

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: P965210

Luminaire Tested: **NAV-SB3D-827-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965210
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-827-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26596.7 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

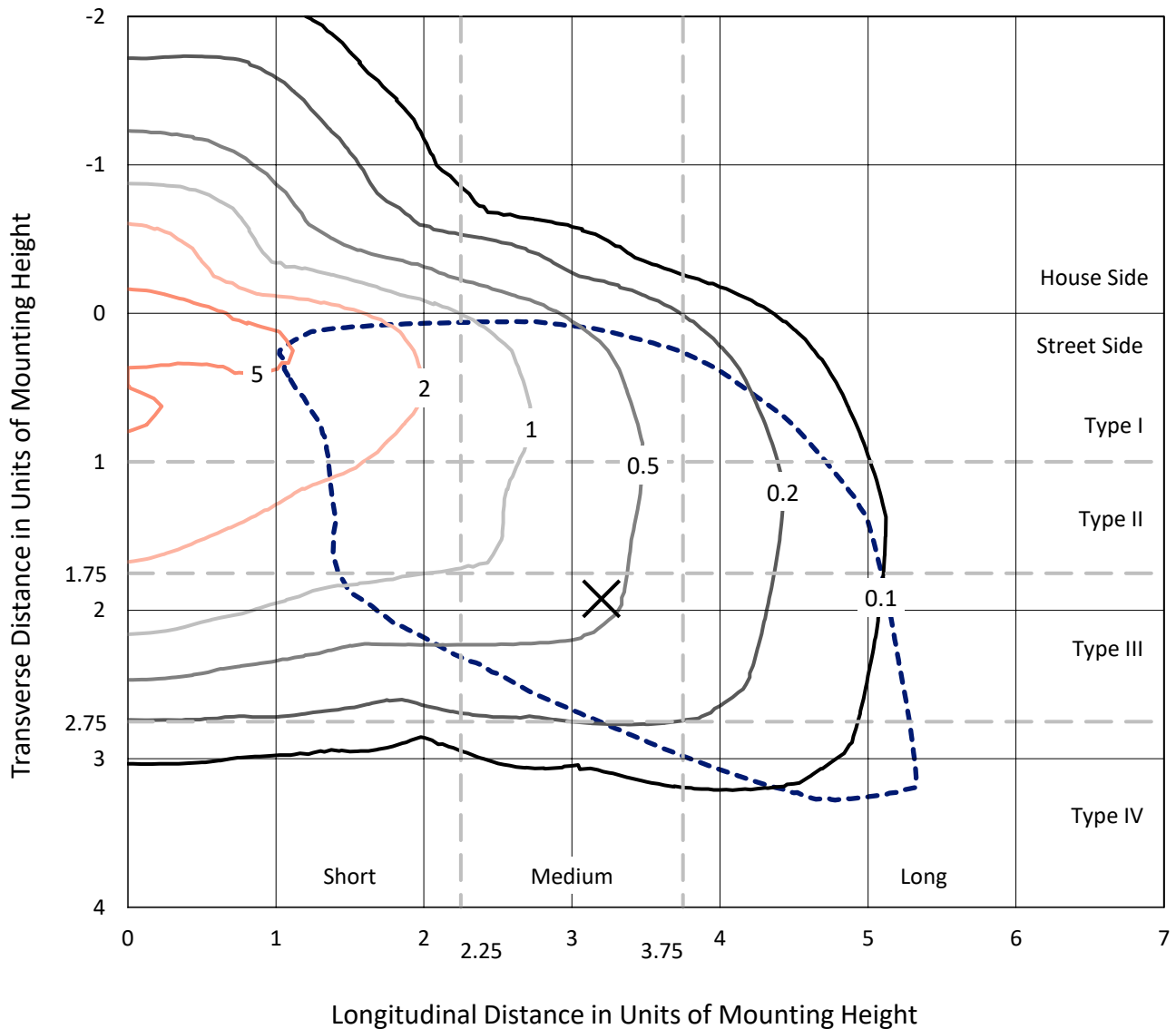
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P965210
CATALOG NUMBER: NAV-SB3D-827-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

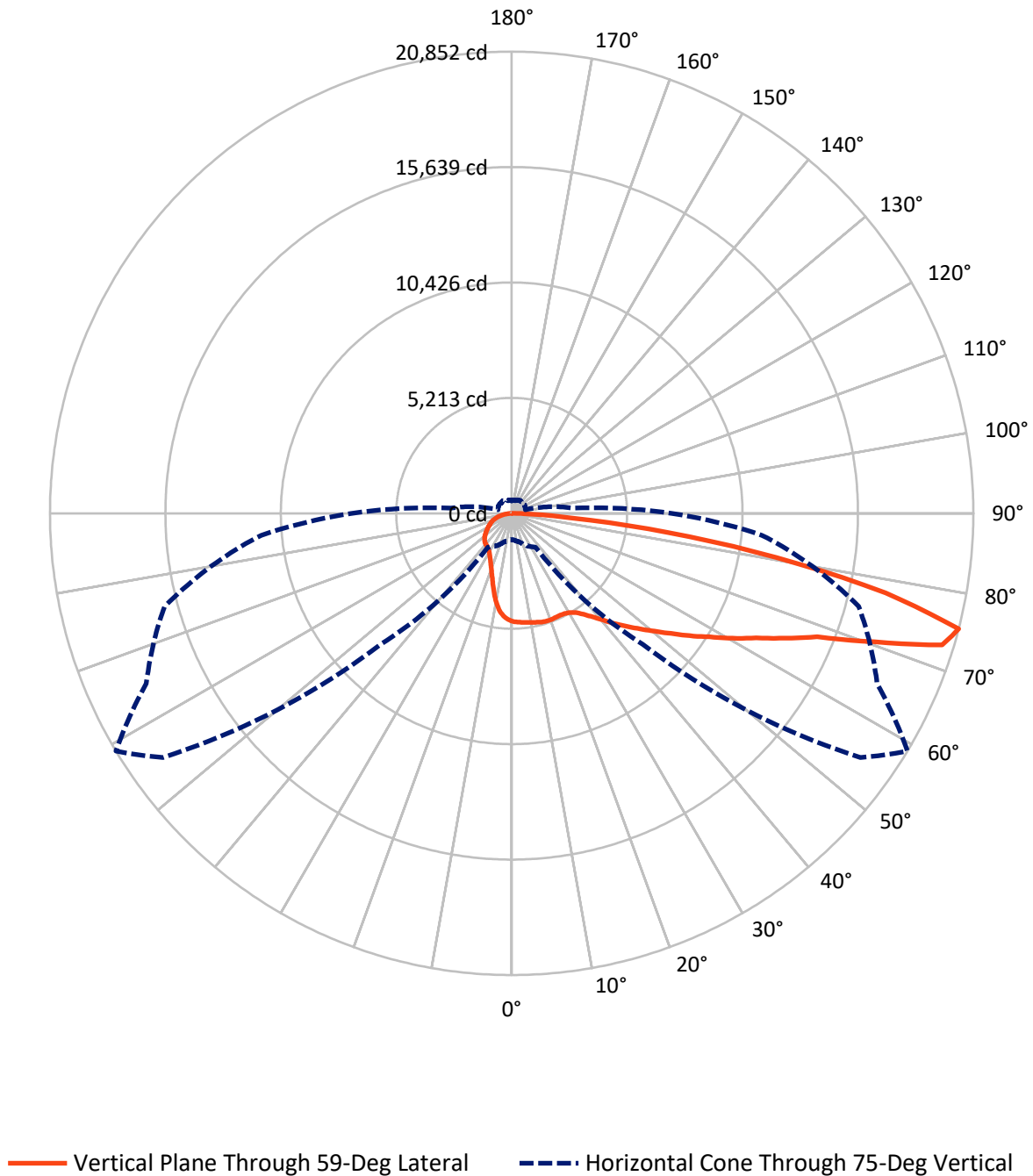
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
Type IV - Medium - N/A

REPORT NUMBER: P965210
CATALOG NUMBER: NAV-SB3D-827-U-SL3

Luminous Intensity Polar Plot



REPORT NUMBER: P965210

CATALOG NUMBER: NAV-SB3D-827-U-SL3

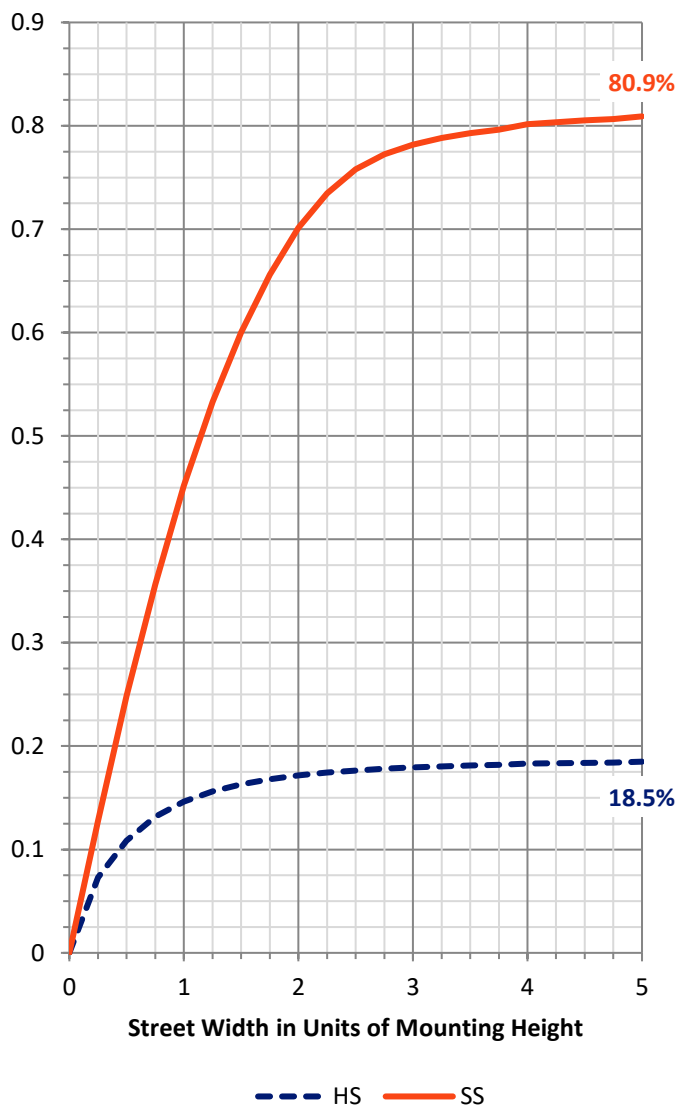
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4988.4	0.0	4988.4
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	21608.3	0.0	21608.3
	% Fixture	81.2	0.0	81.2
Total	Lumens	26596.7	0.0	26596.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	437.7	1.6
10°-20°	1118.9	4.2
20°-30°	1699.5	6.4
30°-40°	2526.2	9.5
40°-50°	3756.9	14.1
50°-60°	5099.6	19.2
60°-70°	6225.7	23.4
70°-80°	4885.9	18.4
80°-90°	846.4	3.2
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°	26596.7	100.0
0°-180°	26596.7	100.0

Coefficient of Utilization



REPORT NUMBER: P965210

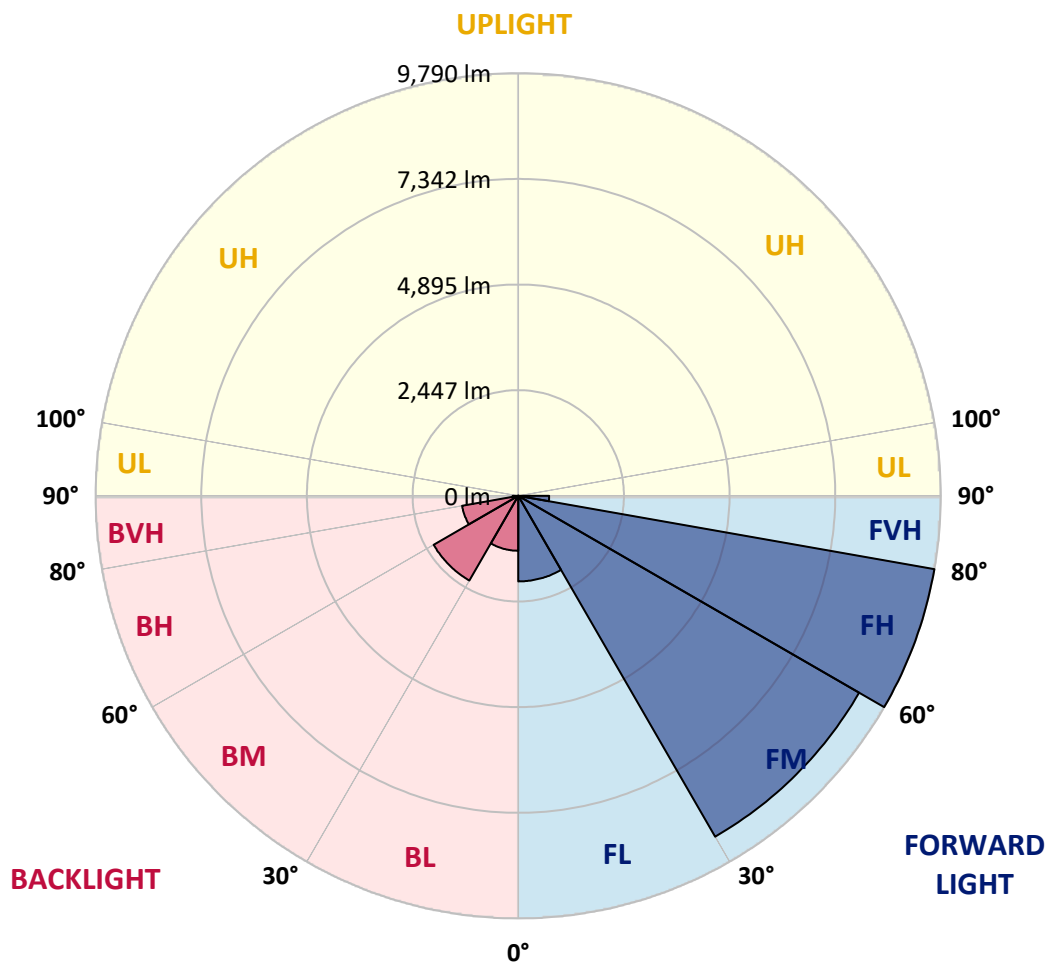
CATALOG NUMBER: NAV-SB3D-827-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1983.1	7.5			
FM	(30°-60°)	9118.5	34.3			
FH	(60°-80°)	9790.0	36.8			G4/12000
FVH	(80°-90°)	716.8	2.7			G4/750
BL	(0°-30°)	1273.0	4.8	B3/2500		
BM	(30°-60°)	2264.2	8.5	B2/2500		
BH	(60°-80°)	1321.6	5.0	B3/2500		G3/2500
BVH	(80°-90°)	129.6	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium



REPORT NUMBER: P965210

CATALOG NUMBER: NAV-SB3D-827-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8
2.5°	4923.3	4906.1	4923.3	4916.1	4913.2	4907.5	4908.9	4919.0	4913.2	4920.4	4896.1
5°	4890.4	4880.3	4897.6	4893.2	4911.8	4914.7	4933.2	4944.7	4951.9	4953.3	4934.7
7.5°	4836.0	4826.0	4850.3	4870.3	4910.4	4921.8	4960.5	4979.0	4989.1	5006.2	4979.0
10°	4637.1	4632.8	4692.9	4768.7	4863.2	4921.8	4980.5	5011.9	5027.7	5073.4	5042.0
12.5°	4285.1	4290.9	4369.6	4515.5	4704.3	4893.2	5003.3	5049.2	5073.4	5130.7	5116.4
15°	3948.9	3947.5	4033.3	4189.3	4453.9	4767.3	5014.8	5093.5	5135.0	5219.4	5208.0
17.5°	3754.4	3748.6	3808.7	3927.5	4173.5	4574.2	4986.2	5117.8	5206.6	5312.5	5302.4
20°	3718.6	3707.1	3738.6	3797.2	3971.8	4362.4	4911.8	5117.8	5263.8	5401.1	5395.4
22.5°	3848.8	3830.1	3817.3	3810.1	3887.4	4187.8	4827.4	5100.7	5348.2	5528.4	5518.5
25°	4110.6	4082.0	4016.2	3951.8	3928.9	4109.1	4753.0	5096.4	5474.1	5700.1	5662.9
27.5°	4534.1	4498.3	4365.3	4210.7	4071.9	4149.2	4720.1	5122.1	5612.9	5881.9	5807.4
30°	5059.2	5020.6	4853.2	4615.7	4366.7	4298.0	4761.5	5198.0	5790.3	6123.7	5977.7
32.5°	5529.9	5486.9	5343.9	5102.1	4765.8	4555.5	4893.2	5342.5	6069.3	6459.9	6233.8
35°	5947.7	5897.6	5768.8	5545.7	5255.2	4917.5	5130.7	5598.5	6465.6	7006.5	6581.5
37.5°	6356.8	6298.2	6158.0	5921.9	5718.8	5399.7	5458.3	5927.7	6992.1	7670.3	7042.3
40°	6814.7	6730.4	6560.0	6326.8	6129.4	5964.9	5889.0	6331.1	7527.3	8411.5	7617.4
42.5°	7258.2	7178.2	6975.0	6776.1	6528.5	6481.4	6388.3	6803.2	8112.5	9225.5	8201.1
45°	7736.2	7640.2	7394.1	7142.4	6986.4	6824.8	6871.9	7275.4	8686.2	10055.5	8813.5
47.5°	8184.0	8076.7	7786.2	7505.8	7420.0	7113.7	7315.5	7794.8	9282.8	10896.7	9420.2
50°	8425.8	8319.9	8078.1	7824.8	7757.6	7470.0	7796.3	8365.6	9908.1	11735.1	10002.5
52.5°	8627.5	8513.0	8196.8	8056.6	8036.6	7857.8	8388.6	9018.1	10533.3	12476.3	10564.8
55°	8842.2	8714.8	8311.3	8185.4	8277.0	8292.7	9091.0	9757.8	11194.3	13198.8	11095.5
57.5°	9089.6	8928.0	8421.5	8294.1	8511.6	8802.1	9898.0	10524.7	11843.9	13868.4	11567.7
60°	9322.9	9159.7	8633.3	8467.2	8764.9	9393.0	10823.7	11453.2	12579.3	14465.0	12014.1
62.5°	9368.6	9234.1	8802.1	8800.6	9108.3	10082.6	11919.7	12390.4	13221.7	15054.5	12414.7
65°	8576.0	8491.6	8235.5	8787.7	9600.5	11075.5	13140.1	13589.3	14038.6	15569.5	12766.7
67.5°	6527.1	6538.6	6520.0	7585.9	9202.7	12502.0	14907.1	14872.7	15047.3	16147.6	13171.6
70°	2984.6	3051.8	3489.6	5236.6	7372.7	12666.5	17828.7	17383.8	16313.6	16895.9	13522.1
72.5°	1612.4	1664.0	1842.8	2536.8	4432.5	11261.6	20012.1	20328.3	17997.6	17399.5	13137.2
75°	1183.3	1211.9	1336.3	1612.4	1861.4	8369.9	19229.5	20852.0	18207.9	16224.8	11344.5
77.5°	885.6	898.5	1000.1	1277.7	952.8	4412.5	15365.0	17269.3	15586.8	13330.4	8380.0
80°	642.4	656.7	732.6	958.6	668.2	1613.9	10550.4	12121.4	10675.0	8497.4	4176.4
82.5°	443.5	449.3	482.2	652.4	466.5	626.7	5986.3	7108.1	5959.1	2981.7	1127.4
85°	267.5	274.7	289.0	380.6	264.7	297.6	2583.9	2672.7	1781.3	712.5	350.5
87.5°	110.2	117.4	128.7	160.2	104.4	83.0	426.4	535.2	333.3	208.9	108.8
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: P965210

CATALOG NUMBER: NAV-SB3D-827-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8	4881.8
2.5°	4888.9	4878.9	4851.7	4814.5	4780.2	4737.2	4718.7	4702.9	4688.7	4661.4	4648.6
5°	4919.0	4891.8	4818.8	4724.4	4617.1	4499.8	4385.3	4306.6	4239.4	4189.3	4147.8
7.5°	4964.8	4913.2	4780.2	4587.0	4341.0	4089.1	3861.6	3699.9	3578.4	3534.0	3456.7
10°	5011.9	4950.4	4718.7	4378.2	3953.2	3565.5	3263.6	3097.7	3000.3	2968.8	2920.2
12.5°	5067.8	4977.6	4622.8	4087.7	3519.6	3094.8	2831.5	2734.2	2684.1	2666.9	2671.3
15°	5149.3	5000.6	4478.3	3724.2	3106.2	2751.4	2581.1	2513.8	2488.1	2486.6	2492.4
17.5°	5210.8	5004.8	4253.6	3335.1	2788.5	2543.9	2403.7	2377.9	2395.1	2420.8	2430.9
20°	5279.5	4966.2	3959.0	2980.3	2565.4	2362.2	2303.5	2320.7	2362.2	2399.4	2412.2
22.5°	5328.2	4896.1	3602.7	2704.2	2372.2	2257.8	2254.9	2290.7	2313.5	2332.2	2342.1
25°	5371.1	4777.3	3225.0	2472.4	2213.4	2194.8	2226.3	2214.8	2199.0	2214.8	2224.9
27.5°	5402.6	4589.8	2887.3	2269.1	2101.8	2151.9	2133.2	2107.5	2106.1	2114.7	2128.9
30°	5392.5	4339.5	2609.8	2076.0	2023.1	2071.7	2027.3	2023.1	2018.8	2023.1	2038.8
32.5°	5392.5	4054.8	2396.6	1943.0	1973.0	1954.5	1950.2	1940.1	1922.9	1921.5	1940.1
35°	5422.6	3770.1	2213.4	1871.4	1931.5	1887.1	1890.0	1865.7	1829.9	1812.8	1829.9
37.5°	5484.2	3541.2	2031.7	1837.1	1858.5	1857.1	1845.7	1804.2	1741.3	1686.8	1705.5
40°	5632.9	3473.9	1907.2	1821.3	1824.2	1841.4	1811.4	1731.2	1588.1	1499.5	1510.8
42.5°	5866.2	3586.9	1880.1	1782.8	1801.3	1818.5	1759.8	1573.9	1472.2	1419.3	1419.3
45°	6162.3	3784.4	1938.7	1726.9	1747.0	1777.0	1602.5	1513.7	1468.0	1469.4	1476.5
47.5°	6537.1	3991.9	2047.4	1678.3	1668.3	1685.4	1498.0	1443.6	1380.7	1396.5	1436.5
50°	6970.7	4202.2	2150.4	1612.4	1581.0	1525.2	1430.8	1379.2	1299.1	1262.0	1271.9
52.5°	7440.0	4405.3	2192.0	1532.4	1486.6	1422.2	1385.0	1322.0	1224.8	1163.2	1161.7
55°	7884.9	4589.8	2146.1	1436.5	1392.2	1342.0	1336.3	1297.8	1193.3	1107.4	1107.4
57.5°	8305.6	4744.4	2031.7	1339.2	1296.3	1266.2	1304.8	1286.3	1154.7	1044.5	1038.7
60°	8661.9	4850.3	1865.7	1240.5	1210.4	1194.6	1253.4	1247.6	1100.2	977.2	972.9
62.5°	8945.2	4891.8	1682.5	1146.1	1138.9	1110.3	1181.8	1181.8	1031.6	911.4	907.1
65°	9166.9	4851.7	1496.6	1053.1	1067.3	1024.4	1094.5	1086.0	958.6	852.7	847.1
67.5°	9363.0	4720.1	1290.6	961.4	994.4	940.0	1003.0	983.0	878.5	794.1	788.3
70°	9450.2	4413.9	1055.9	869.9	910.0	857.0	911.4	874.2	788.3	731.1	719.7
72.5°	8749.1	3668.5	831.3	774.1	808.4	765.5	812.7	769.8	691.1	665.3	643.8
75°	7238.2	2752.7	639.6	669.6	695.4	662.5	693.9	662.5	590.9	609.5	556.6
77.5°	5256.6	1858.5	489.3	559.4	570.9	553.7	580.9	545.1	480.7	476.4	455.0
80°	2614.0	1088.9	383.5	442.1	437.8	426.4	457.9	440.6	386.3	409.2	404.9
82.5°	756.9	466.5	279.0	310.5	301.9	304.7	327.7	336.2	503.6	499.4	510.8
85°	237.5	183.2	167.4	173.1	164.5	168.8	193.1	383.5	354.9	207.5	224.7
87.5°	61.5	62.9	41.5	44.4	45.8	54.3	61.5	233.2	111.6	73.0	77.3
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)