

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: P969434

Luminaire Tested: **NAV-SB5D-827-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969434
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33455.9 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 364.9
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



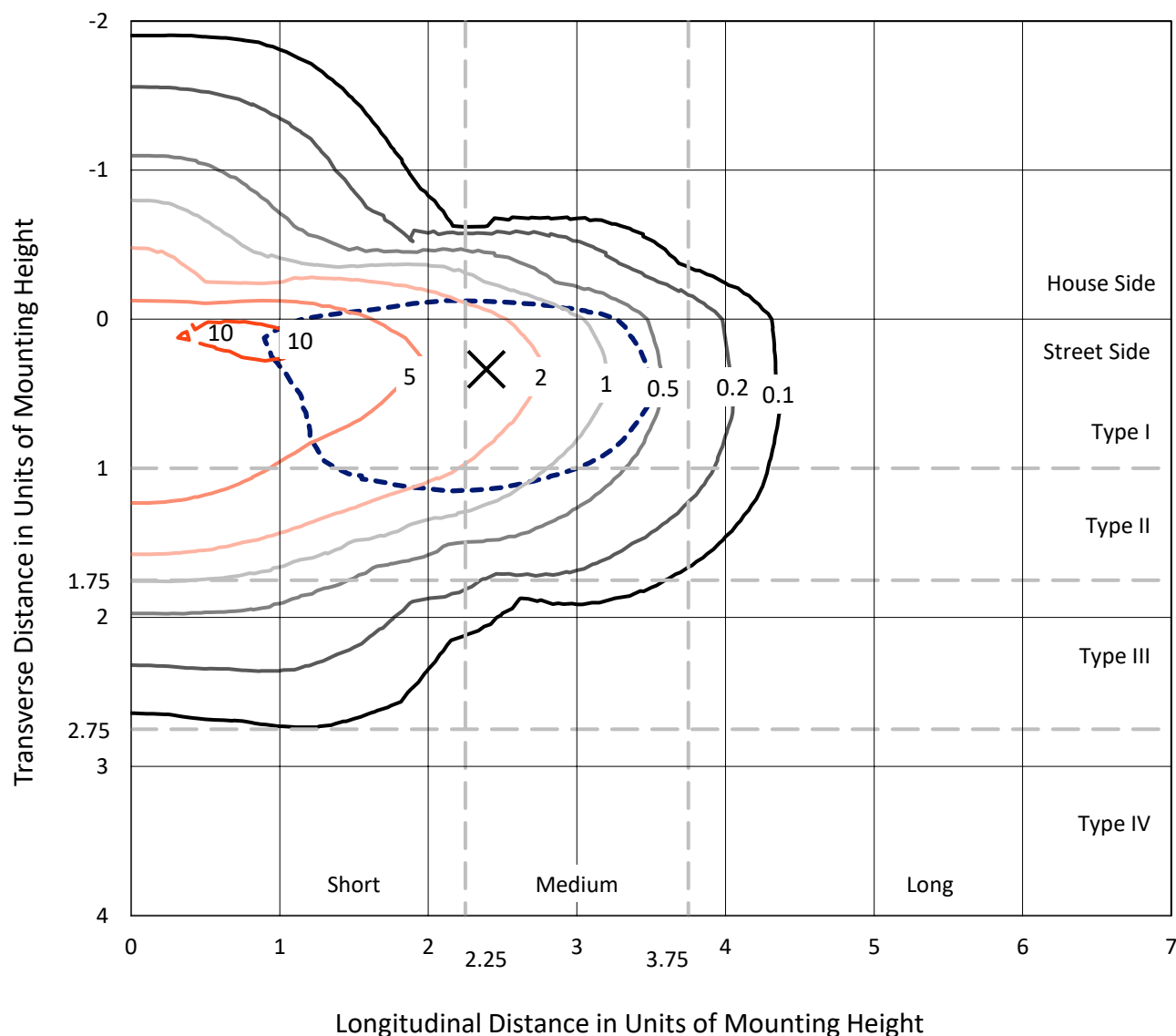
REPORT NUMBER: P969434

CATALOG NUMBER: NAV-SB5D-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

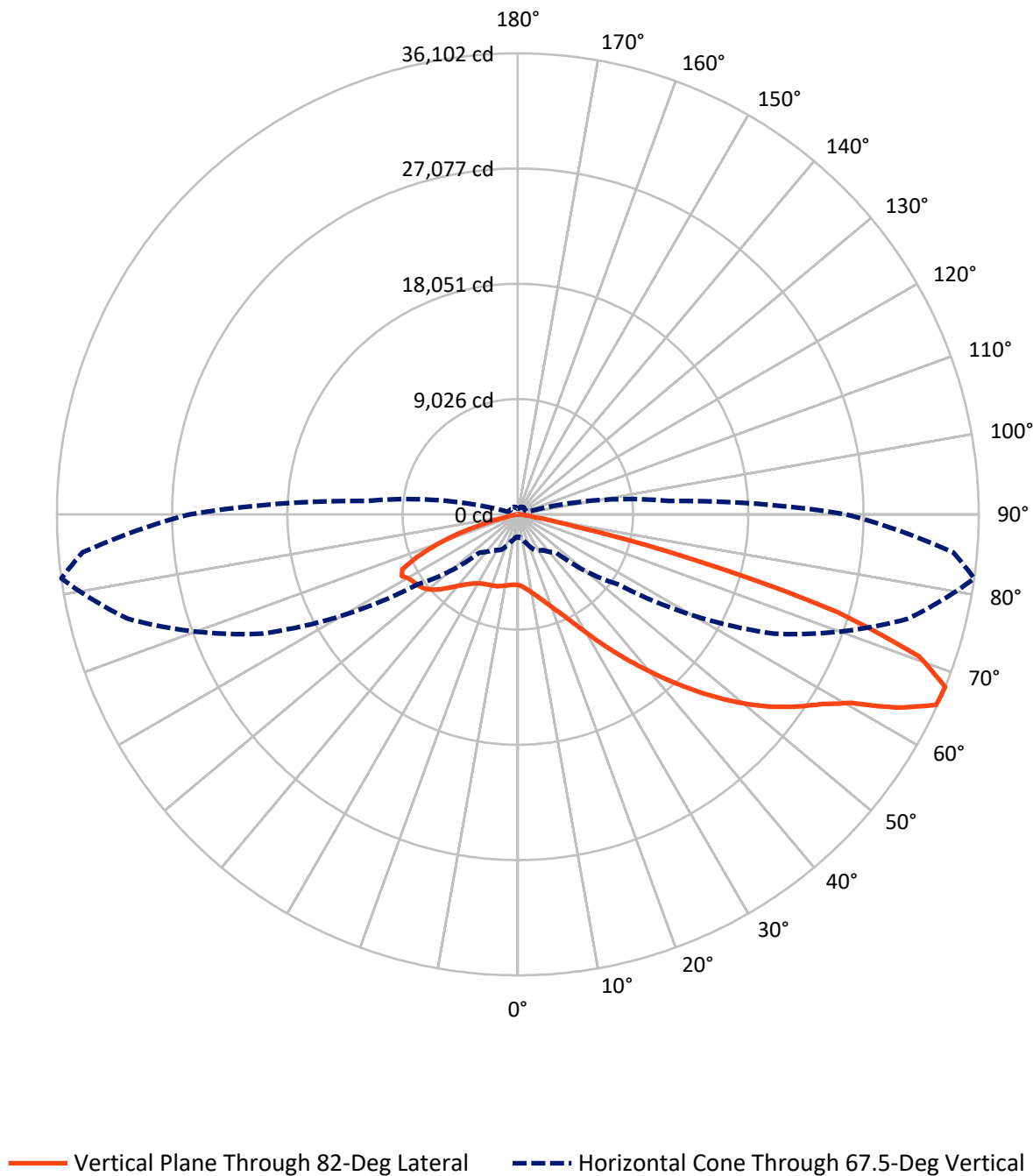


Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
Type II - Medium - N/A

REPORT NUMBER: P969434

CATALOG NUMBER: NAV-SB5D-827-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P969434

CATALOG NUMBER: NAV-SB5D-827-U-T2-HSS

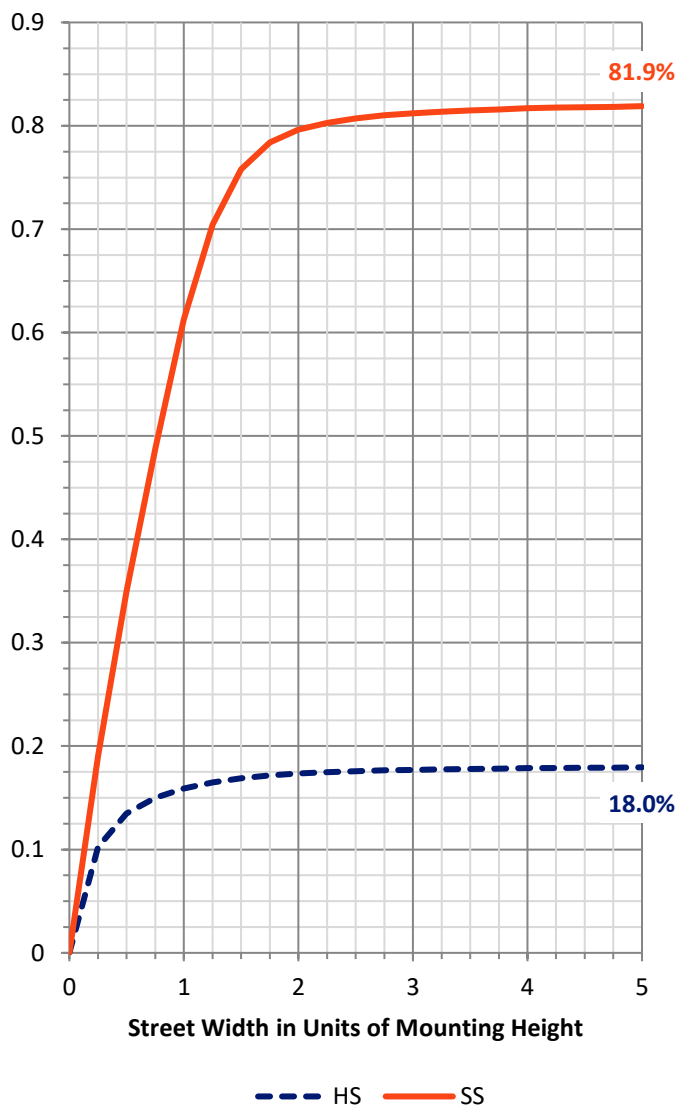
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6060.2	0.0	6060.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	27395.7	0.0	27395.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	33455.9	0.0	33455.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	493.8	1.5
10°-20°	1283.2	3.8
20°-30°	2055.2	6.1
30°-40°	3634.3	10.9
40°-50°	6367.6	19.0
50°-60°	8492.7	25.4
60°-70°	7906.2	23.6
70°-80°	3034.4	9.1
80°-90°	188.4	0.6
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°	33455.9	100.0
0°-180°	33455.9	100.0

Coefficient of Utilization



REPORT NUMBER: P969434

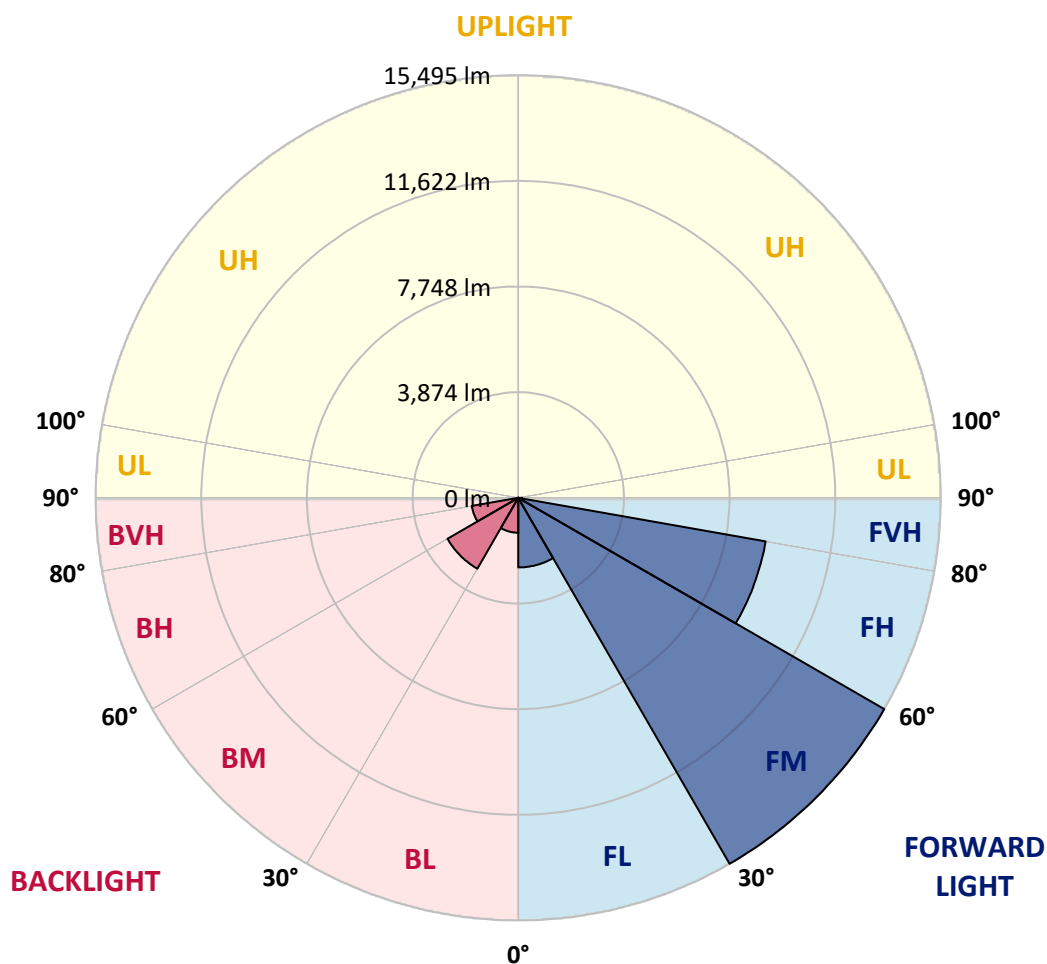
CATALOG NUMBER: NAV-SB5D-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2552.3	7.6			
FM	(30°-60°)	15495.4	46.3			
FH	(60°-80°)	9210.9	27.5			G4/12000
FVH	(80°-90°)	137.0	0.4			G2/225
BL	(0°-30°)	1279.9	3.8	B3/2500		
BM	(30°-60°)	2999.2	9.0	B3/5000		
BH	(60°-80°)	1729.7	5.2	B3/2500		G3/2500
BVH	(80°-90°)	51.4	0.2			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 Medium



REPORT NUMBER: P969434

CATALOG NUMBER: NAV-SB5D-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5
2.5°	5858.1	5891.8	5872.5	5862.9	5846.0	5821.9	5802.6	5742.5	5679.8	5638.8	5624.4
5°	5976.1	6009.8	6007.4	6017.1	6029.0	6036.3	6031.5	5964.1	5874.9	5805.1	5764.1
7.5°	5874.9	5913.4	5944.8	5993.0	6077.2	6166.4	6209.8	6195.3	6103.8	6007.4	5956.8
10°	5588.3	5629.2	5703.9	5817.1	5995.3	6188.0	6349.5	6424.1	6366.3	6260.3	6190.5
12.5°	5063.2	5104.1	5251.1	5496.8	5795.5	6130.2	6438.5	6638.5	6653.0	6547.0	6465.1
15°	4473.0	4514.0	4670.5	4978.8	5434.1	5971.2	6486.7	6864.9	6992.6	6901.0	6802.3
17.5°	4106.9	4143.0	4261.0	4509.2	4983.7	5653.3	6469.9	7105.8	7397.2	7325.0	7207.0
20°	3996.1	4027.4	4082.8	4256.2	4651.2	5323.3	6359.1	7332.2	7833.3	7792.3	7659.8
22.5°	4114.1	4143.0	4159.9	4236.9	4485.1	5106.5	6219.4	7563.5	8339.1	8343.9	8182.5
25°	4386.3	4415.2	4395.9	4444.1	4552.5	5039.1	6166.4	7835.6	8975.0	9028.0	8844.9
27.5°	4834.3	4836.8	4791.0	4788.6	4805.4	5140.3	6221.7	8127.1	9777.1	9875.9	9649.5
30°	5732.8	5696.6	5520.9	5330.5	5243.8	5443.8	6375.9	8471.5	10723.8	10899.5	10615.3
32.5°	7117.8	7064.8	6742.0	6286.8	5829.2	5932.7	6653.0	8864.2	11754.7	12072.7	11725.8
35°	8620.9	8606.4	8269.2	7592.4	6792.7	6628.9	7103.4	9379.7	12879.5	13385.4	12973.5
37.5°	10017.9	10010.8	9818.1	9020.7	8047.6	7599.6	7826.0	10054.1	14083.9	14816.2	14329.6
40°	11294.6	11316.3	11123.6	10410.6	9430.2	8844.9	8808.7	10887.6	15423.2	16374.7	15796.6
42.5°	12397.8	12421.9	12226.8	11699.2	10796.0	10222.7	10015.6	11908.9	16731.2	18048.7	17364.6
45°	13147.0	13296.3	13267.4	12845.8	12197.9	11602.9	11465.6	13190.3	18222.1	19824.0	19021.8
47.5°	13358.9	13496.2	13713.0	13770.8	13375.7	12790.5	12954.3	14734.3	19730.0	21601.7	20688.7
50°	12836.2	12963.9	13414.3	14014.1	14288.7	14108.0	14401.9	16389.1	21274.1	23374.5	22324.3
52.5°	11805.2	11935.3	12503.8	13452.8	14572.9	15141.4	15854.4	18019.8	22769.9	25053.4	23873.1
55°	10314.3	10451.5	11181.4	12255.7	14030.9	15567.7	17065.9	19648.1	24140.5	26563.7	25270.1
57.5°	8286.1	8387.3	9146.0	10649.0	12667.6	15143.8	17959.6	21425.8	25431.6	28047.5	26655.2
60°	5400.4	5489.5	6371.1	8047.6	10408.2	13727.4	18137.9	23408.2	27146.6	29976.8	28522.0
62.5°	3591.4	3651.7	4174.3	5405.2	7329.8	11008.0	17094.8	24990.7	29661.3	33334.6	31723.2
65°	2464.1	2524.4	3047.0	3904.5	4735.6	7281.6	14096.0	24781.2	31940.0	36001.2	34095.8
67.5°	1758.4	1808.9	2252.1	3061.5	3427.6	4229.8	9555.5	22102.7	31612.4	36102.3	34223.5
70°	1259.7	1288.6	1654.8	2384.7	2724.2	2541.2	5313.7	16904.6	27678.9	33337.1	31617.3
72.5°	881.6	891.2	1148.9	1816.2	2194.3	1854.7	2529.2	11270.5	20934.4	26166.2	24511.4
75°	597.4	609.4	773.2	1332.0	1760.7	1416.3	1339.3	6043.5	12289.4	14483.8	12983.2
77.5°	366.1	370.9	498.6	910.5	1317.5	1079.1	862.3	2560.4	4754.9	4668.2	3979.3
80°	207.2	207.2	318.0	566.0	898.4	696.1	604.5	1088.8	1505.4	1322.4	1165.8
82.5°	115.6	118.0	231.2	351.7	594.9	411.8	332.4	503.4	650.4	575.6	501.0
85°	48.2	53.0	142.1	166.2	284.2	204.7	134.9	212.0	240.9	214.3	156.5
87.5°	4.8	7.2	43.4	31.3	33.7	40.9	19.3	40.9	33.7	33.7	24.1
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: P969434

CATALOG NUMBER: NAV-SB5D-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5	5542.5
2.5°	5578.7	5542.5	5451.0	5345.0	5205.3	5137.8	5046.3	4983.7	4930.7	4935.5	4887.3
5°	5687.0	5595.5	5390.8	5135.5	4817.5	4591.1	4350.2	4183.9	4049.1	4020.2	3955.2
7.5°	5836.3	5691.8	5333.0	4872.8	4335.8	3928.6	3565.0	3331.2	3165.1	3112.1	3059.1
10°	6029.0	5819.5	5258.2	4542.9	3769.6	3251.8	2861.6	2678.5	2565.3	2526.7	2497.8
12.5°	6253.1	5966.4	5159.5	4140.6	3186.7	2688.2	2440.0	2348.5	2312.4	2300.3	2293.1
15°	6534.9	6149.5	5010.2	3663.7	2693.0	2343.7	2237.7	2225.7	2230.5	2225.7	2223.2
17.5°	6869.8	6349.5	4766.9	3172.3	2360.6	2167.9	2129.3	2139.0	2151.0	2148.6	2143.8
20°	7235.9	6547.0	4456.2	2736.3	2134.2	2042.6	2020.9	2030.5	2040.2	2035.3	2033.0
22.5°	7652.5	6759.0	4111.7	2396.7	1982.4	1927.0	1902.9	1905.3	1905.3	1895.6	1890.8
25°	8151.2	6992.6	3750.4	2155.8	1866.7	1823.4	1794.5	1784.8	1770.4	1741.5	1736.7
27.5°	8746.1	7240.7	3403.5	1987.2	1775.2	1734.3	1700.6	1676.5	1640.3	1592.1	1587.3
30°	9415.8	7541.7	3109.6	1881.2	1702.9	1662.0	1623.5	1587.3	1534.3	1474.2	1469.3
32.5°	10203.5	7864.5	2895.3	1811.4	1637.9	1594.6	1548.8	1505.4	1447.6	1387.4	1389.8
35°	11142.9	8254.7	2770.1	1763.2	1587.3	1529.5	1479.0	1430.8	1387.4	1334.4	1329.6
37.5°	12161.7	8669.0	2731.5	1739.1	1553.6	1464.5	1406.7	1373.0	1368.2	1336.8	1334.4
40°	13277.0	9160.4	2760.4	1724.7	1517.5	1401.9	1339.3	1332.0	1344.1	1288.6	1291.1
42.5°	14457.3	9743.3	2808.6	1707.8	1466.9	1339.3	1279.0	1279.0	1269.4	1192.3	1192.3
45°	15734.0	10415.4	2856.8	1666.9	1406.7	1276.6	1230.8	1214.0	1173.0	1098.4	1095.9
47.5°	17020.2	11099.5	2892.9	1592.1	1334.4	1223.6	1182.6	1144.1	1083.9	1016.5	1014.0
50°	18241.4	11713.7	2854.3	1481.3	1252.6	1173.0	1129.7	1076.7	1011.7	965.9	958.7
52.5°	19332.6	12246.1	2690.5	1351.3	1165.8	1120.0	1081.5	1026.1	973.1	925.0	920.1
55°	20281.7	12677.2	2401.5	1228.5	1088.8	1074.3	1035.8	965.9	893.6	852.7	847.9
57.5°	21192.2	13004.8	2040.2	1127.3	1018.8	1023.7	965.9	903.2	835.8	792.4	787.6
60°	22403.7	13443.2	1674.0	1033.3	944.2	958.7	896.1	850.2	766.0	710.5	703.4
62.5°	24340.4	14124.9	1329.6	917.7	857.5	862.3	835.8	780.4	679.3	614.2	609.4
65°	25877.1	13874.4	1047.8	792.4	758.7	766.0	766.0	705.7	597.4	522.6	515.5
67.5°	25703.7	11880.0	835.8	669.6	664.8	669.6	686.4	635.9	529.9	469.7	460.0
70°	23678.0	9449.5	669.6	556.4	578.1	566.0	614.2	580.5	476.9	416.7	409.5
72.5°	19320.5	6807.1	510.7	460.0	443.2	462.5	554.0	522.6	397.4	329.9	322.8
75°	11289.8	3632.4	380.6	363.7	320.3	385.4	491.4	445.6	303.5	243.2	236.1
77.5°	3675.8	1267.0	279.4	267.3	238.4	310.7	419.1	375.8	248.0	192.7	185.4
80°	985.1	382.9	190.2	175.8	154.2	231.2	332.4	298.7	178.2	125.3	122.8
82.5°	395.0	161.3	110.8	98.7	84.3	159.0	262.5	240.9	132.4	79.4	79.4
85°	127.6	53.0	40.9	31.3	38.5	98.7	156.5	163.8	93.9	40.9	31.3
87.5°	16.8	7.2	7.2	9.6	7.2	16.8	48.2	45.7	26.4	4.8	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)