

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: P968911

Luminaire Tested: **NAV-SB5C-827-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968911
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-SB5C-827-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34170.4 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 249.5
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



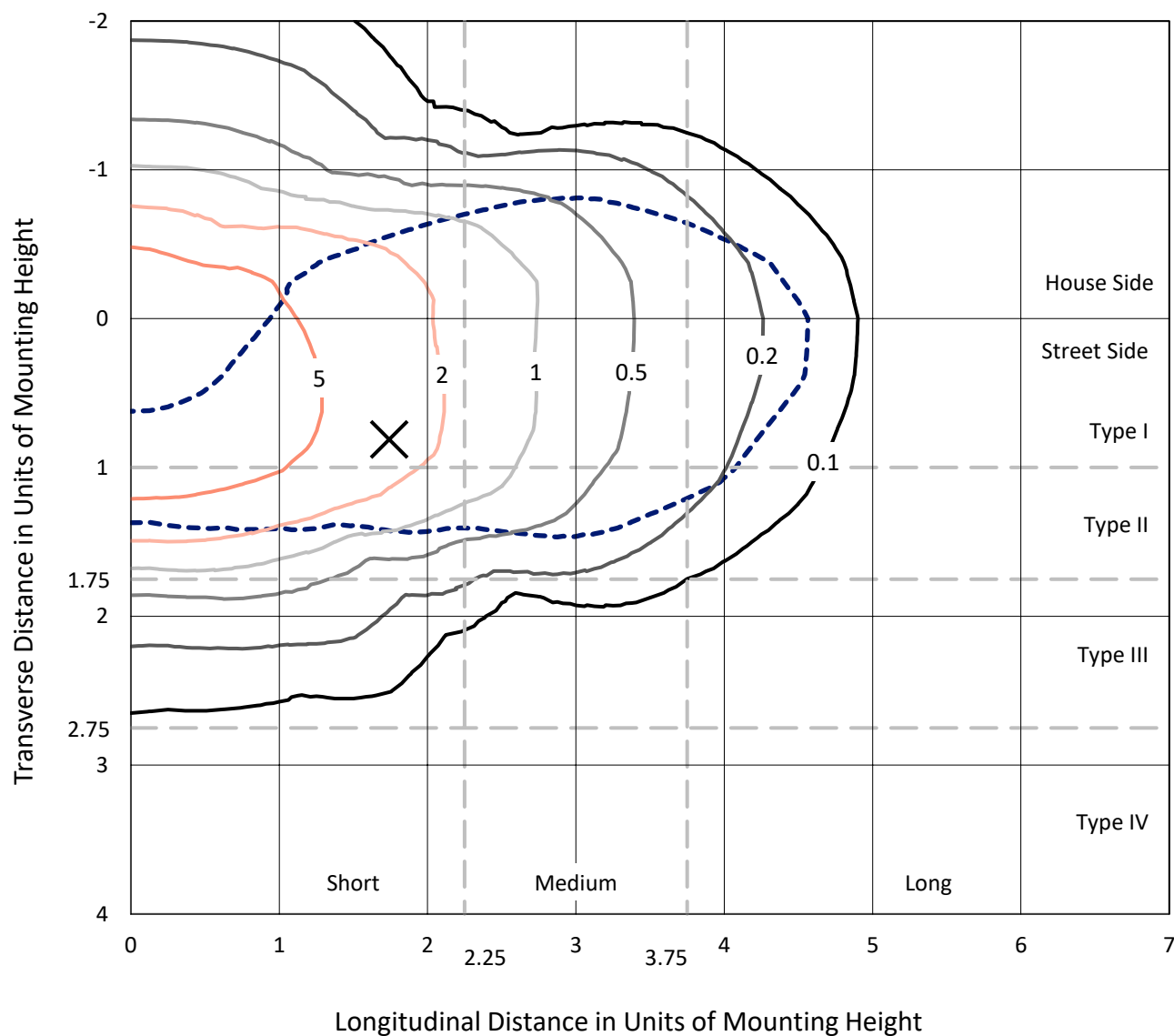
REPORT NUMBER: P968911

CATALOG NUMBER: NAV-SB5C-827-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

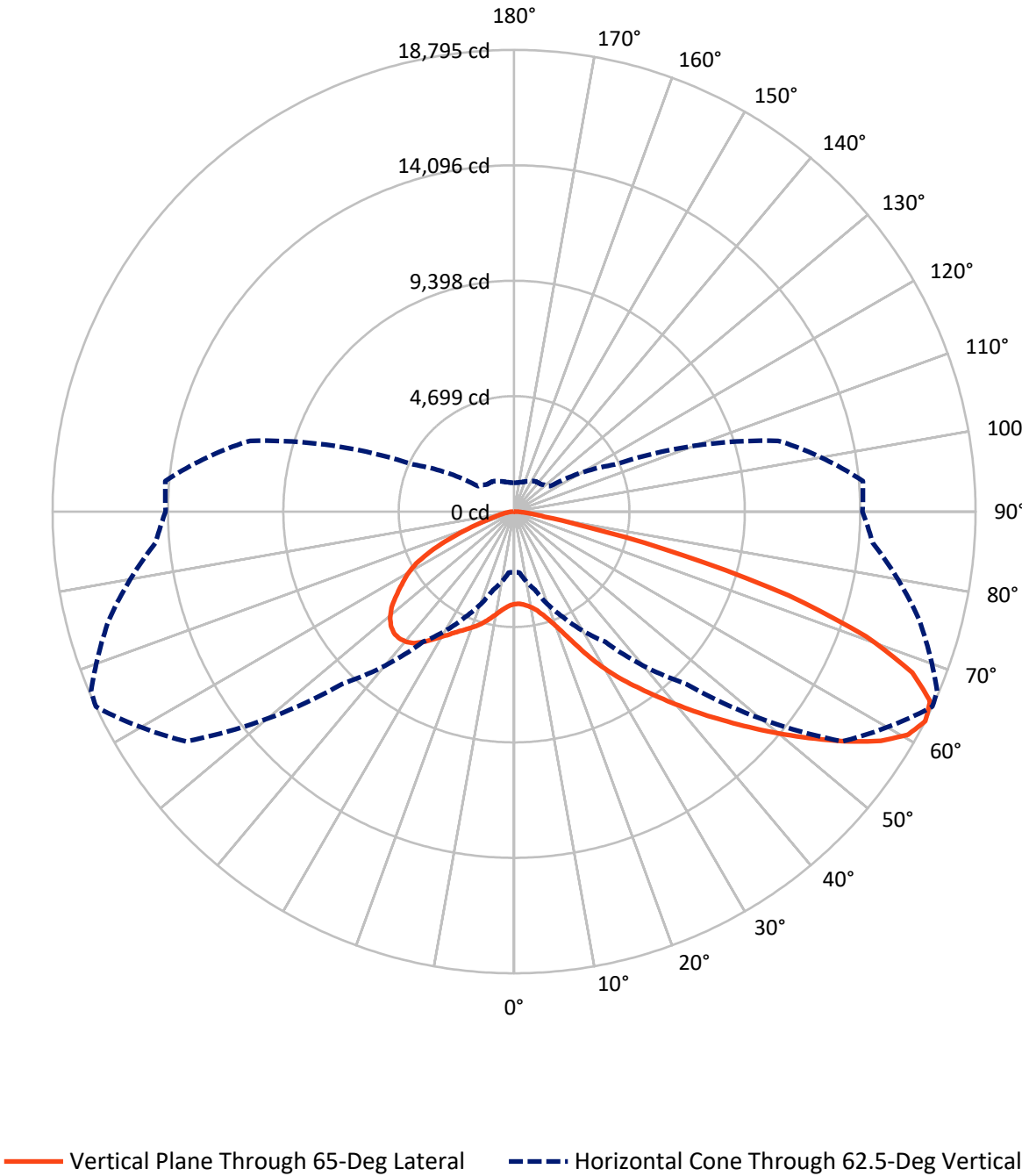


Based on 25 foot mounting height. Maximum calculated value = 9.6 fc

Type II - Short - N/A

REPORT NUMBER: P968911
CATALOG NUMBER: NAV-SB5C-827-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P968911

CATALOG NUMBER: NAV-SB5C-827-U-T2U

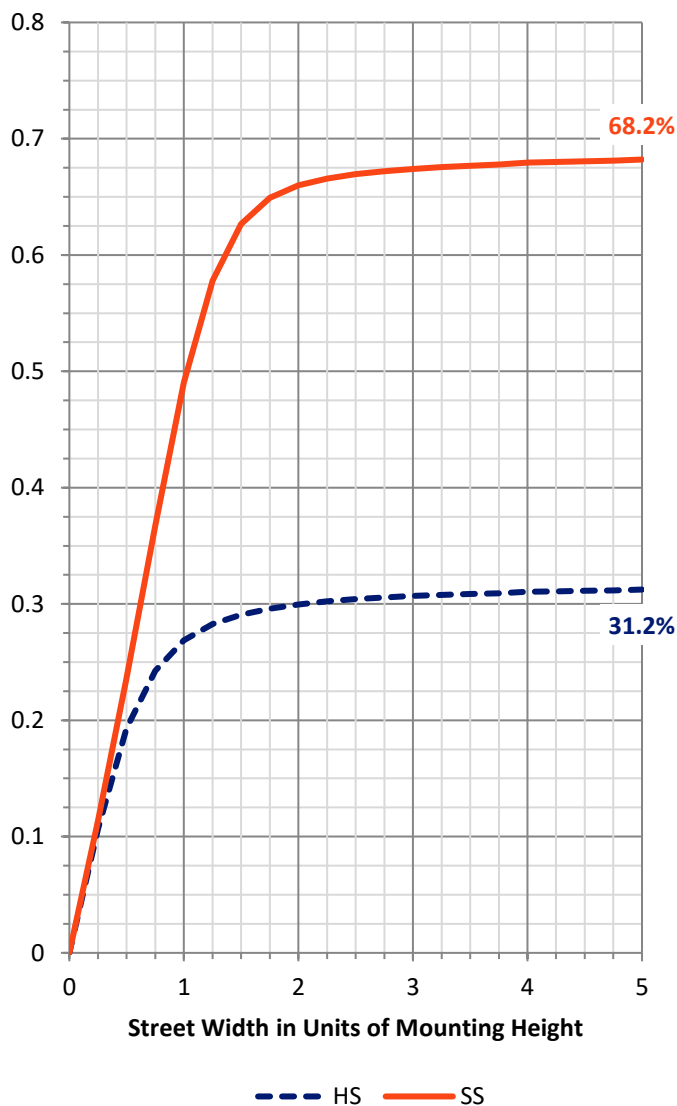
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10782.7	0.0	10782.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	23387.7	0.0	23387.7
	% Fixture	68.4	0.0	68.4
Total	Lumens	34170.4	0.0	34170.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.4	1.1
10°-20°	1273.0	3.7
20°-30°	2581.2	7.6
30°-40°	4466.8	13.1
40°-50°	6759.6	19.8
50°-60°	7925.2	23.2
60°-70°	6644.3	19.4
70°-80°	3668.2	10.7
80°-90°	476.5	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°	34170.4	100.0
0°-180°	34170.4	100.0

Coefficient of Utilization



REPORT NUMBER: P968911

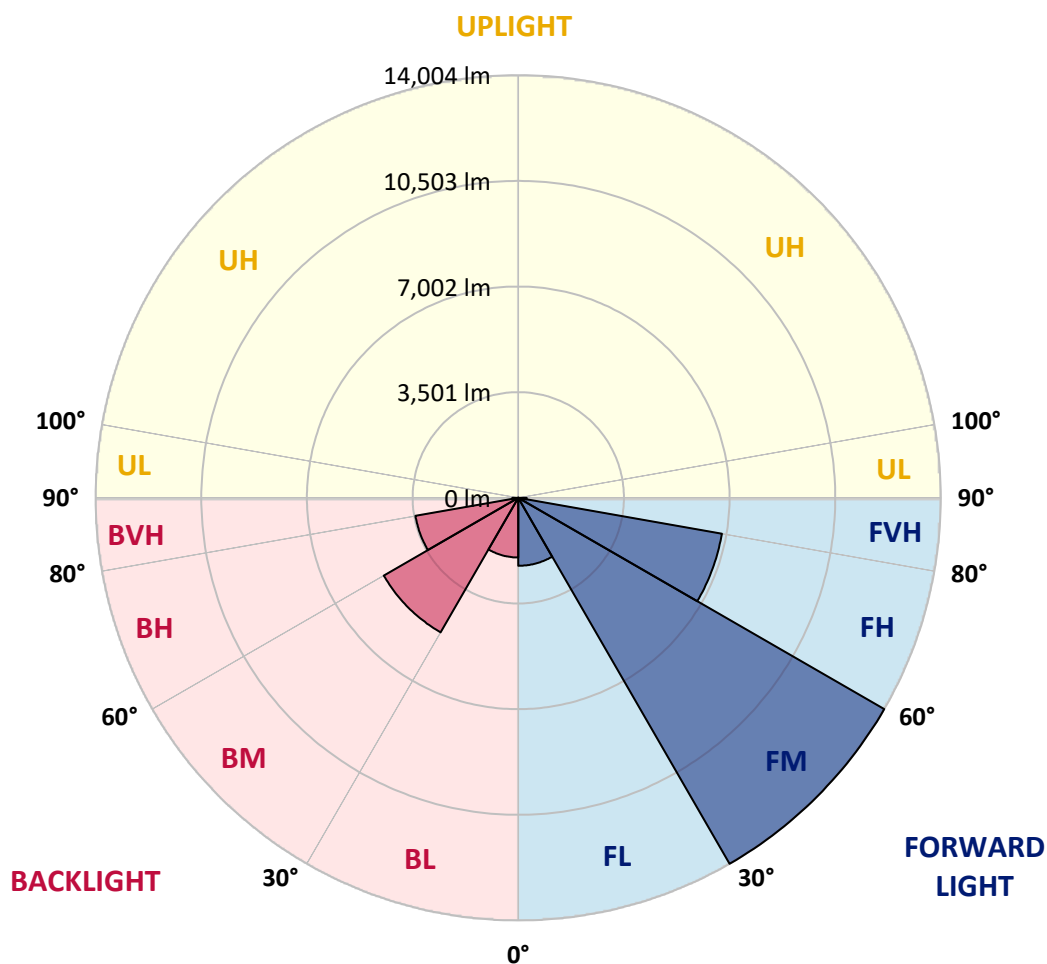
CATALOG NUMBER: NAV-SB5C-827-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2252.3	6.6			
FM	(30°-60°)	14004.2	41.0			
FH	(60°-80°)	6853.6	20.1			G3/7500
FVH	(80°-90°)	277.7	0.8			G3/500
BL	(0°-30°)	1977.4	5.8	B3/2500		
BM	(30°-60°)	5147.5	15.1	B4/8500		
BH	(60°-80°)	3459.0	10.1	B4/5000		G4/5000
BVH	(80°-90°)	198.8	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



REPORT NUMBER: P968911

CATALOG NUMBER: NAV-SB5C-827-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4
2.5°	3740.6	3730.0	3738.8	3738.8	3742.4	3740.6	3753.0	3756.5	3761.9	3772.5	3772.5
5°	3703.4	3701.6	3717.6	3731.7	3746.0	3758.4	3774.3	3797.3	3800.9	3813.3	3829.3
7.5°	3691.0	3680.4	3705.2	3722.9	3756.5	3786.7	3829.3	3868.2	3884.2	3889.6	3919.7
10°	3786.7	3769.0	3792.0	3802.6	3831.0	3861.2	3910.8	3972.9	3990.5	4011.8	4045.6
12.5°	3949.8	3930.3	3964.0	3980.0	4006.5	4033.2	4066.8	4127.1	4136.0	4174.9	4206.9
15°	4173.2	4150.1	4171.4	4190.9	4235.2	4260.0	4293.7	4352.3	4352.3	4382.4	4405.4
17.5°	4476.3	4446.1	4462.1	4469.2	4497.6	4534.8	4591.6	4642.9	4669.6	4658.9	4627.1
20°	4928.4	4891.2	4891.2	4855.7	4845.1	4875.2	4949.6	5020.6	5048.9	4994.0	4916.0
22.5°	5607.4	5554.2	5524.0	5403.5	5355.6	5359.2	5433.6	5520.5	5543.5	5446.0	5270.5
25°	6470.7	6387.4	6346.6	6169.4	6061.2	5967.2	6025.8	6137.4	6169.4	6048.8	5765.1
27.5°	7334.1	7339.4	7300.4	7087.7	6908.6	6736.6	6706.5	6823.5	6857.2	6720.7	6369.7
30°	8544.9	8419.0	8344.6	8089.3	7834.0	7592.9	7468.9	7516.6	7525.6	7362.5	6954.7
32.5°	9589.1	9557.2	9397.6	9174.3	8846.3	8468.7	8261.3	8185.0	8170.9	7938.6	7454.6
35°	10778.6	10761.0	10592.5	10326.6	9972.0	9447.2	9073.2	8855.2	8837.4	8511.2	7949.3
37.5°	11987.7	11987.7	11822.9	11532.1	11165.1	10509.2	9940.1	9594.4	9537.7	9112.2	8452.8
40°	12952.1	12893.6	12923.7	12801.4	12381.3	11684.6	10902.7	10401.0	10324.8	9814.3	8988.1
42.5°	13499.9	13480.4	13661.2	13797.7	13625.7	13069.1	11962.9	11275.0	11168.6	10587.2	9605.1
45°	13622.2	13600.9	13923.6	14423.5	14664.6	14435.9	13115.2	12195.1	12065.7	11395.5	10266.3
47.5°	13340.4	13297.8	13771.1	14560.0	15333.0	15735.4	14363.2	13193.2	13005.3	12182.7	10945.3
50°	12492.9	12452.2	13168.4	14216.1	15558.1	16618.2	15717.7	14251.6	13964.4	13026.5	11631.4
52.5°	10651.0	10670.5	11792.7	13232.2	15262.0	17167.8	16884.2	15366.7	15021.0	13889.9	12274.9
55°	8296.8	8339.3	9718.5	11303.4	14077.9	17084.5	17680.1	16515.4	16171.5	14701.9	12939.7
57.5°	5940.7	6128.6	7421.0	8989.9	11803.3	15763.8	17853.9	17607.4	17274.2	15588.3	13590.3
60°	3850.5	3884.2	5213.8	6795.1	8988.1	13416.5	17501.2	18435.3	18174.8	16492.4	14134.5
62.5°	2467.8	2490.8	3300.9	4752.9	6469.0	9925.9	16313.3	18795.2	18715.5	17089.8	14657.5
65°	1813.5	1795.8	2217.8	3141.4	4357.6	6121.5	14006.9	18621.5	18779.3	17463.8	15090.0
67.5°	1513.9	1489.1	1696.6	2175.3	3210.5	3476.5	10363.8	17492.2	18070.1	17421.3	15407.4
70°	1379.2	1357.9	1483.8	1615.0	2505.0	2327.7	5224.4	15207.1	16097.0	16937.3	15356.0
72.5°	1168.3	1131.1	1303.0	1434.2	1948.3	1785.2	2159.3	11681.0	12766.0	15386.2	14632.7
75°	905.9	881.1	1028.2	1262.2	1464.3	1393.4	1365.1	7093.0	8277.2	11899.0	12801.4
77.5°	718.0	684.3	819.1	983.9	1317.2	1051.2	994.6	3054.5	4228.1	7596.5	9578.4
80°	540.7	510.6	622.3	778.3	1012.3	792.4	643.5	1246.3	1593.8	3848.8	4816.7
82.5°	384.7	358.1	434.3	570.8	680.8	710.9	395.3	698.4	785.4	1483.8	1076.0
85°	246.4	230.4	290.7	358.1	432.6	457.4	241.1	365.2	400.7	611.6	448.5
87.5°	134.7	109.9	156.0	166.7	200.3	182.6	115.2	132.9	143.6	221.6	189.7
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: P968911

CATALOG NUMBER: NAV-SB5C-827-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4	3765.4
2.5°	3779.6	3784.9	3802.6	3808.0	3820.4	3836.4	3847.0	3857.6	3857.6	3868.2	3868.2
5°	3831.0	3843.4	3880.6	3900.1	3932.1	3964.0	3983.5	4006.5	4020.7	4027.8	4031.3
7.5°	3930.3	3949.8	4003.0	4036.7	4091.6	4136.0	4166.1	4198.0	4205.1	4224.5	4217.5
10°	4065.0	4088.1	4148.4	4212.1	4277.7	4332.8	4361.1	4384.1	4393.0	4396.5	4387.7
12.5°	4219.3	4252.9	4330.9	4408.9	4478.1	4526.0	4533.1	4527.7	4502.9	4481.6	4481.6
15°	4408.9	4439.1	4526.0	4611.1	4678.4	4687.3	4642.9	4614.7	4584.5	4579.2	4579.2
17.5°	4635.9	4651.9	4731.6	4814.9	4820.3	4790.1	4724.5	4697.9	4669.6	4650.0	4651.9
20°	4900.0	4894.7	4951.5	4986.9	4949.6	4857.5	4758.2	4713.9	4685.5	4662.5	4664.3
22.5°	5215.6	5174.8	5167.7	5158.8	5059.6	4866.4	4731.6	4674.9	4630.5	4598.7	4609.3
25°	5674.7	5518.7	5410.6	5350.3	5126.9	4818.5	4646.5	4520.7	4437.3	4382.4	4403.6
27.5°	6249.1	5986.7	5713.8	5566.6	5126.9	4720.9	4440.9	4237.0	4100.5	4043.7	4072.1
30°	6796.9	6522.2	6119.8	5827.2	5114.5	4561.5	4109.3	3825.7	3666.1	3609.4	3643.2
32.5°	7265.0	6965.4	6550.5	6112.6	5084.4	4302.6	3698.1	3384.2	3230.1	3162.6	3196.4
35°	7699.3	7380.2	6983.1	6426.4	5004.7	3923.2	3246.0	3006.6	2834.7	2726.6	2762.1
37.5°	8144.2	7764.9	7392.6	6710.1	4861.1	3480.0	2898.5	2694.6	2492.6	2347.1	2386.2
40°	8628.2	8174.4	7830.5	6878.5	4625.2	3058.1	2629.0	2442.9	2228.5	2074.2	2104.3
42.5°	9193.7	8665.5	8318.0	6965.4	4302.6	2758.5	2453.5	2271.0	2068.9	1943.0	1967.8
45°	9784.1	9206.1	8762.9	6963.5	3942.7	2618.5	2396.9	2216.0	1992.6	1861.4	1882.7
47.5°	10402.8	9771.7	9147.6	6850.1	3630.7	2637.9	2364.9	2097.3	1850.8	1723.1	1740.9
50°	11023.3	10390.4	9520.0	6637.4	3497.7	2595.4	2246.2	1930.6	1639.8	1524.6	1531.7
52.5°	11638.5	11048.1	9840.8	6334.2	3363.0	2437.6	2093.7	1714.3	1553.0	1473.2	1473.2
55°	12257.2	11698.7	10190.0	5892.8	3026.2	2253.3	1838.4	1632.7	1483.8	1411.1	1404.0
57.5°	12877.6	12450.4	10521.6	5451.4	2602.5	2026.3	1698.3	1533.5	1414.7	1352.7	1342.0
60°	13522.9	13310.2	10863.8	5045.4	2184.1	1735.5	1595.5	1453.7	1333.1	1264.0	1258.7
62.5°	14187.7	14256.8	11131.4	4522.4	1799.4	1558.3	1503.4	1357.9	1241.0	1175.4	1173.6
65°	14857.9	15169.9	11307.0	3797.3	1459.0	1389.9	1404.0	1253.4	1134.6	1077.9	1076.0
67.5°	15363.1	15827.5	11257.3	2873.7	1196.7	1230.3	1279.9	1143.5	1031.8	987.5	989.2
70°	15419.8	15749.5	10768.0	1967.8	1001.6	1074.3	1141.6	1035.4	920.0	888.2	889.9
72.5°	14664.6	14685.9	9404.7	1285.2	847.4	943.1	996.3	925.4	813.7	781.8	780.0
75°	12684.4	12145.4	6905.0	847.4	709.1	810.2	859.8	810.2	702.0	709.1	684.3
77.5°	9610.4	8601.6	4192.7	602.8	592.1	680.8	748.1	712.7	620.4	696.7	613.4
80°	4951.5	4653.6	1870.3	450.3	468.0	544.3	615.2	569.1	491.1	468.0	427.2
82.5°	1134.6	1319.0	737.5	322.7	338.6	391.8	469.8	427.2	352.8	297.9	294.3
85°	397.1	434.3	326.2	202.1	198.5	244.7	319.1	285.5	239.3	191.5	202.1
87.5°	125.9	164.8	122.3	81.6	85.1	109.9	147.2	134.7	111.7	72.7	76.3
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)