

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: P966683

Luminaire Tested: **NAV-SB4C-735-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966683
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31583.3 lumens
Efficiency: N/A
Efficacy: 157.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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



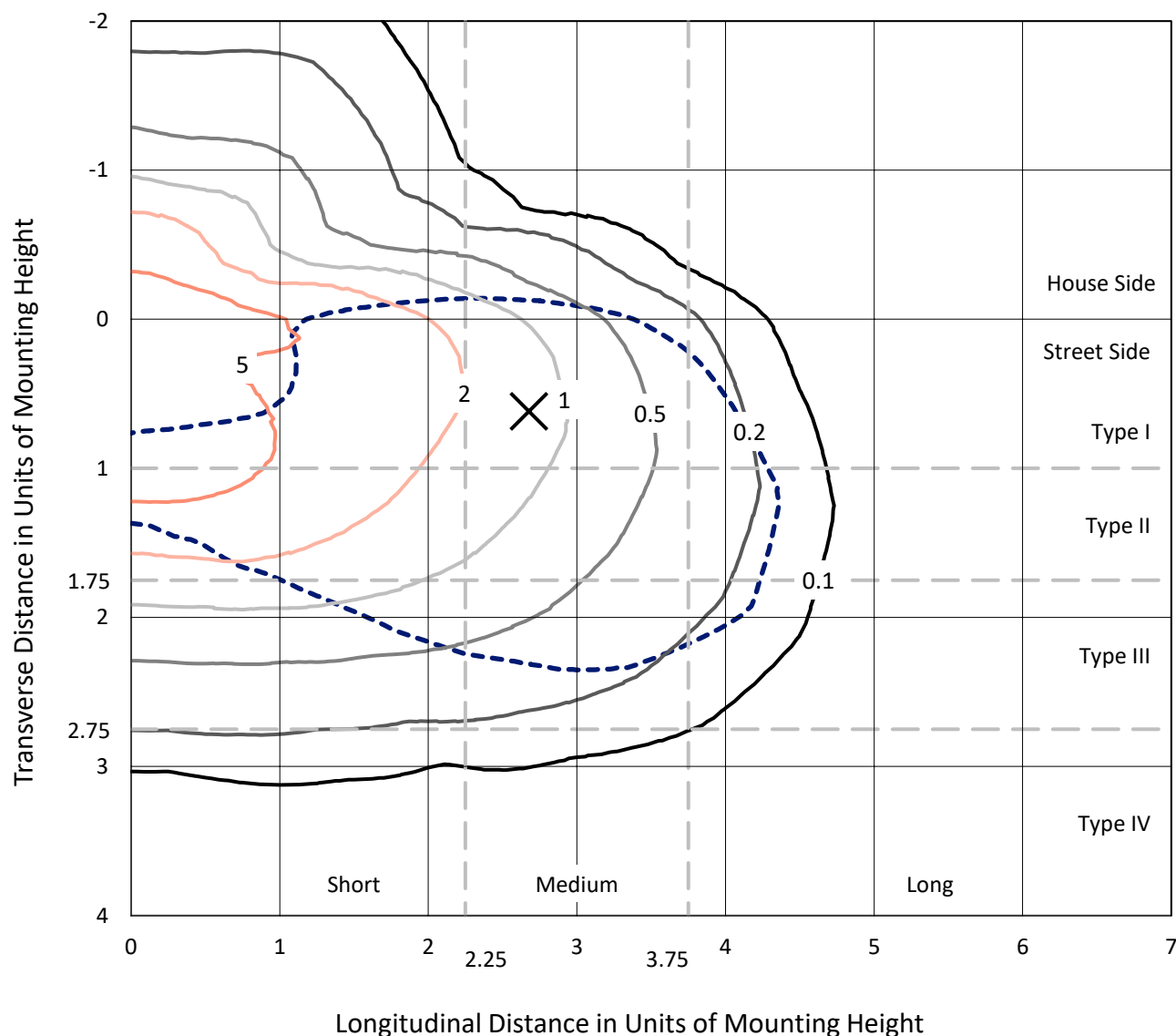
REPORT NUMBER: P966683

CATALOG NUMBER: NAV-SB4C-735-U-T3R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

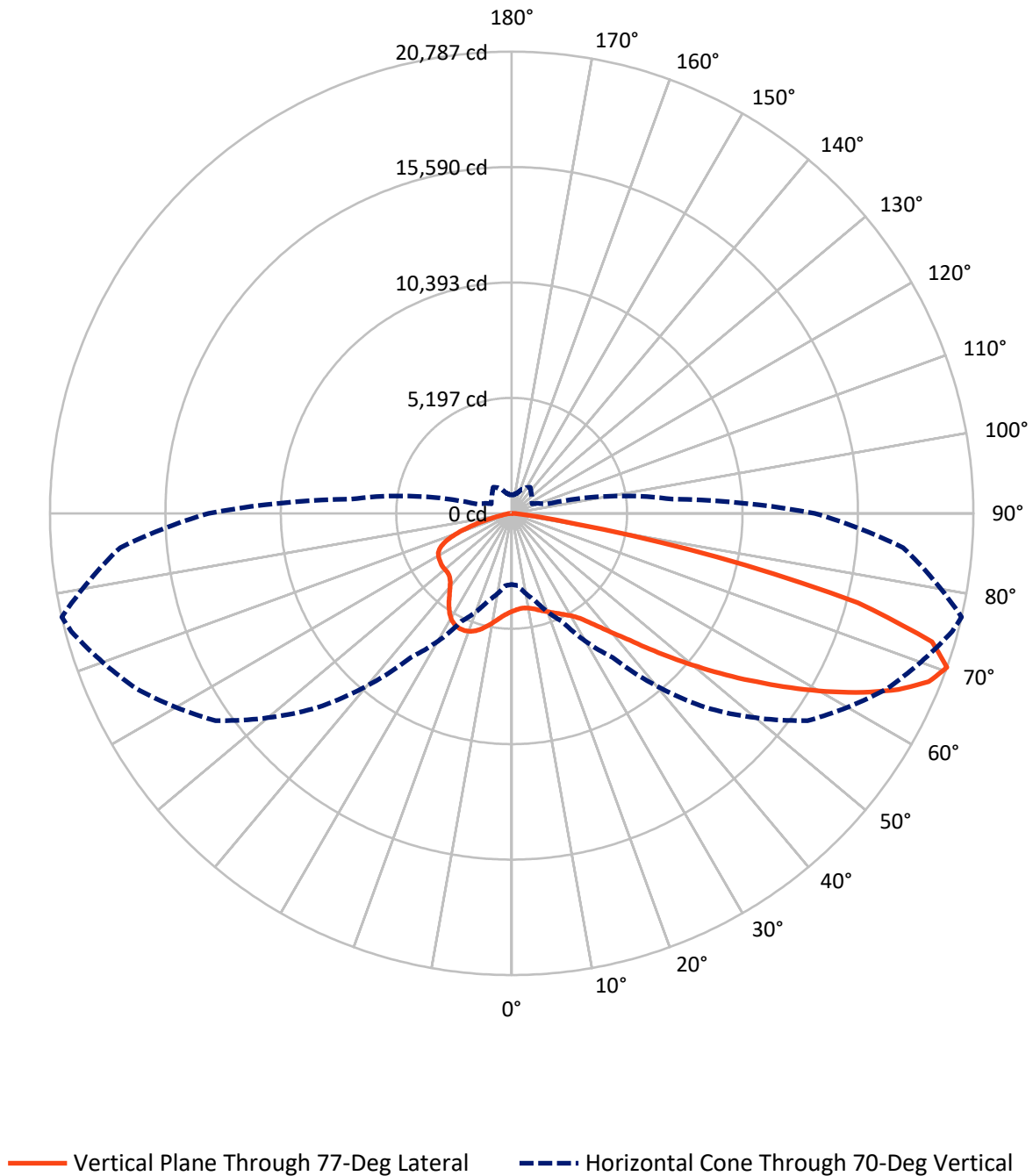


Based on 25 foot mounting height. Maximum calculated value = 8.4 fc

Type III - Medium - N/A

REPORT NUMBER: P966683
CATALOG NUMBER: NAV-SB4C-735-U-T3R

Luminous Intensity Polar Plot



REPORT NUMBER: P966683

CATALOG NUMBER: NAV-SB4C-735-U-T3R

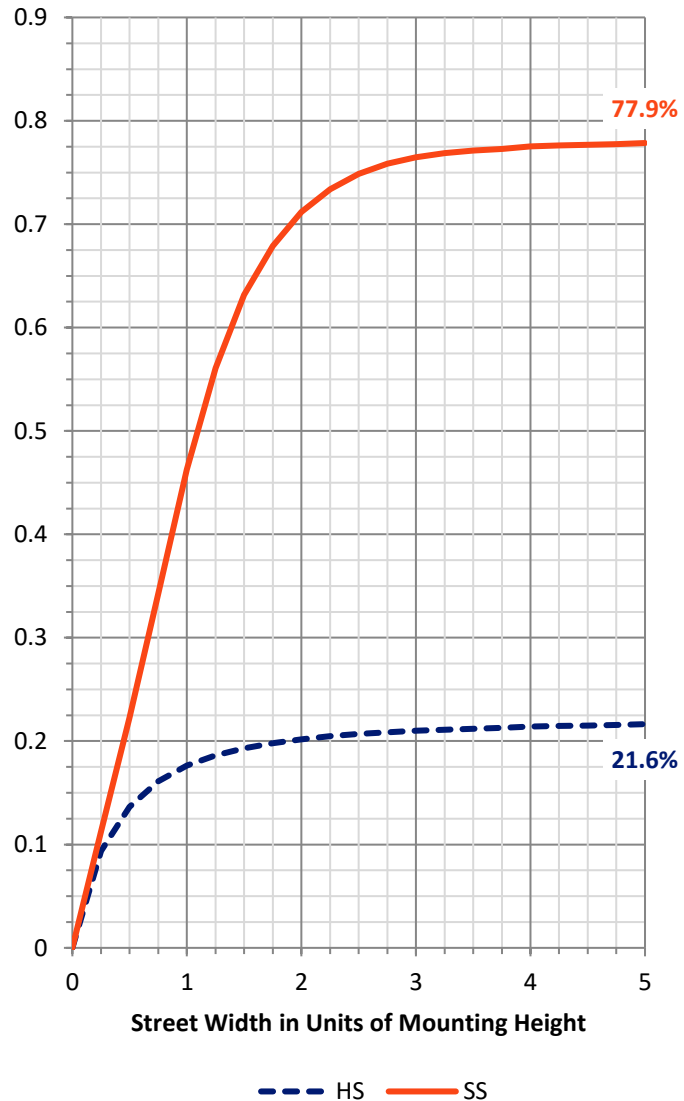
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6916.3	0.0	6916.3
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	24667.1	0.0	24667.1
	% Fixture	78.1	0.0	78.1
Total	Lumens	31583.3	0.0	31583.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.2	1.3
10°-20°	1212.8	3.8
20°-30°	2074.1	6.6
30°-40°	3335.4	10.6
40°-50°	5207.4	16.5
50°-60°	6955.8	22.0
60°-70°	7413.8	23.5
70°-80°	4563.9	14.5
80°-90°	399.9	1.3
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°	31583.3	100.0
0°-180°	31583.3	100.0

Coefficient of Utilization



REPORT NUMBER: P966683

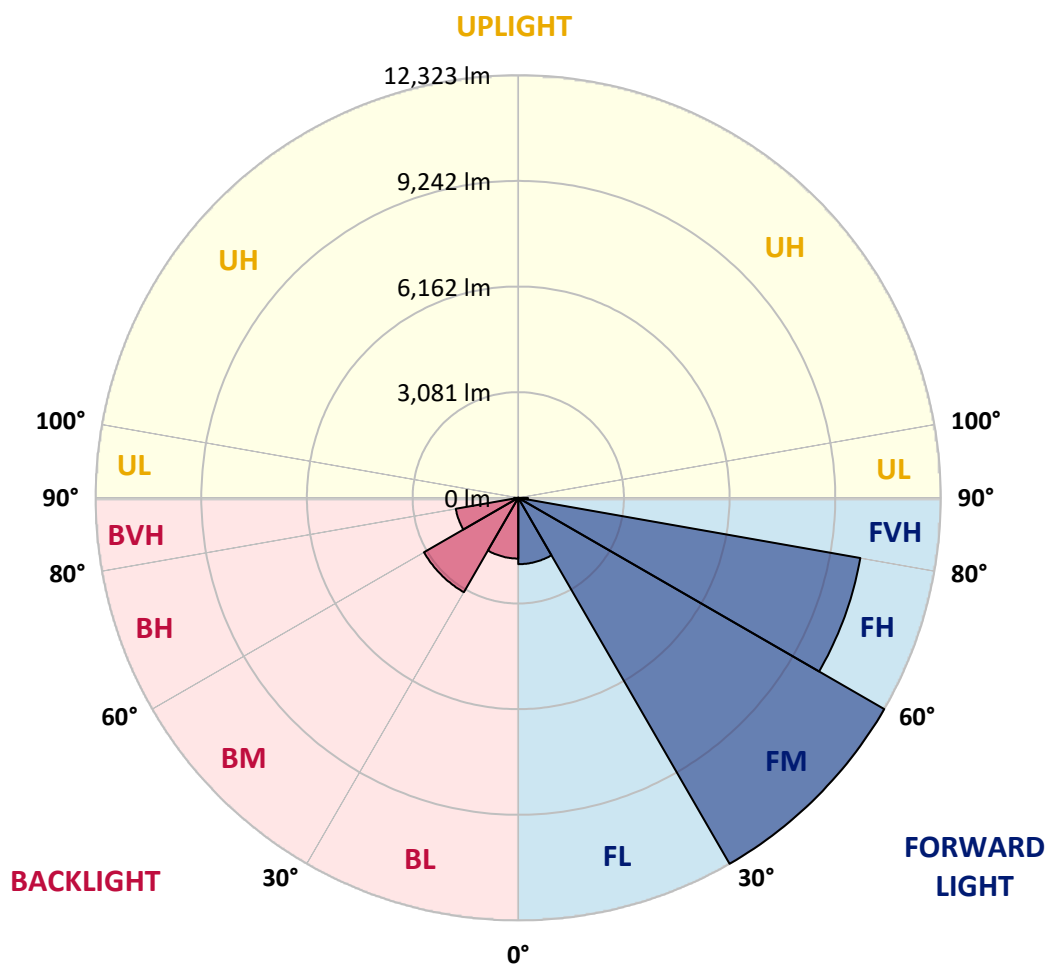
CATALOG NUMBER: NAV-SB4C-735-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1935.0	6.1			
FM	(30°-60°)	12323.1	39.0			
FH	(60°-80°)	10129.3	32.1			G4/12000
FVH	(80°-90°)	279.6	0.9			G3/500
BL	(0°-30°)	1772.2	5.6	B3/2500		
BM	(30°-60°)	3175.4	10.1	B3/5000		
BH	(60°-80°)	1848.4	5.9	B3/2500		G3/2500
BVH	(80°-90°)	120.3	0.4			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 III Medium



REPORT NUMBER: P966683

CATALOG NUMBER: NAV-SB4C-735-U-T3R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2
2.5°	4061.7	4060.0	4081.0	4087.5	4126.3	4153.8	4205.6	4260.6	4331.8	4339.8	4383.5
5°	3827.0	3827.0	3851.3	3877.3	3927.4	3982.3	4061.7	4157.1	4280.0	4299.4	4407.8
7.5°	3628.1	3641.1	3662.1	3712.2	3770.5	3849.7	3971.1	4106.9	4268.7	4299.4	4474.1
10°	3468.0	3482.5	3508.5	3548.9	3636.2	3746.2	3904.7	4079.4	4296.2	4344.7	4571.2
12.5°	3417.9	3432.4	3447.0	3477.7	3558.6	3688.0	3877.3	4092.3	4362.5	4411.0	4703.8
15°	3534.3	3552.1	3540.8	3532.7	3574.8	3692.9	3890.2	4139.3	4445.0	4514.5	4867.1
17.5°	3802.9	3809.3	3783.4	3707.4	3701.0	3764.0	3951.7	4203.9	4548.5	4624.5	5032.1
20°	4236.3	4224.9	4171.6	4021.2	3935.5	3922.5	4056.7	4301.0	4655.2	4736.1	5210.1
22.5°	4825.1	4812.2	4705.4	4467.7	4276.7	4150.6	4208.9	4427.2	4775.0	4865.6	5383.2
25°	5559.5	5541.7	5384.7	5061.2	4765.2	4453.1	4415.9	4593.8	4922.2	5006.3	5564.3
27.5°	6416.8	6402.2	6232.3	5805.3	5378.3	4867.1	4673.1	4789.5	5075.8	5171.2	5768.1
30°	7338.8	7380.8	7080.0	6620.6	6080.3	5407.4	5019.2	5030.5	5274.8	5360.5	6015.6
32.5°	8422.5	8495.3	8133.0	7550.7	6813.1	5994.6	5456.0	5367.0	5564.3	5635.4	6327.8
35°	9496.5	9579.0	9278.2	8634.4	7785.2	6686.9	5912.1	5753.5	5949.3	6026.9	6741.8
37.5°	10425.0	10534.9	10379.8	9820.0	8825.2	7521.6	6507.3	6208.1	6423.3	6520.2	7298.3
40°	11157.7	11325.9	11314.7	10965.2	10051.4	8534.2	7262.7	6769.4	7012.0	7117.2	7972.9
42.5°	11753.0	11898.6	12024.8	12007.0	11330.9	9684.2	8150.8	7498.9	7683.3	7804.6	8731.5
45°	12163.9	12319.2	12590.9	12883.6	12561.8	10915.1	9168.2	8364.3	8532.5	8715.3	9635.6
47.5°	12531.0	12707.3	13059.9	13524.2	13606.7	12150.9	10282.7	9372.0	9525.6	9714.9	10543.0
50°	12563.4	12715.4	13262.2	13920.5	14349.2	13338.2	11479.6	10502.7	10646.6	10848.8	11515.3
52.5°	11782.1	12021.5	12975.9	13909.1	14690.4	14331.3	12668.5	11678.5	11840.4	12083.0	12521.3
55°	9145.6	9496.5	12136.3	13475.7	14569.1	14973.5	13799.2	12928.9	13136.0	13390.0	13533.9
57.5°	7877.4	8031.1	9634.1	12686.3	14016.0	15140.1	14753.5	14192.3	14525.5	14803.7	14604.7
60°	7080.0	7207.7	8155.6	11458.6	13288.0	14876.4	15491.1	15369.8	15945.6	16277.2	15699.8
62.5°	6225.8	6347.2	7209.3	9567.8	12356.4	14438.2	15957.0	16456.8	17401.4	17763.8	16731.8
65°	5378.3	5481.8	6308.4	8039.2	11172.3	13999.8	16198.0	17396.6	18748.8	19124.1	17589.1
67.5°	4433.6	4519.4	5300.7	6782.3	9732.7	13399.6	16317.7	18135.8	19921.6	20243.4	18012.8
70°	3199.4	3265.8	4072.9	5363.7	7925.9	12367.6	16269.1	18659.9	20529.7	20786.9	17692.6
72.5°	1512.4	1572.2	2520.2	3482.5	5598.2	10358.6	15287.4	18244.2	19911.9	19784.0	15732.1
75°	807.2	859.0	1447.7	1910.3	2956.8	7101.0	12510.0	15715.9	16720.4	16099.3	11626.9
77.5°	546.7	587.1	896.2	1146.9	1350.6	3370.9	8040.7	10881.2	10468.6	9443.1	5823.1
80°	433.5	475.6	734.3	776.4	653.4	1218.0	3322.4	5037.0	3618.5	2893.8	1656.4
82.5°	333.2	380.1	617.9	562.9	355.9	499.8	967.3	1593.3	926.8	705.2	401.2
85°	203.8	254.0	485.2	359.1	200.6	228.1	328.4	443.2	283.1	236.2	143.9
87.5°	103.5	145.5	245.9	131.0	90.6	53.4	87.3	87.3	74.4	64.7	37.2
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: P966683

CATALOG NUMBER: NAV-SB4C-735-U-T3R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2	4406.2
2.5°	4422.4	4454.6	4509.7	4561.5	4601.8	4640.7	4679.5	4700.5	4707.0	4732.9	4747.5
5°	4474.1	4534.0	4640.7	4741.0	4804.1	4842.9	4870.4	4886.6	4889.8	4897.9	4910.9
7.5°	4569.6	4665.0	4813.8	4914.1	4961.0	4957.7	4946.4	4906.0	4889.8	4875.2	4878.5
10°	4703.8	4830.0	5012.8	5082.3	5053.1	4975.6	4875.2	4757.1	4702.2	4648.8	4632.6
12.5°	4870.4	5030.5	5210.1	5206.8	5062.9	4863.9	4631.0	4449.8	4335.0	4252.5	4233.0
15°	5072.6	5257.0	5394.5	5284.5	4969.1	4611.6	4270.3	4034.1	3930.6	3840.1	3830.3
17.5°	5281.2	5478.6	5541.7	5260.2	4732.9	4238.0	3851.3	3665.3	3563.4	3514.9	3529.5
20°	5485.1	5680.8	5629.0	5121.1	4373.8	3814.1	3469.6	3367.7	3346.7	3358.0	3353.2
22.5°	5700.2	5874.9	5646.8	4852.6	3916.0	3380.7	3191.4	3194.6	3241.6	3275.5	3283.6
25°	5920.2	6038.3	5599.9	4464.4	3424.3	3062.0	3015.0	3066.8	3159.0	3225.4	3243.2
27.5°	6132.1	6183.8	5498.0	3984.0	3002.1	2833.9	2842.0	2948.7	3087.9	3180.1	3202.7
30°	6371.5	6313.3	5302.3	3443.7	2709.4	2638.2	2706.1	2830.6	2969.8	3052.2	3071.7
32.5°	6641.6	6424.8	4991.8	2943.9	2502.3	2481.3	2592.9	2673.8	2735.2	2759.5	2772.4
35°	6978.0	6581.7	4593.8	2592.9	2316.3	2366.4	2473.2	2432.7	2408.5	2395.5	2408.5
37.5°	7414.7	6793.6	4128.0	2364.9	2165.9	2284.0	2327.7	2201.5	2106.1	2059.1	2070.4
40°	7940.5	7104.2	3679.9	2188.5	2070.4	2212.8	2136.7	1984.7	1863.4	1797.0	1802.0
42.5°	8524.4	7429.3	3303.0	2055.8	2017.1	2154.5	1996.1	1814.9	1619.2	1598.1	1619.2
45°	9137.5	7764.2	3045.8	1954.0	1991.2	2104.4	1915.1	1622.4	1483.3	1569.0	1614.3
47.5°	9750.5	8071.5	2890.5	1878.0	1978.2	2047.8	1844.0	1515.7	1417.0	1541.5	1599.7
50°	10433.1	8346.5	2821.0	1823.0	1963.7	2025.2	1737.3	1488.1	1347.4	1429.9	1491.4
52.5°	11110.8	8560.0	2769.2	1767.9	1942.7	2007.4	1685.5	1455.8	1263.3	1268.1	1302.2
55°	11787.0	8699.1	2712.6	1695.1	1895.7	1968.5	1680.6	1420.2	1200.2	1177.5	1193.7
57.5°	12508.4	8778.3	2643.1	1614.3	1814.9	1869.9	1675.8	1392.7	1180.8	1143.6	1148.4
60°	13242.8	8894.8	2552.5	1515.7	1706.5	1751.8	1664.4	1383.0	1169.5	1106.4	1111.2
62.5°	13901.0	8935.2	2444.1	1421.8	1567.4	1635.3	1640.2	1374.9	1138.8	1030.3	1030.3
65°	14333.0	8760.6	2254.8	1315.1	1417.0	1515.7	1593.3	1347.4	1083.7	975.4	975.4
67.5°	14315.2	8262.3	1958.9	1177.5	1271.4	1383.0	1525.3	1300.5	1017.4	907.4	912.2
70°	13648.8	7278.9	1583.5	1017.4	1111.2	1240.7	1438.0	1230.9	938.2	833.0	842.8
72.5°	11706.1	5697.0	1150.0	829.8	925.3	1093.5	1324.7	1146.9	857.3	766.7	761.9
75°	8362.7	3605.4	779.6	637.3	719.8	926.8	1184.1	1048.2	782.9	770.0	726.3
77.5°	4271.9	1722.7	516.0	465.9	501.4	731.1	994.8	936.5	794.2	635.7	566.1
80°	1389.5	635.7	325.1	317.0	333.2	486.9	770.0	768.3	601.7	431.8	381.7
82.5°	443.2	273.4	211.9	203.8	195.7	305.8	537.0	608.2	406.0	273.4	271.7
85°	176.3	163.4	124.5	114.8	82.5	143.9	281.5	404.4	302.5	197.3	202.2
87.5°	64.7	64.7	33.9	24.3	17.8	48.5	76.1	121.4	173.1	101.9	100.2
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)