

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: P965257

Luminaire Tested: **NAV-SB3D-830-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965257
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-830-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28868.1 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 218.1
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

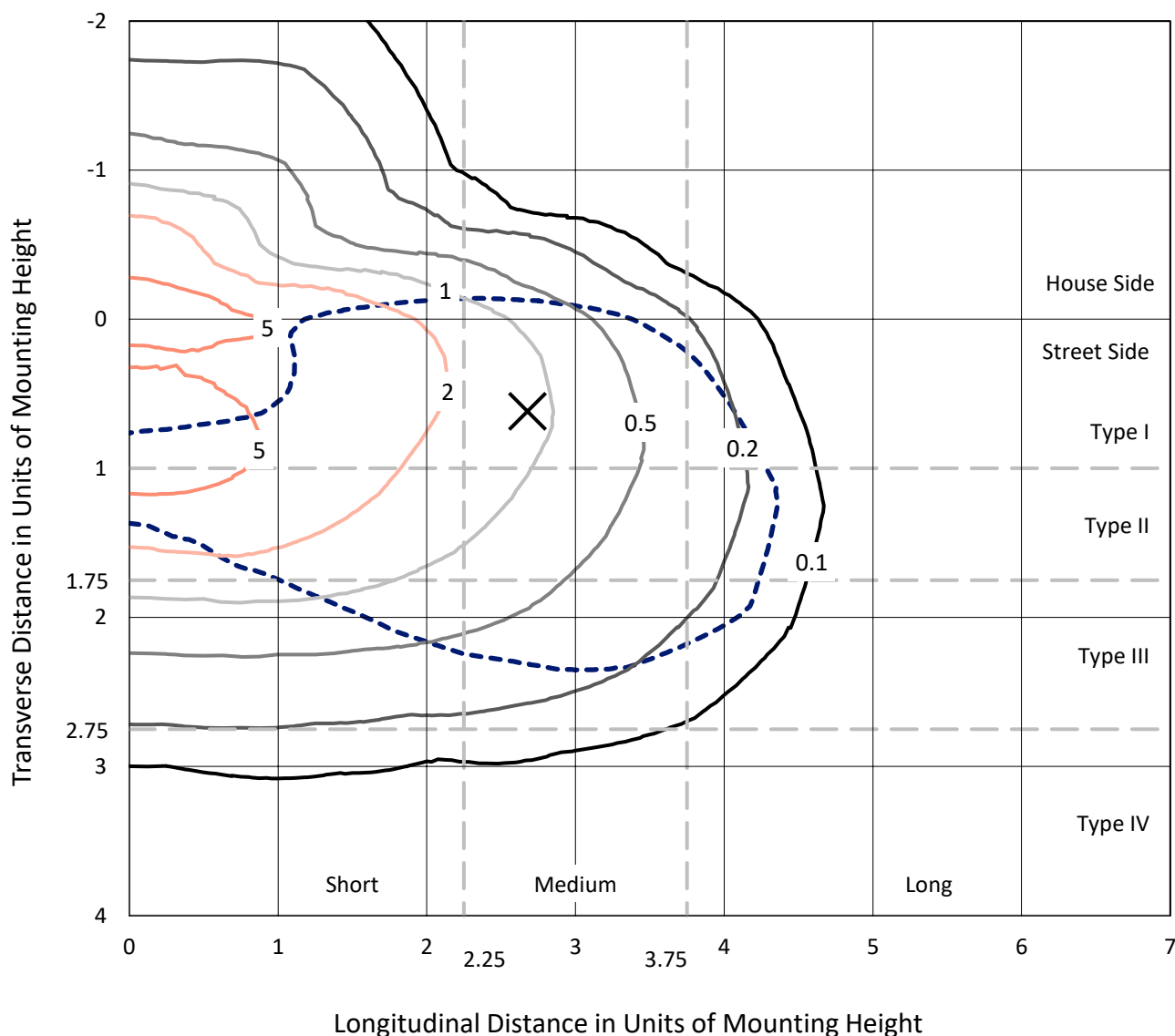


REPORT NUMBER: P965257

CATALOG NUMBER: NAV-SB3D-830-U-T3R

Iso-Footcandle Lines of Horizontal Illumination

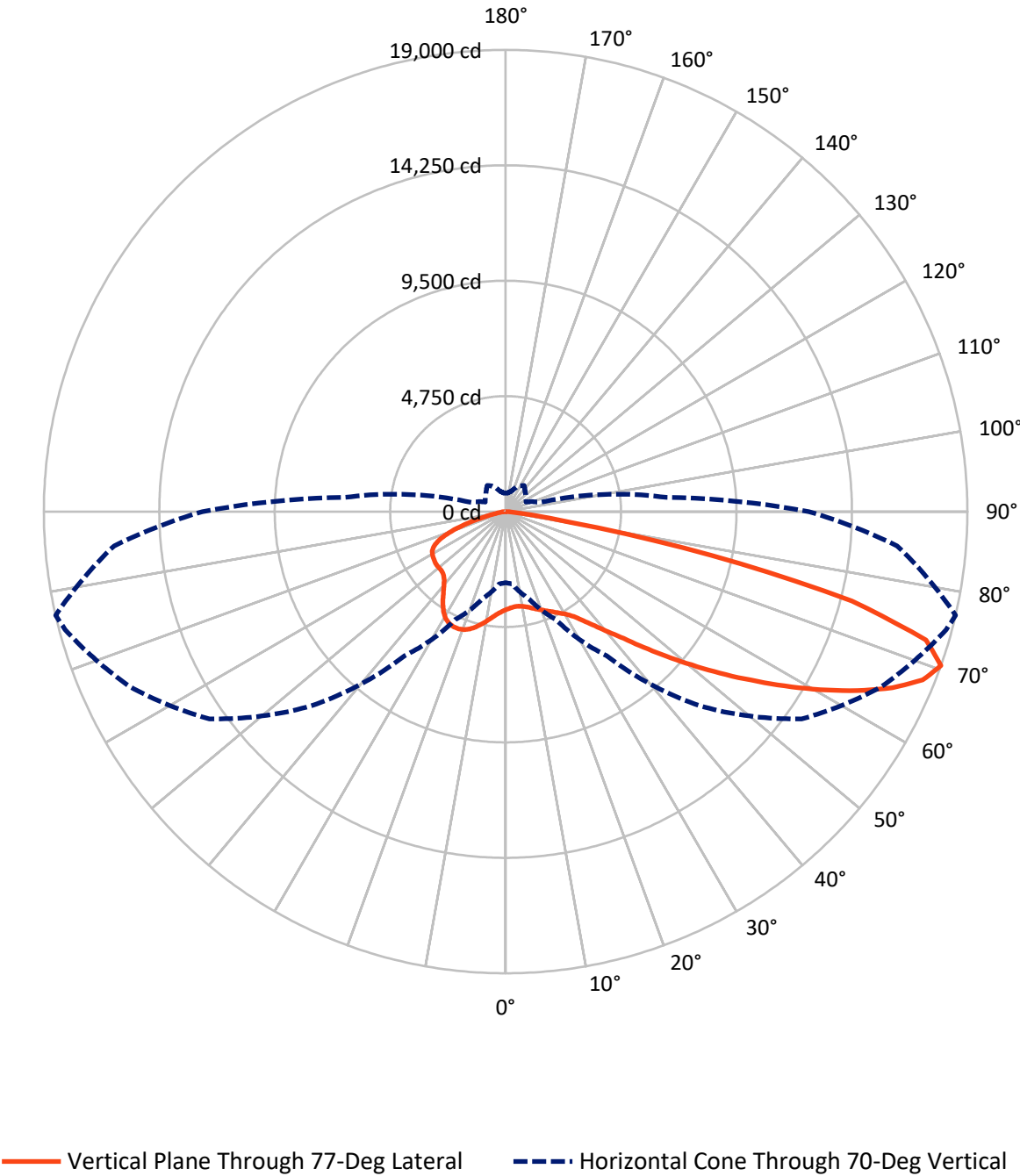
× Max cd
 --- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type III - Medium - N/A

REPORT NUMBER: P965257
CATALOG NUMBER: NAV-SB3D-830-U-T3R

Luminous Intensity Polar Plot



REPORT NUMBER: P965257

CATALOG NUMBER: NAV-SB3D-830-U-T3R

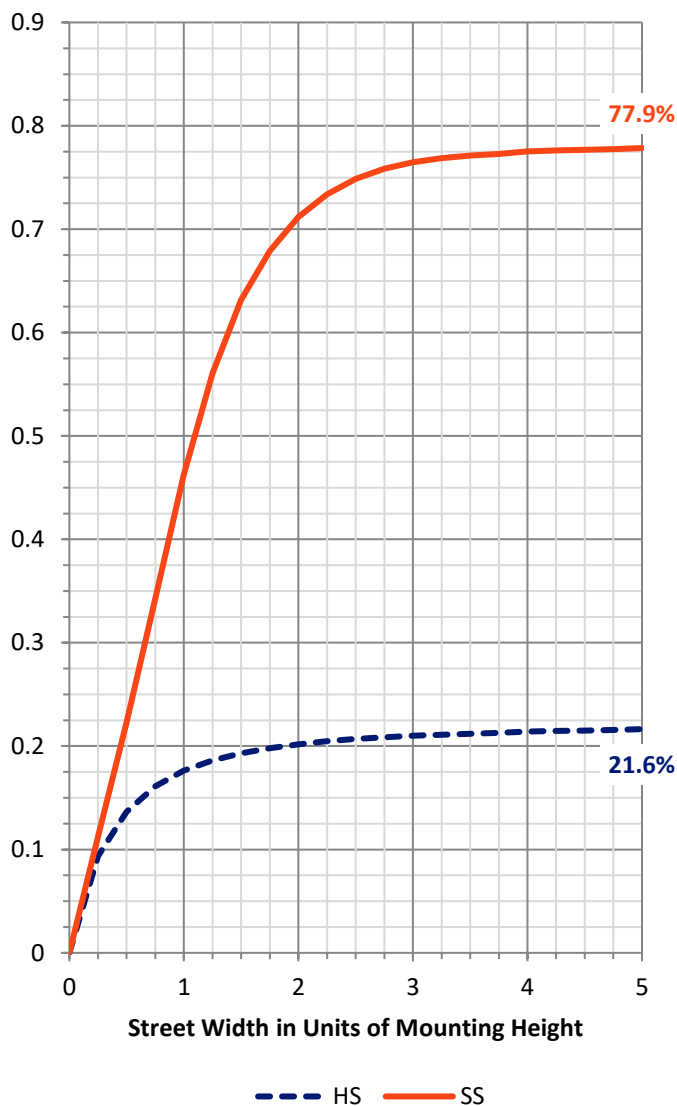
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6321.7	0.0	6321.7
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	22546.4	0.0	22546.4
	% Fixture	78.1	0.0	78.1
Total	Lumens	28868.1	0.0	28868.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.1	1.3
10°-20°	1108.6	3.8
20°-30°	1895.8	6.6
30°-40°	3048.6	10.6
40°-50°	4759.7	16.5
50°-60°	6357.8	22.0
60°-70°	6776.4	23.5
70°-80°	4171.5	14.5
80°-90°	365.5	1.3
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°	28868.1	100.0
0°-180°	28868.1	100.0

Coefficient of Utilization



REPORT NUMBER: P965257

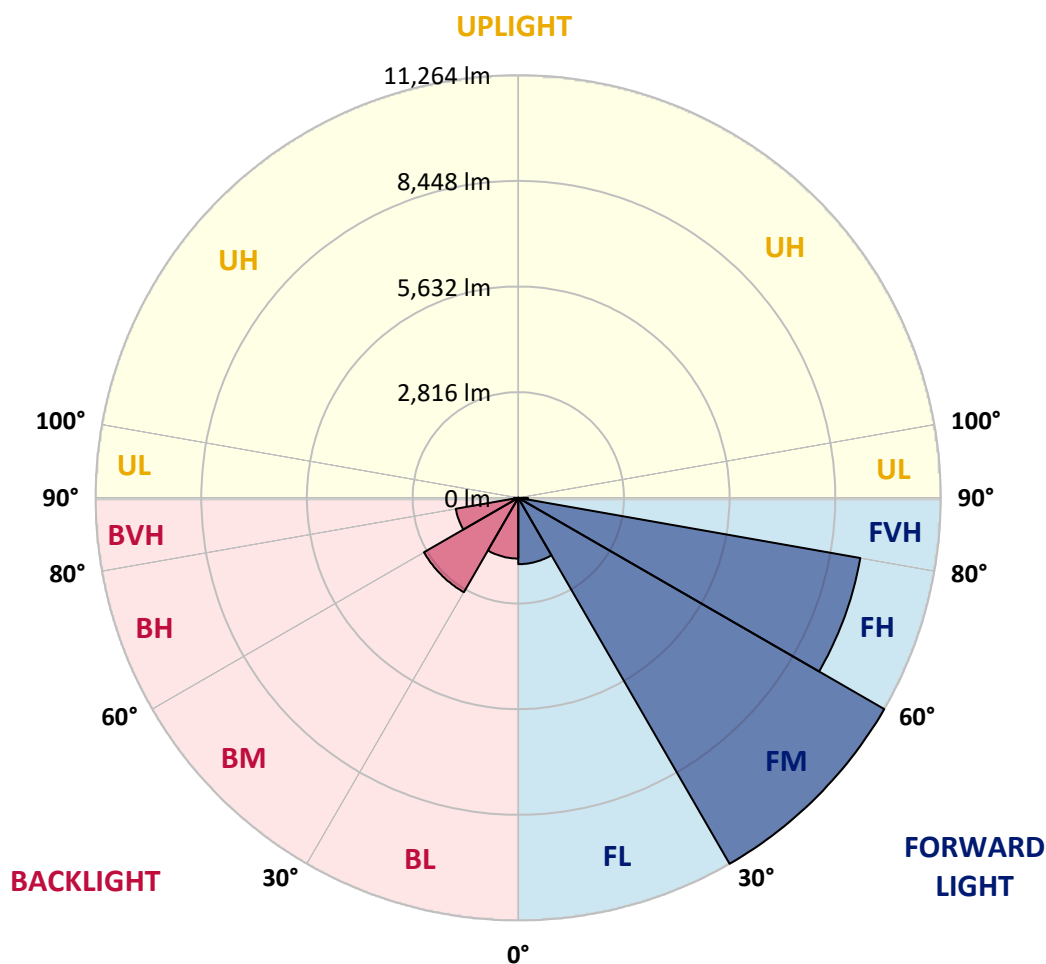
CATALOG NUMBER: NAV-SB3D-830-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1768.6	6.1			
FM	(30°-60°)	11263.7	39.0			
FH	(60°-80°)	9258.5	32.1			G4/12000
FVH	(80°-90°)	255.6	0.9			G3/500
BL	(0°-30°)	1619.8	5.6	B3/2500		
BM	(30°-60°)	2902.4	10.1	B3/5000		
BH	(60°-80°)	1689.5	5.9	B3/2500		G3/2500
BVH	(80°-90°)	109.9	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium



REPORT NUMBER: P965257

CATALOG NUMBER: NAV-SB3D-830-U-T3R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3
2.5°	3712.4	3711.0	3730.2	3736.1	3771.6	3796.7	3844.1	3894.3	3959.4	3966.7	4006.6
5°	3498.1	3498.1	3520.3	3543.9	3589.8	3640.0	3712.4	3799.7	3912.0	3929.7	4028.9
7.5°	3316.2	3328.1	3347.2	3393.1	3446.4	3518.7	3629.6	3753.9	3901.7	3929.7	4089.4
10°	3169.8	3183.1	3206.8	3243.8	3323.6	3424.1	3569.0	3728.7	3926.9	3971.2	4178.2
12.5°	3124.0	3137.3	3150.6	3178.7	3252.6	3370.9	3543.9	3740.5	3987.5	4031.8	4299.4
15°	3230.5	3246.7	3236.3	3229.0	3267.4	3375.3	3555.7	3783.4	4062.9	4126.4	4448.7
17.5°	3475.9	3481.8	3458.1	3388.6	3382.7	3440.4	3611.9	3842.5	4157.5	4227.0	4599.5
20°	3872.1	3861.8	3813.0	3675.4	3597.1	3585.3	3708.0	3931.3	4255.1	4329.0	4762.2
22.5°	4410.3	4398.5	4300.9	4083.5	3909.0	3793.7	3847.0	4046.6	4364.4	4447.3	4920.4
25°	5081.5	5065.2	4921.8	4626.1	4355.6	4070.3	4036.2	4198.9	4499.0	4575.9	5085.9
27.5°	5865.2	5851.8	5696.5	5306.2	4915.9	4448.7	4271.3	4377.8	4639.5	4726.7	5272.2
30°	6707.8	6746.2	6471.2	6051.4	5557.5	4942.5	4587.7	4598.0	4821.3	4899.7	5498.4
32.5°	7698.4	7765.0	7433.8	6901.5	6227.3	5479.2	4986.9	4905.5	5085.9	5151.0	5783.8
35°	8680.1	8755.6	8480.5	7892.1	7115.9	6112.0	5403.8	5259.0	5437.8	5508.8	6162.3
37.5°	9528.8	9629.3	9487.4	8975.8	8066.5	6874.9	5947.9	5674.4	5871.0	5959.8	6670.9
40°	10198.5	10352.3	10341.9	10022.6	9187.3	7800.5	6638.3	6187.4	6409.2	6505.3	7287.4
42.5°	10742.6	10875.7	10991.0	10974.7	10356.7	8851.6	7450.0	6854.2	7022.8	7133.6	7980.8
45°	11118.2	11260.0	11508.4	11776.0	11481.8	9976.7	8380.0	7645.2	7798.9	7966.0	8807.3
47.5°	11453.8	11614.9	11937.2	12361.5	12436.9	11106.3	9398.6	8566.2	8706.8	8879.7	9636.7
50°	11483.3	11622.3	12122.0	12723.7	13115.6	12191.5	10492.7	9599.7	9731.3	9916.2	10525.2
52.5°	10769.2	10988.0	11860.3	12713.4	13427.5	13099.3	11579.4	10674.6	10822.5	11044.2	11444.8
55°	8359.3	8680.1	11093.0	12317.1	13316.6	13686.2	12612.8	11817.4	12006.6	12238.8	12370.4
57.5°	7200.2	7340.6	8805.8	11595.7	12811.0	13838.5	13485.2	12972.1	13276.7	13531.0	13349.2
60°	6471.2	6588.1	7454.4	10473.6	12145.6	13597.5	14159.4	14048.4	14574.8	14877.9	14350.1
62.5°	5690.7	5801.5	6589.5	8745.2	11294.1	13196.9	14585.1	15042.0	15905.4	16236.6	15293.3
65°	4915.9	5010.5	5766.0	7348.0	10211.9	12796.2	14805.4	15901.0	17137.0	17480.0	16076.9
67.5°	4052.5	4130.9	4845.0	6199.2	8896.0	12247.7	14914.9	16576.6	18208.9	18503.1	16464.3
70°	2924.4	2985.0	3722.8	4902.6	7244.5	11304.4	14870.5	17055.7	18764.8	18999.9	16171.5
72.5°	1382.4	1437.0	2303.5	3183.1	5117.0	9468.1	13973.1	16675.7	18200.0	18083.3	14379.6
75°	737.8	785.0	1323.3	1746.1	2702.6	6490.5	11434.5	14364.9	15283.0	14715.2	10627.3
77.5°	499.7	536.7	819.1	1048.3	1234.5	3081.1	7349.5	9945.7	9568.7	8631.3	5322.5
80°	396.3	434.7	671.3	709.7	597.3	1113.3	3036.8	4604.0	3307.4	2645.0	1513.9
82.5°	304.5	347.5	564.8	514.6	325.2	456.8	884.2	1456.3	847.2	644.6	366.6
85°	186.2	232.2	443.5	328.2	183.4	208.5	300.1	405.1	258.7	215.9	131.6
87.5°	94.6	133.0	224.7	119.7	82.8	48.8	79.8	79.8	68.1	59.1	34.0
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: P965257

CATALOG NUMBER: NAV-SB3D-830-U-T3R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3	4027.3
2.5°	4042.2	4071.7	4121.9	4169.3	4206.3	4241.8	4277.2	4296.5	4302.3	4326.0	4339.3
5°	4089.4	4144.2	4241.8	4333.4	4391.1	4426.6	4451.7	4466.4	4469.4	4476.8	4488.7
7.5°	4176.7	4263.9	4399.9	4491.7	4534.5	4531.5	4521.2	4484.2	4469.4	4456.1	4459.1
10°	4299.4	4414.7	4581.8	4645.4	4618.8	4547.8	4456.1	4348.2	4297.9	4249.1	4234.4
12.5°	4451.7	4598.0	4762.2	4759.2	4627.7	4445.7	4232.8	4067.3	3962.3	3886.9	3869.2
15°	4636.5	4805.0	4930.7	4830.2	4541.9	4215.1	3903.2	3687.3	3592.7	3509.9	3501.0
17.5°	4827.2	5007.6	5065.2	4808.0	4326.0	3873.6	3520.3	3350.2	3257.0	3212.8	3226.0
20°	5013.5	5192.4	5145.1	4680.9	3997.8	3486.2	3171.4	3078.2	3059.0	3069.4	3064.9
22.5°	5210.2	5369.8	5161.4	4435.4	3579.4	3090.0	2917.0	2920.0	2962.9	2993.9	3001.3
25°	5411.2	5519.1	5118.4	4080.6	3129.9	2798.8	2755.9	2803.2	2887.4	2948.1	2964.3
27.5°	5604.9	5652.2	5025.4	3641.5	2744.0	2590.3	2597.7	2695.2	2822.4	2906.7	2927.4
30°	5823.7	5770.4	4846.4	3147.7	2476.4	2411.4	2473.5	2587.3	2714.5	2789.8	2807.6
32.5°	6070.7	5872.5	4562.6	2690.8	2287.2	2268.0	2370.0	2443.9	2500.1	2522.3	2534.1
35°	6378.2	6015.9	4198.9	2370.0	2117.1	2163.1	2260.6	2223.6	2201.5	2189.6	2201.5
37.5°	6777.3	6209.6	3773.0	2161.5	1979.7	2087.6	2127.5	2012.2	1925.0	1882.1	1892.5
40°	7257.8	6493.5	3363.5	2000.4	1892.5	2022.5	1953.0	1814.0	1703.2	1642.6	1647.0
42.5°	7791.5	6790.6	3019.0	1879.1	1843.7	1969.3	1824.4	1658.9	1480.0	1460.7	1480.0
45°	8351.9	7096.7	2784.0	1786.0	1820.0	1923.5	1750.5	1482.9	1355.8	1434.1	1475.5
47.5°	8912.3	7377.5	2642.0	1716.5	1808.2	1871.8	1685.5	1385.3	1295.2	1409.0	1462.2
50°	9536.2	7629.0	2578.5	1666.2	1794.9	1851.0	1587.9	1360.2	1231.5	1307.0	1363.1
52.5°	10155.6	7824.1	2531.1	1616.0	1775.6	1834.7	1540.6	1330.7	1154.7	1159.2	1190.1
55°	10773.7	7951.2	2479.4	1549.4	1732.8	1799.3	1536.2	1298.1	1097.1	1076.4	1091.1
57.5°	11433.1	8023.7	2415.8	1475.5	1658.9	1709.1	1531.7	1272.9	1079.3	1045.3	1049.7
60°	12104.2	8130.1	2333.0	1385.3	1559.7	1601.2	1521.3	1264.1	1069.0	1011.3	1015.7
62.5°	12706.0	8167.1	2234.0	1299.6	1432.6	1494.8	1499.2	1256.8	1040.9	941.8	941.8
65°	13100.7	8007.4	2061.0	1202.0	1295.2	1385.3	1456.3	1231.5	990.6	891.5	891.5
67.5°	13084.5	7552.0	1790.5	1076.4	1162.0	1264.1	1394.2	1188.7	930.0	829.4	833.8
70°	12475.4	6653.2	1447.4	930.0	1015.7	1134.0	1314.4	1125.1	857.5	761.4	770.3
72.5°	10699.7	5207.2	1051.2	758.5	845.7	999.5	1210.8	1048.3	783.6	700.8	696.4
75°	7643.7	3295.5	712.6	582.5	657.9	847.2	1082.2	958.1	715.6	703.8	663.8
77.5°	3904.6	1574.6	471.6	425.8	458.3	668.3	909.3	856.1	725.9	581.1	517.4
80°	1270.0	581.1	297.1	289.8	304.5	445.1	703.8	702.2	550.0	394.7	348.9
82.5°	405.1	249.9	193.7	186.2	178.9	279.4	490.9	555.9	371.0	249.9	248.4
85°	161.1	149.3	113.9	105.0	75.4	131.6	257.3	369.6	276.4	180.4	184.8
87.5°	59.1	59.1	31.1	22.1	16.3	44.4	69.5	110.9	158.2	93.2	91.6
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)