

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: P965128

Luminaire Tested: **NAV-SB3D-740-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965128
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25303.2 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

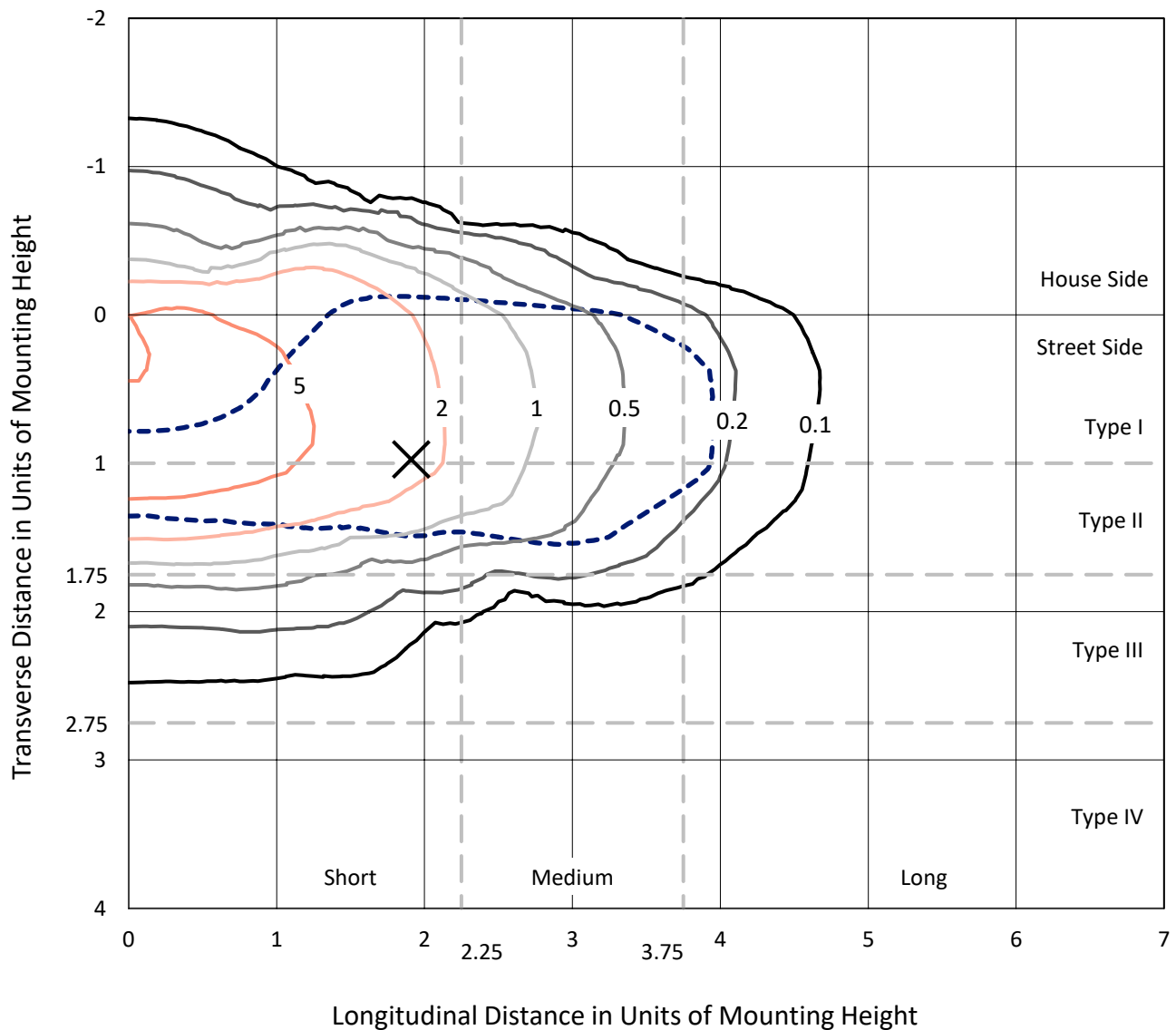
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P965128
CATALOG NUMBER: NAV-SB3D-740-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

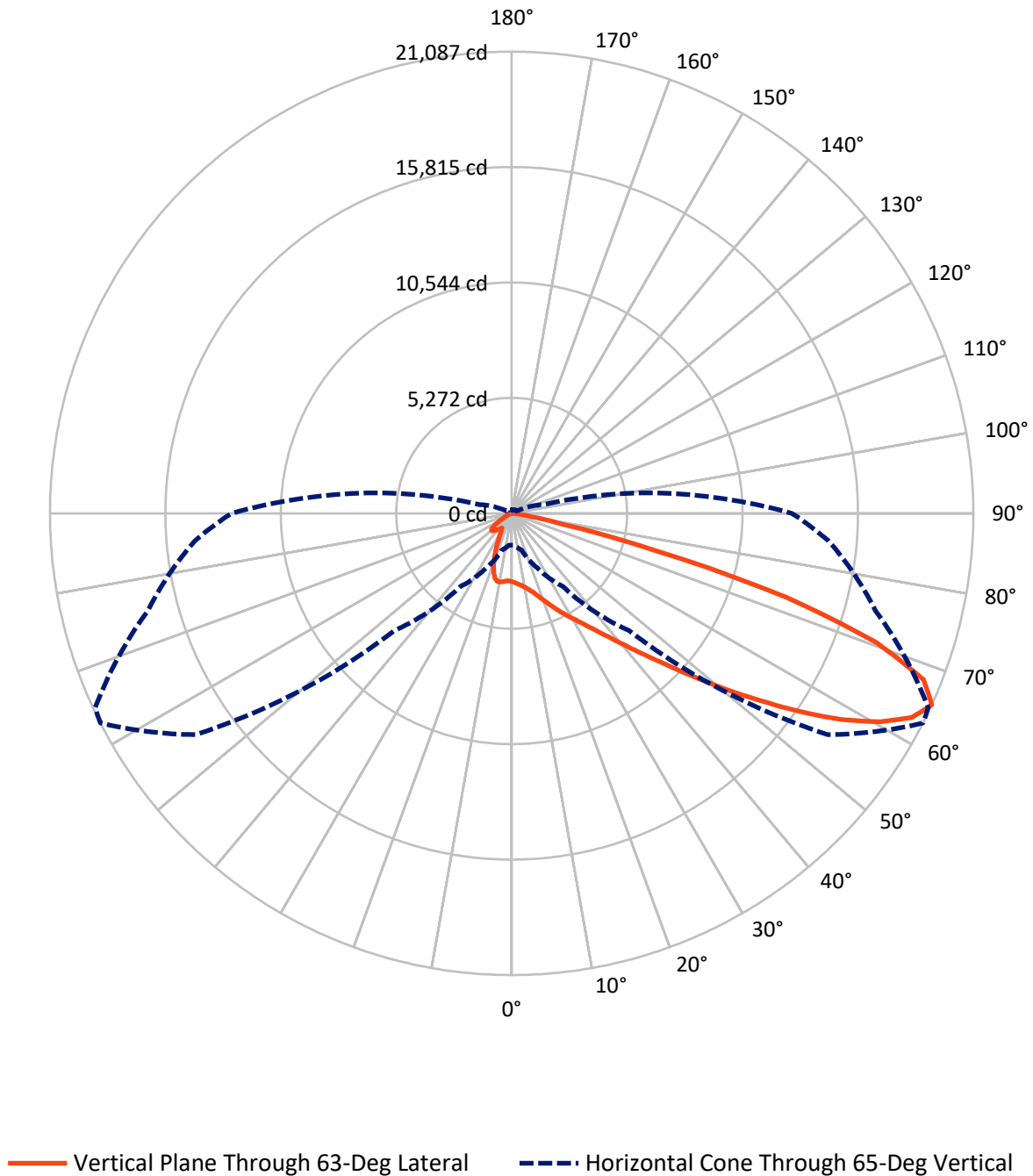
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
Type II - Short - N/A

REPORT NUMBER: P965128
CATALOG NUMBER: NAV-SB3D-740-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P965128

CATALOG NUMBER: NAV-SB3D-740-U-T2U-HSS

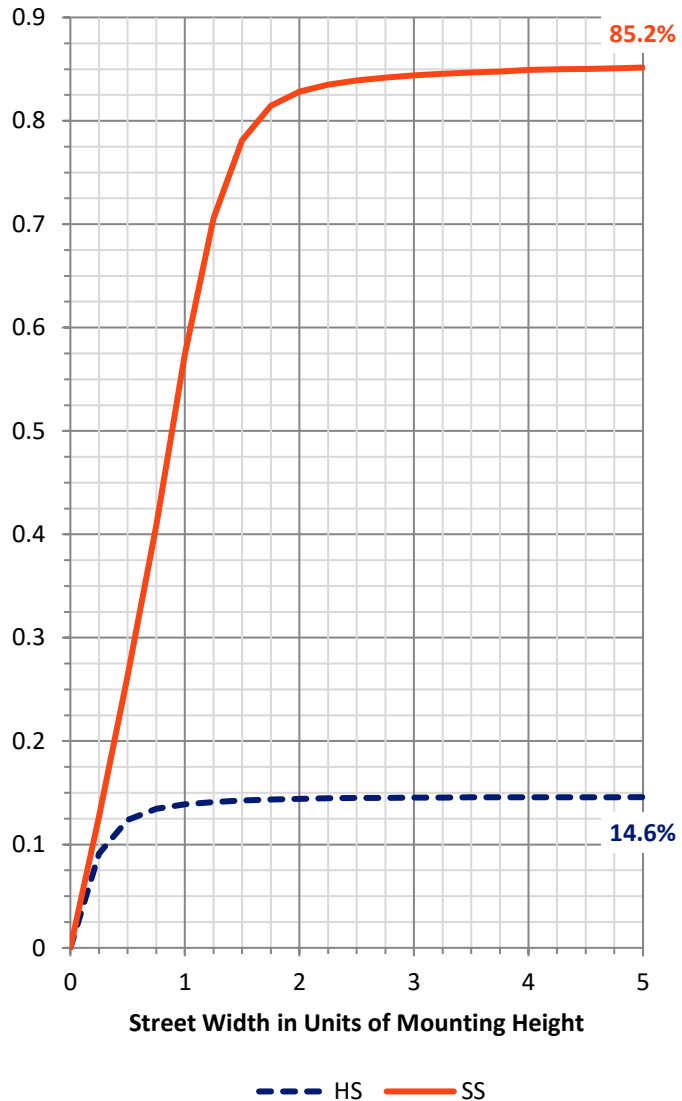
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3719.4	0.0	3719.4
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	21583.8	0.0	21583.8
	% Fixture	85.3	0.0	85.3
Total	Lumens	25303.2	0.0	25303.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.2	1.2
10°-20°	816.4	3.2
20°-30°	1421.5	5.6
30°-40°	2562.2	10.1
40°-50°	5081.7	20.1
50°-60°	6922.0	27.4
60°-70°	5525.1	21.8
70°-80°	2500.2	9.9
80°-90°	179.7	0.7
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°	25303.2	100.0
0°-180°	25303.2	100.0

Coefficient of Utilization



REPORT NUMBER: P965128

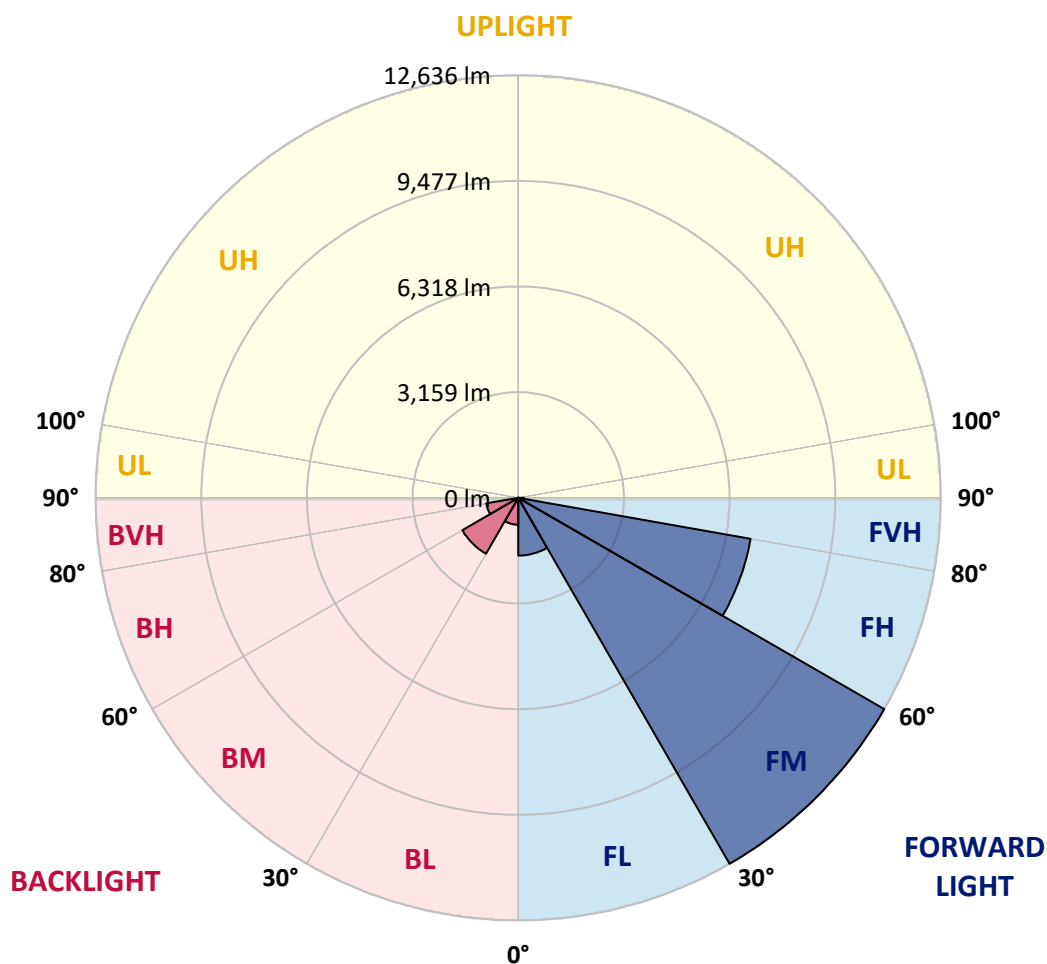
CATALOG NUMBER: NAV-SB3D-740-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1727.2	6.8			
FM	(30°-60°)	12635.8	49.9			
FH	(60°-80°)	7054.4	27.9			G3/7500
FVH	(80°-90°)	166.4	0.7			G2/225
BL	(0°-30°)	804.9	3.2	B2/1000		
BM	(30°-60°)	1930.1	7.6	B2/2500		
BH	(60°-80°)	971.0	3.8	B2/1000		G2/1000
BVH	(80°-90°)	13.3	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short



REPORT NUMBER: P965128

CATALOG NUMBER: NAV-SB3D-740-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9
2.5°	3196.0	3187.3	3199.4	3194.2	3190.8	3183.9	3180.4	3176.9	3169.9	3164.7	3143.8
5°	3204.7	3199.4	3211.6	3222.1	3232.5	3243.0	3248.2	3255.2	3248.2	3234.3	3213.4
7.5°	3131.6	3128.1	3154.2	3185.6	3232.5	3272.6	3316.1	3340.5	3342.2	3337.0	3314.3
10°	3126.4	3117.6	3143.8	3182.1	3243.0	3314.3	3391.0	3443.2	3450.2	3472.8	3448.4
12.5°	3208.1	3199.4	3236.0	3277.8	3340.5	3415.3	3509.3	3582.5	3592.9	3624.2	3606.8
15°	3345.7	3333.5	3375.3	3429.2	3509.3	3594.7	3693.9	3760.0	3768.7	3807.0	3775.7
17.5°	3505.8	3493.7	3542.4	3599.8	3686.9	3803.5	3918.4	3991.6	4002.0	4026.3	3968.9
20°	3711.2	3695.6	3733.9	3786.1	3878.4	4017.6	4155.1	4259.6	4257.8	4257.8	4163.9
22.5°	3949.7	3925.3	3958.4	4000.3	4087.3	4256.1	4438.9	4562.5	4562.5	4513.7	4358.8
25°	4205.7	4181.3	4217.8	4256.1	4332.7	4524.1	4738.3	4891.5	4898.5	4814.8	4567.7
27.5°	4525.9	4494.6	4522.4	4567.7	4612.9	4808.0	5062.1	5239.6	5243.1	5114.3	4766.1
30°	5142.1	5053.4	4966.3	4917.5	4938.4	5131.7	5403.3	5600.0	5617.4	5439.8	4982.0
32.5°	6270.1	6252.7	5946.3	5546.0	5337.1	5479.9	5784.5	6021.3	6031.6	5803.7	5262.2
35°	8023.1	8002.2	7509.6	6747.1	6066.5	5946.3	6247.5	6527.8	6520.8	6263.2	5626.0
37.5°	10115.4	10096.2	9447.0	8426.9	7325.1	6651.3	6844.5	7138.8	7182.3	6844.5	6096.1
40°	11903.2	11831.8	11421.0	10437.5	8996.1	7821.2	7694.1	7889.0	7934.3	7534.0	6693.1
42.5°	13257.5	13196.6	12987.7	12373.2	11018.9	9551.5	8695.0	8769.8	8820.3	8339.9	7379.0
45°	13959.0	13945.0	14028.7	13971.2	13079.9	11675.2	10125.9	9814.3	9833.4	9232.9	8157.2
47.5°	14058.2	14051.2	14432.5	14972.1	14851.9	14070.4	11962.4	11116.3	11048.5	10240.8	9003.1
50°	13473.3	13459.4	14190.5	15201.9	16035.7	16082.7	14047.7	12583.8	12434.1	11283.5	9885.6
52.5°	11605.5	11602.1	12803.2	14486.4	16451.8	17844.3	16108.8	14195.7	13945.0	12387.1	10818.7
55°	8930.0	8994.4	10371.4	12361.0	15692.7	18692.1	17959.2	15985.2	15600.5	13497.7	11678.6
57.5°	6325.9	6419.9	7781.1	9553.2	13339.2	18190.8	19210.8	17778.2	17363.9	14604.8	12550.7
60°	3397.9	3481.5	4844.5	6959.4	9923.9	16321.2	19870.5	19334.4	18942.7	15656.3	13337.5
62.5°	2024.5	2052.4	2616.3	4492.9	6712.3	12468.9	19590.3	20519.9	20197.8	16538.8	14021.7
65°	1453.6	1458.8	1742.5	2743.4	4075.1	7575.7	17625.0	21087.3	20988.1	17203.7	14528.2
67.5°	1223.7	1220.3	1338.6	1822.6	2776.5	3794.9	13508.2	20284.9	20706.1	17625.0	14815.5
70°	1049.7	1054.9	1194.1	1335.2	2087.1	2148.1	6715.8	17661.6	18559.8	17736.4	14798.0
72.5°	781.6	799.0	927.8	1216.8	1575.3	1477.8	2318.7	13095.6	14719.7	16711.1	14030.4
75°	551.9	560.5	652.8	1023.6	1175.0	1075.7	1183.7	6769.7	8851.7	12811.9	11483.7
77.5°	424.8	440.4	494.4	715.4	1157.6	755.5	724.2	2343.0	3599.8	7739.4	7873.3
80°	229.8	257.6	356.8	517.0	812.9	534.4	358.5	933.1	1220.3	3619.0	3035.8
82.5°	118.4	132.3	249.0	372.5	463.0	466.5	177.5	388.2	503.1	1117.6	416.0
85°	47.0	57.4	167.1	205.4	238.5	229.8	80.1	156.6	181.0	309.9	127.1
87.5°	10.5	17.4	60.9	47.0	45.3	48.8	19.2	36.6	34.8	36.6	22.7
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: P965128

CATALOG NUMBER: NAV-SB3D-740-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9	3122.9
2.5°	3142.0	3135.1	3115.9	3095.0	3070.7	3056.8	3048.0	3046.3	3034.1	3025.4	3034.1
5°	3194.2	3187.3	3150.7	3107.2	3060.2	3023.6	2988.9	2957.5	2912.2	2903.5	2900.0
7.5°	3298.7	3279.6	3220.3	3161.2	3072.4	2966.2	2837.4	2689.4	2557.2	2517.1	2497.9
10°	3427.5	3401.4	3326.5	3222.1	3025.4	2736.4	2424.8	2135.9	1906.1	1841.7	1817.3
12.5°	3573.8	3551.1	3451.9	3258.7	2828.7	2304.7	1827.8	1469.2	1246.4	1190.6	1175.0
15°	3747.8	3714.7	3577.2	3202.9	2477.1	1751.2	1255.1	1042.7	962.7	952.2	941.8
17.5°	3932.3	3878.4	3688.7	3002.7	2003.6	1244.7	969.5	908.7	873.8	863.4	858.2
20°	4101.2	4031.5	3754.8	2699.8	1497.0	969.5	868.6	828.6	797.2	785.0	778.1
22.5°	4270.0	4170.8	3754.8	2287.3	1122.8	860.0	797.2	760.7	724.2	708.5	699.8
25°	4445.8	4313.5	3688.7	1827.8	903.4	788.5	729.4	689.3	658.0	638.9	631.9
27.5°	4616.4	4433.6	3537.2	1392.6	804.2	725.9	666.7	628.4	598.8	584.9	584.9
30°	4778.3	4552.0	3324.8	1056.7	739.8	664.9	609.3	576.2	546.6	532.7	534.4
32.5°	4997.7	4701.8	3098.5	866.8	684.1	607.5	557.1	525.7	499.6	489.1	489.1
35°	5302.3	4922.8	2903.5	851.3	637.1	560.5	510.0	480.4	454.4	445.7	445.7
37.5°	5734.0	5279.7	2800.8	955.7	598.8	518.8	471.7	440.4	416.0	409.1	407.3
40°	6266.6	5763.6	2856.6	1060.2	572.7	482.2	437.0	405.6	384.7	376.0	374.2
42.5°	6898.6	6360.6	3164.7	1140.2	555.3	450.9	403.8	369.0	355.1	351.7	351.7
45°	7624.5	7016.9	3636.4	1225.5	527.5	421.3	370.7	344.7	334.3	332.5	330.8
47.5°	8449.6	7737.6	4183.0	1331.7	499.6	393.4	344.7	327.3	318.6	315.1	315.1
50°	9267.7	8463.4	4745.2	1390.8	476.9	367.3	323.8	309.9	302.9	301.1	301.1
52.5°	10124.1	9210.2	5199.6	1335.2	457.8	346.4	306.4	295.9	288.9	287.2	287.2
55°	10940.5	9814.3	5277.9	1133.2	419.5	325.5	287.2	282.0	273.3	273.3	271.5
57.5°	11643.8	10117.2	4724.3	832.1	381.2	294.2	268.0	262.8	255.8	254.1	252.5
60°	12289.6	10030.1	3646.8	560.5	339.5	262.8	243.7	240.3	233.3	224.6	222.8
62.5°	12653.4	9647.2	2494.4	365.5	297.7	229.8	215.9	214.1	198.4	181.0	177.5
65°	12791.0	8860.4	1556.3	266.3	249.0	196.7	186.2	182.8	160.1	141.0	139.3
67.5°	12670.8	7565.2	785.0	210.6	196.7	163.6	153.1	153.1	137.6	120.1	118.4
70°	12190.4	5671.3	330.8	168.8	151.5	125.4	125.4	132.3	116.6	97.5	95.7
72.5°	11147.7	3815.7	175.8	128.8	113.2	88.8	102.7	107.9	92.2	73.1	73.1
75°	8862.2	2327.4	121.9	95.7	71.3	62.6	78.3	81.8	62.6	48.8	47.0
77.5°	6061.2	1336.9	81.8	60.9	45.3	36.6	53.9	50.5	33.1	22.7	24.4
80°	2661.6	557.1	47.0	27.9	17.4	13.9	19.2	13.9	10.5	7.0	7.0
82.5°	311.6	130.6	17.4	10.5	7.0	3.5	1.7	0.0	0.0	0.0	0.0
85°	64.4	15.7	8.7	3.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.2	3.5	1.7	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)