

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: P969509

Luminaire Tested: **NAV-SB5D-835-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969509
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-SB5D-835-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 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: 48775.6 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

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

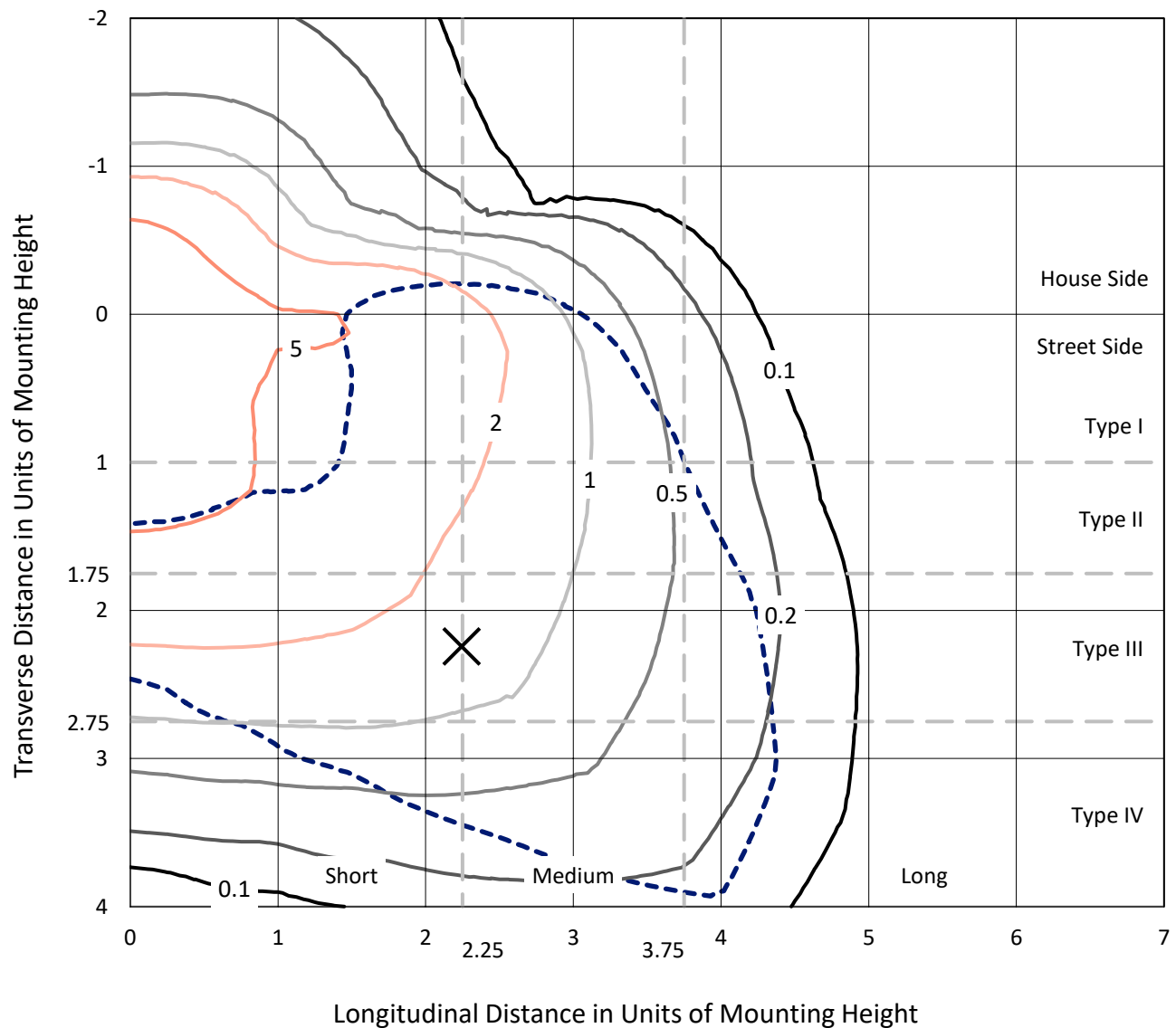


REPORT NUMBER: P969509

CATALOG NUMBER: NAV-SB5D-835-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

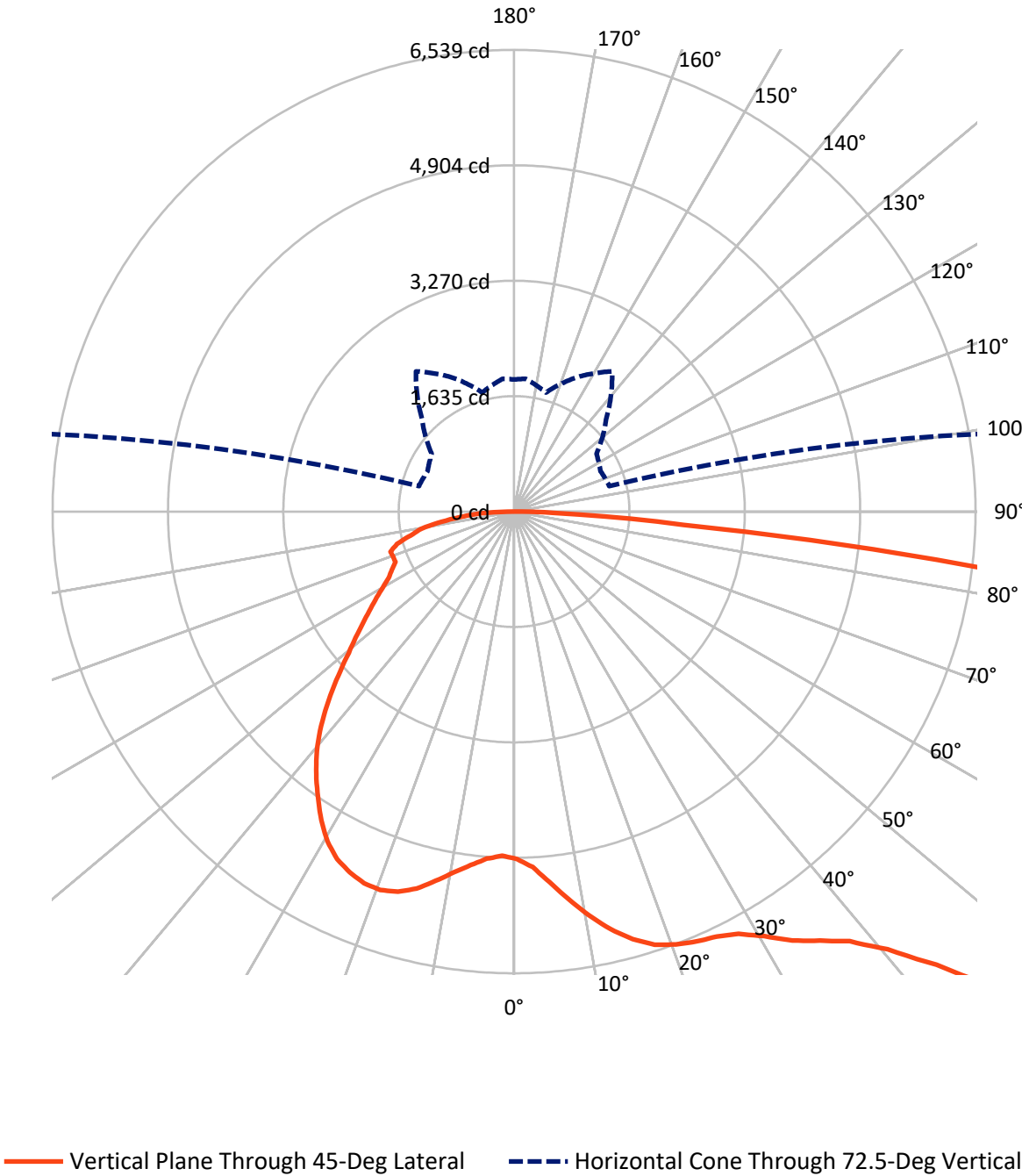
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
Type IV - Short - N/A

REPORT NUMBER: P969509
CATALOG NUMBER: NAV-SB5D-835-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P969509

CATALOG NUMBER: NAV-SB5D-835-U-T4W

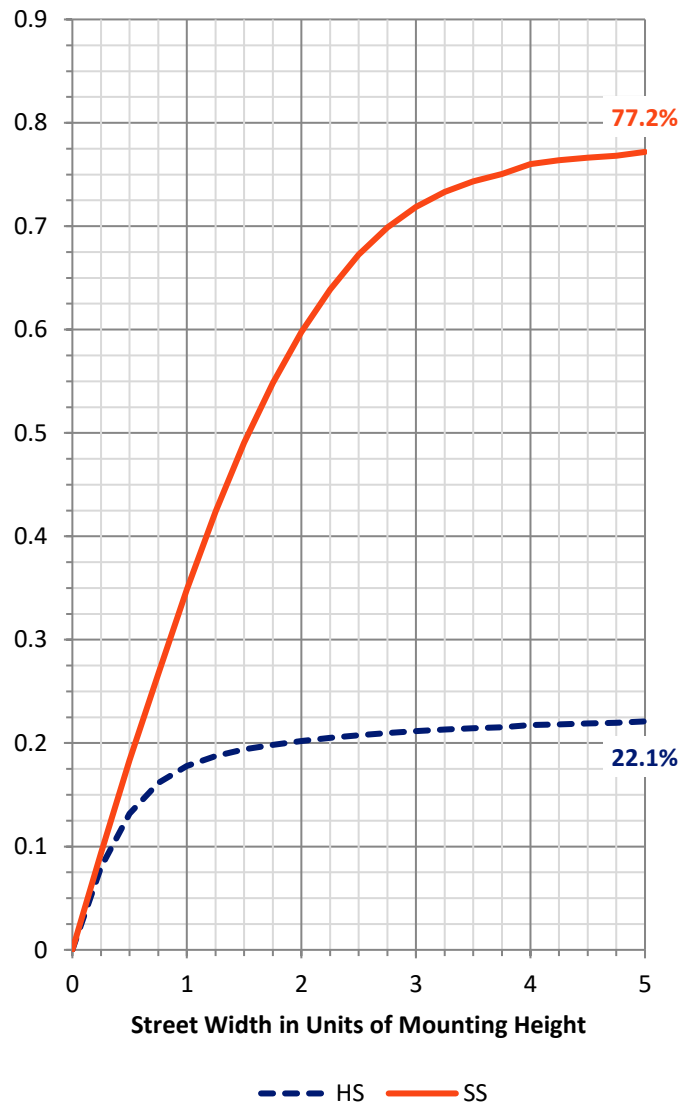
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11026.5	0.0	11026.5
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	37749.1	0.0	37749.1
	% Fixture	77.4	0.0	77.4
Total	Lumens	48775.6	0.0	48775.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.8	1.0
10°-20°	1669.8	3.4
20°-30°	2904.7	6.0
30°-40°	4164.0	8.5
40°-50°	5863.1	12.0
50°-60°	8980.6	18.4
60°-70°	13009.7	26.7
70°-80°	10389.1	21.3
80°-90°	1293.9	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°	48775.6	100.0
0°-180°	48775.6	100.0

Coefficient of Utilization



REPORT NUMBER: P969509

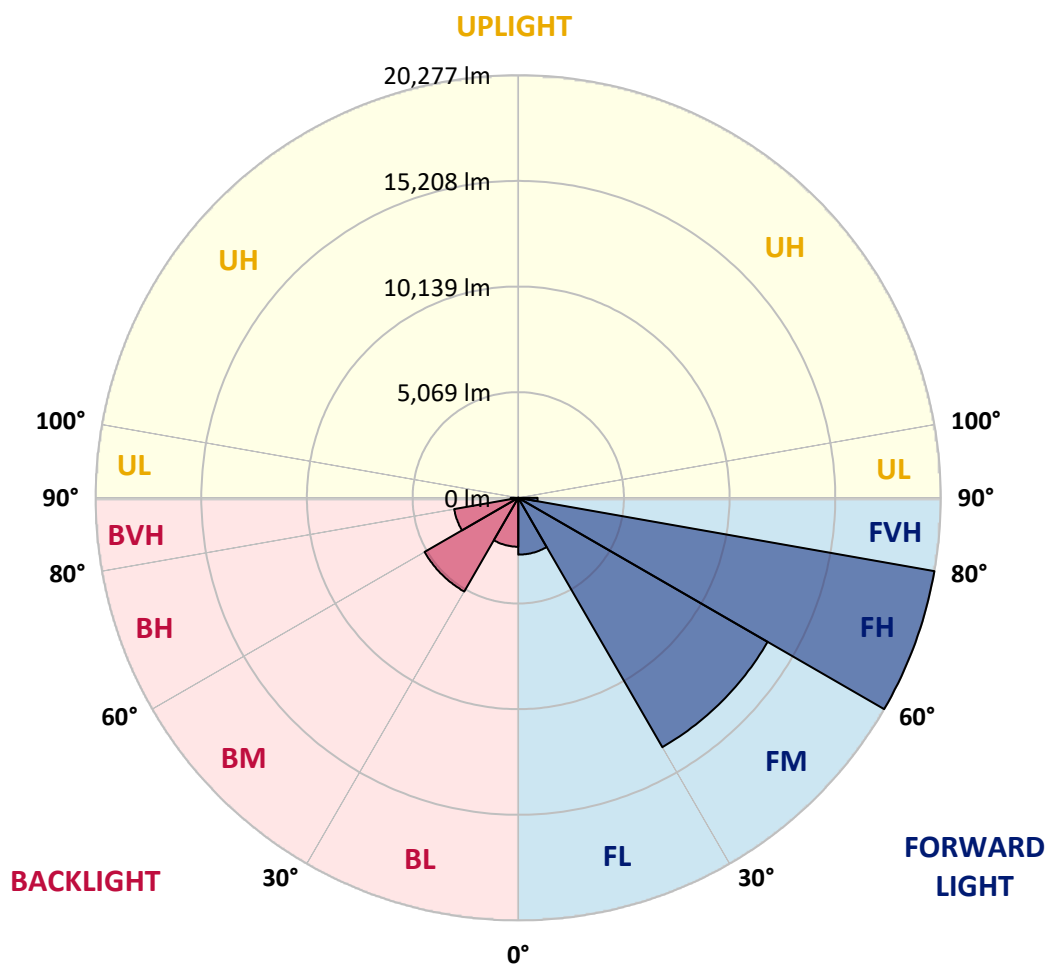
CATALOG NUMBER: NAV-SB5D-835-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2727.6	5.6			
FM	(30°-60°)	13815.8	28.3			
FH	(60°-80°)	20277.5	41.6			G5
FVH	(80°-90°)	928.3	1.9			G5
BL	(0°-30°)	2347.6	4.8	B3/2500		
BM	(30°-60°)	5191.9	10.6	B4/8500		
BH	(60°-80°)	3121.3	6.4	B4/5000		G4/5000
BVH	(80°-90°)	365.6	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: P969509

CATALOG NUMBER: NAV-SB5D-835-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5
2.5°	5113.2	5146.6	5115.8	5087.5	5074.7	5041.3	5038.7	5018.2	5005.3	4969.3	4959.1
5°	5470.4	5514.1	5462.6	5406.2	5354.7	5272.5	5262.2	5203.1	5136.4	5059.3	5015.6
7.5°	5873.8	5912.3	5853.3	5768.4	5678.5	5542.3	5539.7	5431.9	5326.5	5195.4	5120.9
10°	6225.8	6277.2	6197.6	6081.9	5968.9	5814.7	5796.7	5673.4	5539.7	5370.2	5257.1
12.5°	6536.7	6572.7	6495.6	6354.3	6223.2	6069.0	6046.0	5909.7	5760.7	5568.0	5424.1
15°	6783.3	6829.6	6726.9	6575.3	6436.5	6284.9	6264.4	6141.0	5991.9	5789.0	5604.0
17.5°	6945.3	6983.8	6878.5	6708.8	6575.3	6449.3	6433.9	6331.1	6200.1	5994.5	5796.7
20°	7006.9	7048.0	6937.5	6765.4	6642.0	6544.4	6536.7	6462.2	6372.2	6184.6	5984.3
22.5°	7068.6	7107.1	6963.2	6783.3	6675.4	6613.8	6611.2	6562.4	6526.4	6372.2	6177.0
25°	7317.8	7328.1	7135.4	6875.9	6721.7	6667.7	6665.2	6662.6	6678.0	6557.2	6385.1
27.5°	7533.6	7531.1	7366.7	7122.5	6883.6	6770.5	6768.0	6793.7	6842.5	6742.2	6600.9
30°	7849.7	7821.5	7626.2	7371.8	7153.4	6978.6	6963.2	6940.1	6978.6	6899.0	6816.8
32.5°	8520.3	8430.4	8114.3	7662.1	7376.9	7243.3	7222.8	7078.9	7094.2	7045.4	7004.3
35°	9481.4	9363.1	8941.7	8212.0	7654.4	7464.3	7454.0	7271.6	7240.7	7197.0	7212.5
37.5°	10624.7	10478.3	9987.5	9008.5	8132.4	7721.2	7705.8	7541.3	7415.5	7369.2	7456.6
40°	11773.3	11588.2	11182.2	9979.8	8836.3	8150.3	8101.5	7852.2	7708.4	7631.3	7816.3
42.5°	12888.5	12734.2	12387.3	11069.2	9704.8	8777.3	8669.3	8242.8	8134.9	8063.0	8397.0
45°	13875.1	13736.3	13481.9	12233.2	10722.3	9630.3	9525.0	8828.6	8795.2	8795.2	9278.3
47.5°	14676.8	14645.9	14376.1	13420.3	11922.3	10601.6	10419.1	9643.2	9733.1	9871.9	10529.6
50°	15565.8	15481.0	15193.2	14589.3	13332.9	11714.2	11565.2	10642.7	10979.3	11359.6	12338.5
52.5°	16382.9	16429.1	16108.0	15807.3	14925.9	12955.2	12693.1	11822.0	12549.3	13178.7	14458.3
55°	17223.1	17225.6	17135.7	17094.6	16596.2	14327.3	14039.5	13240.4	14396.6	15177.8	16930.1
57.5°	18011.9	18017.0	18150.7	18512.9	18533.5	15910.0	15583.8	14982.5	16449.7	17246.2	19479.1
60°	18716.0	18751.9	19116.8	19964.7	20237.1	17724.1	17415.8	17040.6	18572.1	19373.7	22159.0
62.5°	18952.4	19083.3	19895.4	21100.4	21920.0	19949.3	19646.1	19422.5	20802.4	21547.4	24399.6
65°	18551.5	18852.1	20422.1	22038.2	23651.9	22593.3	22292.6	22048.6	23120.0	23821.4	26239.3
67.5°	17567.4	17955.3	20391.2	23022.3	25753.6	25774.2	25494.2	24921.1	25604.7	25874.5	26838.0
70°	14974.8	15555.5	18595.1	23389.8	28166.4	30124.3	29854.6	28379.7	28084.2	26778.9	25152.5
72.5°	9648.3	10429.5	13692.7	20365.5	28703.4	34217.5	34202.1	31501.5	28867.9	25021.4	20172.8
75°	3520.2	3998.1	6362.0	12783.1	24093.9	34009.4	34109.5	30967.1	26352.3	19327.5	12567.2
77.5°	1282.2	1402.9	2076.1	4912.8	14818.1	27287.7	27495.8	24756.7	18757.1	9699.7	4979.7
80°	673.2	740.0	1063.7	1906.5	6349.2	16205.6	16531.9	14712.7	8815.8	2921.5	1492.8
82.5°	372.6	403.4	596.1	1035.5	2859.9	6929.8	7125.1	5812.2	3101.3	1238.5	616.6
85°	200.4	213.3	280.0	565.3	1397.8	2402.4	2456.4	1737.0	1235.9	727.1	298.1
87.5°	59.1	72.0	92.5	179.9	547.2	539.6	552.5	344.3	488.2	367.5	97.7
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: P969509

CATALOG NUMBER: NAV-SB5D-835-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5	4920.5
2.5°	4943.7	4935.9	4907.7	4894.8	4879.4	4876.8	4889.7	4892.2	4894.8	4897.3	4907.7
5°	4989.9	4964.2	4938.4	4923.1	4928.2	4930.8	4956.5	4974.4	4987.3	4997.6	5002.7
7.5°	5079.8	5059.3	5015.6	5013.0	5020.8	5043.8	5077.2	5118.3	5141.5	5159.4	5164.6
10°	5213.5	5174.9	5123.5	5131.3	5146.6	5180.0	5249.4	5282.8	5321.4	5354.7	5347.0
12.5°	5349.6	5316.2	5257.1	5262.2	5288.0	5347.0	5413.8	5454.9	5480.7	5506.3	5516.7
15°	5526.9	5467.8	5403.6	5403.6	5449.8	5514.1	5544.9	5578.3	5593.7	5622.0	5632.3
17.5°	5709.4	5632.3	5547.5	5542.3	5598.9	5629.7	5647.6	5652.8	5657.9	5688.7	5699.1
20°	5891.8	5806.9	5686.2	5675.9	5688.7	5683.6	5681.1	5675.9	5683.6	5722.2	5737.6
22.5°	6071.6	5974.0	5806.9	5760.7	5724.7	5675.9	5673.4	5670.8	5675.9	5714.5	5740.2
25°	6282.3	6164.1	5940.6	5801.8	5681.1	5614.2	5622.0	5624.6	5629.7	5660.6	5701.7
27.5°	6511.0	6380.0	6063.9	5789.0	5570.6	5524.3	5511.5	5519.2	5537.2	5586.0	5634.8
30°	6739.7	6585.5	6177.0	5737.6	5431.9	5367.6	5326.5	5344.5	5401.0	5449.8	5503.7
32.5°	6947.9	6793.7	6267.0	5624.6	5254.6	5154.3	5100.4	5123.5	5180.0	5198.0	5262.2
35°	7191.9	7017.2	6305.5	5444.7	5061.9	4907.7	4835.7	4802.3	4830.6	4812.6	4869.2
37.5°	7464.3	7281.8	6300.3	5208.3	4835.7	4658.4	4558.2	4432.3	4373.3	4311.6	4350.1
40°	7867.7	7605.6	6238.7	4923.1	4555.6	4393.8	4213.9	4000.7	3867.0	3746.3	3754.0
42.5°	8417.5	8055.3	6125.6	4609.6	4239.6	4088.0	3844.0	3594.7	3383.9	3183.5	3165.6
45°	9237.2	8643.6	5984.3	4275.6	3897.9	3748.8	3484.2	3204.1	2965.1	2708.3	2677.4
47.5°	10419.1	9435.0	5850.7	3895.3	3538.1	3402.0	3163.0	2903.5	2620.8	2371.6	2343.4
50°	12043.0	10570.7	5727.3	3525.3	3183.5	3080.7	2890.6	2625.9	2340.8	2140.4	2127.5
52.5°	14108.9	12115.0	5675.9	3168.2	2852.1	2813.5	2661.9	2415.3	2145.5	1975.9	1963.1
55°	16480.5	13962.4	5675.9	2826.4	2561.8	2574.6	2469.2	2240.5	2006.7	1855.1	1839.8
57.5°	18900.9	15833.0	5573.1	2510.3	2315.1	2369.1	2302.3	2101.9	1891.1	1734.4	1708.7
60°	21131.2	17400.4	5156.9	2222.6	2096.6	2181.5	2137.7	1965.6	1708.7	1577.7	1557.1
62.5°	22845.1	18284.3	4355.2	1993.9	1916.9	2014.4	1991.4	1785.8	1675.3	1621.3	1603.3
65°	23703.2	18140.3	3330.0	1790.9	1765.3	1916.9	1868.0	1860.3	1772.9	1711.2	1690.7
67.5°	23176.5	16901.9	2415.3	1641.8	1677.8	1826.9	2014.4	2045.3	1883.4	1762.7	1742.1
70°	20866.5	14661.3	1798.7	1500.6	1567.3	1829.4	2297.1	2140.4	1847.5	1706.1	1682.9
72.5°	15874.1	10933.1	1395.2	1351.6	1423.5	1842.3	2423.0	2096.6	1744.7	1886.0	1870.5
75°	9077.9	6002.3	1120.3	1169.1	1243.6	1721.5	2358.7	1983.6	1665.0	1731.8	1731.8
77.5°	3461.0	2307.4	925.0	989.2	999.5	1503.2	2256.0	1975.9	1585.4	1546.8	1410.6
80°	1200.0	901.9	765.7	786.3	773.4	1336.1	2163.5	1718.9	1297.5	1161.4	1122.9
82.5°	490.8	449.7	606.4	580.7	549.9	1038.0	1747.2	1405.5	1061.2	937.9	927.6
85°	213.3	285.3	400.9	352.0	318.6	719.4	1400.4	1189.6	896.8	773.4	770.8
87.5°	43.7	107.9	169.5	159.3	164.4	480.5	994.4	845.3	634.7	475.4	372.6
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)