

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: P968910

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968910
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
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-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25769.5 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

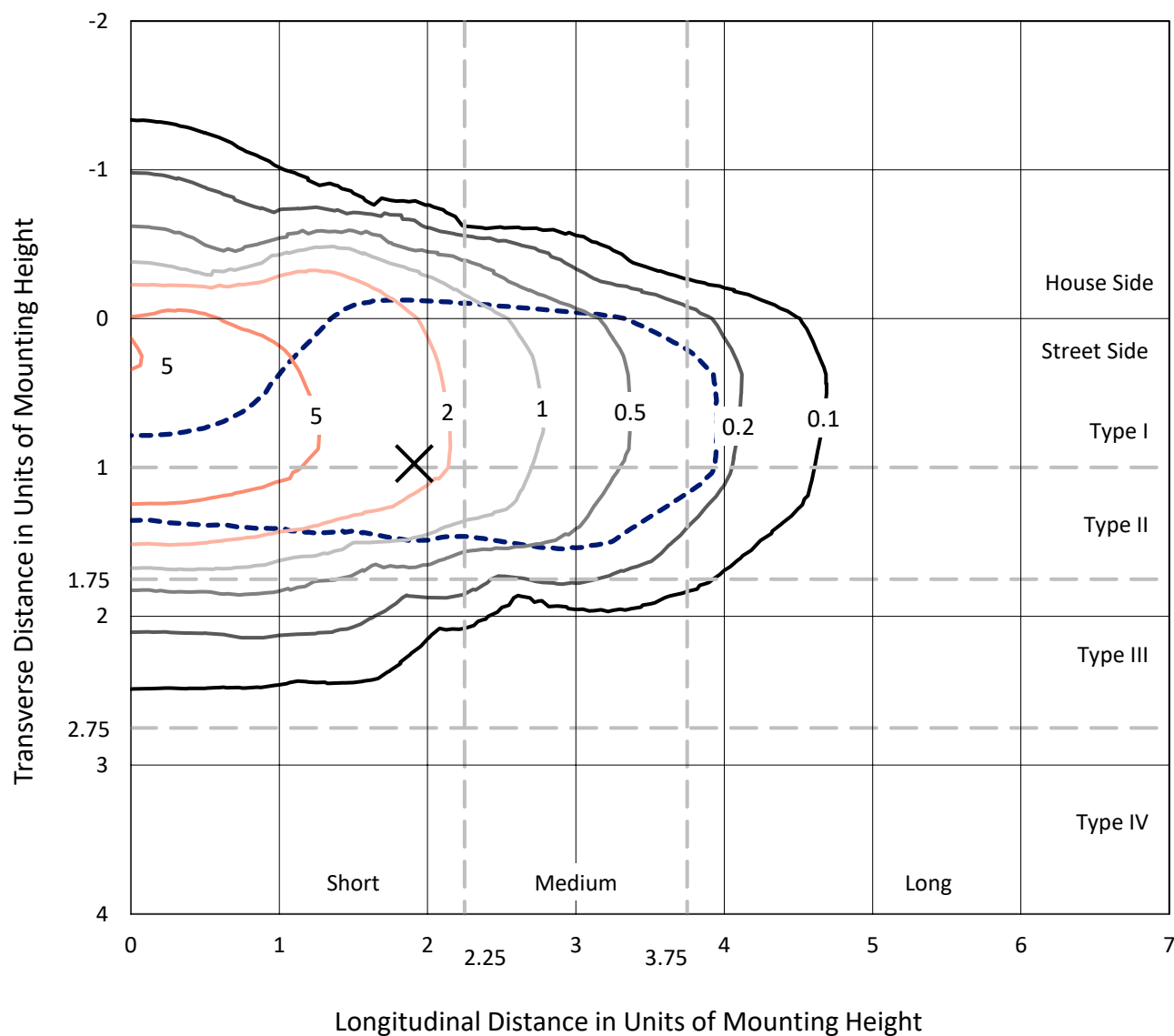
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P968910
 CATALOG NUMBER: NAV-SB5C-827-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

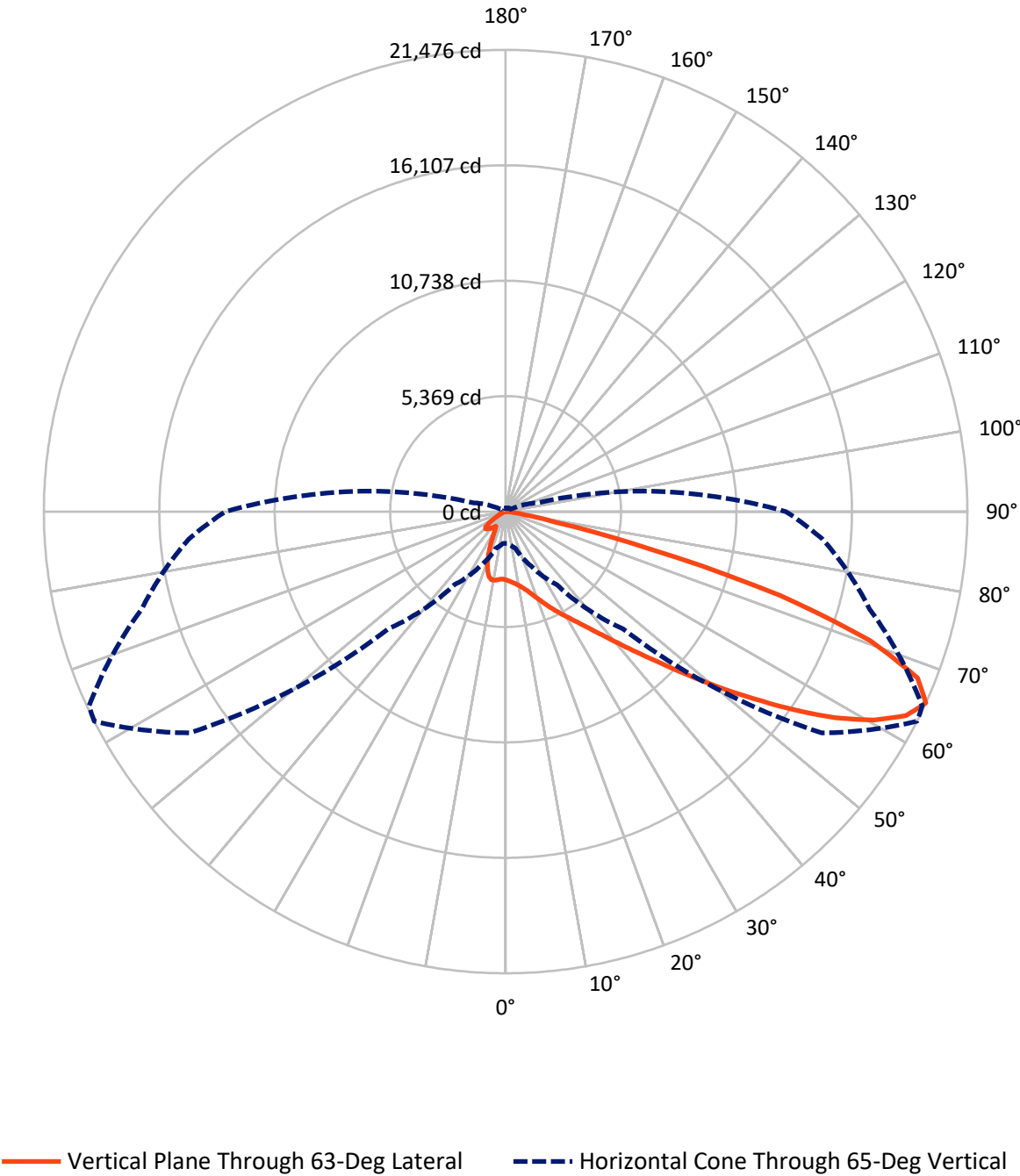
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc
 Type II - Short - N/A

REPORT NUMBER: P968910
CATALOG NUMBER: NAV-SB5C-827-U-T2U-HSS

Luminous Intensity Polar Plot



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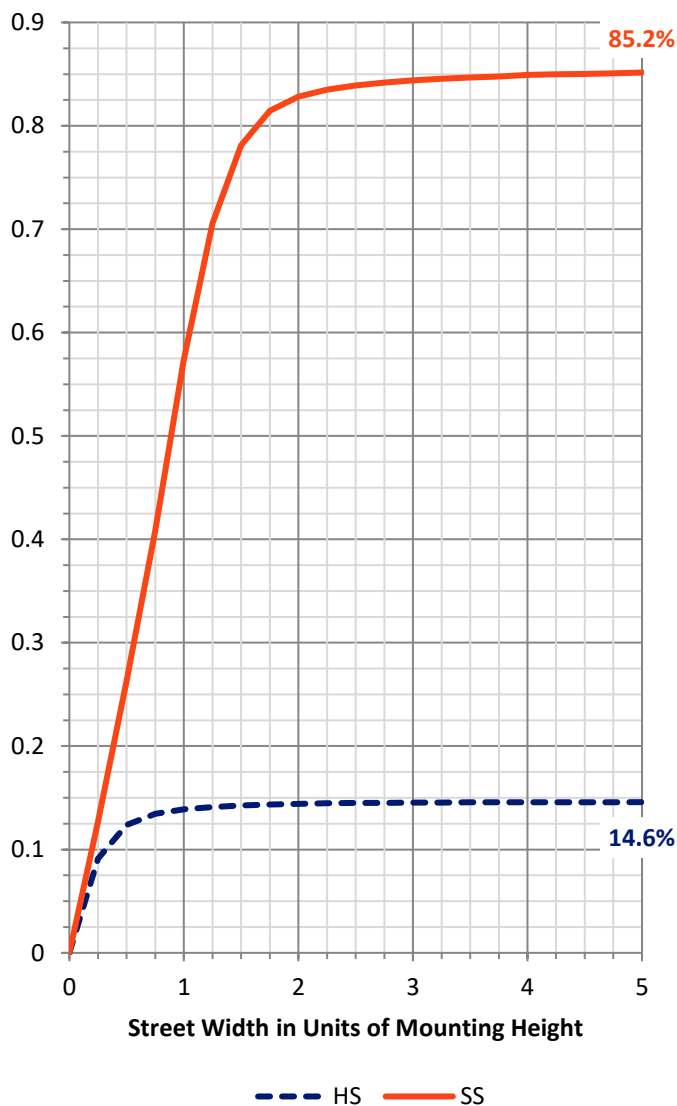
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3787.9	0.0	3787.9
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	21981.6	0.0	21981.6
	% Fixture	85.3	0.0	85.3
Total	Lumens	25769.5	0.0	25769.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.7	1.2
10°-20°	831.4	3.2
20°-30°	1447.8	5.6
30°-40°	2609.4	10.1
40°-50°	5175.3	20.1
50°-60°	7049.6	27.4
60°-70°	5627.0	21.8
70°-80°	2546.3	9.9
80°-90°	183.0	0.7
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°	25769.5	100.0
0°-180°	25769.5	100.0

Coefficient of Utilization



REPORT NUMBER: P968910

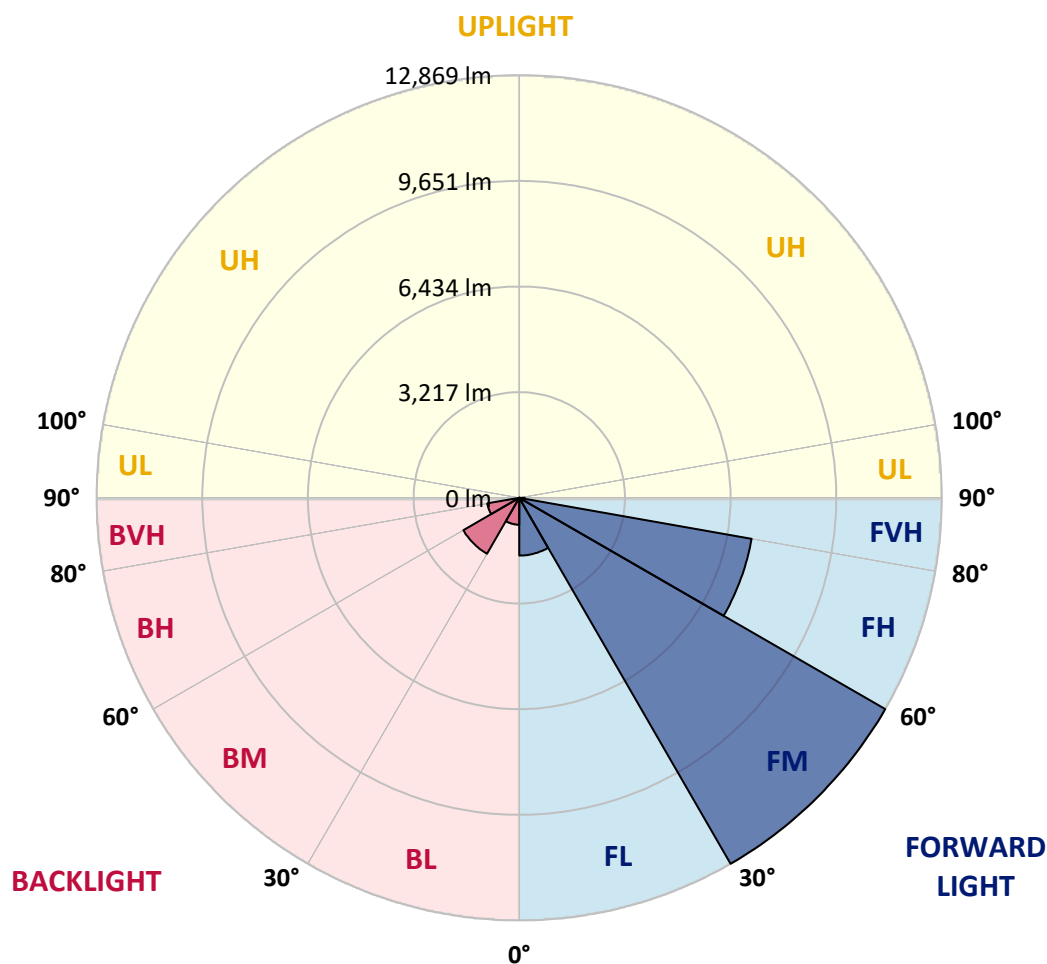
CATALOG NUMBER: NAV-SB5C-827-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1759.1	6.8			
FM	(30°-60°)	12868.7	49.9			
FH	(60°-80°)	7184.4	27.9			G3/7500
FVH	(80°-90°)	169.4	0.7			G2/225
BL	(0°-30°)	819.8	3.2	B2/1000		
BM	(30°-60°)	1965.7	7.6	B2/2500		
BH	(60°-80°)	988.9	3.8	B2/1000		G2/1000
BVH	(80°-90°)	13.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short



REPORT NUMBER: P968910

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5
2.5°	3254.9	3246.1	3258.5	3253.1	3249.6	3242.5	3239.0	3235.4	3228.3	3223.0	3201.7
5°	3263.8	3258.5	3270.9	3281.5	3292.1	3302.8	3308.1	3315.2	3308.1	3293.9	3272.6
7.5°	3189.3	3185.8	3212.4	3244.2	3292.1	3332.9	3377.3	3402.1	3403.8	3398.5	3375.4
10°	3184.0	3175.1	3201.7	3240.7	3302.8	3375.4	3453.4	3506.6	3513.7	3536.8	3512.0
12.5°	3267.3	3258.5	3295.7	3338.2	3402.1	3478.2	3574.0	3648.5	3659.1	3691.0	3673.3
15°	3407.4	3395.0	3437.5	3492.5	3574.0	3660.9	3762.0	3829.3	3838.2	3877.2	3845.3
17.5°	3570.5	3558.1	3607.7	3666.2	3754.9	3873.6	3990.6	4065.0	4075.7	4100.5	4042.1
20°	3779.7	3763.7	3802.7	3855.8	3949.8	4091.7	4231.7	4338.1	4336.4	4336.4	4240.6
22.5°	4022.5	3997.7	4031.4	4074.0	4162.6	4334.5	4520.7	4646.5	4646.5	4596.9	4439.2
25°	4283.2	4258.4	4295.6	4334.5	4412.5	4607.6	4825.6	4981.6	4988.8	4903.6	4651.9
27.5°	4609.3	4577.4	4605.8	4651.9	4698.0	4896.5	5155.3	5336.2	5339.7	5208.5	4854.0
30°	5236.9	5146.5	5057.9	5008.3	5029.5	5226.3	5502.8	5703.2	5720.9	5540.1	5073.9
32.5°	6385.7	6368.0	6056.0	5648.3	5435.5	5580.8	5891.1	6132.2	6142.8	5910.6	5359.2
35°	8171.0	8149.7	7647.9	6871.5	6178.3	6056.0	6362.7	6648.0	6641.0	6378.6	5729.7
37.5°	10301.9	10282.4	9621.2	8582.2	7460.1	6773.9	6970.7	7270.3	7314.7	6970.7	6208.4
40°	12122.6	12049.9	11631.5	10629.9	9162.0	7965.3	7835.9	8034.5	8080.5	7672.7	6816.6
42.5°	13501.8	13439.8	13227.0	12601.2	11222.0	9727.5	8855.3	8931.4	8982.9	8493.6	7515.0
45°	14216.2	14202.1	14287.2	14228.6	13321.0	11890.3	10312.5	9995.2	10014.7	9403.0	8307.4
47.5°	14317.3	14310.2	14698.5	15248.1	15125.7	14329.7	12182.8	11321.2	11252.1	10429.5	9169.0
50°	13721.7	13707.4	14452.1	15482.1	16331.2	16379.1	14306.6	12815.8	12663.3	11491.5	10067.9
52.5°	11819.4	11815.9	13039.1	14753.4	16755.0	18173.2	16405.7	14457.4	14202.1	12615.4	11018.1
55°	9094.6	9160.2	10562.5	12588.8	15982.0	19036.6	18290.2	16279.9	15888.0	13746.5	11893.9
57.5°	6442.4	6538.2	7924.5	9729.3	13585.1	18526.1	19564.9	18105.8	17683.9	14874.0	12782.1
60°	3460.5	3545.7	4933.7	7087.8	10106.9	16622.0	20236.8	19690.8	19291.8	15944.8	13583.4
62.5°	2061.8	2090.2	2664.6	4575.7	6836.0	12698.7	19951.3	20898.0	20570.1	16843.6	14280.1
65°	1480.3	1485.6	1774.6	2793.9	4150.2	7715.4	17949.8	21476.0	21374.9	17520.8	14796.0
67.5°	1246.3	1242.7	1363.4	1856.2	2827.7	3864.8	13757.1	20658.7	21087.7	17949.8	15088.5
70°	1069.0	1074.3	1216.2	1359.8	2125.6	2187.7	6839.5	17987.1	18901.8	18063.3	15070.8
72.5°	796.0	813.7	944.9	1239.2	1604.4	1505.1	2361.4	13337.0	14991.0	17019.1	14289.0
75°	562.0	570.8	664.8	1042.4	1196.7	1095.6	1205.5	6894.6	9014.8	13047.9	11695.4
77.5°	432.6	448.5	503.5	728.7	1179.0	769.4	737.5	2386.2	3666.2	7881.9	8018.5
80°	234.0	262.4	363.5	526.5	827.9	544.3	365.2	950.3	1242.7	3685.7	3091.8
82.5°	120.5	134.7	253.5	379.4	471.6	475.1	180.8	395.3	512.3	1138.2	423.7
85°	47.9	58.5	170.1	209.2	242.9	234.0	81.6	159.6	184.4	315.6	129.5
87.5°	10.7	17.7	62.0	47.9	46.1	49.6	19.5	37.2	35.5	37.2	23.1
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: P968910

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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5	3180.5
2.5°	3199.9	3192.9	3173.4	3152.1	3127.3	3113.1	3104.2	3102.5	3090.1	3081.1	3090.1
5°	3253.1	3246.1	3208.8	3164.5	3116.6	3079.4	3043.9	3012.1	2965.9	2957.0	2953.5
7.5°	3359.5	3340.0	3279.7	3219.4	3129.0	3020.9	2889.7	2739.0	2604.3	2563.5	2544.0
10°	3490.7	3464.1	3387.8	3281.5	3081.1	2786.9	2469.5	2175.3	1941.2	1875.6	1850.8
12.5°	3639.6	3616.6	3515.5	3318.7	2880.9	2347.2	1861.5	1496.3	1269.4	1212.6	1196.7
15°	3816.9	3783.2	3643.2	3262.0	2522.7	1783.5	1278.2	1061.9	980.4	969.8	959.1
17.5°	4004.8	3949.8	3756.6	3058.1	2040.6	1267.6	987.5	925.4	890.0	879.3	874.0
20°	4176.8	4105.8	3824.0	2749.7	1524.6	987.5	884.7	843.9	811.9	799.5	792.4
22.5°	4348.8	4247.7	3824.0	2329.5	1143.5	875.8	811.9	774.7	737.5	721.5	712.7
25°	4527.8	4393.0	3756.6	1861.5	920.1	803.1	742.8	702.0	670.1	650.7	643.5
27.5°	4701.6	4515.4	3602.4	1418.3	819.1	739.2	679.0	640.0	609.9	595.6	595.6
30°	4866.4	4636.0	3386.1	1076.1	753.5	677.2	620.5	586.8	556.7	542.5	544.3
32.5°	5089.7	4788.4	3155.7	882.8	696.7	618.7	567.3	535.4	508.8	498.2	498.2
35°	5400.0	5013.6	2957.0	866.9	648.8	570.8	519.5	489.3	462.7	453.9	453.9
37.5°	5839.7	5376.9	2852.5	973.2	609.9	528.3	480.4	448.5	423.7	416.7	414.8
40°	6382.2	5869.9	2909.2	1079.6	583.2	491.1	445.0	413.1	391.8	382.9	381.2
42.5°	7025.7	6477.9	3223.0	1161.2	565.5	459.2	411.3	375.9	361.6	358.1	358.1
45°	7765.0	7146.3	3703.4	1248.0	537.2	429.1	377.6	351.1	340.4	338.7	336.8
47.5°	8605.3	7880.2	4260.1	1356.2	508.8	400.7	351.1	333.3	324.4	320.9	320.9
50°	9438.5	8619.4	4832.7	1416.4	485.7	374.0	329.7	315.6	308.4	306.7	306.7
52.5°	10310.8	9380.0	5295.5	1359.8	466.3	352.8	312.0	301.3	294.3	292.5	292.5
55°	11142.2	9995.2	5375.2	1154.1	427.2	331.5	292.5	287.2	278.3	278.3	276.5
57.5°	11858.4	10303.6	4811.5	847.4	388.3	299.6	273.1	267.7	260.6	258.8	257.1
60°	12516.2	10215.0	3714.1	570.8	345.7	267.7	248.2	244.7	237.6	228.7	226.9
62.5°	12886.6	9825.0	2540.5	372.3	303.2	234.0	219.9	218.0	202.1	184.4	180.8
65°	13026.7	9023.7	1584.9	271.2	253.5	200.3	189.7	186.1	163.1	143.6	141.9
67.5°	12904.3	7704.7	799.5	214.5	200.3	166.7	156.0	156.0	140.0	122.3	120.5
70°	12415.1	5775.9	336.8	172.0	154.3	127.6	127.6	134.7	118.8	99.3	97.5
72.5°	11353.2	3886.0	179.1	131.2	115.2	90.4	104.6	109.9	94.0	74.4	74.4
75°	9025.4	2370.3	124.1	97.5	72.7	63.9	79.7	83.3	63.9	49.6	47.9
77.5°	6173.0	1361.5	83.3	62.0	46.1	37.2	54.9	51.5	33.7	23.1	24.8
80°	2710.6	567.3	47.9	28.4	17.7	14.1	19.5	14.1	10.7	7.1	7.1
82.5°	317.3	132.9	17.7	10.7	7.1	3.6	1.7	0.0	0.0	0.0	0.0
85°	65.6	16.0	8.8	3.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.4	3.6	1.7	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)