

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: P967382

Luminaire Tested: **NAV-SB4D-835-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967382
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38435.4 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
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



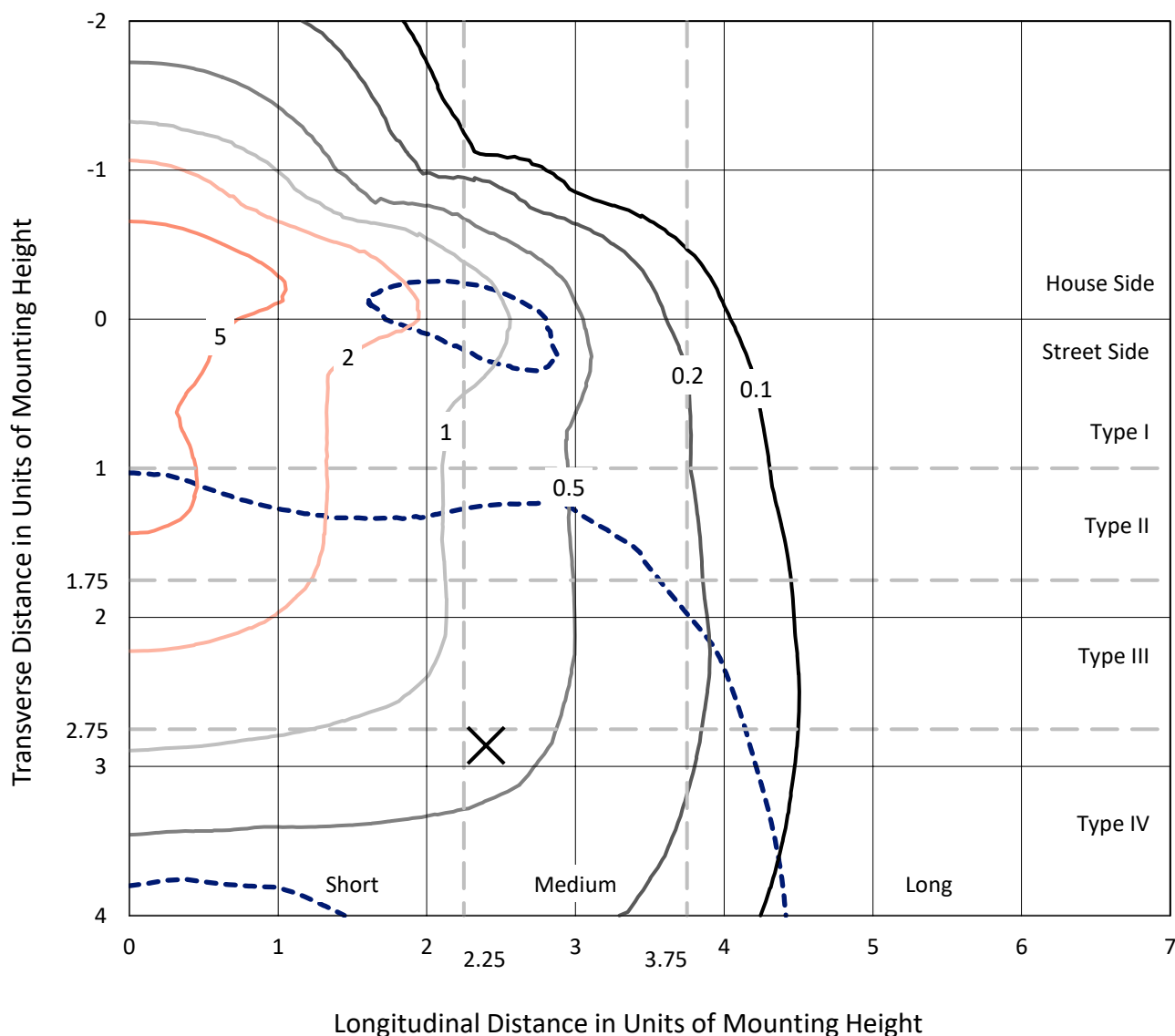
REPORT NUMBER: P967382

CATALOG NUMBER: NAV-SB4D-835-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

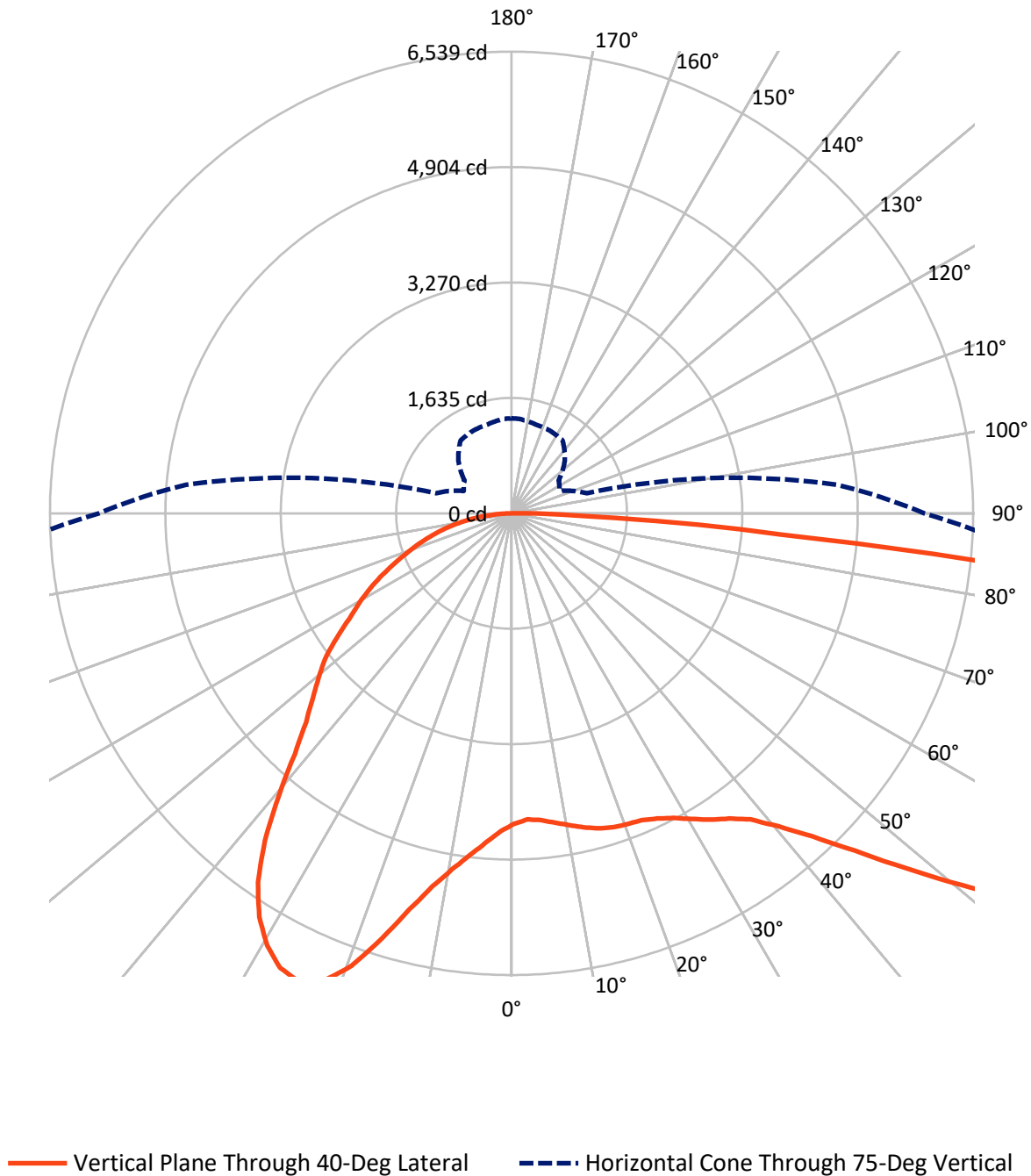
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
Type IV - Medium - N/A

REPORT NUMBER: P967382
CATALOG NUMBER: NAV-SB4D-835-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P967382

CATALOG NUMBER: NAV-SB4D-835-U-SL4

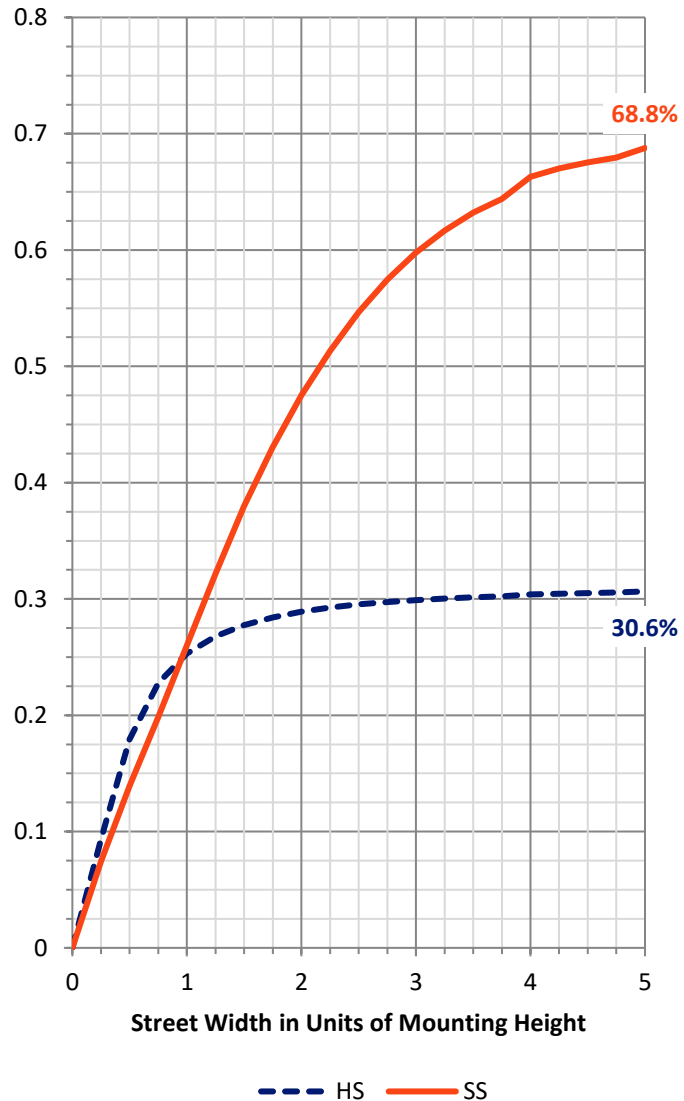
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11908.6	0.0	11908.6
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	26526.9	0.0	26526.9
	% Fixture	69.0	0.0	69.0
Total	Lumens	38435.4	0.0	38435.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	438.7	1.1
10°-20°	1473.0	3.8
20°-30°	2689.5	7.0
30°-40°	3814.5	9.9
40°-50°	5150.7	13.4
50°-60°	6929.1	18.0
60°-70°	8794.7	22.9
70°-80°	7981.7	20.8
80°-90°	1163.5	3.0
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°	38435.4	100.0
0°-180°	38435.4	100.0

Coefficient of Utilization



REPORT NUMBER: P967382

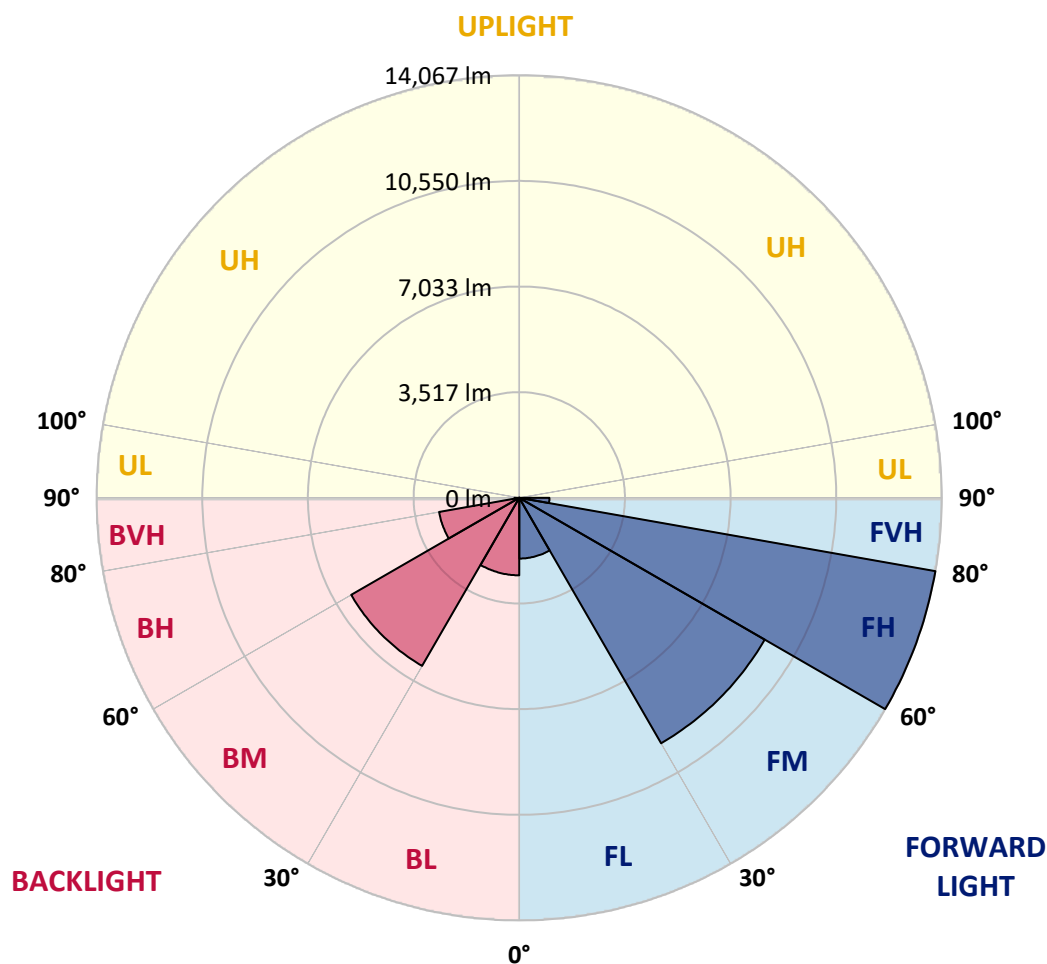
CATALOG NUMBER: NAV-SB4D-835-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2021.7	5.3			
FM	(30°-60°)	9435.0	24.5			
FH	(60°-80°)	14066.8	36.6			G5
FVH	(80°-90°)	1003.3	2.6			G5
BL	(0°-30°)	2579.5	6.7	B4/5000		
BM	(30°-60°)	6459.3	16.8	B4/8500		
BH	(60°-80°)	2709.6	7.0	B4/5000		G4/5000
BVH	(80°-90°)	160.2	0.4			G2/225
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 Medium



REPORT NUMBER: P967382

CATALOG NUMBER: NAV-SB4D-835-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1
2.5°	4327.9	4352.4	4346.2	4338.1	4338.1	4340.1	4338.1	4352.4	4366.6	4380.8	4403.3
5°	4372.8	4397.1	4385.0	4374.8	4366.6	4364.6	4358.4	4356.5	4364.6	4382.9	4413.4
7.5°	4460.4	4484.9	4466.5	4448.2	4431.8	4423.7	4415.5	4403.3	4397.1	4407.4	4450.1
10°	4558.3	4582.7	4560.2	4527.6	4501.2	4490.9	4482.8	4470.5	4462.4	4468.5	4515.4
12.5°	4656.1	4680.6	4650.0	4605.1	4570.5	4564.3	4554.2	4550.1	4548.0	4546.0	4592.9
15°	4747.8	4768.2	4729.5	4676.5	4639.8	4629.6	4619.4	4625.5	4635.7	4648.0	4701.0
17.5°	4819.1	4839.5	4782.4	4713.2	4678.5	4674.4	4668.4	4688.7	4717.3	4747.8	4813.1
20°	4884.4	4904.8	4831.4	4737.7	4696.9	4696.9	4698.9	4741.6	4782.4	4827.3	4917.0
22.5°	4976.2	4992.5	4902.8	4774.3	4715.2	4719.3	4735.6	4778.3	4829.4	4890.5	5014.9
25°	5112.7	5125.0	5014.9	4843.6	4776.4	4788.6	4802.8	4823.2	4872.1	4943.5	5110.6
27.5°	5332.9	5343.1	5198.4	4965.9	4864.0	4884.4	4904.8	4890.5	4912.9	4974.1	5188.1
30°	5642.7	5648.9	5465.4	5157.6	5012.9	5023.0	5027.1	4968.0	4925.1	4974.1	5243.2
32.5°	6009.7	6007.6	5789.5	5390.0	5182.0	5171.8	5137.2	5021.0	4921.1	4963.9	5292.1
35°	6578.4	6556.0	6274.7	5716.1	5373.7	5310.4	5228.9	5080.1	4941.5	4953.7	5334.9
37.5°	7520.2	7450.9	7061.6	6250.2	5659.0	5498.0	5377.8	5175.9	4986.3	4949.6	5385.9
40°	8582.3	8494.7	8066.6	6982.1	6087.2	5828.3	5634.6	5312.5	5059.7	4968.0	5461.3
42.5°	9842.2	9717.8	9257.1	7844.4	6629.4	6254.3	5962.8	5485.8	5167.7	5027.1	5563.3
45°	11389.5	11224.4	10572.0	8816.7	7312.4	6812.9	6423.5	5748.7	5332.9	5141.3	5716.1
47.5°	12953.0	12993.8	12066.3	9929.9	8131.8	7501.9	7000.4	6144.3	5573.4	5324.8	5962.8
50°	14614.4	14643.0	13552.3	11163.2	9061.4	8280.7	7648.7	6586.6	5907.8	5585.6	6331.7
52.5°	15911.0	15915.1	14901.9	12453.5	10029.7	9136.8	8347.9	7092.2	6295.0	5932.2	6823.1
55°	16722.4	16712.1	15847.8	13674.7	11142.8	10035.9	9122.6	7667.0	6768.1	6339.9	7440.8
57.5°	17311.5	17280.9	16500.1	14724.5	12329.2	11098.0	9999.2	8319.4	7326.6	6825.1	8254.1
60°	17535.7	17517.4	16942.5	15631.8	13576.8	12272.1	11010.2	9049.2	7960.6	7397.9	9299.9
62.5°	17621.4	17656.0	17376.7	16510.3	14912.1	13572.7	12121.3	9921.7	8674.1	8046.2	10402.8
65°	17923.0	17986.3	17929.2	17660.0	16420.6	15095.6	13595.2	10959.3	9452.9	8741.4	11554.6
67.5°	18520.3	18583.6	18608.1	19036.1	18263.4	16993.5	15433.9	12251.7	10364.1	9463.0	12420.9
70°	18506.1	18487.7	18920.0	20130.8	20571.1	19621.2	17912.9	13841.8	11450.6	10062.3	12531.0
72.5°	16844.6	16697.9	17719.2	20118.6	22491.5	22365.1	20940.1	15892.6	12388.4	10135.7	10873.7
75°	12637.0	12245.7	14049.8	18131.0	22811.6	23922.6	22864.6	17164.8	12166.1	8955.4	7567.2
77.5°	5404.2	5010.8	7137.0	13421.9	20416.3	22363.0	21099.1	14975.2	9711.7	5922.0	3716.3
80°	1414.8	1412.8	2156.8	6085.1	13884.6	16514.4	14488.1	9671.0	5548.9	2116.0	1025.4
82.5°	585.1	570.8	793.0	2366.7	6784.4	9267.3	7563.1	4313.6	2003.9	572.9	340.4
85°	218.1	216.1	385.3	817.4	2393.3	3822.3	2766.4	1102.9	499.5	279.3	152.9
87.5°	61.2	59.1	83.5	283.3	583.0	884.8	472.9	181.4	140.6	110.1	44.9
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: P967382

CATALOG NUMBER: NAV-SB4D-835-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1	4395.1
2.5°	4409.4	4419.6	4437.9	4452.2	4470.5	4490.9	4519.5	4537.9	4556.2	4568.4	4560.2
5°	4427.8	4450.1	4497.1	4543.9	4599.0	4650.0	4709.1	4751.9	4786.5	4796.7	4800.8
7.5°	4468.5	4505.2	4584.7	4664.3	4751.9	4835.4	4921.1	4994.5	5053.6	5076.0	5078.1
10°	4539.9	4588.8	4701.0	4813.1	4929.2	5057.7	5167.7	5273.7	5357.4	5392.0	5394.1
12.5°	4629.6	4690.7	4837.5	4992.5	5153.5	5330.8	5473.5	5604.0	5708.0	5754.9	5754.9
15°	4745.8	4825.3	5012.9	5220.7	5457.2	5703.9	5885.3	6030.1	6146.3	6203.4	6199.3
17.5°	4872.1	4978.2	5214.7	5528.5	5867.0	6191.1	6403.2	6509.2	6629.4	6684.4	6682.4
20°	4994.5	5125.0	5463.4	5920.0	6370.5	6715.1	6886.3	6914.9	6923.0	6929.1	6945.4
22.5°	5120.9	5296.2	5775.3	6413.3	6896.5	7135.0	7159.4	7037.1	6865.9	6786.4	6808.8
25°	5259.5	5491.8	6183.0	6957.6	7349.0	7377.5	7190.1	6892.4	6568.3	6419.5	6441.8
27.5°	5394.1	5718.2	6672.2	7477.5	7675.2	7424.5	7020.8	6598.8	6207.4	6050.5	6068.8
30°	5528.5	5977.1	7212.4	7932.1	7824.0	7308.2	6753.7	6282.8	5889.4	5724.3	5742.7
32.5°	5665.2	6278.7	7834.2	8260.3	7797.5	7061.6	6421.5	5928.2	5581.6	5408.3	5430.8
35°	5820.1	6649.8	8423.3	8439.6	7620.2	6698.7	5983.2	5504.1	5202.4	5063.8	5094.4
37.5°	6021.9	7120.7	8943.2	8484.5	7310.3	6166.7	5438.9	5002.6	4754.0	4690.7	4735.6
40°	6272.7	7687.4	9340.7	8413.2	6851.6	5520.4	4843.6	4495.0	4354.4	4368.7	4417.5
42.5°	6598.8	8321.5	9620.0	8229.7	6213.5	4853.8	4321.7	4166.8	4234.1	4291.2	4344.2
45°	7022.9	8979.9	9793.3	7917.8	5491.8	4289.1	4013.9	4050.6	4101.6	4107.7	4148.5
47.5°	7565.1	9646.5	9907.4	7446.8	4756.0	3891.6	3818.2	3826.4	3816.2	3773.3	3806.0
50°	8241.9	10294.8	10009.3	6823.1	4130.1	3643.0	3545.1	3516.6	3375.8	3237.3	3255.6
52.5°	9012.5	10890.0	10052.2	6048.4	3643.0	3435.0	3276.0	3096.6	2833.6	2790.8	2805.0
55°	9868.7	11440.4	9942.1	5096.4	3233.2	3168.0	2927.4	2711.3	2682.7	2646.0	2652.2
57.5°	10892.1	12033.6	9717.8	4034.3	2813.2	2856.1	2621.6	2646.0	2595.1	2538.0	2527.9
60°	12011.3	12647.3	9324.4	3066.0	2379.0	2466.7	2542.1	2540.1	2525.8	2478.9	2462.6
62.5°	13018.3	13050.9	8549.7	2348.4	1997.8	2165.0	2370.8	2368.8	2356.6	2330.0	2319.9
65°	13617.6	12989.7	7257.3	1849.0	1683.9	1916.2	2138.5	2154.8	2156.8	2154.8	2154.8
67.5°	13511.7	12274.2	5483.7	1471.8	1425.0	1663.5	1908.1	1930.5	1946.8	1950.9	1955.0
70°	12312.9	10702.4	3575.6	1174.2	1194.6	1441.3	1690.0	1712.4	1726.7	1743.0	1751.1
72.5°	9597.6	7868.8	2046.7	950.0	992.8	1249.7	1473.8	1500.4	1508.5	1539.1	1551.3
75°	5848.6	4627.6	1104.9	748.1	815.4	1068.3	1259.8	1290.4	1304.7	1341.4	1345.4
77.5°	2780.6	2003.9	630.0	583.0	656.4	872.5	1064.2	1098.8	1060.1	1080.5	1064.2
80°	939.8	744.0	397.5	444.4	501.5	680.9	852.1	886.7	805.2	801.1	793.0
82.5°	328.2	301.7	252.8	295.6	324.1	487.2	644.2	689.0	599.3	597.3	568.8
85°	128.4	122.3	140.6	161.0	193.6	299.7	424.0	446.5	369.0	297.7	293.6
87.5°	26.5	28.5	34.6	36.7	59.1	103.9	152.9	187.6	148.8	126.4	116.2
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)