

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: P967742

Luminaire Tested: **NAV-SB5A-735-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967742
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-735-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23180.4 lumens
Efficiency: N/A
Efficacy: 163.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 141.7
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

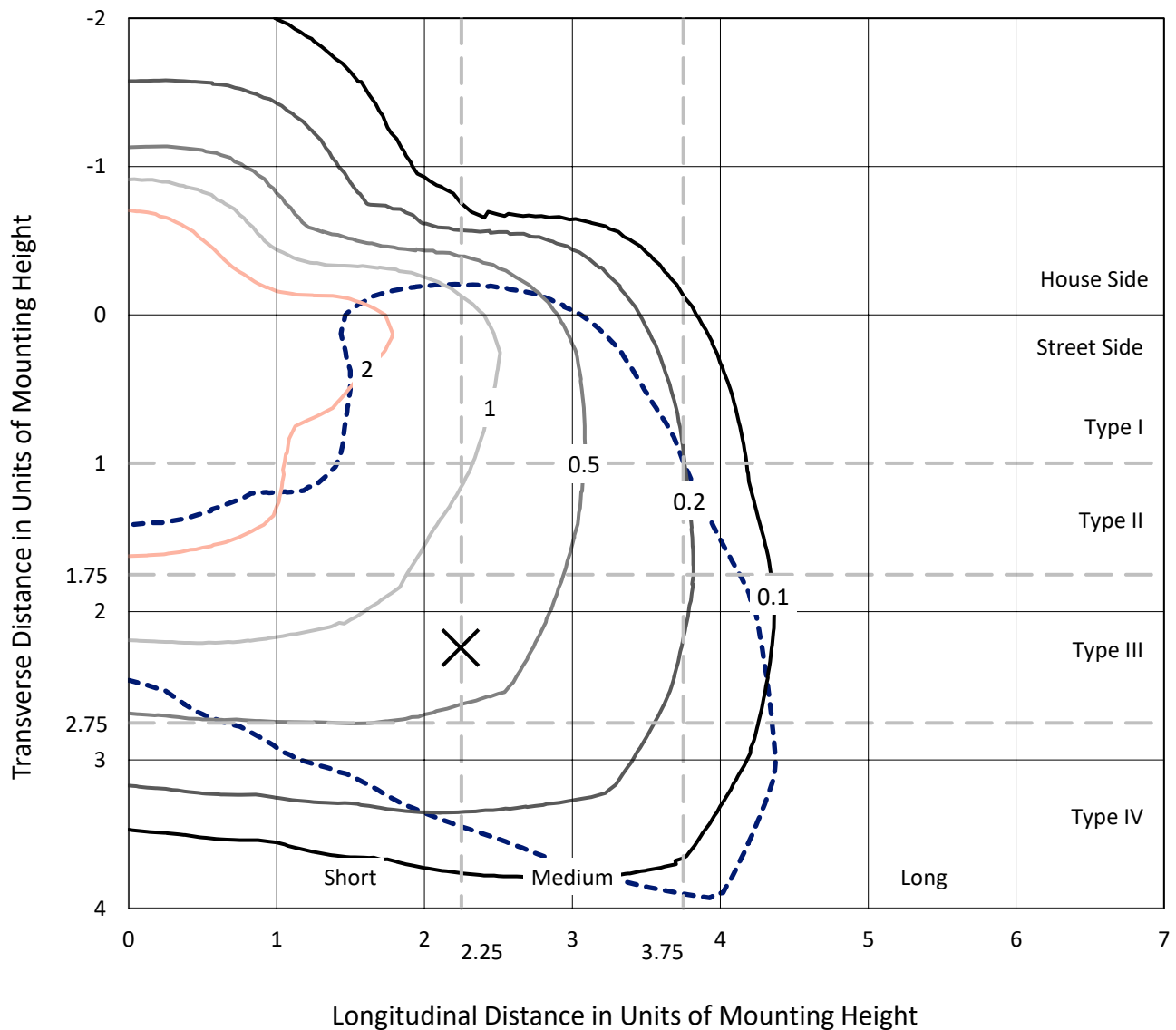


REPORT NUMBER: P967742

CATALOG NUMBER: NAV-SB5A-735-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

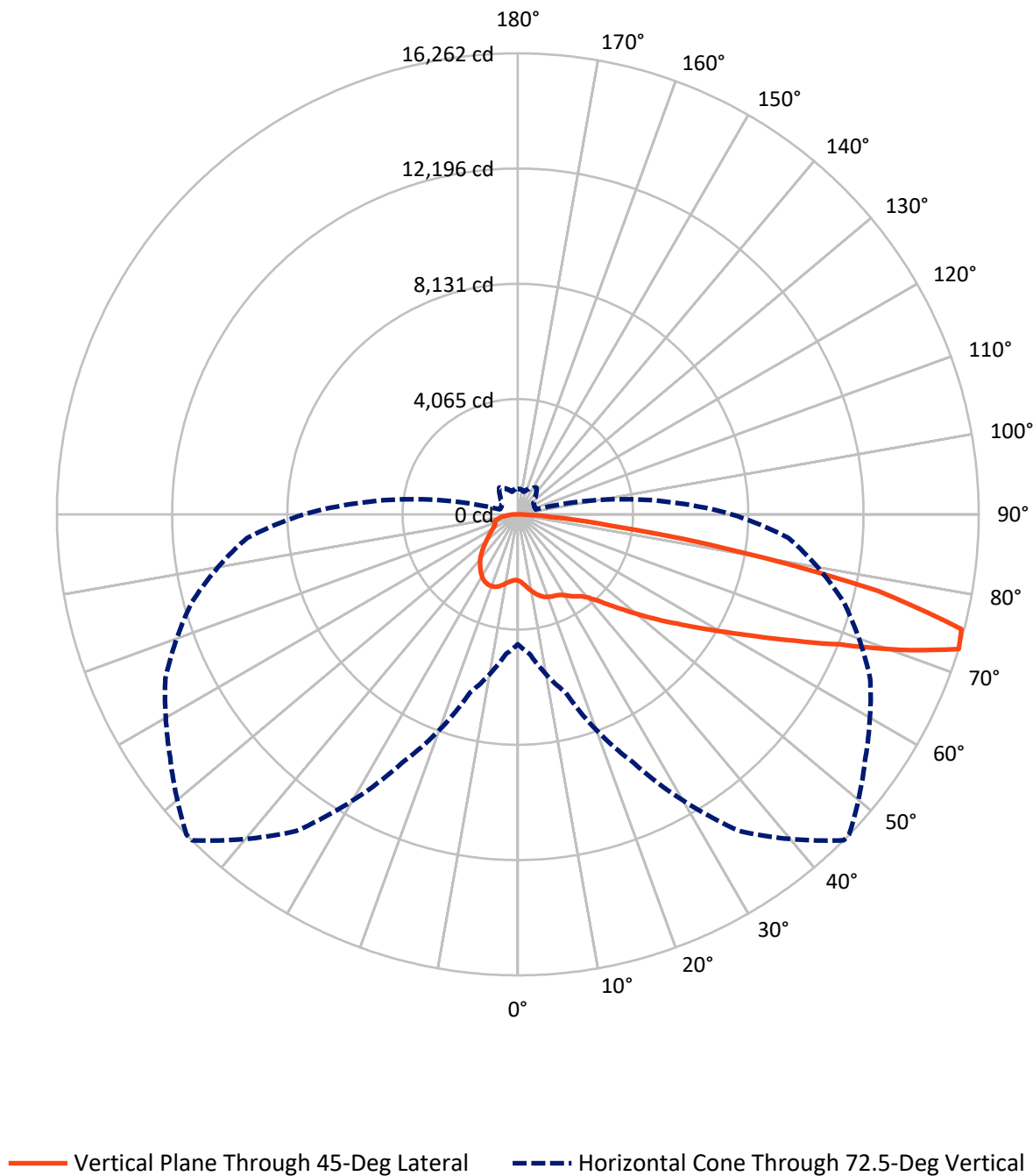
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type IV - Short - N/A

REPORT NUMBER: P967742
CATALOG NUMBER: NAV-SB5A-735-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P967742

CATALOG NUMBER: NAV-SB5A-735-U-T4W

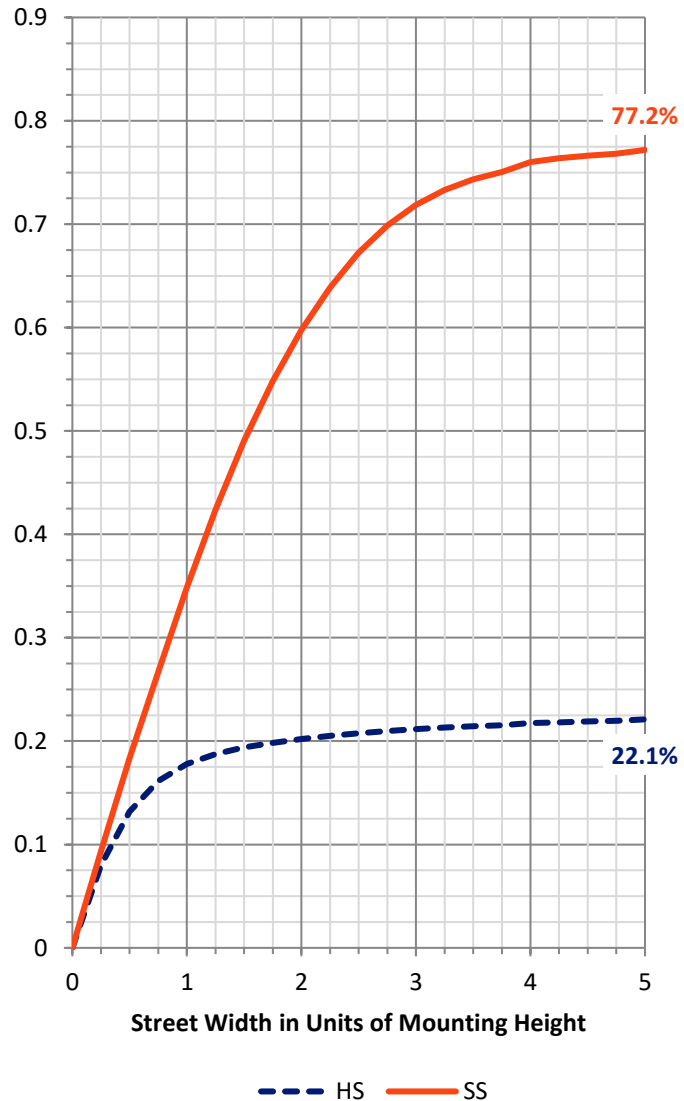
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5240.3	0.0	5240.3
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	17940.1	0.0	17940.1
	% Fixture	77.4	0.0	77.4
Total	Lumens	23180.4	0.0	23180.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.0	1.0
10°-20°	793.5	3.4
20°-30°	1380.4	6.0
30°-40°	1978.9	8.5
40°-50°	2786.4	12.0
50°-60°	4268.0	18.4
60°-70°	6182.8	26.7
70°-80°	4937.3	21.3
80°-90°	614.9	2.7
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°	23180.4	100.0
0°-180°	23180.4	100.0

Coefficient of Utilization



REPORT NUMBER: P967742

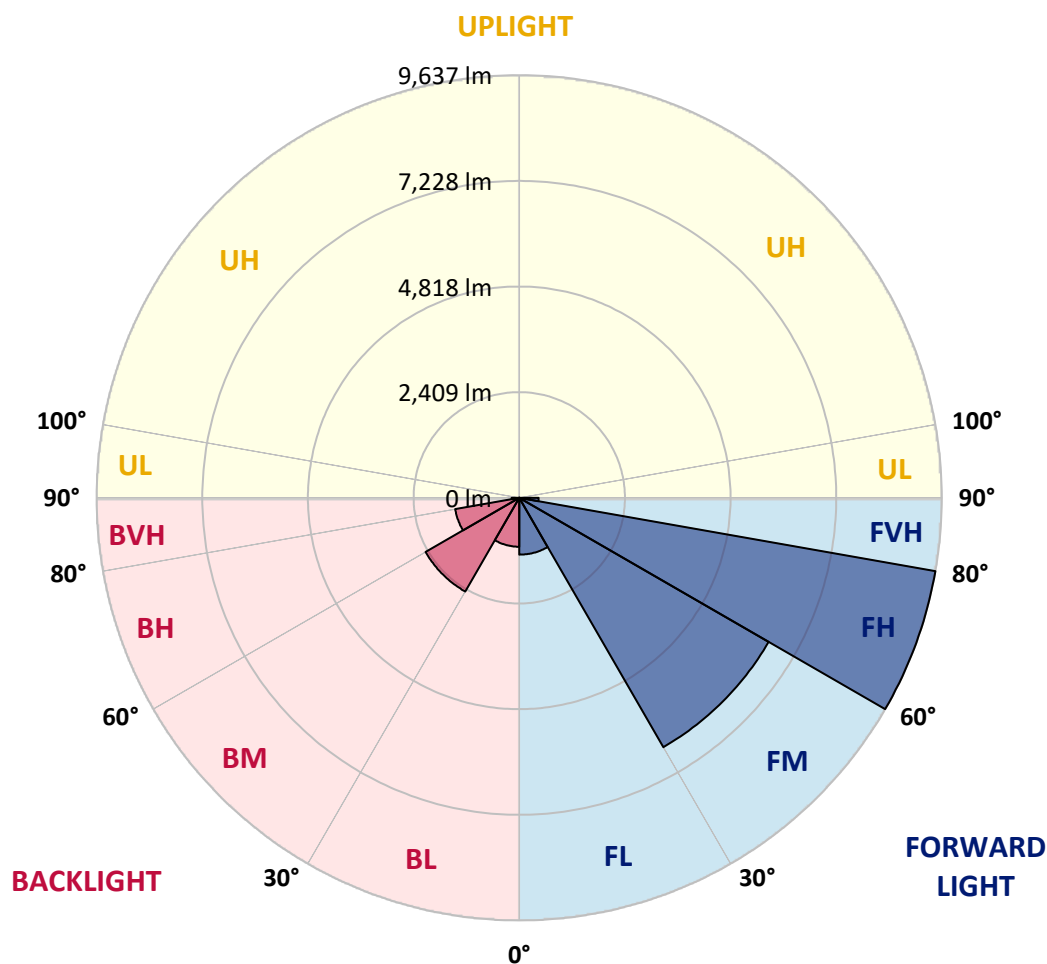
CATALOG NUMBER: NAV-SB5A-735-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1296.3	5.6			
FM	(30°-60°)	6565.9	28.3			
FH	(60°-80°)	9636.8	41.6			G4/12000
FVH	(80°-90°)	441.2	1.9			G3/500
BL	(0°-30°)	1115.7	4.8	B3/2500		
BM	(30°-60°)	2467.4	10.6	B2/2500		
BH	(60°-80°)	1483.4	6.4	B3/2500		G3/2500
BVH	(80°-90°)	173.8	0.7			G2/225
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 Short



REPORT NUMBER: P967742

CATALOG NUMBER: NAV-SB5A-735-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4
2.5°	2430.1	2446.0	2431.3	2417.9	2411.7	2395.8	2394.6	2384.9	2378.7	2361.6	2356.8
5°	2599.8	2620.5	2596.1	2569.3	2544.8	2505.7	2500.9	2472.8	2441.0	2404.3	2383.6
7.5°	2791.5	2809.8	2781.7	2741.5	2698.7	2633.9	2632.7	2581.5	2531.3	2469.1	2433.7
10°	2958.8	2983.2	2945.3	2890.4	2836.7	2763.4	2754.9	2696.3	2632.7	2552.1	2498.4
12.5°	3106.6	3123.6	3087.0	3019.9	2957.5	2884.2	2873.3	2808.6	2737.8	2646.1	2577.8
15°	3223.7	3245.8	3196.9	3124.8	3058.9	2986.8	2977.1	2918.5	2847.7	2751.2	2663.3
17.5°	3300.7	3319.1	3268.9	3188.4	3124.8	3065.1	3057.7	3008.9	2946.6	2848.9	2754.9
20°	3330.0	3349.5	3297.0	3215.2	3156.6	3110.2	3106.6	3071.1	3028.4	2939.3	2844.0
22.5°	3359.3	3377.6	3309.2	3223.7	3172.5	3143.2	3141.9	3118.8	3101.6	3028.4	2935.6
25°	3477.7	3482.6	3391.0	3267.7	3194.4	3168.8	3167.6	3166.3	3173.7	3116.3	3034.5
27.5°	3580.3	3579.1	3501.0	3385.0	3271.4	3217.7	3216.4	3228.6	3251.8	3204.3	3137.0
30°	3730.5	3717.1	3624.3	3503.4	3399.6	3316.6	3309.2	3298.2	3316.6	3278.7	3239.6
32.5°	4049.3	4006.5	3856.3	3641.4	3505.8	3442.4	3432.6	3364.2	3371.5	3348.4	3328.8
35°	4505.9	4449.7	4249.5	3902.7	3637.7	3547.3	3542.5	3455.8	3441.1	3420.3	3427.7
37.5°	5049.4	4979.8	4746.5	4281.2	3864.9	3669.5	3662.1	3584.0	3524.2	3502.2	3543.7
40°	5595.2	5507.2	5314.3	4742.9	4199.4	3873.4	3850.2	3731.7	3663.4	3626.8	3714.7
42.5°	6125.2	6051.9	5887.0	5260.6	4612.2	4171.3	4120.1	3917.3	3866.1	3831.9	3990.6
45°	6594.0	6528.1	6407.3	5813.8	5095.8	4576.7	4526.7	4195.7	4180.0	4180.0	4409.4
47.5°	6975.0	6960.4	6832.1	6378.0	5666.0	5038.4	4951.7	4582.9	4625.6	4691.5	5004.2
50°	7397.5	7357.2	7220.5	6933.5	6336.4	5567.1	5496.3	5057.9	5217.9	5398.6	5863.8
52.5°	7785.9	7807.8	7655.2	7512.3	7093.5	6156.9	6032.3	5618.3	5964.0	6263.2	6871.3
55°	8185.1	8186.4	8143.6	8124.2	7887.3	6809.0	6672.2	6292.5	6842.0	7213.1	8045.9
57.5°	8560.1	8562.5	8626.0	8798.2	8807.9	7561.2	7406.1	7120.4	7817.6	8196.2	9257.3
60°	8894.6	8911.8	9085.2	9488.1	9617.6	8423.3	8276.8	8098.5	8826.3	9207.3	10531.0
62.5°	9007.0	9069.3	9455.1	10027.9	10417.4	9480.8	9336.7	9230.4	9886.2	10240.4	11595.8
65°	8816.5	8959.4	9705.5	10473.6	11240.5	10737.3	10594.5	10478.5	10987.7	11321.0	12470.0
67.5°	8348.8	8533.2	9690.9	10941.3	12239.3	12249.1	12116.0	11843.7	12168.5	12296.7	12754.6
70°	7116.7	7392.7	8837.2	11115.9	13386.0	14316.5	14188.3	13487.3	13346.8	12726.5	11953.6
72.5°	4585.3	4956.5	6507.3	9678.6	13641.1	16261.7	16254.3	14970.9	13719.3	11891.3	9587.0
75°	1672.9	1900.0	3023.5	6075.1	11450.5	16162.8	16210.4	14717.0	12523.9	9185.2	5972.5
77.5°	609.4	666.8	986.7	2334.7	7042.2	12968.3	13067.2	11765.5	8914.2	4609.7	2366.5
80°	319.9	351.7	505.5	906.1	3017.4	7701.6	7856.7	6992.1	4189.7	1388.5	709.5
82.5°	177.0	191.7	283.3	492.1	1359.1	3293.3	3386.2	2762.2	1473.8	588.6	293.0
85°	95.2	101.4	133.1	268.7	664.3	1141.7	1167.4	825.4	587.3	345.5	141.7
87.5°	28.1	34.2	44.0	85.5	260.1	256.5	262.5	163.6	232.1	174.7	46.4
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: P967742

CATALOG NUMBER: NAV-SB5A-735-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4
2.5°	2349.4	2345.8	2332.4	2326.2	2319.0	2317.7	2323.8	2325.0	2326.2	2327.5	2332.4
5°	2371.4	2359.2	2347.0	2339.7	2342.1	2343.4	2355.6	2364.1	2370.2	2375.1	2377.5
7.5°	2414.2	2404.3	2383.6	2382.4	2386.1	2397.1	2413.0	2432.4	2443.5	2452.0	2454.5
10°	2477.6	2459.4	2434.9	2438.6	2446.0	2461.7	2494.7	2510.6	2529.0	2544.8	2541.2
12.5°	2542.4	2526.5	2498.4	2500.9	2513.1	2541.2	2573.0	2592.4	2604.6	2616.8	2621.7
15°	2626.7	2598.6	2568.0	2568.0	2590.0	2620.5	2635.2	2651.1	2658.3	2671.8	2676.7
17.5°	2713.4	2676.7	2636.4	2633.9	2660.8	2675.5	2684.1	2686.4	2688.9	2703.5	2708.5
20°	2800.0	2759.7	2702.3	2697.5	2703.5	2701.1	2699.8	2697.5	2701.1	2719.4	2726.8
22.5°	2885.5	2839.1	2759.7	2737.8	2720.7	2697.5	2696.3	2695.0	2697.5	2715.7	2728.0
25°	2985.6	2929.4	2823.3	2757.2	2699.8	2668.2	2671.8	2673.0	2675.5	2690.1	2709.7
27.5°	3094.4	3032.1	2881.9	2751.2	2647.4	2625.4	2619.3	2623.0	2631.5	2654.7	2677.9
30°	3203.0	3129.7	2935.6	2726.8	2581.5	2550.9	2531.3	2540.0	2566.8	2590.0	2615.6
32.5°	3301.9	3228.6	2978.3	2673.0	2497.2	2449.5	2423.9	2434.9	2461.7	2470.4	2500.9
35°	3418.0	3334.8	2996.6	2587.5	2405.6	2332.4	2298.2	2282.3	2295.7	2287.2	2314.0
37.5°	3547.3	3460.7	2994.2	2475.2	2298.2	2213.9	2166.2	2106.5	2078.4	2049.1	2067.3
40°	3739.1	3614.6	2964.9	2339.7	2165.0	2088.1	2002.6	1901.3	1837.8	1780.4	1784.0
42.5°	4000.4	3828.2	2911.2	2190.7	2014.8	1942.8	1826.8	1708.4	1608.2	1513.0	1504.4
45°	4390.0	4107.9	2844.0	2032.0	1852.5	1781.7	1655.9	1522.7	1409.2	1287.1	1272.4
47.5°	4951.7	4484.0	2780.5	1851.3	1681.5	1616.7	1503.2	1379.9	1245.6	1127.1	1113.7
50°	5723.4	5023.7	2721.9	1675.4	1513.0	1464.1	1373.8	1247.9	1112.4	1017.2	1011.1
52.5°	6705.1	5757.6	2697.5	1505.6	1355.5	1337.1	1265.1	1147.9	1019.7	939.0	933.0
55°	7832.2	6635.5	2697.5	1343.3	1217.5	1223.5	1173.5	1064.8	953.7	881.6	874.3
57.5°	8982.6	7524.5	2648.6	1193.0	1100.2	1125.9	1094.1	998.9	898.7	824.3	812.0
60°	10042.5	8269.4	2450.8	1056.3	996.4	1036.7	1016.0	934.2	812.0	749.8	740.0
62.5°	10857.0	8689.5	2069.8	947.6	910.9	957.4	946.4	848.7	796.2	770.5	762.0
65°	11264.9	8621.2	1582.6	851.2	838.9	910.9	887.8	884.1	842.6	813.2	803.5
67.5°	11014.5	8032.5	1147.9	780.3	797.3	868.2	957.4	972.0	895.1	837.7	827.9
70°	9916.8	6967.7	854.7	713.1	744.9	869.4	1091.7	1017.2	878.0	810.8	799.8
72.5°	7544.1	5195.8	663.1	642.3	676.5	875.6	1151.5	996.4	829.1	896.3	889.0
75°	4314.2	2852.6	532.4	555.7	591.0	818.2	1120.9	942.7	791.3	823.1	823.1
77.5°	1644.8	1096.5	439.6	470.2	475.0	714.3	1072.1	939.0	753.5	735.1	670.3
80°	570.3	428.7	363.9	373.6	367.6	635.0	1028.2	816.9	616.6	552.0	533.6
82.5°	233.2	213.7	288.2	275.9	261.3	493.3	830.4	668.0	504.3	445.7	440.9
85°	101.4	135.5	190.4	167.3	151.4	341.9	665.5	565.4	426.2	367.6	366.3
87.5°	20.8	51.2	80.6	75.7	78.1	228.4	472.5	401.8	301.7	225.9	177.0
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)