

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: P964165

Luminaire Tested: **NAV-SB3B-827-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964165
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-827-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12750 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 109.2
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

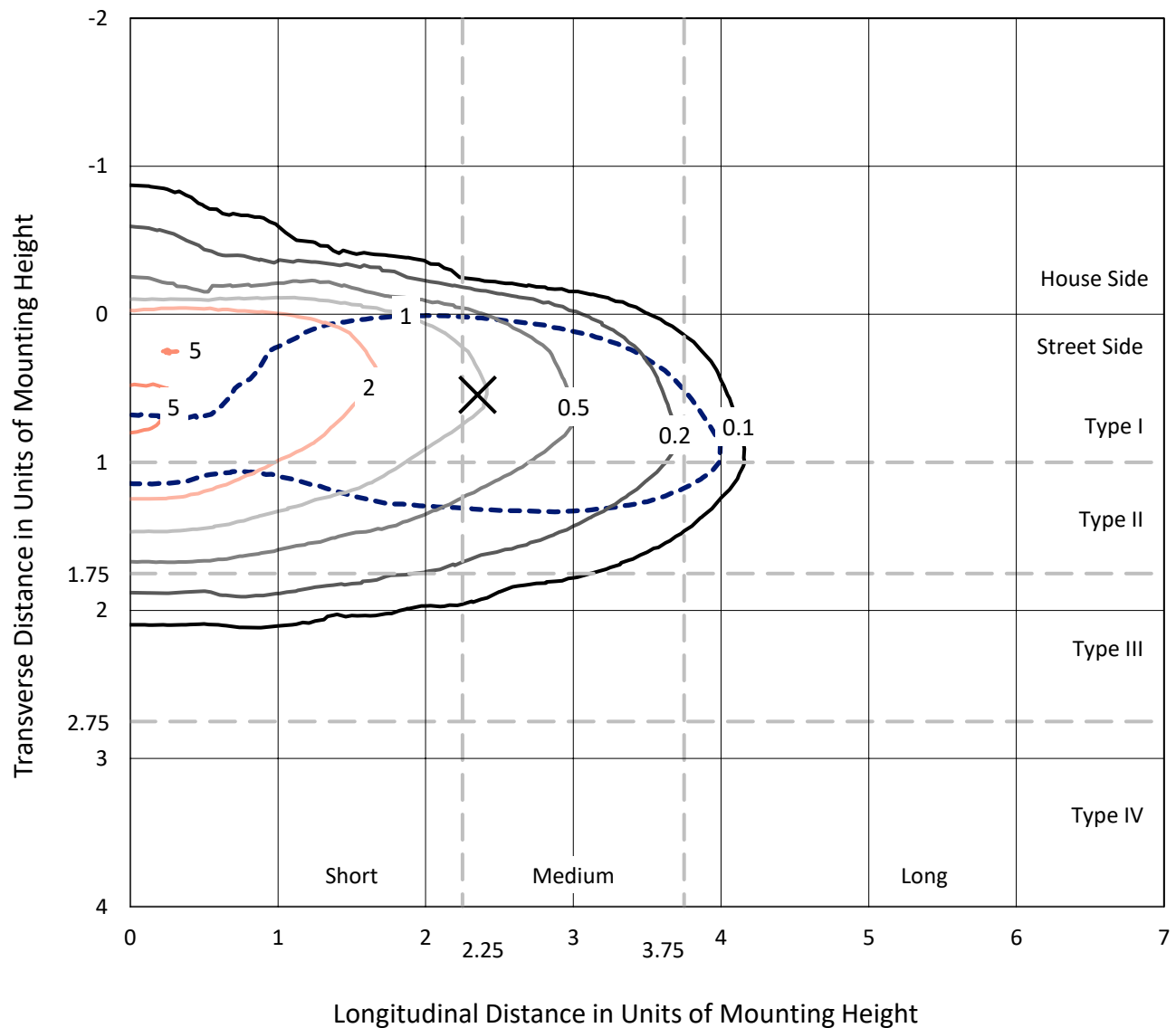


REPORT NUMBER: P964165

CATALOG NUMBER: NAV-SB3B-827-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

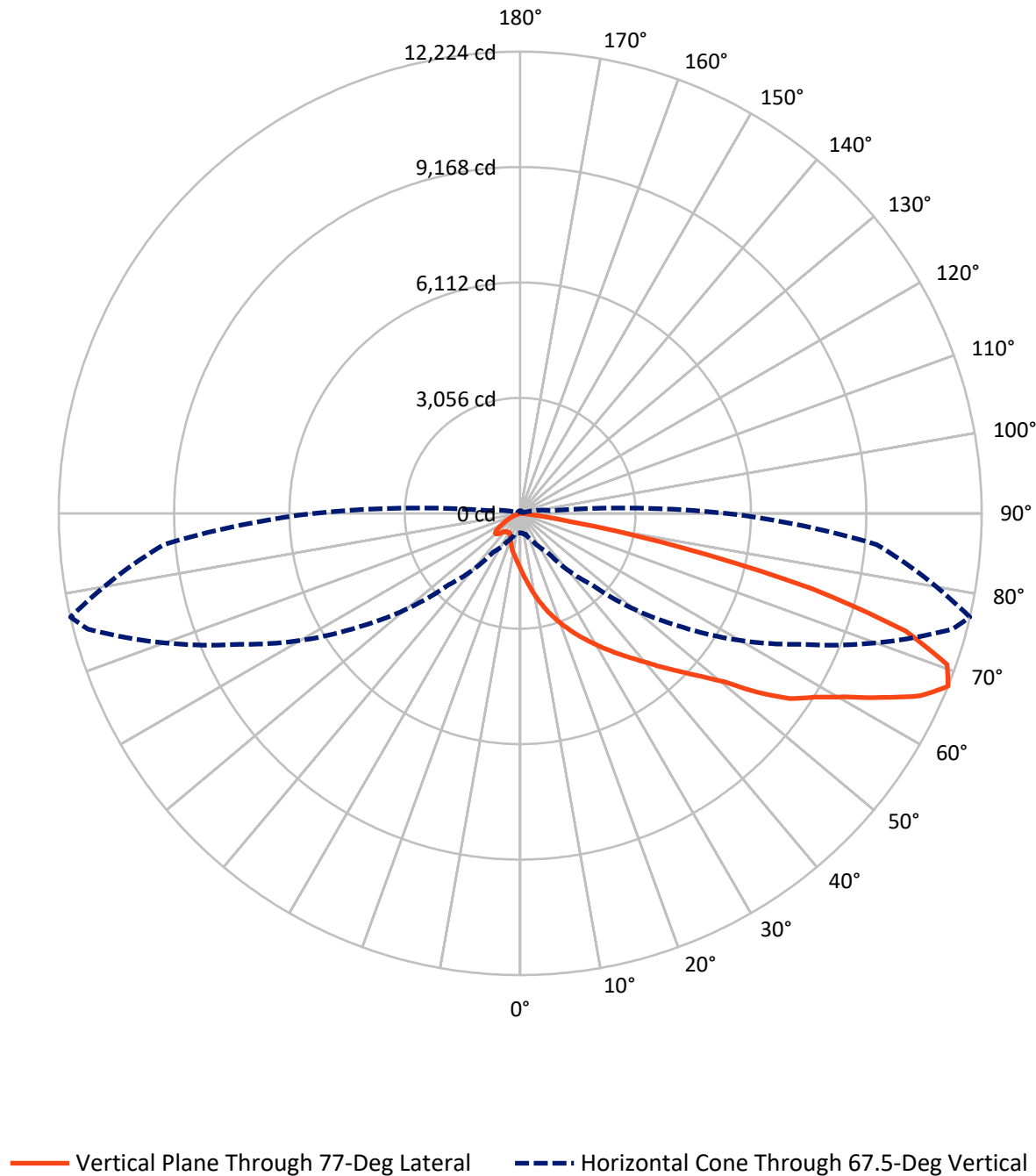
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
Type II - Medium - N/A

REPORT NUMBER: P964165
CATALOG NUMBER: NAV-SB3B-827-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P964165

CATALOG NUMBER: NAV-SB3B-827-U-T2R-HSS

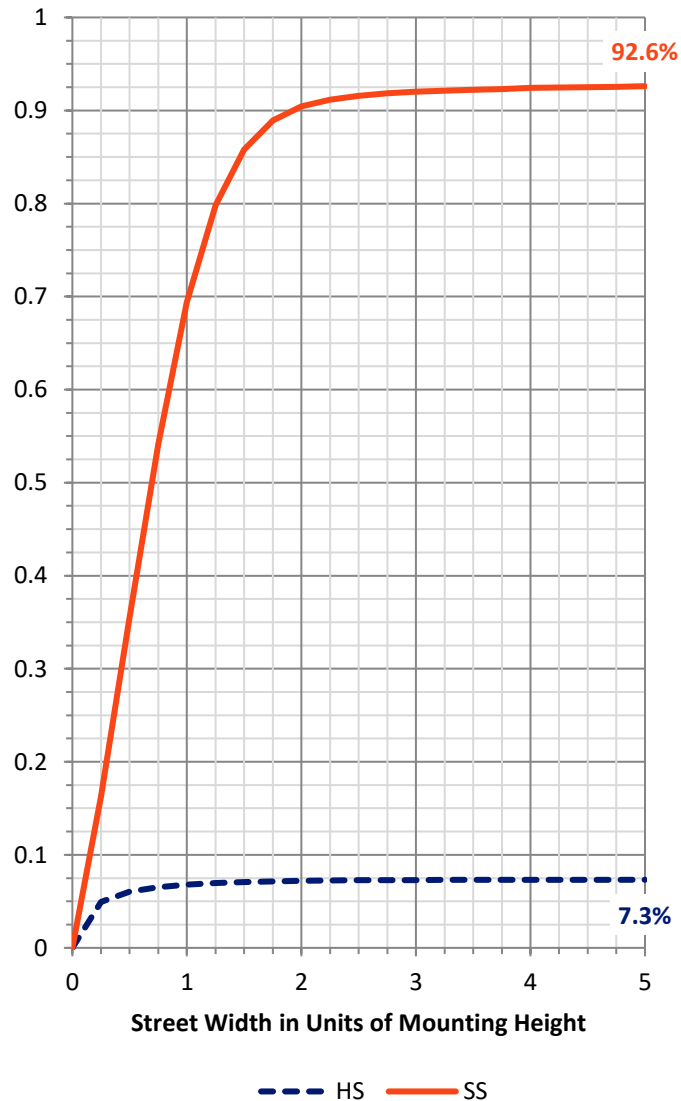
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	938.0	0.0	938.0
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	11812.0	0.0	11812.0
	% Fixture	92.6	0.0	92.6
Total	Lumens	12750.0	0.0	12750.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.1	1.2
10°-20°	525.5	4.1
20°-30°	1014.1	8.0
30°-40°	1760.5	13.8
40°-50°	2556.2	20.0
50°-60°	2935.4	23.0
60°-70°	2548.5	20.0
70°-80°	1200.4	9.4
80°-90°	59.4	0.5
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°	12750.0	100.0
0°-180°	12750.0	100.0

Coefficient of Utilization



REPORT NUMBER: P964165

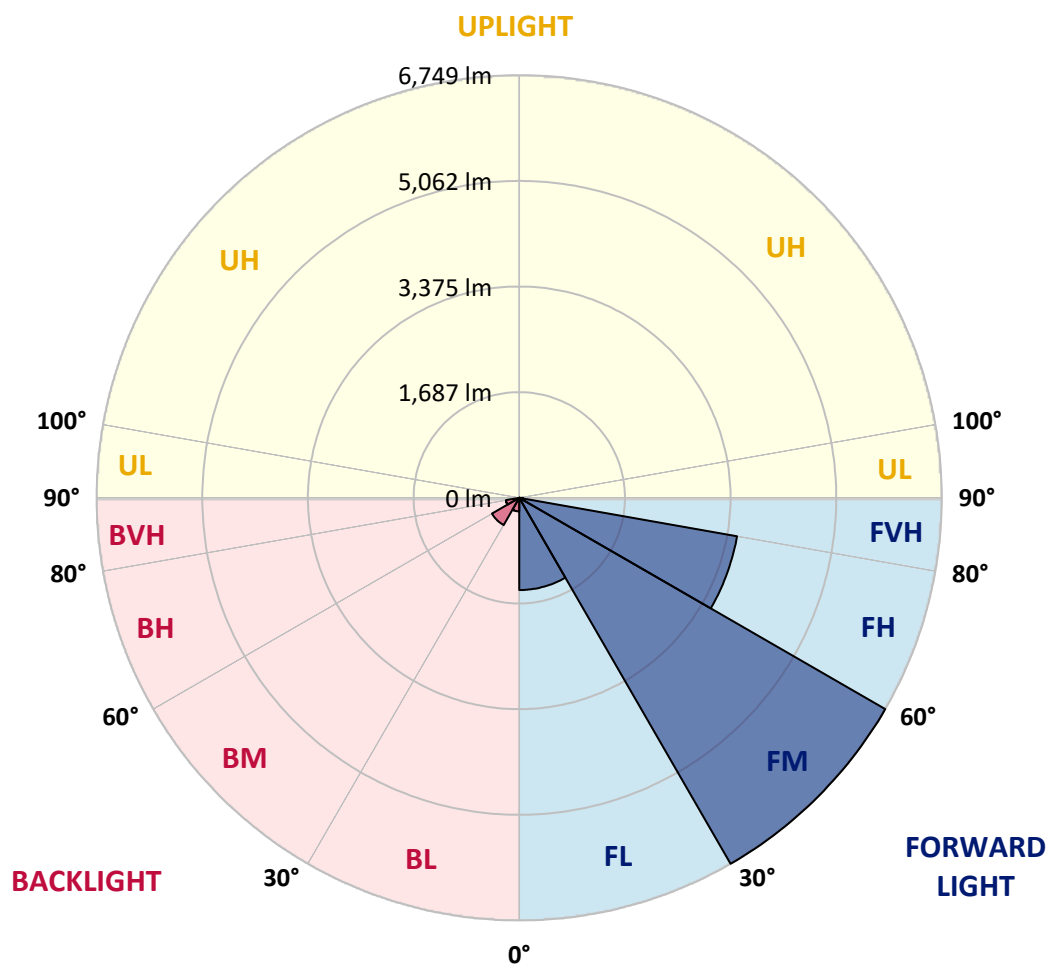
CATALOG NUMBER: NAV-SB3B-827-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1472.5	11.5			
FM	(30°-60°)	6749.5	52.9			
FH	(60°-80°)	3531.7	27.7			G2/5000
FVH	(80°-90°)	58.3	0.5			G1/100
BL	(0°-30°)	217.2	1.7	B1/500		
BM	(30°-60°)	502.6	3.9	B1/1000		
BH	(60°-80°)	217.2	1.7	B1/500		G1/500
BVH	(80°-90°)	1.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



REPORT NUMBER: P964165

CATALOG NUMBER: NAV-SB3B-827-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3
2.5°	2035.5	2048.3	2030.0	1995.2	1942.9	1908.9	1825.7	1747.3	1660.3	1632.5	1545.5
5°	2481.3	2492.4	2471.8	2433.8	2364.2	2297.6	2188.4	2024.5	1854.2	1799.6	1645.2
7.5°	2811.5	2817.8	2809.8	2775.1	2708.6	2633.3	2511.4	2317.4	2064.9	2004.7	1767.9
10°	3049.0	3069.6	3067.2	3053.8	3009.4	2948.4	2818.5	2597.7	2300.8	2223.2	1906.5
12.5°	3206.5	3229.5	3243.0	3273.0	3270.7	3231.9	3117.8	2884.4	2536.0	2444.9	2062.5
15°	3252.4	3277.0	3328.5	3398.2	3459.9	3479.7	3399.7	3165.4	2794.9	2678.4	2222.4
17.5°	3226.3	3264.3	3326.1	3436.1	3571.5	3661.0	3652.3	3436.9	3030.0	2897.0	2379.1
20°	3284.1	3320.6	3368.9	3461.5	3619.1	3781.3	3846.3	3696.7	3263.5	3124.2	2543.8
22.5°	3604.0	3597.6	3602.4	3617.4	3711.6	3872.3	4006.2	3932.6	3494.7	3352.3	2718.0
25°	4110.7	4082.2	4033.9	3952.4	3928.6	4006.2	4145.5	4141.6	3738.6	3585.8	2896.1
27.5°	4691.8	4687.1	4573.9	4377.6	4266.7	4236.6	4303.1	4345.1	3980.1	3817.0	3075.1
30°	5248.4	5261.1	5108.3	4889.8	4686.3	4568.3	4508.2	4538.3	4225.6	4066.4	3259.6
32.5°	5733.0	5746.5	5580.2	5324.5	5072.6	4930.1	4803.5	4729.0	4493.1	4319.8	3462.2
35°	6142.3	6155.7	5965.0	5682.3	5413.9	5284.9	5141.6	4938.0	4762.4	4600.8	3688.0
37.5°	6508.1	6504.1	6248.4	5963.3	5699.7	5597.6	5522.4	5195.4	5039.4	4883.4	3938.2
40°	6724.2	6740.9	6522.4	6208.0	5952.3	5877.9	5873.1	5514.5	5359.3	5208.0	4212.0
42.5°	6787.6	6816.9	6658.5	6400.4	6168.4	6087.7	6212.0	5859.6	5731.4	5584.1	4521.6
45°	6673.6	6702.1	6630.0	6451.0	6315.7	6263.5	6503.3	6217.5	6128.9	5983.1	4870.8
47.5°	6341.1	6376.6	6394.1	6356.1	6354.5	6407.6	6764.6	6594.4	6600.7	6451.9	5275.4
50°	5697.4	5757.5	5917.4	6052.0	6260.3	6521.6	7018.8	7002.9	7132.8	7004.5	5802.6
52.5°	4527.1	4612.7	5163.7	5531.9	5999.8	6500.1	7298.2	7658.5	8066.2	7878.6	6546.1
55°	3638.0	3638.0	4086.2	4775.0	5491.5	6359.2	7420.2	8084.5	8702.0	8657.7	7069.4
57.5°	2965.8	3001.5	3287.3	3896.1	4756.0	6023.5	7495.4	8352.0	9214.2	9181.8	7580.9
60°	1830.5	1907.3	2447.3	3048.1	3919.1	5425.8	7447.9	8622.8	9835.8	9861.9	8196.9
62.5°	1030.8	1059.3	1300.0	2193.1	3047.4	4622.1	7084.5	8774.1	10630.7	10741.5	8831.8
65°	711.8	726.0	818.7	1365.0	2112.3	3680.0	6374.3	8679.8	11427.2	11651.3	9370.2
67.5°	517.0	524.1	581.9	833.7	1253.4	2668.2	5261.1	8204.8	11849.2	12223.6	9473.2
70°	397.5	402.2	444.1	547.9	740.3	1646.9	3820.9	7260.3	11543.6	11990.9	8945.9
72.5°	323.1	327.8	360.3	405.4	490.9	973.9	2315.9	5896.1	10194.4	10677.4	7615.7
75°	272.3	278.7	308.0	337.3	384.8	625.5	1086.3	4105.9	7666.4	7983.1	5296.0
77.5°	151.2	139.3	250.2	279.5	324.6	395.9	508.3	2416.4	4293.6	4381.5	2349.9
80°	94.2	97.4	198.7	224.9	249.4	199.6	232.8	930.3	1488.5	1414.1	455.2
82.5°	5.5	12.7	152.8	162.3	171.0	85.5	87.8	315.9	358.6	329.3	80.8
85°	0.0	0.0	69.7	56.2	59.3	24.5	25.3	73.6	48.3	52.3	15.8
87.5°	0.0	0.0	0.0	1.5	0.0	2.4	4.7	6.4	2.4	3.2	5.5
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: P964165

CATALOG NUMBER: NAV-SB3B-827-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3	1470.3
2.5°	1490.0	1434.6	1322.2	1212.2	1122.7	1039.6	980.2	923.9	895.4	893.9	892.3
5°	1535.1	1418.8	1193.9	995.2	835.3	707.0	623.9	564.5	534.4	524.1	522.5
7.5°	1598.5	1423.5	1081.5	805.2	616.7	506.8	459.2	440.2	433.9	426.7	425.2
10°	1678.4	1434.6	980.9	648.4	486.2	430.7	411.7	403.7	399.0	394.3	392.7
12.5°	1767.9	1444.9	881.2	538.4	427.5	399.0	385.6	376.1	369.7	364.2	362.6
15°	1855.0	1451.3	777.5	461.6	397.5	374.5	360.3	349.9	341.2	334.9	334.2
17.5°	1941.4	1460.0	680.1	415.6	372.9	349.9	335.7	323.1	315.9	308.7	308.0
20°	2037.2	1458.4	588.2	383.2	348.4	325.4	310.4	298.5	291.4	283.4	282.7
22.5°	2125.8	1450.5	507.5	355.5	323.1	300.8	284.2	272.3	265.3	258.9	258.1
25°	2227.9	1444.1	440.2	330.2	299.3	277.1	258.9	247.8	239.8	234.3	233.6
27.5°	2326.1	1434.6	391.1	307.2	276.3	254.9	237.5	224.9	217.7	213.8	213.8
30°	2422.7	1432.2	372.9	285.1	255.7	234.3	216.9	205.1	199.6	197.9	197.1
32.5°	2539.1	1438.6	380.8	277.1	236.8	215.4	198.7	190.0	184.5	184.5	184.5
35°	2663.4	1437.0	392.7	284.2	224.1	196.4	183.7	178.1	172.6	172.6	172.6
37.5°	2819.4	1439.4	402.2	296.1	219.4	180.5	173.4	166.3	163.1	163.1	163.1
40°	3052.1	1517.7	397.5	306.4	217.7	169.4	155.2	152.8	150.5	150.5	150.5
42.5°	3337.2	1688.0	403.7	307.2	216.9	161.5	142.5	147.3	141.8	140.9	140.1
45°	3649.1	1874.0	444.1	290.6	216.2	157.5	136.2	141.8	133.0	133.0	133.0
47.5°	3958.7	2058.5	485.3	266.8	213.8	156.7	130.7	127.5	125.0	125.9	125.9
50°	4385.5	2209.0	501.1	234.3	208.2	155.2	120.3	121.2	119.5	121.2	121.2
52.5°	4850.2	2240.6	482.2	197.9	192.4	150.5	113.3	116.3	115.6	117.2	117.2
55°	5140.0	2206.6	398.2	164.7	167.9	131.4	106.1	112.4	112.4	112.4	112.4
57.5°	5439.3	2061.7	282.7	133.8	139.3	107.7	99.7	108.4	107.7	106.9	106.9
60°	5654.6	1827.4	186.0	110.1	110.8	88.7	92.7	102.1	101.4	97.4	97.4
62.5°	5815.3	1568.5	119.5	93.4	84.7	79.9	84.7	92.7	89.5	80.8	79.1
65°	5797.1	1209.8	91.8	79.9	69.7	69.7	73.6	80.8	71.2	57.0	55.5
67.5°	5459.0	818.7	76.1	67.3	58.6	57.8	61.0	67.3	61.0	48.3	46.7
70°	4854.9	535.3	61.0	52.3	46.7	42.7	49.1	57.8	51.5	38.7	37.2
72.5°	3940.5	326.2	45.9	38.0	34.0	27.7	38.7	47.5	41.2	28.5	27.0
75°	2549.4	166.3	31.7	24.5	18.2	16.6	28.5	35.7	28.5	17.4	15.1
77.5°	975.4	69.7	17.4	11.1	9.5	7.9	15.8	21.4	11.9	4.0	3.2
80°	187.7	29.3	8.7	5.5	4.7	3.2	2.4	1.5	0.0	0.0	0.0
82.5°	32.5	9.5	3.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	0.0	0.0	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)