

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: P966712

Luminaire Tested: **NAV-SB4C-740-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966712
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-740-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25526.6 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - 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



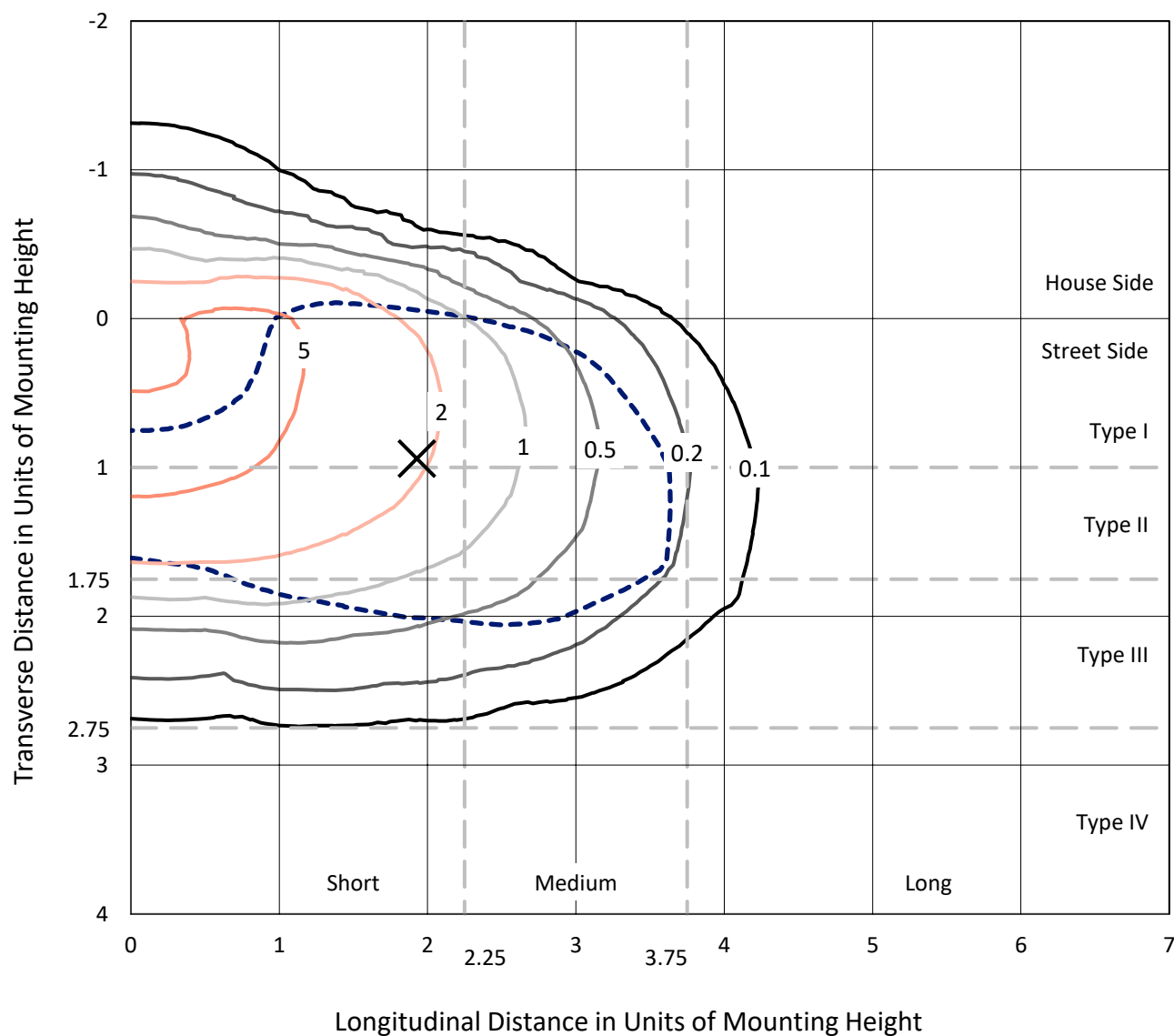
REPORT NUMBER: P966712

CATALOG NUMBER: NAV-SB4C-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



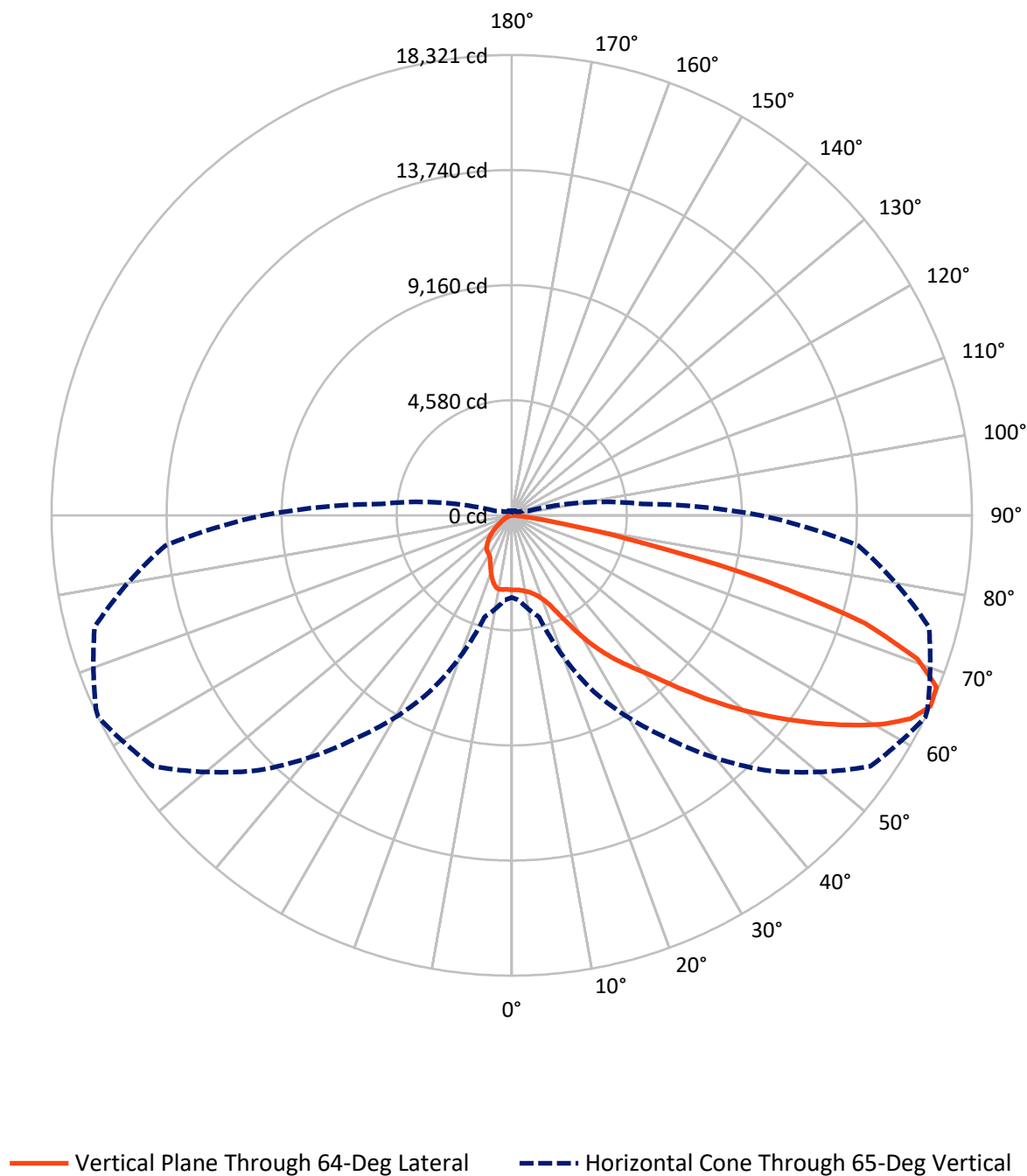
Based on 25 foot mounting height. Maximum calculated value = 7.5 fc

Type III - Short - N/A

REPORT NUMBER: P966712

CATALOG NUMBER: NAV-SB4C-740-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P966712

CATALOG NUMBER: NAV-SB4C-740-U-T3-HSS

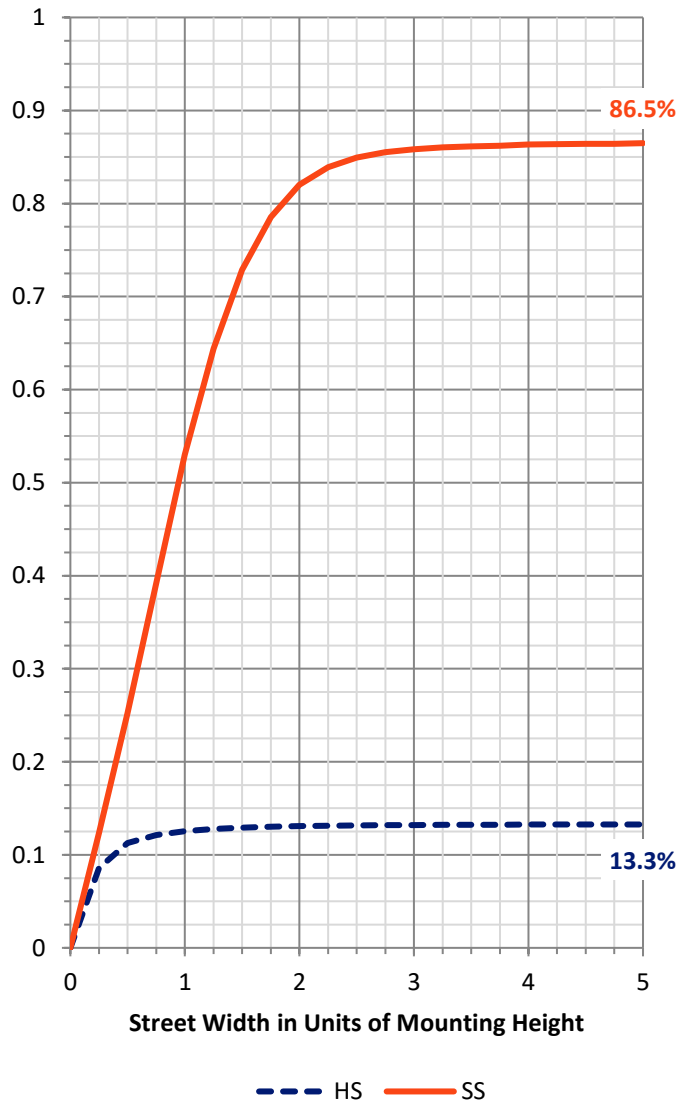
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3413.7	0.0	3413.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	22112.9	0.0	22112.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	25526.6	0.0	25526.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.9	1.1
10°-20°	742.9	2.9
20°-30°	1407.8	5.5
30°-40°	2848.8	11.2
40°-50°	4852.9	19.0
50°-60°	6599.6	25.9
60°-70°	6197.4	24.3
70°-80°	2482.9	9.7
80°-90°	120.3	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°	25526.6	100.0
0°-180°	25526.6	100.0

Coefficient of Utilization



REPORT NUMBER: P966712

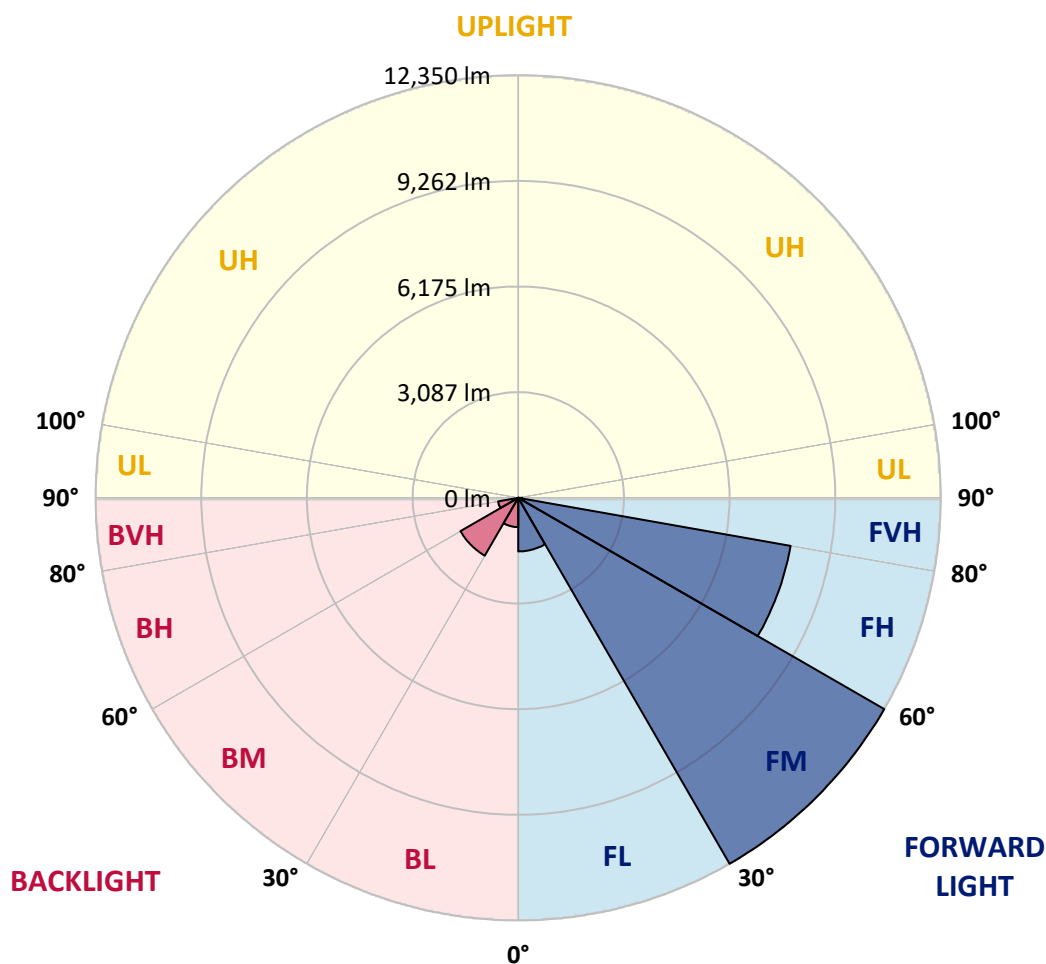
CATALOG NUMBER: NAV-SB4C-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1567.6	6.1			
FM	(30°-60°)	12349.7	48.4			
FH	(60°-80°)	8081.1	31.7			G4/12000
FVH	(80°-90°)	114.4	0.4			G2/225
BL	(0°-30°)	857.1	3.4	B2/1000		
BM	(30°-60°)	1951.6	7.6	B2/2500		
BH	(60°-80°)	599.2	2.3	B2/1000		G2/1000
BVH	(80°-90°)	5.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short



REPORT NUMBER: P966712

CATALOG NUMBER: NAV-SB4C-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0
2.5°	2958.8	2979.3	2974.1	2969.0	2967.3	2970.8	2972.4	2970.8	2970.8	2970.8	2972.4
5°	2902.3	2919.4	2919.4	2931.4	2948.5	2969.0	2984.4	2987.9	2991.3	2996.4	2994.6
7.5°	2794.5	2808.2	2818.4	2857.8	2900.5	2955.3	3001.5	3025.5	3028.9	3047.7	3054.6
10°	2720.9	2738.0	2755.1	2796.2	2857.8	2939.9	3018.6	3076.8	3085.4	3129.8	3150.4
12.5°	2717.5	2734.6	2756.8	2801.3	2873.2	2960.4	3056.2	3140.1	3155.6	3220.5	3263.3
15°	2753.4	2774.0	2794.5	2849.2	2926.3	3032.4	3135.0	3239.4	3254.8	3347.2	3393.4
17.5°	2827.0	2854.3	2869.8	2924.5	3006.6	3124.7	3259.9	3379.7	3393.4	3501.2	3559.4
20°	2972.4	3005.0	3010.1	3054.6	3135.0	3261.7	3422.5	3571.4	3588.5	3711.7	3776.7
22.5°	3273.6	3319.8	3278.8	3301.0	3372.9	3499.5	3674.0	3862.3	3886.2	4026.5	4084.7
25°	3804.1	3869.2	3763.0	3725.4	3756.2	3887.9	4107.0	4344.9	4372.2	4485.2	4514.3
27.5°	4846.2	4762.4	4601.5	4444.1	4351.7	4427.0	4673.4	4967.8	5002.0	5111.5	5077.2
30°	5991.0	5917.5	5700.1	5351.0	5132.1	5120.1	5347.6	5676.2	5715.6	5820.0	5715.6
32.5°	7137.6	7067.5	6831.3	6401.7	6021.9	5833.6	5991.0	6355.5	6376.1	6442.8	6288.8
35°	8265.3	8193.4	7957.3	7517.5	7050.4	6622.5	6591.7	7002.4	7009.3	7079.4	6850.1
37.5°	9399.9	9340.0	9088.4	8657.2	8196.8	7606.5	7320.7	7615.0	7623.6	7692.0	7454.2
40°	10209.3	10234.9	10062.1	9728.4	9333.1	8688.0	8138.7	8267.0	8215.7	8330.4	8188.3
42.5°	10904.1	10955.4	10804.8	10637.1	10407.7	9839.7	9151.7	9129.5	9047.4	9109.0	8961.8
45°	11504.7	11547.4	11412.2	11372.9	11367.8	10969.0	10258.9	10125.5	10010.8	9998.8	9822.6
47.5°	11725.5	11807.6	11865.8	11997.5	12254.2	12086.5	11403.7	11196.7	11068.4	10974.2	10695.3
50°	11809.3	11896.6	12095.1	12478.3	13085.9	13157.7	12543.4	12310.7	12153.2	11982.1	11571.4
52.5°	11696.4	11852.1	12119.0	12764.1	13645.4	14016.8	13636.9	13433.2	13253.6	12974.7	12365.5
55°	11030.6	11186.4	11732.3	12760.7	13924.4	14619.2	14670.5	14579.8	14377.9	13938.1	13007.1
57.5°	9627.4	9858.4	10722.6	12326.1	13919.3	15137.7	15683.5	15748.6	15522.7	14892.9	13512.0
60°	7683.5	7996.6	9050.8	11362.6	13489.7	15418.4	16571.7	16896.8	16657.3	15834.1	13920.9
62.5°	5361.4	5724.1	6721.7	9853.3	12507.5	15216.4	17220.2	17820.9	17639.5	16676.0	14078.4
65°	3270.2	3386.6	4190.8	7753.6	10837.3	14371.0	17420.5	18320.5	18260.7	17191.2	13845.7
67.5°	2178.4	2275.9	2506.9	5316.9	8412.5	12682.0	16941.3	18233.3	18250.4	17107.4	12993.5
70°	1312.5	1396.4	1546.9	3092.2	5452.0	10038.1	15457.7	17121.0	17220.2	15986.4	11378.0
72.5°	540.8	597.3	734.1	1401.5	2823.6	6371.0	12309.0	14699.6	14930.6	13441.8	8732.5
75°	306.3	335.4	431.2	703.4	1225.3	2969.0	7455.8	10435.2	10775.7	9264.7	5253.5
77.5°	203.7	217.3	278.9	455.2	689.6	1013.0	3186.3	5436.6	6086.9	5060.1	2274.3
80°	136.9	148.8	191.7	304.6	448.3	434.7	1014.7	2014.1	2477.8	1738.6	554.4
82.5°	92.5	94.1	136.9	200.2	284.0	210.4	299.5	626.3	787.2	503.1	210.4
85°	53.1	51.4	101.0	116.3	126.6	87.2	90.7	188.2	246.4	212.2	119.8
87.5°	6.9	10.2	39.4	30.9	17.1	18.9	18.9	32.5	47.9	51.4	25.6
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: P966712

CATALOG NUMBER: NAV-SB4C-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0	2969.0
2.5°	2972.4	2970.8	2965.6	2960.4	2948.5	2941.6	2945.0	2941.6	2939.9	2941.6	2948.5
5°	2994.6	2989.5	2975.9	2958.8	2934.8	2905.7	2886.9	2859.4	2833.8	2818.4	2821.8
7.5°	3054.6	3049.5	3030.6	2982.6	2905.7	2784.2	2673.0	2575.4	2501.8	2459.1	2460.8
10°	3150.4	3141.8	3112.7	3006.6	2804.7	2539.4	2318.8	2135.6	2015.9	1959.4	1954.3
12.5°	3263.3	3253.0	3201.7	2984.4	2613.0	2198.9	1894.3	1690.7	1579.5	1529.8	1524.7
15°	3396.8	3383.1	3282.2	2878.3	2334.1	1822.4	1543.5	1391.2	1319.4	1274.9	1276.6
17.5°	3562.8	3538.8	3342.0	2719.1	2031.2	1534.9	1327.9	1213.3	1149.9	1107.2	1103.7
20°	3778.5	3739.1	3390.0	2529.2	1752.3	1353.6	1182.4	1086.6	1038.7	1001.1	994.2
22.5°	4079.6	4023.1	3448.2	2323.9	1555.5	1228.7	1074.7	1004.5	965.1	922.4	915.5
25°	4452.7	4385.9	3520.1	2133.9	1420.3	1120.8	996.0	937.8	891.5	841.9	836.8
27.5°	4974.6	4854.8	3605.6	1978.1	1304.0	1028.5	924.0	859.1	806.0	765.0	756.3
30°	5556.4	5359.6	3680.9	1884.1	1197.9	942.9	829.9	765.0	715.3	686.2	681.1
32.5°	6107.5	5840.4	3730.5	1843.1	1102.1	845.3	727.2	657.1	619.5	610.9	616.0
35°	6627.6	6275.2	3725.4	1803.7	1016.5	747.8	626.3	554.4	525.3	530.4	530.4
37.5°	7226.6	6738.9	3689.5	1742.1	946.3	658.9	539.0	475.7	450.1	451.7	458.6
40°	7923.0	7274.5	3667.2	1625.6	869.3	576.7	467.2	415.8	397.0	390.1	388.5
42.5°	8665.8	7793.0	3670.6	1493.9	773.5	503.1	417.6	374.7	357.6	352.5	350.8
45°	9411.9	8287.5	3675.8	1357.0	672.5	446.6	381.6	345.6	335.4	328.5	328.5
47.5°	10113.5	8708.5	3579.9	1209.8	573.3	403.8	352.5	328.5	320.0	311.5	311.5
50°	10767.1	8989.1	3348.9	1038.7	494.6	369.6	330.3	313.1	304.6	296.0	296.0
52.5°	11275.4	9033.6	2967.3	862.4	439.8	344.0	316.6	301.1	290.9	282.4	280.6
55°	11501.3	8754.7	2424.8	698.2	397.0	321.7	302.9	287.5	275.5	266.9	265.3
57.5°	11443.1	8167.8	1890.9	561.3	356.0	299.5	285.8	275.5	261.8	248.2	246.4
60°	11157.3	7382.4	1425.5	467.2	318.3	275.5	266.9	258.4	239.5	219.0	215.7
62.5°	10662.8	6394.9	1016.5	386.7	277.3	248.2	244.7	237.9	210.4	172.8	169.4
65°	9906.4	5195.3	684.5	321.7	237.9	217.3	219.0	207.0	171.2	128.3	124.9
67.5°	8801.0	3799.0	438.1	263.5	198.5	181.4	183.1	176.3	145.4	109.5	104.3
70°	7392.6	2515.6	285.8	200.2	159.2	140.3	150.6	152.3	123.2	89.0	85.6
72.5°	5419.5	1485.3	200.2	148.8	116.3	97.6	123.2	126.6	99.2	66.7	63.3
75°	3088.8	705.0	150.6	107.8	71.9	68.5	95.8	95.8	68.5	44.5	41.1
77.5°	1297.1	294.4	106.1	70.1	41.1	39.4	65.0	59.9	34.2	20.5	20.5
80°	374.7	131.8	56.5	34.2	17.1	15.4	25.6	18.9	8.5	3.4	3.4
82.5°	147.2	58.2	22.2	13.7	6.9	6.9	3.4	0.0	0.0	0.0	0.0
85°	87.2	24.0	10.2	5.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	22.2	5.1	3.4	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)