

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: P968945

Luminaire Tested: **NAV-SB5C-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968945
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-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 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: 29007.5 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

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

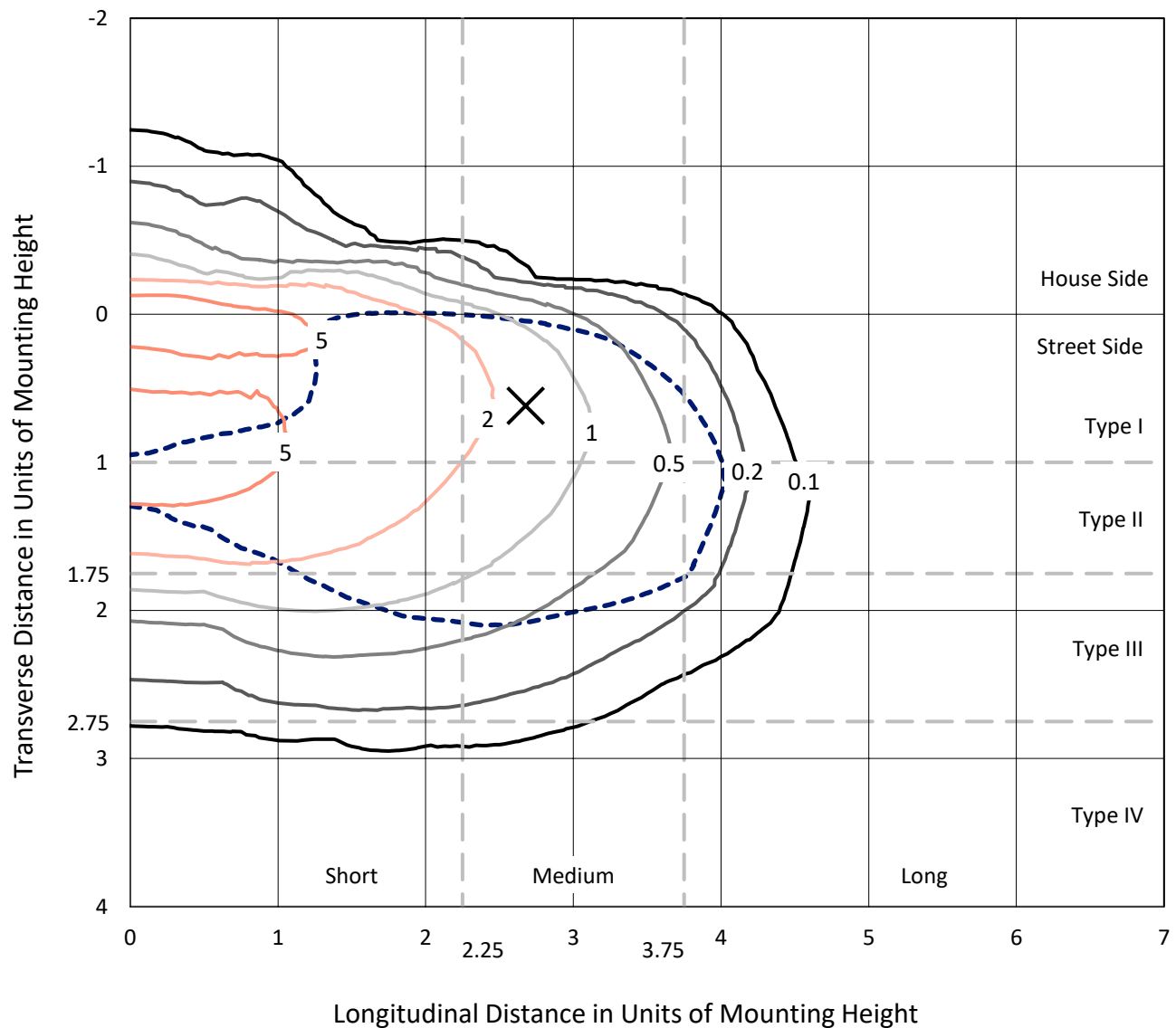


REPORT NUMBER: P968945

CATALOG NUMBER: NAV-SB5C-830-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

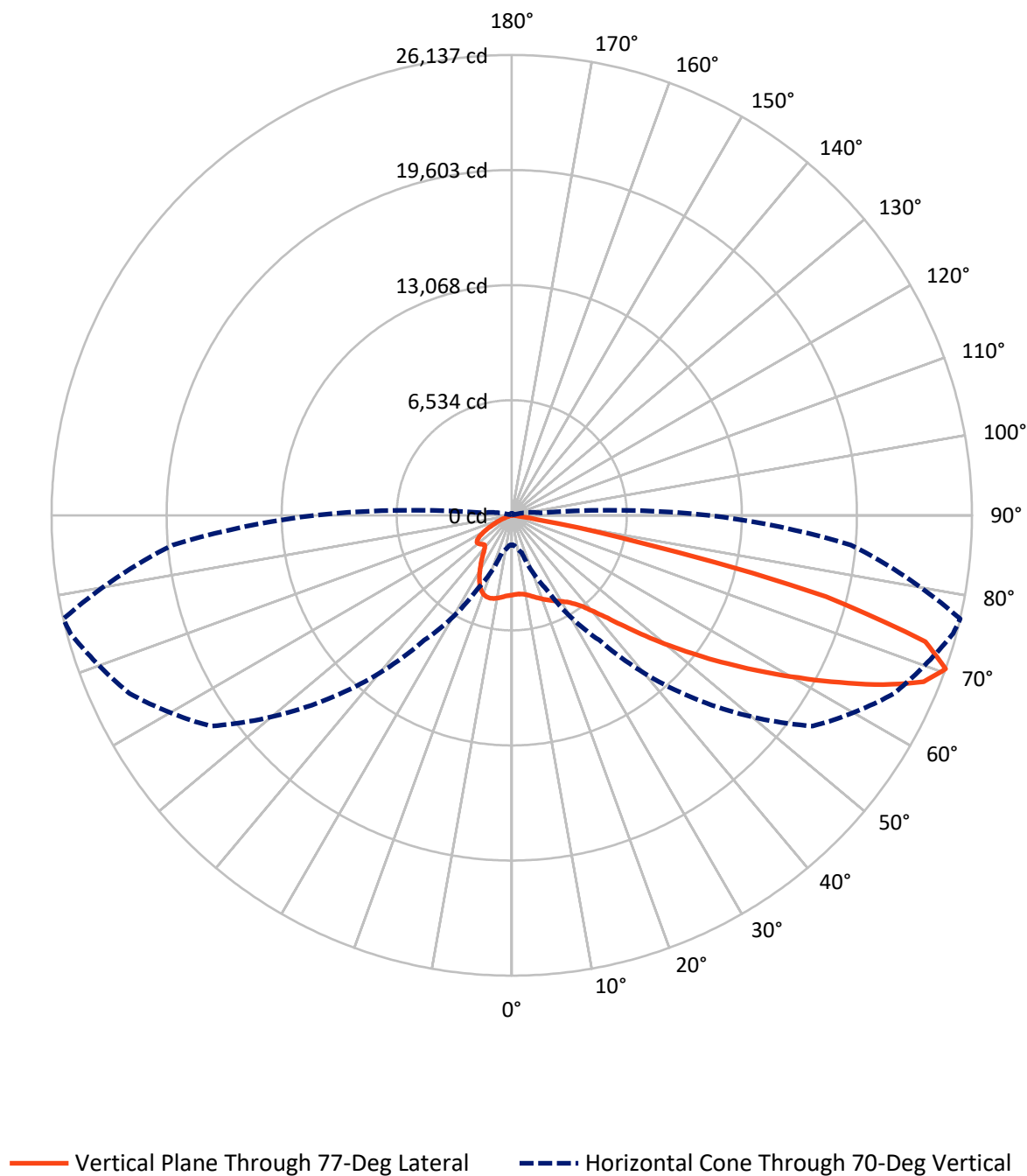
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
Type III - Medium - N/A

REPORT NUMBER: P968945
CATALOG NUMBER: NAV-SB5C-830-U-T3R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968945

CATALOG NUMBER: NAV-SB5C-830-U-T3R-HSS

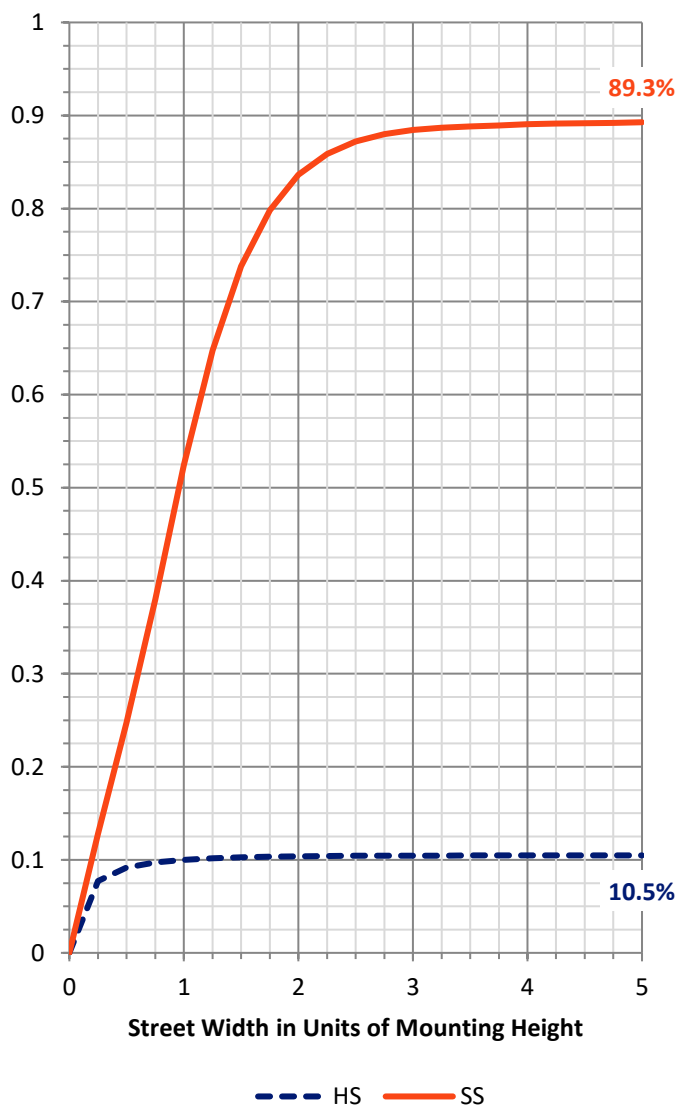
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3057.8	0.0	3057.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	25949.7	0.0	25949.7
	% Fixture	89.5	0.0	89.5
Total	Lumens	29007.5	0.0	29007.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.0	1.3
10°-20°	925.7	3.2
20°-30°	1431.8	4.9
30°-40°	2598.1	9.0
40°-50°	4904.2	16.9
50°-60°	7086.2	24.4
60°-70°	7543.0	26.0
70°-80°	3997.3	13.8
80°-90°	131.2	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°	29007.5	100.0
0°-180°	29007.5	100.0

Coefficient of Utilization



REPORT NUMBER: P968945

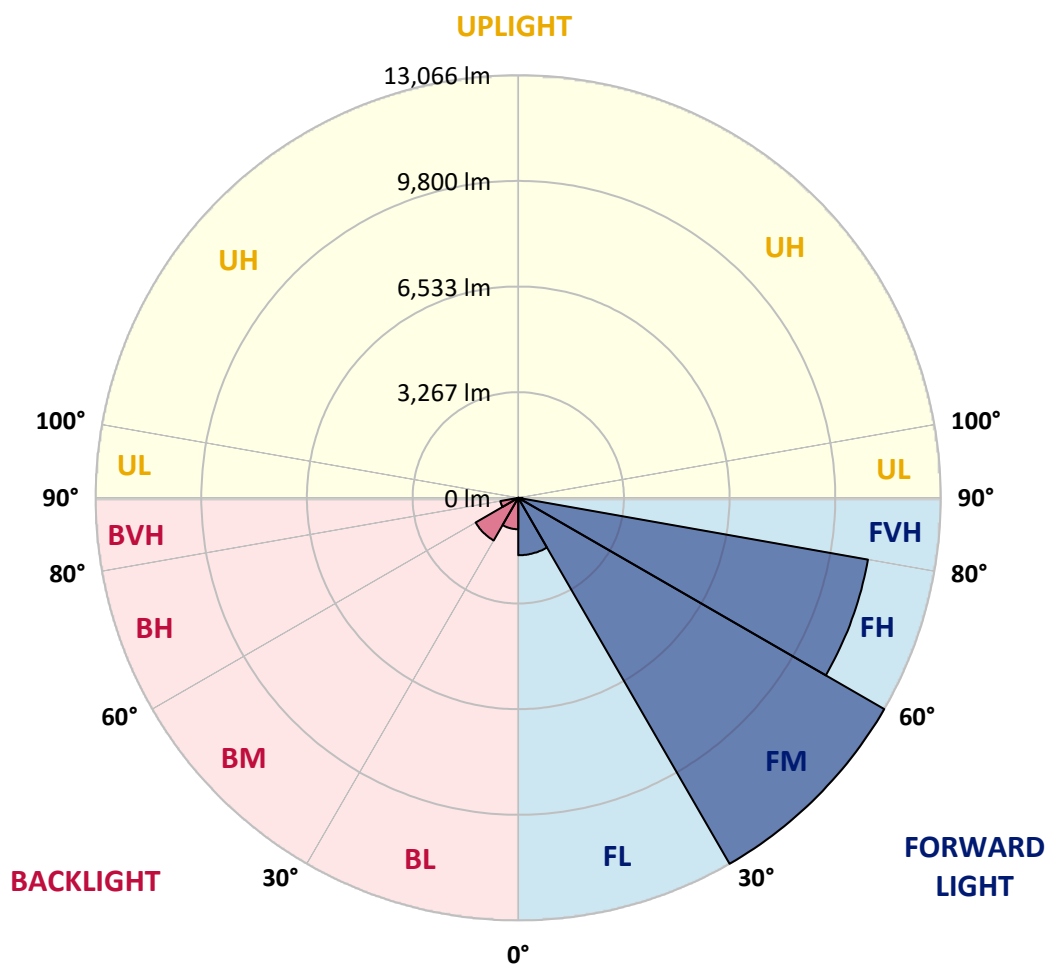
CATALOG NUMBER: NAV-SB5C-830-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1775.9	6.1			
FM	(30°-60°)	13066.3	45.0			
FH	(60°-80°)	10979.7	37.9			G4/12000
FVH	(80°-90°)	127.7	0.4			G2/225
BL	(0°-30°)	971.5	3.3	B2/1000		
BM	(30°-60°)	1522.2	5.2	B2/2500		
BH	(60°-80°)	560.6	1.9	B2/1000		G2/1000
BVH	(80°-90°)	3.5	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 Medium



REPORT NUMBER: P968945

CATALOG NUMBER: NAV-SB5C-830-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7
2.5°	4248.0	4286.5	4281.0	4306.6	4315.9	4352.5	4389.0	4438.6	4493.5	4491.7	4528.3
5°	4008.1	4046.5	4055.7	4090.5	4134.4	4191.2	4266.4	4365.3	4467.9	4484.4	4557.7
7.5°	3724.1	3764.4	3788.2	3857.9	3938.5	4055.7	4178.4	4323.1	4493.5	4517.3	4658.4
10°	3440.2	3476.8	3508.0	3606.9	3735.1	3909.1	4108.8	4317.6	4546.6	4581.4	4781.1
12.5°	3264.3	3299.2	3333.9	3420.0	3579.4	3791.9	4063.0	4343.3	4634.5	4684.0	4947.8
15°	3202.1	3233.2	3260.6	3337.6	3486.0	3727.8	4053.9	4396.4	4746.3	4812.3	5149.3
17.5°	3211.2	3227.7	3246.1	3304.6	3449.3	3698.5	4070.4	4488.0	4878.2	4936.8	5350.8
20°	3264.3	3273.5	3275.3	3315.7	3443.9	3694.8	4103.3	4575.9	5002.7	5081.5	5550.5
22.5°	3332.1	3335.8	3332.1	3359.6	3478.6	3722.3	4147.3	4682.2	5142.0	5215.2	5752.0
25°	3649.0	3579.4	3491.5	3438.4	3537.3	3775.4	4213.3	4825.1	5294.0	5365.5	5948.0
27.5°	4632.7	4433.0	4117.9	3764.4	3658.2	3852.4	4304.8	4969.8	5447.9	5512.0	6158.6
30°	6230.1	5968.2	5433.2	4636.4	4046.5	4013.6	4423.9	5114.5	5611.0	5680.5	6384.0
32.5°	7831.1	7767.0	7149.7	6046.9	4920.3	4372.6	4621.7	5310.5	5827.1	5882.1	6688.0
35°	9450.5	9320.4	8814.8	7724.9	6266.7	5103.5	4951.5	5567.0	6111.0	6173.3	7131.3
37.5°	10690.6	10611.8	10298.6	9401.0	7864.1	6231.9	5515.6	5964.5	6523.2	6592.8	7699.2
40°	11786.1	11749.5	11643.2	11051.4	9650.2	7708.4	6393.1	6580.0	7094.7	7177.2	8395.4
42.5°	12647.1	12733.2	12793.5	12628.7	11491.2	9393.7	7572.8	7444.6	7891.6	7975.8	9281.9
45°	13528.2	13557.5	13801.1	14039.2	13319.4	11155.9	8902.7	8457.6	8882.5	8987.0	10344.4
47.5°	14094.2	14211.4	14640.1	15059.6	14856.2	12903.5	10331.6	9653.8	10031.2	10227.1	11535.1
50°	14136.3	14358.0	14947.8	15678.7	15975.4	14566.8	11885.0	11016.7	11417.9	11634.1	12806.3
52.5°	13434.7	13779.1	14693.2	15763.0	16580.0	15975.4	13491.5	12379.5	12894.3	13176.5	14125.3
55°	10300.4	10751.1	13735.1	15305.0	16603.8	17043.5	15055.9	13799.3	14539.3	14858.1	15550.5
57.5°	8974.2	9201.3	10798.7	14510.0	16162.3	17473.9	16470.1	15151.1	16329.1	16724.7	16896.9
60°	7466.6	7765.2	9056.6	13209.4	15563.3	17516.0	17719.4	16895.1	18269.0	18714.0	18131.5
62.5°	5074.2	5398.5	6682.6	10974.6	14744.5	17495.9	18743.4	18690.3	20425.1	20903.1	19177.5
65°	3143.5	3346.7	4193.1	8961.4	13599.6	17517.9	19815.0	20870.1	22700.2	23185.6	19987.2
67.5°	2484.0	2577.4	3018.8	6880.4	11626.7	17023.3	20884.8	22920.0	24841.6	25226.3	20234.5
70°	1668.8	1725.6	2196.4	4612.6	8650.0	14740.8	20864.7	23949.4	25944.4	26136.7	19333.2
72.5°	879.2	923.2	1284.1	2135.9	5224.4	10478.2	17587.5	22718.5	24847.1	24557.7	16525.0
75°	439.6	512.9	864.6	1084.4	2231.2	5843.5	10921.5	17911.8	19556.7	18435.6	10602.7
77.5°	333.4	403.0	714.4	714.4	776.7	1967.4	4625.4	9769.2	9010.8	7503.2	3112.3
80°	212.5	274.8	624.6	540.4	324.2	500.1	1205.4	2736.7	1914.3	1456.3	566.0
82.5°	124.5	179.5	520.3	357.2	181.3	185.0	340.7	582.5	496.4	386.5	174.0
85°	49.5	117.3	357.2	141.0	71.4	45.8	102.6	124.5	102.6	77.0	44.0
87.5°	0.0	27.5	62.3	0.0	5.5	3.7	7.3	9.1	9.1	7.3	14.7
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: P968945

CATALOG NUMBER: NAV-SB5C-830-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7	4524.7
2.5°	4544.7	4548.4	4559.4	4561.2	4535.6	4502.6	4489.8	4484.4	4462.3	4460.5	4464.2
5°	4599.8	4616.2	4599.8	4552.1	4438.6	4279.2	4158.3	4059.3	3969.6	3942.2	3925.6
7.5°	4709.7	4726.2	4676.7	4489.8	4204.0	3887.2	3601.4	3399.9	3218.5	3150.7	3123.3
10°	4867.2	4889.1	4733.4	4356.1	3850.5	3341.3	2857.7	2517.0	2251.3	2143.3	2097.5
12.5°	5065.0	5074.2	4764.6	4152.8	3390.7	2663.5	1978.4	1613.9	1377.5	1289.7	1262.2
15°	5283.1	5270.2	4768.3	3876.1	2764.2	1883.1	1291.4	1060.7	965.3	936.0	936.0
17.5°	5512.0	5458.8	4695.0	3476.8	2077.3	1287.8	958.1	903.1	886.6	879.2	877.5
20°	5737.3	5618.2	4561.2	2954.8	1491.1	961.8	870.1	853.6	844.5	840.8	837.1
22.5°	5942.5	5739.2	4332.3	2348.4	1082.6	849.9	822.5	807.8	791.4	784.0	782.2
25°	6142.2	5808.8	4009.9	1782.4	866.4	795.0	773.1	745.6	723.5	714.4	710.7
27.5°	6336.3	5852.7	3606.9	1319.0	773.1	743.7	703.5	664.9	648.5	644.8	641.1
30°	6543.3	5867.4	3148.9	983.7	716.3	679.6	620.9	577.1	567.8	569.7	569.7
32.5°	6796.2	5889.3	2687.3	806.1	668.6	602.7	533.1	487.3	479.9	487.3	485.4
35°	7098.4	5933.3	2242.2	741.9	626.5	523.9	448.8	410.3	403.0	408.5	406.6
37.5°	7508.7	6004.8	1826.3	729.1	591.7	458.0	377.4	346.2	346.2	348.1	346.2
40°	8054.6	6195.3	1454.5	720.0	573.4	408.5	318.8	306.0	311.4	315.1	315.1
42.5°	8719.6	6600.1	1203.6	708.9	553.2	386.5	289.5	283.9	293.0	296.7	296.7
45°	9465.2	7113.0	1115.6	690.6	534.9	401.2	276.6	269.3	280.2	282.1	283.9
47.5°	10236.4	7614.9	1104.6	670.5	516.6	423.1	273.0	256.5	269.3	271.1	273.0
50°	11016.7	7942.8	1115.6	639.3	487.3	423.1	274.8	243.6	254.6	260.1	262.0
52.5°	11802.6	8093.1	1108.2	571.5	435.9	397.5	274.8	232.7	243.6	247.3	247.3
55°	12564.6	8063.8	996.5	470.8	370.0	351.7	267.4	223.4	230.8	232.7	232.7
57.5°	13167.3	7655.2	789.6	366.3	300.4	293.0	243.6	212.5	218.0	216.2	216.2
60°	13482.3	6757.6	564.2	282.1	236.3	230.8	214.3	197.8	201.5	192.4	190.5
62.5°	13486.0	5570.7	377.4	223.4	188.7	183.2	183.2	177.7	174.0	155.7	150.2
65°	13198.4	4253.5	250.9	177.7	152.0	142.9	153.9	152.0	139.2	113.6	109.9
67.5°	12546.3	2788.1	190.5	139.2	117.3	111.7	122.7	128.2	119.1	95.2	93.4
70°	11205.4	1623.0	157.5	108.0	87.9	82.4	98.9	109.9	98.9	77.0	73.3
72.5°	9307.6	875.7	128.2	80.6	60.5	54.9	78.7	89.8	78.7	56.8	54.9
75°	6039.6	468.9	98.9	53.1	31.2	34.8	58.6	65.9	54.9	36.6	33.0
77.5°	2027.9	206.9	62.3	25.6	14.7	14.7	34.8	40.3	25.6	12.8	11.0
80°	452.4	86.1	25.6	11.0	5.5	5.5	7.3	7.3	3.7	0.0	0.0
82.5°	148.4	34.8	11.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	56.8	12.8	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	21.9	1.8	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)