

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: P971544

Luminaire Tested: **NAV-SB6D-827-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971544
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56021.4 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 440.1
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

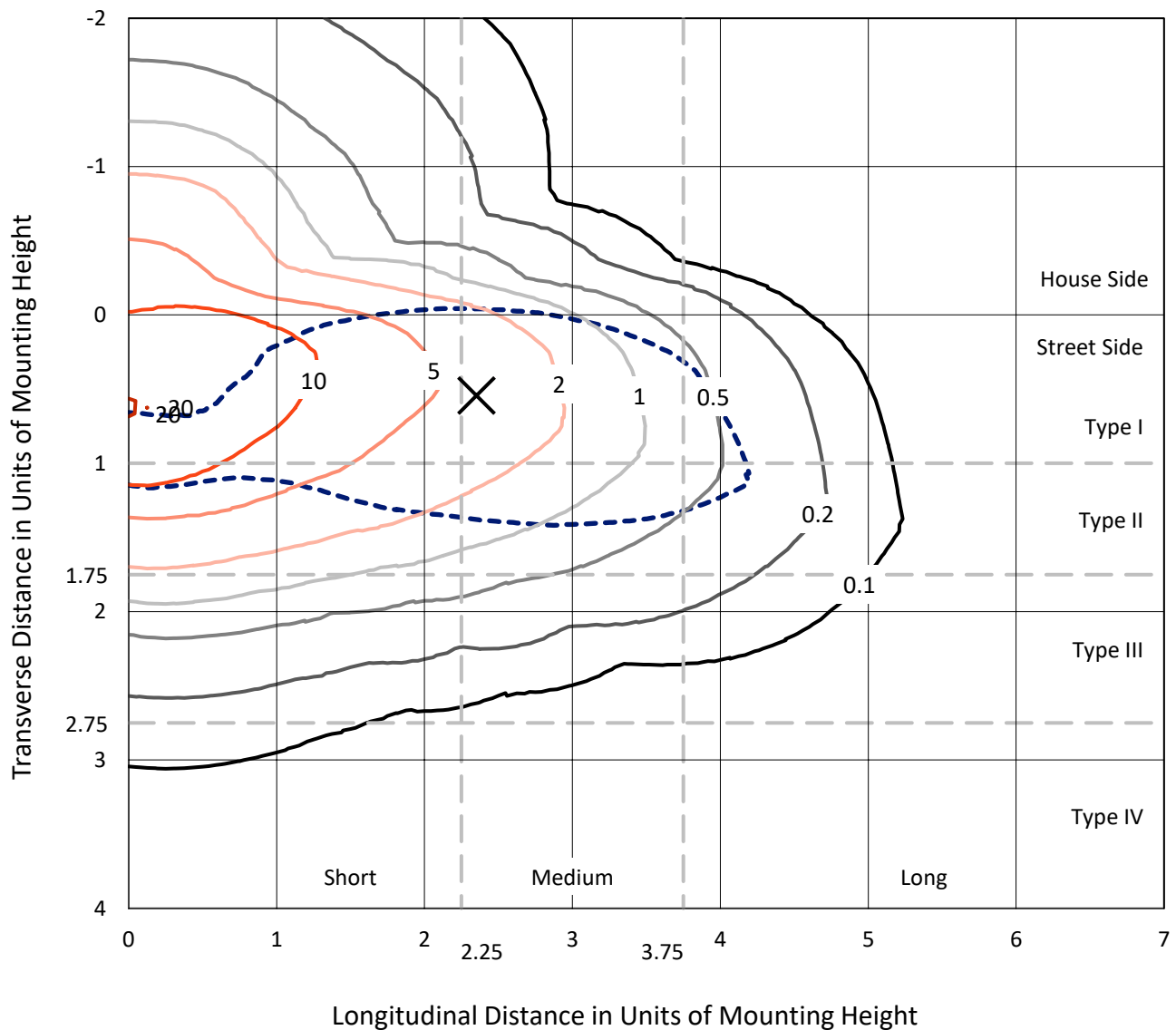


REPORT NUMBER: P971544

CATALOG NUMBER: NAV-SB6D-827-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

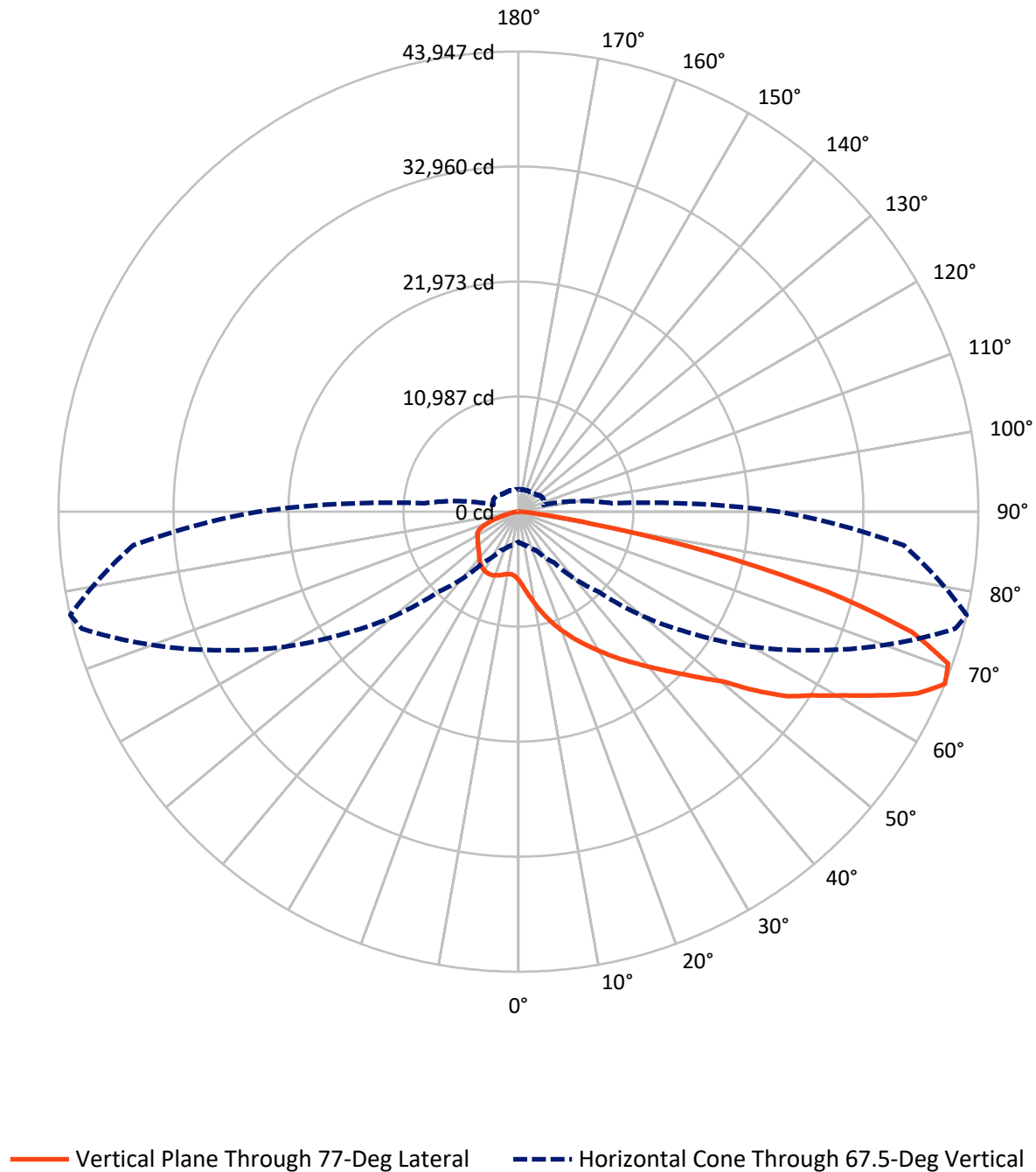
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.5 fc
Type II - Medium - N/A

REPORT NUMBER: P971544
CATALOG NUMBER: NAV-SB6D-827-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P971544

CATALOG NUMBER: NAV-SB6D-827-U-T2R

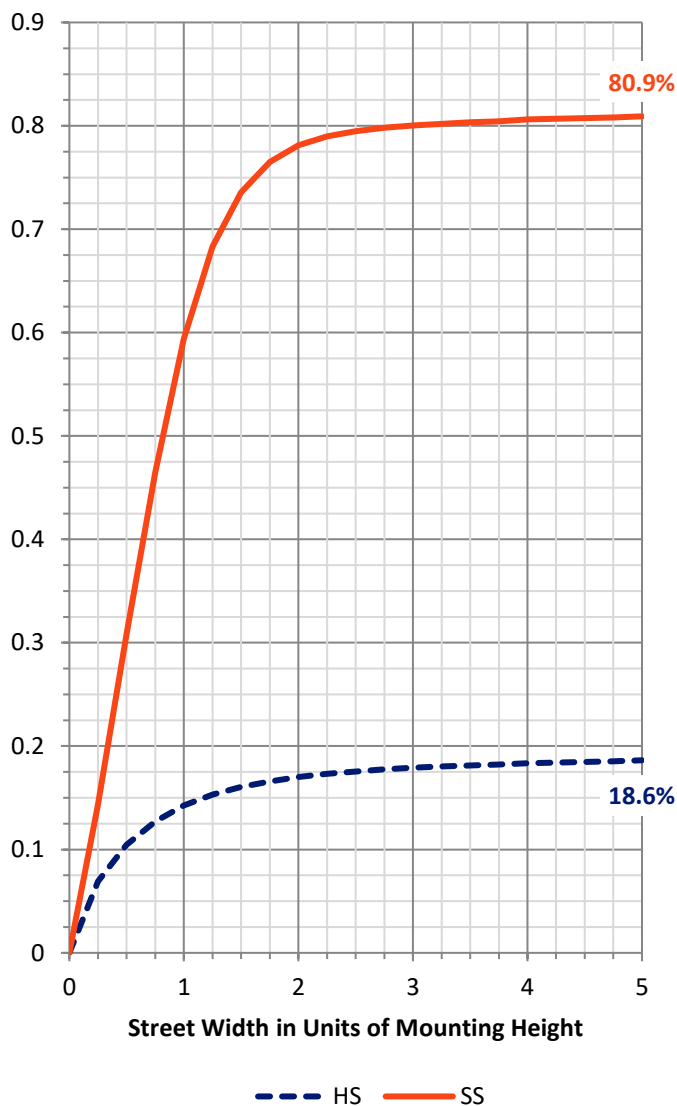
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10597.0	0.0	10597.0
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	45424.4	0.0	45424.4
	% Fixture	81.1	0.0	81.1
Total	Lumens	56021.4	0.0	56021.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	704.5	1.3
10°-20°	2531.1	4.5
20°-30°	4779.0	8.5
30°-40°	7698.9	13.7
40°-50°	10530.8	18.8
50°-60°	11878.8	21.2
60°-70°	11087.3	19.8
70°-80°	6077.7	10.8
80°-90°	733.1	1.3
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°	56021.4	100.0
0°-180°	56021.4	100.0

Coefficient of Utilization



REPORT NUMBER: P971544

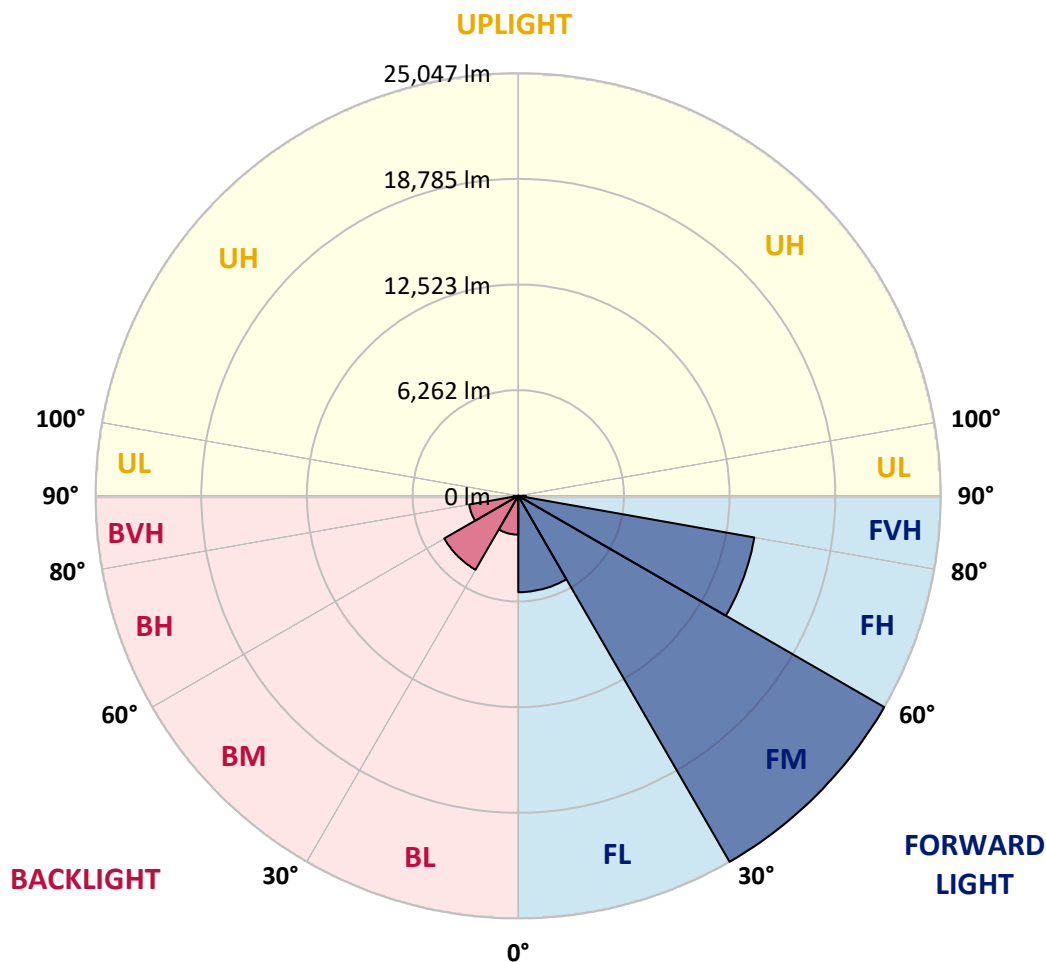
CATALOG NUMBER: NAV-SB6D-827-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5710.7	10.2			
FM	(30°-60°)	25046.5	44.7			
FH	(60°-80°)	14208.7	25.4			G5
FVH	(80°-90°)	458.5	0.8			G3/500
BL	(0°-30°)	2304.0	4.1	B3/2500		
BM	(30°-60°)	5061.9	9.0	B4/8500		
BH	(60°-80°)	2956.4	5.3	B4/5000		G4/5000
BVH	(80°-90°)	274.6	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Medium



REPORT NUMBER: P971544

CATALOG NUMBER: NAV-SB6D-827-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0
2.5°	8230.0	8287.8	8215.6	8215.6	7972.7	7845.5	7602.5	7417.4	7084.9	7027.1	6807.3
5°	9728.0	9800.3	9699.1	9655.7	9369.4	9106.3	8698.6	8296.6	7703.7	7643.0	7125.4
7.5°	10887.7	10980.1	10890.5	10844.2	10589.8	10294.8	9817.7	9256.7	8420.9	8302.3	7553.3
10°	11833.2	11847.7	11818.8	11836.1	11636.6	11393.7	10905.0	10251.4	9207.5	9045.5	8071.0
12.5°	12368.2	12434.7	12492.6	12596.6	12562.0	12411.6	11972.0	11191.3	10040.3	9832.1	8634.9
15°	12619.8	12735.4	12865.6	13105.6	13299.4	13337.0	13001.5	12200.5	10887.7	10636.0	9204.6
17.5°	12709.4	12819.4	13024.7	13371.6	13788.1	14068.5	13918.2	13180.8	11726.2	11437.1	9803.2
20°	13163.5	13195.2	13319.6	13649.3	14100.4	14566.0	14678.7	14123.5	12556.1	12229.4	10422.0
22.5°	14135.1	14071.5	14106.2	14256.5	14580.4	15031.5	15288.9	14956.4	13409.3	13033.3	11046.6
25°	15740.0	15555.0	15369.9	15196.3	15361.2	15615.7	15907.8	15789.2	14302.8	13825.7	11677.1
27.5°	17767.1	17541.6	17133.9	16564.2	16364.6	16454.3	16584.4	16561.3	15129.8	14646.9	12327.7
30°	19762.5	19499.4	19013.5	18189.3	17663.1	17425.9	17327.6	17261.1	16029.3	15514.5	12984.2
32.5°	21355.9	21147.7	20670.6	19748.1	18984.6	18579.8	18253.0	18015.9	16969.1	16454.3	13678.2
35°	22749.8	22555.9	22009.4	21003.1	20173.1	19742.3	19314.3	18808.2	17946.5	17425.9	14424.3
37.5°	24022.1	23828.4	23079.4	22032.6	21196.9	20899.0	20517.3	19658.4	18926.8	18435.1	15213.8
40°	24826.0	24782.7	24082.9	22897.3	22029.7	21882.2	21755.0	20644.5	20014.1	19557.2	16081.2
42.5°	25031.3	25126.7	24571.6	23597.0	22770.0	22651.4	22949.2	21760.7	21234.4	20797.8	17064.5
45°	24536.9	24811.6	24447.3	23785.0	23296.3	23232.6	24007.7	22981.1	22585.0	22185.8	18250.1
47.5°	23284.7	23750.3	23599.9	23507.4	23438.0	23712.8	24938.9	24276.6	24114.7	23767.7	19603.4
50°	20757.3	21639.3	21902.4	22486.6	23157.5	24085.8	25786.1	25690.7	25901.7	25551.9	21251.8
52.5°	16387.8	17602.3	19129.3	20592.5	22295.7	23961.4	26717.2	27720.7	28611.4	28420.6	23871.7
55°	13527.8	14074.4	15248.4	17932.0	20624.2	23438.0	27136.6	29360.4	31300.7	31130.2	25858.4
57.5°	11330.0	11818.8	12541.7	14782.9	18096.9	22249.5	27396.8	30360.9	33142.9	33125.5	27819.0
60°	8973.3	9490.9	10231.1	11818.8	15144.4	20196.3	27339.0	31500.3	35493.9	35638.4	30210.5
62.5°	6312.8	6882.5	7703.7	9184.3	12128.2	17535.8	26159.1	32324.5	38261.3	38654.6	33087.9
65°	4149.7	4525.7	5144.5	6422.6	9036.8	14114.9	23906.5	32431.5	41222.5	41887.6	35788.8
67.5°	2909.2	3053.8	3418.1	4112.1	5957.1	10824.0	20317.8	31323.9	43197.6	43946.6	36960.1
70°	2270.1	2342.3	2527.4	2805.0	3742.0	7278.6	15569.4	28443.6	42775.4	43556.2	35736.8
72.5°	1960.6	2030.0	2099.4	2134.2	2510.1	4493.8	10546.3	23782.2	38799.2	39328.4	31072.4
75°	1778.5	1795.8	1853.6	1842.0	1914.4	2914.9	6087.3	17327.6	30612.5	30430.3	22937.8
77.5°	1495.1	1518.2	1613.7	1599.2	1700.4	1992.4	3160.7	11182.5	19846.4	18608.7	12767.3
80°	1266.6	1278.2	1382.3	1364.9	1477.7	1443.0	1613.7	5699.7	8418.0	7131.1	3681.3
82.5°	439.5	543.7	1055.5	1087.3	1127.8	873.3	931.1	2325.0	2570.8	1969.3	772.1
85°	214.0	228.5	537.9	763.4	760.6	439.5	454.0	829.9	809.7	636.2	257.4
87.5°	34.7	43.4	63.7	297.9	237.1	115.7	156.1	162.0	167.7	144.6	57.8
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: P971544

CATALOG NUMBER: NAV-SB6D-827-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0	6573.0
2.5°	6645.4	6500.8	6197.2	5916.6	5696.8	5485.7	5367.2	5265.9	5208.1	5196.5	5196.5
5°	6824.7	6526.8	5974.4	5508.9	5205.3	4979.7	4861.1	4785.9	4748.3	4725.1	4722.3
7.5°	7082.0	6645.4	5858.8	5329.6	5011.4	4849.6	4788.8	4777.2	4774.3	4777.2	4785.9
10°	7437.7	6839.1	5847.2	5286.2	5020.1	4930.6	4927.6	4930.6	4942.0	4945.0	4947.9
12.5°	7822.3	7038.7	5893.4	5323.7	5130.0	5080.9	5072.2	5069.3	5078.0	5083.8	5086.7
15°	8241.6	7301.8	5971.5	5404.7	5251.5	5199.4	5190.8	5173.4	5170.5	5167.6	5164.8
17.5°	8672.5	7562.0	6058.3	5491.5	5329.6	5257.3	5225.4	5185.0	5153.2	5144.5	5153.2
20°	9109.2	7819.4	6119.0	5534.9	5335.3	5234.2	5170.5	5101.1	5046.2	5014.4	5026.0
22.5°	9574.7	8088.4	6156.7	5523.3	5283.3	5144.5	5028.9	4947.9	4864.0	4809.1	4812.0
25°	10028.7	8322.6	6153.7	5462.6	5182.1	5005.7	4858.2	4754.2	4638.4	4580.6	4580.6
27.5°	10465.4	8533.6	6081.4	5355.6	5037.5	4840.9	4664.5	4540.1	4427.4	4372.3	4369.5
30°	10916.6	8710.0	5968.7	5199.4	4866.9	4650.0	4456.3	4349.3	4248.0	4196.0	4193.1
32.5°	11364.8	8872.0	5809.6	5005.7	4670.2	4462.0	4271.2	4172.9	4112.1	4112.1	4115.1
35°	11839.0	8984.8	5598.5	4780.1	4462.0	4262.5	4112.1	4054.3	4048.5	4013.8	4005.1
37.5°	12339.3	9057.1	5341.2	4548.7	4256.7	4068.7	4022.5	3953.1	3895.2	3820.1	3808.5
40°	12865.6	9129.4	5031.7	4308.8	4039.8	3935.7	3915.5	3822.9	3658.1	3473.0	3447.0
42.5°	13504.7	9178.6	4710.7	4068.7	3811.4	3776.7	3805.6	3646.5	3383.4	3244.6	3247.5
45°	14244.9	9259.5	4415.8	3831.7	3577.1	3577.1	3698.6	3490.4	3273.5	3186.7	3201.2
47.5°	15205.1	9447.5	4141.0	3571.4	3360.3	3418.1	3461.5	3302.4	3181.0	3074.0	3071.1
50°	16593.1	9898.6	3857.7	3308.2	3195.4	3311.1	3250.4	3157.8	3016.2	2929.3	2920.7
52.5°	18316.6	10164.6	3606.1	3071.1	3053.8	3169.4	3082.7	2995.9	2888.9	2773.2	2750.1
55°	19490.7	10213.8	3395.0	2897.6	2958.4	2946.8	2914.9	2836.9	2779.0	2625.7	2628.6
57.5°	20803.6	10312.1	3221.5	2793.4	2897.6	2770.4	2758.8	2692.3	2617.0	2513.0	2478.2
60°	22373.8	10465.4	3071.1	2752.9	2845.5	2654.6	2596.8	2570.8	2495.6	2443.6	2458.1
62.5°	24085.8	10604.2	2917.9	2758.8	2784.8	2541.9	2455.2	2446.5	2400.1	2382.8	2382.8
65°	25254.1	10225.4	2727.0	2752.9	2689.4	2426.2	2316.3	2313.4	2275.8	2270.1	2267.2
67.5°	24846.3	9025.3	2469.6	2672.0	2591.1	2310.6	2189.1	2177.5	2128.3	2131.3	2131.3
70°	22804.7	7313.4	2113.9	2472.5	2469.6	2206.4	2056.0	2018.4	1952.0	1963.5	1975.1
72.5°	18975.9	5419.2	1636.7	2139.9	2275.8	2111.0	1902.8	1842.0	1758.2	1769.8	1766.9
75°	13704.2	3684.2	1191.5	1628.1	1980.9	1998.2	1752.4	1648.3	1547.1	1564.5	1570.2
77.5°	7012.6	2087.9	876.2	1122.0	1555.7	1816.1	1616.5	1477.7	1454.6	1616.5	1593.4
80°	2287.4	1046.8	607.3	786.6	1020.8	1486.4	1417.0	1257.9	1252.1	1289.8	1107.5
82.5°	682.4	442.5	390.4	517.6	563.9	1139.4	1223.2	951.4	818.4	861.7	890.6
85°	234.2	214.0	222.6	257.4	269.0	668.0	856.0	630.4	595.7	656.4	647.8
87.5°	54.9	75.2	63.7	57.8	57.8	162.0	332.5	263.1	364.4	242.9	234.2
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)