

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: P968942

Luminaire Tested: **NAV-SB5C-830-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968942
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35309.2 lumens
Efficiency: N/A
Efficacy: 141.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - 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



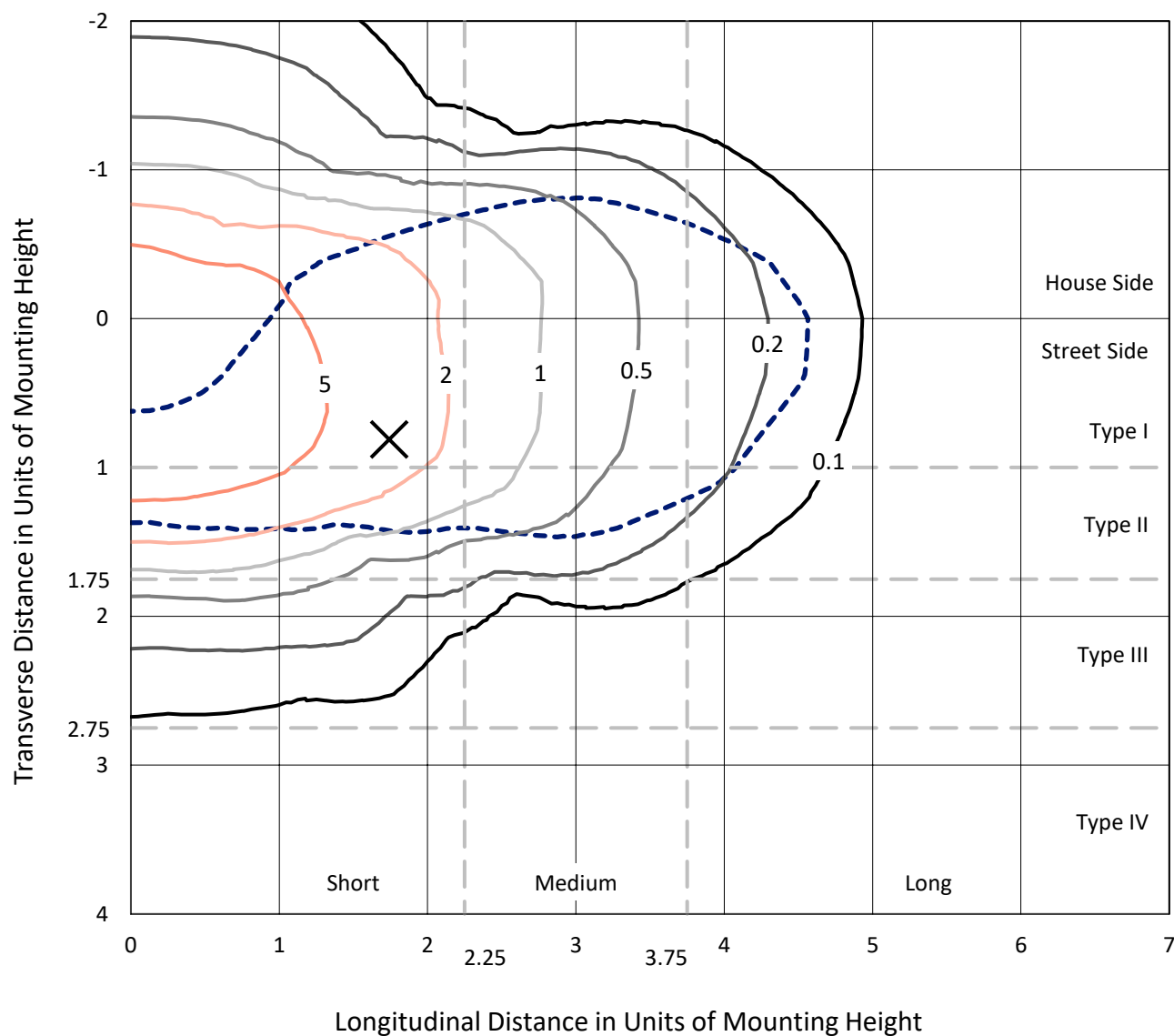
REPORT NUMBER: P968942

CATALOG NUMBER: NAV-SB5C-830-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

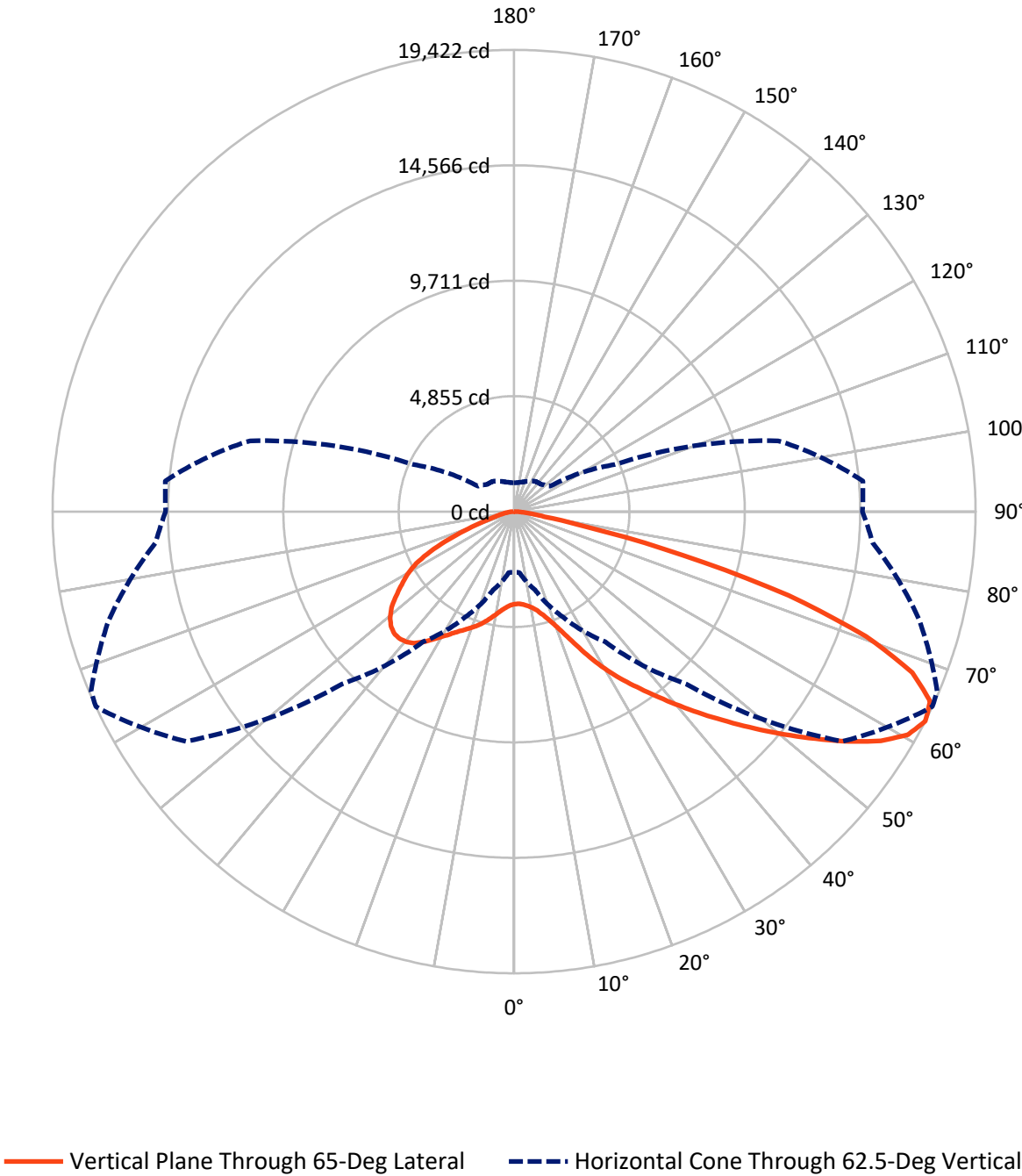


Based on 25 foot mounting height. Maximum calculated value = 9.9 fc

Type II - Short - N/A

REPORT NUMBER: P968942
CATALOG NUMBER: NAV-SB5C-830-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P968942

CATALOG NUMBER: NAV-SB5C-830-U-T2U

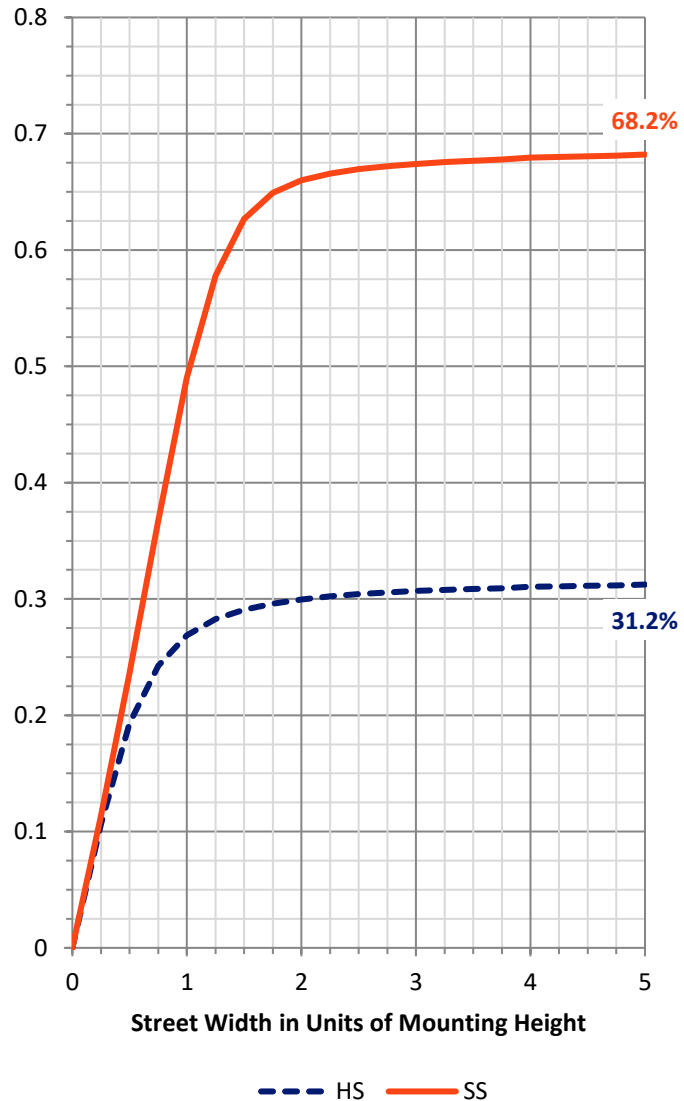
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11142.1	0.0	11142.1
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	24167.1	0.0	24167.1
	% Fixture	68.4	0.0	68.4
Total	Lumens	35309.2	0.0	35309.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	387.9	1.1
10°-20°	1315.5	3.7
20°-30°	2667.3	7.6
30°-40°	4615.7	13.1
40°-50°	6984.9	19.8
50°-60°	8189.4	23.2
60°-70°	6865.8	19.4
70°-80°	3790.5	10.7
80°-90°	492.4	1.4
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°	35309.2	100.0
0°-180°	35309.2	100.0

Coefficient of Utilization



REPORT NUMBER: P968942

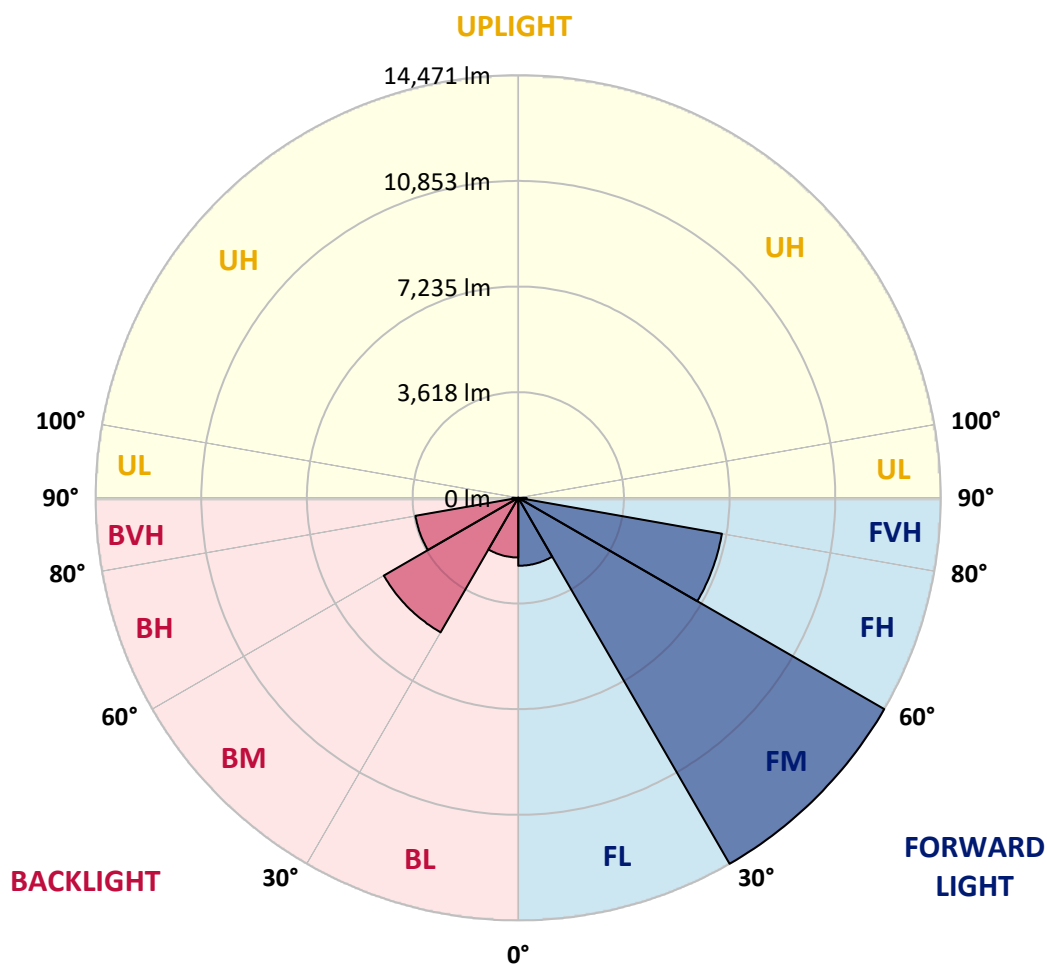
CATALOG NUMBER: NAV-SB5C-830-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2327.3	6.6			
FM	(30°-60°)	14470.9	41.0			
FH	(60°-80°)	7082.0	20.1			G3/7500
FVH	(80°-90°)	287.0	0.8			G3/500
BL	(0°-30°)	2043.3	5.8	B3/2500		
BM	(30°-60°)	5319.1	15.1	B4/8500		
BH	(60°-80°)	3574.3	10.1	B4/5000		G4/5000
BVH	(80°-90°)	205.4	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



REPORT NUMBER: P968942

CATALOG NUMBER: NAV-SB5C-830-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9
2.5°	3865.3	3854.3	3863.4	3863.4	3867.1	3865.3	3878.1	3881.8	3887.2	3898.3	3898.3
5°	3826.8	3825.0	3841.5	3856.2	3870.8	3883.6	3900.1	3923.9	3927.6	3940.4	3956.9
7.5°	3814.0	3803.0	3828.7	3846.9	3881.8	3912.9	3956.9	3997.2	4013.7	4019.1	4050.3
10°	3912.9	3894.6	3918.4	3929.4	3958.7	3989.8	4041.2	4105.2	4123.6	4145.5	4180.4
12.5°	4081.4	4061.3	4096.1	4112.6	4140.1	4167.5	4202.3	4264.6	4273.7	4314.1	4347.0
15°	4312.3	4288.4	4310.4	4330.5	4376.3	4402.1	4436.8	4497.3	4497.3	4528.4	4552.2
17.5°	4625.5	4594.4	4610.9	4618.1	4647.5	4686.0	4744.6	4797.7	4825.2	4814.2	4781.2
20°	5092.6	5054.2	5054.2	5017.6	5006.5	5037.7	5114.6	5187.9	5217.2	5160.5	5079.8
22.5°	5794.2	5739.3	5708.1	5583.6	5534.1	5537.8	5614.7	5704.5	5728.3	5627.6	5446.2
25°	6686.4	6600.3	6558.2	6375.0	6263.2	6166.1	6226.6	6342.0	6375.0	6250.3	5957.3
27.5°	7578.5	7584.0	7543.7	7323.8	7138.8	6961.2	6930.0	7050.9	7085.7	6944.7	6581.9
30°	8829.7	8699.6	8622.7	8358.9	8095.1	7846.0	7717.7	7767.1	7776.4	7607.9	7186.5
32.5°	9908.7	9875.7	9710.8	9480.0	9141.1	8750.9	8536.6	8457.8	8443.1	8203.2	7703.1
35°	11137.9	11119.5	10945.5	10670.8	10304.3	9762.1	9375.6	9150.3	9131.9	8794.9	8214.1
37.5°	12387.2	12387.2	12216.9	11916.4	11537.2	10859.4	10271.4	9914.1	9855.6	9415.9	8734.4
40°	13383.7	13323.3	13354.4	13228.0	12793.8	12074.0	11266.1	10747.6	10668.9	10141.3	9287.6
42.5°	13949.8	13929.6	14116.5	14257.5	14079.8	13504.7	12361.5	11650.8	11540.9	10940.0	9925.2
45°	14076.2	14054.2	14387.6	14904.2	15153.3	14917.0	13552.2	12601.6	12467.8	11775.3	10608.4
47.5°	13784.9	13740.9	14230.1	15045.3	15843.9	16259.8	14841.9	13632.9	13438.7	12588.7	11310.1
50°	12909.3	12867.1	13607.2	14689.9	16076.6	17172.0	16241.4	14726.5	14429.7	13460.7	12018.9
52.5°	11005.9	11026.1	12185.7	13673.2	15770.6	17740.0	17446.8	15878.8	15521.6	14352.8	12684.0
55°	8573.2	8617.2	10042.3	11680.1	14547.0	17653.9	18269.4	17065.8	16710.5	15191.8	13370.9
57.5°	6138.6	6332.9	7668.2	9289.5	12196.7	16289.1	18448.9	18194.3	17849.9	16107.8	14043.2
60°	3978.8	4013.7	5387.6	7021.7	9287.6	13863.7	18084.4	19049.7	18780.5	17042.1	14605.6
62.5°	2550.0	2573.8	3411.0	4911.3	6684.5	10256.8	16856.9	19421.6	19339.2	17659.3	15146.0
65°	1874.0	1855.7	2291.7	3246.1	4502.7	6325.5	14473.7	19242.1	19405.1	18045.8	15593.0
67.5°	1564.5	1538.8	1753.2	2247.7	3317.5	3592.3	10709.2	18075.2	18672.4	18001.9	15920.9
70°	1425.2	1403.2	1533.3	1668.8	2588.4	2405.3	5398.6	15713.9	16633.5	17501.8	15867.8
72.5°	1207.2	1168.7	1346.4	1481.9	2013.2	1844.7	2231.2	12070.3	13191.4	15898.9	15120.4
75°	936.1	910.4	1062.5	1304.3	1513.1	1439.8	1410.5	7329.4	8553.1	12295.6	13228.0
77.5°	741.9	707.1	846.3	1016.7	1361.1	1086.3	1027.7	3156.4	4369.1	7849.7	9897.7
80°	558.7	527.6	643.0	804.2	1046.0	818.9	665.0	1287.8	1646.9	3977.0	4977.2
82.5°	397.5	370.0	448.8	589.9	703.5	734.6	408.5	721.8	811.5	1533.3	1111.9
85°	254.6	238.1	300.4	370.0	447.0	472.6	249.2	377.4	414.0	632.0	463.5
87.5°	139.2	113.6	161.2	172.2	207.0	188.7	119.1	137.4	148.4	229.0	196.0
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: P968942

CATALOG NUMBER: NAV-SB5C-830-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9	3890.9
2.5°	3905.6	3911.1	3929.4	3934.9	3947.7	3964.2	3975.2	3986.2	3986.2	3997.2	3997.2
5°	3958.7	3971.6	4010.0	4030.1	4063.1	4096.1	4116.2	4140.1	4154.7	4162.0	4165.7
7.5°	4061.3	4081.4	4136.4	4171.2	4228.0	4273.7	4304.9	4337.9	4345.2	4365.4	4358.1
10°	4200.6	4224.3	4286.7	4352.6	4420.3	4477.1	4506.4	4530.3	4539.4	4543.1	4533.9
12.5°	4359.8	4394.7	4475.3	4555.9	4627.4	4676.8	4684.1	4678.6	4653.0	4631.1	4631.1
15°	4555.9	4587.1	4676.8	4764.7	4834.3	4843.5	4797.7	4768.4	4737.2	4731.7	4731.7
17.5°	4790.3	4806.8	4889.2	4975.3	4980.9	4949.7	4882.0	4854.5	4825.2	4805.0	4806.8
20°	5063.3	5057.9	5116.5	5153.1	5114.6	5019.3	4916.8	4871.0	4841.7	4817.8	4819.7
22.5°	5389.4	5347.2	5339.9	5330.8	5228.2	5028.5	4889.2	4830.7	4784.9	4751.9	4762.9
25°	5863.8	5702.7	5590.9	5528.6	5297.8	4979.0	4801.4	4671.3	4585.2	4528.4	4550.4
27.5°	6457.4	6186.3	5904.2	5752.1	5297.8	4878.3	4588.8	4378.2	4237.1	4178.5	4207.8
30°	7023.4	6739.5	6323.6	6021.4	5285.0	4713.5	4246.3	3953.2	3788.3	3729.7	3764.5
32.5°	7507.1	7197.4	6768.8	6316.4	5253.8	4445.9	3821.3	3497.1	3337.7	3268.1	3302.9
35°	7955.8	7626.1	7215.8	6640.6	5171.4	4054.0	3354.2	3106.9	2929.1	2817.4	2854.1
37.5°	8415.7	8023.7	7638.9	6933.7	5023.0	3596.0	2995.2	2784.4	2575.6	2425.5	2465.7
40°	8915.8	8446.8	8091.5	7107.7	4779.4	3160.0	2716.7	2524.4	2302.7	2143.3	2174.4
42.5°	9500.1	8954.3	8595.2	7197.4	4445.9	2850.4	2535.3	2346.6	2137.8	2007.8	2033.4
45°	10110.2	9512.9	9055.0	7195.6	4074.1	2705.7	2476.7	2289.8	2059.0	1923.5	1945.4
47.5°	10749.5	10097.4	9452.6	7078.4	3751.7	2725.9	2443.7	2167.2	1912.4	1780.6	1798.9
50°	11390.6	10736.7	9837.2	6858.6	3614.4	2681.9	2321.0	1995.0	1694.5	1575.4	1582.7
52.5°	12026.3	11416.3	10168.8	6545.3	3475.1	2518.8	2163.5	1771.4	1604.7	1522.3	1522.3
55°	12665.6	12088.6	10529.6	6089.2	3127.1	2328.3	1899.6	1687.2	1533.3	1458.2	1450.9
57.5°	13306.8	12865.3	10872.3	5633.1	2689.2	2093.9	1754.9	1584.5	1461.9	1397.7	1386.7
60°	13973.6	13753.8	11225.8	5213.6	2256.8	1793.4	1648.7	1502.1	1377.6	1306.2	1300.6
62.5°	14660.6	14732.0	11502.4	4673.2	1859.4	1610.3	1553.4	1403.2	1282.3	1214.5	1212.7
65°	15353.1	15675.4	11683.8	3923.9	1507.7	1436.2	1450.9	1295.2	1172.4	1113.8	1111.9
67.5°	15875.1	16355.1	11632.4	2969.5	1236.6	1271.3	1322.7	1181.5	1066.2	1020.4	1022.2
70°	15933.7	16274.4	11126.9	2033.4	1035.0	1110.1	1179.8	1069.8	950.8	917.8	919.6
72.5°	15153.3	15175.3	9718.1	1328.1	875.7	974.6	1029.5	956.2	840.8	807.9	806.1
75°	13107.1	12550.2	7135.2	875.7	732.8	837.2	888.5	837.2	725.4	732.8	707.1
77.5°	9930.6	8888.3	4332.4	622.8	611.8	703.5	773.1	736.5	641.1	720.0	633.9
80°	5116.5	4808.7	1932.6	465.2	483.6	562.4	635.7	588.0	507.5	483.6	441.5
82.5°	1172.4	1362.9	762.1	333.4	349.9	404.9	485.4	441.5	364.6	307.8	304.1
85°	410.3	448.8	337.0	208.8	205.2	252.8	329.7	294.9	247.3	197.8	208.8
87.5°	130.1	170.4	126.4	84.3	87.9	113.6	152.0	139.2	115.4	75.1	78.7
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)