

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: P969314

Luminaire Tested: **NAV-SB5D-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969314
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-SB5D-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53394.3 lumens
Efficiency: N/A
Efficacy: 146.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B5 - U0 - G5

Input Watts (W): 364.9
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



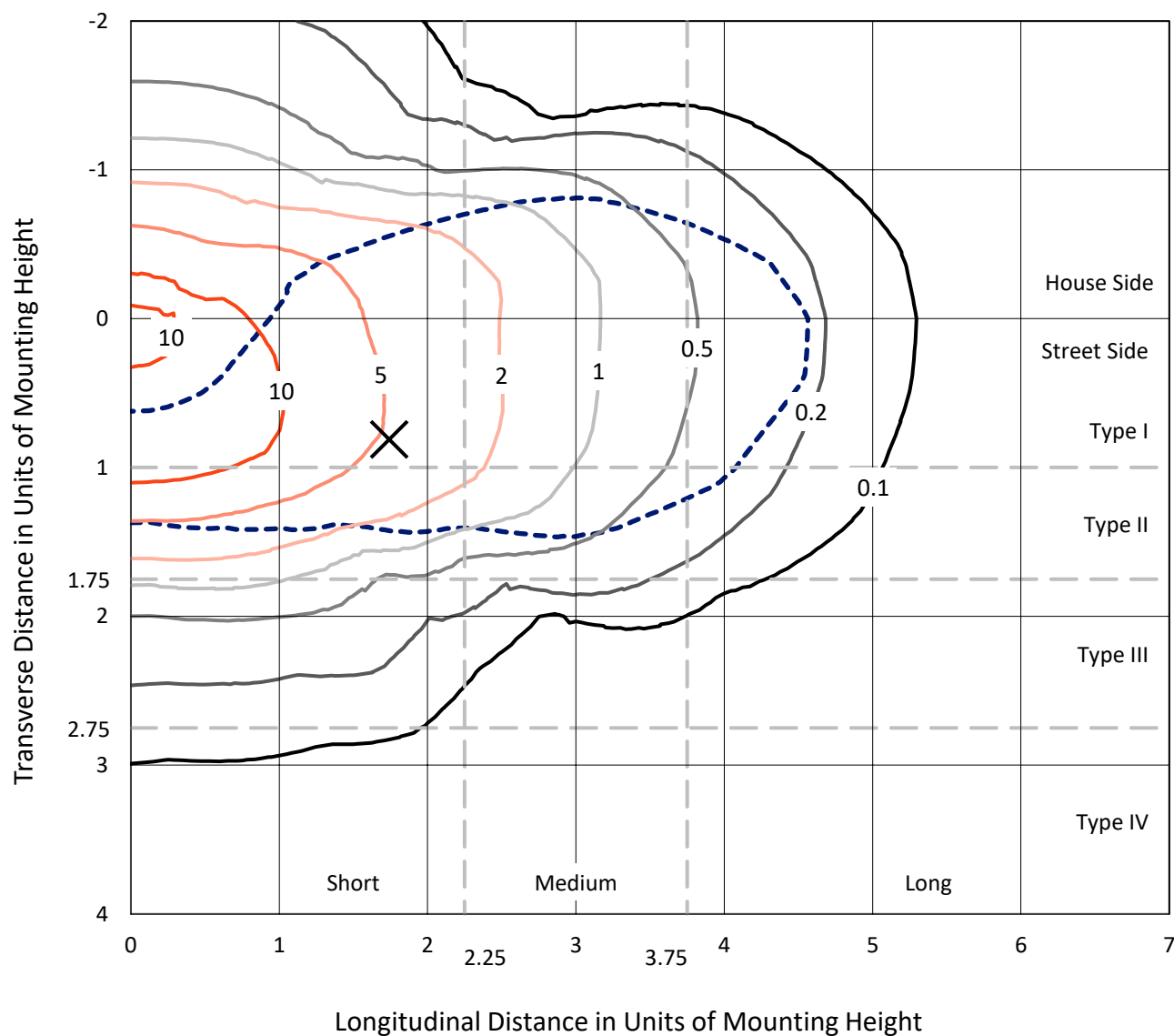
REPORT NUMBER: P969314

CATALOG NUMBER: NAV-SB5D-735-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

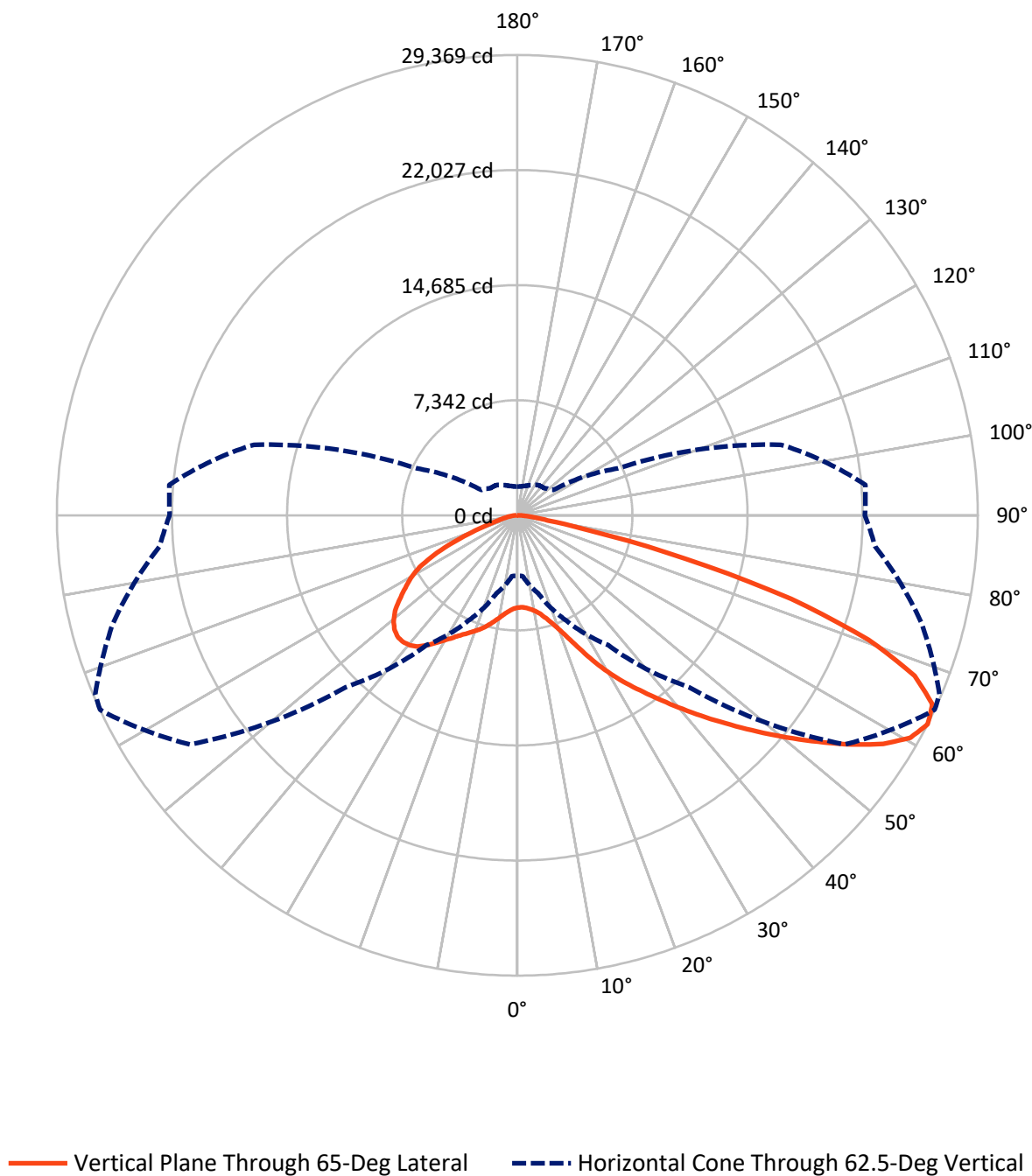


Based on 25 foot mounting height. Maximum calculated value = 15 fc

Type II - Short - N/A

REPORT NUMBER: P969314
CATALOG NUMBER: NAV-SB5D-735-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P969314

CATALOG NUMBER: NAV-SB5D-735-U-T2U

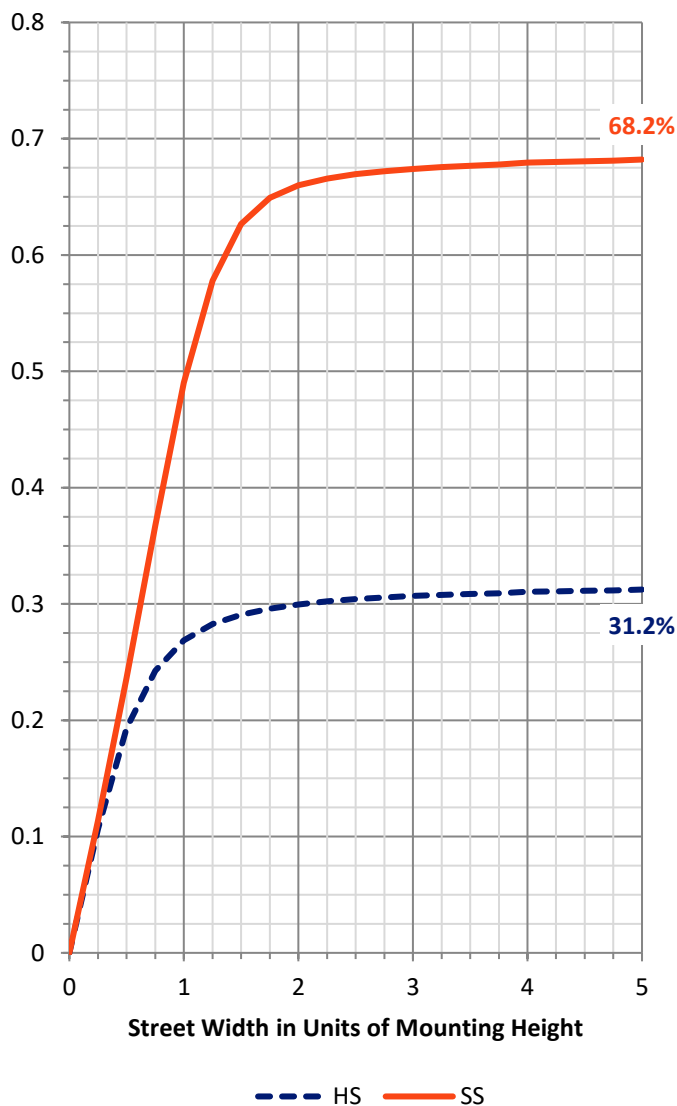
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16848.9	0.0	16848.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	36545.4	0.0	36545.4
	% Fixture	68.4	0.0	68.4
Total	Lumens	53394.3	0.0	53394.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	586.6	1.1
10°-20°	1989.2	3.7
20°-30°	4033.4	7.6
30°-40°	6979.7	13.1
40°-50°	10562.5	19.8
50°-60°	12383.9	23.2
60°-70°	10382.4	19.4
70°-80°	5731.9	10.7
80°-90°	744.6	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°	53394.3	100.0
0°-180°	53394.3	100.0

Coefficient of Utilization



REPORT NUMBER: P969314

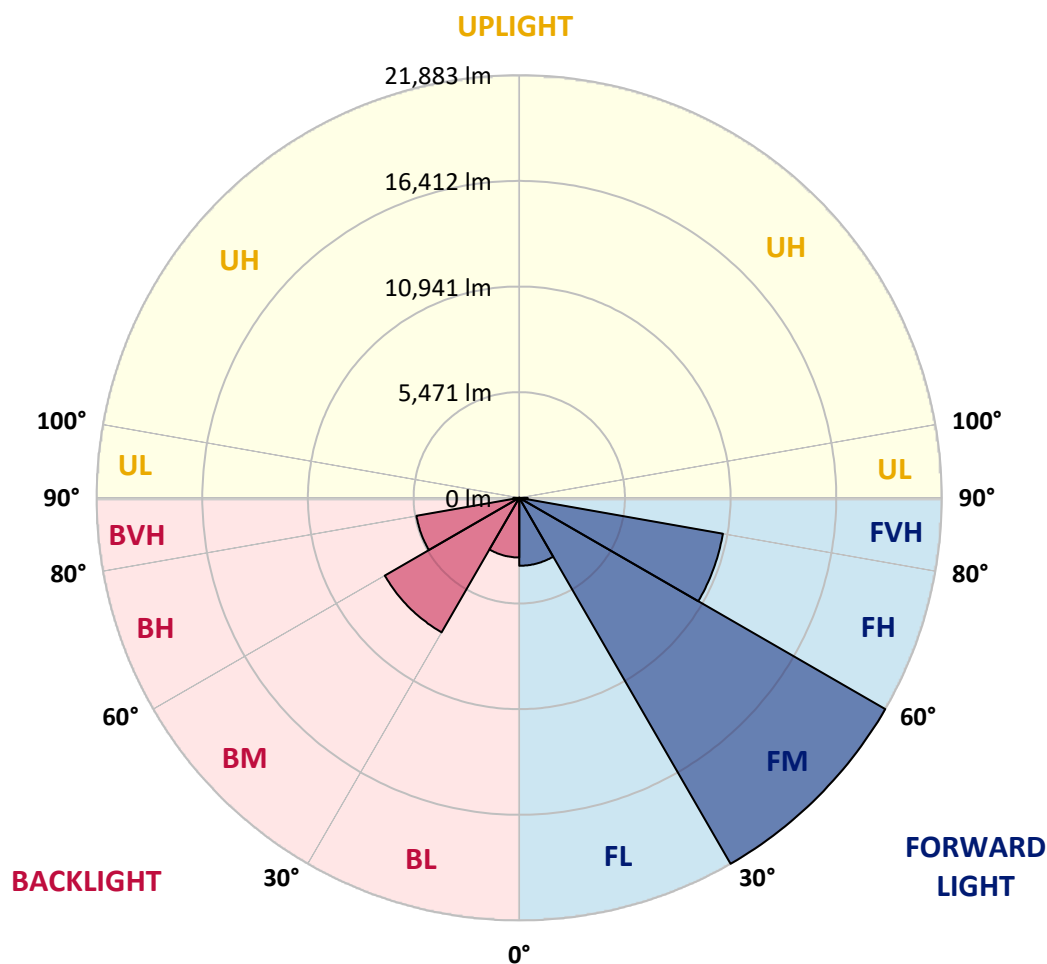
CATALOG NUMBER: NAV-SB5D-735-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3519.4	6.6			
FM	(30°-60°)	21882.7	41.0			
FH	(60°-80°)	10709.3	20.1			G4/12000
FVH	(80°-90°)	433.9	0.8			G3/500
BL	(0°-30°)	3089.9	5.8	B4/5000		
BM	(30°-60°)	8043.4	15.1	B4/8500		
BH	(60°-80°)	5405.0	10.1	B5		G5
BVH	(80°-90°)	310.6	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type II Short



REPORT NUMBER: P969314

CATALOG NUMBER: NAV-SB5D-735-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8
2.5°	5845.1	5828.5	5842.3	5842.3	5847.8	5845.1	5864.4	5870.0	5878.3	5894.9	5894.9
5°	5786.8	5784.1	5809.0	5831.2	5853.4	5872.7	5897.6	5933.7	5939.3	5958.6	5983.5
7.5°	5767.5	5750.9	5789.6	5817.4	5870.0	5917.0	5983.5	6044.5	6069.4	6077.7	6124.8
10°	5917.0	5889.3	5925.4	5942.0	5986.3	6033.5	6110.9	6207.9	6235.6	6268.9	6321.5
12.5°	6171.9	6141.5	6194.1	6219.0	6260.6	6302.1	6354.8	6448.9	6462.8	6523.7	6573.6
15°	6520.9	6485.0	6518.2	6548.6	6617.9	6656.7	6709.3	6800.8	6800.8	6847.8	6883.8
17.5°	6994.7	6947.6	6972.5	6983.5	7027.9	7086.0	7174.7	7255.1	7296.6	7280.0	7230.1
20°	7701.0	7642.9	7642.9	7587.5	7570.9	7617.9	7734.2	7845.1	7889.4	7803.5	7681.7
22.5°	8762.0	8678.9	8631.8	8443.4	8368.6	8374.1	8490.6	8626.3	8662.3	8510.0	8235.7
25°	10111.1	9980.9	9917.2	9640.1	9471.2	9324.3	9415.8	9590.3	9640.1	9451.8	9008.5
27.5°	11460.1	11468.4	11407.5	11075.1	10795.3	10526.6	10479.5	10662.4	10714.9	10501.6	9953.2
30°	13352.2	13155.5	13039.1	12640.2	12241.4	11864.6	11670.6	11745.5	11759.3	11504.5	10867.4
32.5°	14983.8	14933.9	14684.7	14335.5	13823.2	13233.1	12909.0	12789.8	12767.7	12404.8	11648.5
35°	16842.6	16814.9	16551.7	16136.2	15582.2	14762.2	14177.7	13837.0	13809.2	13299.6	12421.4
37.5°	18731.8	18731.8	18474.2	18019.9	17446.4	16421.5	15532.3	14992.1	14903.5	14238.6	13208.2
40°	20238.8	20147.4	20194.4	20003.3	19346.8	18258.1	17036.5	16252.5	16133.4	15335.6	14044.8
42.5°	21094.8	21064.3	21346.9	21560.2	21291.4	20421.6	18693.0	17618.2	17452.1	16543.4	15008.8
45°	21285.9	21252.7	21756.9	22538.0	22914.8	22557.4	20493.6	19056.0	18853.7	17806.6	16042.0
47.5°	20845.4	20779.0	21518.6	22751.3	23959.1	24587.9	22443.8	20615.5	20321.9	19036.5	17102.9
50°	19521.3	19457.6	20576.8	22213.9	24310.9	25967.5	24560.2	22269.4	21820.5	20355.2	18175.0
52.5°	16643.1	16673.6	18427.1	20676.5	23848.3	26826.2	26383.0	24011.8	23471.6	21704.2	19180.6
55°	12964.3	13030.8	15186.0	17662.5	21997.8	26696.0	27626.8	25806.8	25269.4	22972.9	20219.4
57.5°	9282.8	9576.5	11595.9	14047.5	18443.7	24632.3	27898.2	27513.3	26992.5	24358.0	21236.1
60°	6016.7	6069.4	8147.0	10618.0	14044.8	20964.5	27347.0	28806.9	28399.7	25770.8	22086.5
62.5°	3856.0	3892.0	5158.0	7426.8	10108.3	15510.1	25491.0	29369.2	29244.6	26704.3	22903.7
65°	2833.9	2806.1	3465.4	4908.7	6809.1	9565.4	21887.0	29097.8	29344.3	27288.9	23579.6
67.5°	2365.7	2327.0	2651.1	3399.0	5016.8	5432.3	16194.4	27333.2	28236.3	27222.4	24075.5
70°	2155.2	2122.0	2318.7	2523.7	3914.3	3637.2	8163.6	23762.5	25153.1	26466.1	23995.1
72.5°	1825.5	1767.4	2036.1	2241.1	3044.5	2789.5	3374.1	18252.6	19947.9	24042.2	22864.9
75°	1415.5	1376.8	1606.7	1972.3	2288.1	2177.3	2133.0	11083.4	12933.9	18593.3	20003.3
77.5°	1122.0	1069.3	1279.8	1537.4	2058.2	1642.7	1554.1	4773.0	6606.8	11870.1	14967.2
80°	844.9	797.8	972.3	1216.1	1581.8	1238.3	1005.5	1947.4	2490.3	6014.0	7526.6
82.5°	601.2	559.5	678.7	892.0	1063.7	1110.8	617.8	1091.4	1227.1	2318.7	1681.5
85°	385.1	360.1	454.3	559.5	675.9	714.7	376.8	570.6	626.1	955.7	700.9
87.5°	210.5	171.8	243.7	260.3	313.0	285.4	180.1	207.8	224.4	346.2	296.4
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: P969314

CATALOG NUMBER: NAV-SB5D-735-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8	5883.8
2.5°	5905.9	5914.2	5942.0	5950.3	5969.7	5994.6	6011.2	6027.8	6027.8	6044.5	6044.5
5°	5986.3	6005.7	6063.9	6094.3	6144.3	6194.1	6224.5	6260.6	6282.7	6293.8	6299.3
7.5°	6141.5	6171.9	6255.1	6307.6	6393.5	6462.8	6509.9	6559.7	6570.9	6601.3	6590.2
10°	6352.0	6388.0	6482.2	6581.9	6684.4	6770.2	6814.6	6850.6	6864.4	6870.0	6856.1
12.5°	6593.0	6645.6	6767.5	6889.4	6997.5	7072.2	7083.3	7075.0	7036.2	7003.0	7003.0
15°	6889.4	6936.5	7072.2	7205.2	7310.4	7324.3	7255.1	7210.8	7163.6	7155.3	7155.3
17.5°	7244.0	7268.9	7393.5	7523.7	7532.1	7485.0	7382.5	7340.9	7296.6	7266.1	7268.9
20°	7656.7	7648.4	7737.0	7792.5	7734.2	7590.2	7435.1	7365.9	7321.6	7285.5	7288.3
22.5°	8149.8	8086.1	8075.1	8061.2	7906.0	7604.1	7393.5	7304.9	7235.7	7185.8	7202.4
25°	8867.3	8623.5	8454.5	8360.3	8011.3	7529.3	7260.6	7063.9	6933.7	6847.8	6881.0
27.5°	9764.8	9354.9	8928.3	8698.3	8011.3	7376.9	6939.2	6620.7	6407.4	6318.7	6363.1
30°	10620.8	10191.4	9562.6	9105.5	7991.9	7127.6	6421.2	5978.0	5728.7	5640.1	5692.6
32.5°	11352.1	10884.0	10235.8	9551.5	7944.8	6723.2	5778.5	5288.3	5047.2	4941.9	4994.6
35°	12030.8	11532.2	10911.6	10041.8	7820.1	6130.3	5072.2	4698.2	4429.4	4260.5	4315.9
37.5°	12726.1	12133.3	11551.5	10485.0	7595.8	5437.8	4529.2	4210.6	3894.8	3667.7	3728.6
40°	13482.3	12773.2	12235.8	10748.3	7227.4	4778.5	4108.1	3817.3	3482.1	3241.0	3288.2
42.5°	14366.1	13540.6	12997.6	10884.0	6723.2	4310.3	3833.9	3548.6	3232.7	3036.0	3074.9
45°	15288.5	14385.5	13692.9	10881.2	6160.9	4091.5	3745.2	3462.7	3113.6	2908.6	2942.0
47.5°	16255.3	15269.1	14294.0	10703.9	5673.3	4122.0	3695.4	3277.1	2892.0	2692.6	2720.2
50°	17224.8	16235.9	14875.7	10371.5	5465.5	4055.5	3509.8	3016.7	2562.4	2382.3	2393.4
52.5°	18186.1	17263.7	15377.2	9897.8	5255.0	3809.0	3271.6	2678.7	2426.7	2302.0	2302.0
55°	19152.8	18280.3	15922.9	9208.0	4728.6	3520.9	2872.7	2551.3	2318.7	2205.1	2194.0
57.5°	20122.5	19454.8	16440.9	8518.3	4066.6	3166.3	2653.8	2396.1	2210.6	2113.7	2097.0
60°	21130.8	20798.4	16975.5	7883.9	3412.8	2711.9	2493.1	2271.5	2083.2	1975.2	1966.8
62.5°	22169.6	22277.7	17393.8	7066.7	2811.7	2435.0	2349.1	2122.0	1939.1	1836.6	1833.8
65°	23216.8	23704.3	17668.1	5933.7	2279.8	2171.8	2194.0	1958.5	1772.9	1684.3	1681.5
67.5°	24006.2	24732.0	17590.5	4490.4	1869.9	1922.5	2000.1	1786.8	1612.2	1542.9	1545.7
70°	24094.9	24610.1	16826.0	3074.9	1565.2	1678.7	1784.0	1617.8	1437.7	1387.8	1390.6
72.5°	22914.8	22948.0	14695.7	2008.4	1324.1	1473.7	1556.9	1446.1	1271.5	1221.6	1218.8
75°	19820.5	18978.4	10789.8	1324.1	1108.0	1266.0	1343.6	1266.0	1097.0	1108.0	1069.3
77.5°	15017.1	13440.8	6551.4	941.9	925.3	1063.7	1169.0	1113.6	969.5	1088.7	958.5
80°	7737.0	7271.7	2922.5	703.7	731.3	850.4	961.2	889.2	767.3	731.3	667.6
82.5°	1772.9	2061.0	1152.4	504.2	529.1	612.2	734.1	667.6	551.2	465.4	459.8
85°	620.5	678.7	509.7	315.8	310.3	382.3	498.7	446.0	374.0	299.2	315.8
87.5°	196.7	257.6	191.2	127.4	132.9	171.8	229.9	210.5	174.6	113.6	119.1
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)