

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: P966276

Luminaire Tested: **NAV-SB4B-827-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966276
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-827-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20384.2 lumens
Efficiency: N/A
Efficacy: 138.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - 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

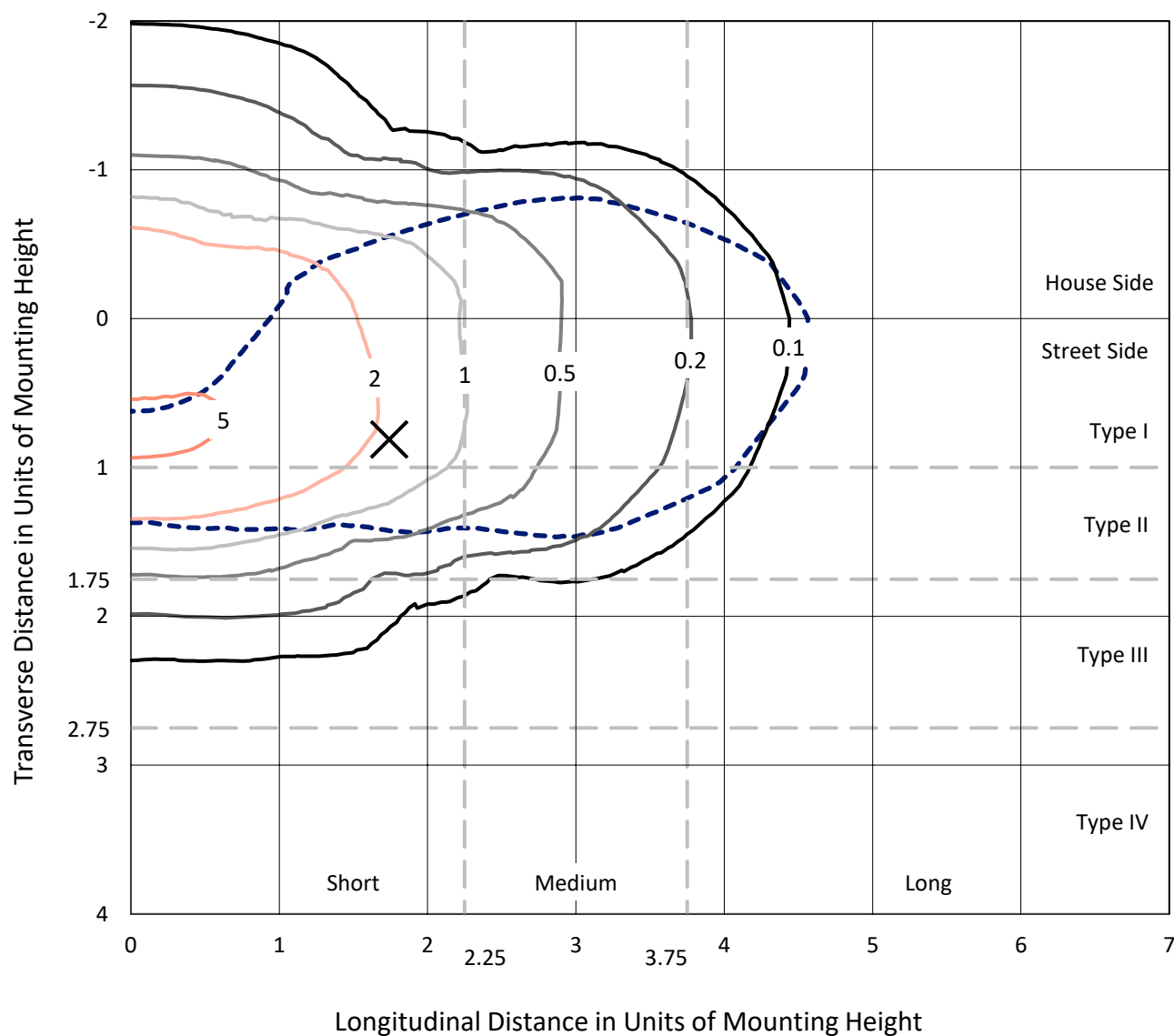


REPORT NUMBER: P966276

CATALOG NUMBER: NAV-SB4B-827-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

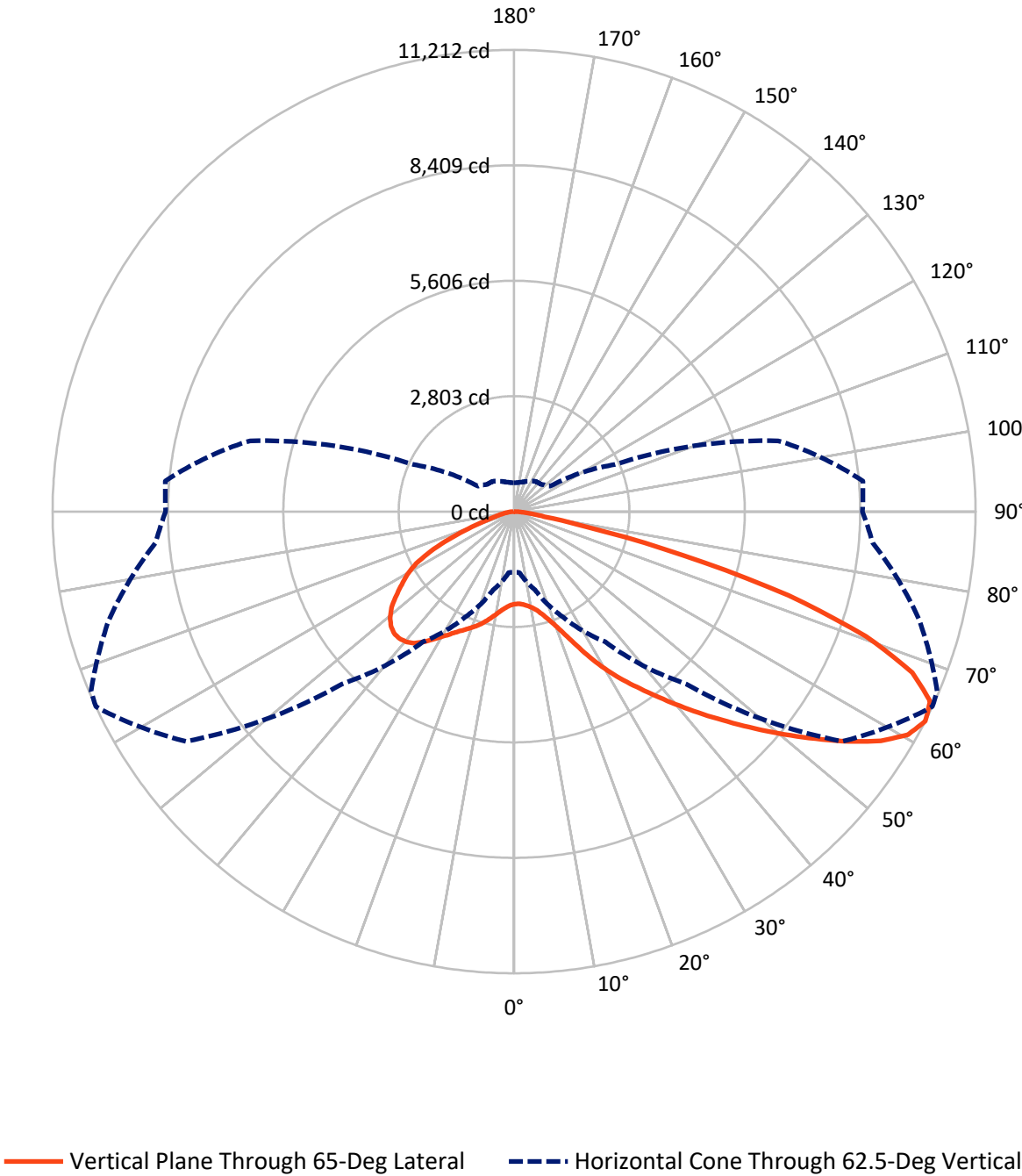
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type II - Short - N/A

REPORT NUMBER: P966276
CATALOG NUMBER: NAV-SB4B-827-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P966276

CATALOG NUMBER: NAV-SB4B-827-U-T2U

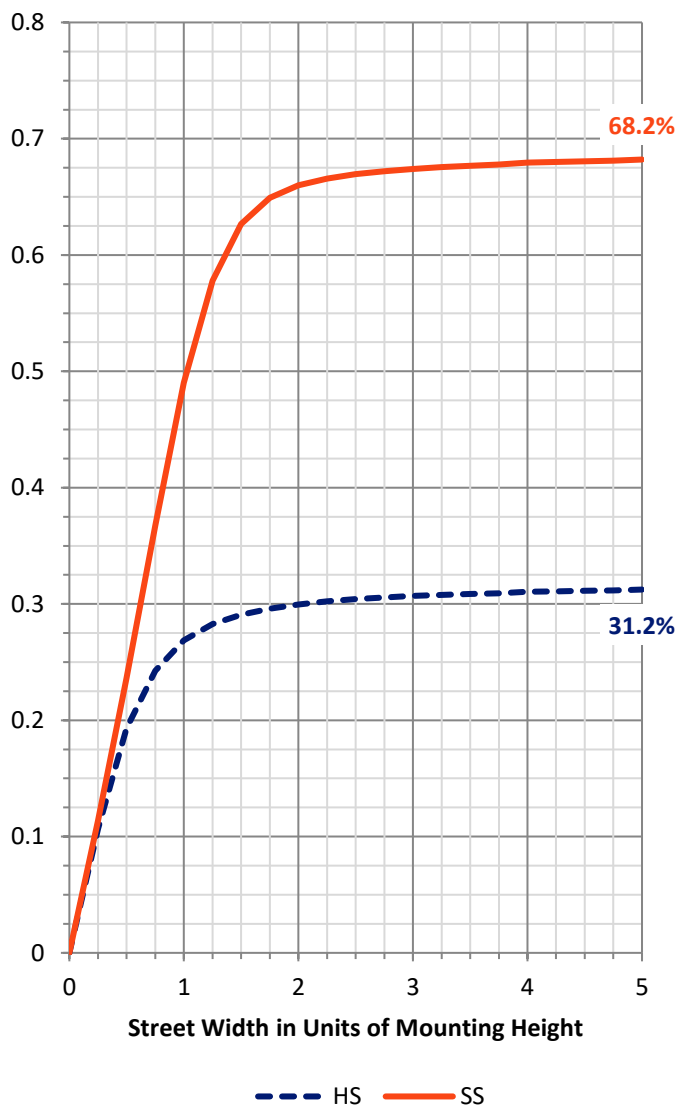
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6432.4	0.0	6432.4
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	13951.8	0.0	13951.8
	% Fixture	68.4	0.0	68.4
Total	Lumens	20384.2	0.0	20384.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.9	1.1
10°-20°	759.4	3.7
20°-30°	1539.8	7.6
30°-40°	2664.6	13.1
40°-50°	4032.4	19.8
50°-60°	4727.8	23.2
60°-70°	3963.7	19.4
70°-80°	2188.3	10.7
80°-90°	284.2	1.4
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°	20384.2	100.0
0°-180°	20384.2	100.0

Coefficient of Utilization



REPORT NUMBER: P966276

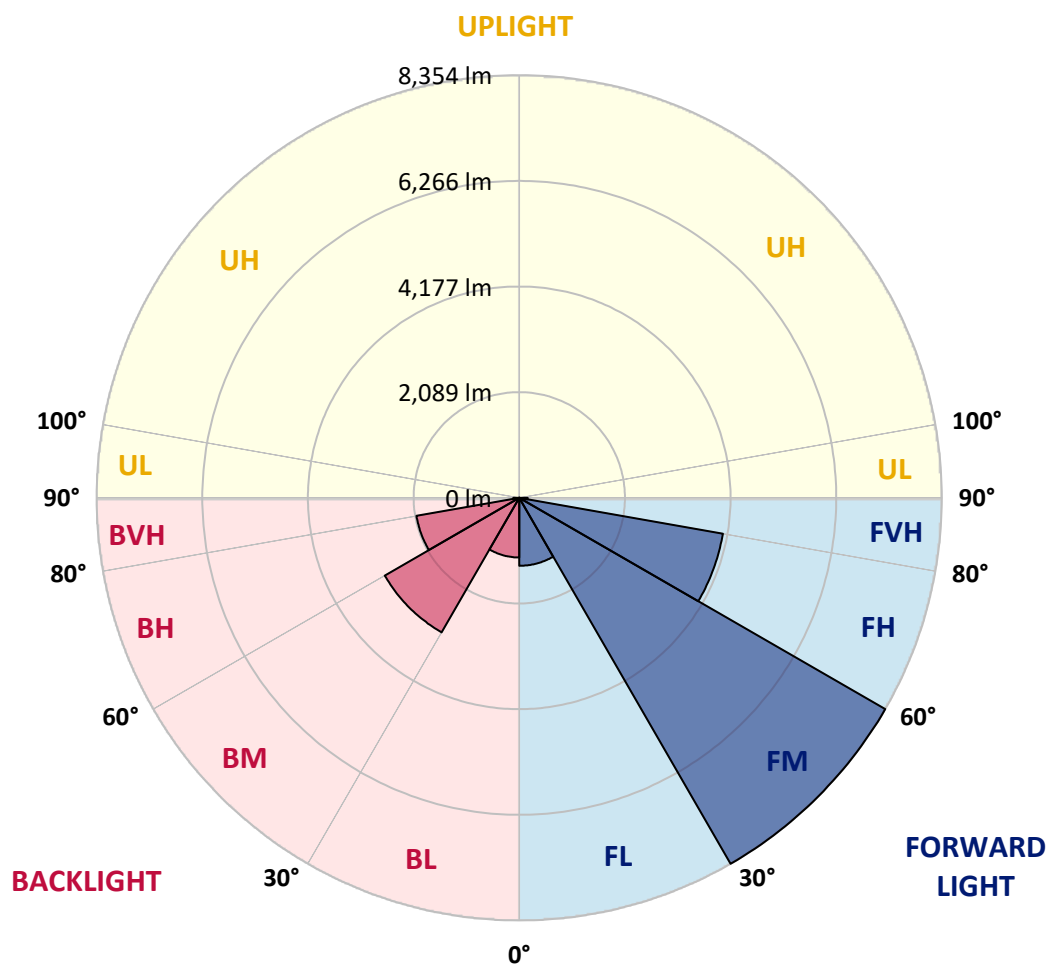
CATALOG NUMBER: NAV-SB4B-827-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1343.6	6.6			
FM	(30°-60°)	8354.1	41.0			
FH	(60°-80°)	4088.5	20.1			G2/5000
FVH	(80°-90°)	165.7	0.8			G2/225
BL	(0°-30°)	1179.6	5.8	B3/2500		
BM	(30°-60°)	3070.7	15.1	B3/5000		
BH	(60°-80°)	2063.4	10.1	B3/2500		G3/2500
BVH	(80°-90°)	118.6	0.6			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 II Short



REPORT NUMBER: P966276

CATALOG NUMBER: NAV-SB4B-827-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3
2.5°	2231.4	2225.1	2230.4	2230.4	2232.4	2231.4	2238.8	2241.0	2244.1	2250.5	2250.5
5°	2209.2	2208.2	2217.7	2226.2	2234.6	2242.0	2251.5	2265.2	2267.4	2274.8	2284.3
7.5°	2201.8	2195.4	2210.3	2220.9	2241.0	2258.9	2284.3	2307.6	2317.1	2320.3	2338.2
10°	2258.9	2248.3	2262.1	2268.4	2285.3	2303.4	2333.0	2370.0	2380.6	2393.3	2413.4
12.5°	2356.3	2344.6	2364.7	2374.2	2390.1	2406.0	2426.1	2461.9	2467.3	2490.5	2509.6
15°	2489.5	2475.8	2488.4	2500.1	2526.5	2541.3	2561.4	2596.3	2596.3	2614.3	2628.0
17.5°	2670.3	2652.4	2661.8	2666.1	2683.0	2705.2	2739.1	2769.8	2785.6	2779.3	2760.2
20°	2940.0	2917.8	2917.8	2896.6	2890.3	2908.2	2952.7	2994.9	3012.0	2979.2	2932.6
22.5°	3345.1	3313.3	3295.4	3223.4	3194.9	3197.0	3241.4	3293.2	3307.0	3248.8	3144.1
25°	3860.0	3810.3	3786.0	3680.3	3615.8	3559.7	3594.7	3661.3	3680.3	3608.4	3439.2
27.5°	4375.1	4378.3	4355.0	4228.1	4121.3	4018.7	4000.8	4070.5	4090.7	4009.2	3799.8
30°	5097.4	5022.3	4977.9	4825.6	4673.4	4529.5	4455.5	4484.1	4489.3	4392.0	4148.8
32.5°	5720.3	5701.3	5606.1	5472.9	5277.2	5051.9	4928.2	4882.7	4874.3	4735.7	4447.1
35°	6429.9	6419.4	6318.9	6160.2	5948.8	5635.8	5412.6	5282.4	5271.9	5077.3	4742.1
37.5°	7151.2	7151.2	7052.8	6879.4	6660.4	6269.2	5929.7	5723.5	5689.7	5435.9	5042.4
40°	7726.4	7691.6	7709.5	7636.6	7385.9	6970.3	6503.9	6204.6	6159.2	5854.6	5361.8
42.5°	8053.3	8041.6	8149.6	8231.0	8128.4	7796.3	7136.4	6726.0	6662.6	6315.7	5729.9
45°	8126.3	8113.6	8306.1	8604.3	8748.1	8611.6	7823.8	7274.9	7197.8	6798.0	6124.3
47.5°	7958.1	7932.7	8215.1	8685.7	9146.8	9386.8	8568.3	7870.4	7758.2	7267.6	6529.4
50°	7452.6	7428.3	7855.5	8480.5	9281.1	9913.5	9376.3	8501.7	8330.4	7770.9	6938.6
52.5°	6353.8	6365.5	7034.9	7893.6	9104.5	10241.4	10072.2	9166.9	8960.7	8286.0	7322.5
55°	4949.3	4974.7	5797.5	6743.0	8398.0	10191.7	10547.0	9852.2	9647.0	8770.3	7719.1
57.5°	3543.8	3656.0	4427.0	5362.9	7041.2	9403.8	10650.7	10503.7	10304.8	9299.1	8107.2
60°	2297.0	2317.1	3110.3	4053.6	5361.8	8003.6	10440.1	10997.5	10842.0	9838.5	8431.9
62.5°	1472.1	1485.8	1969.1	2835.4	3859.0	5921.2	9731.7	11212.2	11164.6	10194.9	8743.9
65°	1081.9	1071.3	1323.0	1874.0	2599.5	3651.8	8355.7	11108.5	11202.6	10418.0	9002.0
67.5°	903.1	888.4	1012.1	1297.6	1915.2	2073.9	6182.5	10434.9	10779.6	10392.6	9191.2
70°	822.8	810.1	885.2	963.4	1494.3	1388.6	3116.6	9071.7	9602.6	10103.8	9160.5
72.5°	696.9	674.8	777.3	855.6	1162.2	1065.0	1288.1	6968.3	7615.4	9178.6	8729.1
75°	540.4	525.6	613.4	753.0	873.5	831.3	814.4	4231.3	4937.7	7098.3	7636.6
77.5°	428.3	408.3	488.6	586.9	785.8	627.1	593.3	1822.1	2522.3	4531.6	5714.0
80°	322.6	304.5	371.2	464.2	603.8	472.7	383.9	743.4	950.8	2296.0	2873.4
82.5°	229.5	213.6	259.1	340.5	406.1	424.0	235.9	416.7	468.5	885.2	642.0
85°	147.0	137.5	173.4	213.6	258.0	272.9	143.8	217.8	239.0	364.9	267.5
87.5°	80.4	65.6	93.1	99.4	119.5	109.0	68.8	79.3	85.7	132.2	113.2
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: P966276

CATALOG NUMBER: NAV-SB4B-827-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3	2246.3
2.5°	2254.7	2257.9	2268.4	2271.6	2279.0	2288.5	2294.9	2301.2	2301.2	2307.6	2307.6
5°	2285.3	2292.8	2315.0	2326.6	2345.6	2364.7	2376.4	2390.1	2398.5	2402.8	2404.9
7.5°	2344.6	2356.3	2387.9	2408.0	2440.8	2467.3	2485.2	2504.3	2508.5	2520.2	2516.0
10°	2424.9	2438.7	2474.7	2512.8	2551.8	2584.6	2601.6	2615.3	2620.6	2622.8	2617.4
12.5°	2517.0	2537.1	2583.6	2630.1	2671.4	2700.0	2704.2	2701.0	2686.2	2673.5	2673.5
15°	2630.1	2648.1	2700.0	2750.7	2790.9	2796.2	2769.8	2752.8	2734.8	2731.6	2731.6
17.5°	2765.6	2775.0	2822.6	2872.4	2875.5	2857.5	2818.3	2802.6	2785.6	2774.0	2775.0
20°	2923.1	2919.9	2953.7	2974.9	2952.7	2897.7	2838.4	2812.1	2795.1	2781.3	2782.5
22.5°	3111.3	3087.0	3082.8	3077.5	3018.2	2903.0	2822.6	2788.8	2762.4	2743.3	2749.7
25°	3385.3	3292.2	3227.6	3191.7	3058.5	2874.4	2771.8	2696.8	2647.1	2614.3	2627.0
27.5°	3727.9	3571.4	3408.5	3320.7	3058.5	2816.3	2649.2	2527.5	2446.2	2412.2	2429.2
30°	4054.7	3890.8	3650.6	3476.2	3051.0	2721.1	2451.4	2282.2	2187.0	2153.2	2173.3
32.5°	4333.9	4155.1	3907.7	3646.4	3033.1	2566.7	2206.1	2018.8	1926.9	1886.7	1906.8
35°	4592.9	4402.6	4165.7	3833.6	2985.5	2340.4	1936.4	1793.6	1691.0	1626.5	1647.7
37.5°	4858.4	4632.1	4410.0	4002.8	2899.8	2075.9	1729.1	1607.5	1487.0	1400.3	1423.5
40°	5147.1	4876.4	4671.2	4103.3	2759.2	1824.3	1568.4	1457.3	1329.3	1237.4	1255.3
42.5°	5484.5	5169.3	4962.0	4155.1	2566.7	1645.5	1463.7	1354.7	1234.2	1159.1	1173.9
45°	5836.7	5491.8	5227.5	4154.1	2352.0	1562.0	1429.8	1321.9	1188.7	1110.4	1123.1
47.5°	6205.8	5829.3	5457.0	4086.4	2165.8	1573.7	1410.8	1251.1	1104.1	1028.0	1038.5
50°	6575.9	6198.4	5679.1	3959.5	2086.6	1548.3	1339.9	1151.7	978.3	909.5	913.7
52.5°	6942.8	6590.6	5870.5	3778.7	2006.2	1454.2	1249.0	1022.6	926.4	878.8	878.8
55°	7311.9	6978.8	6078.9	3515.3	1805.2	1344.2	1096.6	974.1	885.2	841.8	837.6
57.5°	7682.1	7427.3	6276.6	3252.0	1552.5	1208.8	1013.1	914.8	843.9	806.9	800.5
60°	8067.1	7940.2	6480.7	3009.8	1302.9	1035.4	951.8	867.2	795.3	754.0	750.9
62.5°	8463.6	8504.8	6640.4	2697.8	1073.4	929.6	896.8	810.1	740.3	701.2	700.1
65°	8863.4	9049.5	6745.1	2265.2	870.3	829.1	837.6	747.7	676.8	643.0	642.0
67.5°	9164.7	9441.9	6715.5	1714.3	713.8	733.9	763.5	682.1	615.5	589.1	590.1
70°	9198.7	9395.4	6423.6	1173.9	597.5	640.8	681.1	617.6	548.9	529.8	530.8
72.5°	8748.1	8760.8	5610.3	766.7	505.5	562.6	594.3	552.1	485.4	466.4	465.4
75°	7566.9	7245.3	4119.2	505.5	423.0	483.3	512.9	483.3	418.8	423.0	408.3
77.5°	5733.0	5131.3	2501.1	359.6	353.2	406.1	446.3	425.2	370.1	415.6	365.9
80°	2953.7	2776.1	1115.7	268.7	279.2	324.7	367.0	339.5	292.9	279.2	254.9
82.5°	676.8	786.8	439.9	192.5	202.0	233.7	280.2	254.9	210.4	177.6	175.6
85°	236.9	259.1	194.5	120.5	118.5	146.0	190.3	170.3	142.8	114.2	120.5
87.5°	75.1	98.4	73.0	48.7	50.7	65.6	87.7	80.4	66.6	43.4	45.5
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)