

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: P965137

Luminaire Tested: **NAV-SB3D-740-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965137
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25504 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

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



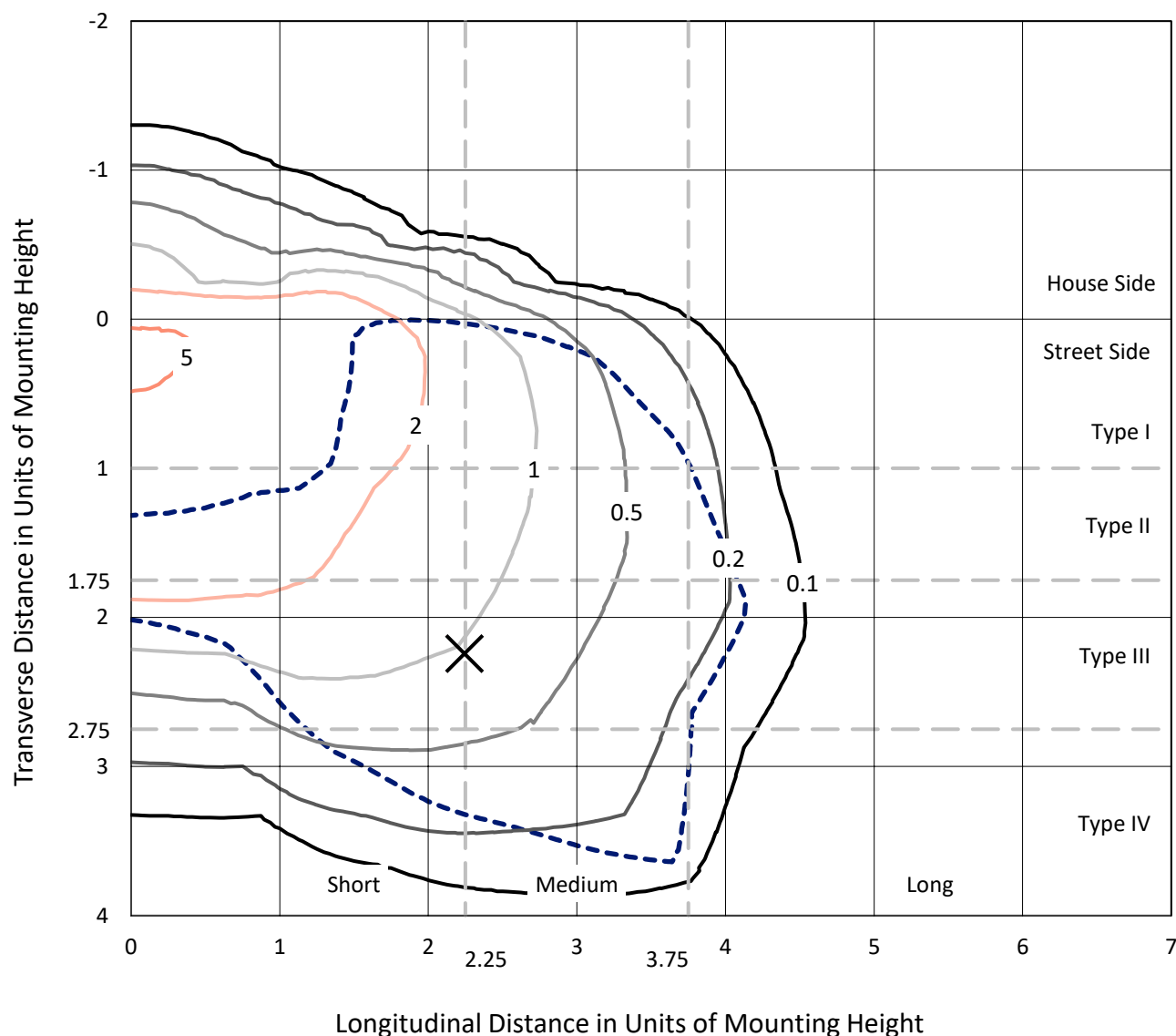
REPORT NUMBER: P965137

CATALOG NUMBER: NAV-SB3D-740-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

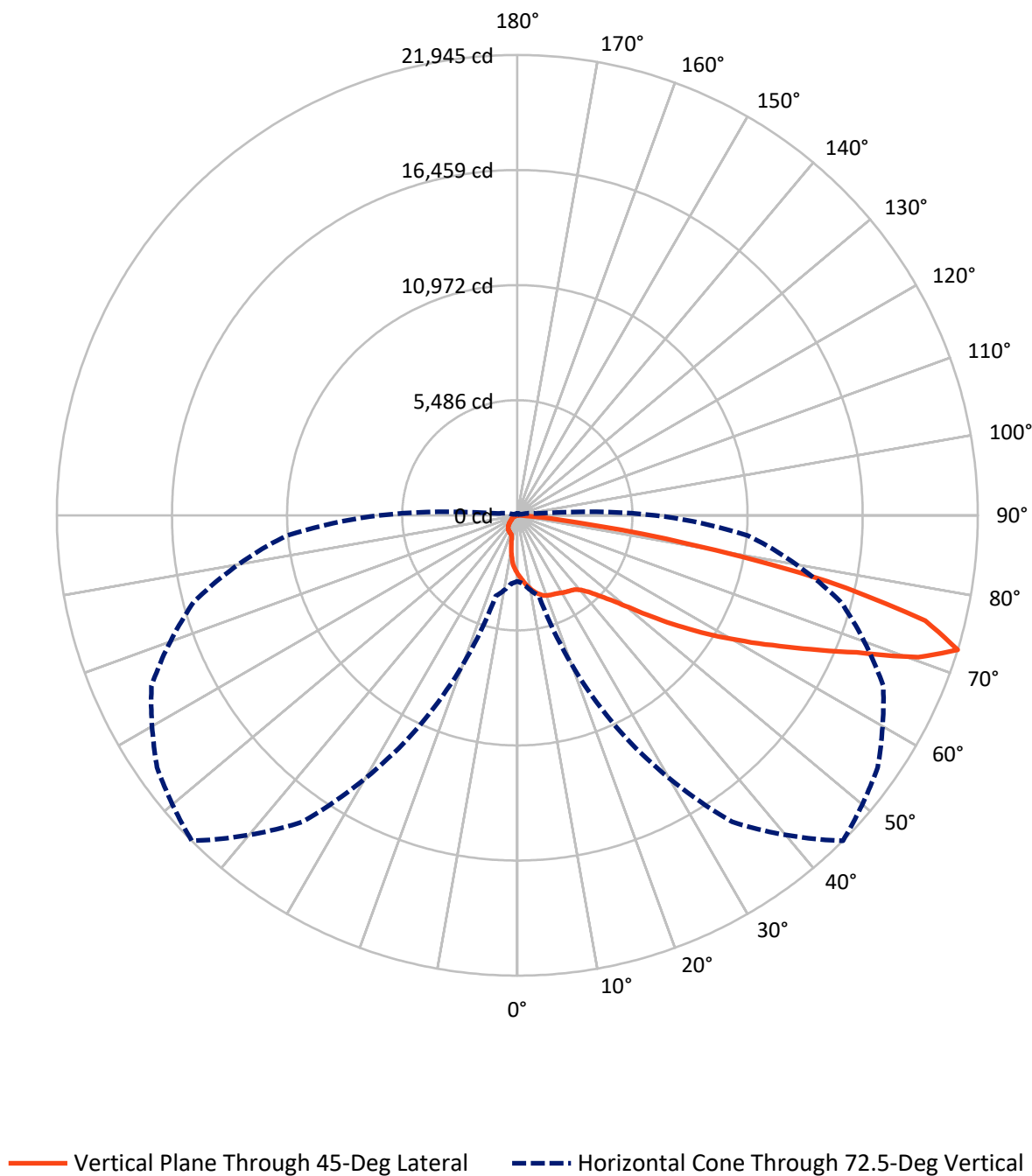


Based on 25 foot mounting height. Maximum calculated value = 6.1 fc

Type IV - Short - N/A

REPORT NUMBER: P965137
CATALOG NUMBER: NAV-SB3D-740-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P965137

CATALOG NUMBER: NAV-SB3D-740-U-T4W-HSS

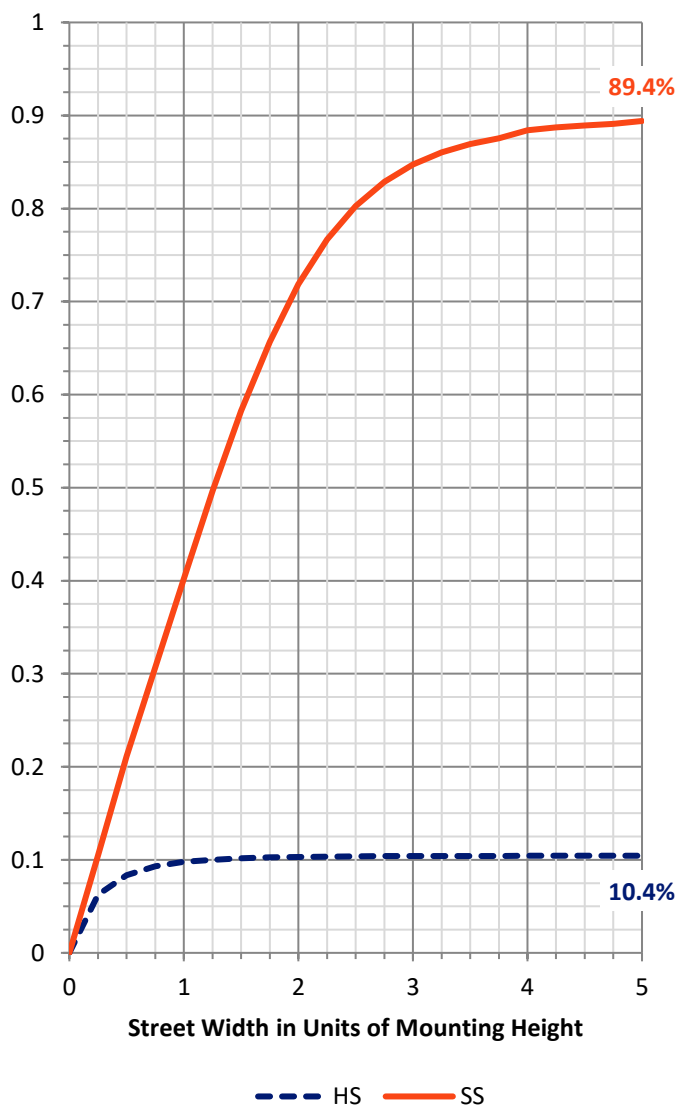
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2679.8	0.0	2679.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	22824.3	0.0	22824.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	25504.0	0.0	25504.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.3	1.0
10°-20°	769.4	3.0
20°-30°	1263.4	5.0
30°-40°	1791.9	7.0
40°-50°	2961.7	11.6
50°-60°	5320.4	20.9
60°-70°	7387.7	29.0
70°-80°	5358.8	21.0
80°-90°	387.4	1.5
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°	25504.0	100.0
0°-180°	25504.0	100.0

Coefficient of Utilization



REPORT NUMBER: P965137

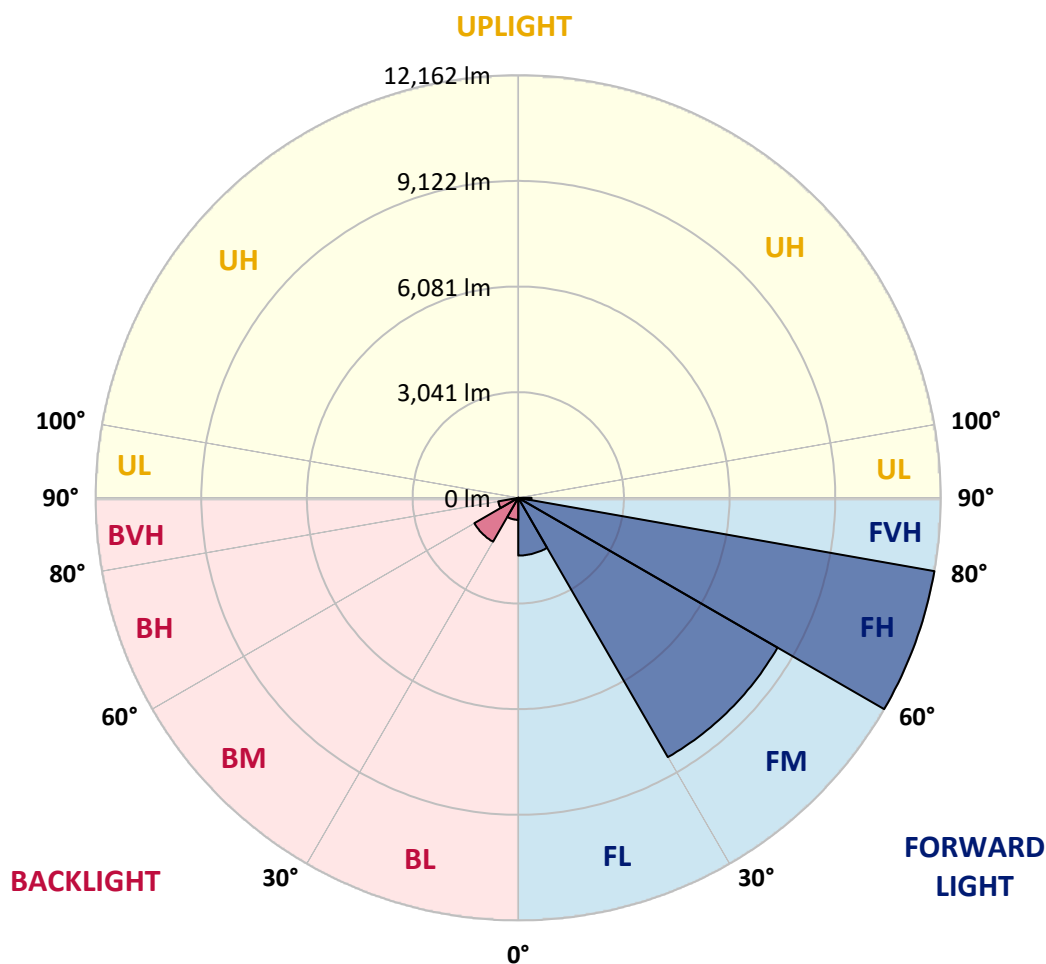
CATALOG NUMBER: NAV-SB3D-740-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1661.3	6.5			
FM	(30°-60°)	8616.6	33.8			
FH	(60°-80°)	12162.2	47.7			G5
FVH	(80°-90°)	384.2	1.5			G3/500
BL	(0°-30°)	634.7	2.5	B2/1000		
BM	(30°-60°)	1457.4	5.7	B2/2500		
BH	(60°-80°)	584.4	2.3	B2/1000		G2/1000
BVH	(80°-90°)	3.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short



REPORT NUMBER: P965137

CATALOG NUMBER: NAV-SB3D-740-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0
2.5°	3051.6	3056.9	3053.4	3032.6	2997.7	2978.5	2968.1	2933.2	2910.7	2870.6	2828.8
5°	3332.0	3352.9	3340.7	3298.9	3232.7	3185.7	3171.8	3100.4	3035.9	2961.1	2874.1
7.5°	3629.6	3640.1	3617.4	3563.5	3474.6	3394.6	3382.4	3283.2	3180.5	3065.6	2947.2
10°	3887.2	3899.4	3864.7	3786.2	3685.3	3586.1	3568.6	3459.1	3337.2	3196.2	3044.7
12.5°	4103.1	4115.3	4070.1	3976.1	3864.7	3762.0	3744.5	3629.6	3495.6	3338.9	3150.8
15°	4266.8	4289.4	4228.4	4127.5	4007.3	3904.6	3895.9	3782.8	3652.3	3478.1	3278.0
17.5°	4362.5	4385.2	4327.7	4205.9	4103.1	4016.1	4005.6	3911.6	3789.7	3622.7	3401.6
20°	4378.2	4399.1	4338.1	4231.9	4146.6	4077.0	4071.8	4003.9	3915.1	3755.0	3535.6
22.5°	4331.1	4357.3	4301.6	4216.2	4157.1	4120.5	4113.5	4075.3	4024.8	3889.0	3661.0
25°	4282.4	4303.4	4261.5	4186.7	4155.3	4151.9	4157.1	4150.1	4139.7	4024.8	3807.2
27.5°	4279.0	4301.6	4254.6	4183.2	4165.8	4202.4	4207.5	4240.6	4249.3	4148.4	3948.2
30°	4308.6	4324.2	4279.0	4204.1	4195.4	4279.0	4280.7	4339.8	4353.8	4252.8	4087.5
32.5°	4373.0	4390.4	4345.1	4235.4	4223.2	4339.8	4345.1	4423.4	4446.0	4364.2	4233.7
35°	4524.5	4545.3	4493.1	4322.4	4279.0	4397.4	4413.0	4505.3	4550.5	4482.6	4385.2
37.5°	4902.2	4841.3	4769.8	4498.3	4406.1	4487.9	4514.0	4621.9	4702.0	4623.7	4566.2
40°	5840.4	5649.0	5426.1	4797.7	4628.9	4681.1	4702.0	4809.9	4919.6	4843.0	4815.1
42.5°	7248.8	7022.5	6663.8	5487.0	4964.8	4990.9	5006.6	5100.6	5255.6	5194.6	5201.6
45°	8503.9	8422.1	8056.5	6663.8	5593.2	5464.5	5483.6	5532.3	5760.4	5737.7	5783.0
47.5°	9468.3	9421.4	9139.3	8014.8	6655.1	6044.1	6098.1	6120.8	6449.7	6529.9	6651.7
50°	10209.9	10192.5	9940.1	9215.9	8042.6	6898.9	6918.0	6869.2	7362.0	7560.4	7791.9
52.5°	10909.8	10968.9	10782.7	10331.8	9524.1	8018.3	8014.8	7785.0	8450.0	8749.4	9144.5
55°	11541.7	11562.5	11581.7	11470.3	11014.2	9292.5	9259.4	8883.5	9712.1	10021.9	10450.2
57.5°	12135.3	12144.0	12314.6	12542.6	12565.3	10660.8	10599.8	10149.0	11090.8	11311.9	11574.7
60°	12533.9	12574.0	12934.4	13568.0	13844.8	12072.7	12039.5	11579.9	12493.9	12596.6	12547.8
62.5°	11959.5	12203.1	13111.9	14368.8	15052.9	13637.6	13621.9	13190.2	13970.1	13886.6	13468.8
65°	9680.7	10093.3	11691.4	14910.2	16238.4	15385.5	15408.0	14948.5	15486.4	15214.8	14217.3
67.5°	6771.8	7207.0	9097.6	14953.7	17563.2	17437.8	17568.4	16847.7	17096.6	16487.3	14394.9
70°	4682.8	4907.4	6138.1	14017.1	18595.4	20265.0	20261.5	19180.4	18698.2	17067.1	13489.6
72.5°	3149.1	3265.8	3986.5	11120.4	17836.4	21944.8	21843.9	20963.0	19237.8	15961.6	11021.1
75°	1328.3	1413.6	1845.3	6249.5	14111.1	20076.9	19803.6	18525.8	17093.1	12568.8	6876.2
77.5°	421.3	457.9	727.6	2237.0	7772.8	15091.2	14802.2	11569.5	11456.3	6305.3	2513.7
80°	200.2	233.3	409.1	898.3	3058.6	8208.0	8167.9	5248.6	4928.3	1702.5	504.8
82.5°	87.0	102.7	226.3	480.4	1368.3	2928.1	2987.3	1786.1	1477.9	645.9	155.0
85°	27.9	36.6	104.4	221.1	578.0	727.6	718.9	424.8	595.3	351.7	53.9
87.5°	0.0	0.0	34.8	50.5	59.1	41.8	47.0	36.6	165.3	97.5	19.2
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: P965137

CATALOG NUMBER: NAV-SB3D-740-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0	2794.0
2.5°	2808.0	2780.1	2731.3	2686.1	2646.0	2606.1	2581.7	2546.8	2543.3	2543.3	2552.0
5°	2827.1	2781.8	2694.8	2602.6	2496.4	2395.4	2294.4	2196.9	2165.6	2143.0	2153.4
7.5°	2882.8	2811.5	2673.9	2498.1	2296.1	2075.1	1920.1	1753.1	1688.6	1653.7	1659.0
10°	2962.9	2865.4	2656.5	2348.4	2021.1	1720.0	1498.9	1317.8	1248.1	1218.6	1218.6
12.5°	3051.6	2931.5	2625.1	2162.1	1720.0	1359.6	1143.7	1060.2	1049.7	1049.7	1049.7
15°	3157.8	3011.7	2571.2	1942.8	1404.9	1075.8	999.3	1002.8	1013.1	1020.1	1020.1
17.5°	3267.5	3096.9	2485.9	1697.3	1126.3	967.9	969.6	974.9	983.6	990.6	990.6
20°	3385.9	3182.2	2372.8	1436.2	966.2	936.5	941.8	947.0	954.0	957.5	959.2
22.5°	3513.0	3262.3	2238.7	1180.3	912.1	910.4	912.1	917.4	926.1	926.1	929.6
25°	3648.8	3351.1	2085.5	994.0	884.4	884.4	887.9	891.3	898.3	898.3	900.1
27.5°	3788.0	3432.9	1923.6	896.6	860.0	858.2	858.2	863.5	866.9	868.7	870.4
30°	3941.2	3528.7	1761.7	875.7	840.8	832.1	826.9	830.4	833.8	835.6	839.1
32.5°	4098.0	3620.9	1617.2	884.4	821.6	806.0	788.6	785.2	785.2	792.1	797.3
35°	4272.0	3721.9	1505.8	913.9	811.2	767.7	739.8	724.2	725.9	736.4	741.6
37.5°	4480.9	3843.7	1424.0	940.0	804.2	724.2	679.0	659.8	647.6	659.8	656.3
40°	4754.2	4023.0	1364.8	960.9	795.6	673.7	612.7	581.5	558.8	565.8	562.3
42.5°	5156.4	4305.1	1342.1	962.7	776.4	614.5	544.9	503.1	470.1	471.8	464.8
45°	5720.3	4750.7	1458.8	940.0	734.6	550.1	473.6	417.8	396.9	391.7	384.7
47.5°	6493.3	5400.0	1728.7	893.1	673.7	487.4	403.8	356.9	341.2	332.5	327.3
50°	7529.0	6233.8	2028.1	840.8	612.7	428.2	346.4	316.8	306.4	297.7	295.9
52.5°	8730.2	7080.0	2273.6	788.6	551.9	376.0	309.9	292.4	283.7	276.8	275.0
55°	9832.2	7663.1	2259.6	732.9	492.6	334.3	283.7	273.3	262.9	255.9	252.5
57.5°	10518.0	7744.9	1862.7	672.0	424.8	301.1	259.4	252.5	240.3	231.5	229.8
60°	10833.1	7278.4	1305.6	591.8	356.9	269.8	233.3	229.8	214.1	201.9	198.4
62.5°	10890.6	6411.5	870.4	492.6	297.7	240.3	207.2	201.9	181.0	160.1	149.8
65°	10657.3	5171.9	602.3	384.7	254.2	208.9	177.5	167.1	144.5	123.6	116.6
67.5°	9919.2	3631.4	419.5	276.8	215.9	165.3	141.0	137.6	120.1	102.7	97.5
70°	8566.6	2069.9	280.2	207.2	170.6	113.2	111.4	114.9	97.5	83.5	76.6
72.5°	6568.1	947.0	174.0	151.5	116.6	76.6	88.8	90.5	74.8	62.6	55.7
75°	3866.4	405.6	109.7	97.5	59.1	50.5	64.4	66.1	50.5	40.1	34.8
77.5°	1316.1	153.2	69.6	57.4	29.6	27.9	41.8	41.8	27.9	15.7	12.2
80°	299.4	57.4	34.8	22.7	13.9	12.2	13.9	12.2	7.0	1.7	0.0
82.5°	85.3	22.7	13.9	8.7	5.2	5.2	1.7	0.0	0.0	0.0	0.0
85°	24.4	10.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)