

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: P968790

Luminaire Tested: **NAV-SB5C-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968790
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32283.4 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

Input Watts (W): 249.5
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

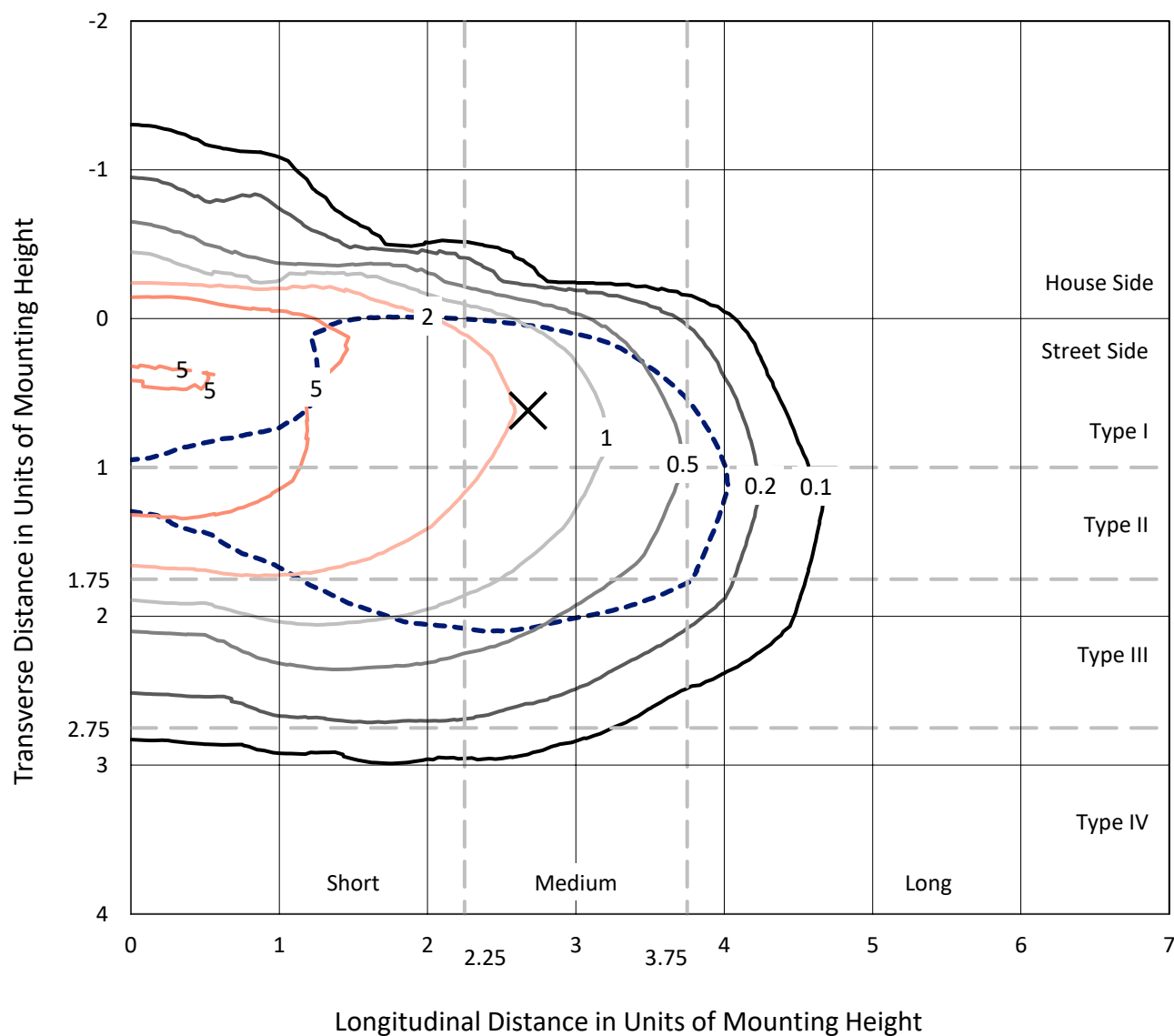


REPORT NUMBER: P968790

CATALOG NUMBER: NAV-SB5C-735-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

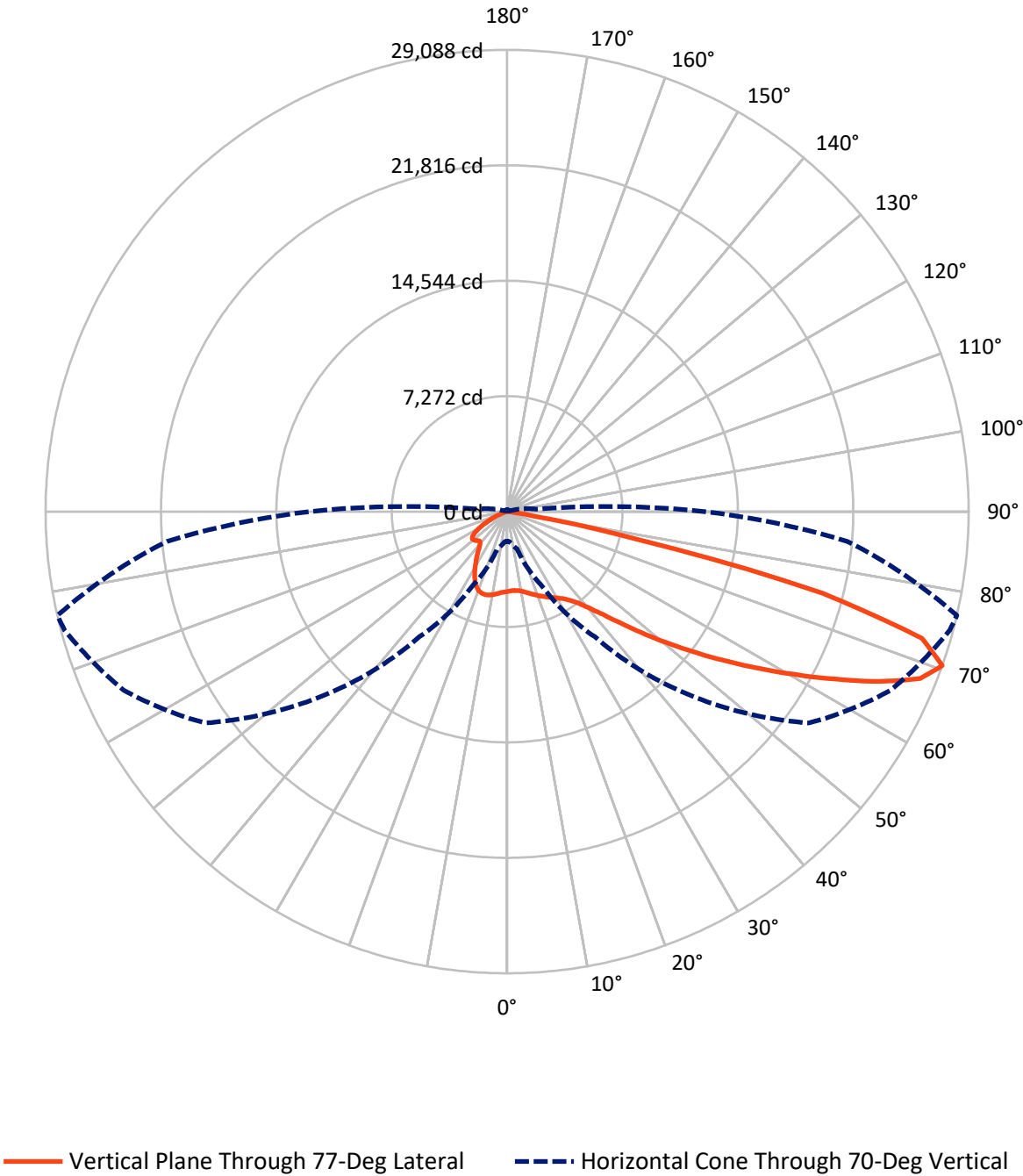
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P968790
CATALOG NUMBER: NAV-SB5C-735-U-T3R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968790

CATALOG NUMBER: NAV-SB5C-735-U-T3R-HSS

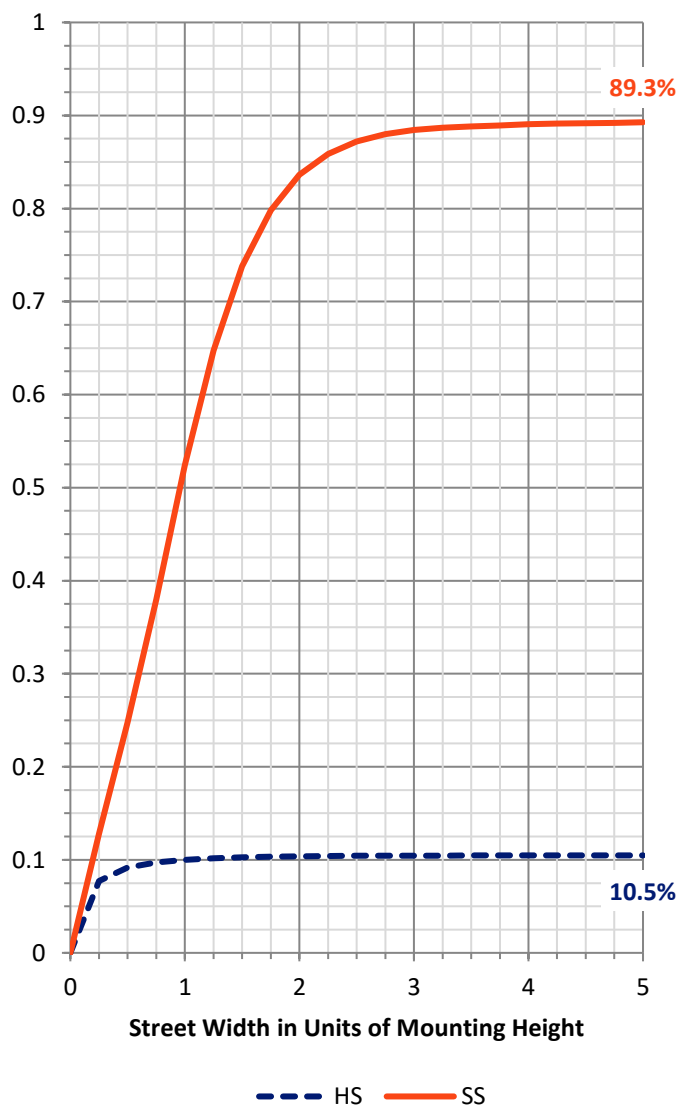
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3403.1	0.0	3403.1
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	28880.3	0.0	28880.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	32283.4	0.0	32283.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.0	1.3
10°-20°	1030.2	3.2
20°-30°	1593.5	4.9
30°-40°	2891.5	9.0
40°-50°	5458.1	16.9
50°-60°	7886.4	24.4
60°-70°	8394.9	26.0
70°-80°	4448.7	13.8
80°-90°	146.1	0.5
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°	32283.4	100.0
0°-180°	32283.4	100.0

Coefficient of Utilization



REPORT NUMBER: P968790

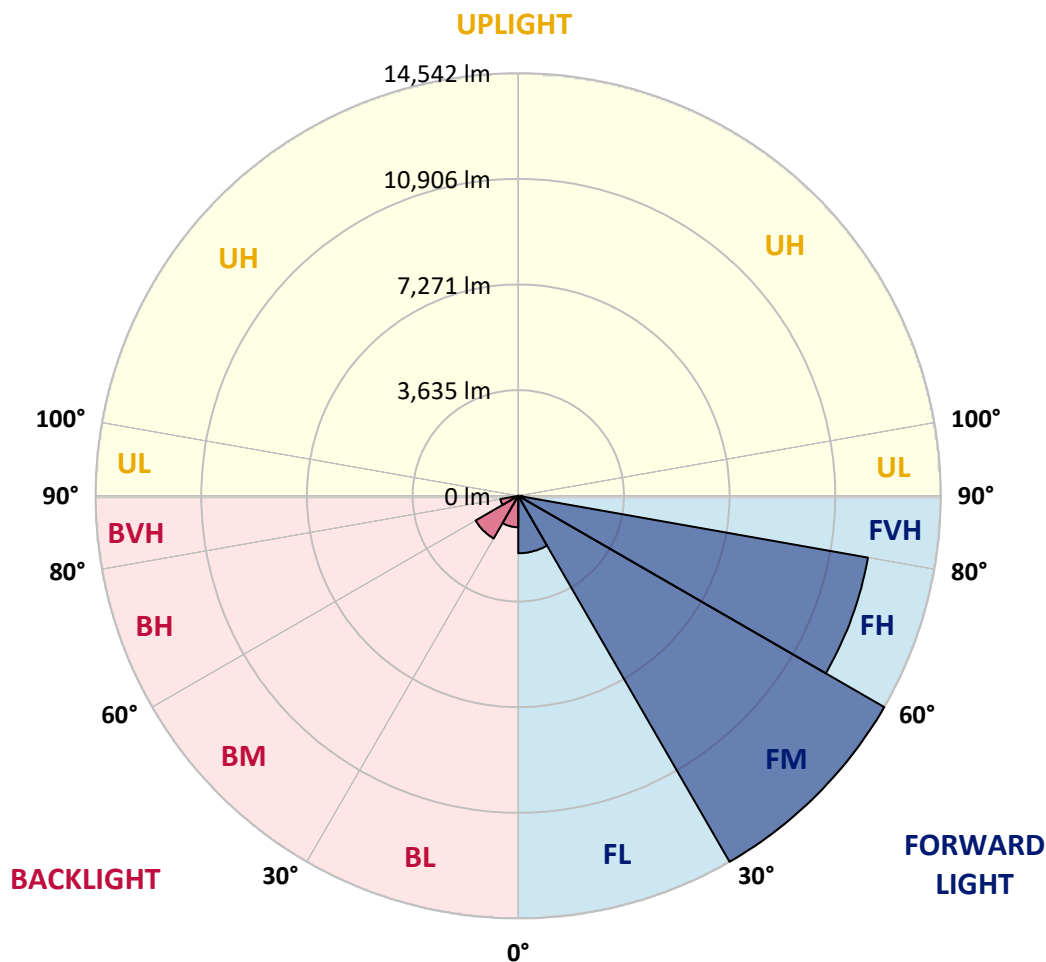
CATALOG NUMBER: NAV-SB5C-735-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1976.5	6.1			
FM	(30°-60°)	14541.9	45.0			
FH	(60°-80°)	12219.7	37.9			G5
FVH	(80°-90°)	142.1	0.4			G2/225
BL	(0°-30°)	1081.2	3.3	B3/2500		
BM	(30°-60°)	1694.1	5.2	B2/2500		
BH	(60°-80°)	623.9	1.9	B2/1000		G2/1000
BVH	(80°-90°)	3.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium



REPORT NUMBER: P968790

CATALOG NUMBER: NAV-SB5C-735-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6
2.5°	4727.8	4770.6	4764.5	4793.0	4803.3	4843.9	4884.7	4939.8	5001.0	4998.9	5039.7
5°	4460.7	4503.5	4513.7	4552.4	4601.4	4664.6	4748.2	4858.3	4972.4	4990.7	5072.3
7.5°	4144.7	4189.6	4216.0	4293.5	4383.2	4513.7	4650.3	4811.3	5001.0	5027.5	5184.4
10°	3828.7	3869.5	3904.1	4014.2	4157.0	4350.6	4572.8	4805.3	5060.1	5098.9	5321.1
12.5°	3633.0	3671.8	3710.5	3806.2	3983.7	4220.1	4521.9	4833.8	5157.9	5212.9	5506.6
15°	3563.7	3598.4	3628.9	3714.5	3879.6	4148.8	4511.6	4892.9	5282.3	5355.7	5730.9
17.5°	3573.9	3592.2	3612.6	3677.8	3838.9	4116.2	4530.0	4994.8	5429.1	5494.3	5955.0
20°	3633.0	3643.2	3645.2	3690.1	3832.8	4112.1	4566.7	5092.7	5567.7	5655.4	6177.3
22.5°	3708.4	3712.6	3708.4	3739.0	3871.5	4142.6	4615.7	5211.0	5722.7	5804.3	6401.5
25°	4061.2	3983.7	3885.8	3826.6	3936.7	4201.8	4689.1	5370.0	5891.9	5971.4	6619.8
27.5°	5156.0	4933.7	4583.1	4189.6	4071.3	4287.4	4791.0	5531.0	6063.2	6134.5	6854.2
30°	6933.7	6642.1	6046.8	5160.0	4503.5	4466.8	4923.5	5692.1	6244.6	6322.1	7104.9
32.5°	8715.5	8644.1	7957.1	6729.8	5476.0	4866.4	5143.7	5910.3	6485.2	6546.3	7443.3
35°	10517.7	10373.0	9810.3	8597.3	6974.4	5679.8	5510.6	6195.6	6801.2	6870.5	7936.7
37.5°	11898.0	11810.3	11461.7	10462.7	8752.2	6935.7	6138.6	6638.1	7259.9	7337.4	8568.7
40°	13117.1	13076.3	12958.0	12299.6	10739.9	8578.9	7115.1	7323.1	7896.0	7987.7	9343.4
42.5°	14075.3	14171.1	14238.4	14054.9	12788.8	10454.5	8428.1	8285.4	8782.8	8876.6	10330.2
45°	15055.9	15088.5	15359.7	15624.7	14823.6	12415.8	9908.2	9412.8	9885.7	10001.9	11512.6
47.5°	15685.9	15816.4	16293.4	16760.3	16534.0	14360.8	11498.3	10744.0	11164.0	11382.1	12837.8
50°	15732.7	15979.4	16636.0	17449.4	17779.6	16211.9	13227.2	12260.8	12707.3	12947.9	14252.6
52.5°	14952.0	15335.2	16352.5	17543.2	18452.5	17779.6	15015.1	13777.6	14350.5	14664.5	15720.5
55°	11463.7	11965.2	15286.3	17033.4	18478.9	18968.2	16756.2	15357.7	16181.3	16536.0	17306.6
57.5°	9987.7	10240.5	12018.2	16148.7	17987.6	19447.3	18330.1	16862.2	18173.1	18613.5	18805.2
60°	8309.8	8642.1	10079.4	14701.2	17321.0	19494.2	19720.5	18803.1	20332.1	20827.5	20179.2
62.5°	5647.2	6008.1	7437.2	12213.9	16409.6	19471.8	20860.2	20801.0	22731.6	23263.8	21343.3
65°	3498.4	3724.7	4666.6	9973.4	15135.5	19496.2	22052.8	23227.1	25263.8	25804.1	22244.4
67.5°	2764.5	2868.5	3359.8	7657.4	12939.7	18945.8	23243.4	25508.5	27647.0	28075.2	22519.7
70°	1857.3	1920.4	2444.4	5133.5	9626.8	16405.5	23221.0	26654.2	28874.4	29088.4	21516.6
72.5°	978.6	1027.6	1429.2	2377.2	5814.4	11661.4	19573.7	25284.2	27653.2	27331.0	18391.3
75°	489.3	570.8	962.3	1206.9	2483.2	6503.5	12154.9	19934.6	21765.4	20517.6	11800.1
77.5°	371.0	448.5	795.1	795.1	864.4	2189.6	5147.8	10872.5	10028.4	8350.6	3463.8
80°	236.5	305.8	695.2	601.5	360.9	556.6	1341.5	3045.9	2130.5	1620.7	630.0
82.5°	138.7	199.8	579.0	397.6	201.8	205.9	379.2	648.3	552.5	430.2	193.7
85°	55.0	130.5	397.6	157.0	79.5	50.9	114.2	138.7	114.2	85.6	48.9
87.5°	0.0	30.5	69.3	0.0	6.1	4.1	8.2	10.1	10.1	8.2	16.3
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: P968790

CATALOG NUMBER: NAV-SB5C-735-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6	5035.6
2.5°	5058.1	5062.2	5074.4	5076.4	5047.8	5011.1	4996.9	4990.7	4966.3	4964.3	4968.4
5°	5119.3	5137.6	5119.3	5066.2	4939.8	4762.5	4627.9	4517.8	4417.9	4387.3	4369.0
7.5°	5241.5	5259.9	5204.8	4996.9	4678.8	4326.1	4008.2	3783.9	3582.1	3506.6	3476.0
10°	5416.8	5441.3	5268.1	4848.0	4285.4	3718.6	3180.4	2801.2	2505.6	2385.3	2334.3
12.5°	5637.1	5647.2	5302.7	4621.7	3773.6	2964.3	2201.8	1796.1	1533.1	1435.2	1404.7
15°	5879.6	5865.4	5306.7	4313.9	3076.4	2095.8	1437.3	1180.4	1074.4	1041.8	1041.8
17.5°	6134.5	6075.4	5225.2	3869.5	2311.9	1433.3	1066.2	1005.1	986.8	978.6	976.5
20°	6385.2	6252.7	5076.4	3288.4	1659.5	1070.3	968.4	950.1	939.8	935.7	931.7
22.5°	6613.6	6387.3	4821.6	2613.6	1204.9	946.0	915.4	899.0	880.7	872.6	870.5
25°	6835.8	6464.8	4462.7	1983.7	964.3	884.8	860.4	829.7	805.3	795.1	791.0
27.5°	7051.9	6513.7	4014.2	1467.9	860.4	827.7	782.9	740.0	721.7	717.6	713.5
30°	7282.3	6530.0	3504.6	1094.8	797.1	756.3	691.2	642.2	632.0	634.1	634.1
32.5°	7563.7	6554.5	2990.7	897.1	744.2	670.8	593.3	542.3	534.1	542.3	540.3
35°	7900.0	6603.4	2495.4	825.6	697.2	583.1	499.5	456.6	448.5	454.6	452.6
37.5°	8356.7	6682.9	2032.6	811.4	658.5	509.6	419.9	385.3	385.3	387.3	385.3
40°	8964.2	6895.0	1618.8	801.2	638.2	454.6	354.8	340.5	346.6	350.7	350.7
42.5°	9704.3	7345.5	1339.5	788.9	615.7	430.2	322.2	316.0	326.2	330.3	330.3
45°	10534.0	7916.4	1241.6	768.5	595.3	446.5	307.8	299.7	311.9	314.0	316.0
47.5°	11392.4	8474.9	1229.4	746.2	574.9	471.0	303.8	285.5	299.7	301.8	303.8
50°	12260.8	8839.9	1241.6	711.6	542.3	471.0	305.8	271.1	283.4	289.5	291.5
52.5°	13135.5	9007.1	1233.4	636.1	485.2	442.4	305.8	258.9	271.1	275.2	275.2
55°	13983.6	8974.4	1109.0	524.0	411.8	391.4	297.7	248.8	256.9	258.9	258.9
57.5°	14654.3	8519.8	878.7	407.7	334.4	326.2	271.1	236.5	242.6	240.6	240.6
60°	15005.0	7520.8	627.9	314.0	263.0	256.9	238.5	220.2	224.3	214.0	212.1
62.5°	15009.0	6199.7	419.9	248.8	210.0	203.9	203.9	197.7	193.7	173.3	167.2
65°	14689.0	4733.9	279.3	197.7	169.2	159.0	171.3	169.2	155.0	126.4	122.3
67.5°	13963.2	3102.9	212.1	155.0	130.5	124.3	136.6	142.7	132.5	106.0	103.9
70°	12470.9	1806.3	175.4	120.3	97.9	91.7	110.1	122.3	110.1	85.6	81.6
72.5°	10358.8	974.5	142.7	89.7	67.2	61.2	87.6	99.9	87.6	63.2	61.2
75°	6721.6	521.9	110.1	59.1	34.6	38.7	65.2	73.4	61.2	40.8	36.7
77.5°	2256.8	230.4	69.3	28.5	16.3	16.3	38.7	44.9	28.5	14.2	12.2
80°	503.6	95.8	28.5	12.2	6.1	6.1	8.2	8.2	4.1	0.0	0.0
82.5°	165.1	38.7	12.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	63.2	14.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	24.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)