

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: P967862

Luminaire Tested: **NAV-SB5A-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967862
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

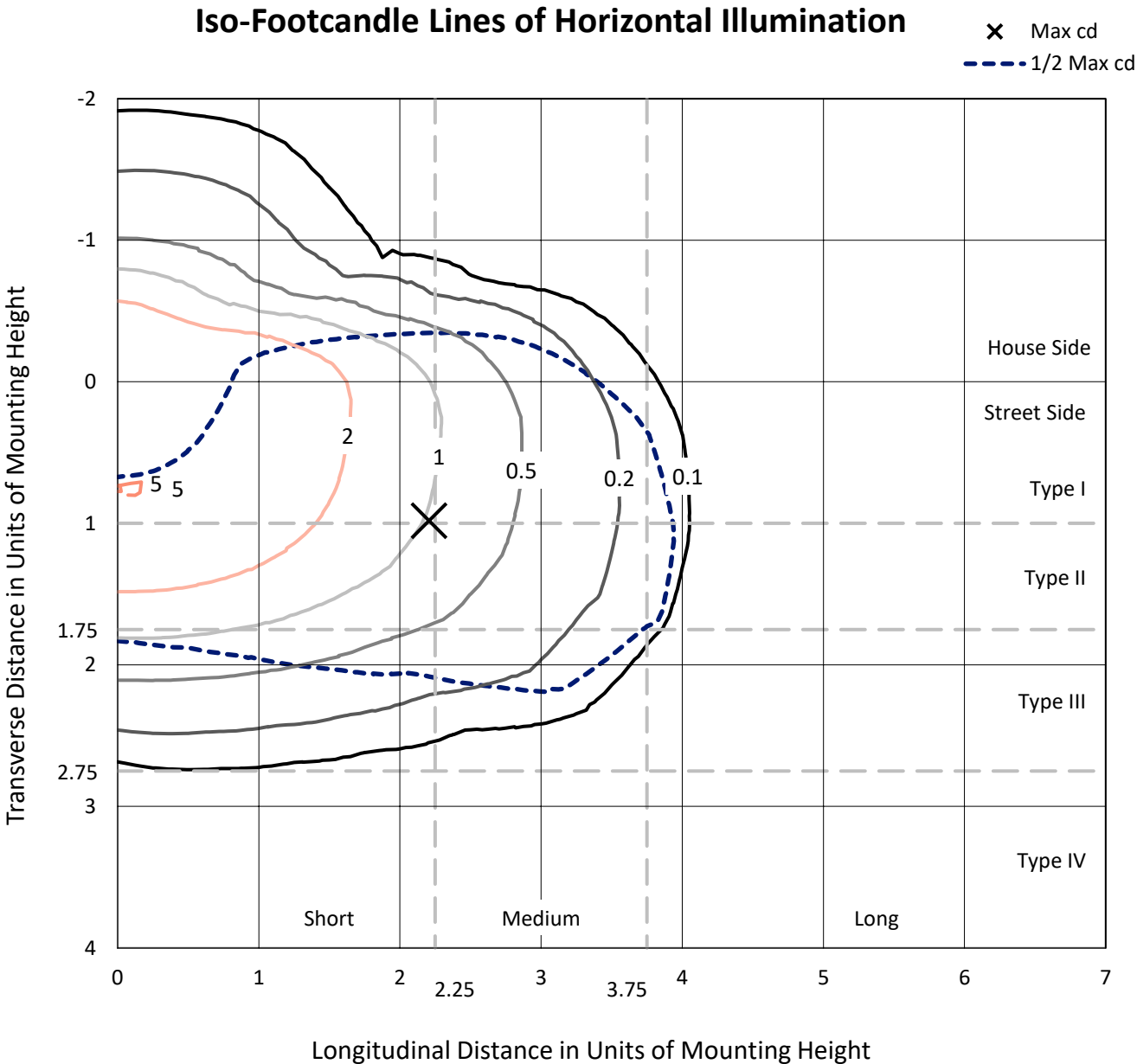
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20209.9 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

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



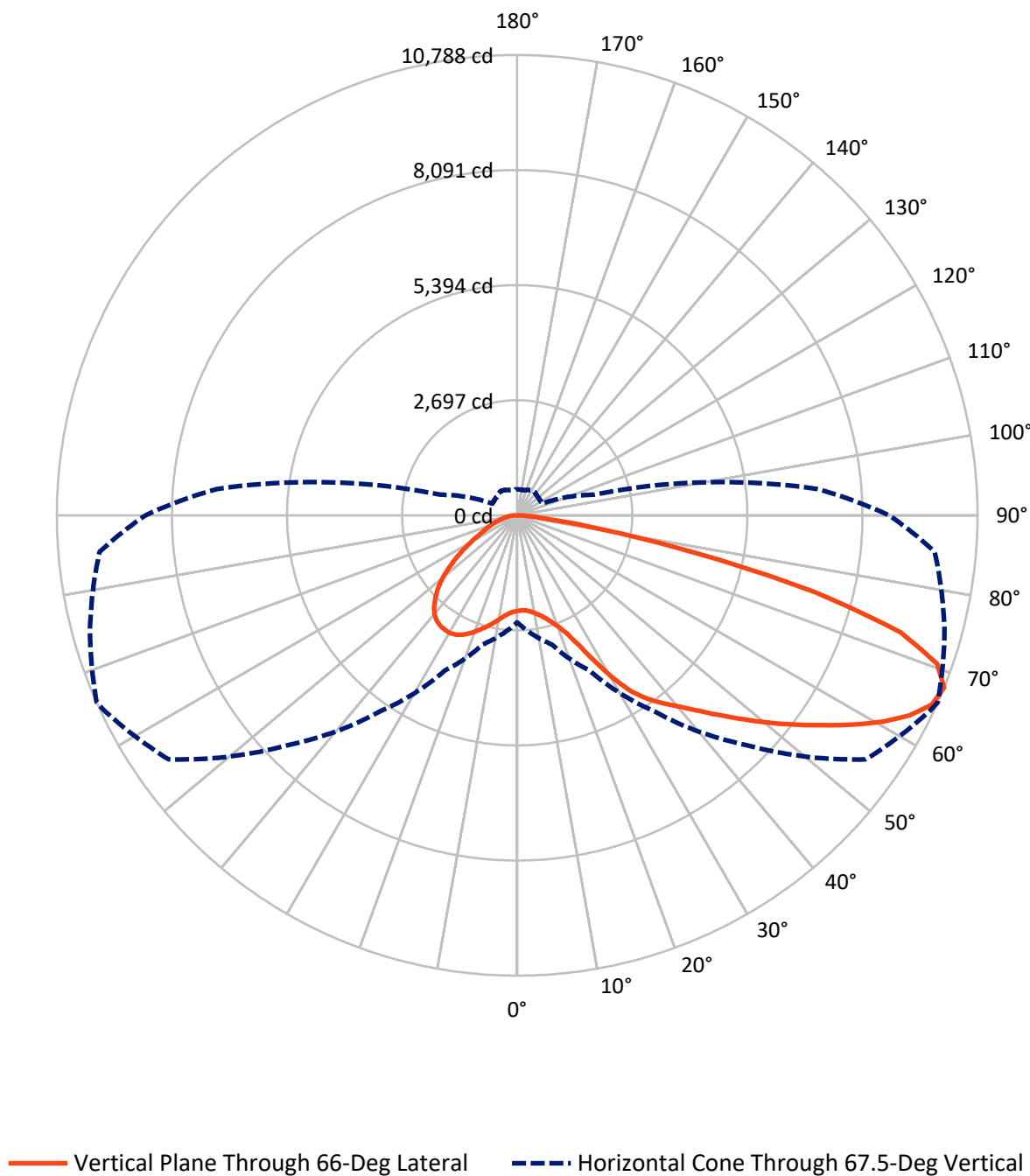
REPORT NUMBER: P967862
CATALOG NUMBER: NAV-SB5A-827-U-T3



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
Type III - Short - N/A

REPORT NUMBER: P967862
CATALOG NUMBER: NAV-SB5A-827-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P967862

CATALOG NUMBER: NAV-SB5A-827-U-T3

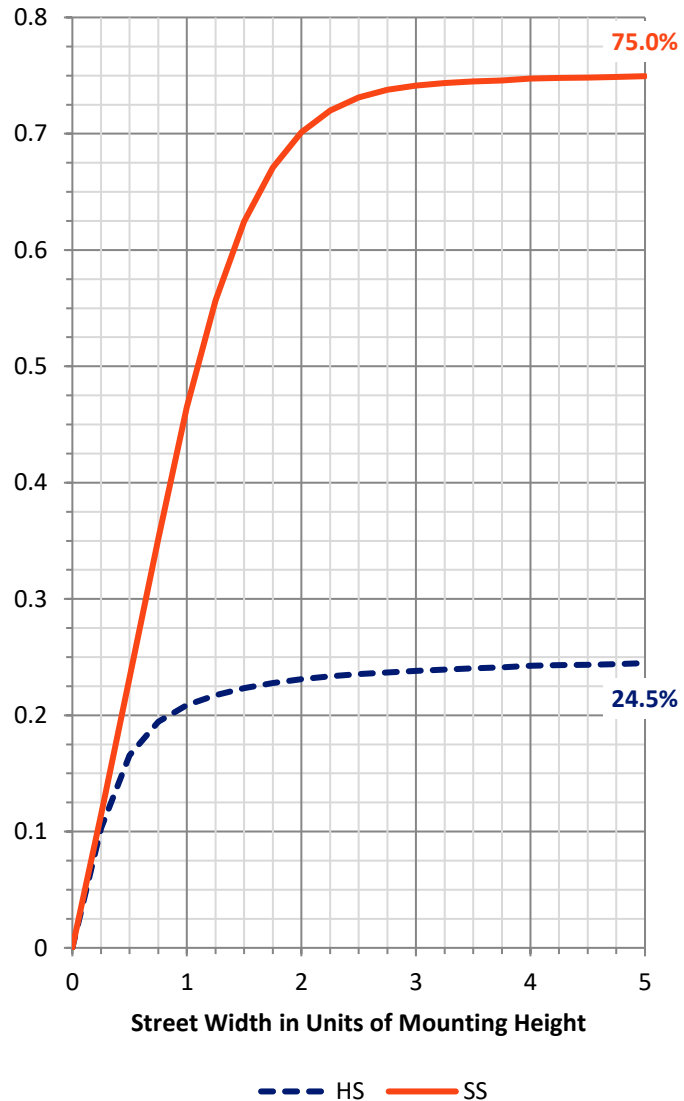
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5025.1	0.0	5025.1
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	15184.8	0.0	15184.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	20209.9	0.0	20209.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.2	1.1
10°-20°	734.3	3.6
20°-30°	1415.2	7.0
30°-40°	2481.4	12.3
40°-50°	3689.1	18.3
50°-60°	4676.3	23.1
60°-70°	4575.6	22.6
70°-80°	2182.6	10.8
80°-90°	233.3	1.2
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°	20209.9	100.0
0°-180°	20209.9	100.0

Coefficient of Utilization



REPORT NUMBER: P967862

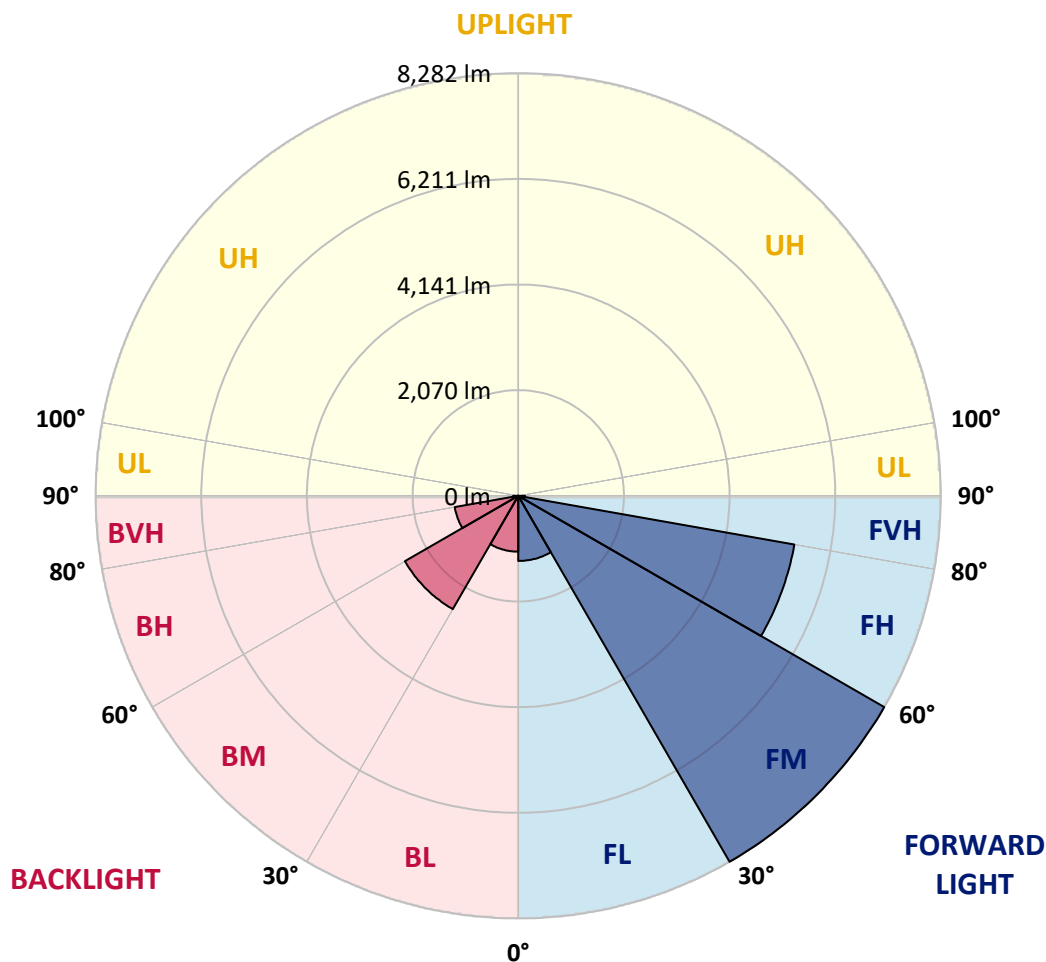
CATALOG NUMBER: NAV-SB5A-827-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1277.1	6.3			
FM	(30°-60°)	8281.9	41.0			
FH	(60°-80°)	5493.6	27.2			G3/7500
FVH	(80°-90°)	132.3	0.7			G2/225
BL	(0°-30°)	1094.7	5.4	B3/2500		
BM	(30°-60°)	2564.9	12.7	B3/5000		
BH	(60°-80°)	1264.6	6.3	B3/2500		G3/2500
BVH	(80°-90°)	101.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



REPORT NUMBER: P967862

CATALOG NUMBER: NAV-SB5A-827-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6
2.5°	2218.2	2230.9	2227.7	2222.4	2221.4	2223.5	2226.7	2229.9	2228.8	2234.1	2242.6
5°	2211.8	2224.6	2223.5	2223.5	2227.7	2236.2	2241.6	2246.9	2241.6	2247.9	2259.6
7.5°	2216.0	2225.6	2229.9	2234.1	2244.8	2260.6	2273.4	2285.0	2278.7	2286.2	2301.0
10°	2270.2	2277.7	2281.9	2281.9	2289.3	2307.4	2320.1	2341.4	2336.1	2347.8	2366.8
12.5°	2369.0	2376.4	2376.4	2372.2	2377.5	2389.2	2393.4	2416.7	2407.2	2426.3	2445.4
15°	2490.0	2504.9	2493.2	2485.7	2487.9	2499.6	2498.5	2516.6	2507.0	2522.9	2540.0
17.5°	2623.8	2643.0	2623.8	2622.8	2618.5	2631.3	2632.3	2648.2	2631.3	2643.0	2654.6
20°	2782.1	2808.6	2792.6	2797.9	2788.4	2793.7	2799.0	2822.3	2795.8	2804.3	2801.1
22.5°	3005.0	3036.9	3019.9	3040.0	3033.7	3029.4	3028.4	3069.8	3028.4	3031.5	3000.8
25°	3329.9	3368.2	3338.4	3366.0	3366.0	3379.8	3395.7	3448.8	3379.8	3359.6	3280.0
27.5°	3809.9	3848.2	3789.7	3806.7	3801.4	3835.3	3818.4	3950.0	3875.7	3842.8	3682.5
30°	4387.5	4455.5	4345.1	4340.8	4335.5	4389.7	4414.1	4501.2	4425.7	4392.8	4199.6
32.5°	5011.9	5083.1	4951.4	4913.1	4892.9	4925.8	4905.8	4975.8	4923.8	4872.7	4633.9
35°	5672.3	5742.5	5617.1	5542.8	5462.1	5393.1	5320.9	5338.9	5290.1	5212.5	4965.2
37.5°	6296.7	6425.2	6292.5	6212.8	6064.2	5929.3	5727.6	5643.6	5598.0	5526.9	5277.3
40°	6932.8	7006.1	6905.1	6837.2	6675.8	6464.5	6141.7	5964.4	5902.8	5833.8	5622.4
42.5°	7401.0	7471.1	7417.0	7370.3	7243.9	6998.6	6581.3	6359.4	6270.1	6192.6	6013.2
45°	7772.7	7824.7	7790.7	7807.7	7753.6	7515.7	7036.8	6783.0	6690.7	6596.2	6454.9
47.5°	7922.4	7977.6	8031.8	8132.7	8225.0	8049.8	7526.4	7241.7	7144.0	7047.5	6908.3
50°	7905.4	7961.7	8118.8	8333.4	8620.0	8561.6	8042.4	7730.2	7639.9	7529.5	7401.0
52.5°	7769.5	7833.3	8035.0	8391.8	8848.3	8945.0	8568.0	8234.5	8149.7	8018.0	7889.5
55°	7412.7	7450.9	7753.6	8259.0	8902.4	9212.5	9083.0	8771.8	8687.0	8503.2	8363.1
57.5°	6751.2	6806.4	7247.1	7901.2	8766.5	9394.1	9535.4	9336.7	9255.0	8990.6	8844.1
60°	5887.9	5976.1	6480.5	7300.2	8420.4	9393.1	9946.3	9892.1	9824.1	9470.6	9317.7
62.5°	4911.0	5013.0	5498.2	6450.7	7815.1	9126.5	10203.3	10357.2	10322.2	9913.4	9718.0
65°	3771.7	3841.7	4324.9	5351.7	6873.3	8554.2	10233.0	10674.7	10681.1	10250.0	9927.1
67.5°	2511.2	2713.0	3132.4	4015.8	5611.9	7618.7	9971.7	10726.7	10788.3	10365.7	9822.1
70°	1225.4	1490.9	1901.8	2610.0	4015.8	6184.1	9289.0	10299.8	10436.9	10028.0	9195.6
72.5°	508.6	594.6	818.7	1288.0	2305.2	4173.1	7917.1	9142.5	9396.3	8885.5	7731.3
75°	343.0	371.7	468.3	660.5	1050.1	2057.9	5709.6	6817.1	7225.8	6710.9	5485.5
77.5°	264.3	282.5	340.8	461.9	624.3	778.3	3055.9	4108.3	4319.6	3998.9	2854.2
80°	208.1	221.9	254.8	336.6	442.8	416.3	1041.7	1861.4	1983.5	1663.9	917.5
82.5°	180.5	185.8	182.7	228.3	294.2	243.1	341.9	687.1	758.2	550.0	299.4
85°	130.6	145.4	151.8	141.2	156.1	123.2	140.1	243.1	267.6	238.9	168.8
87.5°	53.1	78.6	96.7	91.3	57.3	35.1	43.6	71.1	81.8	89.2	55.2
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: P967862

CATALOG NUMBER: NAV-SB5A-827-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6
2.5°	2243.6	2251.1	2256.4	2262.8	2267.0	2273.4	2286.2	2293.5	2294.7	2300.0	2298.9
5°	2263.8	2274.5	2286.2	2303.2	2322.2	2338.1	2362.6	2379.5	2386.0	2391.2	2390.2
7.5°	2307.4	2322.2	2343.5	2373.2	2400.9	2422.1	2451.8	2472.0	2492.2	2499.6	2500.6
10°	2372.2	2393.4	2424.2	2464.5	2494.2	2521.9	2552.7	2569.7	2589.9	2598.4	2602.6
12.5°	2452.8	2475.2	2515.5	2571.8	2599.4	2618.5	2629.1	2624.9	2629.1	2636.5	2638.7
15°	2545.3	2569.7	2615.3	2675.9	2694.9	2677.9	2654.6	2633.3	2630.1	2632.3	2639.8
17.5°	2654.6	2672.7	2725.8	2776.7	2762.9	2692.9	2641.8	2607.9	2590.9	2585.6	2593.0
20°	2807.5	2807.5	2851.0	2882.9	2790.6	2671.6	2591.9	2536.8	2501.7	2486.9	2483.7
22.5°	2993.3	2976.3	3004.0	2981.6	2785.2	2612.1	2501.7	2406.1	2353.0	2331.8	2328.6
25°	3229.1	3208.9	3201.5	3063.4	2747.0	2517.6	2338.1	2222.4	2175.7	2164.1	2166.1
27.5°	3584.7	3533.8	3437.1	3108.0	2676.9	2369.0	2147.1	2039.7	2013.2	2014.3	2017.5
30°	4058.4	3956.4	3719.6	3115.5	2562.2	2158.8	1951.7	1875.2	1862.4	1867.8	1885.8
32.5°	4496.9	4400.2	4008.5	3081.5	2386.0	1952.7	1776.4	1725.5	1706.4	1712.8	1721.3
35°	4841.0	4814.4	4276.0	3033.7	2169.3	1759.5	1619.3	1575.7	1538.6	1530.1	1536.5
37.5°	5165.9	5155.2	4476.7	2966.8	1954.9	1622.5	1492.9	1435.6	1381.5	1351.8	1352.8
40°	5522.6	5512.0	4608.4	2863.7	1764.7	1503.6	1379.3	1303.9	1237.1	1182.8	1188.2
42.5°	5924.0	5861.4	4671.0	2716.1	1603.4	1402.7	1287.0	1185.0	1096.9	1046.9	1050.1
45°	6362.6	6221.3	4670.0	2528.3	1467.5	1310.4	1188.2	1043.8	962.1	915.3	913.2
47.5°	6827.6	6565.3	4612.6	2320.1	1335.8	1208.4	1035.2	924.9	870.7	842.0	835.7
50°	7307.6	6887.1	4514.9	2081.2	1201.0	1092.6	939.7	864.4	823.0	796.4	786.8
52.5°	7758.8	7179.1	4397.0	1810.5	1063.9	980.1	897.3	838.9	795.3	765.6	752.9
55°	8178.3	7430.7	4230.4	1533.3	952.4	904.7	877.1	828.2	778.3	743.3	729.5
57.5°	8551.0	7594.3	3942.7	1273.2	872.8	852.7	855.9	810.2	752.9	723.1	704.0
60°	8861.0	7714.3	3516.8	1032.1	808.1	801.7	823.0	776.2	709.3	675.4	660.5
62.5°	9046.9	7712.2	2994.4	845.2	752.9	755.0	779.4	733.7	665.7	634.0	624.3
65°	9031.0	7523.2	2421.0	723.1	699.8	701.9	733.7	687.1	629.7	610.6	609.5
67.5°	8711.4	7062.4	1857.2	643.5	641.3	650.9	688.1	655.2	607.4	605.3	608.4
70°	7846.0	6105.6	1337.9	579.7	580.9	594.6	643.5	635.0	595.7	599.9	598.9
72.5°	6291.4	4655.1	898.3	512.9	513.9	536.3	601.0	619.1	584.0	640.3	648.8
75°	4190.0	2903.1	577.7	441.8	442.8	471.5	563.9	588.2	552.2	638.2	643.5
77.5°	2013.2	1305.0	418.4	371.7	371.7	398.2	487.4	526.6	470.4	495.9	454.5
80°	695.5	490.6	329.1	299.4	293.0	311.1	410.9	456.6	405.6	373.8	350.4
82.5°	274.0	254.8	264.3	232.6	211.4	222.9	319.6	377.0	298.4	269.7	268.7
85°	157.1	165.6	186.9	154.0	122.1	136.9	234.6	270.8	225.1	198.5	202.8
87.5°	42.4	58.4	86.0	79.6	55.2	58.4	111.5	149.8	129.6	99.8	103.0
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)