

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: P968372

Luminaire Tested: **NAV-SB5B-827-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968372
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-827-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24778.3 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - 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



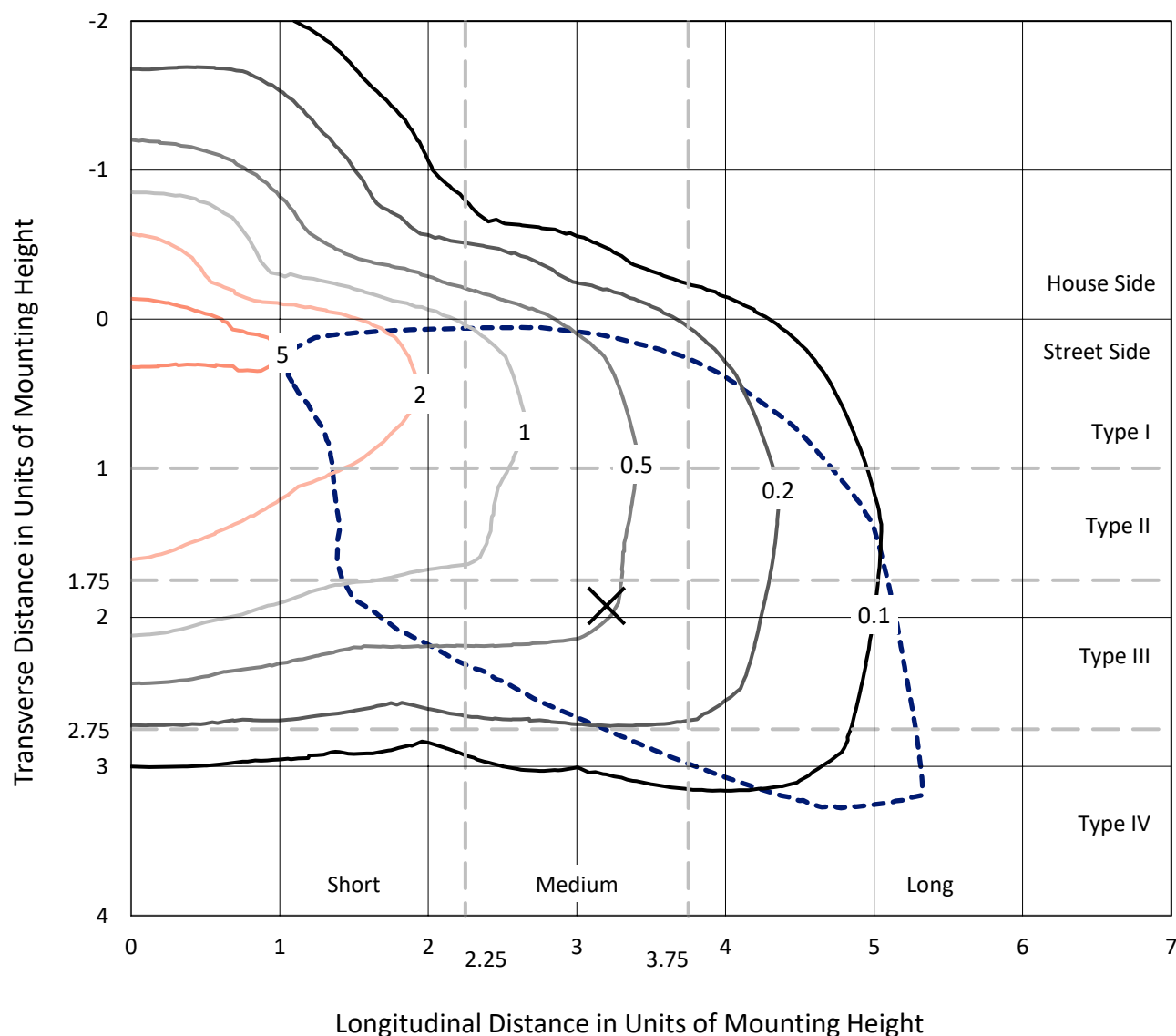
REPORT NUMBER: P968372

CATALOG NUMBER: NAV-SB5B-827-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

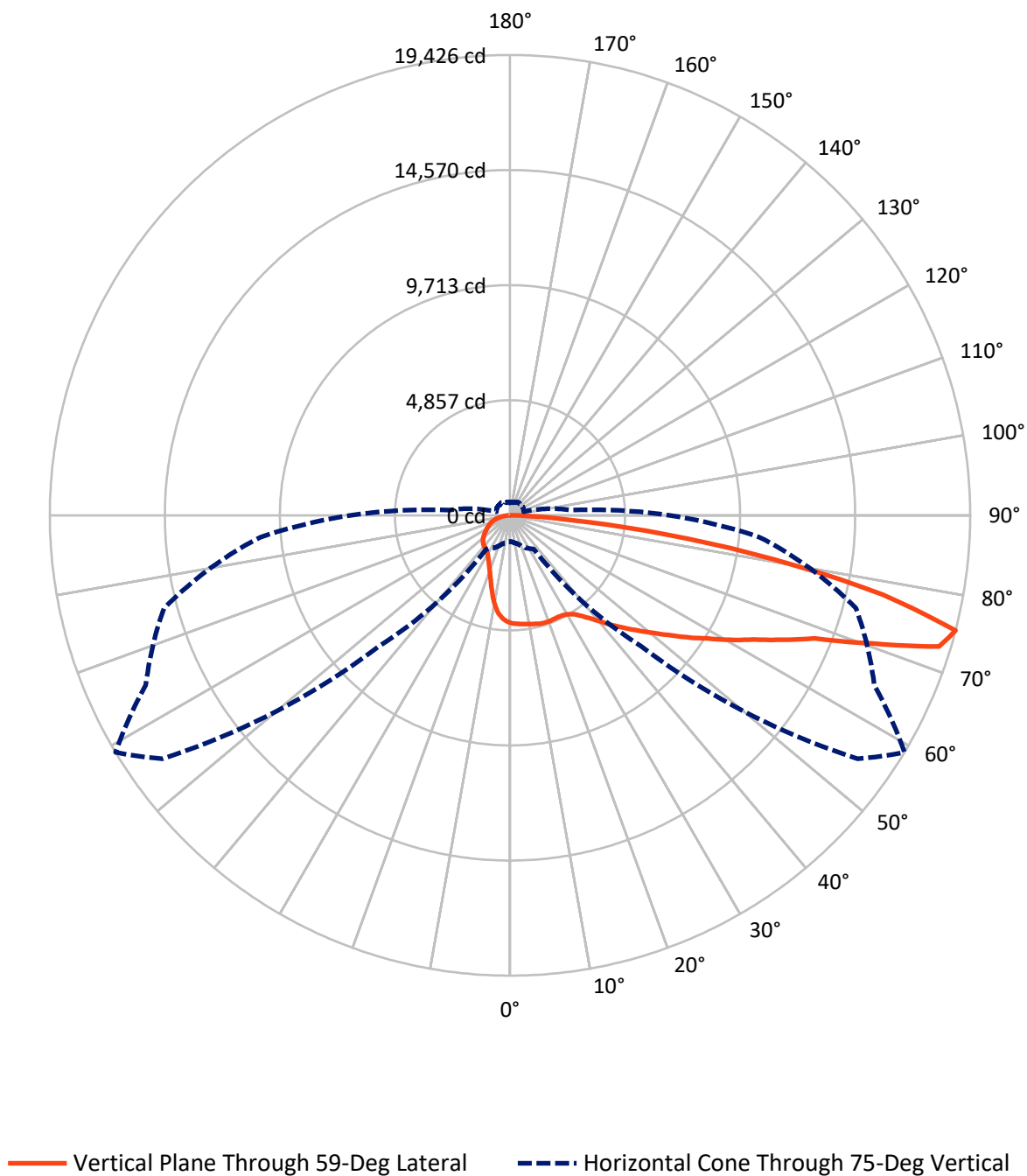


Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Medium - N/A

REPORT NUMBER: P968372

CATALOG NUMBER: NAV-SB5B-827-U-SL3

Luminous Intensity Polar Plot



REPORT NUMBER: P968372

CATALOG NUMBER: NAV-SB5B-827-U-SL3

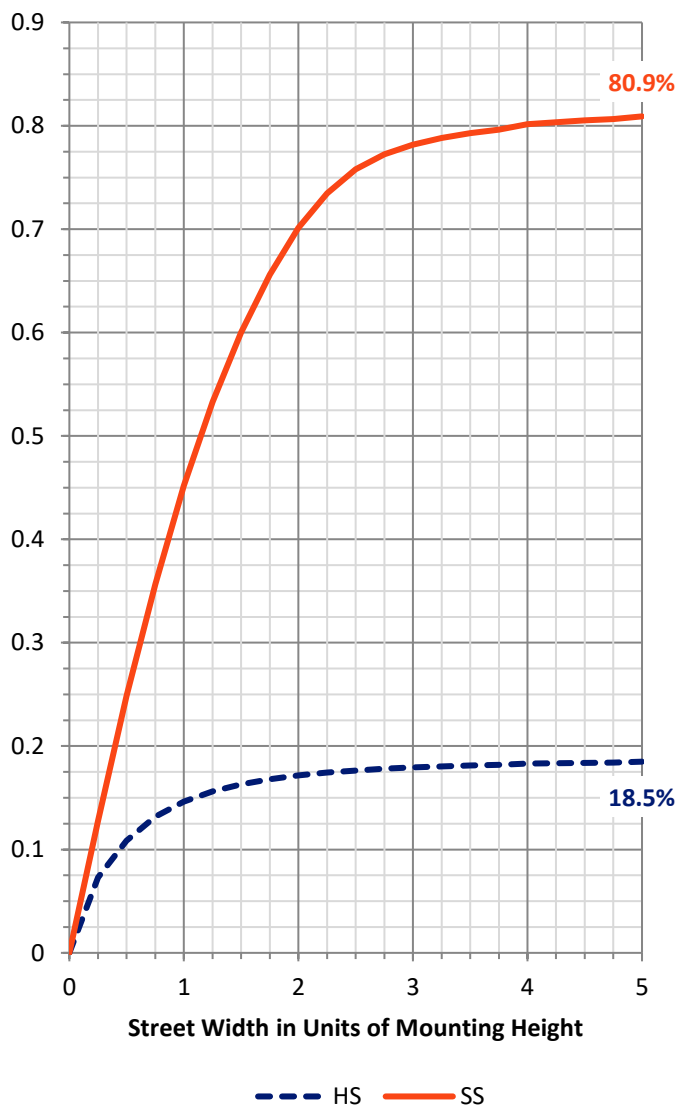
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4647.3	0.0	4647.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	20131.0	0.0	20131.0
	% Fixture	81.2	0.0	81.2
Total	Lumens	24778.3	0.0	24778.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.8	1.6
10°-20°	1042.4	4.2
20°-30°	1583.3	6.4
30°-40°	2353.5	9.5
40°-50°	3500.1	14.1
50°-60°	4750.9	19.2
60°-70°	5800.1	23.4
70°-80°	4551.8	18.4
80°-90°	788.5	3.2
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°	24778.3	100.0
0°-180°	24778.3	100.0

Coefficient of Utilization



REPORT NUMBER: P968372

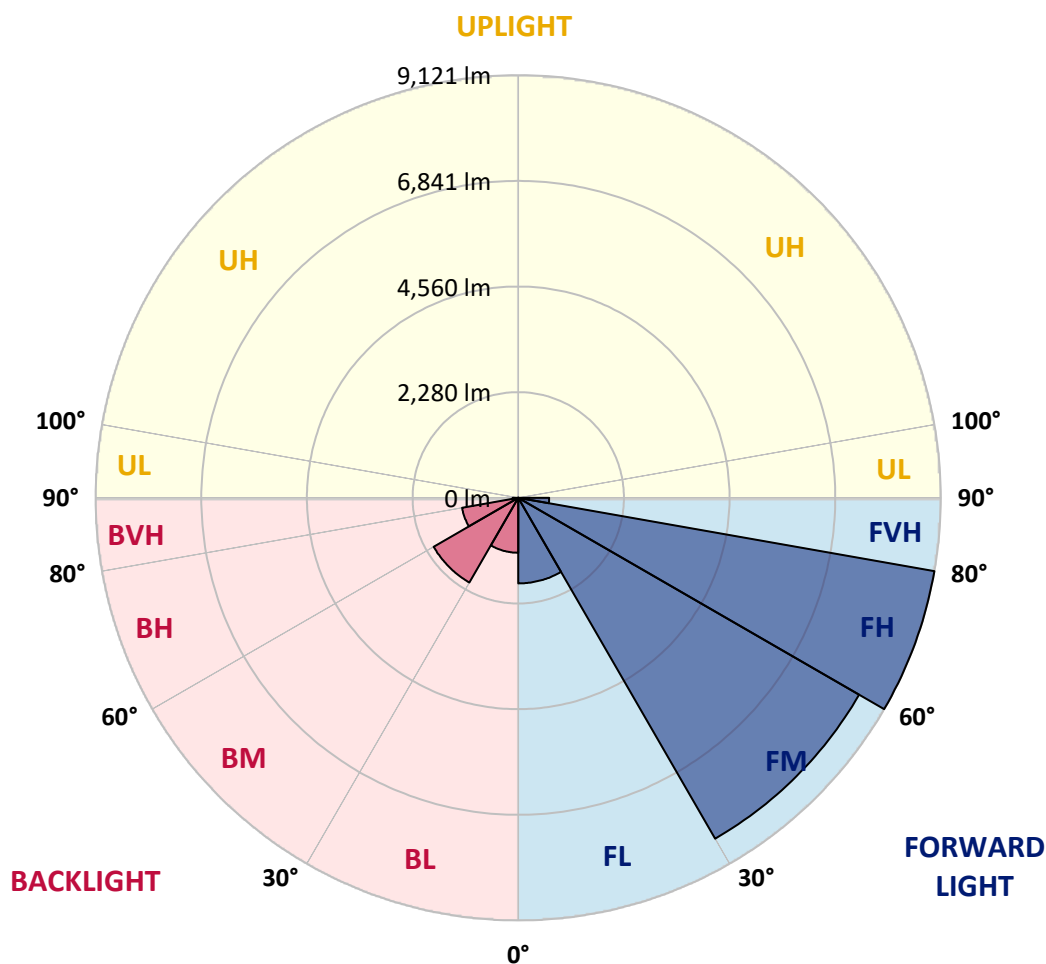
CATALOG NUMBER: NAV-SB5B-827-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1847.5	7.5			
FM	(30°-60°)	8495.1	34.3			
FH	(60°-80°)	9120.7	36.8			G4/12000
FVH	(80°-90°)	667.8	2.7			G4/750
BL	(0°-30°)	1186.0	4.8	B3/2500		
BM	(30°-60°)	2109.4	8.5	B2/2500		
BH	(60°-80°)	1231.3	5.0	B3/2500		G3/2500
BVH	(80°-90°)	120.7	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-G4

Type IV Medium



REPORT NUMBER: P968372

CATALOG NUMBER: NAV-SB5B-827-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0
2.5°	4586.7	4570.7	4586.7	4580.0	4577.3	4572.0	4573.3	4582.7	4577.3	4584.0	4561.4
5°	4556.0	4546.7	4562.7	4558.7	4576.0	4578.7	4596.0	4606.7	4613.3	4614.7	4597.3
7.5°	4505.4	4496.1	4518.7	4537.4	4574.7	4585.3	4621.3	4638.6	4648.0	4664.0	4638.6
10°	4320.1	4316.1	4372.0	4442.7	4530.7	4585.3	4640.0	4669.3	4683.9	4726.6	4697.3
12.5°	3992.2	3997.5	4070.8	4206.8	4382.7	4558.7	4661.3	4703.9	4726.6	4780.0	4766.7
15°	3678.9	3677.6	3757.5	3902.9	4149.5	4441.3	4672.0	4745.2	4784.0	4862.6	4851.9
17.5°	3497.6	3492.3	3548.3	3658.9	3888.2	4261.4	4645.3	4768.0	4850.6	4949.2	4939.9
20°	3464.3	3453.6	3483.0	3537.7	3700.2	4064.1	4576.0	4768.0	4903.9	5031.8	5026.5
22.5°	3585.7	3568.3	3556.3	3549.7	3621.6	3901.6	4497.4	4752.0	4982.5	5150.5	5141.2
25°	3829.5	3802.9	3741.6	3681.6	3660.3	3828.2	4428.0	4747.9	5099.9	5310.4	5275.8
27.5°	4224.1	4190.8	4066.8	3922.9	3793.5	3865.6	4397.4	4772.0	5229.1	5479.8	5410.5
30°	4713.3	4677.3	4521.4	4300.1	4068.1	4004.2	4436.0	4842.6	5394.5	5705.0	5569.0
32.5°	5151.9	5111.9	4978.5	4753.3	4440.0	4244.1	4558.7	4977.2	5654.3	6018.3	5807.6
35°	5541.0	5494.4	5374.5	5166.5	4895.9	4581.3	4780.0	5215.8	6023.6	6527.4	6131.5
37.5°	5922.2	5867.6	5737.0	5517.1	5327.7	5030.5	5085.2	5522.4	6514.1	7145.9	6560.7
40°	6348.8	6270.1	6111.6	5894.3	5710.4	5557.0	5486.4	5898.3	7012.6	7836.4	7096.6
42.5°	6762.0	6687.4	6498.1	6312.9	6082.2	6038.3	5951.6	6338.2	7557.8	8594.8	7640.5
45°	7207.3	7117.9	6888.6	6654.1	6508.7	6358.2	6402.2	6778.0	8092.3	9368.0	8211.0
47.5°	7624.5	7524.5	7253.9	6992.7	6912.7	6627.4	6815.3	7261.9	8648.1	10151.7	8776.2
50°	7849.8	7751.0	7525.9	7289.9	7227.3	6959.3	7263.3	7793.7	9230.6	10932.9	9318.6
52.5°	8037.6	7931.0	7636.5	7505.8	7487.1	7320.6	7815.0	8401.5	9813.1	11623.3	9842.5
55°	8237.6	8118.9	7743.1	7625.8	7711.1	7725.7	8469.6	9090.7	10429.0	12296.4	10337.0
57.5°	8468.2	8317.6	7845.8	7727.1	7929.7	8200.3	9221.3	9805.2	11034.1	12920.2	10776.8
60°	8685.4	8533.5	8043.0	7888.4	8165.7	8750.8	10083.7	10670.2	11719.2	13476.1	11192.8
62.5°	8728.1	8602.8	8200.3	8199.0	8485.6	9393.3	11104.7	11543.3	12317.7	14025.3	11566.0
65°	7989.7	7911.1	7672.4	8187.0	8944.0	10318.4	12241.8	12660.3	13078.9	14505.1	11893.9
67.5°	6080.9	6091.6	6074.3	7067.3	8573.5	11647.3	13887.9	13856.0	14018.6	15043.6	12271.1
70°	2780.5	2843.1	3251.1	4878.6	6868.6	11800.6	16609.8	16195.3	15198.3	15740.7	12597.7
72.5°	1502.2	1550.2	1716.9	2363.3	4129.4	10491.6	18643.9	18938.5	16767.2	16210.0	12239.1
75°	1102.4	1129.0	1245.0	1502.2	1734.2	7797.7	17914.7	19426.3	16963.0	15115.6	10568.9
77.5°	825.1	837.1	931.7	1190.3	887.8	4110.8	14314.5	16088.6	14521.1	12419.1	7807.0
80°	598.5	611.8	682.4	893.1	622.5	1503.6	9829.1	11292.7	9945.1	7916.4	3890.9
82.5°	413.2	418.5	449.2	607.8	434.5	583.8	5577.0	6622.1	5551.7	2777.9	1050.3
85°	249.3	255.9	269.3	354.5	246.6	277.3	2407.3	2489.9	1659.5	663.8	326.6
87.5°	102.6	109.3	119.9	149.2	97.3	77.3	397.2	498.6	310.6	194.6	101.3
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: P968372

CATALOG NUMBER: NAV-SB5B-827-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0	4548.0
2.5°	4554.7	4545.4	4520.0	4485.4	4453.4	4413.3	4396.0	4381.4	4368.0	4342.7	4330.7
5°	4582.7	4557.4	4489.4	4401.3	4301.4	4192.1	4085.4	4012.2	3949.5	3902.9	3864.2
7.5°	4625.3	4577.3	4453.4	4273.4	4044.1	3809.5	3597.6	3447.0	3333.7	3292.4	3220.4
10°	4669.3	4612.0	4396.0	4078.8	3682.9	3321.7	3040.5	2885.8	2795.2	2765.9	2720.6
12.5°	4721.3	4637.3	4306.7	3808.2	3279.1	2883.1	2637.9	2547.2	2500.6	2484.6	2488.6
15°	4797.3	4658.6	4172.2	3469.6	2893.8	2563.2	2404.6	2342.0	2318.0	2316.7	2322.0
17.5°	4854.6	4662.6	3962.9	3107.1	2597.9	2370.0	2239.3	2215.3	2231.3	2255.3	2264.6
20°	4918.6	4626.6	3688.3	2776.5	2390.0	2200.7	2146.0	2162.0	2200.7	2235.3	2247.3
22.5°	4963.9	4561.4	3356.4	2519.2	2210.0	2103.4	2100.7	2134.0	2155.4	2172.7	2182.0
25°	5003.8	4450.8	3004.5	2303.4	2062.1	2044.8	2074.1	2063.4	2048.8	2063.4	2072.8
27.5°	5033.2	4276.1	2689.9	2114.1	1958.1	2004.8	1987.4	1963.4	1962.1	1970.0	1983.4
30°	5023.8	4042.8	2431.3	1934.1	1884.8	1930.1	1888.8	1884.8	1880.8	1884.8	1899.4
32.5°	5023.8	3777.5	2232.7	1810.2	1838.1	1820.8	1816.8	1807.5	1791.5	1790.2	1807.5
35°	5051.8	3512.3	2062.1	1743.5	1799.5	1758.2	1760.8	1738.2	1704.9	1688.9	1704.9
37.5°	5109.2	3299.1	1892.8	1711.5	1731.5	1730.2	1719.5	1680.8	1622.2	1571.5	1588.9
40°	5247.8	3236.4	1776.8	1696.9	1699.6	1715.5	1687.6	1612.8	1479.6	1397.0	1407.6
42.5°	5465.1	3341.7	1751.5	1660.8	1678.1	1694.2	1639.5	1466.3	1371.6	1322.2	1322.2
45°	5741.0	3525.7	1806.2	1608.8	1627.5	1655.5	1492.9	1410.3	1367.6	1368.9	1375.6
47.5°	6090.2	3718.9	1907.4	1563.5	1554.2	1570.2	1395.6	1344.9	1286.3	1300.9	1338.2
50°	6494.1	3914.9	2003.5	1502.2	1472.9	1421.0	1332.9	1284.9	1210.3	1175.7	1185.0
52.5°	6931.4	4104.1	2042.1	1427.6	1385.0	1324.9	1290.3	1231.6	1141.0	1083.7	1082.4
55°	7345.9	4276.1	1999.5	1338.2	1296.9	1250.3	1245.0	1209.0	1111.7	1031.7	1031.7
57.5°	7737.7	4420.0	1892.8	1247.6	1207.7	1179.7	1215.6	1198.3	1075.7	973.0	967.7
60°	8069.6	4518.7	1738.2	1155.7	1127.7	1113.0	1167.7	1162.4	1025.0	910.4	906.4
62.5°	8333.6	4557.4	1567.5	1067.6	1061.0	1034.3	1101.1	1101.1	961.0	849.1	845.1
65°	8540.2	4520.0	1394.3	981.0	994.4	954.4	1019.7	1011.7	893.1	794.5	789.1
67.5°	8722.8	4397.4	1202.3	895.7	926.4	875.8	934.4	915.7	818.5	739.7	734.4
70°	8804.1	4112.1	983.7	810.5	847.8	798.5	849.1	814.5	734.4	681.1	670.5
72.5°	8151.0	3417.7	774.5	721.1	753.1	713.1	757.1	717.1	643.8	619.8	599.8
75°	6743.4	2564.5	595.8	623.8	647.8	617.2	646.5	617.2	550.5	567.8	518.5
77.5°	4897.2	1731.5	455.8	521.2	531.9	515.9	541.2	507.9	447.8	443.8	423.8
80°	2435.3	1014.3	357.2	411.8	407.8	397.2	426.5	410.5	359.9	381.2	377.2
82.5°	705.1	434.5	259.9	289.3	281.3	283.9	305.2	313.2	469.2	465.2	475.9
85°	221.3	170.7	156.0	161.3	153.3	157.3	180.0	357.2	330.6	193.3	209.3
87.5°	57.3	58.6	38.6	41.3	42.6	50.6	57.3	217.3	103.9	68.0	72.0
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)