

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: P962978

Luminaire Tested: **NAV-SB2D-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962978
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20386.2 lumens
Efficiency: N/A
Efficacy: 138.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 147.6
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

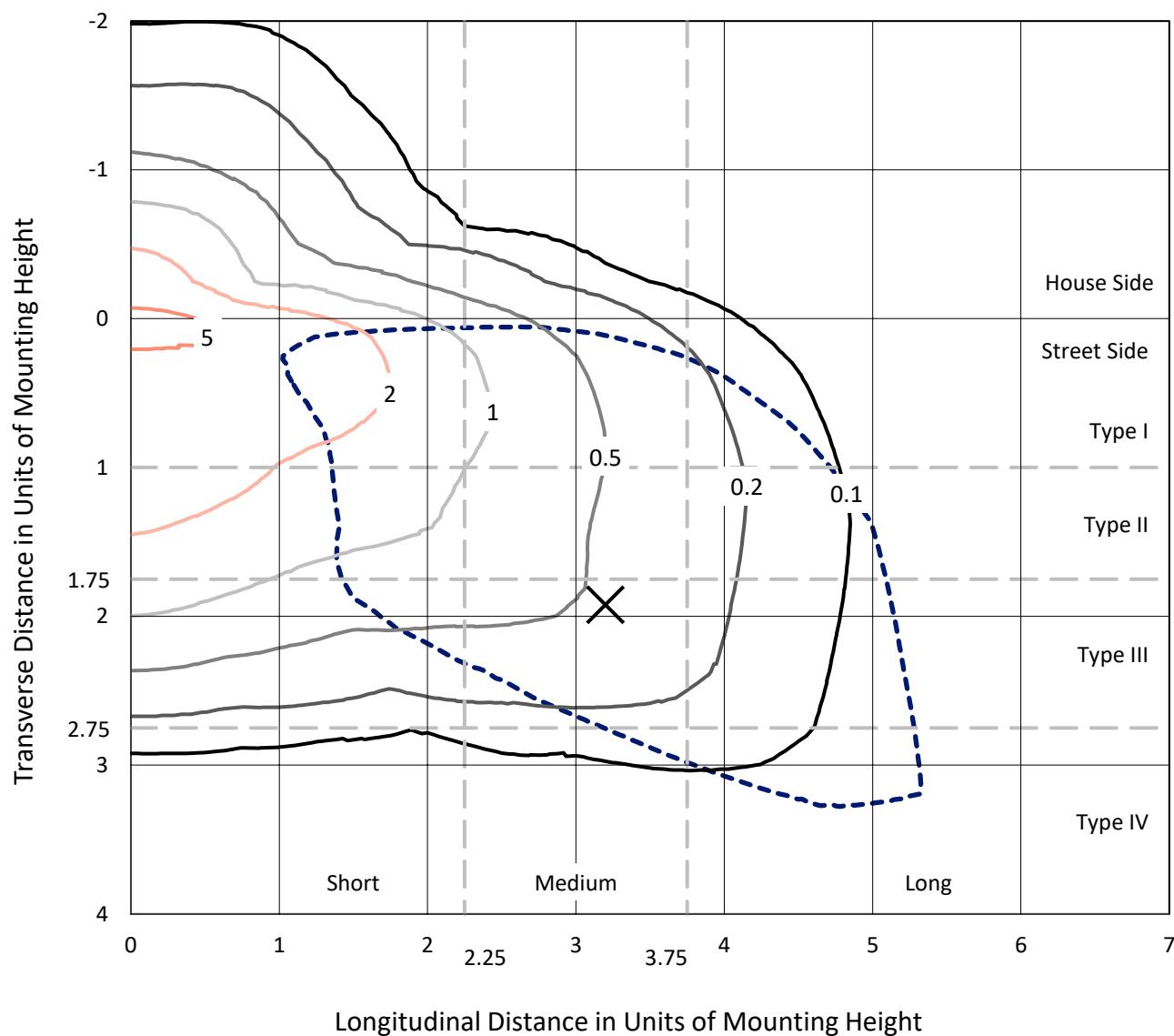


REPORT NUMBER: P962978

CATALOG NUMBER: NAV-SB2D-735-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

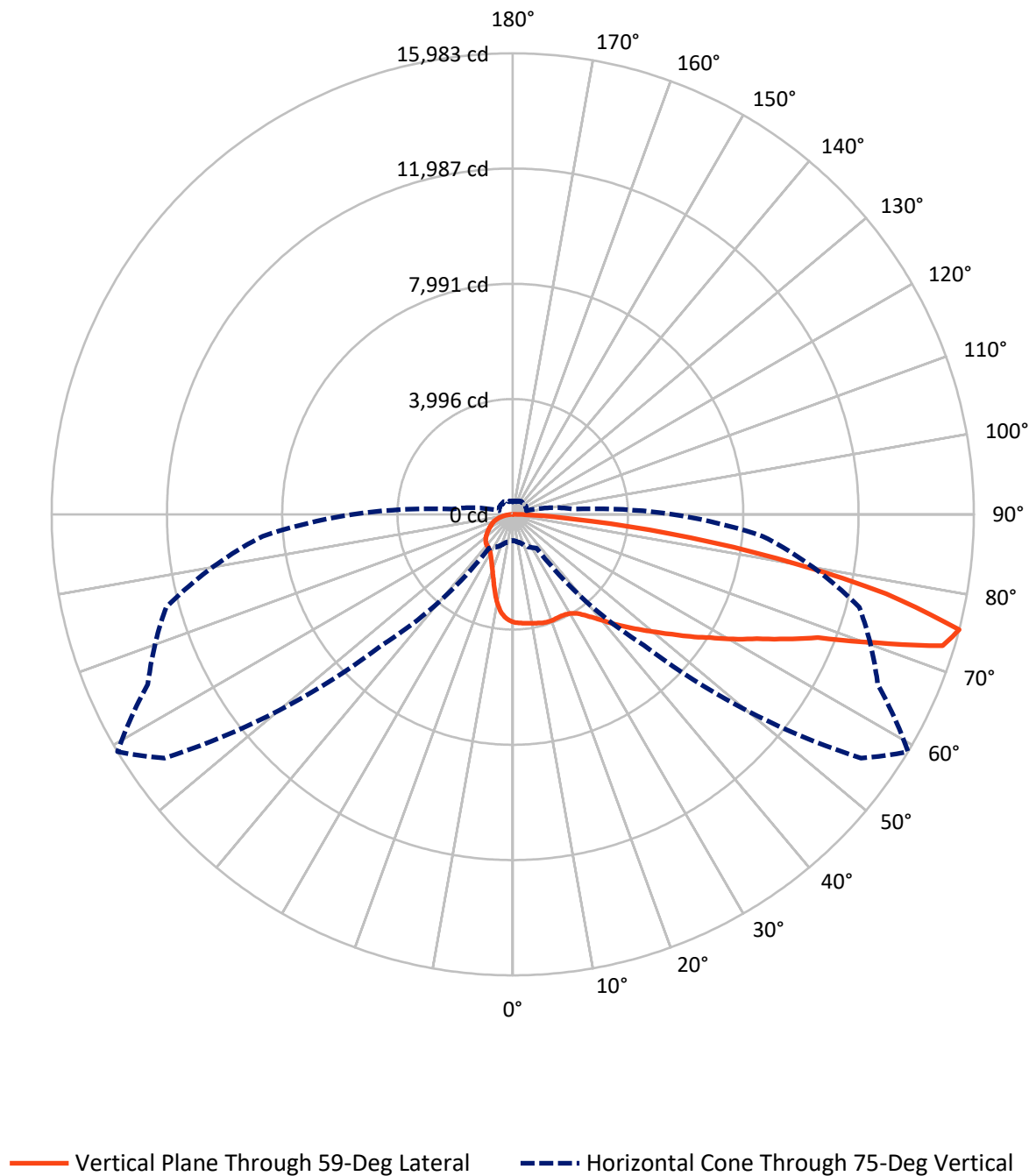


Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type IV - Medium - N/A

REPORT NUMBER: P962978

CATALOG NUMBER: NAV-SB2D-735-U-SL3

Luminous Intensity Polar Plot



REPORT NUMBER: P962978

CATALOG NUMBER: NAV-SB2D-735-U-SL3

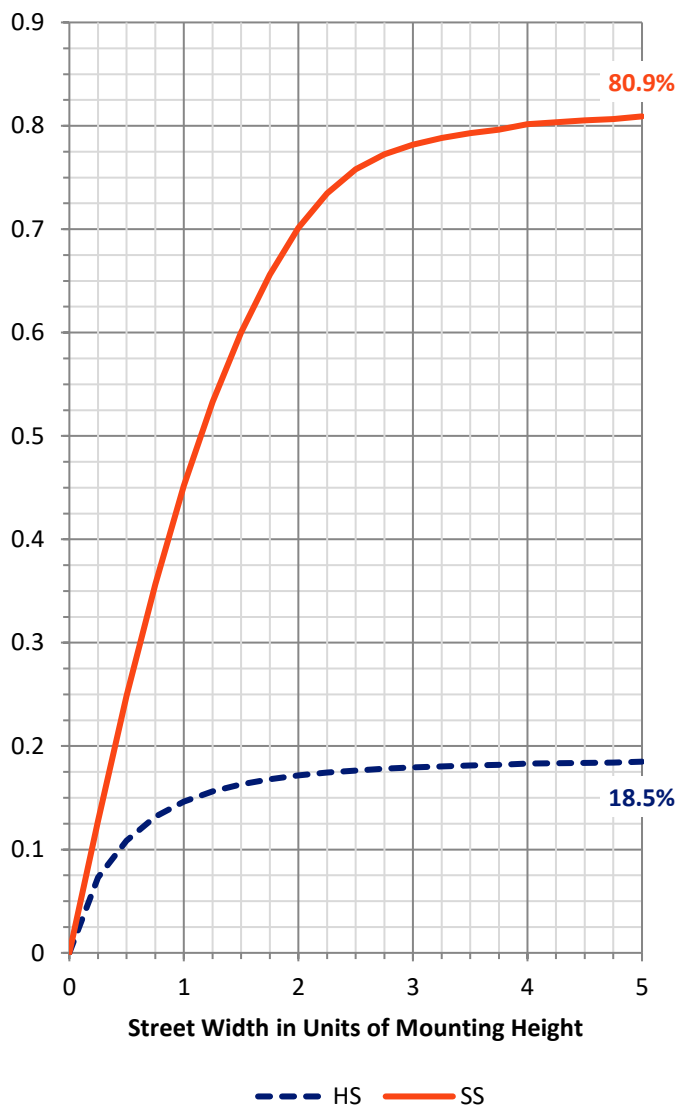
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3823.6	0.0	3823.6
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	16562.6	0.0	16562.6
	% Fixture	81.2	0.0	81.2
Total	Lumens	20386.2	0.0	20386.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.5	1.6
10°-20°	857.6	4.2
20°-30°	1302.6	6.4
30°-40°	1936.3	9.5
40°-50°	2879.7	14.1
50°-60°	3908.8	19.2
60°-70°	4772.0	23.4
70°-80°	3745.0	18.4
80°-90°	648.7	3.2
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°	20386.2	100.0
0°-180°	20386.2	100.0

Coefficient of Utilization



REPORT NUMBER: P962978

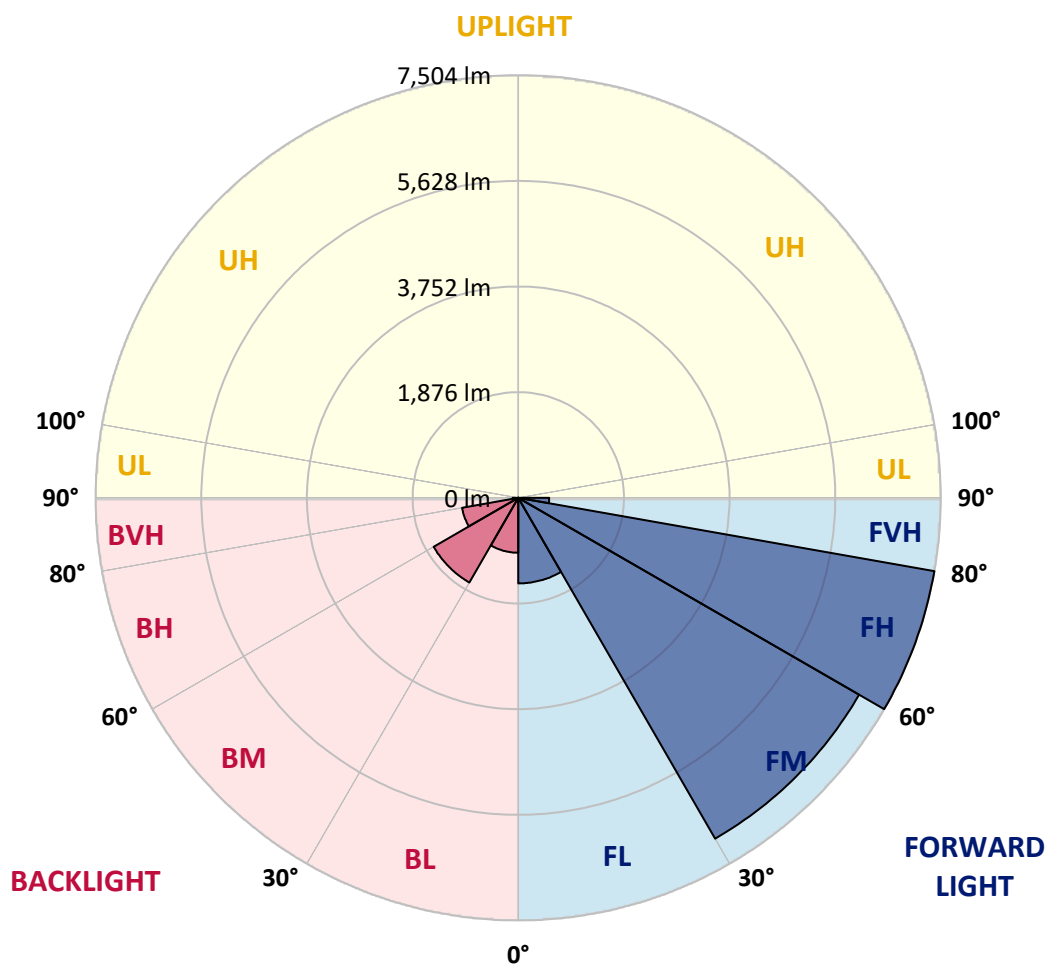
CATALOG NUMBER: NAV-SB2D-735-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1520.0	7.5			
FM	(30°-60°)	6989.2	34.3			
FH	(60°-80°)	7504.0	36.8			G4/12000
FVH	(80°-90°)	549.4	2.7			G4/750
BL	(0°-30°)	975.7	4.8	B2/1000		
BM	(30°-60°)	1735.5	8.5	B2/2500		
BH	(60°-80°)	1013.0	5.0	B3/2500		G3/2500
BVH	(80°-90°)	99.3	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium



REPORT NUMBER: P962978

CATALOG NUMBER: NAV-SB2D-735-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9
2.5°	3773.6	3760.5	3773.6	3768.2	3766.0	3761.5	3762.7	3770.4	3766.0	3771.5	3752.8
5°	3748.4	3740.7	3754.0	3750.6	3764.9	3767.1	3781.3	3790.1	3795.6	3796.7	3782.5
7.5°	3706.7	3699.1	3717.7	3733.0	3763.8	3772.5	3802.1	3816.4	3824.1	3837.3	3816.4
10°	3554.3	3551.0	3597.1	3655.3	3727.6	3772.5	3817.5	3841.6	3853.7	3888.8	3864.7
12.5°	3284.5	3288.9	3349.2	3461.1	3605.8	3750.6	3835.0	3870.2	3888.8	3932.6	3921.6
15°	3026.8	3025.7	3091.5	3211.0	3414.0	3654.1	3843.9	3904.1	3936.0	4000.7	3991.9
17.5°	2877.7	2873.3	2919.3	3010.3	3199.0	3506.0	3821.9	3922.8	3990.8	4071.9	4064.2
20°	2850.2	2841.5	2865.6	2910.6	3044.4	3343.8	3764.9	3922.8	4034.7	4140.0	4135.6
22.5°	2950.1	2935.8	2926.0	2920.4	2979.7	3210.0	3700.1	3909.7	4099.4	4237.6	4229.9
25°	3150.7	3128.8	3078.4	3029.0	3011.4	3149.6	3643.2	3906.4	4195.8	4369.2	4340.7
27.5°	3475.4	3447.9	3345.9	3227.5	3121.1	3180.4	3617.9	3926.1	4302.2	4508.5	4451.4
30°	3877.9	3848.3	3719.9	3537.9	3347.0	3294.5	3649.7	3984.2	4438.2	4693.8	4581.9
32.5°	4238.7	4205.8	4096.1	3910.7	3653.0	3491.8	3750.6	4095.0	4652.1	4951.5	4778.2
35°	4558.9	4520.5	4421.7	4250.7	4028.0	3769.2	3932.6	4291.3	4955.9	5370.4	5044.7
37.5°	4872.5	4827.5	4720.1	4539.1	4383.4	4138.8	4183.8	4543.5	5359.4	5879.3	5397.9
40°	5223.4	5158.7	5028.2	4849.5	4698.2	4572.0	4513.9	4852.8	5769.6	6447.4	5838.7
42.5°	5563.4	5502.0	5346.3	5193.9	5004.2	4968.0	4896.6	5214.7	6218.2	7071.4	6286.1
45°	5929.7	5856.2	5667.6	5474.6	5355.0	5231.1	5267.3	5576.6	6657.9	7707.4	6755.5
47.5°	6273.0	6190.7	5968.1	5753.1	5687.3	5452.7	5607.3	5974.6	7115.2	8352.2	7220.5
50°	6458.3	6377.1	6191.8	5997.7	5946.1	5725.8	5975.7	6412.2	7594.4	8994.9	7666.8
52.5°	6612.9	6525.2	6282.8	6175.3	6160.0	6022.9	6429.8	6912.3	8073.7	9562.9	8097.8
55°	6777.4	6679.8	6370.6	6274.0	6344.2	6356.3	6968.3	7479.3	8580.4	10116.9	8504.7
57.5°	6967.1	6843.2	6455.0	6357.5	6524.1	6746.8	7586.7	8067.2	9078.2	10630.1	8866.6
60°	7145.9	7020.9	6617.3	6490.1	6718.3	7199.7	8296.3	8778.8	9642.0	11087.3	9208.8
62.5°	7181.0	7077.9	6746.8	6745.6	6981.4	7728.3	9136.3	9497.1	10134.4	11539.1	9515.8
65°	6573.4	6508.7	6312.5	6735.8	7358.7	8489.4	10071.9	10416.2	10760.6	11934.0	9785.6
67.5°	5003.0	5011.8	4997.5	5814.5	7053.8	9582.7	11426.2	11399.9	11533.7	12377.1	10095.9
70°	2287.7	2339.2	2674.7	4013.8	5651.1	9708.8	13665.6	13324.6	12504.3	12950.6	10364.7
72.5°	1235.9	1275.4	1412.6	1944.4	3397.5	8631.9	15339.1	15581.5	13795.1	13336.6	10069.6
75°	906.9	928.9	1024.3	1235.9	1426.8	6415.6	14739.3	15982.9	13956.3	12436.2	8695.5
77.5°	678.9	688.7	766.6	979.3	730.4	3382.1	11777.1	13236.8	11947.2	10217.7	6423.2
80°	492.4	503.4	561.5	734.7	512.2	1237.1	8086.8	9291.0	8182.3	6513.2	3201.2
82.5°	340.0	344.4	369.6	500.1	357.5	480.3	4588.5	5448.3	4567.6	2285.4	864.2
85°	205.1	210.5	221.5	291.7	202.8	228.1	1980.6	2048.6	1365.4	546.1	268.7
87.5°	84.5	89.9	98.7	122.8	80.1	63.7	326.8	410.2	255.5	160.1	83.3
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: P962978

CATALOG NUMBER: NAV-SB2D-735-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9	3741.9
2.5°	3747.3	3739.6	3718.8	3690.3	3664.0	3631.1	3616.8	3604.7	3593.8	3572.9	3563.1
5°	3770.4	3749.6	3693.6	3621.2	3538.9	3449.0	3361.3	3301.0	3249.5	3211.0	3179.2
7.5°	3805.4	3766.0	3664.0	3516.0	3327.4	3134.2	2959.9	2836.0	2742.8	2708.8	2649.5
10°	3841.6	3794.4	3616.8	3355.8	3030.1	2733.0	2501.5	2374.3	2299.7	2275.6	2238.3
12.5°	3884.4	3815.4	3543.3	3133.2	2697.8	2372.1	2170.3	2095.7	2057.4	2044.2	2047.4
15°	3947.0	3832.9	3432.6	2854.6	2380.9	2108.9	1978.4	1926.9	1907.1	1906.0	1910.4
17.5°	3994.1	3836.2	3260.4	2556.4	2137.4	1949.9	1842.4	1822.7	1835.9	1855.6	1863.2
20°	4046.7	3806.5	3034.5	2284.4	1966.4	1810.6	1765.7	1778.8	1810.6	1839.2	1849.0
22.5°	4084.0	3752.8	2761.5	2072.8	1818.2	1730.5	1728.4	1755.7	1773.4	1787.6	1795.3
25°	4116.9	3661.8	2471.9	1895.0	1696.6	1682.3	1706.4	1697.6	1685.6	1697.6	1705.3
27.5°	4141.0	3518.1	2213.1	1739.3	1611.0	1649.4	1635.2	1615.4	1614.3	1620.8	1631.8
30°	4133.3	3326.2	2000.3	1591.3	1550.7	1588.0	1554.0	1550.7	1547.4	1550.7	1562.7
32.5°	4133.3	3108.0	1836.9	1489.3	1512.3	1498.0	1494.8	1487.1	1473.9	1472.8	1487.1
35°	4156.4	2889.8	1696.6	1434.5	1480.5	1446.5	1448.7	1430.1	1402.6	1389.5	1402.6
37.5°	4203.5	2714.3	1557.3	1408.1	1424.5	1423.5	1414.7	1382.9	1334.7	1292.9	1307.2
40°	4317.6	2662.7	1461.9	1396.0	1398.3	1411.4	1388.4	1327.0	1217.3	1149.3	1158.0
42.5°	4496.4	2749.4	1441.0	1366.4	1380.7	1393.9	1348.9	1206.3	1128.5	1087.9	1087.9
45°	4723.4	2900.6	1485.9	1323.7	1339.1	1362.0	1228.3	1160.3	1125.1	1126.3	1131.8
47.5°	5010.7	3059.7	1569.4	1286.4	1278.7	1291.9	1148.2	1106.6	1058.3	1070.3	1101.1
50°	5343.0	3221.0	1648.3	1235.9	1211.9	1169.0	1096.6	1057.2	995.8	967.3	975.0
52.5°	5702.7	3376.7	1680.1	1174.5	1139.5	1090.1	1061.6	1013.3	938.8	891.5	890.5
55°	6043.8	3518.1	1645.0	1101.1	1067.0	1028.7	1024.3	994.7	914.6	848.8	848.8
57.5°	6366.2	3636.6	1557.3	1026.4	993.6	970.6	1000.2	985.9	885.0	800.5	796.2
60°	6639.2	3717.7	1430.1	950.8	927.8	915.7	960.7	956.3	843.4	749.1	745.7
62.5°	6856.4	3749.6	1289.7	878.4	873.0	851.1	905.9	905.9	790.7	698.5	695.3
65°	7026.4	3718.8	1147.1	807.2	818.2	785.3	839.0	832.4	734.7	653.6	649.2
67.5°	7176.6	3617.9	989.2	737.0	762.2	720.5	768.7	753.4	673.3	608.6	604.2
70°	7243.5	3383.2	809.3	666.8	697.5	656.9	698.5	670.0	604.2	560.4	551.7
72.5°	6706.2	2811.9	637.1	593.3	619.6	586.7	622.9	590.0	529.7	509.9	493.5
75°	5548.0	2110.0	490.3	513.2	533.0	507.8	531.9	507.8	452.9	467.2	426.6
77.5°	4029.2	1424.5	375.0	428.8	437.6	424.5	445.3	417.8	368.5	365.2	348.7
80°	2003.7	834.6	293.9	338.9	335.6	326.8	351.0	337.7	296.1	313.6	310.4
82.5°	580.2	357.5	213.8	238.0	231.4	233.6	251.1	257.7	386.0	382.7	391.5
85°	182.0	140.4	128.3	132.7	126.1	129.5	148.0	293.9	271.9	159.0	172.2
87.5°	47.2	48.3	31.8	34.0	35.1	41.7	47.2	178.8	85.6	56.0	59.2
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)