

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: P967215

Luminaire Tested: **NAV-SB4D-735-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967215
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-735-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41721.6 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 293.6
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

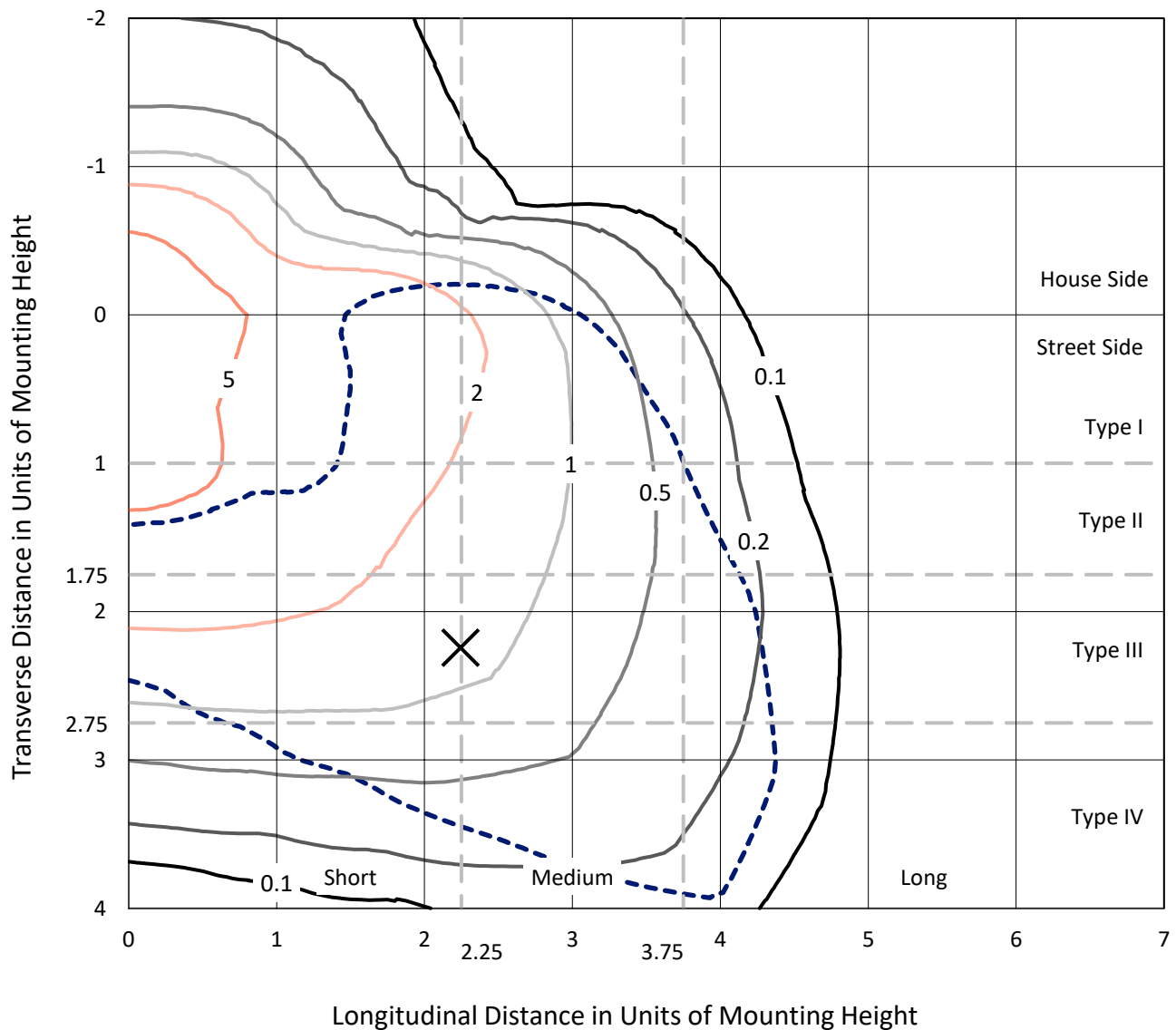


REPORT NUMBER: P967215

CATALOG NUMBER: NAV-SB4D-735-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

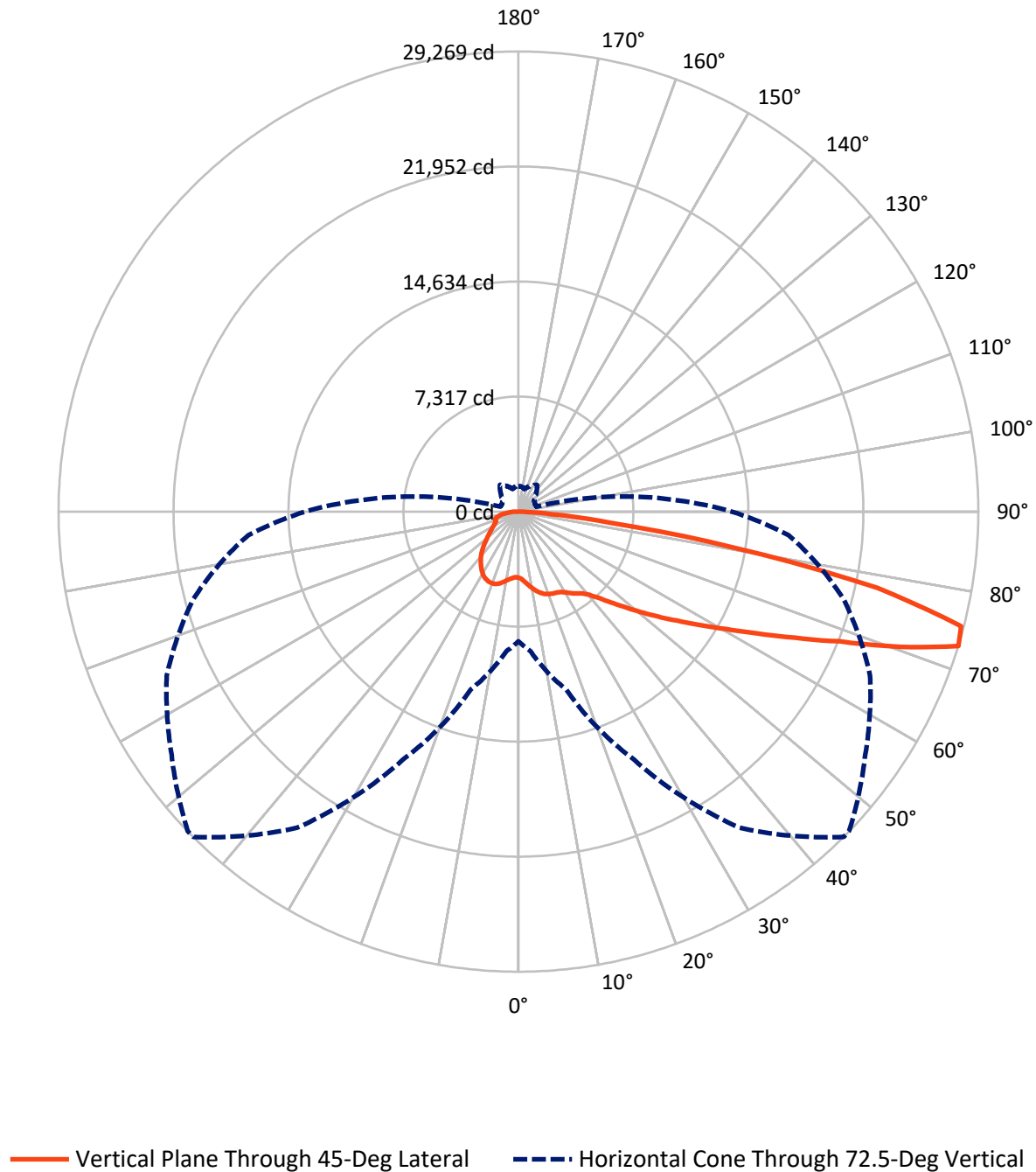
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
Type IV - Short - N/A

REPORT NUMBER: P967215
CATALOG NUMBER: NAV-SB4D-735-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P967215

CATALOG NUMBER: NAV-SB4D-735-U-T4W

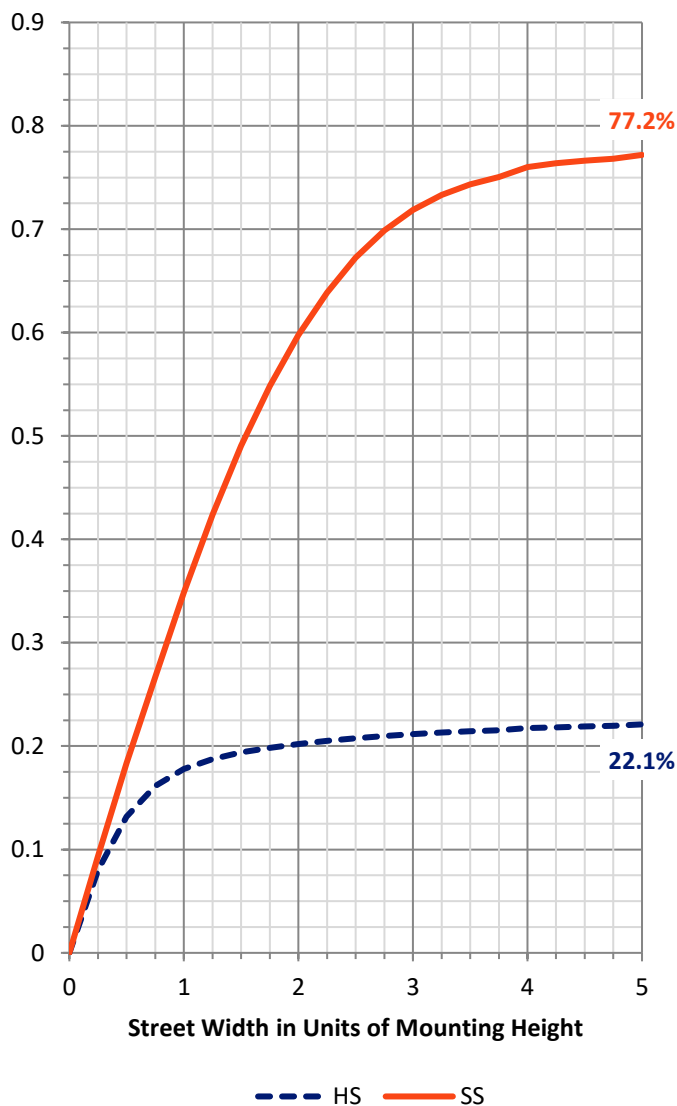
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9431.8	0.0	9431.8
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	32289.8	0.0	32289.8
	% Fixture	77.4	0.0	77.4
Total	Lumens	41721.6	0.0	41721.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	428.4	1.0
10°-20°	1428.3	3.4
20°-30°	2484.6	6.0
30°-40°	3561.8	8.5
40°-50°	5015.2	12.0
50°-60°	7681.8	18.4
60°-70°	11128.2	26.7
70°-80°	8886.6	21.3
80°-90°	1106.8	2.7
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°	41721.6	100.0
0°-180°	41721.6	100.0

Coefficient of Utilization



REPORT NUMBER: P967215

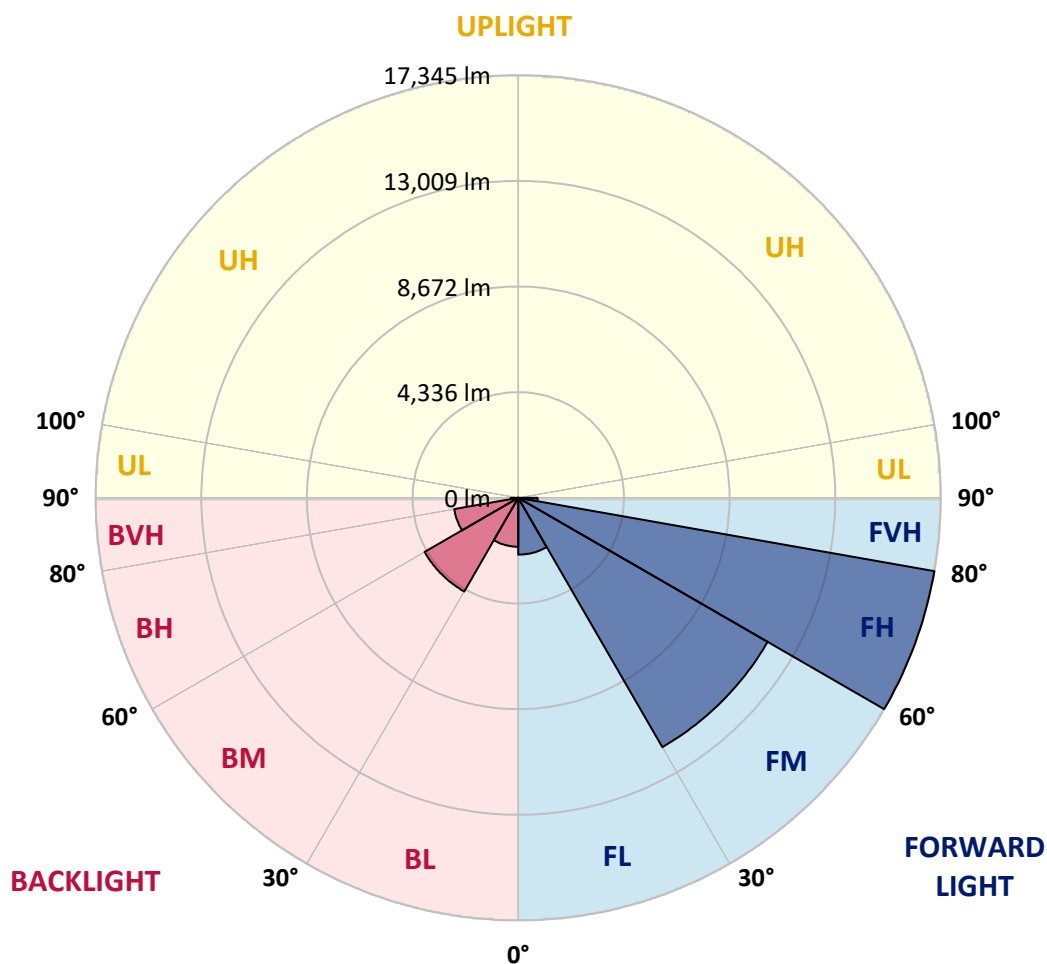
CATALOG NUMBER: NAV-SB4D-735-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2333.1	5.6			
FM	(30°-60°)	11817.7	28.3			
FH	(60°-80°)	17344.9	41.6			G5
FVH	(80°-90°)	794.0	1.9			G5
BL	(0°-30°)	2008.1	4.8	B3/2500		
BM	(30°-60°)	4441.0	10.6	B3/5000		
BH	(60°-80°)	2669.9	6.4	B4/5000		G4/5000
BVH	(80°-90°)	312.8	0.7			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 IV Short



REPORT NUMBER: P967215

CATALOG NUMBER: NAV-SB4D-735-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9
2.5°	4373.8	4402.3	4375.9	4351.7	4340.8	4312.2	4310.0	4292.4	4281.4	4250.7	4241.9
5°	4679.2	4716.6	4672.7	4624.3	4580.3	4510.0	4501.2	4450.7	4393.6	4327.5	4290.2
7.5°	5024.3	5057.2	5006.7	4934.1	4857.3	4740.8	4738.6	4646.2	4556.1	4444.1	4380.3
10°	5325.4	5369.4	5301.2	5202.3	5105.6	4973.7	4958.3	4852.9	4738.6	4593.5	4496.8
12.5°	5591.4	5622.1	5556.2	5435.3	5323.2	5191.3	5171.5	5055.1	4927.6	4762.8	4639.7
15°	5802.3	5841.9	5754.0	5624.3	5505.6	5375.9	5358.4	5252.9	5125.4	4951.8	4793.5
17.5°	5940.8	5973.8	5883.7	5738.6	5624.3	5516.7	5503.4	5415.5	5303.5	5127.6	4958.3
20°	5993.6	6028.7	5934.2	5786.9	5681.5	5597.9	5591.4	5527.6	5450.6	5290.2	5118.8
22.5°	6046.3	6079.3	5956.2	5802.3	5710.1	5657.3	5655.1	5613.3	5582.6	5450.6	5283.7
25°	6259.5	6268.3	6103.5	5881.4	5749.6	5703.4	5701.3	5699.0	5712.2	5608.9	5461.7
27.5°	6444.1	6441.9	6301.3	6092.5	5888.0	5791.4	5789.2	5811.1	5852.9	5767.2	5646.3
30°	6714.5	6690.3	6523.2	6305.7	6118.8	5969.4	5956.2	5936.4	5969.4	5901.2	5830.9
32.5°	7288.1	7211.2	6940.8	6554.1	6310.0	6195.7	6178.2	6055.1	6068.3	6026.5	5991.3
35°	8110.1	8009.0	7648.6	7024.3	6547.4	6384.8	6376.0	6219.9	6193.6	6156.2	6169.4
37.5°	9088.2	8962.9	8543.1	7705.6	6956.3	6604.6	6591.4	6450.7	6343.0	6303.4	6378.2
40°	10070.6	9912.4	9565.1	8536.5	7558.5	6971.6	6929.8	6716.6	6593.6	6527.6	6685.9
42.5°	11024.5	10892.6	10595.8	9468.3	8301.3	7507.9	7415.6	7050.8	6958.4	6896.9	7182.6
45°	11868.5	11749.8	11532.2	10464.0	9171.7	8237.6	8147.4	7551.8	7523.3	7523.3	7936.5
47.5°	12554.2	12527.8	12297.0	11479.4	10198.0	9068.4	8912.3	8248.6	8325.5	8444.2	9006.8
50°	13314.6	13242.1	12996.0	12479.5	11404.7	10020.0	9892.6	9103.5	9391.5	9716.7	10554.1
52.5°	14013.5	14053.1	13778.4	13521.2	12767.4	11081.6	10857.4	10112.3	10734.3	11272.8	12367.3
55°	14732.2	14734.5	14657.5	14622.3	14195.9	12255.2	12009.1	11325.5	12314.6	12982.8	14481.7
57.5°	15407.0	15411.4	15525.7	15835.5	15853.2	13609.1	13330.0	12815.7	14070.7	14752.0	16662.0
60°	16009.2	16039.9	16352.0	17077.3	17310.3	15160.8	14897.0	14576.2	15886.1	16571.9	18954.3
62.5°	16211.4	16323.5	17018.0	18048.8	18749.9	17064.2	16804.8	16613.6	17793.9	18431.2	20870.8
65°	15868.5	16125.7	17468.6	18851.0	20231.2	19325.8	19068.6	18859.8	19776.4	20376.4	22444.5
67.5°	15026.7	15358.6	17442.2	19692.8	22029.1	22046.7	21807.2	21317.0	21901.7	22132.4	22956.6
70°	12809.1	13305.8	15905.8	20007.1	24092.9	25767.7	25537.0	24275.4	24022.6	22906.1	21514.9
72.5°	8253.0	8921.1	11712.4	17420.2	24552.2	29268.9	29255.7	26945.7	24693.0	21402.7	17255.4
75°	3011.0	3419.9	5441.9	10934.4	20609.3	29090.8	29176.5	26488.6	22541.2	16532.3	10749.7
77.5°	1096.8	1200.1	1775.9	4202.3	12675.0	23341.2	23519.2	21176.4	16044.3	8296.9	4259.5
80°	575.8	632.9	909.9	1630.8	5430.9	13861.9	14141.0	12584.9	7540.8	2499.0	1276.9
82.5°	318.7	345.0	509.9	885.7	2446.3	5927.6	6094.6	4971.6	2652.8	1059.3	527.5
85°	171.5	182.4	239.5	483.5	1195.7	2055.0	2101.1	1485.7	1057.2	622.0	254.9
87.5°	50.5	61.5	79.1	153.9	468.1	461.6	472.5	294.5	417.6	314.3	83.5
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: P967215

CATALOG NUMBER: NAV-SB4D-735-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9	4208.9
2.5°	4228.6	4222.1	4197.9	4186.9	4173.7	4171.5	4182.5	4184.8	4186.9	4189.1	4197.9
5°	4268.2	4246.3	4224.3	4211.1	4215.5	4217.7	4239.7	4255.1	4266.0	4274.9	4279.3
7.5°	4345.2	4327.5	4290.2	4288.0	4294.6	4314.4	4342.9	4378.1	4397.9	4413.3	4417.6
10°	4459.5	4426.5	4382.5	4389.2	4402.3	4430.9	4490.2	4518.8	4551.7	4580.3	4573.8
12.5°	4575.9	4547.4	4496.8	4501.2	4523.2	4573.8	4630.8	4666.0	4688.0	4710.0	4718.8
15°	4727.6	4677.1	4622.1	4622.1	4661.7	4716.6	4743.0	4771.6	4784.7	4808.9	4817.7
17.5°	4883.6	4817.7	4745.1	4740.8	4789.1	4815.6	4830.9	4835.3	4839.6	4866.1	4874.8
20°	5039.7	4967.2	4863.8	4855.1	4866.1	4861.7	4859.4	4855.1	4861.7	4894.6	4907.8
22.5°	5193.6	5110.0	4967.2	4927.6	4896.8	4855.1	4852.9	4850.7	4855.1	4888.0	4910.1
25°	5373.8	5272.7	5081.4	4962.7	4859.4	4802.3	4808.9	4811.1	4815.6	4841.9	4877.1
27.5°	5569.3	5457.3	5186.9	4951.8	4764.9	4725.4	4714.4	4721.0	4736.4	4778.1	4819.9
30°	5765.0	5633.1	5283.7	4907.8	4646.2	4591.3	4556.1	4571.5	4619.9	4661.7	4707.8
32.5°	5943.1	5811.1	5360.5	4811.1	4494.6	4408.9	4362.7	4382.5	4430.9	4446.2	4501.2
35°	6151.8	6002.4	5393.5	4657.3	4329.8	4197.9	4136.4	4107.8	4132.0	4116.6	4165.0
37.5°	6384.8	6228.7	5389.1	4455.1	4136.4	3984.7	3899.0	3791.3	3740.7	3688.1	3721.0
40°	6729.8	6505.7	5336.4	4211.1	3896.8	3758.4	3604.5	3422.1	3307.8	3204.5	3211.1
42.5°	7200.2	6890.3	5239.7	3943.0	3626.4	3496.8	3288.0	3074.8	2894.6	2723.1	2707.7
45°	7901.3	7393.6	5118.8	3657.2	3334.1	3206.7	2980.3	2740.7	2536.4	2316.5	2290.2
47.5°	8912.3	8070.5	5004.6	3332.0	3026.4	2910.0	2705.6	2483.6	2241.8	2028.6	2004.5
50°	10301.4	9042.0	4899.0	3015.4	2723.1	2635.3	2472.6	2246.2	2002.2	1830.9	1819.8
52.5°	12068.5	10362.9	4855.1	2710.0	2439.6	2406.7	2276.9	2066.0	1835.2	1690.1	1679.2
55°	14097.0	11943.2	4855.1	2417.7	2191.2	2202.2	2112.1	1916.5	1716.6	1586.8	1573.7
57.5°	16167.4	13543.2	4767.2	2147.3	1980.3	2026.4	1969.2	1797.8	1617.7	1483.6	1461.5
60°	18075.2	14883.9	4411.1	1901.2	1793.4	1866.0	1828.6	1681.4	1461.5	1349.5	1331.9
62.5°	19541.1	15640.0	3725.4	1705.5	1639.6	1723.1	1703.3	1527.6	1433.1	1386.8	1371.4
65°	20275.2	15516.9	2848.4	1531.9	1509.9	1639.6	1597.9	1591.2	1516.5	1463.8	1446.2
67.5°	19824.6	14457.5	2066.0	1404.5	1435.2	1562.7	1723.1	1749.5	1611.0	1507.8	1490.1
70°	17848.8	12541.0	1538.5	1283.5	1340.7	1564.9	1964.9	1830.9	1580.2	1459.4	1439.6
72.5°	13578.4	9351.9	1193.4	1156.1	1217.6	1575.8	2072.5	1793.4	1492.3	1613.2	1600.0
75°	7765.0	5134.2	958.3	1000.0	1063.7	1472.5	2017.6	1696.8	1424.2	1481.3	1481.3
77.5°	2960.5	1973.6	791.2	846.1	855.0	1285.8	1929.8	1690.1	1356.1	1323.1	1206.6
80°	1026.4	771.4	655.0	672.5	661.5	1142.9	1850.6	1470.4	1109.9	993.4	960.4
82.5°	419.8	384.6	518.6	496.7	470.4	888.0	1494.6	1202.2	907.7	802.3	793.5
85°	182.4	244.0	342.9	301.1	272.5	615.4	1197.8	1017.6	767.0	661.5	659.4
87.5°	37.4	92.4	145.0	136.2	140.6	411.0	850.5	723.1	542.8	406.6	318.7
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)