

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: P969313

Luminaire Tested: **NAV-SB5D-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969313
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-SB5D-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 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: 40267.1 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

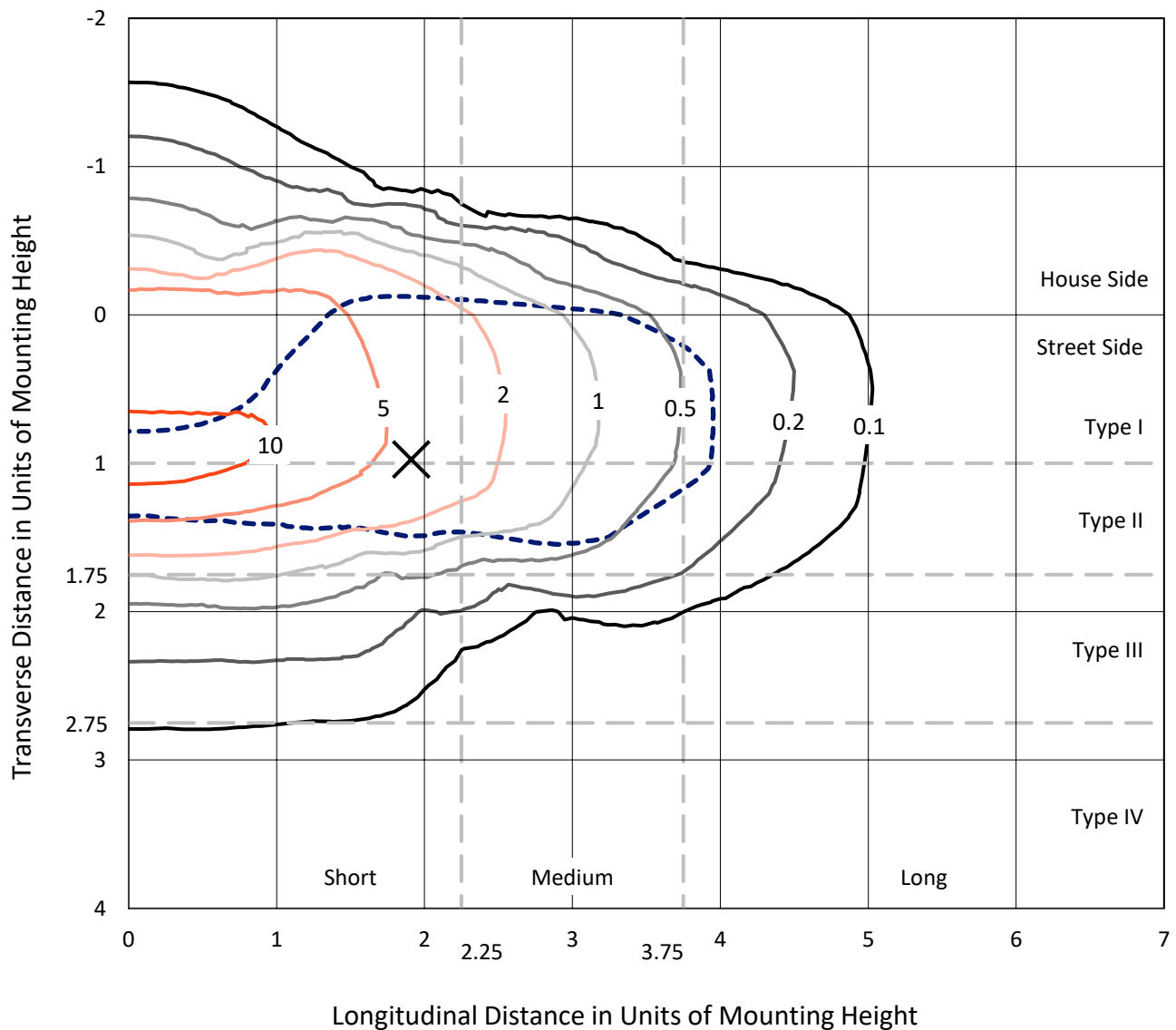
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P969313
CATALOG NUMBER: NAV-SB5D-735-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

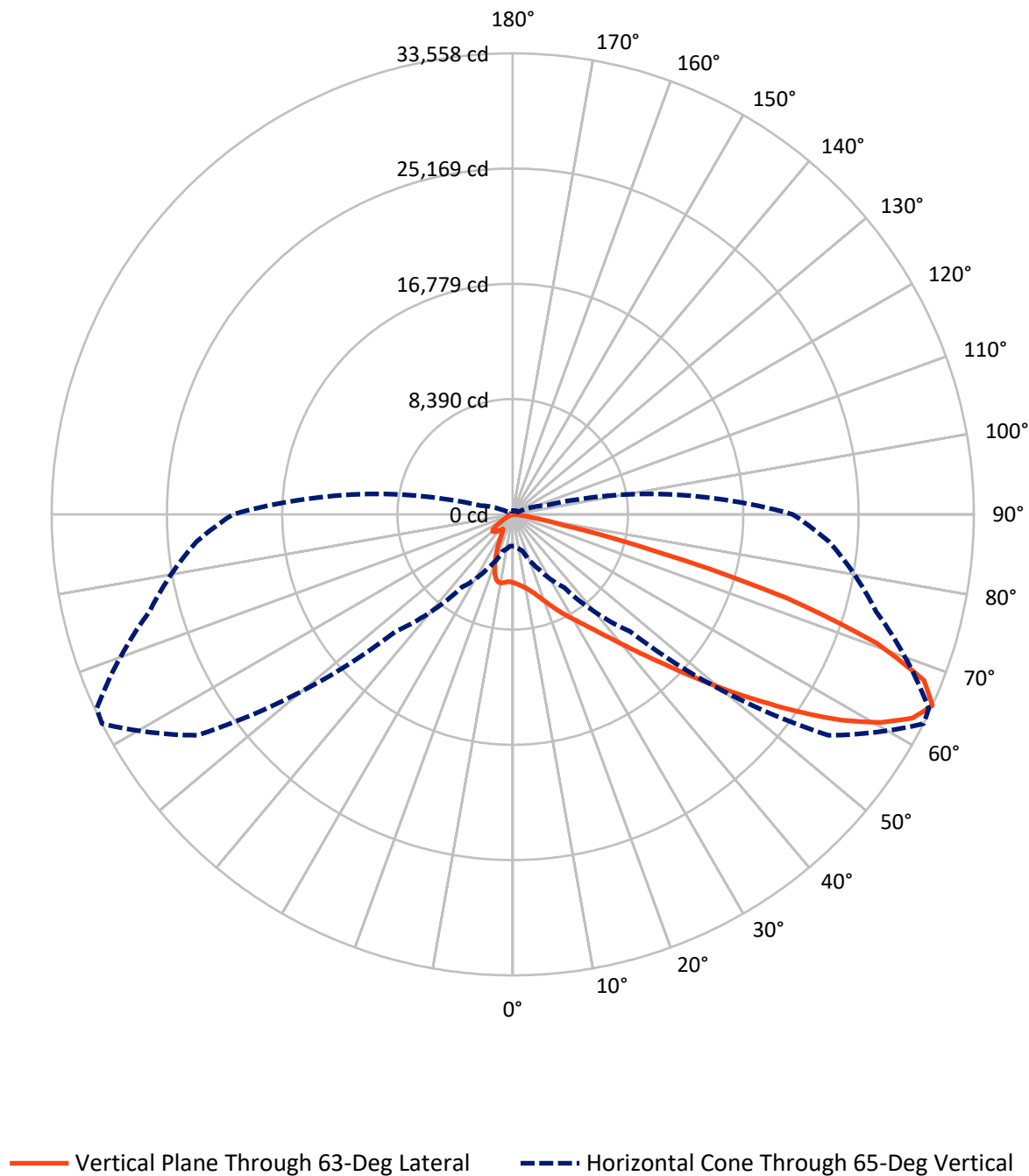
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.6 fc
Type II - Short - N/A

REPORT NUMBER: P969313
CATALOG NUMBER: NAV-SB5D-735-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P969313

CATALOG NUMBER: NAV-SB5D-735-U-T2U-HSS

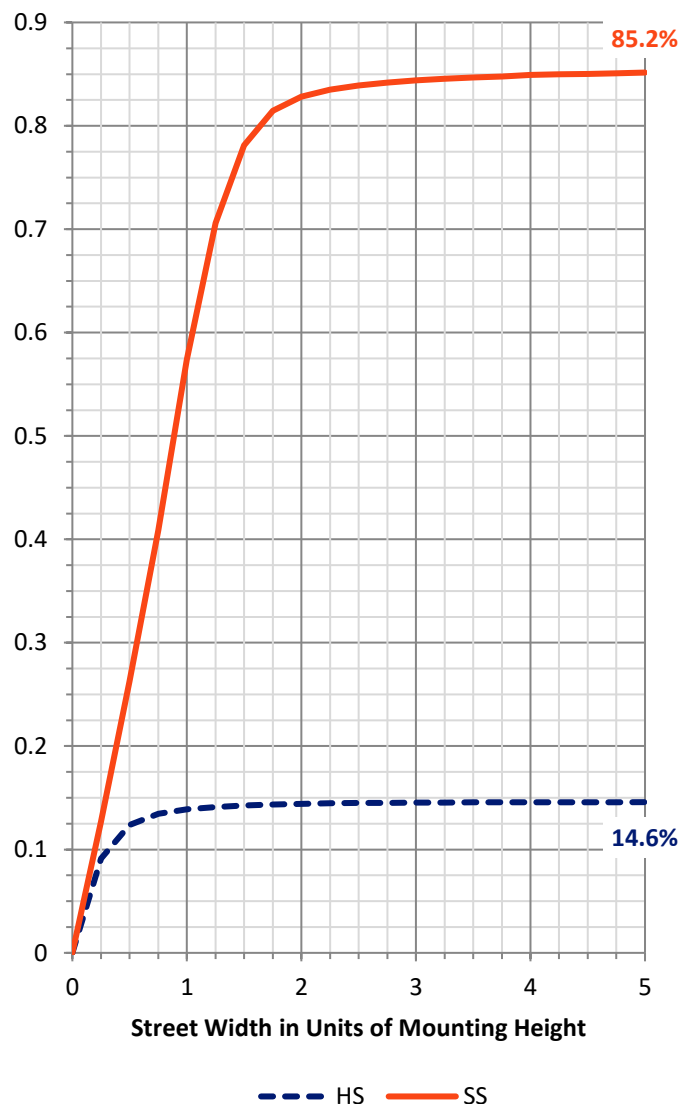
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5918.9	0.0	5918.9
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	34348.2	0.0	34348.2
	% Fixture	85.3	0.0	85.3
Total	Lumens	40267.1	0.0	40267.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	468.2	1.2
10°-20°	1299.2	3.2
20°-30°	2262.2	5.6
30°-40°	4077.4	10.1
40°-50°	8086.9	20.1
50°-60°	11015.7	27.4
60°-70°	8792.6	21.8
70°-80°	3978.9	9.9
80°-90°	286.0	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°	40267.1	100.0
0°-180°	40267.1	100.0

Coefficient of Utilization



REPORT NUMBER: P969313

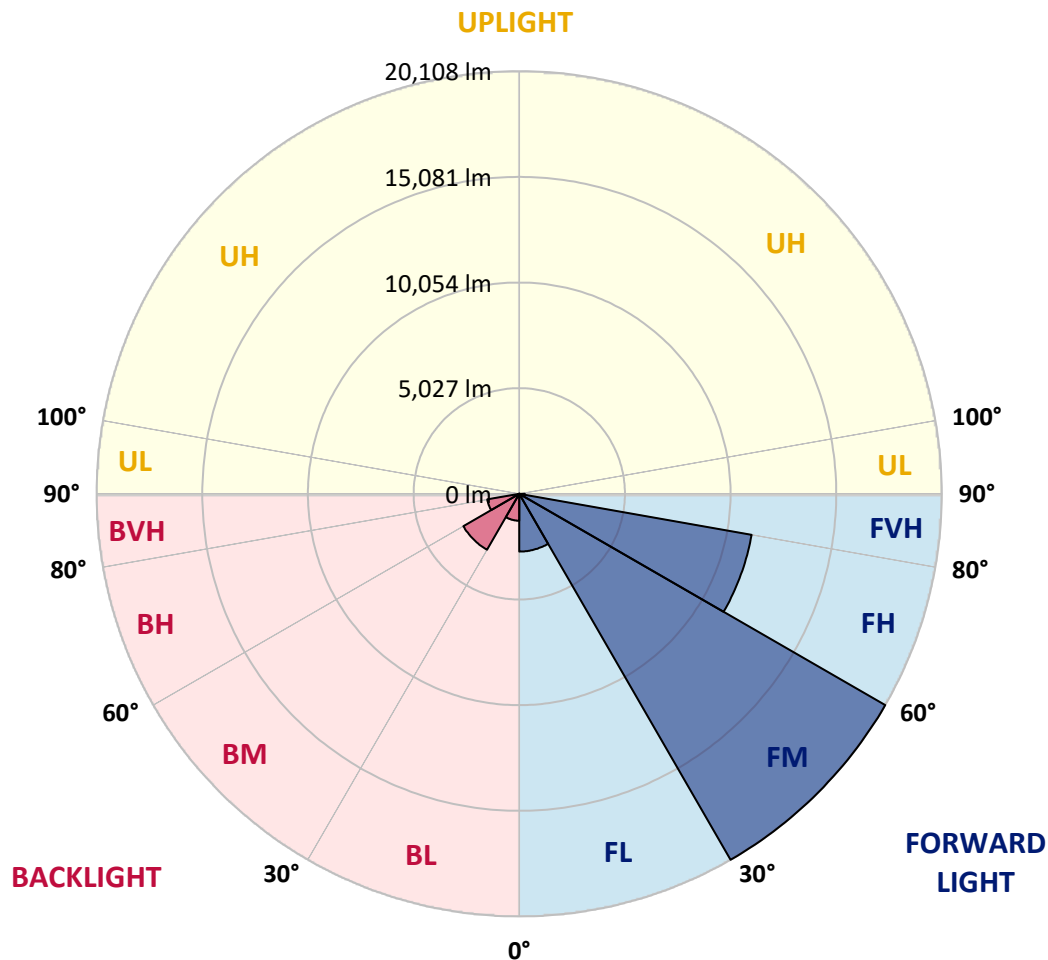
CATALOG NUMBER: NAV-SB5D-735-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2748.7	6.8			
FM	(30°-60°)	20108.4	49.9			
FH	(60°-80°)	11226.3	27.9			G4/12000
FVH	(80°-90°)	264.8	0.7			G3/500
BL	(0°-30°)	1281.0	3.2	B3/2500		
BM	(30°-60°)	3071.6	7.6	B3/5000		
BH	(60°-80°)	1545.2	3.8	B3/2500		G3/2500
BVH	(80°-90°)	21.2	0.1			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 II Short



REPORT NUMBER: P969313

CATALOG NUMBER: NAV-SB5D-735-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7
2.5°	5086.0	5072.2	5091.6	5083.3	5077.7	5066.7	5061.1	5055.6	5044.5	5036.2	5002.9
5°	5099.9	5091.6	5111.0	5127.7	5144.3	5160.9	5169.2	5180.2	5169.2	5147.0	5113.7
7.5°	4983.5	4978.0	5019.6	5069.4	5144.3	5207.9	5277.2	5316.0	5318.7	5310.4	5274.4
10°	4975.2	4961.4	5002.9	5063.9	5160.9	5274.4	5396.3	5479.4	5490.5	5526.5	5487.7
12.5°	5105.4	5091.6	5149.8	5216.2	5316.0	5435.2	5584.7	5701.0	5717.7	5767.6	5739.8
15°	5324.3	5304.9	5371.4	5457.3	5584.7	5720.4	5878.4	5983.6	5997.5	6058.4	6008.5
17.5°	5579.2	5559.8	5637.3	5728.7	5867.3	6052.8	6235.7	6352.0	6368.6	6407.5	6316.0
20°	5906.0	5881.1	5942.0	6025.2	6172.0	6393.6	6612.5	6778.6	6775.9	6775.9	6626.3
22.5°	6285.6	6246.8	6299.4	6365.9	6504.4	6773.1	7064.0	7260.7	7260.7	7183.1	6936.6
25°	6692.7	6654.0	6712.2	6773.1	6895.0	7199.7	7540.4	7784.3	7795.3	7662.4	7269.0
27.5°	7202.5	7152.7	7196.9	7269.0	7341.0	7651.3	8055.7	8338.3	8343.8	8138.8	7584.8
30°	8183.2	8041.8	7903.4	7825.8	7859.1	8166.5	8598.7	8911.7	8939.4	8656.8	7928.3
32.5°	9978.3	9950.5	9463.0	8825.9	8493.5	8720.6	9205.3	9582.1	9598.7	9235.9	8374.2
35°	12767.8	12734.6	11950.6	10737.3	9654.2	9463.0	9942.2	10388.2	10377.1	9967.1	8953.3
37.5°	16097.6	16067.1	15033.9	13410.5	11657.0	10584.9	10892.4	11360.6	11429.8	10892.4	9701.2
40°	18942.6	18828.9	18175.2	16610.0	14316.4	12446.5	12244.2	12554.5	12626.6	11989.4	10651.4
42.5°	21097.8	21000.8	20668.4	19690.6	17535.3	15200.0	13837.1	13956.2	14036.6	13272.0	11742.8
45°	22214.2	22192.0	22325.0	22233.6	20815.2	18579.7	16114.2	15618.3	15648.8	14693.1	12981.1
47.5°	22372.1	22361.0	22967.7	23826.4	23635.3	22391.4	19036.7	17690.5	17582.4	16297.0	14327.4
50°	21441.3	21419.1	22582.6	24192.0	25519.0	25593.8	22355.5	20025.7	19787.5	17956.4	15731.9
52.5°	18468.9	18463.3	20374.7	23053.6	26181.1	28397.2	25635.4	22590.9	22192.0	19712.7	17216.7
55°	14211.1	14313.6	16504.8	19671.1	24973.3	29746.3	28580.1	25438.7	24826.4	21480.1	18585.2
57.5°	10066.8	10216.5	12382.7	15202.8	21228.0	28948.5	30571.9	28291.9	27632.7	23241.9	19973.0
60°	5407.4	5540.4	7709.4	11075.2	15792.9	25973.3	31621.8	30768.6	30145.2	24915.1	21225.2
62.5°	3221.8	3266.1	4163.5	7149.9	10681.8	19842.9	31175.8	32655.1	32142.6	26319.6	22313.9
65°	2313.1	2321.4	2772.9	4365.8	6485.0	12055.8	28048.2	33558.1	33400.2	27377.9	23120.0
67.5°	1947.4	1941.9	2130.3	2900.3	4418.5	6039.0	21496.7	32281.0	32951.4	28048.2	23577.2
70°	1670.4	1678.7	1900.4	2124.7	3321.4	3418.4	10687.4	28106.3	29535.8	28225.5	23549.4
72.5°	1243.8	1271.5	1476.5	1936.3	2507.0	2351.9	3689.9	20840.2	23424.7	26593.8	22327.8
75°	878.1	892.0	1038.8	1628.8	1869.9	1712.0	1883.7	10773.3	14086.5	20388.6	18274.9
77.5°	675.9	700.9	786.7	1138.6	1842.1	1202.2	1152.4	3728.6	5728.7	12316.3	12529.6
80°	365.6	410.0	567.8	822.8	1293.7	850.4	570.6	1484.8	1941.9	5759.3	4831.2
82.5°	188.4	210.5	396.2	592.9	736.9	742.4	282.6	617.8	800.6	1778.5	662.0
85°	74.8	91.4	266.0	326.9	379.6	365.6	127.4	249.3	288.1	493.1	202.2
87.5°	16.6	27.7	97.0	74.8	72.1	77.6	30.4	58.2	55.5	58.2	36.0
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: P969313

CATALOG NUMBER: NAV-SB5D-735-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7	4969.7
2.5°	5000.2	4989.1	4958.6	4925.4	4886.6	4864.4	4850.6	4847.8	4828.5	4814.6	4828.5
5°	5083.3	5072.2	5014.1	4944.8	4870.0	4811.9	4756.4	4706.6	4634.5	4620.7	4615.2
7.5°	5249.5	5219.0	5124.9	5030.7	4889.4	4720.4	4515.4	4280.0	4069.5	4005.7	3975.3
10°	5454.5	5412.9	5293.8	5127.7	4814.6	4354.7	3858.9	3399.0	3033.4	2930.9	2892.0
12.5°	5687.2	5651.2	5493.3	5185.8	4501.6	3667.8	2908.7	2338.0	1983.5	1894.8	1869.9
15°	5964.3	5911.6	5692.7	5097.1	3941.9	2786.8	1997.3	1659.4	1532.0	1515.3	1498.7
17.5°	6257.8	6172.0	5870.1	4778.5	3188.5	1980.7	1543.0	1446.1	1390.6	1374.0	1365.7
20°	6526.6	6415.8	5975.3	4296.6	2382.4	1543.0	1382.3	1318.7	1268.7	1249.4	1238.3
22.5°	6795.2	6637.4	5975.3	3640.1	1786.8	1368.5	1268.7	1210.5	1152.4	1127.5	1113.7
25°	7075.1	6864.5	5870.1	2908.7	1437.8	1254.9	1160.7	1097.0	1047.1	1016.7	1005.6
27.5°	7346.6	7055.7	5629.0	2216.2	1279.8	1155.2	1061.0	1000.0	952.9	930.8	930.8
30°	7604.2	7244.1	5291.0	1681.5	1177.3	1058.2	969.5	917.0	869.8	847.7	850.4
32.5°	7953.2	7482.3	4931.0	1379.5	1088.7	966.8	886.4	836.6	795.1	778.4	778.4
35°	8438.0	7834.1	4620.7	1354.6	1013.9	892.0	811.7	764.5	723.0	709.2	709.2
37.5°	9125.1	8402.0	4457.2	1520.8	952.9	825.5	750.7	700.9	662.0	651.0	648.2
40°	9972.7	9172.1	4545.9	1687.0	911.4	767.3	695.4	645.4	612.2	598.4	595.6
42.5°	10978.3	10122.3	5036.2	1814.5	883.7	717.5	642.7	587.3	565.1	559.5	559.5
45°	12133.4	11166.7	5786.9	1950.2	839.4	670.3	590.1	548.5	531.9	529.1	526.3
47.5°	13446.5	12313.5	6656.8	2119.2	795.1	626.1	548.5	520.8	507.0	501.4	501.4
50°	14748.5	13468.7	7551.6	2213.4	759.0	584.6	515.3	493.1	482.1	479.3	479.3
52.5°	16111.5	14657.1	8274.5	2124.7	728.6	551.2	487.6	470.9	459.8	457.0	457.0
55°	17410.6	15618.3	8399.3	1803.4	667.6	518.0	457.0	448.7	434.9	434.9	432.1
57.5°	18529.8	16100.4	7518.3	1324.2	606.7	468.1	426.6	418.3	407.2	404.5	401.7
60°	19557.5	15961.8	5803.5	892.0	540.2	418.3	387.9	382.3	371.3	357.3	354.5
62.5°	20136.5	15352.4	3969.7	581.8	473.7	365.6	343.5	340.7	315.8	288.1	282.6
65°	20355.4	14100.3	2476.5	423.8	396.2	313.0	296.4	290.9	254.8	224.4	221.6
67.5°	20164.2	12039.2	1249.4	335.2	313.0	260.3	243.7	243.7	218.8	191.2	188.4
70°	19399.7	9025.3	526.3	268.8	241.0	199.5	199.5	210.5	185.6	155.1	152.3
72.5°	17740.3	6072.3	279.8	205.0	180.1	141.2	163.5	171.8	146.8	116.3	116.3
75°	14103.1	3703.7	193.9	152.3	113.6	99.7	124.6	130.2	99.7	77.6	74.8
77.5°	9645.8	2127.5	130.2	97.0	72.1	58.2	85.9	80.4	52.6	36.0	38.7
80°	4235.6	886.4	74.8	44.3	27.7	22.1	30.4	22.1	16.6	11.1	11.1
82.5°	495.9	207.8	27.7	16.6	11.1	5.5	2.8	0.0	0.0	0.0	0.0
85°	102.5	24.9	13.8	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.4	5.5	2.8	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)