

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: P968454

Luminaire Tested: **NAV-SB5B-835-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-835-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20831.1 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 182.7
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

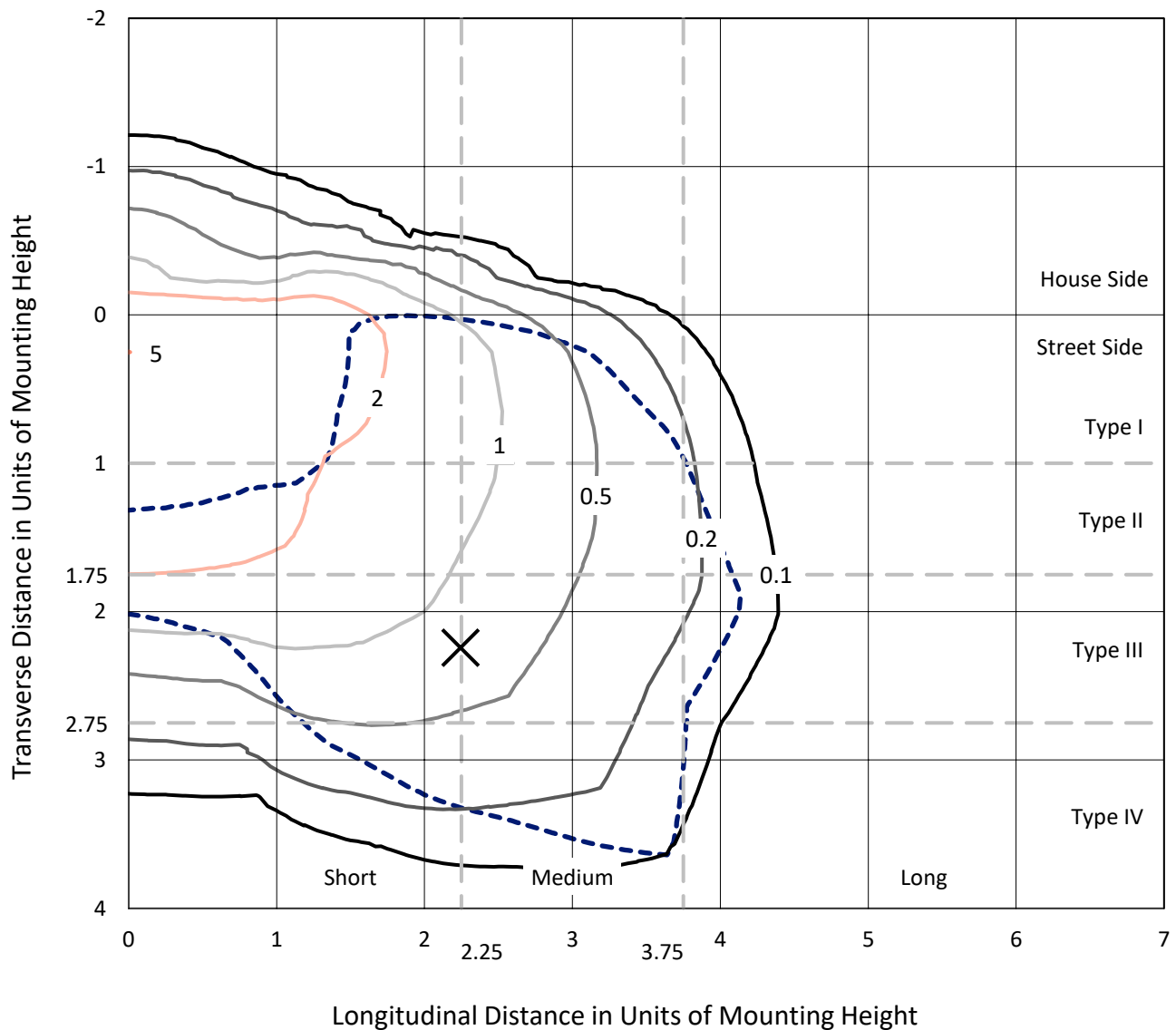


REPORT NUMBER: P968454

CATALOG NUMBER: NAV-SB5B-835-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

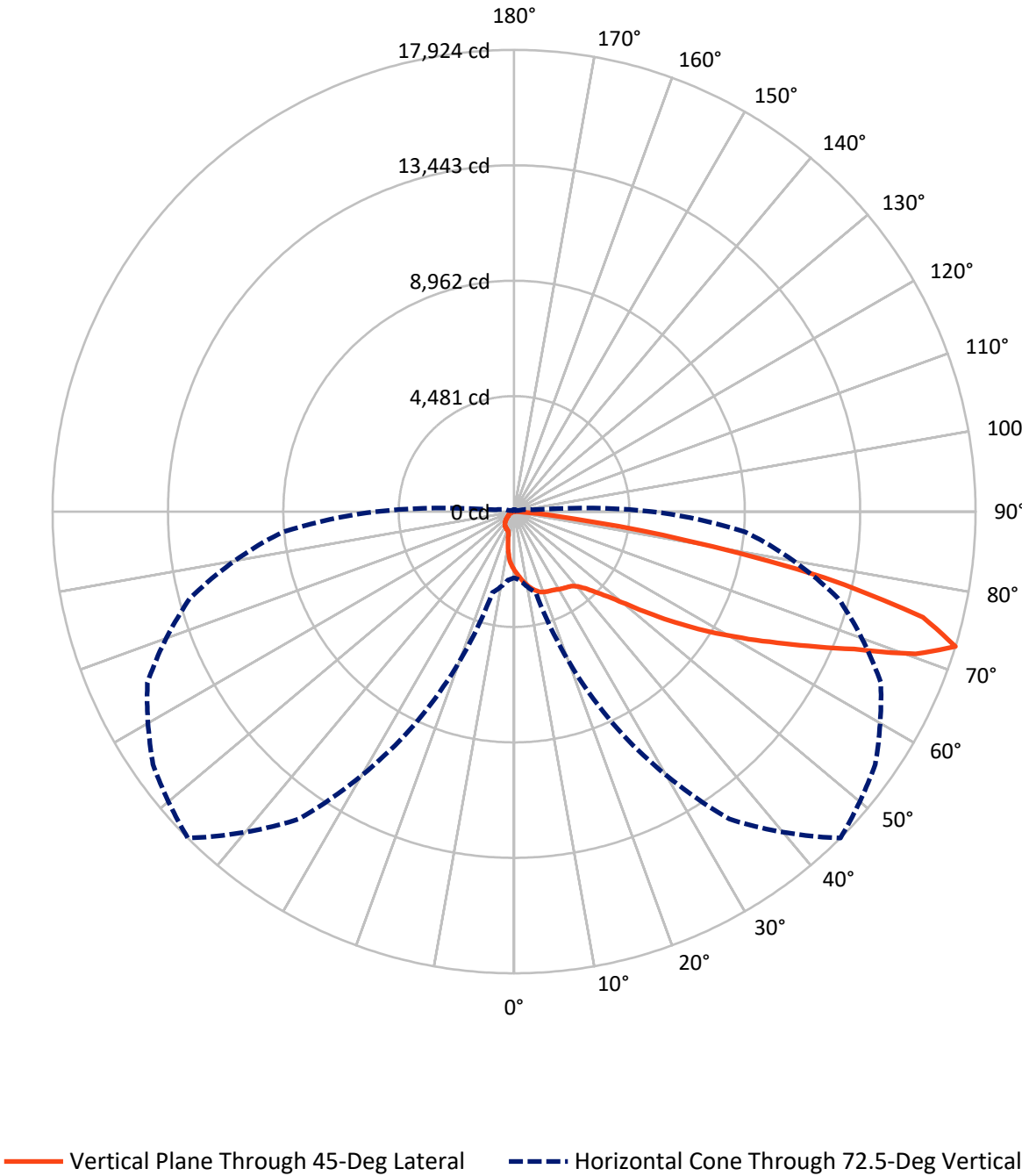
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
Type IV - Short - N/A

REPORT NUMBER: P968454
CATALOG NUMBER: NAV-SB5B-835-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968454

CATALOG NUMBER: NAV-SB5B-835-U-T4W-HSS

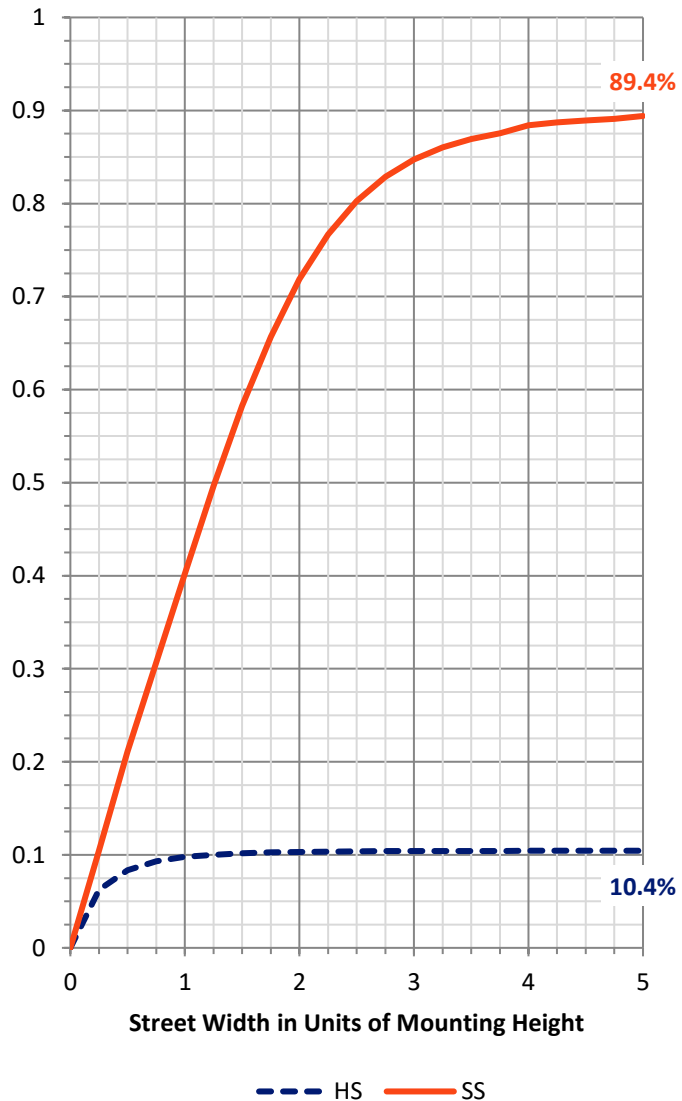
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2188.8	0.0	2188.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	18642.3	0.0	18642.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	20831.1	0.0	20831.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.0	1.0
10°-20°	628.4	3.0
20°-30°	1031.9	5.0
30°-40°	1463.5	7.0
40°-50°	2419.1	11.6
50°-60°	4345.6	20.9
60°-70°	6034.1	29.0
70°-80°	4376.9	21.0
80°-90°	316.4	1.5
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°	20831.1	100.0
0°-180°	20831.1	100.0

Coefficient of Utilization



REPORT NUMBER: P968454

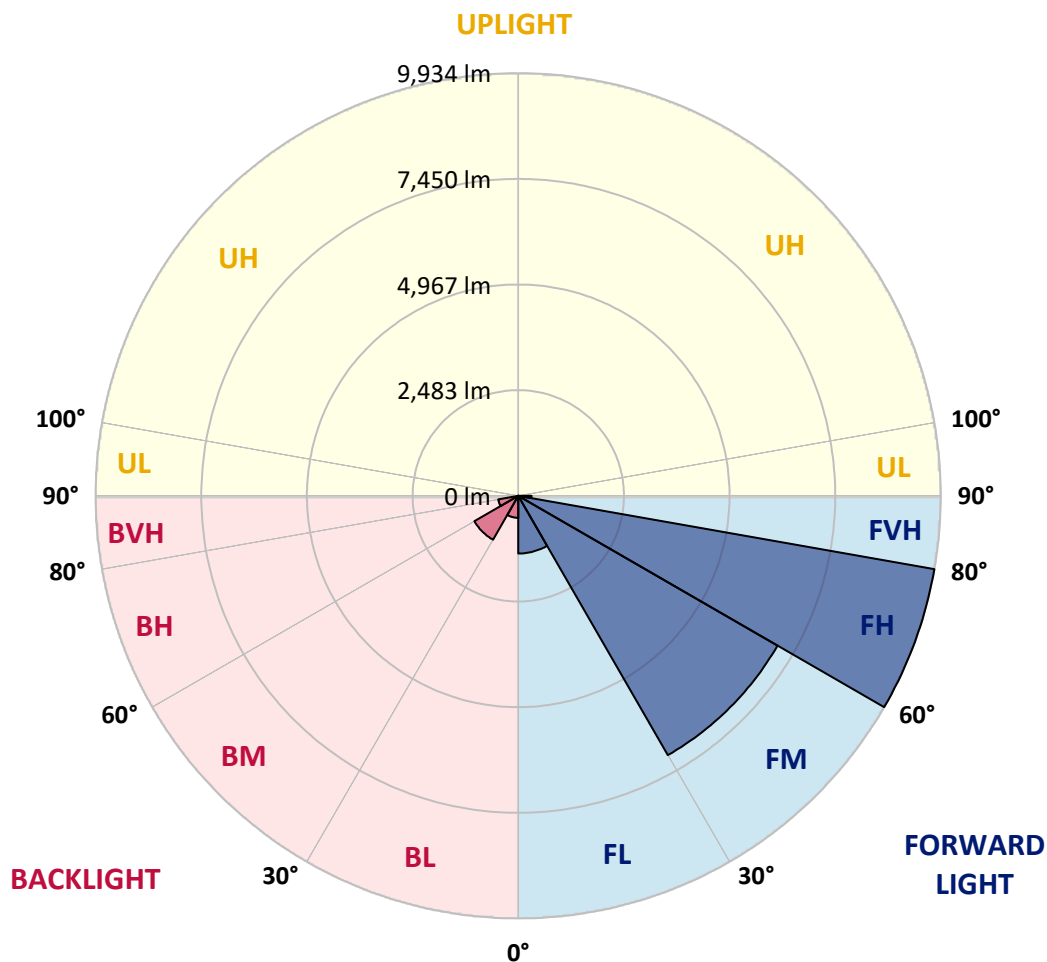
CATALOG NUMBER: NAV-SB5B-835-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1356.9	6.5			
FM	(30°-60°)	7037.8	33.8			
FH	(60°-80°)	9933.7	47.7			G4/12000
FVH	(80°-90°)	313.8	1.5			G3/500
BL	(0°-30°)	518.4	2.5	B2/1000		
BM	(30°-60°)	1190.4	5.7	B2/2500		
BH	(60°-80°)	477.3	2.3	B1/500		G1/500
BVH	(80°-90°)	2.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short



REPORT NUMBER: P968454

CATALOG NUMBER: NAV-SB5B-835-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1
2.5°	2492.5	2496.8	2493.9	2476.9	2448.4	2432.8	2424.2	2395.8	2377.4	2344.7	2310.6
5°	2721.5	2738.5	2728.5	2694.4	2640.4	2602.0	2590.6	2532.4	2479.7	2418.6	2347.5
7.5°	2964.6	2973.1	2954.7	2910.6	2838.0	2772.6	2762.7	2681.6	2597.8	2503.9	2407.2
10°	3175.0	3185.0	3156.5	3092.5	3010.1	2929.0	2914.8	2825.2	2725.7	2610.6	2486.9
12.5°	3351.3	3361.3	3324.3	3247.5	3156.5	3072.6	3058.4	2964.6	2855.1	2727.1	2573.6
15°	3485.0	3503.4	3453.7	3371.2	3273.1	3189.3	3182.1	3089.7	2983.1	2840.9	2677.4
17.5°	3563.2	3581.7	3534.7	3435.2	3351.3	3280.2	3271.7	3194.9	3095.4	2958.9	2778.4
20°	3576.0	3593.0	3543.3	3456.5	3386.9	3330.0	3325.7	3270.3	3197.8	3067.0	2887.8
22.5°	3537.6	3558.9	3513.4	3443.8	3395.4	3365.6	3359.8	3328.6	3287.4	3176.5	2990.1
25°	3497.8	3514.8	3480.7	3419.6	3394.0	3391.1	3395.4	3389.7	3381.2	3287.4	3109.6
27.5°	3494.9	3513.4	3475.1	3416.7	3402.5	3432.4	3436.6	3463.7	3470.8	3388.3	3224.8
30°	3519.1	3531.9	3494.9	3433.7	3426.7	3494.9	3496.4	3544.7	3556.0	3473.6	3338.5
32.5°	3571.7	3586.0	3549.0	3459.4	3449.4	3544.7	3549.0	3612.9	3631.5	3564.6	3457.9
35°	3695.4	3712.4	3669.8	3530.5	3494.9	3591.6	3604.4	3679.7	3716.8	3661.3	3581.7
37.5°	4004.0	3954.2	3895.9	3674.1	3598.8	3665.6	3686.9	3775.1	3840.5	3776.5	3729.6
40°	4770.3	4613.9	4431.9	3918.7	3780.7	3823.4	3840.5	3928.6	4018.2	3955.6	3932.8
42.5°	5920.6	5735.8	5442.9	4481.7	4055.1	4076.5	4089.2	4166.0	4292.6	4242.9	4248.5
45°	6945.8	6879.0	6580.4	5442.9	4568.4	4463.3	4478.8	4518.7	4705.0	4686.5	4723.4
47.5°	7733.5	7695.1	7464.8	6546.3	5435.8	4936.7	4980.8	4999.2	5268.0	5333.4	5432.9
50°	8339.2	8325.0	8118.8	7527.3	6569.0	5634.8	5650.5	5610.6	6013.1	6175.1	6364.2
52.5°	8910.8	8959.1	8807.0	8438.7	7779.0	6549.1	6546.3	6358.6	6901.7	7146.3	7469.1
55°	9426.9	9444.0	9459.6	9368.6	8996.1	7589.9	7562.9	7255.8	7932.6	8185.6	8535.5
57.5°	9911.8	9918.9	10058.2	10244.5	10263.0	8707.5	8657.8	8289.5	9058.6	9239.2	9454.0
60°	10237.4	10270.1	10564.5	11082.0	11308.1	9860.6	9833.6	9458.2	10204.7	10288.6	10248.8
62.5°	9768.1	9967.2	10709.5	11736.0	12294.9	11138.9	11126.1	10773.5	11410.4	11342.2	11000.9
65°	7907.0	8244.0	9549.2	12178.2	13263.1	12566.4	12584.9	12209.5	12648.9	12427.1	11612.3
67.5°	5531.0	5886.5	7430.6	12213.8	14345.2	14242.8	14349.4	13760.8	13964.1	13466.4	11757.4
70°	3824.8	4008.3	5013.5	11448.8	15188.3	16551.9	16549.0	15666.1	15272.2	13939.9	11018.0
72.5°	2572.1	2667.5	3256.0	9082.8	14568.4	17924.0	17841.6	17122.1	15713.0	13037.1	9001.9
75°	1084.9	1154.6	1507.2	5104.5	11525.6	16398.4	16175.1	15131.5	13961.2	10265.9	5616.4
77.5°	344.1	373.9	594.3	1827.1	6348.6	12326.1	12090.1	9449.7	9357.2	5150.0	2053.2
80°	163.5	190.5	334.2	733.7	2498.2	6704.1	6671.4	4287.0	4025.3	1390.6	412.4
82.5°	71.1	83.8	184.8	392.5	1117.6	2391.5	2439.9	1458.8	1207.1	527.5	126.6
85°	22.8	29.8	85.3	180.6	472.0	594.3	587.2	347.0	486.3	287.2	44.1
87.5°	0.0	0.0	28.4	41.2	48.4	34.1	38.4	29.8	135.1	79.6	15.7
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: P968454

CATALOG NUMBER: NAV-SB5B-835-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1	2282.1
2.5°	2293.4	2270.7	2230.9	2193.9	2161.2	2128.5	2108.6	2080.1	2077.4	2077.4	2084.4
5°	2309.1	2272.1	2201.1	2125.6	2038.9	1956.5	1874.0	1794.4	1768.8	1750.3	1758.8
7.5°	2354.6	2296.3	2184.0	2040.4	1875.4	1694.8	1568.4	1431.8	1379.2	1350.7	1355.0
10°	2420.0	2340.4	2169.7	1918.1	1650.8	1404.8	1224.3	1076.4	1019.5	995.3	995.3
12.5°	2492.5	2394.4	2144.2	1766.0	1404.8	1110.5	934.2	865.9	857.4	857.4	857.4
15°	2579.2	2459.8	2100.1	1586.8	1147.5	878.7	816.1	819.0	827.5	833.2	833.2
17.5°	2668.8	2529.5	2030.4	1386.3	919.9	790.6	792.0	796.2	803.4	809.0	809.0
20°	2765.6	2599.2	1938.0	1173.0	789.1	765.0	769.3	773.5	779.2	782.1	783.4
22.5°	2869.3	2664.6	1828.5	964.0	745.1	743.6	745.1	749.3	756.4	756.4	759.3
25°	2980.2	2737.1	1703.3	811.9	722.3	722.3	725.2	728.0	733.7	733.7	735.1
27.5°	3094.0	2803.9	1571.1	732.3	702.4	701.0	701.0	705.2	708.1	709.5	710.9
30°	3219.1	2882.1	1438.9	715.2	686.7	679.7	675.4	678.2	681.1	682.4	685.3
32.5°	3347.0	2957.4	1320.9	722.3	671.2	658.4	644.1	641.2	641.2	647.0	651.2
35°	3489.2	3039.9	1229.9	746.5	662.6	627.0	604.3	591.5	593.0	601.5	605.7
37.5°	3659.9	3139.5	1163.1	767.8	656.9	591.5	554.5	538.8	528.9	538.8	536.1
40°	3883.1	3285.9	1114.8	784.8	649.7	550.2	500.5	474.9	456.4	462.1	459.3
42.5°	4211.5	3516.3	1096.2	786.3	634.2	501.9	445.1	410.9	383.9	385.3	379.7
45°	4672.3	3880.2	1191.6	767.8	600.0	449.3	386.7	341.2	324.2	319.9	314.3
47.5°	5303.6	4410.6	1411.9	729.4	550.2	398.1	329.8	291.5	278.7	271.6	267.3
50°	6149.6	5091.7	1656.5	686.7	500.5	349.7	282.9	258.8	250.2	243.1	241.7
52.5°	7130.6	5782.7	1857.0	644.1	450.7	307.1	253.1	238.8	231.8	226.1	224.7
55°	8030.7	6259.1	1845.6	598.6	402.4	273.0	231.8	223.2	214.7	209.0	206.1
57.5°	8590.9	6325.9	1521.4	548.9	347.0	246.0	211.9	206.1	196.2	189.1	187.7
60°	8848.2	5944.8	1066.4	483.4	291.5	220.4	190.5	187.7	174.9	164.9	162.1
62.5°	8895.2	5236.7	710.9	402.4	243.1	196.2	169.2	164.9	147.9	130.8	122.3
65°	8704.6	4224.3	492.0	314.3	207.6	170.7	145.0	136.5	118.0	101.0	95.2
67.5°	8101.8	2966.0	342.7	226.1	176.3	135.1	115.2	112.3	98.1	83.8	79.6
70°	6997.0	1690.6	228.9	169.2	139.3	92.5	91.0	93.9	79.6	68.3	62.5
72.5°	5364.6	773.5	142.2	123.7	95.2	62.5	72.5	73.9	61.1	51.1	45.5
75°	3157.9	331.3	89.6	79.6	48.4	41.2	52.6	54.0	41.2	32.7	28.4
77.5°	1074.9	125.2	56.9	46.9	24.2	22.8	34.1	34.1	22.8	12.8	9.9
80°	244.6	46.9	28.4	18.4	11.4	9.9	11.4	9.9	5.6	1.4	0.0
82.5°	69.7	18.4	11.4	7.1	4.3	4.3	1.4	0.0	0.0	0.0	0.0
85°	19.9	8.5	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)