

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: P965262

Luminaire Tested: **NAV-SB3D-830-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965262
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-830-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28065.5 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
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

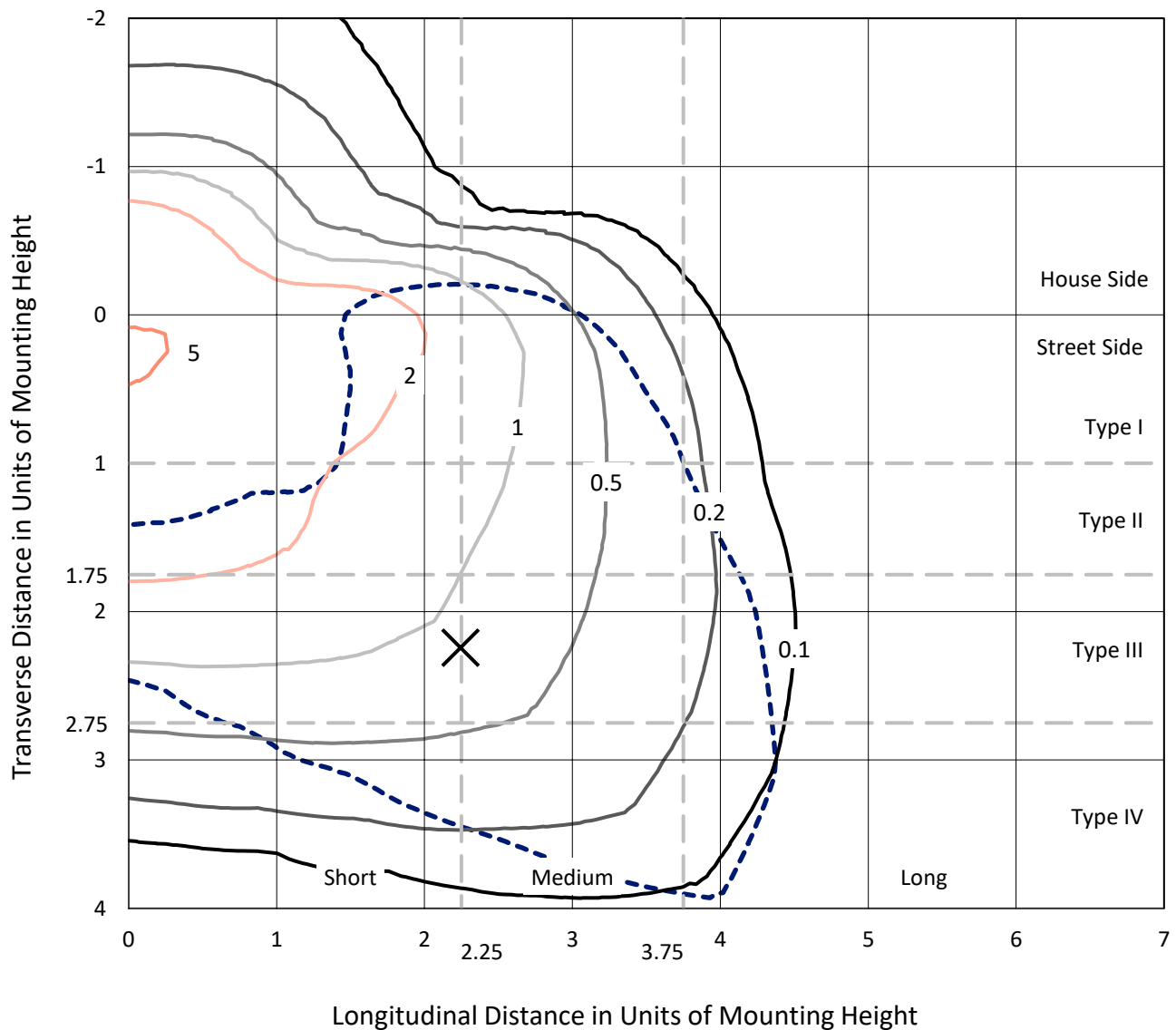


REPORT NUMBER: P965262

CATALOG NUMBER: NAV-SB3D-830-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

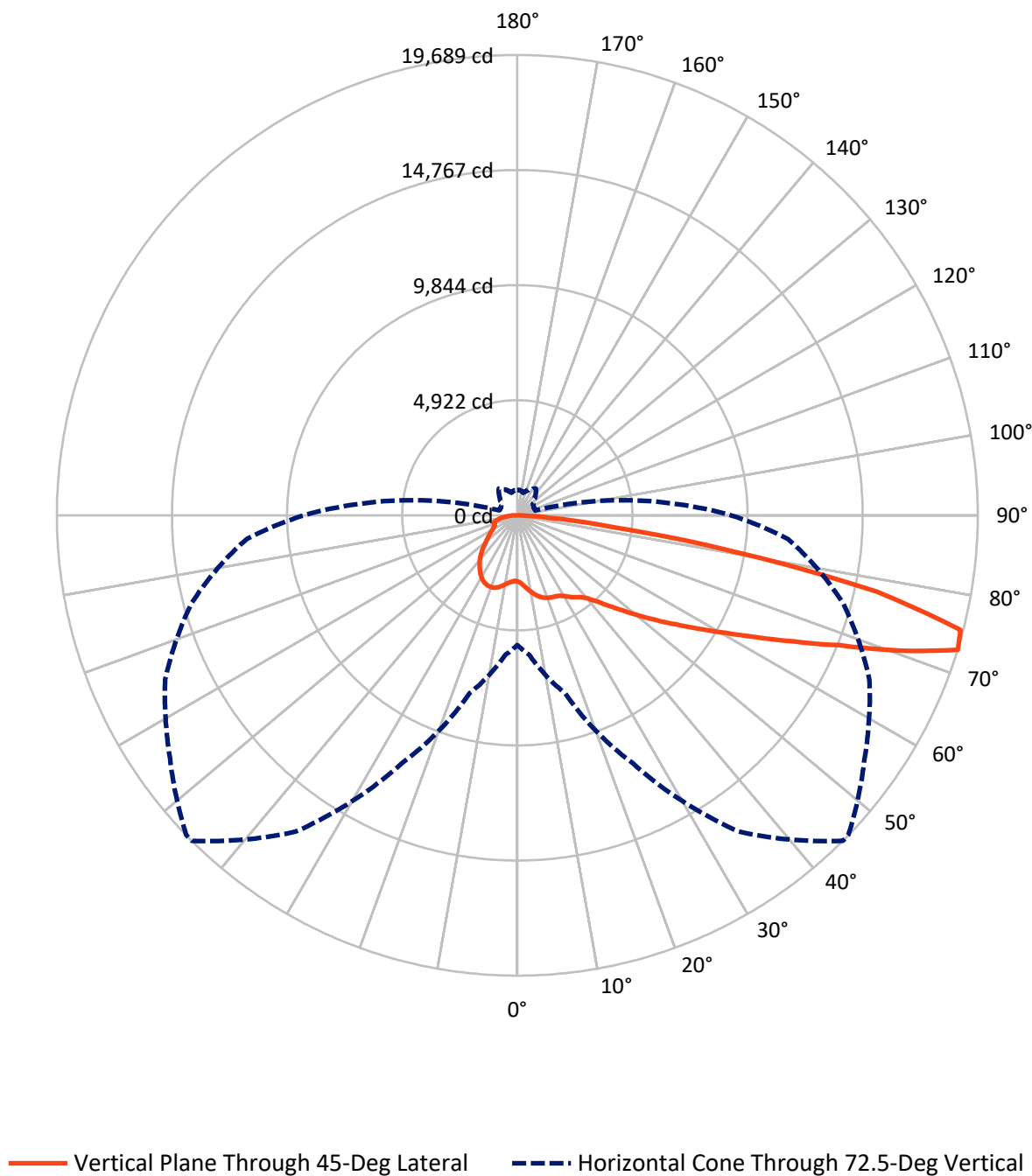
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
Type IV - Short - N/A

REPORT NUMBER: P965262
CATALOG NUMBER: NAV-SB3D-830-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P965262

CATALOG NUMBER: NAV-SB3D-830-U-T4W

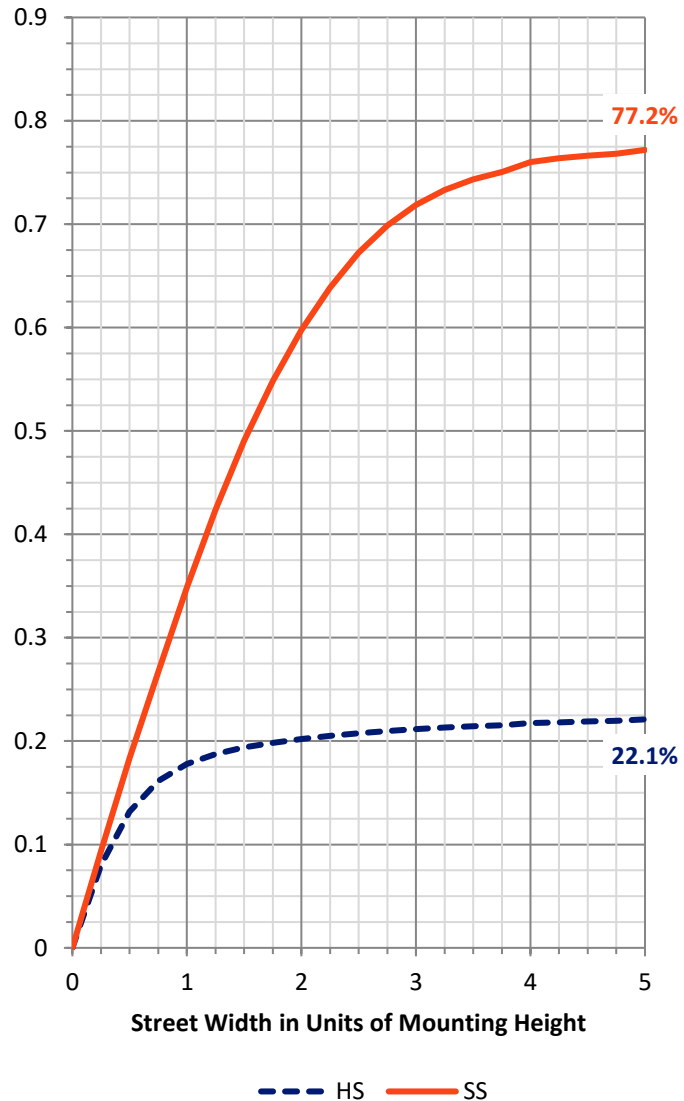
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6344.7	0.0	6344.7
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	21720.9	0.0	21720.9
	% Fixture	77.4	0.0	77.4
Total	Lumens	28065.5	0.0	28065.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.2	1.0
10°-20°	960.8	3.4
20°-30°	1671.3	6.0
30°-40°	2396.0	8.5
40°-50°	3373.7	12.0
50°-60°	5167.4	18.4
60°-70°	7485.8	26.7
70°-80°	5977.9	21.3
80°-90°	744.5	2.7
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°	28065.5	100.0
0°-180°	28065.5	100.0

Coefficient of Utilization



REPORT NUMBER: P965262

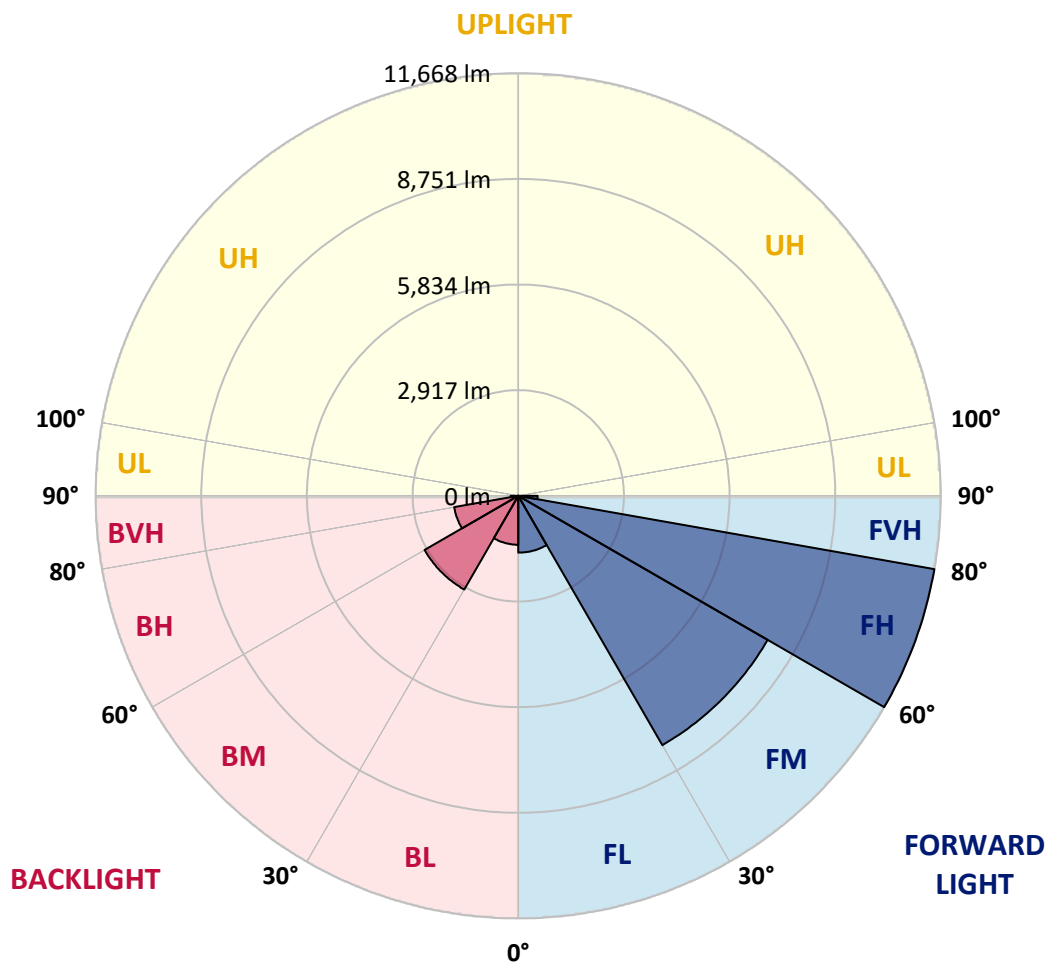
CATALOG NUMBER: NAV-SB3D-830-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1569.5	5.6			
FM	(30°-60°)	7949.6	28.3			
FH	(60°-80°)	11667.7	41.6			G4/12000
FVH	(80°-90°)	534.1	1.9			G4/750
BL	(0°-30°)	1350.8	4.8	B3/2500		
BM	(30°-60°)	2987.4	10.6	B3/5000		
BH	(60°-80°)	1796.0	6.4	B3/2500		G3/2500
BVH	(80°-90°)	210.4	0.7			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 IV Short



REPORT NUMBER: P965262

CATALOG NUMBER: NAV-SB3D-830-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3
2.5°	2942.2	2961.3	2943.6	2927.4	2920.0	2900.7	2899.3	2887.4	2880.0	2859.3	2853.4
5°	3147.7	3172.8	3143.3	3110.7	3081.1	3033.8	3028.0	2993.9	2955.5	2911.1	2886.0
7.5°	3379.7	3402.0	3367.9	3319.2	3267.4	3189.1	3187.5	3125.4	3064.9	2989.4	2946.6
10°	3582.4	3611.9	3566.1	3499.6	3434.5	3345.8	3335.5	3264.4	3187.5	3090.0	3025.0
12.5°	3761.2	3781.9	3737.6	3656.3	3580.8	3492.2	3478.8	3400.4	3314.7	3203.8	3121.0
15°	3903.2	3929.7	3870.6	3783.4	3703.5	3616.3	3604.5	3533.6	3447.8	3330.9	3224.5
17.5°	3996.3	4018.5	3957.8	3860.3	3783.4	3710.9	3702.1	3643.0	3567.5	3449.2	3335.5
20°	4031.7	4055.4	3991.9	3892.8	3821.8	3765.6	3761.2	3718.4	3666.6	3558.7	3443.4
22.5°	4067.3	4089.4	4006.6	3903.2	3841.1	3805.6	3804.1	3776.0	3755.3	3666.6	3554.2
25°	4210.7	4216.5	4105.7	3956.4	3867.6	3836.6	3835.1	3833.7	3842.5	3773.0	3674.0
27.5°	4334.8	4333.4	4238.8	4098.4	3960.8	3895.7	3894.3	3909.0	3937.1	3879.5	3798.1
30°	4516.8	4500.5	4388.1	4241.8	4116.1	4015.5	4006.6	3993.3	4015.5	3969.7	3922.4
32.5°	4902.6	4850.8	4669.0	4408.8	4244.7	4167.8	4156.0	4073.1	4082.1	4054.0	4030.3
35°	5455.6	5387.5	5145.1	4725.1	4404.3	4295.0	4289.0	4184.0	4166.3	4141.2	4150.0
37.5°	6113.5	6029.2	5746.8	5183.5	4679.3	4442.8	4433.9	4339.3	4266.9	4240.2	4290.5
40°	6774.3	6667.9	6434.3	5742.4	5084.4	4689.7	4661.6	4518.2	4435.4	4391.0	4497.5
42.5°	7416.0	7327.3	7127.6	6369.2	5584.2	5050.5	4988.4	4742.9	4680.9	4639.5	4831.6
45°	7983.7	7903.9	7757.5	7039.0	6169.7	5541.3	5480.7	5080.0	5060.8	5060.8	5338.7
47.5°	8445.0	8427.2	8272.1	7722.0	6860.1	6100.2	5995.2	5548.7	5600.4	5680.2	6058.8
50°	8956.6	8907.8	8742.2	8394.8	7671.8	6740.3	6654.6	6123.9	6317.5	6536.3	7099.6
52.5°	9426.7	9453.4	9268.6	9095.5	8588.4	7454.4	7303.6	6802.4	7220.8	7583.1	8319.3
55°	9910.2	9911.6	9859.9	9836.2	9549.4	8244.0	8078.3	7618.5	8283.8	8733.3	9741.6
57.5°	10364.1	10367.1	10443.9	10652.3	10664.2	9154.7	8966.9	8621.0	9465.2	9923.4	11208.3
60°	10769.2	10789.9	10999.8	11487.7	11644.4	10198.4	10021.0	9805.2	10686.3	11147.7	12750.3
62.5°	10905.2	10980.6	11447.8	12141.1	12612.8	11478.9	11304.3	11175.8	11969.6	12398.4	14039.5
65°	10674.6	10847.5	11750.9	12680.8	13609.3	13000.2	12827.2	12686.7	13303.3	13706.9	15098.1
67.5°	10108.2	10331.5	11733.1	13247.1	14818.6	14830.5	14669.4	14339.6	14732.9	14888.1	15442.5
70°	8616.5	8950.6	10699.7	13458.5	16207.0	17333.6	17178.3	16329.7	16159.6	15408.6	14472.7
72.5°	5551.6	6001.1	7878.8	11718.3	16515.9	19688.7	19679.9	18126.0	16610.5	14397.4	11607.4
75°	2025.5	2300.5	3660.7	7355.4	13863.6	19569.0	19626.7	17818.5	15163.1	11121.0	7231.2
77.5°	737.8	807.3	1194.6	2826.8	8526.4	15701.4	15821.1	14245.0	10792.8	5581.2	2865.3
80°	387.3	425.8	612.1	1097.1	3653.3	9324.7	9512.4	8465.7	5072.6	1681.0	859.0
82.5°	214.3	232.2	343.0	595.8	1645.5	3987.5	4099.8	3344.3	1784.5	712.6	354.9
85°	115.3	122.7	161.1	325.2	804.3	1382.4	1413.4	999.5	711.1	418.4	171.5
87.5°	34.0	41.4	53.2	103.5	314.9	310.5	317.9	198.1	281.0	211.5	56.2
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: P965262

CATALOG NUMBER: NAV-SB3D-830-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3	2831.3
2.5°	2844.6	2840.2	2823.9	2816.5	2807.6	2806.1	2813.5	2815.0	2816.5	2817.9	2823.9
5°	2871.2	2856.4	2841.6	2832.8	2835.7	2837.2	2852.0	2862.3	2869.7	2875.6	2878.6
7.5°	2922.9	2911.1	2886.0	2884.5	2889.0	2902.2	2921.5	2945.1	2958.5	2968.8	2971.7
10°	2999.8	2977.6	2948.1	2952.5	2961.3	2980.6	3020.5	3039.7	3061.9	3081.1	3076.6
12.5°	3078.2	3058.9	3025.0	3028.0	3042.7	3076.6	3115.2	3138.8	3153.6	3168.4	3174.2
15°	3180.2	3146.1	3109.2	3109.2	3135.8	3172.8	3190.5	3209.8	3218.6	3234.9	3240.8
17.5°	3285.1	3240.8	3192.1	3189.1	3221.6	3239.3	3249.7	3252.6	3255.6	3273.3	3279.3
20°	3390.1	3341.3	3271.8	3266.0	3273.3	3270.4	3268.9	3266.0	3270.4	3292.5	3301.4
22.5°	3493.6	3437.4	3341.3	3314.7	3294.0	3266.0	3264.4	3263.0	3266.0	3288.1	3302.9
25°	3614.9	3546.8	3418.2	3338.4	3268.9	3230.5	3234.9	3236.3	3239.3	3257.0	3280.7
27.5°	3746.5	3671.0	3489.2	3330.9	3205.3	3178.7	3171.4	3175.8	3186.1	3214.2	3242.3
30°	3878.0	3789.3	3554.2	3301.4	3125.4	3088.5	3064.9	3075.2	3107.7	3135.8	3166.8
32.5°	3997.8	3909.0	3606.0	3236.3	3023.4	2965.8	2934.8	2948.1	2980.6	2991.0	3028.0
35°	4138.2	4037.7	3628.2	3132.9	2912.5	2823.9	2782.5	2763.3	2779.5	2769.1	2801.7
37.5°	4295.0	4190.0	3625.2	2996.9	2782.5	2680.5	2622.8	2550.4	2516.4	2480.9	2503.0
40°	4527.1	4376.2	3589.8	2832.8	2621.3	2528.2	2424.6	2301.9	2225.1	2155.6	2160.1
42.5°	4843.4	4634.9	3524.7	2652.4	2439.5	2352.3	2211.7	2068.3	1947.2	1831.8	1821.4
45°	5315.1	4973.6	3443.4	2460.2	2242.8	2157.1	2004.8	1843.7	1706.1	1558.3	1540.6
47.5°	5995.2	5428.9	3366.5	2241.4	2035.9	1957.4	1820.0	1670.6	1508.1	1364.6	1348.4
50°	6929.6	6082.5	3295.5	2028.5	1831.8	1772.6	1663.3	1511.0	1346.8	1231.5	1224.2
52.5°	8118.3	6971.0	3266.0	1823.0	1641.1	1618.9	1531.7	1389.8	1234.5	1136.9	1129.6
55°	9482.9	8033.9	3266.0	1626.3	1474.1	1481.4	1420.9	1289.2	1154.7	1067.4	1058.6
57.5°	10875.6	9110.3	3206.8	1444.4	1332.1	1363.1	1324.7	1209.4	1088.1	997.9	983.2
60°	12159.0	10012.2	2967.3	1278.9	1206.4	1255.2	1230.1	1131.0	983.2	907.7	896.0
62.5°	13145.0	10520.8	2506.0	1147.3	1102.9	1159.1	1145.8	1027.6	963.9	933.0	922.6
65°	13638.9	10438.0	1916.1	1030.5	1015.7	1102.9	1074.8	1070.4	1020.2	984.6	972.8
67.5°	13335.8	9725.4	1389.8	944.7	965.4	1051.2	1159.1	1176.9	1083.7	1014.2	1002.4
70°	12006.6	8436.2	1034.9	863.5	901.9	1052.7	1321.7	1231.5	1063.0	981.7	968.4
72.5°	9134.0	6290.8	802.8	777.7	819.1	1060.1	1394.2	1206.4	1003.9	1085.2	1076.4
75°	5223.4	3453.7	644.6	672.7	715.6	990.6	1357.2	1141.3	958.1	996.5	996.5
77.5°	1991.5	1327.7	532.3	569.2	575.1	864.9	1298.1	1136.9	912.2	890.0	811.7
80°	690.4	519.0	440.5	452.4	445.1	768.9	1244.9	989.1	746.6	668.3	646.1
82.5°	282.4	258.7	348.9	334.2	316.4	597.3	1005.3	808.7	610.6	539.7	533.7
85°	122.7	164.1	230.6	202.5	183.4	414.0	805.8	684.5	516.0	445.1	443.5
87.5°	25.1	62.1	97.6	91.6	94.6	276.4	572.2	486.5	365.2	273.5	214.3
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)