

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: P971545

Luminaire Tested: **NAV-SB6D-827-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971545
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-SB6D-827-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA 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: 42034.2 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

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



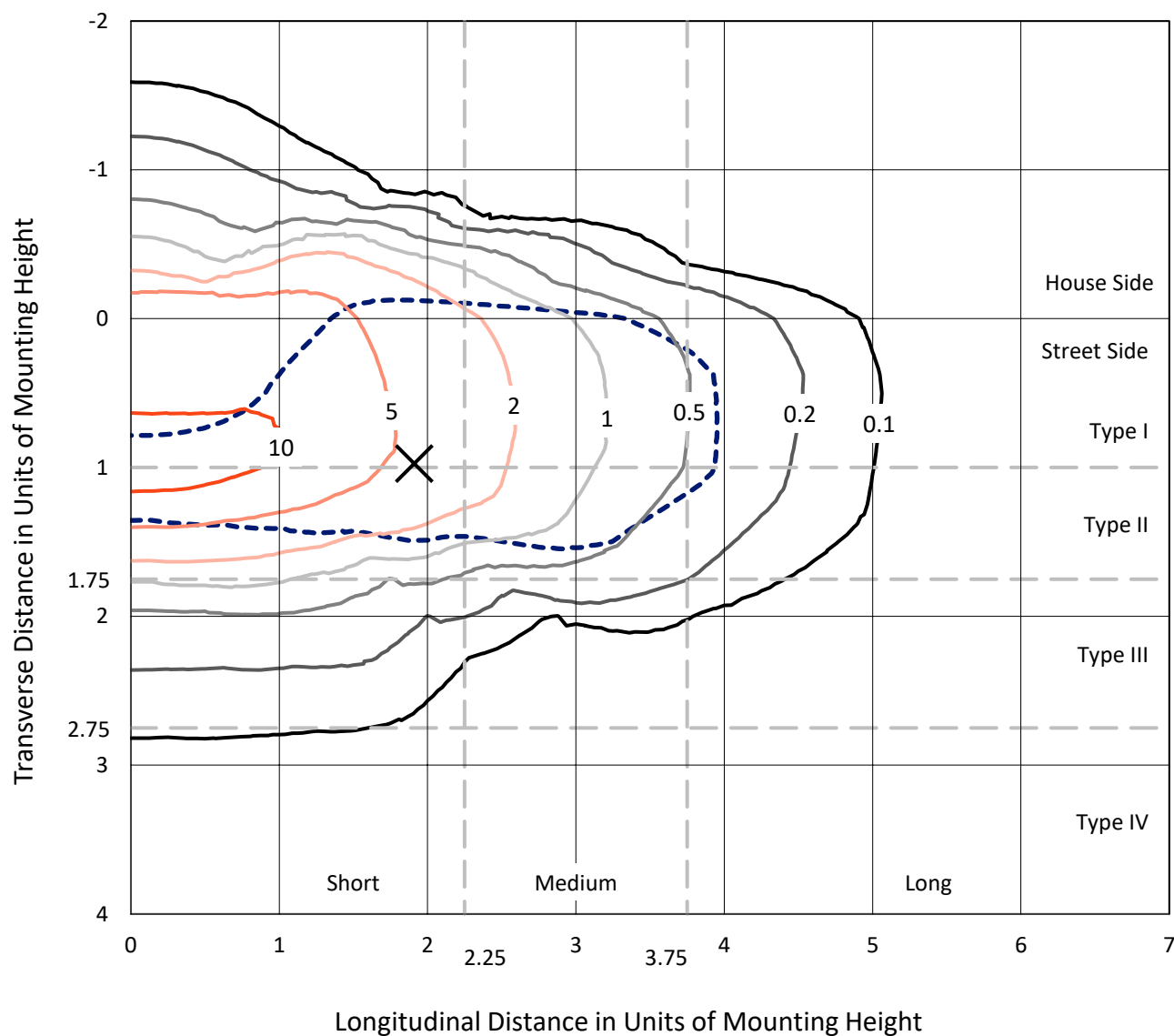
REPORT NUMBER: P971545

CATALOG NUMBER: NAV-SB6D-827-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

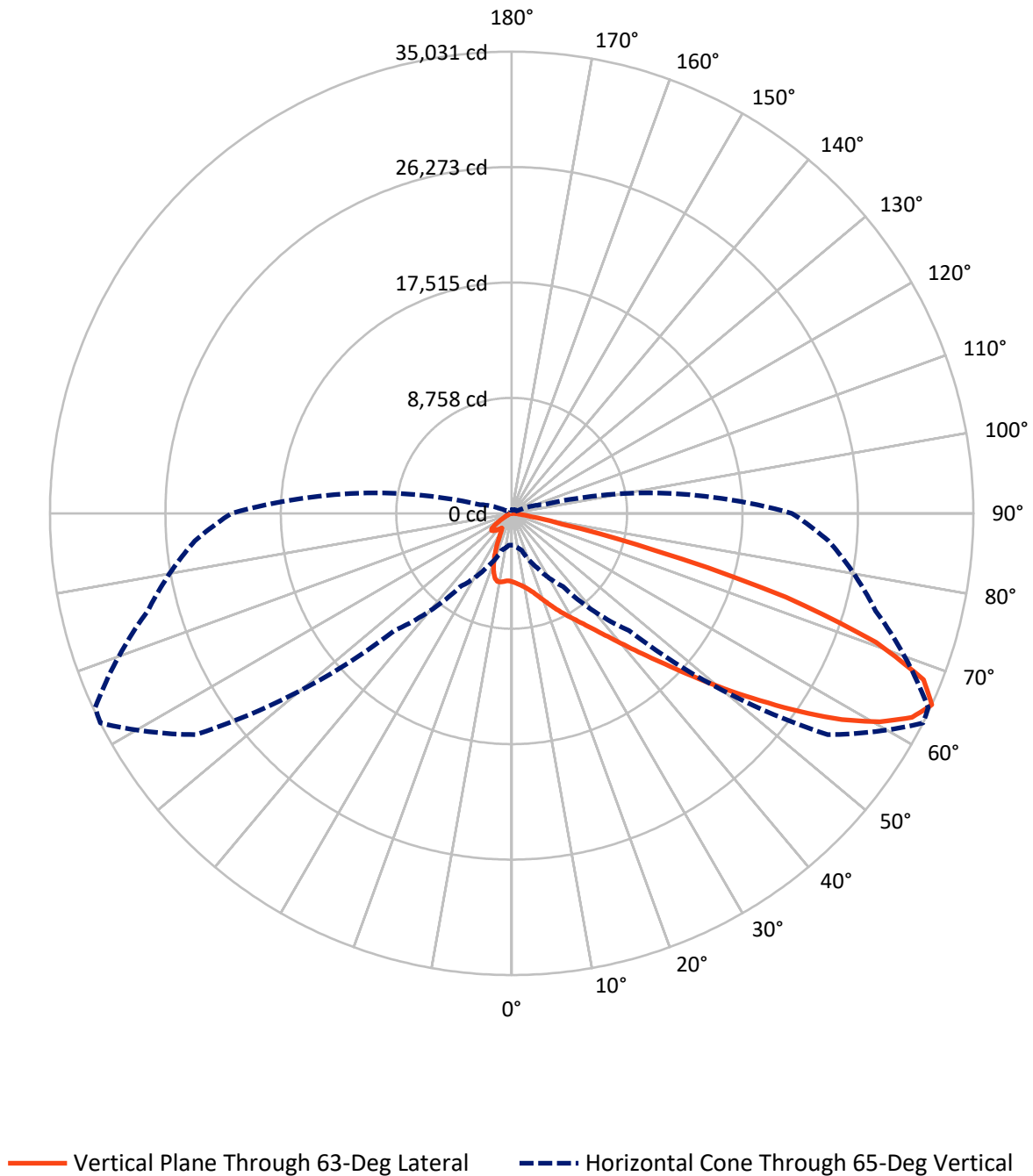


Based on 25 foot mounting height. Maximum calculated value = 14.2 fc

Type II - Short - N/A

REPORT NUMBER: P971545
CATALOG NUMBER: NAV-SB6D-827-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P971545

CATALOG NUMBER: NAV-SB6D-827-U-T2U-HSS

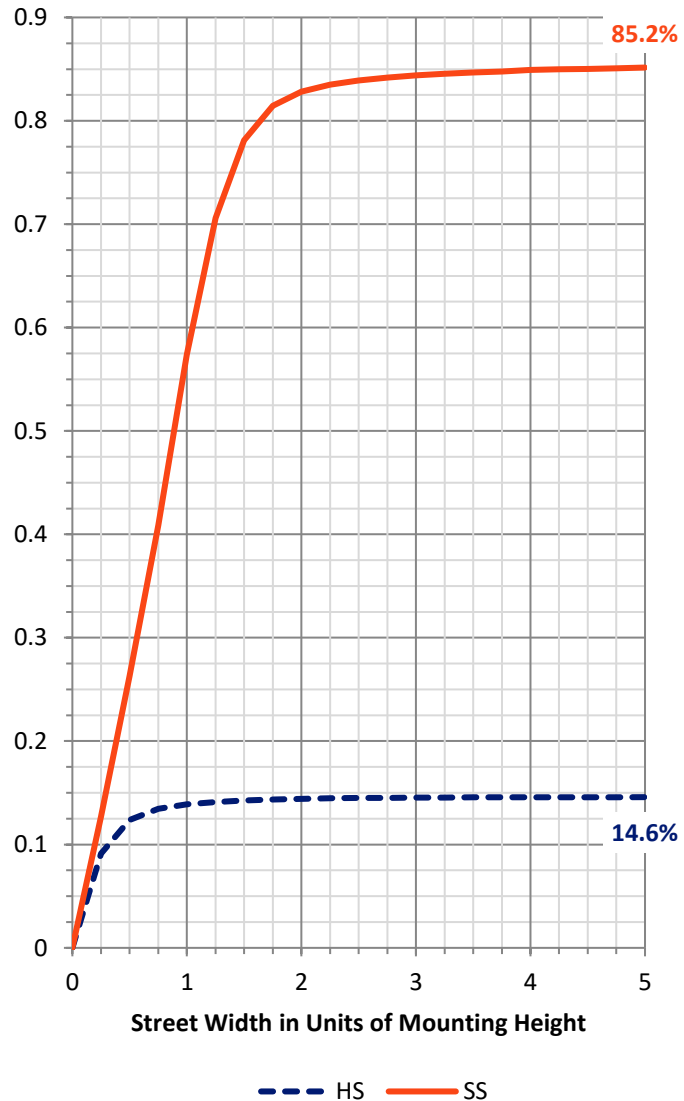
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6178.7	0.0	6178.7
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	35855.5	0.0	35855.5
	% Fixture	85.3	0.0	85.3
Total	Lumens	42034.2	0.0	42034.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	488.8	1.2
10°-20°	1356.2	3.2
20°-30°	2361.5	5.6
30°-40°	4256.4	10.1
40°-50°	8441.8	20.1
50°-60°	11499.1	27.4
60°-70°	9178.5	21.8
70°-80°	4153.5	9.9
80°-90°	298.5	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°	42034.2	100.0
0°-180°	42034.2	100.0

Coefficient of Utilization



REPORT NUMBER: P971545

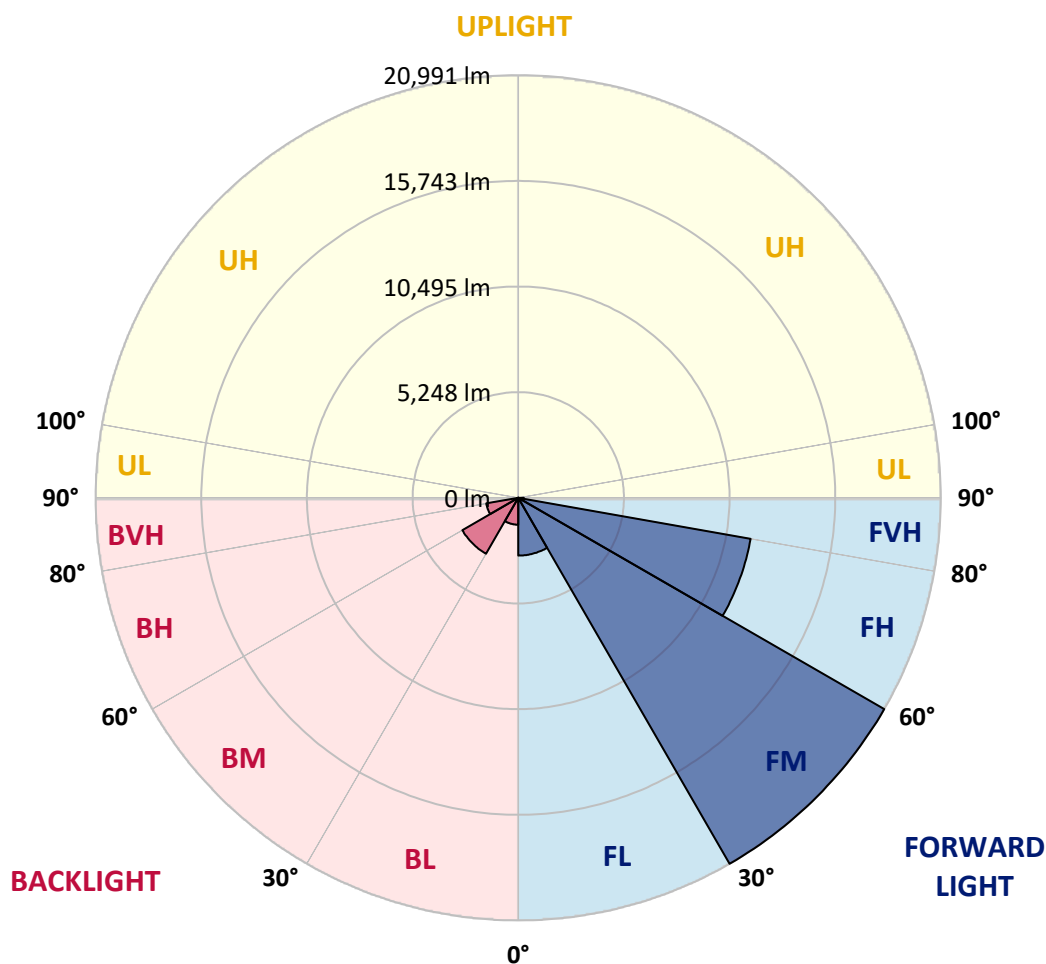
CATALOG NUMBER: NAV-SB6D-827-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2869.3	6.8			
FM	(30°-60°)	20990.8	49.9			
FH	(60°-80°)	11718.9	27.9			G4/12000
FVH	(80°-90°)	276.4	0.7			G3/500
BL	(0°-30°)	1337.2	3.2	B3/2500		
BM	(30°-60°)	3206.4	7.6	B3/5000		
BH	(60°-80°)	1613.0	3.8	B3/2500		G3/2500
BVH	(80°-90°)	22.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short



REPORT NUMBER: P971545

CATALOG NUMBER: NAV-SB6D-827-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8
2.5°	5309.3	5294.8	5315.0	5306.4	5300.6	5289.0	5283.3	5277.4	5265.9	5257.2	5222.5
5°	5323.7	5315.0	5335.3	5352.7	5370.0	5387.4	5396.0	5407.6	5396.0	5372.8	5338.2
7.5°	5202.3	5196.4	5239.9	5291.9	5370.0	5436.5	5508.8	5549.2	5552.2	5543.5	5505.9
10°	5193.6	5179.1	5222.5	5286.1	5387.4	5505.9	5633.2	5719.9	5731.5	5769.1	5728.6
12.5°	5329.5	5315.0	5375.8	5445.2	5549.2	5673.7	5829.8	5951.3	5968.6	6020.6	5991.7
15°	5558.0	5537.8	5607.2	5696.7	5829.8	5971.4	6136.3	6246.2	6260.7	6324.2	6272.2
17.5°	5824.0	5803.8	5884.7	5980.2	6124.8	6318.5	6509.4	6630.8	6648.2	6688.6	6593.2
20°	6165.3	6139.2	6202.8	6289.6	6442.8	6674.2	6902.7	7076.1	7073.2	7073.2	6917.1
22.5°	6561.4	6520.9	6575.9	6645.3	6789.8	7070.3	7374.0	7579.3	7579.3	7498.3	7241.0
25°	6986.5	6946.0	7006.7	7070.3	7197.6	7515.7	7871.4	8125.9	8137.4	7998.6	7588.0
27.5°	7518.6	7466.5	7512.8	7588.0	7663.2	7987.0	8409.2	8704.2	8709.9	8496.0	7917.6
30°	8542.2	8394.8	8250.2	8169.2	8203.9	8524.9	8976.0	9302.8	9331.7	9036.7	8276.3
32.5°	10416.2	10387.2	9878.2	9213.1	8866.1	9103.2	9609.3	10002.6	10020.0	9641.2	8741.8
35°	13328.1	13293.4	12475.1	11208.5	10077.8	9878.2	10378.5	10844.1	10832.5	10404.6	9346.2
37.5°	16804.1	16772.2	15693.6	13999.0	12168.5	11049.4	11370.4	11859.1	11931.4	11370.4	10126.9
40°	19773.9	19655.3	18972.9	17339.0	14944.6	12992.7	12781.5	13105.4	13180.7	12515.6	11118.8
42.5°	22023.7	21922.4	21575.4	20554.6	18304.9	15867.1	14444.3	14568.7	14652.6	13854.4	12258.2
45°	23189.0	23165.9	23304.7	23209.3	21728.7	19395.0	16821.4	16303.8	16335.5	15337.9	13550.8
47.5°	23353.8	23342.3	23975.6	24872.0	24672.5	23374.1	19872.2	18466.8	18354.0	17012.2	14956.2
50°	22382.2	22359.0	23573.7	25253.7	26638.9	26716.9	23336.5	20904.6	20655.8	18744.4	16422.3
52.5°	19279.3	19273.6	21268.9	24065.3	27330.0	29643.4	26760.4	23582.3	23165.9	20577.8	17972.2
55°	14834.7	14941.7	17229.1	20534.3	26069.2	31051.8	29834.3	26555.0	25916.0	22422.7	19400.8
57.5°	10508.6	10664.8	12926.2	15870.0	22159.6	30218.8	31913.5	29533.5	28845.3	24261.9	20849.6
60°	5644.7	5783.6	8047.8	11561.3	16485.9	27113.1	33009.4	32118.8	31468.1	26008.5	22156.7
62.5°	3363.1	3409.4	4346.3	7463.6	11150.7	20713.7	32543.9	34088.1	33553.1	27474.6	23293.1
65°	2414.6	2423.3	2894.7	4557.5	6769.6	12584.9	29279.0	35030.8	34866.0	28579.3	24134.6
67.5°	2032.9	2027.1	2223.7	3027.6	4612.4	6304.1	22440.0	33697.7	34397.5	29279.0	24611.8
70°	1743.7	1752.4	1983.8	2218.0	3467.3	3568.4	11156.4	29339.8	30831.9	29464.1	24582.9
72.5°	1298.4	1327.3	1541.3	2021.3	2617.0	2455.1	3851.8	21754.7	24452.7	27760.9	23307.6
75°	916.7	931.1	1084.4	1700.4	1951.9	1787.1	1966.4	11246.1	14704.6	21283.3	19076.9
77.5°	705.6	731.6	821.2	1188.5	1923.0	1255.0	1202.9	3892.3	5980.2	12856.8	13079.4
80°	381.7	427.9	592.9	858.8	1350.4	887.8	595.7	1550.0	2027.1	6011.9	5043.2
82.5°	196.6	219.8	413.5	618.8	769.2	775.0	295.0	644.8	835.7	1856.5	691.2
85°	78.1	95.4	277.6	341.2	396.2	381.7	133.0	260.2	300.7	514.8	211.0
87.5°	17.3	28.9	101.2	78.1	75.2	81.0	31.8	60.7	57.8	60.7	37.6
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: P971545

CATALOG NUMBER: NAV-SB6D-827-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8	5187.8
2.5°	5219.6	5208.0	5176.2	5141.5	5101.0	5078.0	5063.5	5060.6	5040.3	5025.9	5040.3
5°	5306.4	5294.8	5234.1	5161.8	5083.7	5023.0	4965.2	4913.1	4837.9	4823.4	4817.7
7.5°	5479.9	5448.1	5349.8	5251.5	5104.0	4927.6	4713.6	4467.8	4248.0	4181.5	4149.7
10°	5693.9	5650.5	5526.2	5352.7	5025.9	4545.9	4028.2	3548.1	3166.4	3059.5	3019.0
12.5°	5936.8	5899.2	5734.4	5413.3	4699.1	3828.7	3036.4	2440.6	2070.5	1977.9	1951.9
15°	6226.0	6171.0	5942.5	5320.9	4115.0	2909.2	2085.0	1732.1	1599.1	1581.8	1564.5
17.5°	6532.5	6442.8	6127.7	4988.3	3328.4	2067.6	1610.7	1509.5	1451.7	1434.3	1425.7
20°	6813.0	6697.4	6237.5	4485.1	2487.0	1610.7	1443.0	1376.5	1324.4	1304.2	1292.6
22.5°	7093.5	6928.7	6237.5	3799.8	1865.2	1428.5	1324.4	1263.7	1202.9	1176.9	1162.5
25°	7385.5	7165.8	6127.7	3036.4	1500.8	1309.9	1211.7	1145.1	1093.1	1061.3	1049.7
27.5°	7668.9	7365.3	5876.0	2313.4	1336.0	1205.9	1107.5	1044.0	994.8	971.6	971.6
30°	7937.9	7561.9	5523.2	1755.3	1229.0	1104.6	1012.1	957.1	908.0	884.9	887.8
32.5°	8302.2	7810.6	5147.3	1440.1	1136.4	1009.2	925.4	873.3	829.9	812.6	812.6
35°	8808.3	8177.9	4823.4	1414.1	1058.4	931.1	847.3	798.2	754.7	740.3	740.3
37.5°	9525.4	8770.7	4652.9	1587.6	994.8	861.7	783.7	731.6	691.2	679.6	676.7
40°	10410.3	9574.6	4745.3	1761.1	951.4	801.0	725.8	673.7	639.1	624.6	621.8
42.5°	11460.0	10566.5	5257.2	1894.1	922.5	749.0	670.9	613.1	589.9	584.1	584.1
45°	12665.9	11656.7	6040.8	2035.8	876.2	699.8	615.9	572.6	555.2	552.4	549.4
47.5°	14036.6	12853.9	6948.9	2212.2	829.9	653.5	572.6	543.7	529.2	523.4	523.4
50°	15395.7	14059.7	7883.0	2310.6	792.3	610.2	537.8	514.8	503.2	500.3	500.3
52.5°	16818.5	15300.3	8637.7	2218.0	760.6	575.4	508.9	491.6	480.0	477.1	477.1
55°	18174.7	16303.8	8767.8	1882.5	696.9	540.8	477.1	468.4	454.0	454.0	451.1
57.5°	19343.0	16806.9	7848.2	1382.2	633.2	488.7	445.4	436.6	425.1	422.2	419.3
60°	20415.8	16662.3	6058.3	931.1	563.9	436.6	404.9	399.0	387.4	373.0	370.1
62.5°	21020.2	16026.2	4143.9	607.3	494.5	381.7	358.5	355.7	329.6	300.7	295.0
65°	21248.7	14719.1	2585.3	442.4	413.5	326.8	309.4	303.6	266.1	234.2	231.3
67.5°	21049.1	12567.6	1304.2	349.9	326.8	271.8	254.5	254.5	228.5	199.6	196.6
70°	20251.0	9421.4	549.4	280.5	251.5	208.2	208.2	219.8	193.7	162.0	159.1
72.5°	18518.9	6338.7	292.0	214.0	188.0	147.5	170.7	179.3	153.2	121.5	121.5
75°	14722.0	3866.3	202.4	159.1	118.6	104.1	130.2	135.9	104.1	81.0	78.1
77.5°	10069.1	2220.9	135.9	101.2	75.2	60.7	89.7	83.8	54.9	37.6	40.5
80°	4421.5	925.4	78.1	46.2	28.9	23.2	31.8	23.2	17.3	11.6	11.6
82.5°	517.6	216.9	28.9	17.3	11.6	5.7	2.9	0.0	0.0	0.0	0.0
85°	107.0	26.0	14.5	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.2	5.7	2.9	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)