

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: P968970

Luminaire Tested: **NAV-SB5C-835-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968970
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-SB5C-835-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 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: 30451.7 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - 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

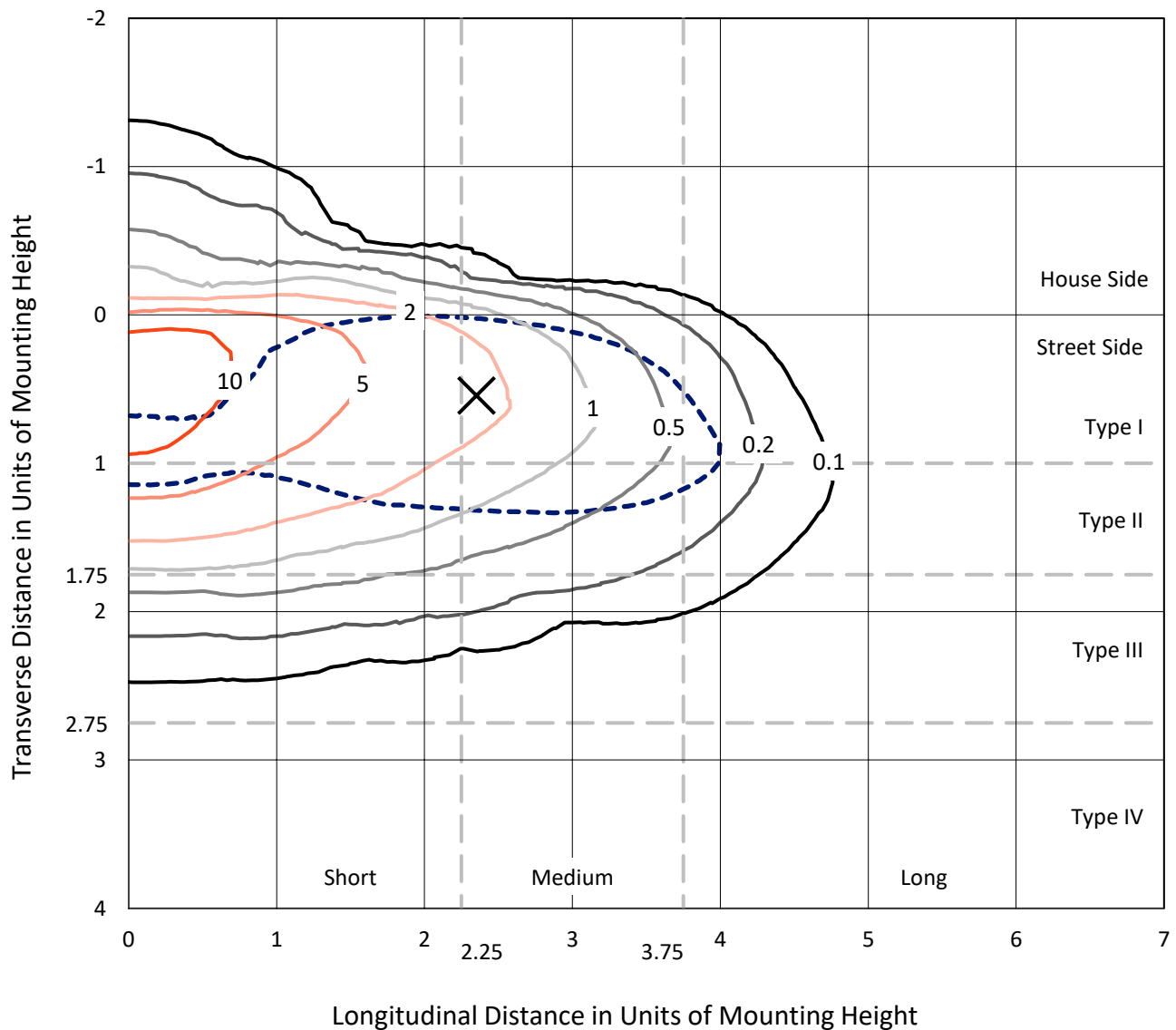


REPORT NUMBER: P968970

CATALOG NUMBER: NAV-SB5C-835-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

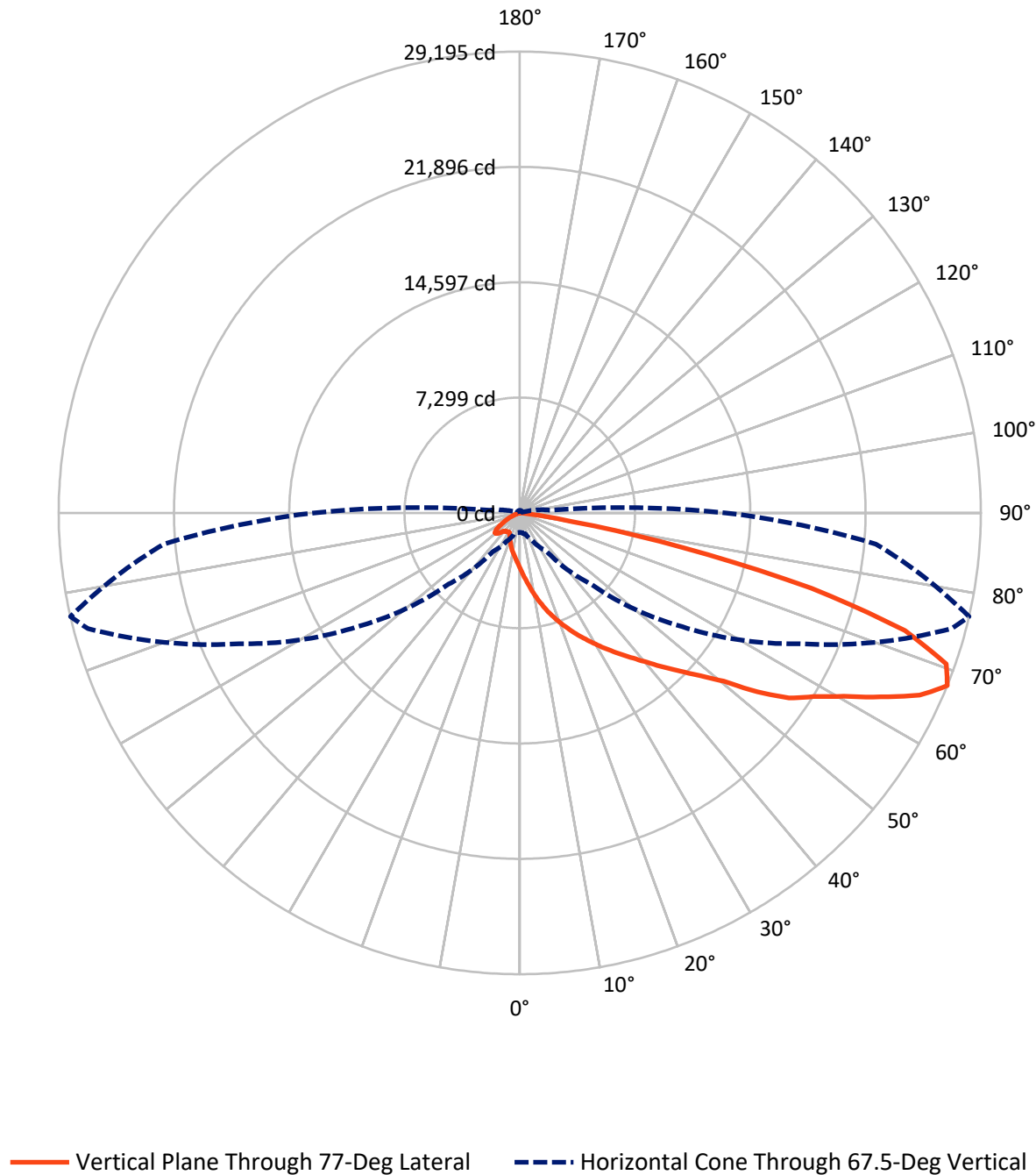
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 fc
Type II - Medium - N/A

REPORT NUMBER: P968970
CATALOG NUMBER: NAV-SB5C-835-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968970

CATALOG NUMBER: NAV-SB5C-835-U-T2R-HSS

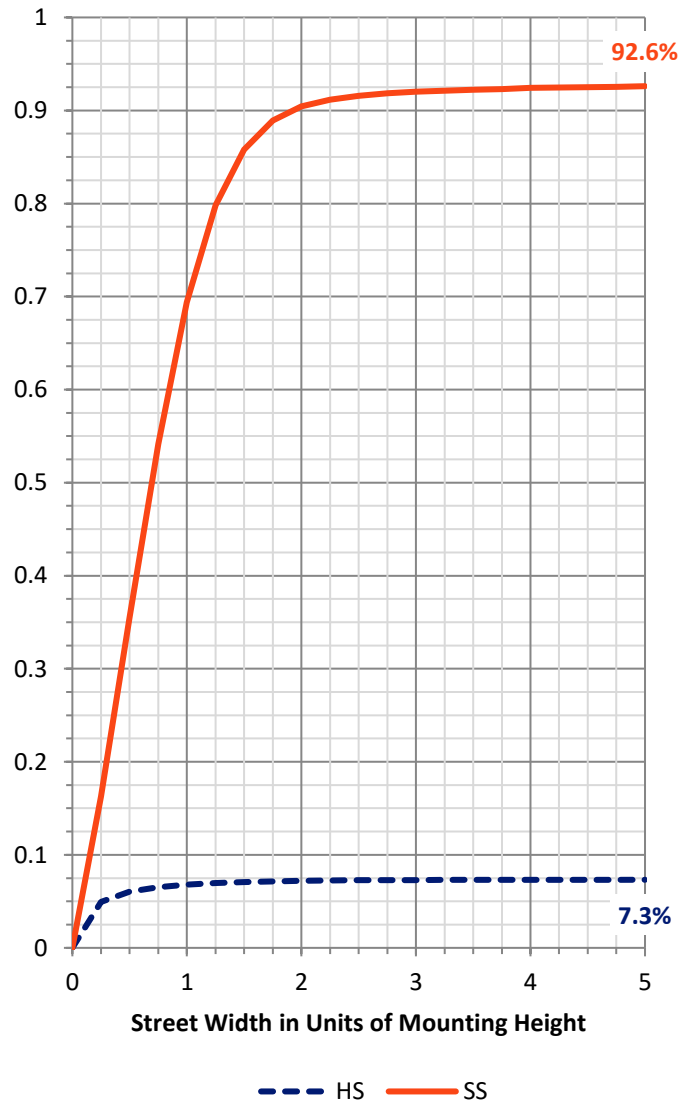
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2240.3	0.0	2240.3
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	28211.4	0.0	28211.4
	% Fixture	92.6	0.0	92.6
Total	Lumens	30451.7	0.0	30451.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	358.4	1.2
10°-20°	1255.1	4.1
20°-30°	2422.0	8.0
30°-40°	4204.7	13.8
40°-50°	6105.1	20.0
50°-60°	7010.9	23.0
60°-70°	6086.8	20.0
70°-80°	2866.9	9.4
80°-90°	141.8	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°	30451.7	100.0
0°-180°	30451.7	100.0

Coefficient of Utilization



REPORT NUMBER: P968970

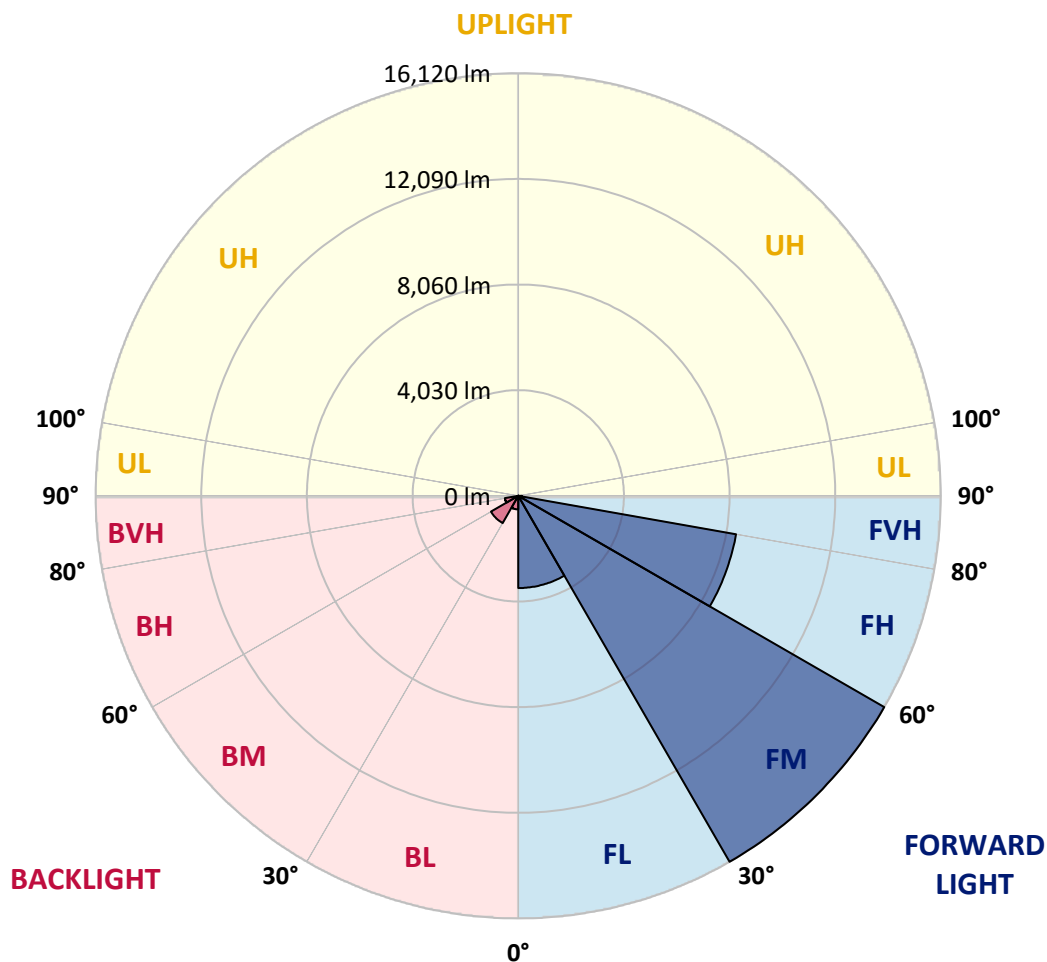
CATALOG NUMBER: NAV-SB5C-835-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3516.9	11.5			
FM	(30°-60°)	16120.3	52.9			
FH	(60°-80°)	8435.0	27.7			G4/12000
FVH	(80°-90°)	139.2	0.5			G2/225
BL	(0°-30°)	518.7	1.7	B2/1000		
BM	(30°-60°)	1200.4	3.9	B2/2500		
BH	(60°-80°)	518.7	1.7	B2/1000		G2/1000
BVH	(80°-90°)	2.6	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 II Medium



REPORT NUMBER: P968970

CATALOG NUMBER: NAV-SB5C-835-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5
2.5°	4861.7	4891.9	4848.5	4765.2	4640.5	4559.1	4360.6	4173.4	3965.3	3899.2	3691.1
5°	5926.3	5952.8	5903.6	5812.9	5646.4	5487.6	5226.7	4835.2	4428.6	4298.1	3929.4
7.5°	6714.9	6729.9	6711.1	6627.9	6469.0	6289.4	5998.2	5534.9	4931.7	4788.0	4222.5
10°	7282.1	7331.3	7325.6	7293.5	7187.6	7042.0	6731.9	6204.2	5495.1	5309.8	4553.5
12.5°	7658.4	7713.2	7745.4	7817.3	7811.6	7719.0	7446.6	6888.8	6056.8	5839.3	4925.9
15°	7768.1	7826.7	7949.6	8116.1	8263.6	8310.8	8119.8	7560.1	6675.1	6397.1	5308.0
17.5°	7705.7	7796.5	7944.0	8206.8	8530.2	8743.9	8723.1	8208.7	7236.7	6919.1	5682.4
20°	7843.7	7930.7	8046.0	8267.3	8643.6	9031.3	9186.4	8828.9	7794.6	7461.8	6075.7
22.5°	8607.7	8592.6	8604.0	8639.8	8864.9	9248.8	9568.3	9392.5	8346.8	8006.4	6491.7
25°	9818.0	9749.8	9634.5	9439.7	9383.0	9568.3	9901.1	9891.7	8929.2	8564.2	6917.2
27.5°	11205.9	11194.5	10924.1	10455.2	10190.4	10118.6	10277.5	10377.6	9506.0	9116.3	7344.5
30°	12535.2	12565.5	12200.6	11678.6	11192.7	10910.9	10767.2	10839.1	10092.2	9712.0	7785.1
32.5°	13692.6	13724.6	13327.6	12716.8	12115.4	11775.1	11472.5	11294.8	10731.2	10317.1	8269.2
35°	14670.1	14702.3	14246.6	13571.5	12930.5	12622.3	12279.9	11794.0	11374.2	10988.4	8808.1
37.5°	15543.8	15534.3	14923.5	14242.8	13613.1	13369.2	13189.5	12408.5	12036.1	11663.5	9405.7
40°	16060.0	16099.7	15577.8	14827.1	14216.3	14038.6	14027.2	13170.6	12800.0	12438.8	10060.0
42.5°	16211.3	16281.2	15903.1	15286.6	14732.5	14539.6	14836.6	13995.0	13688.8	13337.0	10799.3
45°	15939.0	16007.0	15835.0	15407.6	15084.3	14959.5	15532.4	14849.8	14638.0	14290.0	11633.2
47.5°	15144.8	15229.9	15271.5	15180.7	15177.0	15303.7	16156.5	15749.8	15765.0	15409.5	12599.5
50°	13607.4	13751.1	14133.1	14454.6	14951.9	15575.9	16763.5	16725.6	17035.7	16729.4	13858.9
52.5°	10812.5	11016.8	12332.9	13212.2	14329.8	15524.9	17430.9	18291.3	19265.2	18817.1	15634.5
55°	8689.0	8689.0	9759.3	11404.5	13115.8	15188.2	17722.1	19308.7	20783.6	20677.7	16884.5
57.5°	7083.6	7168.6	7851.3	9305.5	11359.0	14386.5	17901.8	19947.8	22007.2	21929.6	18106.0
60°	4371.9	4555.3	5845.0	7280.3	9360.3	12958.8	17788.4	20594.5	23491.6	23553.9	19577.2
62.5°	2462.0	2530.1	3104.9	5238.0	7278.3	11039.5	16920.4	20955.7	25390.1	25654.8	21093.8
65°	1700.0	1734.0	1955.3	3260.0	5045.2	8789.3	15224.2	20730.7	27292.4	27827.5	22379.6
67.5°	1234.8	1251.8	1389.9	1991.2	2993.4	6372.5	12565.5	19596.2	28300.2	29194.7	22625.4
70°	949.3	960.6	1060.9	1308.5	1768.0	3933.2	9125.8	17340.2	27570.3	28638.7	21366.0
72.5°	771.5	782.9	860.4	968.2	1172.4	2325.9	5531.1	14082.1	24348.2	25501.6	18189.2
75°	650.5	665.6	735.5	805.5	919.0	1493.8	2594.4	9806.6	18310.3	19066.6	12648.7
77.5°	361.2	332.8	597.6	667.5	775.3	945.5	1214.0	5771.3	10254.7	10464.6	5612.4
80°	225.0	232.6	474.7	537.0	595.6	476.5	556.0	2221.9	3555.0	3377.3	1087.3
82.5°	13.2	30.2	365.0	387.7	408.5	204.2	209.9	754.5	856.6	786.7	192.9
85°	0.0	0.0	166.4	134.3	141.9	58.6	60.5	175.9	115.3	124.8	37.8
87.5°	0.0	0.0	0.0	3.8	0.0	5.6	11.4	15.2	5.6	7.6	13.2
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: P968970

CATALOG NUMBER: NAV-SB5C-835-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5	3511.5
2.5°	3558.8	3426.5	3157.9	2895.1	2681.4	2482.9	2341.0	2206.7	2138.7	2134.9	2131.1
5°	3666.6	3388.6	2851.5	2377.0	1995.0	1688.7	1490.0	1348.3	1276.4	1251.8	1248.0
7.5°	3817.8	3399.9	2583.1	1923.1	1473.0	1210.2	1096.8	1051.3	1036.3	1019.3	1015.5
10°	4008.9	3426.5	2342.9	1548.7	1161.0	1028.7	983.3	964.4	953.0	941.7	937.9
12.5°	4222.5	3451.0	2104.6	1285.9	1021.1	953.0	920.9	898.2	883.0	869.8	866.0
15°	4430.6	3466.1	1856.9	1102.4	949.3	894.4	860.4	835.8	815.0	799.9	798.0
17.5°	4636.7	3486.9	1624.3	992.7	890.6	835.8	801.8	771.5	754.5	737.5	735.5
20°	4865.5	3483.2	1405.0	915.2	832.0	777.2	741.3	712.9	695.9	677.0	675.1
22.5°	5077.2	3464.3	1212.1	849.0	771.5	718.5	678.9	650.5	633.4	618.4	616.4
25°	5321.2	3449.1	1051.3	788.5	714.8	661.8	618.4	591.8	573.0	559.8	557.8
27.5°	5555.7	3426.5	934.2	733.7	660.0	608.8	567.3	537.0	520.0	510.6	510.6
30°	5786.3	3420.7	890.6	680.7	610.8	559.8	518.1	489.7	476.5	472.7	470.9
32.5°	6064.3	3435.9	909.6	661.8	565.4	514.3	474.7	453.9	440.5	440.5	440.5
35°	6361.3	3432.1	937.9	678.9	535.2	468.9	438.7	425.5	412.3	412.3	412.3
37.5°	6733.7	3437.7	960.6	707.2	523.8	431.1	414.1	397.1	389.5	389.5	389.5
40°	7289.7	3625.0	949.3	731.8	520.0	404.7	370.6	365.0	359.3	359.3	359.3
42.5°	7970.4	4031.5	964.4	733.7	518.1	385.7	340.4	351.7	338.5	336.6	334.7
45°	8715.5	4476.0	1060.9	694.0	516.2	376.3	325.2	338.5	317.6	317.6	317.6
47.5°	9454.8	4916.5	1159.2	637.2	510.6	374.4	312.0	304.4	298.8	300.6	300.6
50°	10474.1	5275.8	1197.0	559.8	497.3	370.6	287.4	289.4	285.6	289.4	289.4
52.5°	11584.0	5351.4	1151.6	472.7	459.5	359.3	270.4	278.0	276.0	279.8	279.8
55°	12276.2	5270.1	951.2	393.3	400.9	313.9	253.4	268.5	268.5	268.5	268.5
57.5°	12991.0	4924.1	675.1	319.6	332.8	257.2	238.3	259.0	257.2	255.3	255.3
60°	13505.3	4364.3	444.3	262.8	264.8	211.8	221.2	244.0	242.0	232.6	232.6
62.5°	13889.2	3746.0	285.6	223.1	202.3	191.0	202.3	221.2	213.7	192.9	189.1
65°	13845.7	2889.4	219.4	191.0	166.4	166.4	175.9	192.9	170.1	136.1	132.3
67.5°	13038.2	1955.3	181.5	160.7	139.9	138.1	145.7	160.7	145.7	115.3	111.5
70°	11595.4	1278.3	145.7	124.8	111.5	102.1	117.3	138.1	122.9	92.7	88.9
72.5°	9411.3	779.1	109.7	90.8	81.3	66.2	92.7	113.5	98.3	68.1	64.3
75°	6088.9	397.1	75.6	58.6	43.5	39.7	68.1	85.1	68.1	41.6	36.0
77.5°	2329.7	166.4	41.6	26.4	22.7	18.9	37.8	51.0	28.4	9.4	7.6
80°	448.1	70.0	20.8	13.2	11.4	7.6	5.6	3.8	0.0	0.0	0.0
82.5°	77.5	22.7	7.6	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	26.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.4	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)