

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: P964599

Luminaire Tested: **NAV-SB3C-740-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964599
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-740-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20631.2 lumens
Efficiency: N/A
Efficacy: 138.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

Input Watts (W): 149.1
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

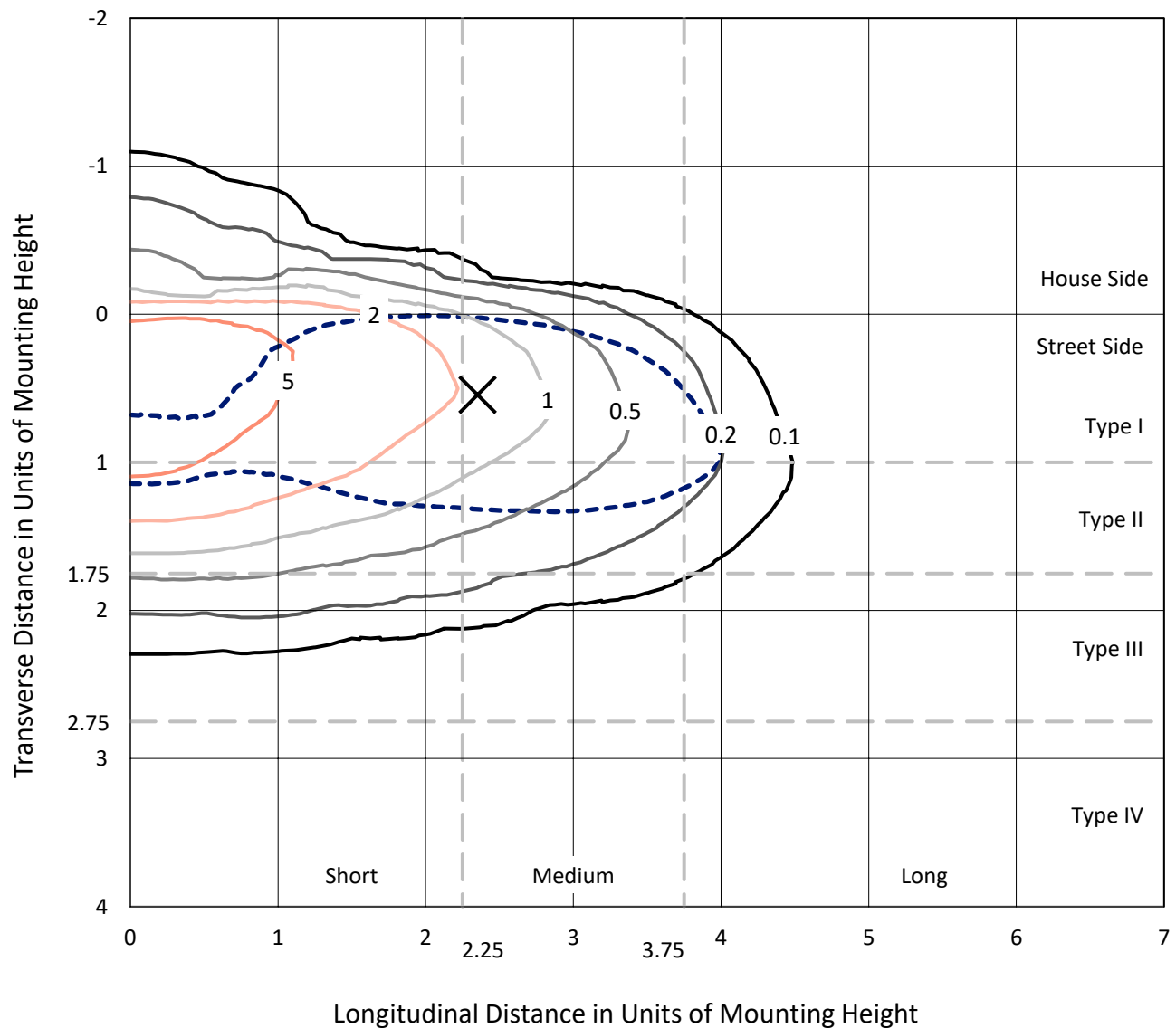


REPORT NUMBER: P964599

CATALOG NUMBER: NAV-SB3C-740-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

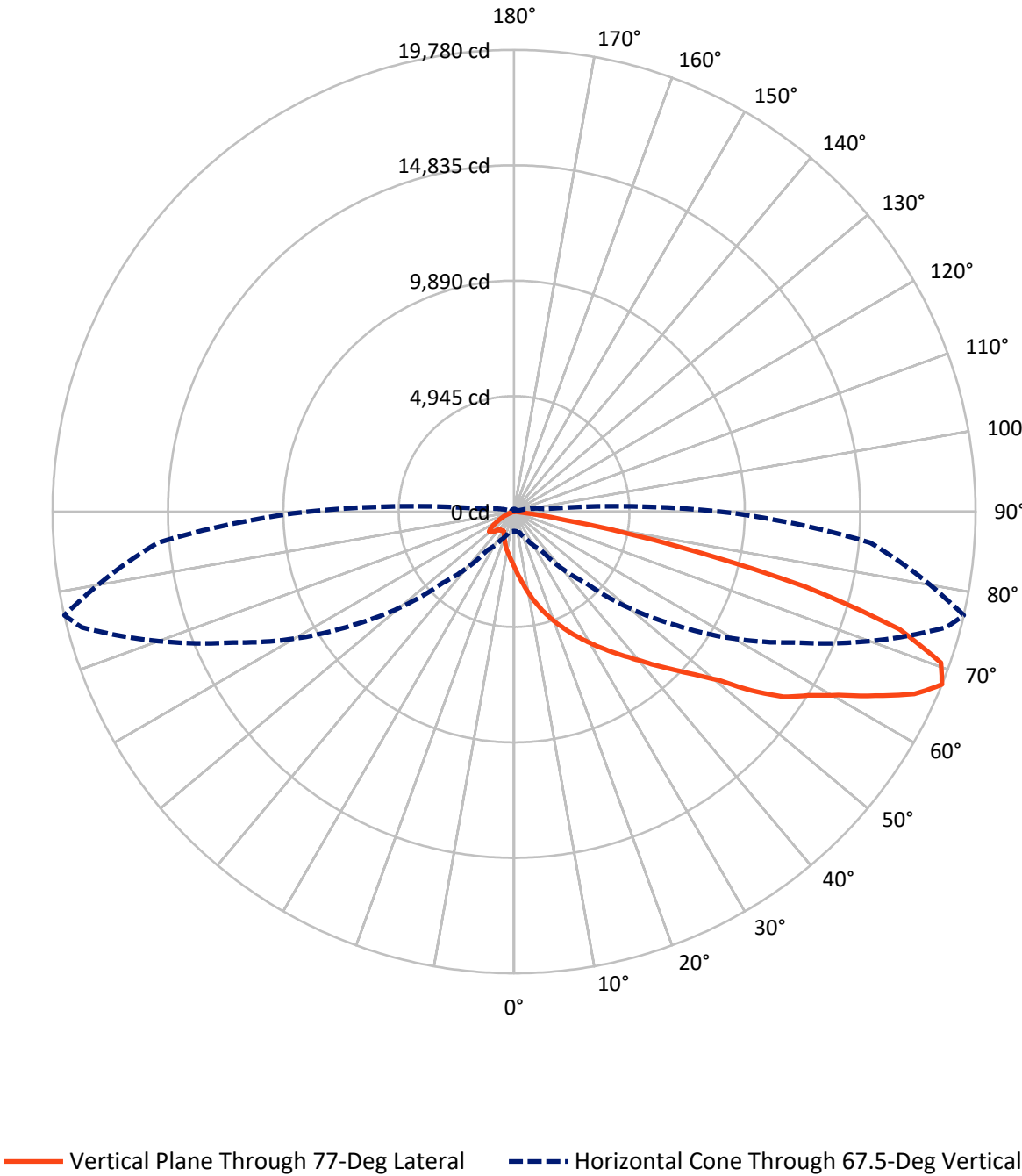
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
Type II - Medium - N/A

REPORT NUMBER: P964599
CATALOG NUMBER: NAV-SB3C-740-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P964599

CATALOG NUMBER: NAV-SB3C-740-U-T2R-HSS

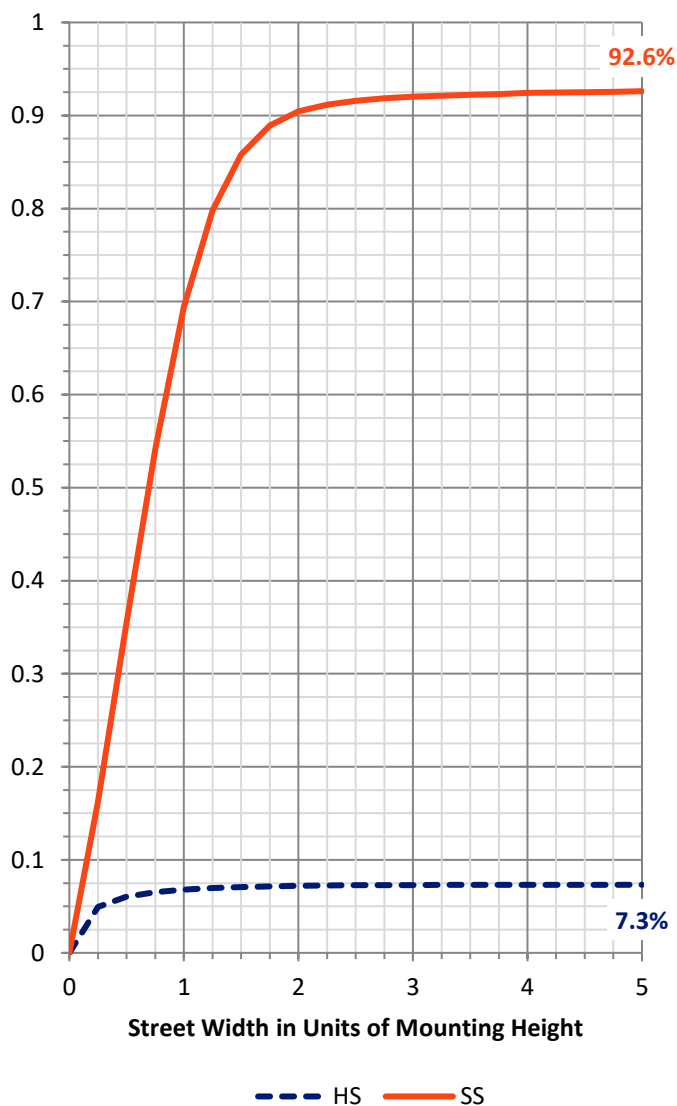
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1517.8	0.0	1517.8
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	19113.3	0.0	19113.3
	% Fixture	92.6	0.0	92.6
Total	Lumens	20631.2	0.0	20631.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.8	1.2
10°-20°	850.3	4.1
20°-30°	1640.9	8.0
30°-40°	2848.7	13.8
40°-50°	4136.2	20.0
50°-60°	4749.9	23.0
60°-70°	4123.8	20.0
70°-80°	1942.4	9.4
80°-90°	96.0	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°	20631.2	100.0
0°-180°	20631.2	100.0

Coefficient of Utilization



REPORT NUMBER: P964599

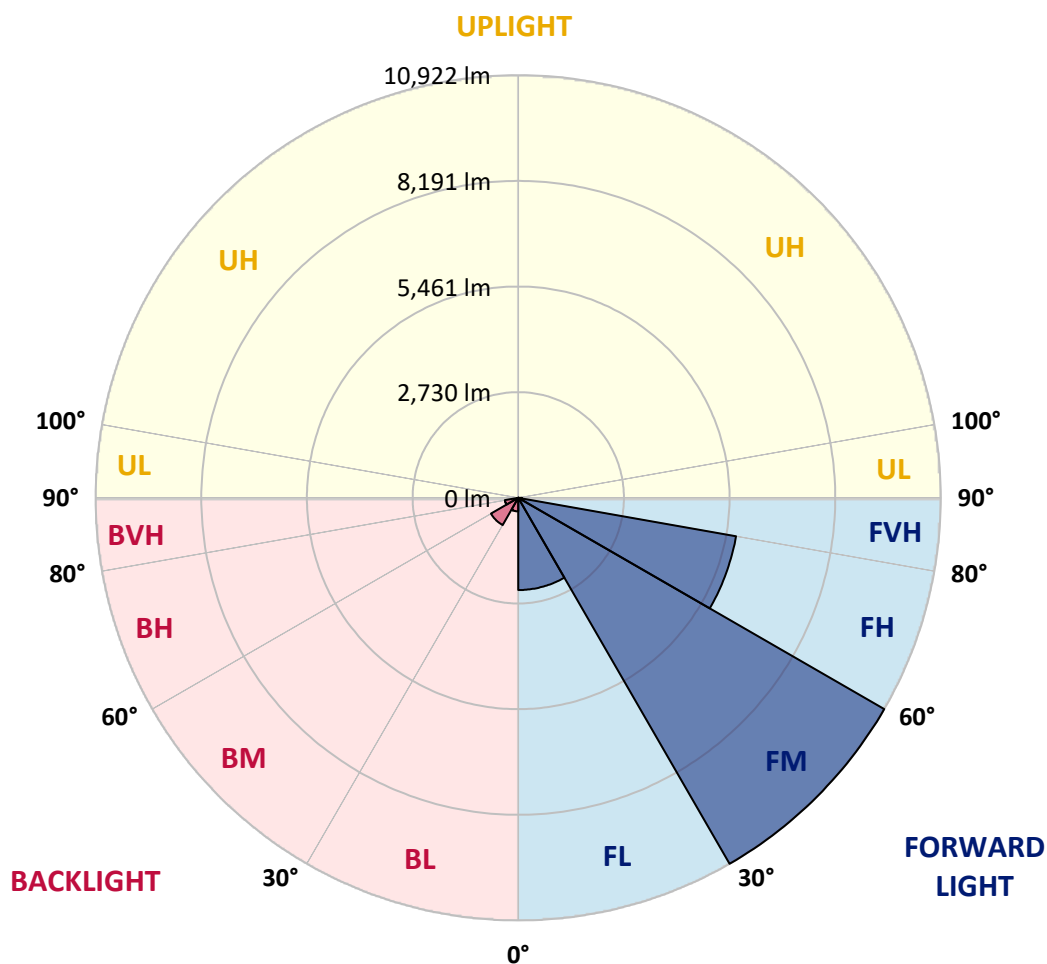
CATALOG NUMBER: NAV-SB3C-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2382.7	11.5			
FM	(30°-60°)	10921.6	52.9			
FH	(60°-80°)	5714.8	27.7			G3/7500
FVH	(80°-90°)	94.3	0.5			G1/100
BL	(0°-30°)	351.4	1.7	B1/500		
BM	(30°-60°)	813.3	3.9	B1/1000		
BH	(60°-80°)	351.4	1.7	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type II Medium



REPORT NUMBER: P964599

CATALOG NUMBER: NAV-SB3C-740-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1
2.5°	3293.8	3314.3	3284.8	3228.4	3143.9	3088.8	2954.4	2827.5	2686.5	2641.7	2500.8
5°	4015.1	4033.1	3999.8	3938.3	3825.5	3717.9	3541.1	3275.9	3000.5	2912.0	2662.2
7.5°	4549.4	4559.6	4546.8	4490.4	4382.8	4261.0	4063.8	3749.9	3341.2	3243.8	2860.8
10°	4933.6	4966.9	4963.2	4941.3	4869.6	4771.0	4560.8	4203.4	3723.0	3597.4	3084.9
12.5°	5188.7	5225.8	5247.6	5296.3	5292.4	5229.7	5045.2	4667.2	4103.5	3956.2	3337.4
15°	5263.0	5302.6	5386.0	5498.6	5598.5	5630.6	5501.2	5122.0	4522.4	4334.1	3596.2
17.5°	5220.6	5282.1	5382.1	5560.1	5779.3	5924.0	5909.9	5561.4	4902.9	4687.7	3849.8
20°	5314.2	5373.2	5451.3	5601.1	5856.1	6118.7	6223.8	5981.7	5280.9	5055.4	4116.3
22.5°	5831.7	5821.5	5829.2	5853.6	6006.0	6266.0	6482.6	6363.4	5654.9	5424.4	4398.2
25°	6651.7	6605.6	6527.4	6395.5	6357.0	6482.6	6708.0	6701.7	6049.5	5802.3	4686.4
27.5°	7592.1	7584.4	7401.1	7083.5	6904.1	6855.4	6963.0	7030.9	6440.3	6176.3	4976.0
30°	8492.7	8513.1	8265.9	7912.3	7583.1	7392.2	7294.8	7343.5	6837.5	6580.0	5274.4
32.5°	9276.8	9298.5	9029.5	8615.6	8208.3	7977.7	7772.7	7652.2	7270.5	6989.9	5602.4
35°	9939.1	9960.8	9652.1	9194.8	8760.5	8551.6	8319.7	7990.5	7706.1	7444.7	5967.5
37.5°	10531.0	10524.6	10110.8	9649.6	9222.9	9057.7	8935.9	8406.8	8154.5	7902.0	6372.4
40°	10880.8	10907.6	10554.0	10045.4	9631.6	9511.2	9503.5	8923.1	8672.0	8427.3	6815.6
42.5°	10983.2	11030.6	10774.4	10356.7	9981.3	9850.7	10051.9	9481.8	9274.2	9035.9	7316.6
45°	10798.8	10844.9	10728.3	10438.7	10219.7	10135.1	10523.3	10060.8	9917.3	9681.6	7881.6
47.5°	10260.7	10318.4	10346.5	10285.1	10282.5	10368.3	10946.1	10670.7	10680.9	10440.0	8536.2
50°	9219.1	9316.4	9575.2	9793.1	10130.0	10552.8	11357.3	11331.7	11541.8	11334.2	9389.5
52.5°	7325.6	7463.9	8355.6	8951.3	9708.5	10518.1	11809.5	12392.5	13052.2	12748.6	10592.5
55°	5886.9	5886.9	6612.0	7726.6	8886.0	10290.2	12006.8	13081.8	14081.0	14009.3	11439.3
57.5°	4799.2	4856.9	5319.3	6304.5	7695.8	9746.9	12128.6	13514.7	14910.0	14857.4	12266.9
60°	2962.0	3086.3	3960.0	4932.4	6341.7	8779.6	12051.7	13952.9	15915.6	15957.9	13263.7
62.5°	1668.1	1714.2	2103.6	3548.8	4931.1	7479.3	11463.7	14197.6	17201.9	17381.2	14291.2
65°	1151.8	1174.9	1324.7	2208.7	3418.1	5954.7	10314.5	14045.2	18490.7	18853.2	15162.3
67.5°	836.6	848.1	941.7	1349.0	2028.1	4317.4	8513.1	13276.5	19173.5	19779.5	15328.9
70°	643.1	650.8	718.7	886.5	1197.9	2664.8	6182.8	11748.0	18679.1	19402.9	14475.7
72.5°	522.8	530.4	582.9	655.9	794.3	1575.8	3747.3	9540.7	16495.9	17277.5	12323.3
75°	440.7	451.0	498.4	545.8	622.6	1012.1	1757.8	6644.0	12405.3	12917.8	8569.5
77.5°	244.7	225.5	404.9	452.2	525.3	640.5	822.5	3910.1	6947.7	7089.8	3802.4
80°	152.4	157.5	321.5	363.9	403.5	322.9	376.7	1505.3	2408.5	2288.1	736.7
82.5°	8.9	20.5	247.2	262.6	276.8	138.4	142.2	511.2	580.4	533.0	130.7
85°	0.0	0.0	112.7	90.9	96.0	39.7	41.0	119.1	78.1	84.6	25.6
87.5°	0.0	0.0	0.0	2.6	0.0	3.8	7.7	10.2	3.8	5.1	8.9
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: P964599

CATALOG NUMBER: NAV-SB3C-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1	2379.1
2.5°	2411.1	2321.4	2139.5	1961.4	1816.7	1682.1	1586.1	1495.1	1448.9	1446.4	1443.8
5°	2484.1	2295.8	1931.9	1610.4	1351.6	1144.1	1009.5	913.5	864.8	848.1	845.5
7.5°	2586.6	2303.5	1750.1	1302.9	998.0	819.9	743.0	712.3	702.0	690.5	688.0
10°	2716.0	2321.4	1587.3	1049.3	786.6	696.9	666.1	653.3	645.6	638.0	635.4
12.5°	2860.8	2338.1	1425.9	871.1	691.8	645.6	623.9	608.5	598.3	589.4	586.8
15°	3001.7	2348.4	1258.1	746.9	643.1	606.0	582.9	566.3	552.2	541.9	540.7
17.5°	3141.3	2362.4	1100.5	672.6	603.4	566.3	543.2	522.8	511.2	499.7	498.4
20°	3296.4	2359.9	951.9	620.0	563.8	526.5	502.2	483.0	471.5	458.7	457.4
22.5°	3439.9	2347.0	821.2	575.2	522.8	486.9	459.9	440.7	429.2	418.9	417.7
25°	3605.1	2336.8	712.3	534.2	484.3	448.4	418.9	401.0	388.2	379.2	377.9
27.5°	3764.0	2321.4	632.8	497.1	447.1	412.6	384.4	363.9	352.3	345.9	345.9
30°	3920.3	2317.6	603.4	461.2	413.8	379.2	351.1	331.8	322.9	320.3	319.0
32.5°	4108.6	2327.9	616.2	448.4	383.0	348.5	321.5	307.5	298.5	298.5	298.5
35°	4309.7	2325.3	635.4	459.9	362.5	317.8	297.2	288.2	279.3	279.3	279.3
37.5°	4562.2	2329.1	650.8	479.2	354.9	292.1	280.5	269.1	263.9	263.9	263.9
40°	4938.8	2455.9	643.1	495.8	352.3	274.2	251.1	247.2	243.4	243.4	243.4
42.5°	5400.0	2731.4	653.3	497.1	351.1	261.4	230.6	238.3	229.3	228.1	226.7
45°	5904.8	3032.5	718.7	470.2	349.7	254.9	220.4	229.3	215.2	215.2	215.2
47.5°	6405.7	3330.9	785.4	431.7	345.9	253.7	211.4	206.2	202.4	203.7	203.7
50°	7096.3	3574.4	811.0	379.2	336.9	251.1	194.7	196.0	193.4	196.0	196.0
52.5°	7848.3	3625.6	780.2	320.3	311.3	243.4	183.2	188.3	187.1	189.6	189.6
55°	8317.2	3570.6	644.4	266.5	271.6	212.7	171.7	181.9	181.9	181.9	181.9
57.5°	8801.5	3336.1	457.4	216.5	225.5	174.2	161.4	175.5	174.2	172.9	172.9
60°	9149.9	2956.9	301.0	178.0	179.4	143.5	149.9	165.2	164.0	157.5	157.5
62.5°	9410.0	2537.9	193.4	151.2	137.0	129.4	137.0	149.9	144.7	130.7	128.1
65°	9380.5	1957.5	148.6	129.4	112.7	112.7	119.1	130.7	115.3	92.2	89.7
67.5°	8833.4	1324.7	123.0	108.9	94.8	93.5	98.6	108.9	98.6	78.1	75.5
70°	7856.0	866.0	98.6	84.6	75.5	69.2	79.4	93.5	83.2	62.7	60.2
72.5°	6376.2	527.9	74.3	61.5	55.0	44.8	62.7	76.9	66.6	46.1	43.6
75°	4125.3	269.1	51.2	39.7	29.4	26.9	46.1	57.6	46.1	28.2	24.3
77.5°	1578.4	112.7	28.2	17.9	15.4	12.8	25.6	34.5	19.2	6.4	5.1
80°	303.6	47.4	14.0	8.9	7.7	5.1	3.8	2.6	0.0	0.0	0.0
82.5°	52.5	15.4	5.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.9	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.4	0.0	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)