.2	10048.9	9889.9	9396.9	8487.2	7724.9	6898.9	5646.9	4936.9	4579.5	5920.7
65°	10200.9	10236.9	10204.4	10051.3	9345.8	8591.7	7737.7	6237.5	5380.1	4975.1	6576.3
67.5°	10540.9	10576.9	10590.7	10834.5	10394.6	9671.8	8784.2	6973.1	5898.7	5385.9	7069.4
70°	10532.8	10522.3	10768.2	11457.4	11708.1	11167.4	10195.2	7878.0	6517.2	5727.0	7132.1
72.5°	9587.1	9503.6	10084.9	11450.5	12801.0	12729.1	11918.1	9045.3	7050.9	5768.8	6188.7
75°	7192.4	6969.6	7996.4	10319.3	12983.2	13615.5	13013.4	9769.3	6924.4	5097.0	4306.8
77.5°	3075.8	2851.9	4062.1	7639.1	11619.9	12727.9	12008.6	8523.2	5527.4	3370.5	2115.1
80°	805.2	804.0	1227.5	3463.4	7902.4	9399.1	8245.9	5504.2	3158.2	1204.4	583.6
82.5°	333.0	324.8	451.3	1347.1	3861.3	5274.4	4304.5	2455.1	1140.5	326.1	193.7
85°	124.1	123.0	219.2	465.2	1362.1	2175.5	1574.5	627.7	284.2	159.0	87.0
87.5°	34.8	33.6	47.6	161.2	331.8	503.6	269.2	103.2	80.1	62.6	25.5
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: P963011

CATALOG NUMBER: NAV-SB2D-740-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5	2501.5
2.5°	2509.6	2515.5	2525.9	2534.0	2544.5	2556.0	2572.2	2582.7	2593.1	2600.1	2595.5
5°	2520.1	2532.8	2559.5	2586.2	2617.5	2646.5	2680.2	2704.6	2724.2	2730.1	2732.3
7.5°	2543.2	2564.1	2609.4	2654.6	2704.6	2752.1	2800.8	2842.6	2876.3	2889.1	2890.2
10°	2583.9	2611.7	2675.6	2739.3	2805.5	2878.6	2941.2	3001.6	3049.2	3068.8	3070.0
12.5°	2635.0	2669.7	2753.3	2841.4	2933.1	3034.1	3115.3	3189.5	3248.7	3275.4	3275.4
15°	2701.1	2746.3	2853.1	2971.4	3106.0	3246.4	3349.6	3432.0	3498.1	3530.6	3528.4
17.5°	2773.0	2833.3	2967.9	3146.6	3339.2	3523.6	3644.4	3704.7	3773.1	3804.5	3803.3
20°	2842.6	2916.8	3109.4	3369.4	3625.7	3821.8	3919.3	3935.6	3940.2	3943.7	3953.0
22.5°	2914.6	3014.3	3287.0	3650.1	3925.1	4060.8	4074.8	4005.2	3907.7	3862.5	3875.2
25°	2993.4	3125.7	3519.0	3959.9	4182.7	4198.9	4092.2	3922.8	3738.3	3653.6	3666.4
27.5°	3070.0	3254.5	3797.5	4255.8	4368.3	4225.7	3995.9	3755.7	3533.0	3443.6	3454.0
30°	3146.6	3401.9	4104.9	4514.5	4453.0	4159.4	3844.0	3575.9	3352.0	3258.0	3268.4
32.5°	3224.3	3573.6	4458.9	4701.4	4437.9	4019.1	3654.7	3374.0	3176.8	3078.2	3090.9
35°	3312.5	3784.7	4794.1	4803.5	4337.0	3812.6	3405.4	3132.7	2960.9	2882.1	2899.4
37.5°	3427.4	4052.7	5090.0	4829.0	4160.7	3509.8	3095.5	2847.2	2705.7	2669.7	2695.2
40°	3570.1	4375.3	5316.3	4788.4	3899.6	3141.9	2756.7	2558.4	2478.2	2486.4	2514.2
42.5°	3755.7	4736.1	5475.2	4683.9	3536.5	2762.6	2459.7	2371.5	2409.9	2442.4	2472.5
45°	3997.1	5110.9	5573.8	4506.4	3125.7	2441.1	2284.5	2305.4	2334.4	2337.9	2361.1
47.5°	4305.7	5490.3	5638.8	4238.4	2706.8	2214.9	2173.1	2177.8	2172.0	2147.6	2166.2
50°	4690.9	5859.3	5696.8	3883.3	2350.6	2073.4	2017.7	2001.4	1921.4	1842.4	1852.9
52.5°	5129.5	6198.1	5721.1	3442.5	2073.4	1955.0	1864.5	1762.4	1612.7	1588.3	1596.5
55°	5616.8	6511.3	5658.5	2900.6	1840.2	1803.1	1666.1	1543.1	1526.8	1506.0	1509.5
57.5°	6199.2	6848.9	5530.9	2296.1	1601.2	1625.5	1492.1	1506.0	1477.0	1444.5	1438.7
60°	6836.2	7198.2	5306.9	1745.1	1354.0	1403.9	1446.8	1445.7	1437.6	1410.9	1401.6
62.5°	7409.3	7427.9	4866.1	1336.6	1137.0	1232.2	1349.4	1348.2	1341.2	1326.1	1320.4
65°	7750.4	7393.1	4130.4	1052.4	958.4	1090.6	1217.1	1226.4	1227.5	1226.4	1226.4
67.5°	7690.2	6985.9	3121.0	837.7	811.0	946.8	1086.0	1098.8	1108.0	1110.4	1112.6
70°	7007.9	6091.3	2035.0	668.3	679.9	820.3	961.9	974.6	982.8	992.0	996.6
72.5°	5462.4	4478.5	1164.9	540.7	565.1	711.2	838.9	853.9	858.5	876.0	882.9
75°	3328.8	2633.7	628.8	425.8	464.1	607.9	717.0	734.4	742.5	763.4	765.8
77.5°	1582.6	1140.5	358.5	331.8	373.6	496.6	605.7	625.4	603.3	614.9	605.7
80°	534.8	423.5	226.2	253.0	285.5	387.6	485.0	504.7	458.3	456.0	451.3
82.5°	186.8	171.7	143.9	168.2	184.5	277.3	366.6	392.2	341.1	340.0	323.7
85°	73.1	69.6	80.1	91.6	110.2	170.6	241.3	254.1	210.0	169.4	167.1
87.5°	15.1	16.2	19.7	20.9	33.6	59.1	87.0	106.7	84.7	72.0	66.1
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)