

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: P966312

Luminaire Tested: **NAV-SB4B-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966312
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-SB4B-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

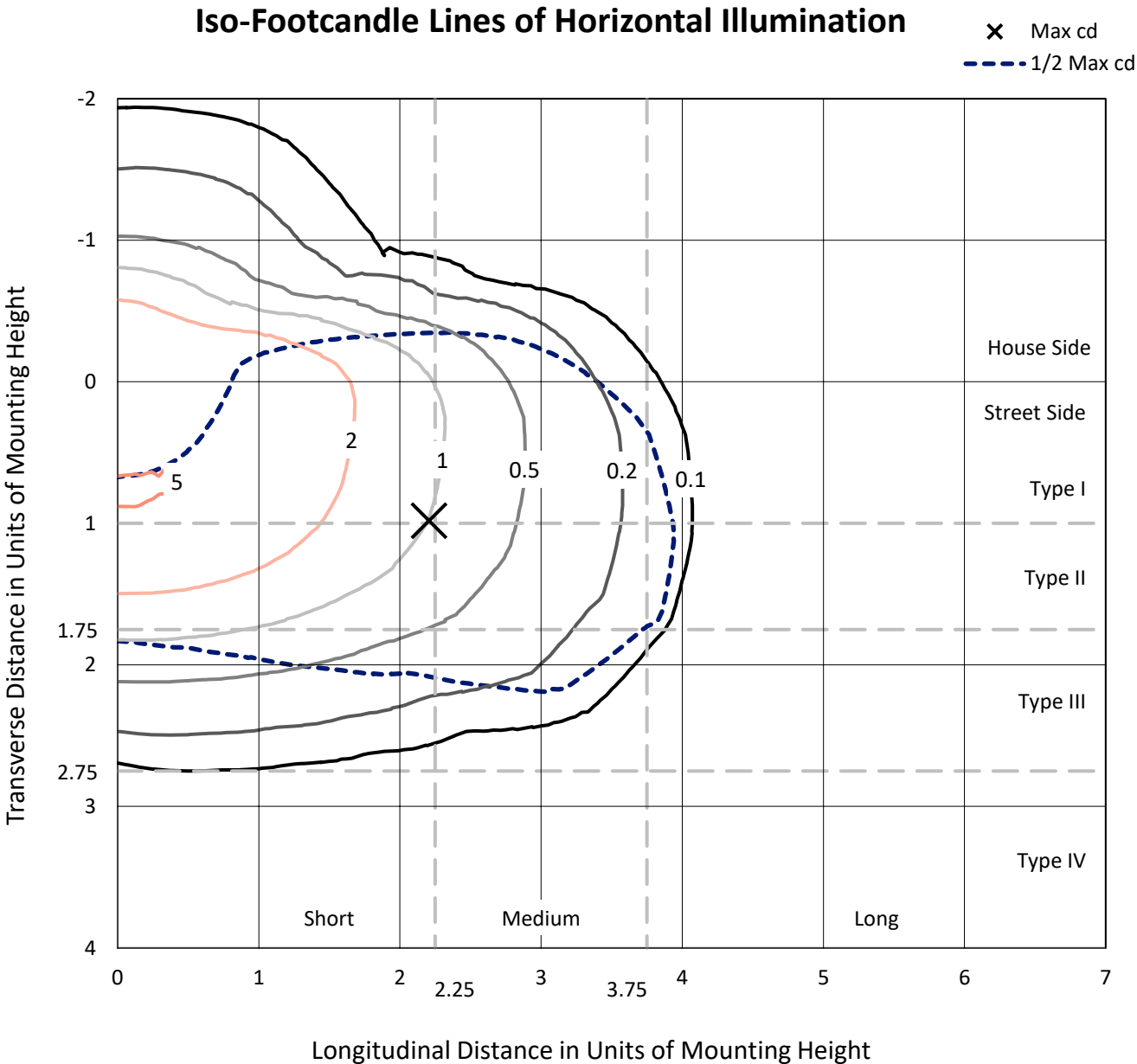
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20799.3 lumens
Efficiency: N/A
Efficacy: 141.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 147
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



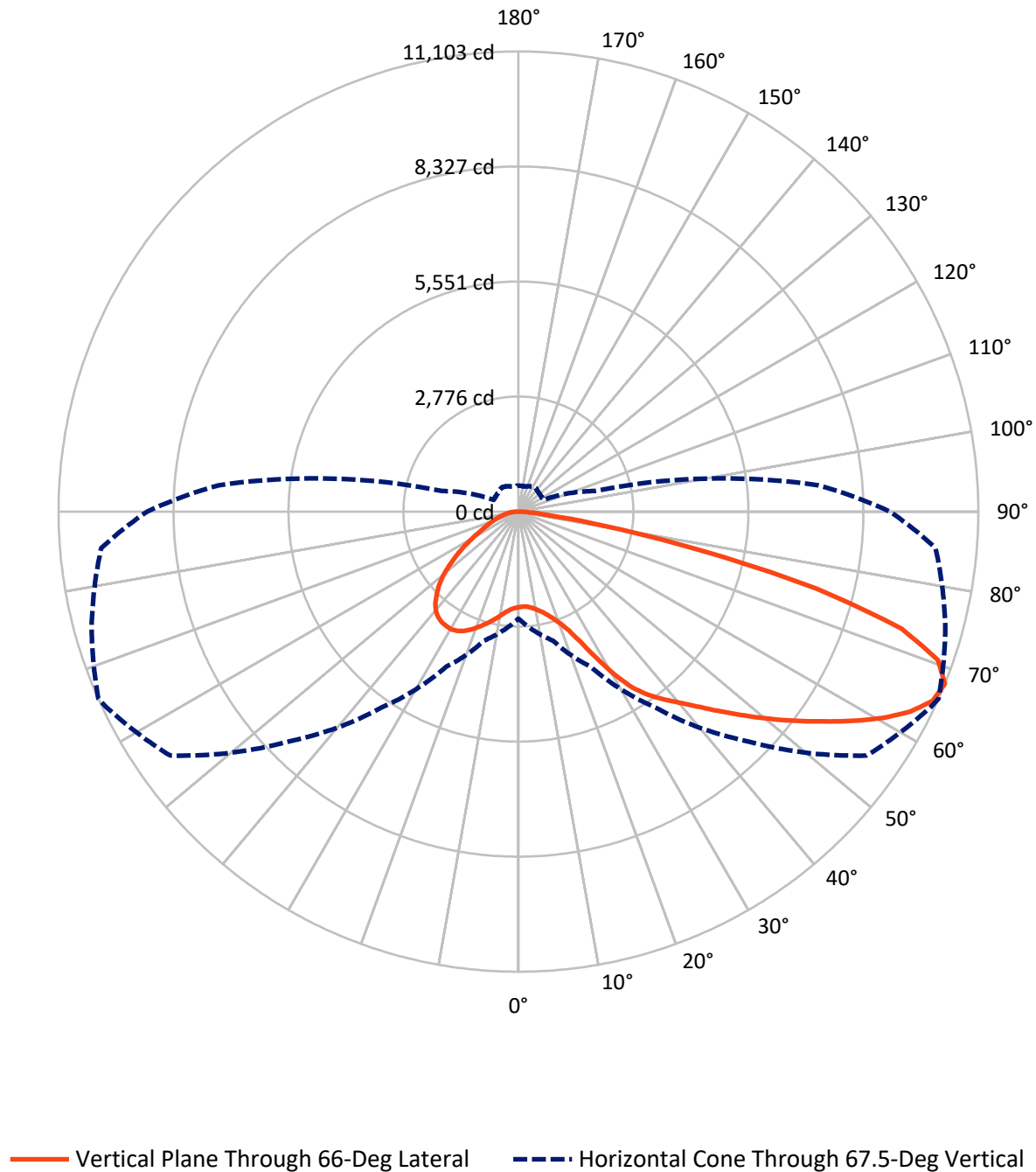
REPORT NUMBER: P966312
CATALOG NUMBER: NAV-SB4B-830-U-T3



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

REPORT NUMBER: P966312
CATALOG NUMBER: NAV-SB4B-830-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P966312

CATALOG NUMBER: NAV-SB4B-830-U-T3

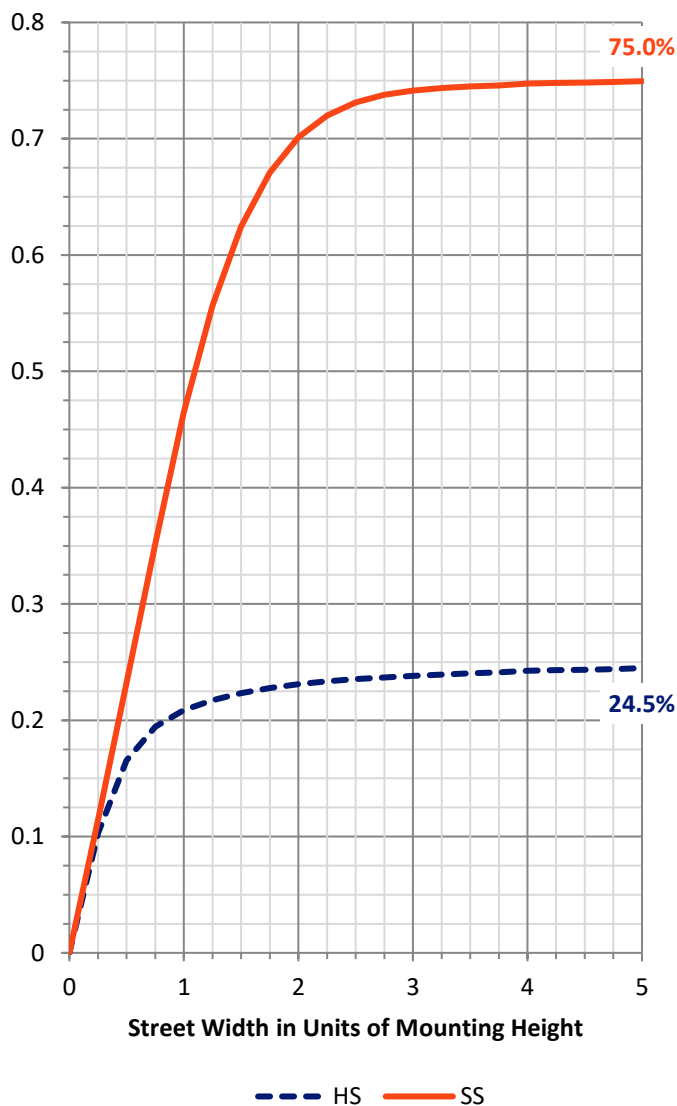
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5171.7	0.0	5171.7
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	15627.6	0.0	15627.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	20799.3	0.0	20799.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.7	1.1
10°-20°	755.7	3.6
20°-30°	1456.5	7.0
30°-40°	2553.8	12.3
40°-50°	3796.6	18.3
50°-60°	4812.6	23.1
60°-70°	4709.0	22.6
70°-80°	2246.3	10.8
80°-90°	240.1	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°	20799.3	100.0
0°-180°	20799.3	100.0

Coefficient of Utilization



REPORT NUMBER: P966312

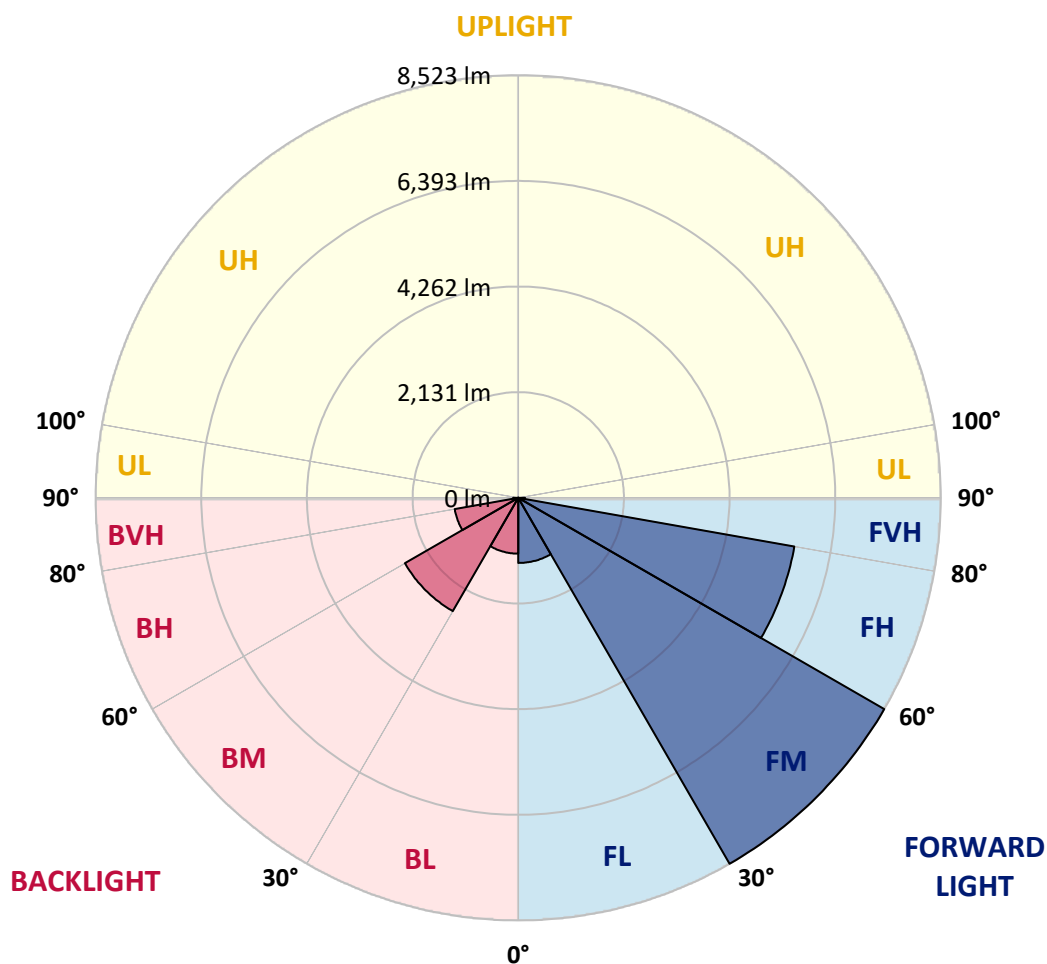
CATALOG NUMBER: NAV-SB4B-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1314.3	6.3			
FM	(30°-60°)	8523.4	41.0			
FH	(60°-80°)	5653.8	27.2			G3/7500
FVH	(80°-90°)	136.1	0.7			G2/225
BL	(0°-30°)	1126.6	5.4	B3/2500		
BM	(30°-60°)	2639.7	12.7	B3/5000		
BH	(60°-80°)	1301.5	6.3	B3/2500		G3/2500
BVH	(80°-90°)	104.0	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: P966312

CATALOG NUMBER: NAV-SB4B-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0
2.5°	2282.9	2296.0	2292.7	2287.3	2286.2	2288.3	2291.6	2294.9	2293.8	2299.3	2308.0
5°	2276.3	2289.4	2288.3	2288.3	2292.7	2301.4	2307.0	2312.4	2307.0	2313.4	2325.5
7.5°	2280.7	2290.6	2294.9	2299.3	2310.1	2326.5	2339.7	2351.8	2345.2	2352.8	2368.2
10°	2336.4	2344.1	2348.5	2348.5	2356.1	2374.7	2387.7	2409.7	2404.1	2416.2	2435.9
12.5°	2438.1	2445.8	2445.8	2441.3	2446.8	2458.8	2463.2	2487.3	2477.4	2497.1	2516.8
15°	2562.6	2578.0	2565.9	2558.3	2560.4	2572.4	2571.4	2590.0	2580.1	2596.5	2614.0
17.5°	2700.4	2720.0	2700.4	2699.2	2694.8	2707.9	2709.1	2725.5	2707.9	2720.0	2732.0
20°	2863.1	2890.5	2874.1	2879.5	2869.7	2875.2	2880.7	2904.6	2877.4	2886.1	2882.8
22.5°	3092.6	3125.4	3107.9	3128.7	3122.1	3117.7	3116.7	3159.4	3116.7	3120.0	3088.3
25°	3427.1	3466.3	3435.8	3464.2	3464.2	3478.4	3494.8	3549.5	3478.4	3457.6	3375.6
27.5°	3921.0	3960.3	3900.2	3917.8	3912.2	3947.2	3929.7	4065.3	3988.8	3954.9	3789.8
30°	4515.4	4585.4	4471.8	4467.4	4461.9	4517.7	4542.8	4632.4	4554.8	4521.0	4322.0
32.5°	5158.0	5231.3	5095.8	5056.4	5035.6	5069.5	5048.7	5120.9	5067.4	5014.9	4769.0
35°	5837.8	5909.9	5781.0	5704.4	5621.4	5550.4	5476.1	5494.6	5444.4	5364.5	5109.9
37.5°	6480.4	6612.6	6476.0	6394.1	6241.0	6102.2	5894.6	5808.3	5761.3	5688.0	5431.3
40°	7134.9	7210.4	7106.5	7036.6	6870.5	6653.0	6320.8	6138.3	6074.9	6003.8	5786.4
42.5°	7616.9	7689.0	7633.3	7585.2	7455.1	7202.7	6773.2	6544.8	6453.0	6373.2	6188.5
45°	7999.3	8052.9	8018.0	8035.4	7979.7	7734.9	7242.0	6980.9	6885.7	6788.5	6643.1
47.5°	8153.5	8210.2	8266.0	8369.8	8464.9	8284.6	7745.8	7453.0	7352.4	7253.0	7109.8
50°	8135.9	8193.8	8355.6	8576.4	8871.4	8811.3	8276.9	7955.6	7862.8	7749.1	7616.9
52.5°	7996.0	8061.6	8269.3	8636.4	9106.4	9205.8	8817.9	8474.7	8387.3	8251.8	8119.5
55°	7628.9	7668.2	7979.7	8499.8	9162.1	9481.2	9347.9	9027.7	8940.3	8751.2	8606.9
57.5°	6948.1	7004.8	7458.4	8131.6	9022.3	9668.1	9813.5	9609.1	9524.9	9252.8	9102.0
60°	6059.6	6150.3	6669.4	7513.0	8666.0	9667.0	10236.4	10180.6	10110.7	9746.7	9589.4
62.5°	5054.3	5159.1	5658.5	6638.8	8043.1	9392.7	10500.8	10659.3	10623.2	10202.4	10001.3
65°	3881.7	3953.7	4451.0	5507.7	7073.7	8803.6	10531.4	10985.9	10992.5	10548.9	10216.7
67.5°	2584.5	2792.1	3223.8	4133.0	5775.5	7840.9	10262.6	11039.6	11102.9	10668.0	10108.4
70°	1261.1	1534.3	1957.2	2686.1	4133.0	6364.5	9559.9	10600.2	10741.2	10320.5	9463.7
72.5°	523.5	611.9	842.6	1325.5	2372.5	4294.8	8147.9	9409.1	9670.3	9144.6	7956.8
75°	353.0	382.5	482.0	679.7	1080.8	2117.9	5876.0	7015.8	7436.6	6906.6	5645.5
77.5°	272.1	290.7	350.8	475.4	642.6	801.0	3145.1	4228.0	4445.5	4115.5	2937.4
80°	214.2	228.4	262.3	346.4	455.7	428.3	1072.0	1915.7	2041.4	1712.5	944.2
82.5°	185.7	191.3	188.0	234.9	302.7	250.2	351.9	707.0	780.2	566.1	308.2
85°	134.4	149.8	156.3	145.3	160.6	126.8	144.2	250.2	275.4	245.9	173.7
87.5°	54.6	80.9	99.4	94.0	59.0	36.1	44.8	73.2	84.2	91.8	56.8
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: P966312

CATALOG NUMBER: NAV-SB4B-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0	2307.0
2.5°	2309.1	2316.7	2322.2	2328.8	2333.1	2339.7	2352.8	2360.5	2361.6	2367.0	2365.9
5°	2329.8	2340.8	2352.8	2370.3	2390.0	2406.4	2431.5	2449.0	2455.5	2461.0	2459.9
7.5°	2374.7	2390.0	2411.8	2442.5	2470.9	2492.7	2523.2	2544.0	2564.9	2572.4	2573.6
10°	2441.3	2463.2	2494.8	2536.4	2567.0	2595.4	2627.1	2644.6	2665.3	2674.1	2678.4
12.5°	2524.4	2547.3	2588.8	2646.8	2675.1	2694.8	2705.8	2701.4	2705.8	2713.5	2715.6
15°	2619.5	2644.6	2691.5	2753.9	2773.5	2756.0	2732.0	2710.2	2706.9	2709.1	2716.8
17.5°	2732.0	2750.6	2805.2	2857.7	2843.5	2771.4	2718.9	2684.0	2666.4	2661.0	2668.6
20°	2889.4	2889.4	2934.2	2967.0	2871.9	2749.5	2667.6	2610.7	2574.7	2559.3	2556.0
22.5°	3080.6	3063.1	3091.5	3068.6	2866.4	2688.3	2574.7	2476.3	2421.7	2399.8	2396.6
25°	3323.3	3302.4	3294.9	3152.8	2827.1	2591.1	2406.4	2287.3	2239.1	2227.1	2229.4
27.5°	3689.3	3636.9	3537.4	3198.6	2755.0	2438.1	2209.7	2099.3	2071.9	2073.1	2076.3
30°	4176.7	4071.8	3828.1	3206.3	2636.9	2221.7	2008.6	1929.9	1916.7	1922.3	1940.8
32.5°	4628.1	4528.6	4125.3	3171.4	2455.5	2009.7	1828.3	1775.8	1756.1	1762.7	1771.4
35°	4982.1	4954.7	4400.7	3122.1	2232.7	1810.8	1666.5	1621.8	1583.5	1574.7	1581.3
37.5°	5316.5	5305.6	4607.3	3053.3	2011.9	1669.8	1536.5	1477.4	1421.8	1391.1	1392.3
40°	5683.7	5672.8	4742.8	2947.3	1816.2	1547.4	1419.5	1341.9	1273.2	1217.4	1222.8
42.5°	6096.8	6032.3	4807.2	2795.4	1650.1	1443.6	1324.5	1219.5	1128.8	1077.5	1080.8
45°	6548.1	6402.8	4806.1	2602.0	1510.2	1348.5	1222.8	1074.2	990.0	942.0	939.8
47.5°	7026.8	6756.8	4747.2	2387.7	1374.7	1243.6	1065.5	951.8	896.1	866.6	860.1
50°	7520.7	7088.0	4646.6	2141.9	1235.9	1124.5	967.1	889.5	847.0	819.6	809.7
52.5°	7985.2	7388.5	4525.3	1863.2	1095.0	1008.7	923.4	863.4	818.5	787.9	774.8
55°	8416.8	7647.4	4353.8	1578.0	980.2	931.1	902.6	852.4	801.0	765.0	750.7
57.5°	8800.3	7815.7	4057.6	1310.3	898.3	877.5	880.8	833.8	774.8	744.3	724.6
60°	9119.5	7939.2	3619.4	1062.2	831.6	825.0	847.0	798.9	730.0	695.1	679.7
62.5°	9310.7	7937.1	3081.8	869.9	774.8	776.9	802.2	755.1	685.2	652.4	642.6
65°	9294.3	7742.5	2491.6	744.3	720.2	722.3	755.1	707.0	648.0	628.3	627.3
67.5°	8965.4	7268.3	1911.3	662.3	660.1	669.9	708.2	674.2	625.0	622.9	626.2
70°	8074.7	6283.7	1377.0	596.7	597.8	611.9	662.3	653.5	613.1	617.5	616.3
72.5°	6474.9	4790.8	924.6	527.9	528.9	551.9	618.5	637.1	601.1	659.0	667.7
75°	4312.2	2987.8	594.5	454.6	455.7	485.2	580.3	605.4	568.3	656.8	662.3
77.5°	2071.9	1343.1	430.6	382.5	382.5	409.8	501.6	542.0	484.1	510.3	467.7
80°	715.8	504.9	338.8	308.2	301.7	320.2	422.9	469.9	417.5	384.7	360.6
82.5°	282.0	262.3	272.1	239.3	217.5	229.5	328.9	388.0	307.1	277.6	276.4
85°	161.7	170.5	192.3	158.5	125.7	140.9	241.5	278.7	231.6	204.4	208.7
87.5°	43.7	60.1	88.6	82.0	56.8	60.1	114.7	154.1	133.4	102.7	106.0
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)