

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: P967384

Luminaire Tested: **NAV-SB4D-835-U-SLL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-835-U-SLL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38634.3 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 293.6
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

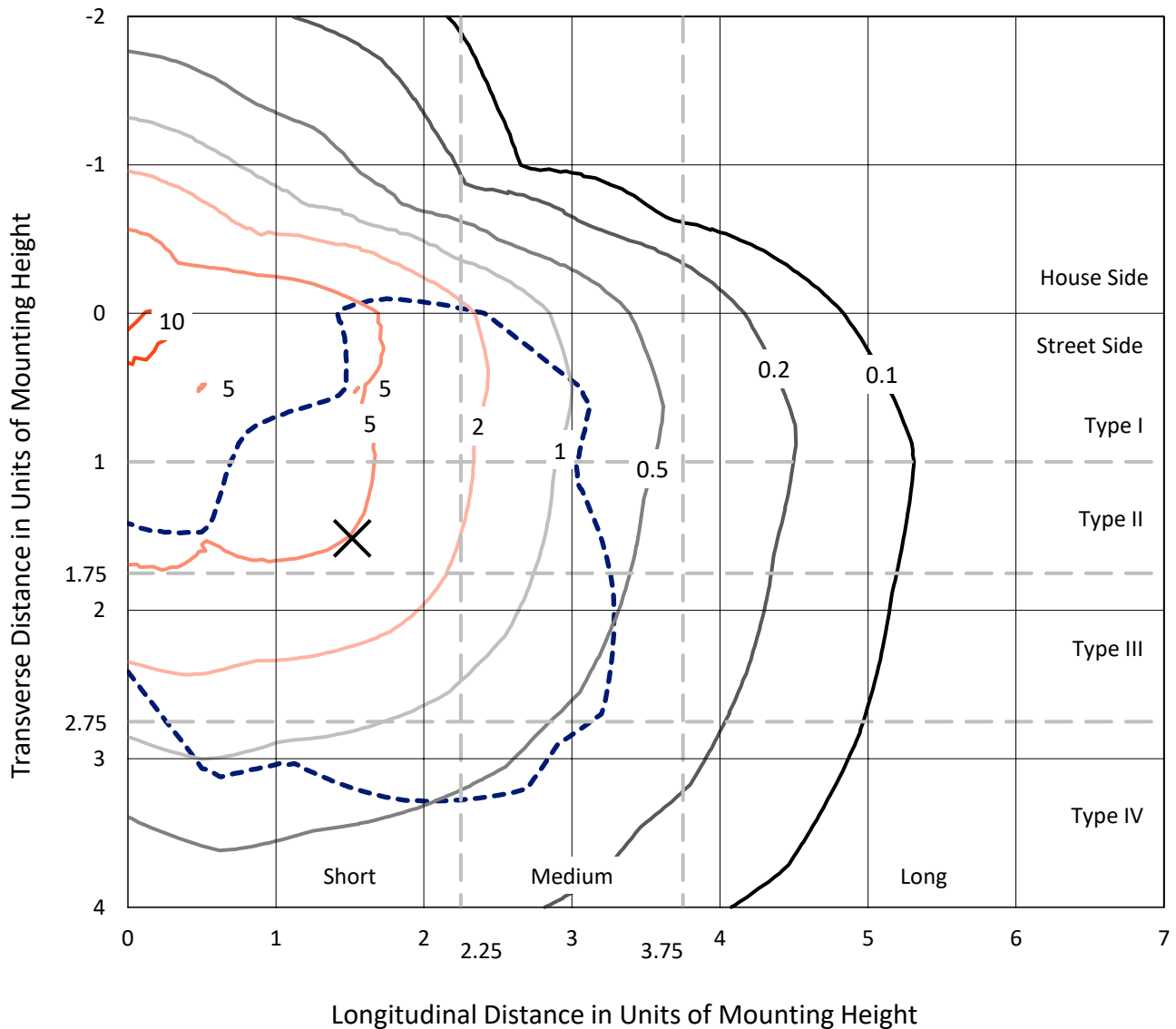


REPORT NUMBER: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

Iso-Footcandle Lines of Horizontal Illumination

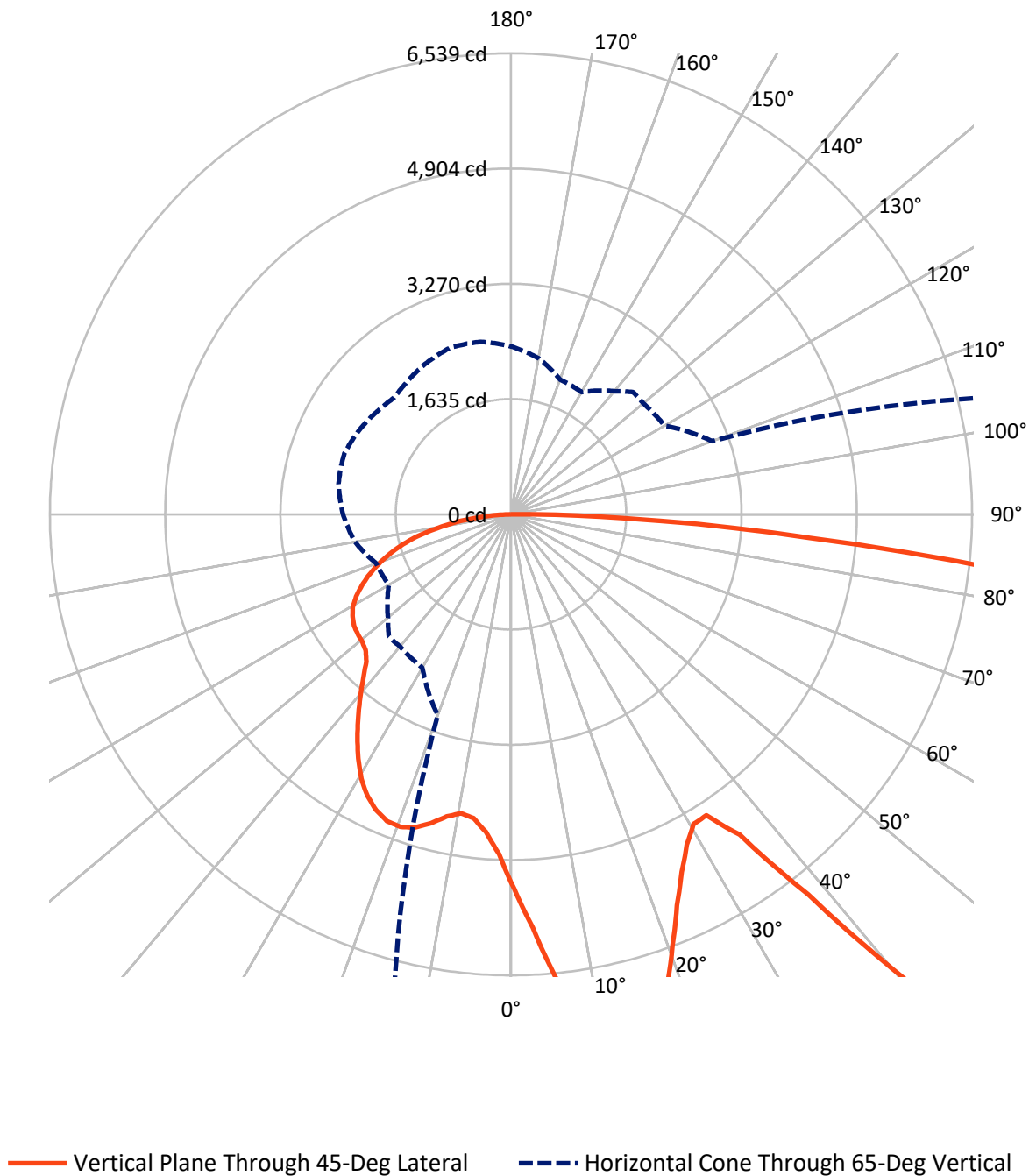
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.8 fc
Type IV - Short - N/A

REPORT NUMBER: P967384
CATALOG NUMBER: NAV-SB4D-835-U-SLL

Luminous Intensity Polar Plot



REPORT NUMBER: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9818.9	0.0	9818.9
	% Fixture	25.4	0.0	25.4
Street Side	Lumens	28815.4	0.0	28815.4
	% Fixture	74.6	0.0	74.6
Total	Lumens	38634.3	0.0	38634.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	527.0	1.4
10°-20°	1654.4	4.3
20°-30°	2555.4	6.6
30°-40°	3238.4	8.4
40°-50°	4884.3	12.6
50°-60°	7891.3	20.4
60°-70°	9837.7	25.5
70°-80°	6451.1	16.7
80°-90°	1594.9	4.1
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°	38634.3	100.0
0°-180°	38634.3	100.0

Coefficient of Utilization



REPORT NUMBER: P967384

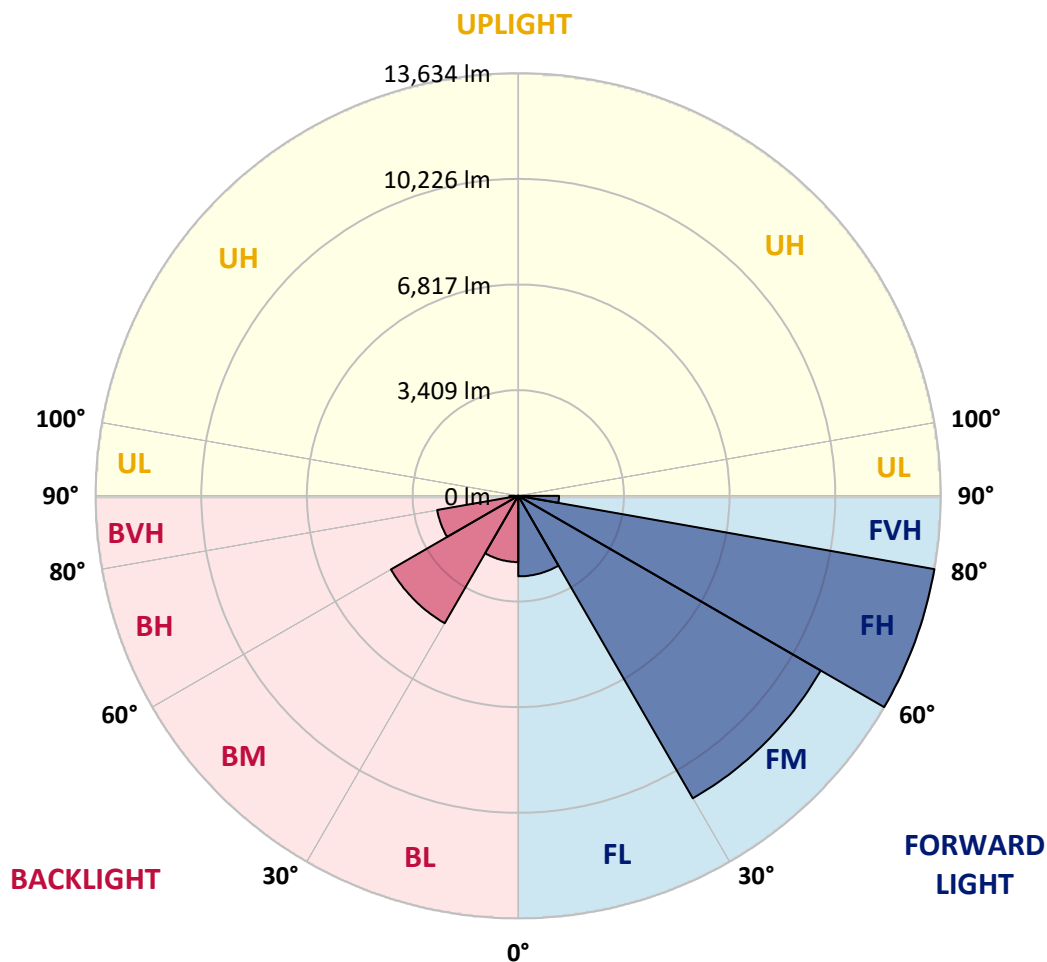
CATALOG NUMBER: NAV-SB4D-835-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2598.6	6.7			
FM	(30°-60°)	11268.8	29.2			
FH	(60°-80°)	13634.2	35.3			G5
FVH	(80°-90°)	1313.8	3.4			G5
BL	(0°-30°)	2138.2	5.5	B3/2500		
BM	(30°-60°)	4745.1	12.3	B3/5000		
BH	(60°-80°)	2654.6	6.9	B4/5000		G4/5000
BVH	(80°-90°)	281.0	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short



REPORT NUMBER: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6
2.5°	5713.1	5734.8	5756.5	5787.4	5818.1	5836.5	5854.8	5864.0	5873.1	5869.0	5873.1
5°	6143.2	6218.9	6294.7	6369.8	6445.0	6485.8	6526.5	6551.2	6576.1	6594.8	6576.1
7.5°	6575.5	6698.6	6821.5	6932.2	7042.9	7109.6	7176.2	7212.3	7248.2	7265.5	7248.2
10°	6906.8	7052.3	7197.9	7327.7	7457.6	7536.2	7614.5	7649.6	7684.4	7697.6	7684.4
12.5°	7109.6	7267.4	7424.9	7542.4	7659.4	7716.4	7773.5	7792.7	7811.8	7813.9	7811.8
15°	7232.9	7369.0	7505.0	7578.6	7652.4	7654.5	7656.5	7636.1	7615.7	7591.7	7615.7
17.5°	7302.2	7394.1	7486.1	7487.5	7488.8	7406.1	7323.6	7248.0	7172.1	7118.7	7172.1
20°	7378.7	7410.6	7442.8	7346.1	7249.2	7067.0	6884.7	6752.0	6619.2	6537.8	6619.2
22.5°	7467.3	7425.3	7383.4	7182.8	6982.2	6714.1	6446.0	6280.1	6114.1	6024.0	6114.1
25°	7581.5	7449.0	7316.4	7011.9	6707.4	6381.8	6056.2	5881.8	5707.6	5622.4	5707.6
27.5°	7736.4	7499.5	7262.4	6859.0	6455.8	6095.0	5734.2	5562.5	5391.0	5310.5	5391.0
30°	7945.4	7592.1	7239.0	6742.4	6245.8	5869.9	5494.0	5334.8	5175.5	5100.5	5175.5
32.5°	8192.0	7708.3	7224.7	6662.9	6101.1	5747.8	5394.5	5269.5	5144.4	5090.4	5144.4
35°	8491.7	7899.7	7307.9	6722.5	6137.2	5891.7	5646.5	5617.3	5588.2	5583.7	5588.2
37.5°	8996.2	8299.9	7603.6	7071.5	6539.4	6523.5	6507.5	6640.9	6774.2	6843.5	6774.2
40°	9758.7	9001.3	8244.1	7848.3	7452.7	7732.0	8011.2	8335.4	8659.5	8820.9	8659.5
42.5°	10769.9	10018.5	9267.0	9039.1	8811.2	9420.3	10029.4	10619.0	11208.6	11554.7	11208.6
45°	12018.4	11343.5	10668.3	10567.9	10467.1	11443.0	12419.0	13387.8	14356.8	14944.8	14356.8
47.5°	13580.0	12923.4	12266.6	12246.2	12225.8	13633.6	15041.1	16459.3	17877.3	18710.1	17877.3
50°	15626.7	14815.7	14004.7	14008.2	14011.5	15825.9	17640.2	19512.3	21384.4	22516.2	21384.4
52.5°	17976.2	16994.1	16012.0	15912.8	15813.3	17980.6	20147.7	22464.0	24780.0	26136.7	24780.0
55°	20477.6	19507.2	18536.8	18149.7	17762.6	20174.7	22586.5	25347.7	28109.0	29722.5	28109.0
57.5°	22752.6	22224.3	21695.7	20919.1	20142.8	22578.3	25013.8	28141.4	31268.9	33269.7	31268.9
60°	24127.7	24948.4	25769.3	24805.1	23840.8	26145.7	28450.5	31799.1	35147.7	37310.2	35147.7
62.5°	23429.4	25672.0	27914.7	27806.1	27697.2	29808.5	31920.1	35106.0	38291.7	40290.6	38291.7
65°	22032.0	24136.8	26241.6	26658.2	27074.5	29757.6	32441.0	35530.3	38619.3	40321.1	38619.3
67.5°	20159.6	22161.4	24163.4	24358.6	24553.7	27349.5	30144.9	33247.5	36350.0	37683.2	36350.0
70°	17909.9	20087.4	22265.0	22352.3	22439.7	24939.8	27439.8	30109.7	32779.4	33520.5	32779.4
72.5°	15229.2	17727.9	20226.8	20289.6	20352.2	22308.2	24264.2	26263.9	28263.4	28338.4	28263.4
75°	11838.0	14424.2	17010.4	17242.6	17474.7	18996.5	20518.3	21926.0	23333.6	22956.5	23333.6
77.5°	8458.1	10872.2	13286.5	13618.8	13951.1	15108.0	16264.8	17263.2	18261.6	17613.4	18261.6
80°	5535.8	7566.9	9597.7	10010.7	10423.6	11297.4	12170.7	12695.0	13219.2	12176.5	13219.2
82.5°	3217.9	4606.3	5995.0	6456.4	6917.9	7519.3	8120.7	8339.4	8557.9	7738.4	8557.9
85°	1415.8	2152.7	2889.7	3282.2	3674.5	4168.7	4662.6	4786.8	4911.0	4254.6	4911.0
87.5°	438.3	686.0	933.7	1152.6	1371.6	1618.7	1865.7	1876.3	1886.7	1583.9	1886.7
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: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6
2.5°	5864.0	5854.8	5836.5	5818.1	5787.4	5756.5	5734.8	5713.1	5669.3	5625.5	5578.8
5°	6551.2	6526.5	6485.8	6445.0	6369.8	6294.7	6218.9	6143.2	6046.5	5949.6	5853.0
7.5°	7212.3	7176.2	7109.6	7042.9	6932.2	6821.5	6698.6	6575.5	6415.6	6256.0	6108.4
10°	7649.6	7614.5	7536.2	7457.6	7327.7	7197.9	7052.3	6906.8	6704.7	6502.7	6307.5
12.5°	7792.7	7773.5	7716.4	7659.4	7542.4	7424.9	7267.4	7109.6	6887.6	6665.8	6444.8
15°	7636.1	7656.5	7654.5	7652.4	7578.6	7505.0	7369.0	7232.9	7001.5	6770.1	6530.4
17.5°	7248.0	7323.6	7406.1	7488.8	7487.5	7486.1	7394.1	7302.2	7067.6	6833.0	6571.4
20°	6752.0	6884.7	7067.0	7249.2	7346.1	7442.8	7410.6	7378.7	7134.8	6890.9	6603.4
22.5°	6280.1	6446.0	6714.1	6982.2	7182.8	7383.4	7425.3	7467.3	7218.3	6968.9	6646.6
25°	5881.8	6056.2	6381.8	6707.4	7011.9	7316.4	7449.0	7581.5	7337.3	7093.2	6724.9
27.5°	5562.5	5734.2	6095.0	6455.8	6859.0	7262.4	7499.5	7736.4	7503.6	7270.6	6847.2
30°	5334.8	5494.0	5869.9	6245.8	6742.4	7239.0	7592.1	7945.4	7720.3	7495.4	7005.6
32.5°	5269.5	5394.5	5747.8	6101.1	6662.9	7224.7	7708.3	8192.0	7969.3	7746.6	7170.9
35°	5617.3	5646.5	5891.7	6137.2	6722.5	7307.9	7899.7	8491.7	8278.5	8065.0	7359.3
37.5°	6640.9	6507.5	6523.5	6539.4	7071.5	7603.6	8299.9	8996.2	8724.3	8452.4	7570.2
40°	8335.4	8011.2	7732.0	7452.7	7848.3	8244.1	9001.3	9758.7	9362.3	8966.1	7838.2
42.5°	10619.0	10029.4	9420.3	8811.2	9039.1	9267.0	10018.5	10769.9	10197.8	9625.8	8188.6
45°	13387.8	12419.0	11443.0	10467.1	10567.9	10668.3	11343.5	12018.4	11246.9	10475.3	8649.7
47.5°	16459.3	15041.1	13633.6	12225.8	12246.2	12266.6	12923.4	13580.0	12494.0	11407.9	9141.1
50°	19512.3	17640.2	15825.9	14011.5	14008.2	14004.7	14815.7	15626.7	13989.6	12352.2	9596.9
52.5°	22464.0	20147.7	17980.6	15813.3	15912.8	16012.0	16994.1	17976.2	15560.5	13144.8	9892.8
55°	25347.7	22586.5	20174.7	17762.6	18149.7	18536.8	19507.2	20477.6	16953.3	13429.1	9827.6
57.5°	28141.4	25013.8	22578.3	20142.8	20919.1	21695.7	22224.3	22752.6	17940.4	13128.1	9368.5
60°	31799.1	28450.5	26145.7	23840.8	24805.1	25769.3	24948.4	24127.7	18187.0	12246.2	8514.2
62.5°	35106.0	31920.1	29808.5	27697.2	27806.1	27914.7	25672.0	23429.4	17148.4	10867.3	7358.9
65°	35530.3	32441.0	29757.6	27074.5	26658.2	26241.6	24136.8	22032.0	15678.7	9325.4	6180.1
67.5°	33247.5	30144.9	27349.5	24553.7	24358.6	24163.4	22161.4	20159.6	13929.9	7700.1	5025.5
70°	30109.7	27439.8	24939.8	22439.7	22352.3	22265.0	20087.4	17909.9	12021.5	6133.1	3956.9
72.5°	26263.9	24264.2	22308.2	20352.2	20289.6	20226.8	17727.9	15229.2	9952.8	4676.5	3025.1
75°	21926.0	20518.3	18996.5	17474.7	17242.6	17010.4	14424.2	11838.0	7581.3	3324.5	2195.5
77.5°	17263.2	16264.8	15108.0	13951.1	13618.8	13286.5	10872.2	8458.1	5306.2	2154.3	1487.8
80°	12695.0	12170.7	11297.4	10423.6	10010.7	9597.7	7566.9	5535.8	3418.7	1301.6	958.6
82.5°	8339.4	8120.7	7519.3	6917.9	6456.4	5995.0	4606.3	3217.9	1978.7	739.6	589.6
85°	4786.8	4662.6	4168.7	3674.5	3282.2	2889.7	2152.7	1415.8	890.0	364.5	315.2
87.5°	1876.3	1865.7	1618.7	1371.6	1152.6	933.7	686.0	438.3	291.5	144.7	130.7
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: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6
2.5°	5532.3	5485.4	5438.5	5393.7	5348.9	5305.4	5257.1	5218.0	5179.0	5143.8	5108.7
5°	5756.5	5659.3	5562.3	5471.6	5380.8	5295.3	5210.6	5136.8	5062.8	5000.9	4939.1
7.5°	5960.8	5817.1	5673.4	5546.8	5420.2	5303.3	5193.9	5095.7	4997.6	4916.0	4834.5
10°	6112.7	5938.2	5763.5	5613.8	5463.8	5319.6	5202.1	5098.5	4994.9	4913.4	4831.8
12.5°	6223.8	6017.9	5812.0	5642.6	5473.2	5321.7	5212.2	5127.5	5043.0	4988.8	4935.0
15°	6290.6	6053.5	5816.5	5620.4	5424.3	5256.5	5168.9	5128.3	5087.9	5095.3	5102.6
17.5°	6309.8	6034.6	5759.4	5523.5	5287.7	5090.4	5036.3	5051.2	5065.9	5154.7	5243.7
20°	6315.9	5982.4	5648.9	5356.5	5064.2	4834.5	4820.3	4889.6	4958.8	5113.2	5267.7
22.5°	6324.0	5918.5	5512.8	5160.7	4808.6	4547.1	4575.0	4677.5	4780.1	4956.2	5132.8
25°	6356.3	5855.2	5354.3	4941.9	4529.8	4261.6	4337.1	4455.4	4573.5	4731.9	4890.6
27.5°	6423.6	5813.0	5202.5	4742.0	4281.4	4037.4	4129.1	4243.3	4357.5	4487.8	4617.8
30°	6515.7	5793.2	5070.4	4574.8	4079.2	3874.3	3946.2	4036.8	4127.7	4235.8	4343.8
32.5°	6595.3	5768.8	4941.9	4430.7	3919.2	3754.1	3786.0	3839.6	3893.3	3979.6	4066.0
35°	6653.5	5722.7	4792.3	4289.0	3785.6	3648.1	3634.8	3649.5	3664.4	3730.2	3795.9
37.5°	6688.2	5643.9	4599.5	4122.2	3645.0	3524.7	3476.2	3459.9	3443.6	3490.8	3538.0
40°	6710.0	5535.2	4360.6	3923.3	3486.0	3377.0	3302.6	3265.6	3228.7	3262.8	3296.8
42.5°	6751.4	5423.1	4095.1	3703.7	3312.3	3211.8	3118.0	3069.1	3020.2	3047.8	3075.8
45°	6824.1	5318.8	3813.8	3470.4	3127.2	3025.3	2934.6	2886.8	2839.4	2862.6	2886.2
47.5°	6874.1	5232.8	3591.6	3285.9	2980.4	2848.9	2770.9	2730.9	2690.9	2713.0	2734.8
50°	6841.5	5139.0	3436.6	3163.5	2890.3	2717.5	2626.7	2591.2	2555.9	2590.2	2624.7
52.5°	6640.7	4980.7	3320.9	3082.8	2844.9	2646.0	2519.2	2484.2	2449.3	2500.9	2552.4
55°	6225.8	4718.1	3210.4	3024.3	2838.1	2653.2	2462.2	2406.8	2351.6	2424.7	2497.7
57.5°	5609.2	4347.8	3086.4	2955.0	2823.5	2660.4	2427.9	2347.2	2266.5	2345.2	2423.9
60°	4782.1	3867.2	2952.3	2848.9	2745.6	2637.9	2395.7	2291.2	2186.4	2255.5	2324.4
62.5°	3850.5	3291.9	2733.4	2664.6	2596.1	2582.9	2358.2	2227.3	2096.6	2140.5	2184.4
65°	3035.0	2774.3	2513.6	2481.1	2448.7	2450.4	2279.1	2140.1	2000.9	2017.8	2034.5
67.5°	2350.9	2276.9	2202.7	2220.9	2238.8	2234.3	2138.0	2022.3	1906.5	1901.2	1895.8
70°	1780.7	1802.0	1822.9	1906.9	1990.7	1990.7	1959.1	1876.7	1794.4	1776.0	1757.7
72.5°	1373.6	1437.4	1501.4	1620.4	1739.3	1759.3	1759.7	1703.2	1646.8	1619.8	1593.2
75°	1066.6	1124.5	1182.3	1315.7	1449.0	1541.2	1533.4	1490.0	1446.4	1420.6	1394.8
77.5°	821.1	860.5	900.1	1029.5	1159.0	1310.8	1306.8	1271.9	1237.0	1210.9	1184.8
80°	615.6	631.9	648.3	758.0	867.5	1048.9	1048.3	1019.1	989.7	967.9	945.9
82.5°	439.9	442.8	446.1	526.7	607.5	762.4	771.0	756.8	742.4	726.9	711.5
85°	266.0	264.7	263.0	322.1	381.2	496.4	507.6	492.3	477.0	459.7	442.4
87.5°	116.6	115.2	113.8	137.8	162.1	210.0	224.3	218.1	212.0	208.8	205.5
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: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6
2.5°	5078.0	5047.1	5016.1	4985.4	4961.5	4937.4	4918.1	4898.7	4883.6	4868.5	4854.7
5°	4884.4	4829.8	4780.3	4730.6	4692.4	4654.1	4627.4	4600.7	4581.8	4562.8	4548.3
7.5°	4765.8	4696.9	4636.2	4575.6	4530.1	4484.9	4453.1	4421.2	4399.5	4377.9	4364.9
10°	4757.8	4683.6	4615.4	4547.1	4492.9	4438.5	4402.9	4367.0	4346.5	4325.9	4314.8
12.5°	4876.7	4818.8	4748.1	4677.5	4608.2	4538.9	4493.1	4447.2	4424.1	4401.3	4391.9
15°	5087.5	5072.4	5011.0	4949.7	4851.0	4752.3	4682.6	4612.9	4580.9	4549.1	4536.9
17.5°	5290.9	5338.0	5288.5	5239.2	5108.5	4977.8	4875.1	4772.3	4725.0	4677.5	4662.0
20°	5366.6	5465.4	5442.6	5419.6	5270.1	5120.9	4994.9	4869.2	4808.6	4747.9	4728.5
22.5°	5261.4	5390.1	5403.9	5417.5	5274.9	5132.2	5002.5	4872.6	4808.8	4744.8	4723.4
25°	5017.2	5143.8	5191.0	5238.2	5121.1	5004.4	4888.9	4773.9	4718.5	4663.2	4643.0
27.5°	4719.3	4820.9	4873.5	4926.3	4842.8	4759.7	4670.2	4580.7	4543.6	4506.3	4497.1
30°	4428.0	4512.4	4555.2	4598.0	4534.6	4471.0	4407.0	4342.6	4323.7	4304.5	4304.5
32.5°	4146.6	4227.6	4275.1	4322.8	4264.5	4206.0	4154.8	4103.7	4091.2	4078.8	4080.4
35°	3875.7	3955.9	4013.0	4070.1	4028.5	3987.0	3939.8	3892.6	3873.7	3854.9	3850.9
37.5°	3617.6	3697.6	3768.1	3838.6	3819.5	3800.3	3756.9	3713.3	3678.8	3644.6	3626.4
40°	3373.9	3450.9	3532.0	3613.4	3618.0	3622.6	3585.7	3548.8	3498.6	3448.9	3415.0
42.5°	3148.8	3222.0	3309.6	3397.3	3420.7	3444.2	3413.0	3382.0	3319.9	3257.7	3208.6
45°	2955.6	3024.9	3115.8	3206.7	3240.3	3274.0	3245.9	3217.9	3146.7	3075.8	3018.1
47.5°	2802.7	2870.3	2960.0	3049.7	3088.4	3127.2	3107.6	3088.0	3024.9	2961.6	2908.2
50°	2688.7	2752.5	2832.8	2913.2	2962.9	3012.6	3011.3	3010.6	2960.0	2909.5	2860.2
52.5°	2611.0	2669.5	2744.3	2819.4	2878.3	2937.2	2947.8	2958.4	2917.3	2876.0	2831.8
55°	2560.9	2624.1	2689.7	2755.1	2817.5	2880.1	2894.8	2909.5	2873.6	2837.7	2799.0
57.5°	2498.1	2572.2	2637.1	2702.1	2765.1	2827.9	2842.8	2857.7	2821.4	2785.1	2746.8
60°	2409.6	2494.8	2560.7	2626.7	2689.9	2753.1	2769.4	2785.7	2750.3	2715.0	2675.5
62.5°	2283.6	2383.1	2453.4	2523.8	2581.7	2639.6	2655.3	2670.9	2639.0	2607.0	2565.4
65°	2140.9	2247.5	2314.9	2382.1	2433.0	2484.0	2500.1	2516.1	2485.2	2454.5	2414.1
67.5°	1994.1	2092.6	2156.4	2220.0	2264.0	2308.1	2323.8	2339.3	2311.0	2282.8	2245.3
70°	1844.1	1930.6	1985.6	2040.7	2080.3	2120.1	2135.2	2150.3	2127.3	2104.2	2068.3
72.5°	1661.2	1729.2	1778.9	1828.6	1867.5	1906.5	1924.4	1942.4	1923.2	1904.0	1869.8
75°	1445.4	1495.9	1541.0	1586.0	1621.4	1656.9	1675.7	1694.4	1685.1	1675.7	1647.0
77.5°	1226.0	1267.0	1305.7	1344.5	1381.8	1418.8	1436.4	1454.0	1440.8	1427.4	1398.5
80°	980.1	1014.2	1046.8	1079.4	1107.7	1135.9	1159.2	1182.3	1176.7	1171.2	1132.2
82.5°	708.6	705.7	694.3	683.0	743.2	803.6	843.2	882.7	880.3	877.6	844.8
85°	427.7	412.8	381.2	349.6	406.1	462.8	511.7	560.6	556.6	552.5	526.7
87.5°	204.9	204.3	180.2	155.9	179.6	203.5	223.2	243.0	238.1	232.8	219.8
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: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6
2.5°	4840.7	4823.2	4840.7	4854.7	4868.5	4883.6	4898.7	4918.1	4937.4	4961.5	4985.4
5°	4533.8	4519.5	4533.8	4548.3	4562.8	4581.8	4600.7	4627.4	4654.1	4692.4	4730.6
7.5°	4351.9	4342.2	4351.9	4364.9	4377.9	4399.5	4421.2	4453.1	4484.9	4530.1	4575.6
10°	4303.9	4299.4	4303.9	4314.8	4325.9	4346.5	4367.0	4402.9	4438.5	4492.9	4547.1
12.5°	4382.6	4381.0	4382.6	4391.9	4401.3	4424.1	4447.2	4493.1	4538.9	4608.2	4677.5
15°	4524.7	4523.6	4524.7	4536.9	4549.1	4580.9	4612.9	4682.6	4752.3	4851.0	4949.7
17.5°	4646.3	4643.9	4646.3	4662.0	4677.5	4725.0	4772.3	4875.1	4977.8	5108.5	5239.2
20°	4709.2	4703.0	4709.2	4728.5	4747.9	4808.6	4869.2	4994.9	5120.9	5270.1	5419.6
22.5°	4702.0	4692.9	4702.0	4723.4	4744.8	4808.8	4872.6	5002.5	5132.2	5274.9	5417.5
25°	4623.1	4611.3	4623.1	4643.0	4663.2	4718.5	4773.9	4888.9	5004.4	5121.1	5238.2
27.5°	4488.0	4484.9	4488.0	4497.1	4506.3	4543.6	4580.7	4670.2	4759.7	4842.8	4926.3
30°	4304.5	4307.6	4304.5	4304.5	4304.5	4323.7	4342.6	4407.0	4471.0	4534.6	4598.0
32.5°	4082.3	4085.3	4082.3	4080.4	4078.8	4091.2	4103.7	4154.8	4206.0	4264.5	4322.8
35°	3846.8	3844.8	3846.8	3850.9	3854.9	3873.7	3892.6	3939.8	3987.0	4028.5	4070.1
37.5°	3608.3	3598.1	3608.3	3626.4	3644.6	3678.8	3713.3	3756.9	3800.3	3819.5	3838.6
40°	3381.6	3361.6	3381.6	3415.0	3448.9	3498.6	3548.8	3585.7	3622.6	3618.0	3613.4
42.5°	3159.4	3127.2	3159.4	3208.6	3257.7	3319.9	3382.0	3413.0	3444.2	3420.7	3397.3
45°	2960.4	2923.3	2960.4	3018.1	3075.8	3146.7	3217.9	3245.9	3274.0	3240.3	3206.7
47.5°	2855.0	2819.4	2855.0	2908.2	2961.6	3024.9	3088.0	3107.6	3127.2	3088.4	3049.7
50°	2810.8	2776.5	2810.8	2860.2	2909.5	2960.0	3010.6	3011.3	3012.6	2962.9	2913.2
52.5°	2787.8	2756.1	2787.8	2831.8	2876.0	2917.3	2958.4	2947.8	2937.2	2878.3	2819.4
55°	2760.2	2731.7	2760.2	2799.0	2837.7	2873.6	2909.5	2894.8	2880.1	2817.5	2755.1
57.5°	2708.3	2678.7	2708.3	2746.8	2785.1	2821.4	2857.7	2842.8	2827.9	2765.1	2702.1
60°	2635.9	2605.3	2635.9	2675.5	2715.0	2750.3	2785.7	2769.4	2753.1	2689.9	2626.7
62.5°	2523.8	2487.1	2523.8	2565.4	2607.0	2639.0	2670.9	2655.3	2639.6	2581.7	2523.8
65°	2373.9	2342.3	2373.9	2414.1	2454.5	2485.2	2516.1	2500.1	2484.0	2433.0	2382.1
67.5°	2207.7	2179.3	2207.7	2245.3	2282.8	2311.0	2339.3	2323.8	2308.1	2264.0	2220.0
70°	2032.5	1999.9	2032.5	2068.3	2104.2	2127.3	2150.3	2135.2	2120.1	2080.3	2040.7
72.5°	1835.8	1804.1	1835.8	1869.8	1904.0	1923.2	1942.4	1924.4	1906.5	1867.5	1828.6
75°	1618.3	1588.0	1618.3	1647.0	1675.7	1685.1	1694.4	1675.7	1656.9	1621.4	1586.0
77.5°	1369.5	1345.4	1369.5	1398.5	1427.4	1440.8	1454.0	1436.4	1418.8	1381.8	1344.5
80°	1093.1	1047.9	1093.1	1132.2	1171.2	1176.7	1182.3	1159.2	1135.9	1107.7	1079.4
82.5°	811.8	782.8	811.8	844.8	877.6	880.3	882.7	843.2	803.6	743.2	683.0
85°	501.1	475.0	501.1	526.7	552.5	556.6	560.6	511.7	462.8	406.1	349.6
87.5°	206.3	193.6	206.3	219.8	232.8	238.1	243.0	223.2	203.5	179.6	155.9
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: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6
2.5°	5016.1	5047.1	5078.0	5108.7	5143.8	5179.0	5218.0	5257.1	5305.4	5348.9	5393.7
5°	4780.3	4829.8	4884.4	4939.1	5000.9	5062.8	5136.8	5210.6	5295.3	5380.8	5471.6
7.5°	4636.2	4696.9	4765.8	4834.5	4916.0	4997.6	5095.7	5193.9	5303.3	5420.2	5546.8
10°	4615.4	4683.6	4757.8	4831.8	4913.4	4994.9	5098.5	5202.1	5319.6	5463.8	5613.8
12.5°	4748.1	4818.8	4876.7	4935.0	4988.8	5043.0	5127.5	5212.2	5321.7	5473.2	5642.6
15°	5011.0	5072.4	5087.5	5102.6	5095.3	5087.9	5128.3	5168.9	5256.5	5424.3	5620.4
17.5°	5288.5	5338.0	5290.9	5243.7	5154.7	5065.9	5051.2	5036.3	5090.4	5287.7	5523.5
20°	5442.6	5465.4	5366.6	5267.7	5113.2	4958.8	4889.6	4820.3	4834.5	5064.2	5356.5
22.5°	5403.9	5390.1	5261.4	5132.8	4956.2	4780.1	4677.5	4575.0	4547.1	4808.6	5160.7
25°	5191.0	5143.8	5017.2	4890.6	4731.9	4573.5	4455.4	4337.1	4261.6	4529.8	4941.9
27.5°	4873.5	4820.9	4719.3	4617.8	4487.8	4357.5	4243.3	4129.1	4037.4	4281.4	4742.0
30°	4555.2	4512.4	4428.0	4343.8	4235.8	4127.7	4036.8	3946.2	3874.3	4079.2	4574.8
32.5°	4275.1	4227.6	4146.6	4066.0	3979.6	3893.3	3839.6	3786.0	3754.1	3919.2	4430.7
35°	4013.0	3955.9	3875.7	3795.9	3730.2	3664.4	3649.5	3634.8	3648.1	3785.6	4289.0
37.5°	3768.1	3697.6	3617.6	3538.0	3490.8	3443.6	3459.9	3476.2	3524.7	3645.0	4122.2
40°	3532.0	3450.9	3373.9	3296.8	3262.8	3228.7	3265.6	3302.6	3377.0	3486.0	3923.3
42.5°	3309.6	3222.0	3148.8	3075.8	3047.8	3020.2	3069.1	3118.0	3211.8	3312.3	3703.7
45°	3115.8	3024.9	2955.6	2886.2	2862.6	2839.4	2886.8	2934.6	3025.3	3127.2	3470.4
47.5°	2960.0	2870.3	2802.7	2734.8	2713.0	2690.9	2730.9	2770.9	2848.9	2980.4	3285.9
50°	2832.8	2752.5	2688.7	2624.7	2590.2	2555.9	2591.2	2626.7	2717.5	2890.3	3163.5
52.5°	2744.3	2669.5	2611.0	2552.4	2500.9	2449.3	2484.2	2519.2	2646.0	2844.9	3082.8
55°	2689.7	2624.1	2560.9	2497.7	2424.7	2351.6	2406.8	2462.2	2653.2	2838.1	3024.3
57.5°	2637.1	2572.2	2498.1	2423.9	2345.2	2266.5	2347.2	2427.9	2660.4	2823.5	2955.0
60°	2560.7	2494.8	2409.6	2324.4	2255.5	2186.4	2291.2	2395.7	2637.9	2745.6	2848.9
62.5°	2453.4	2383.1	2283.6	2184.4	2140.5	2096.6	2227.3	2358.2	2582.9	2596.1	2664.6
65°	2314.9	2247.5	2140.9	2034.5	2017.8	2000.9	2140.1	2279.1	2450.4	2448.7	2481.1
67.5°	2156.4	2092.6	1994.1	1895.8	1901.2	1906.5	2022.3	2138.0	2234.3	2238.8	2220.9
70°	1985.6	1930.6	1844.1	1757.7	1776.0	1794.4	1876.7	1959.1	1990.7	1990.7	1906.9
72.5°	1778.9	1729.2	1661.2	1593.2	1619.8	1646.8	1703.2	1759.7	1759.3	1739.3	1620.4
75°	1541.0	1495.9	1445.4	1394.8	1420.6	1446.4	1490.0	1533.4	1541.2	1449.0	1315.7
77.5°	1305.7	1267.0	1226.0	1184.8	1210.9	1237.0	1271.9	1306.8	1310.8	1159.0	1029.5
80°	1046.8	1014.2	980.1	945.9	967.9	989.7	1019.1	1048.3	1048.9	867.5	758.0
82.5°	694.3	705.7	708.6	711.5	726.9	742.4	756.8	771.0	762.4	607.5	526.7
85°	381.2	412.8	427.7	442.4	459.7	477.0	492.3	507.6	496.4	381.2	322.1
87.5°	180.2	204.3	204.9	205.5	208.8	212.0	218.1	224.3	210.0	162.1	137.8
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: P967384

CATALOG NUMBER: NAV-SB4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6	5312.6
2.5°	5438.5	5485.4	5532.3	5578.8	5625.5	5669.3	5713.1
5°	5562.3	5659.3	5756.5	5853.0	5949.6	6046.5	6143.2
7.5°	5673.4	5817.1	5960.8	6108.4	6256.0	6415.6	6575.5
10°	5763.5	5938.2	6112.7	6307.5	6502.7	6704.7	6906.8
12.5°	5812.0	6017.9	6223.8	6444.8	6665.8	6887.6	7109.6
15°	5816.5	6053.5	6290.6	6530.4	6770.1	7001.5	7232.9
17.5°	5759.4	6034.6	6309.8	6571.4	6833.0	7067.6	7302.2
20°	5648.9	5982.4	6315.9	6603.4	6890.9	7134.8	7378.7
22.5°	5512.8	5918.5	6324.0	6646.6	6968.9	7218.3	7467.3
25°	5354.3	5855.2	6356.3	6724.9	7093.2	7337.3	7581.5
27.5°	5202.5	5813.0	6423.6	6847.2	7270.6	7503.6	7736.4
30°	5070.4	5793.2	6515.7	7005.6	7495.4	7720.3	7945.4
32.5°	4941.9	5768.8	6595.3	7170.9	7746.6	7969.3	8192.0
35°	4792.3	5722.7	6653.5	7359.3	8065.0	8278.5	8491.7
37.5°	4599.5	5643.9	6688.2	7570.2	8452.4	8724.3	8996.2
40°	4360.6	5535.2	6710.0	7838.2	8966.1	9362.3	9758.7
42.5°	4095.1	5423.1	6751.4	8188.6	9625.8	10197.8	10769.9
45°	3813.8	5318.8	6824.1	8649.7	10475.3	11246.9	12018.4
47.5°	3591.6	5232.8	6874.1	9141.1	11407.9	12494.0	13580.0
50°	3436.6	5139.0	6841.5	9596.9	12352.2	13989.6	15626.7
52.5°	3320.9	4980.7	6640.7	9892.8	13144.8	15560.5	17976.2
55°	3210.4	4718.1	6225.8	9827.6	13429.1	16953.3	20477.6
57.5°	3086.4	4347.8	5609.2	9368.5	13128.1	17940.4	22752.6
60°	2952.3	3867.2	4782.1	8514.2	12246.2	18187.0	24127.7
62.5°	2733.4	3291.9	3850.5	7358.9	10867.3	17148.4	23429.4
65°	2513.6	2774.3	3035.0	6180.1	9325.4	15678.7	22032.0
67.5°	2202.7	2276.9	2350.9	5025.5	7700.1	13929.9	20159.6
70°	1822.9	1802.0	1780.7	3956.9	6133.1	12021.5	17909.9
72.5°	1501.4	1437.4	1373.6	3025.1	4676.5	9952.8	15229.2
75°	1182.3	1124.5	1066.6	2195.5	3324.5	7581.3	11838.0
77.5°	900.1	860.5	821.1	1487.8	2154.3	5306.2	8458.1
80°	648.3	631.9	615.6	958.6	1301.6	3418.7	5535.8
82.5°	446.1	442.8	439.9	589.6	739.6	1978.7	3217.9
85°	263.0	264.7	266.0	315.2	364.5	890.0	1415.8
87.5°	113.8	115.2	116.6	130.7	144.7	291.5	438.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)