

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: P969503

Luminaire Tested: **NAV-SB5D-835-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-835-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40686.3 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - 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

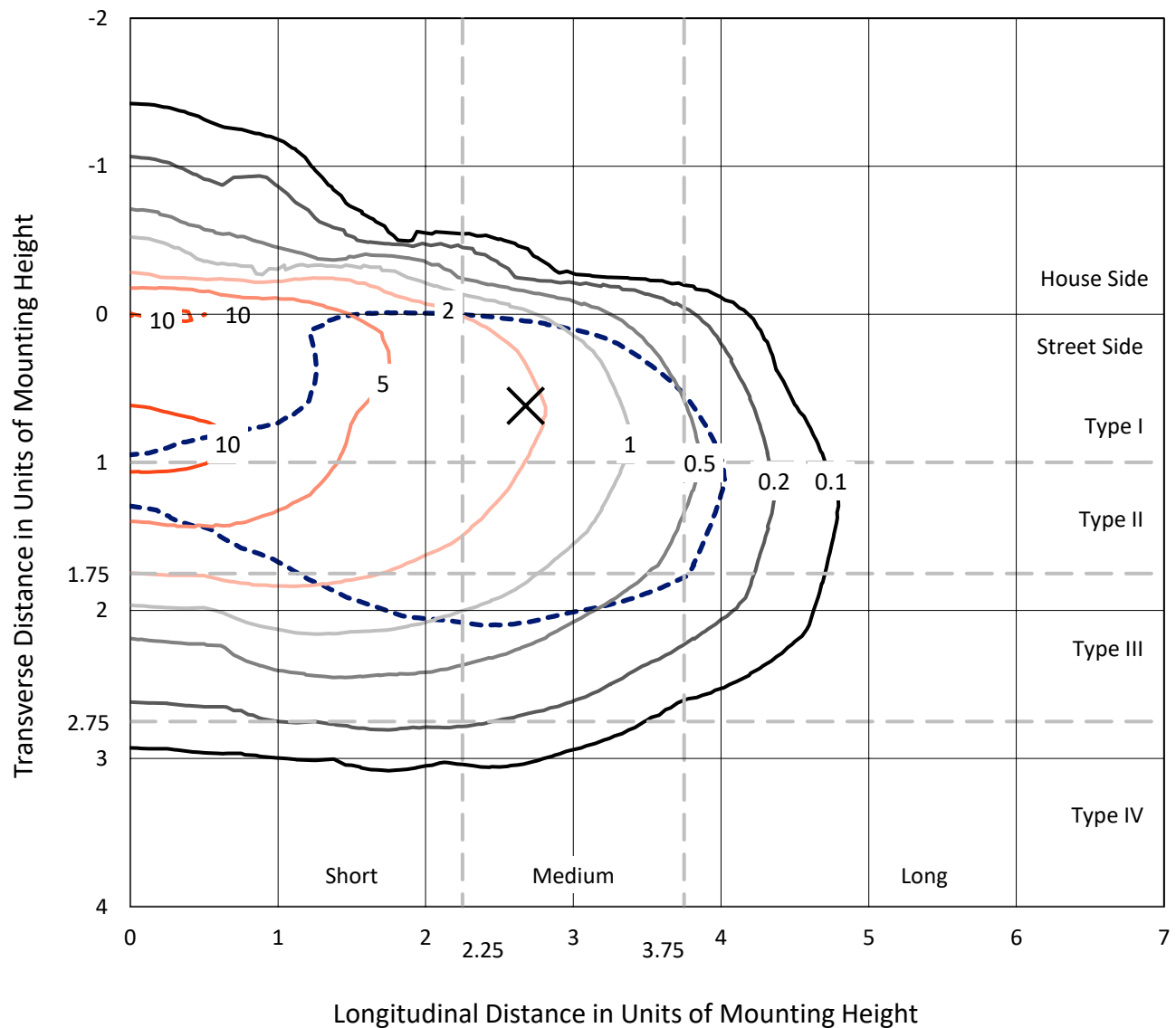


REPORT NUMBER: P969503

CATALOG NUMBER: NAV-SB5D-835-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

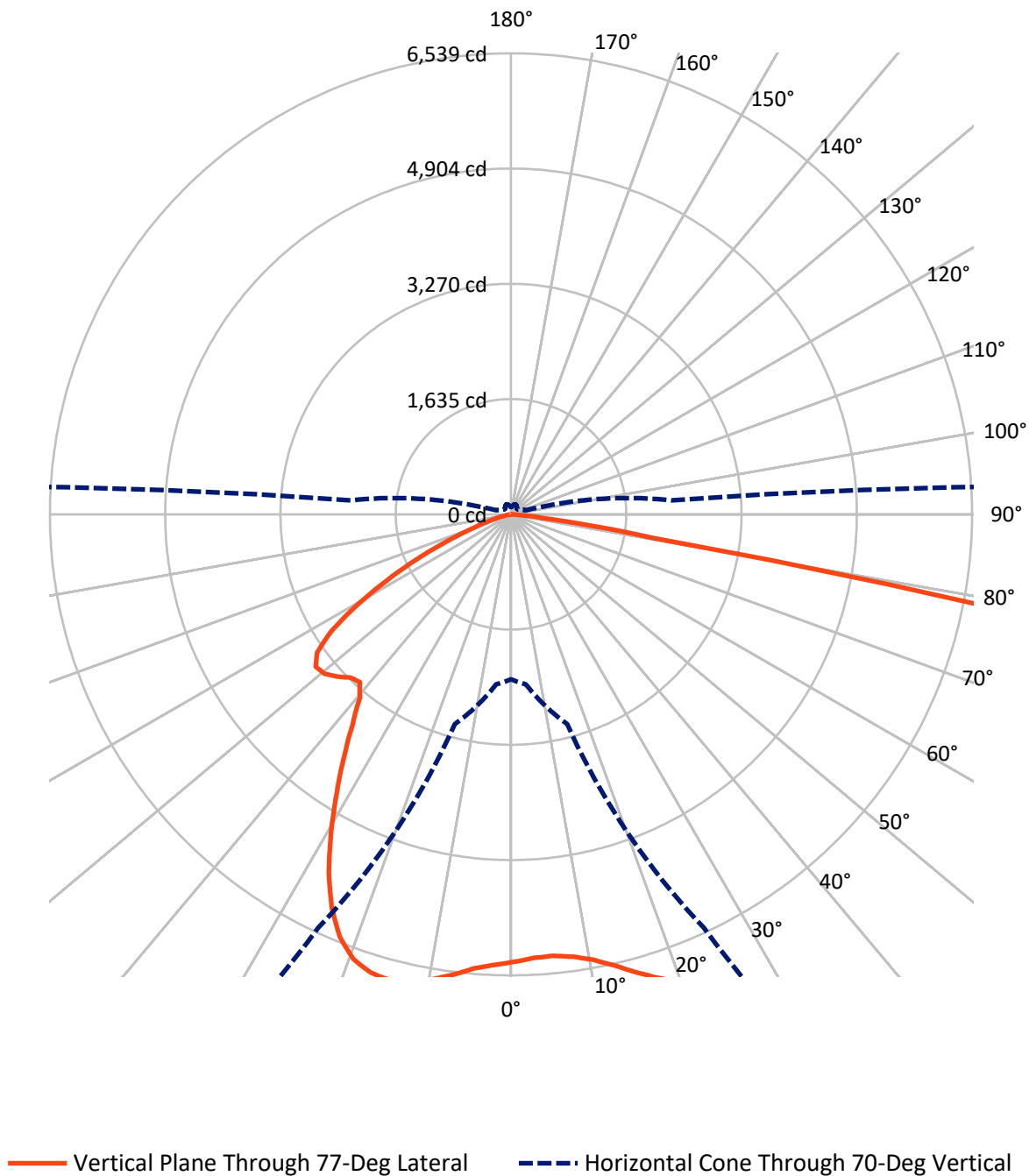
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
Type III - Medium - N/A

REPORT NUMBER: P969503
CATALOG NUMBER: NAV-SB5D-835-U-T3R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P969503

CATALOG NUMBER: NAV-SB5D-835-U-T3R-HSS

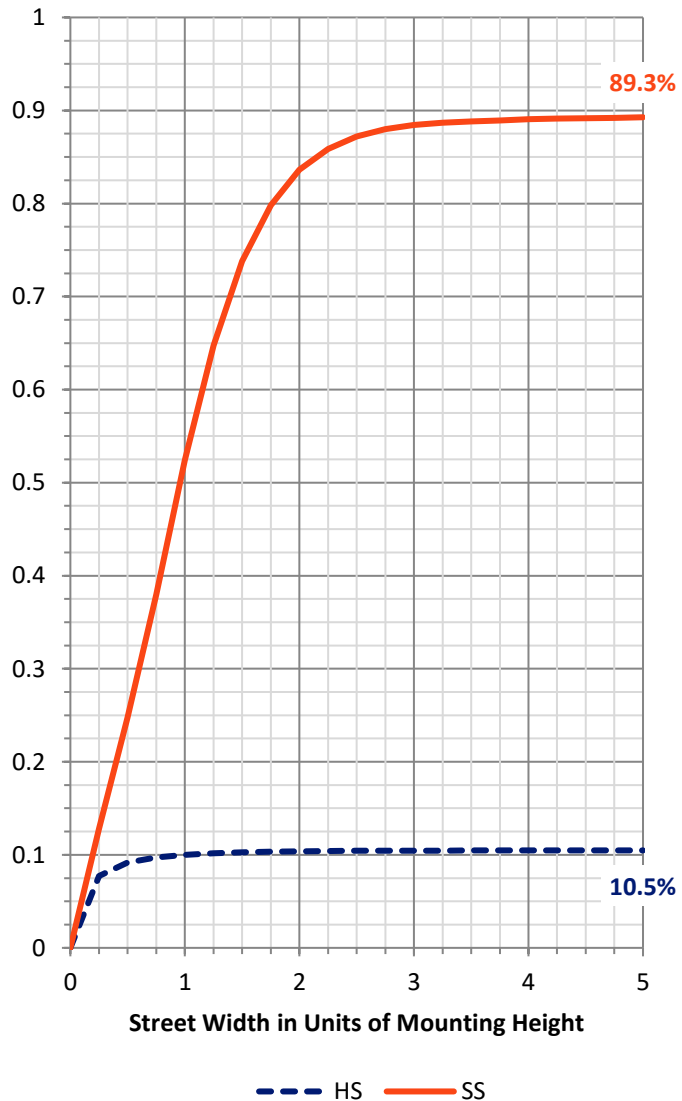
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4288.9	0.0	4288.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	36397.4	0.0	36397.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	40686.3	0.0	40686.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	547.0	1.3
10°-20°	1298.4	3.2
20°-30°	2008.3	4.9
30°-40°	3644.1	9.0
40°-50°	6878.7	16.9
50°-60°	9939.2	24.4
60°-70°	10580.0	26.0
70°-80°	5606.7	13.8
80°-90°	184.1	0.5
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°	40686.3	100.0
0°-180°	40686.3	100.0

Coefficient of Utilization



REPORT NUMBER: P969503

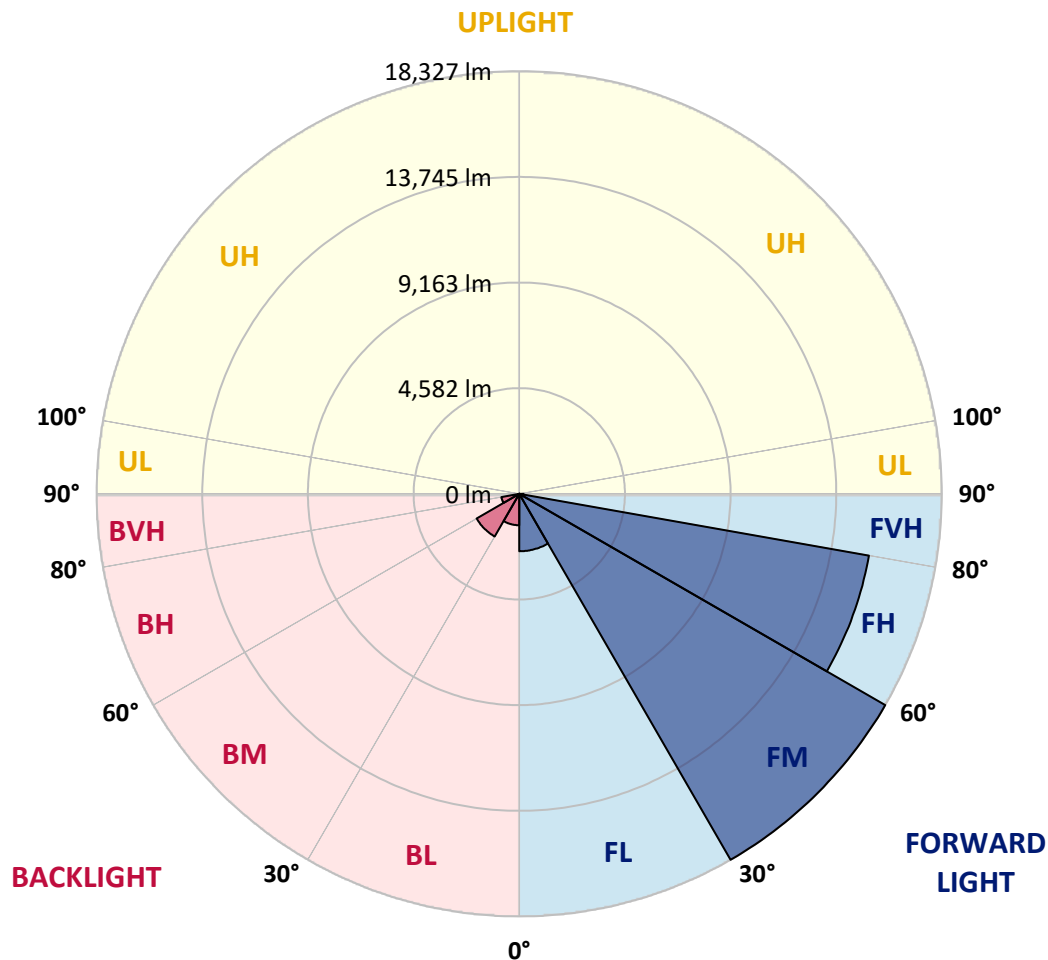
CATALOG NUMBER: NAV-SB5D-835-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2491.0	6.1			
FM	(30°-60°)	18327.0	45.0			
FH	(60°-80°)	15400.4	37.9			G5
FVH	(80°-90°)	179.1	0.4			G2/225
BL	(0°-30°)	1362.7	3.3	B3/2500		
BM	(30°-60°)	2135.0	5.2	B2/2500		
BH	(60°-80°)	786.3	1.9	B2/1000		G2/1000
BVH	(80°-90°)	4.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium



REPORT NUMBER: P969503

CATALOG NUMBER: NAV-SB5D-835-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3
2.5°	5958.3	6012.3	6004.7	6040.5	6053.4	6104.8	6156.3	6225.5	6302.6	6300.1	6351.5
5°	5621.8	5675.7	5688.5	5737.4	5799.0	5878.7	5984.1	6122.8	6266.6	6289.8	6392.6
7.5°	5223.5	5280.1	5313.5	5411.1	5524.1	5688.5	5860.7	6063.7	6302.6	6336.0	6533.9
10°	4825.3	4876.6	4920.3	5059.1	5239.0	5483.0	5763.1	6056.0	6377.1	6426.0	6706.1
12.5°	4578.6	4627.5	4676.3	4797.0	5020.6	5318.6	5698.9	6092.0	6500.4	6569.8	6939.9
15°	4491.2	4534.9	4573.4	4681.4	4889.5	5228.6	5686.0	6166.5	6657.3	6749.7	7222.5
17.5°	4504.1	4527.2	4552.9	4635.2	4838.1	5187.5	5709.1	6294.9	6842.2	6924.5	7505.2
20°	4578.6	4591.5	4594.0	4650.5	4830.4	5182.4	5755.4	6418.2	7016.9	7127.4	7785.2
22.5°	4673.7	4678.8	4673.7	4712.2	4879.2	5220.9	5817.1	6567.3	7212.2	7315.0	8067.8
25°	5118.1	5020.6	4897.2	4822.7	4961.4	5295.5	5909.5	6767.7	7425.5	7525.7	8342.8
27.5°	6497.9	6217.9	5776.0	5280.1	5131.0	5403.4	6038.0	6970.7	7641.3	7731.3	8638.2
30°	8738.4	8371.0	7620.8	6503.1	5675.7	5629.5	6205.0	7173.7	7869.9	7967.6	8954.2
32.5°	10984.0	10894.1	10028.2	8481.5	6901.3	6133.1	6482.5	7448.6	8173.1	8250.2	9380.8
35°	13255.4	13073.0	12363.8	10835.1	8789.8	7158.3	6945.0	7808.3	8571.4	8658.8	10002.6
37.5°	14994.8	14884.3	14445.0	13186.0	11030.3	8741.0	7736.4	8365.8	9149.6	9247.1	10799.1
40°	16531.3	16479.9	16330.9	15501.0	13535.4	10811.9	8967.1	9229.2	9951.1	10066.7	11775.4
42.5°	17739.0	17859.7	17944.5	17713.2	16117.6	13175.8	10621.8	10441.9	11068.9	11187.1	13018.9
45°	18974.8	19015.9	19357.6	19691.6	18681.9	15647.4	12487.2	11862.7	12458.9	12605.3	14509.2
47.5°	19768.7	19933.2	20534.3	21122.8	20837.5	18098.6	14491.2	13540.6	14069.9	14344.8	16179.3
50°	19827.8	20138.7	20966.1	21991.2	22407.4	20431.6	16670.1	15452.2	16014.9	16318.0	17962.4
52.5°	18843.7	19326.8	20608.9	22109.4	23255.3	22407.4	18923.3	17363.8	18085.8	18481.5	19812.4
55°	14447.6	15079.6	19265.1	21467.1	23288.7	23905.4	21117.7	19355.1	20393.1	20840.1	21811.4
57.5°	12587.3	12906.0	15146.4	20352.0	22669.5	24509.2	23101.1	21251.2	22903.3	23458.4	23699.8
60°	10472.7	10891.5	12702.9	18527.7	21829.3	24568.3	24853.5	23697.3	25624.3	26248.6	25431.6
62.5°	7117.2	7571.9	9373.0	15393.0	20680.8	24540.0	26289.7	26215.3	28648.4	29319.0	26898.7
65°	4409.0	4694.2	5881.2	12569.4	19074.9	24570.9	27792.9	29272.8	31839.6	32520.5	28034.4
67.5°	3484.1	3615.1	4234.3	9650.6	16307.7	23877.2	29293.4	32147.9	34843.1	35382.8	28381.2
70°	2340.7	2420.3	3080.6	6469.7	12132.5	20675.7	29265.1	33591.9	36390.0	36659.7	27117.1
72.5°	1233.3	1295.0	1801.1	2995.9	7327.8	14696.8	24668.5	31865.3	34850.9	34444.9	23178.2
75°	616.6	719.4	1212.8	1521.1	3129.5	8196.3	15318.5	25123.3	27430.5	25858.1	14871.5
77.5°	467.6	565.3	1002.0	1002.0	1089.4	2759.5	6487.6	13702.4	12638.8	10524.1	4365.4
80°	298.1	385.4	876.2	758.0	454.8	701.4	1690.6	3838.6	2685.0	2042.6	794.0
82.5°	174.8	251.8	729.7	501.0	254.4	259.5	477.9	817.0	696.3	542.1	244.1
85°	69.4	164.4	501.0	197.8	100.2	64.3	143.9	174.8	143.9	107.9	61.7
87.5°	0.0	38.5	87.3	0.0	7.7	5.1	10.2	12.8	12.8	10.2	20.6
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: P969503

CATALOG NUMBER: NAV-SB5D-835-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3	6346.3
2.5°	6374.6	6379.7	6395.2	6397.7	6361.8	6315.5	6297.5	6289.8	6259.0	6256.4	6261.5
5°	6451.7	6474.8	6451.7	6384.8	6225.5	6002.0	5832.5	5693.7	5567.8	5529.3	5506.2
7.5°	6605.8	6629.0	6559.6	6297.5	5896.7	5452.2	5051.4	4768.7	4514.4	4419.3	4380.7
10°	6826.8	6857.7	6639.2	6109.9	5400.8	4686.5	4008.3	3530.3	3157.7	3006.1	2942.0
12.5°	7104.3	7117.2	6682.9	5824.8	4755.9	3735.8	2774.9	2263.6	1932.1	1808.8	1770.3
15°	7410.0	7392.1	6688.0	5436.8	3877.2	2641.3	1811.4	1487.7	1354.0	1312.9	1312.9
17.5°	7731.3	7656.7	6585.3	4876.6	2913.7	1806.3	1343.8	1266.7	1243.5	1233.3	1230.7
20°	8047.3	7880.2	6397.7	4144.4	2091.5	1348.9	1220.5	1197.3	1184.5	1179.4	1174.2
22.5°	8335.0	8049.8	6076.5	3293.9	1518.5	1192.2	1153.6	1133.1	1110.0	1099.7	1097.2
25°	8615.1	8147.4	5624.4	2500.0	1215.3	1115.1	1084.2	1045.7	1014.9	1002.0	996.9
27.5°	8887.5	8209.1	5059.1	1849.9	1084.2	1043.1	986.7	932.6	909.6	904.5	899.2
30°	9177.7	8229.7	4416.7	1379.8	1004.6	953.2	871.0	809.3	796.5	799.1	799.1
32.5°	9532.4	8260.5	3769.2	1130.5	937.8	845.3	747.6	683.5	673.2	683.5	680.9
35°	9956.3	8322.2	3144.9	1040.6	878.7	734.8	629.5	575.5	565.3	573.0	570.4
37.5°	10531.9	8422.4	2561.7	1022.6	829.9	642.4	529.3	485.6	485.6	488.2	485.6
40°	11297.6	8689.6	2040.1	1009.7	804.2	573.0	447.1	429.1	436.8	442.0	442.0
42.5°	12230.2	9257.4	1688.1	994.4	775.9	542.1	406.0	398.2	411.1	416.3	416.3
45°	13275.9	9976.8	1564.8	968.6	750.3	562.7	388.0	377.7	393.1	395.6	398.2
47.5°	14357.6	10680.8	1549.3	940.4	724.6	593.5	382.8	359.7	377.7	380.3	382.8
50°	15452.2	11140.7	1564.8	896.7	683.5	593.5	385.4	341.7	357.1	364.9	367.5
52.5°	16554.5	11351.5	1554.5	801.7	611.5	557.6	385.4	326.4	341.7	346.9	346.9
55°	17623.3	11310.4	1397.7	660.3	519.1	493.3	375.2	313.4	323.7	326.4	326.4
57.5°	18468.7	10737.4	1107.4	513.8	421.4	411.1	341.7	298.1	305.8	303.2	303.2
60°	18910.5	9478.4	791.4	395.6	331.5	323.7	300.6	277.5	282.6	269.8	267.2
62.5°	18915.7	7813.5	529.3	313.4	264.7	257.0	257.0	249.2	244.1	218.4	210.6
65°	18512.3	5966.1	352.0	249.2	213.3	200.4	215.9	213.3	195.3	159.3	154.2
67.5°	17597.6	3910.6	267.2	195.3	164.4	156.7	172.1	179.9	167.0	133.6	131.0
70°	15716.8	2276.4	221.0	151.6	123.3	115.6	138.8	154.2	138.8	107.9	102.8
72.5°	13054.9	1228.2	179.9	113.1	84.8	77.1	110.5	125.9	110.5	79.6	77.1
75°	8471.2	657.7	138.8	74.5	43.7	48.8	82.2	92.5	77.1	51.4	46.2
77.5°	2844.3	290.4	87.3	36.0	20.6	20.6	48.8	56.5	36.0	17.9	15.4
80°	634.7	120.7	36.0	15.4	7.7	7.7	10.2	10.2	5.1	0.0	0.0
82.5°	208.1	48.8	15.4	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	79.6	17.9	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	30.9	2.6	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)