

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: P969335

Luminaire Tested: **NAV-SB5D-740-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-740-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55255.7 lumens
Efficiency: N/A
Efficacy: 151.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B5 - U0 - G5

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



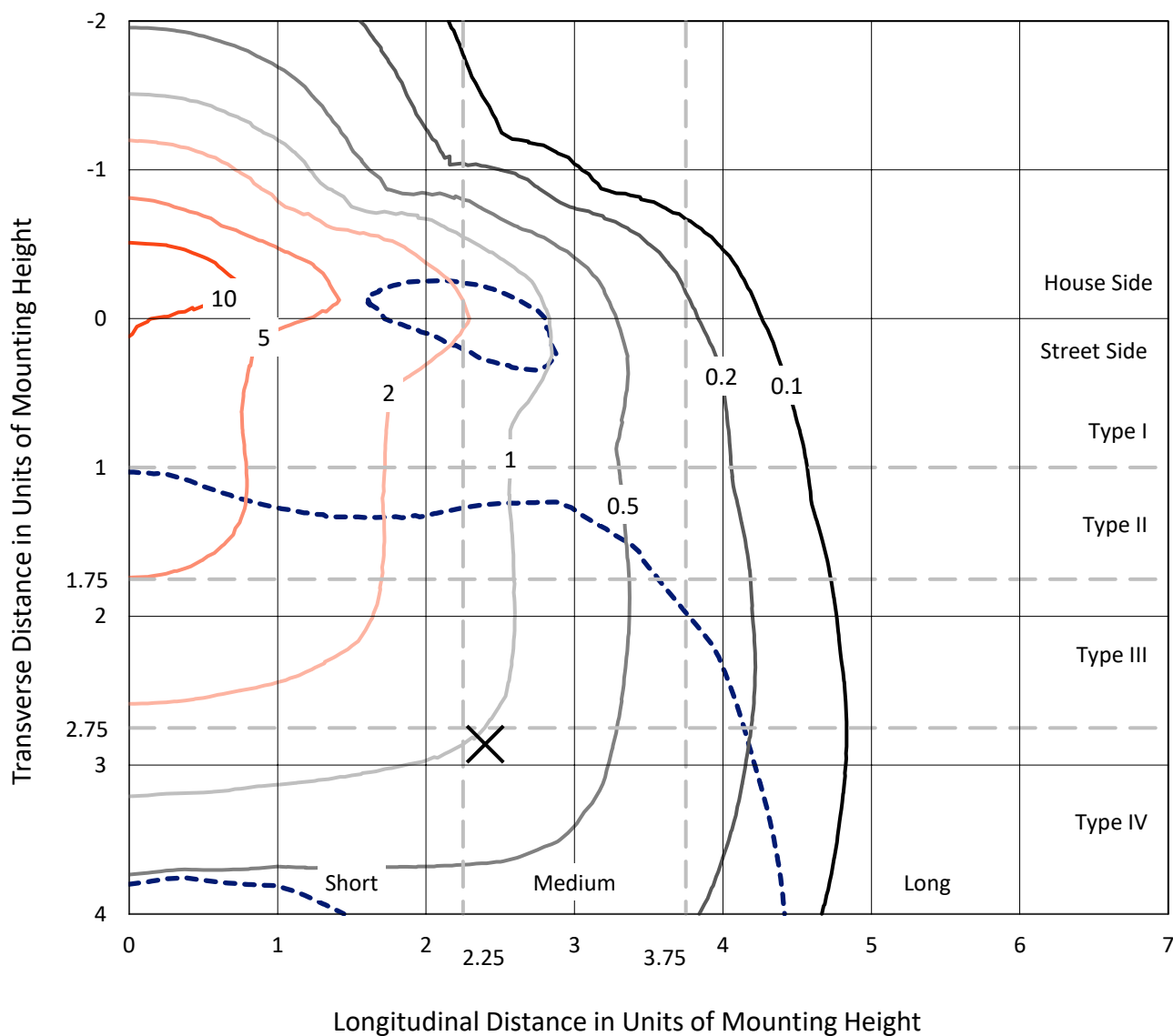
REPORT NUMBER: P969335

CATALOG NUMBER: NAV-SB5D-740-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

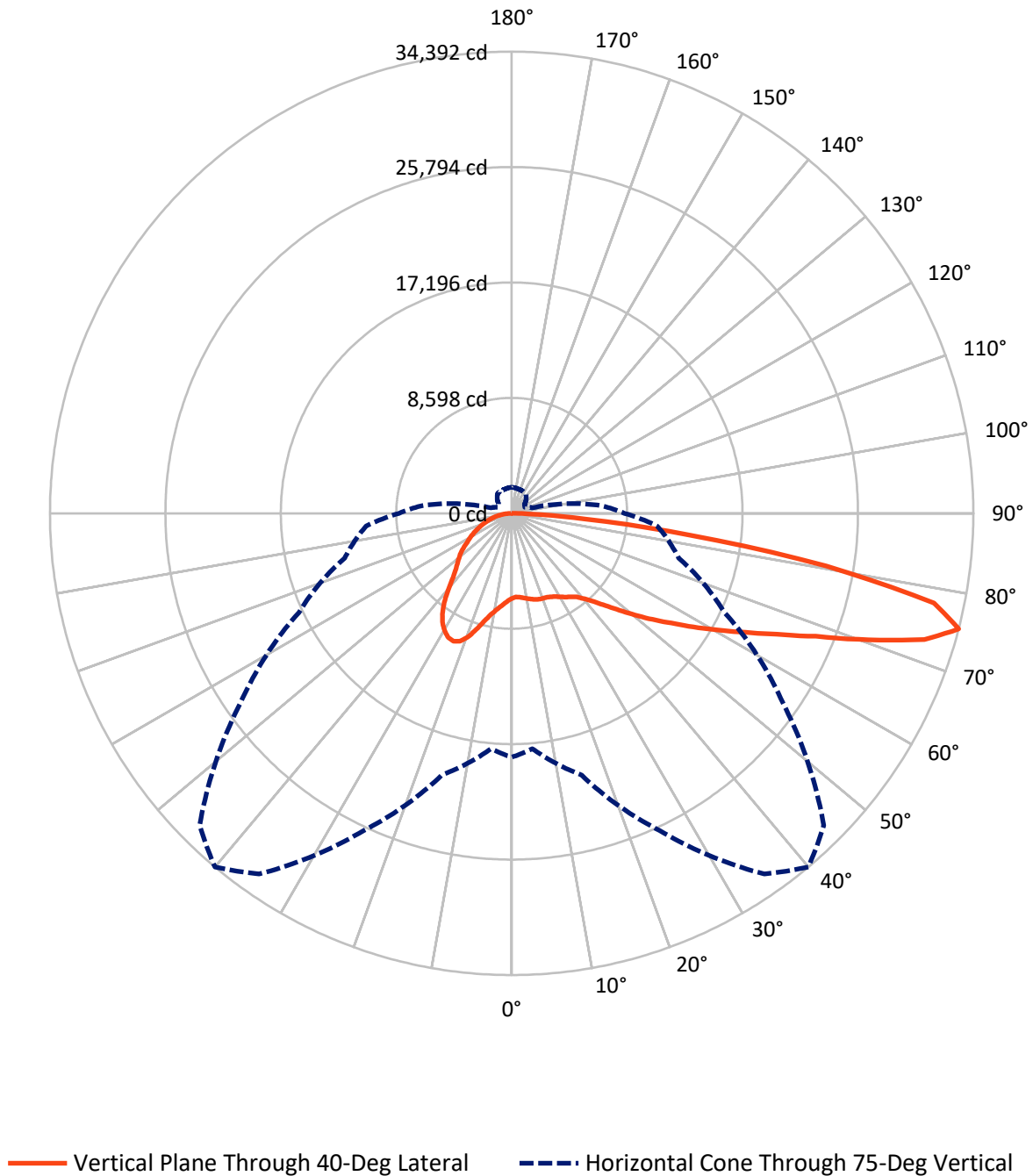
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 fc
Type IV - Medium - N/A

REPORT NUMBER: P969335
CATALOG NUMBER: NAV-SB5D-740-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P969335

CATALOG NUMBER: NAV-SB5D-740-U-SL4

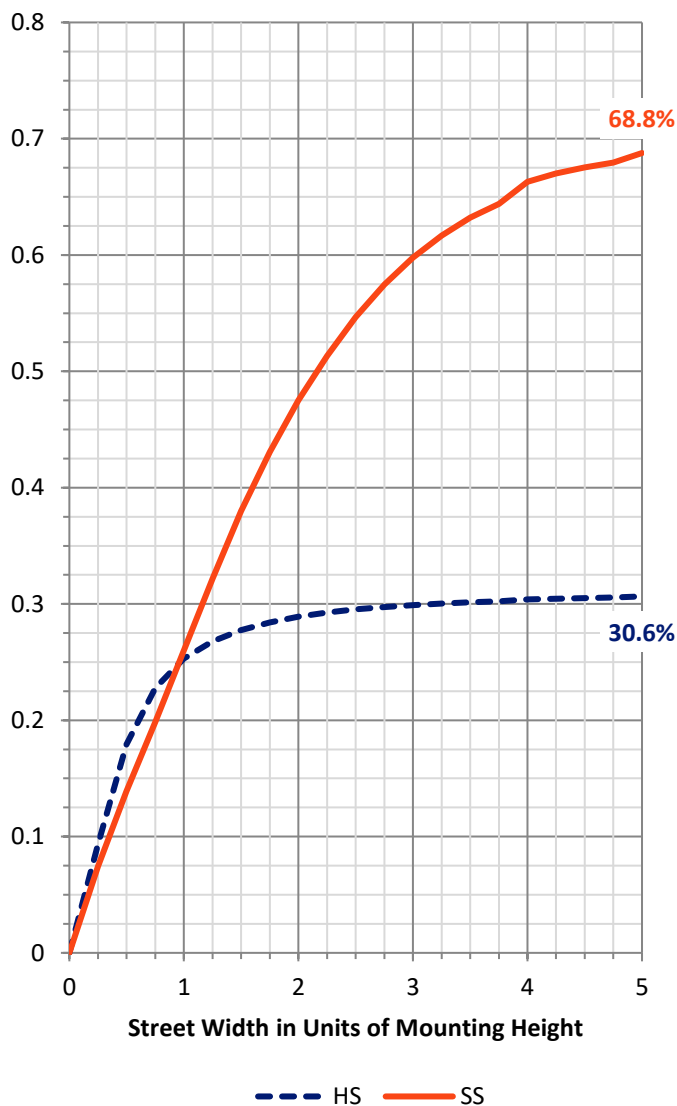
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17120.1	0.0	17120.1
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	38135.6	0.0	38135.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	55255.7	0.0	55255.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	630.7	1.1
10°-20°	2117.6	3.8
20°-30°	3866.6	7.0
30°-40°	5483.8	9.9
40°-50°	7404.8	13.4
50°-60°	9961.5	18.0
60°-70°	12643.4	22.9
70°-80°	11474.7	20.8
80°-90°	1672.6	3.0
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°	55255.7	100.0
0°-180°	55255.7	100.0

Coefficient of Utilization



REPORT NUMBER: P969335

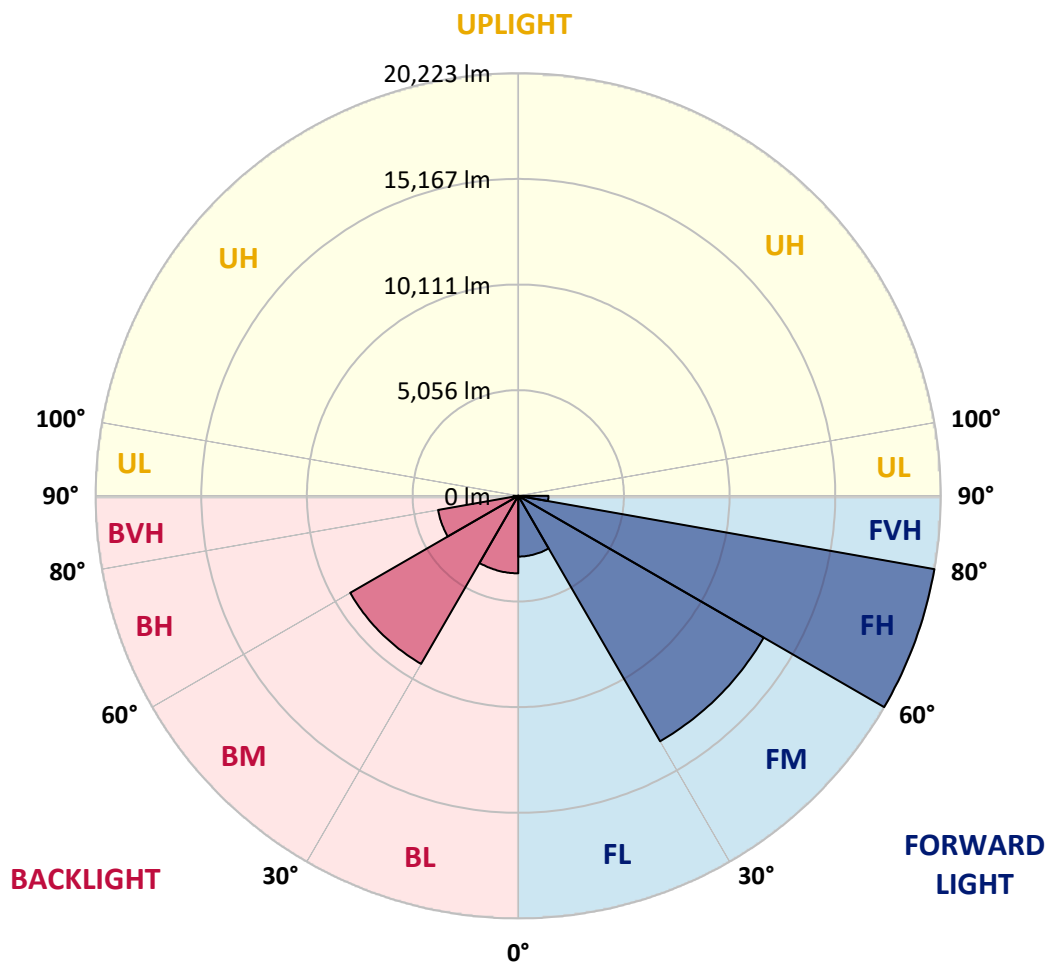
CATALOG NUMBER: NAV-SB5D-740-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2906.5	5.3			
FM	(30°-60°)	13564.0	24.5			
FH	(60°-80°)	20222.7	36.6			G5
FVH	(80°-90°)	1442.4	2.6			G5
BL	(0°-30°)	3708.4	6.7	B4/5000		
BM	(30°-60°)	9286.1	16.8	B5		
BH	(60°-80°)	3895.3	7.0	B4/5000		G4/5000
BVH	(80°-90°)	230.3	0.4			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type IV Medium



REPORT NUMBER: P969335

CATALOG NUMBER: NAV-SB5D-740-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6
2.5°	6221.9	6257.0	6248.2	6236.5	6236.5	6239.5	6236.5	6257.0	6277.5	6298.0	6330.3
5°	6286.3	6321.5	6304.0	6289.3	6277.5	6274.6	6265.8	6262.9	6274.6	6301.0	6345.0
7.5°	6412.3	6447.6	6421.1	6394.8	6371.3	6359.6	6347.8	6330.3	6321.5	6336.1	6397.7
10°	6553.0	6588.2	6555.9	6509.1	6470.9	6456.3	6444.6	6427.0	6415.3	6424.1	6491.4
12.5°	6693.7	6728.8	6684.9	6620.5	6570.6	6561.8	6547.2	6541.3	6538.4	6535.4	6602.8
15°	6825.6	6854.9	6799.2	6723.0	6670.3	6655.6	6641.0	6649.7	6664.3	6682.0	6758.1
17.5°	6928.2	6957.5	6875.4	6775.8	6725.9	6720.1	6711.3	6740.6	6781.6	6825.6	6919.4
20°	7022.0	7051.3	6945.7	6810.9	6752.3	6752.3	6755.3	6816.8	6875.4	6939.9	7068.8
22.5°	7153.8	7177.3	7048.3	6863.7	6778.6	6784.6	6807.9	6869.6	6942.8	7030.7	7209.5
25°	7350.2	7367.7	7209.5	6963.3	6866.6	6884.2	6904.7	6934.0	7004.3	7106.9	7347.2
27.5°	7666.7	7681.4	7473.3	7139.1	6992.7	7022.0	7051.3	7030.7	7063.0	7150.9	7458.6
30°	8112.2	8121.0	7857.1	7414.6	7206.6	7221.2	7227.1	7142.1	7080.5	7150.9	7537.7
32.5°	8639.6	8636.8	8323.1	7748.7	7449.8	7435.1	7385.3	7218.3	7074.7	7136.3	7608.1
35°	9457.4	9425.1	9020.6	8217.6	7725.3	7634.4	7517.2	7303.2	7104.0	7121.6	7669.6
37.5°	10811.3	10711.7	10151.9	8985.5	8135.6	7904.1	7731.2	7441.0	7168.4	7115.8	7742.8
40°	12338.2	12212.2	11596.7	10037.6	8751.0	8378.9	8100.4	7637.4	7274.0	7142.1	7851.3
42.5°	14149.4	13970.5	13308.3	11277.3	9530.6	8991.3	8572.3	7886.5	7429.3	7227.1	7997.9
45°	16373.8	16136.4	15198.6	12675.3	10512.4	9794.4	9234.6	8264.6	7666.7	7391.2	8217.6
47.5°	18621.6	18680.2	17346.7	14275.4	11690.5	10784.9	10064.0	8833.1	8012.5	7655.0	8572.3
50°	21010.1	21051.1	19483.2	16048.4	13026.9	11904.5	10995.9	9469.1	8493.2	8030.1	9102.7
52.5°	22874.0	22879.8	21423.3	17903.6	14419.0	13135.4	12001.2	10195.9	9049.9	8528.3	9809.0
55°	24040.5	24025.8	22783.2	19659.1	16019.1	14427.8	13114.9	11022.3	9729.9	9114.4	10697.0
57.5°	24887.4	24843.4	23721.0	21168.4	17724.8	15954.6	14375.0	11960.1	10532.9	9811.9	11866.3
60°	25209.8	25183.4	24357.0	22472.5	19518.4	17642.7	15828.7	13009.3	11444.3	10635.5	13369.8
62.5°	25332.9	25382.7	24981.2	23735.6	21438.0	19512.5	17425.8	14263.7	12470.0	11567.4	14955.3
65°	25766.7	25857.5	25775.4	25388.5	23606.7	21701.7	19544.8	15755.4	13589.6	12566.8	16611.1
67.5°	26625.3	26716.1	26751.3	27366.8	26256.0	24430.3	22188.3	17613.4	14899.6	13604.2	17856.7
70°	26604.8	26578.5	27199.7	28940.6	29573.6	28207.9	25752.0	19899.4	16461.7	14465.8	18014.9
72.5°	24216.2	24005.3	25473.5	28922.9	32334.2	32152.6	30104.0	22847.7	17809.8	14571.4	15632.3
75°	18167.3	17604.7	20198.3	26065.5	32794.4	34391.6	32870.6	24676.4	17490.4	12874.5	10878.7
77.5°	7769.3	7203.6	10260.4	19295.6	29350.9	32149.6	30332.6	21528.8	13961.8	8513.6	5342.6
80°	2033.9	2030.9	3100.6	8748.1	19961.0	23741.5	20828.4	13903.2	7977.4	3042.1	1474.2
82.5°	841.1	820.6	1140.0	3402.5	9753.3	13323.0	10872.9	6201.4	2880.9	823.5	489.4
85°	313.5	310.7	553.9	1175.2	3440.6	5495.0	3976.9	1585.5	718.0	401.5	219.8
87.5°	87.9	85.0	120.1	407.3	838.1	1271.9	679.9	260.9	202.2	158.3	64.5
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: P969335

CATALOG NUMBER: NAV-SB5D-740-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6	6318.6
2.5°	6339.1	6353.8	6380.1	6400.6	6427.0	6456.3	6497.4	6523.7	6550.1	6567.7	6555.9
5°	6365.5	6397.7	6465.1	6532.5	6611.7	6684.9	6769.9	6831.4	6881.2	6895.9	6901.7
7.5°	6424.1	6476.8	6591.2	6705.4	6831.4	6951.6	7074.7	7180.2	7265.2	7297.4	7300.4
10°	6526.7	6597.0	6758.1	6919.4	7086.4	7271.0	7429.3	7581.7	7701.8	7751.7	7754.6
12.5°	6655.6	6743.5	6954.5	7177.3	7408.8	7663.7	7868.9	8056.5	8205.9	8273.3	8273.3
15°	6822.6	6936.9	7206.6	7505.5	7845.5	8200.1	8460.9	8668.9	8836.0	8918.1	8912.3
17.5°	7004.3	7156.8	7496.7	7948.1	8434.5	8900.5	9205.3	9357.6	9530.6	9609.7	9606.8
20°	7180.2	7367.7	7854.3	8510.7	9158.4	9653.7	9899.9	9940.9	9952.6	9961.4	9984.8
22.5°	7361.9	7613.9	8302.6	9220.0	9914.5	10257.4	10292.5	10116.8	9870.5	9756.3	9788.5
25°	7561.2	7895.3	8888.8	10002.5	10565.1	10606.2	10336.5	9908.7	9442.7	9228.7	9261.0
27.5°	7754.6	8220.6	9592.2	10749.8	11034.0	10673.5	10093.3	9486.7	8924.0	8698.3	8724.7
30°	7948.1	8592.8	10368.8	11403.3	11247.9	10506.6	9709.4	9032.4	8466.8	8229.4	8255.8
32.5°	8144.3	9026.6	11262.6	11875.1	11209.9	10151.9	9231.7	8522.5	8024.2	7775.1	7807.3
35°	8367.1	9559.9	12109.6	12133.0	10954.9	9630.3	8601.6	7912.9	7479.1	7279.9	7323.8
37.5°	8657.3	10236.9	12856.9	12197.5	10509.4	8865.3	7819.1	7191.9	6834.4	6743.5	6807.9
40°	9017.7	11051.7	13428.4	12094.9	9850.0	7936.3	6963.3	6462.2	6260.0	6280.5	6350.8
42.5°	9486.7	11963.1	13829.9	11831.2	8932.8	6978.0	6213.0	5990.3	6087.1	6169.1	6245.3
45°	10096.2	12909.7	14079.0	11382.8	7895.3	6166.2	5770.5	5823.2	5896.5	5905.3	5964.0
47.5°	10875.8	13868.0	14243.1	10705.8	6837.3	5594.7	5489.2	5500.9	5486.2	5424.7	5471.6
50°	11848.8	14800.0	14389.7	9809.0	5937.6	5237.1	5096.5	5055.4	4853.2	4653.9	4680.4
52.5°	12956.6	15655.7	14451.3	8695.4	5237.1	4938.2	4709.6	4451.7	4073.7	4012.2	4032.7
55°	14187.4	16447.0	14293.0	7326.7	4648.1	4554.3	4208.4	3897.8	3856.8	3804.1	3812.8
57.5°	15658.6	17299.8	13970.5	5799.9	4044.3	4105.8	3768.8	3804.1	3730.8	3648.7	3634.0
60°	17267.7	18182.0	13405.0	4407.7	3420.1	3546.1	3654.5	3651.7	3631.2	3563.7	3540.2
62.5°	18715.4	18762.2	12291.3	3376.1	2872.0	3112.4	3408.4	3405.5	3387.8	3349.8	3335.1
65°	19577.0	18674.4	10433.3	2658.1	2420.7	2754.9	3074.3	3097.8	3100.6	3097.8	3097.8
67.5°	19424.6	17645.7	7883.6	2115.9	2048.6	2391.4	2743.1	2775.4	2798.8	2804.7	2810.5
70°	17701.3	15386.1	5140.5	1688.1	1717.4	2072.0	2429.6	2461.7	2482.2	2505.7	2517.5
72.5°	13797.6	11312.4	2942.4	1365.7	1427.2	1796.5	2118.9	2157.0	2168.7	2212.7	2230.3
75°	8408.2	6652.7	1588.4	1075.5	1172.3	1535.7	1811.2	1855.1	1875.6	1928.4	1934.3
77.5°	3997.5	2880.9	905.6	838.1	943.7	1254.3	1529.8	1579.6	1524.0	1553.3	1529.8
80°	1351.1	1069.7	571.4	638.9	721.0	978.9	1225.0	1274.9	1157.6	1151.8	1140.0
82.5°	471.8	433.8	363.4	425.0	466.0	700.5	926.1	990.6	861.6	858.6	817.6
85°	184.6	175.9	202.2	231.5	278.4	430.8	609.6	641.9	530.4	427.8	422.0
87.5°	38.1	41.0	49.8	52.8	85.0	149.4	219.8	269.6	213.9	181.7	167.1
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)