

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: P967238

Luminaire Tested: **NAV-SB4D-740-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43820.8 lumens
Efficiency: N/A
Efficacy: 149.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 293.6
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

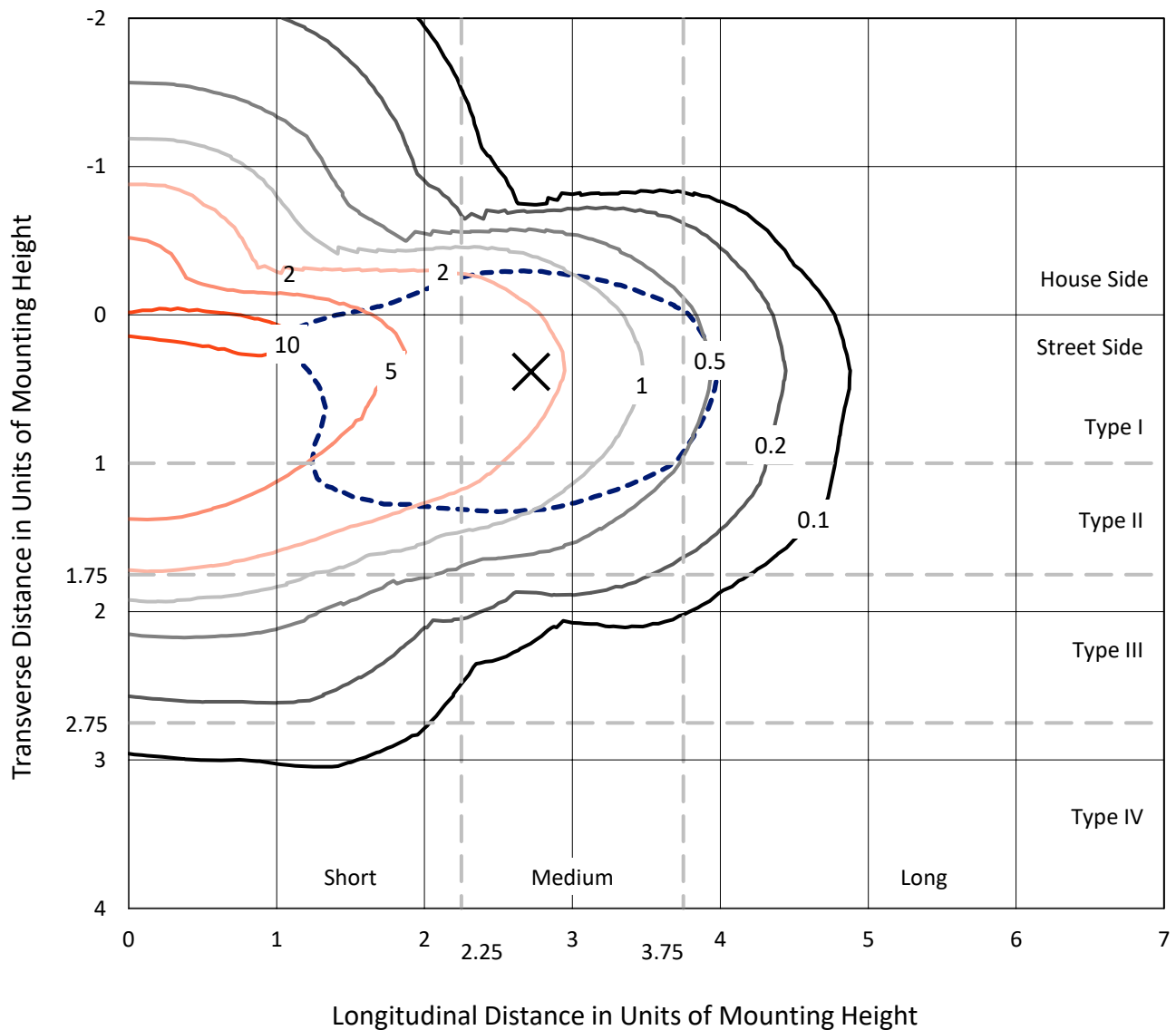


REPORT NUMBER: P967238

CATALOG NUMBER: NAV-SB4D-740-U-T2

Iso-Footcandle Lines of Horizontal Illumination

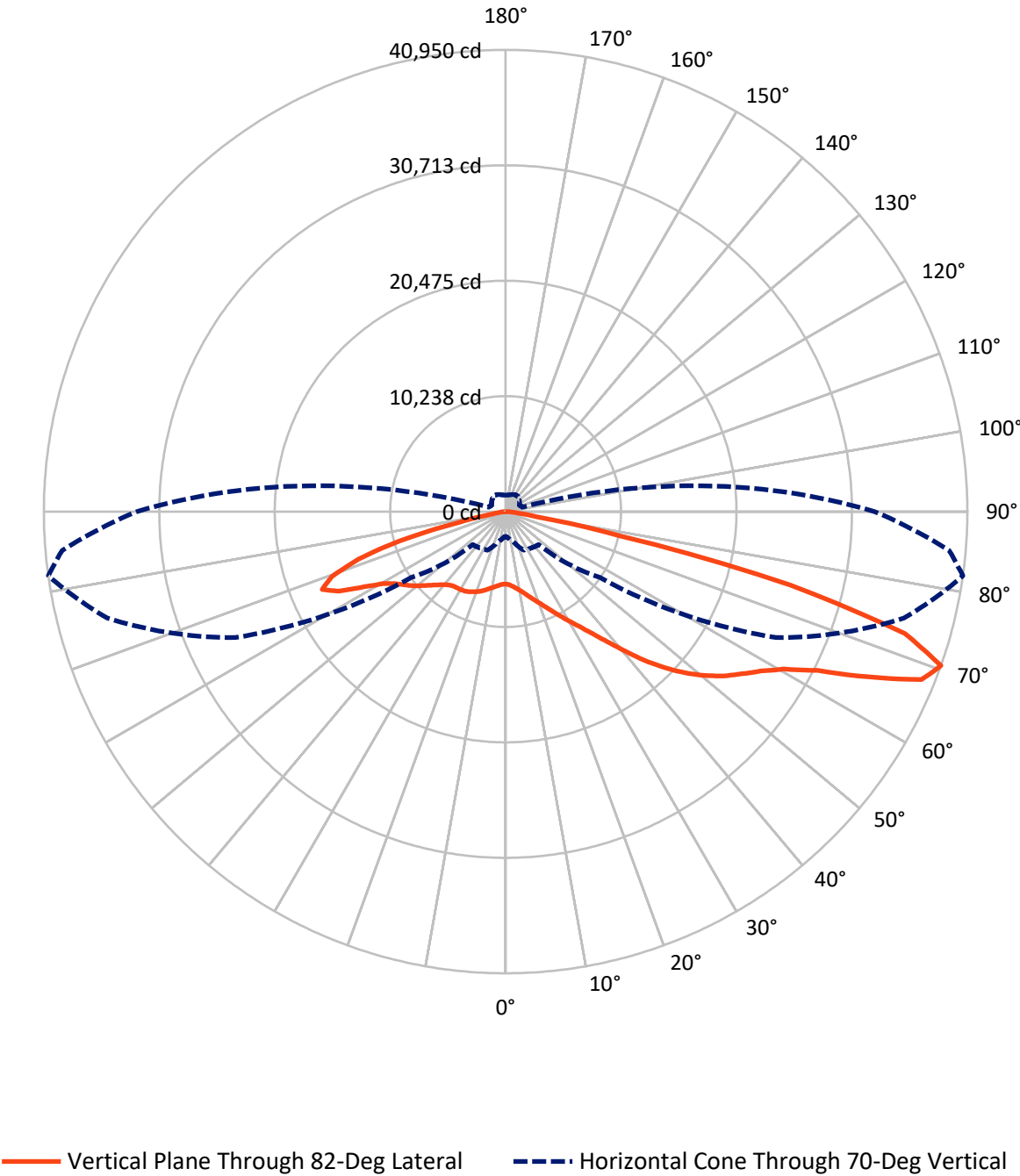
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
Type II - Medium - N/A

REPORT NUMBER: P967238
CATALOG NUMBER: NAV-SB4D-740-U-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P967238

CATALOG NUMBER: NAV-SB4D-740-U-T2

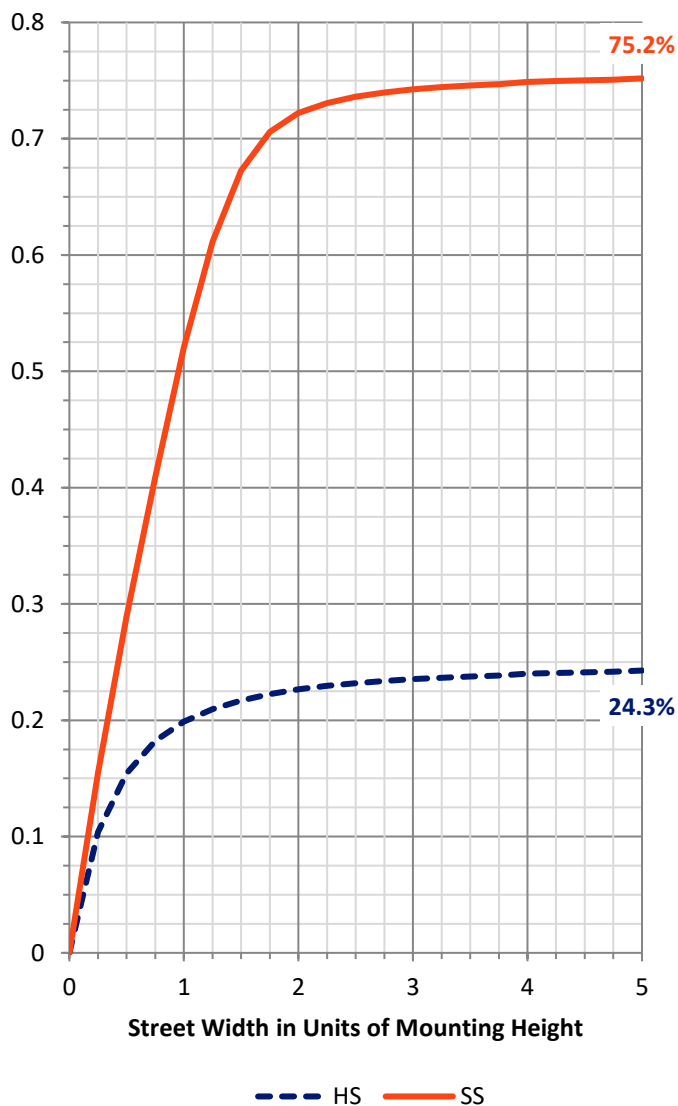
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10802.9	0.0	10802.9
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	33017.9	0.0	33017.9
	% Fixture	75.3	0.0	75.3
Total	Lumens	43820.8	0.0	43820.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	606.6	1.4
10°-20°	1742.8	4.0
20°-30°	2915.5	6.7
30°-40°	4554.8	10.4
40°-50°	7254.1	16.6
50°-60°	10094.9	23.0
60°-70°	10559.8	24.1
70°-80°	5519.1	12.6
80°-90°	573.1	1.3
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°	43820.8	100.0
0°-180°	43820.8	100.0

Coefficient of Utilization



REPORT NUMBER: P967238

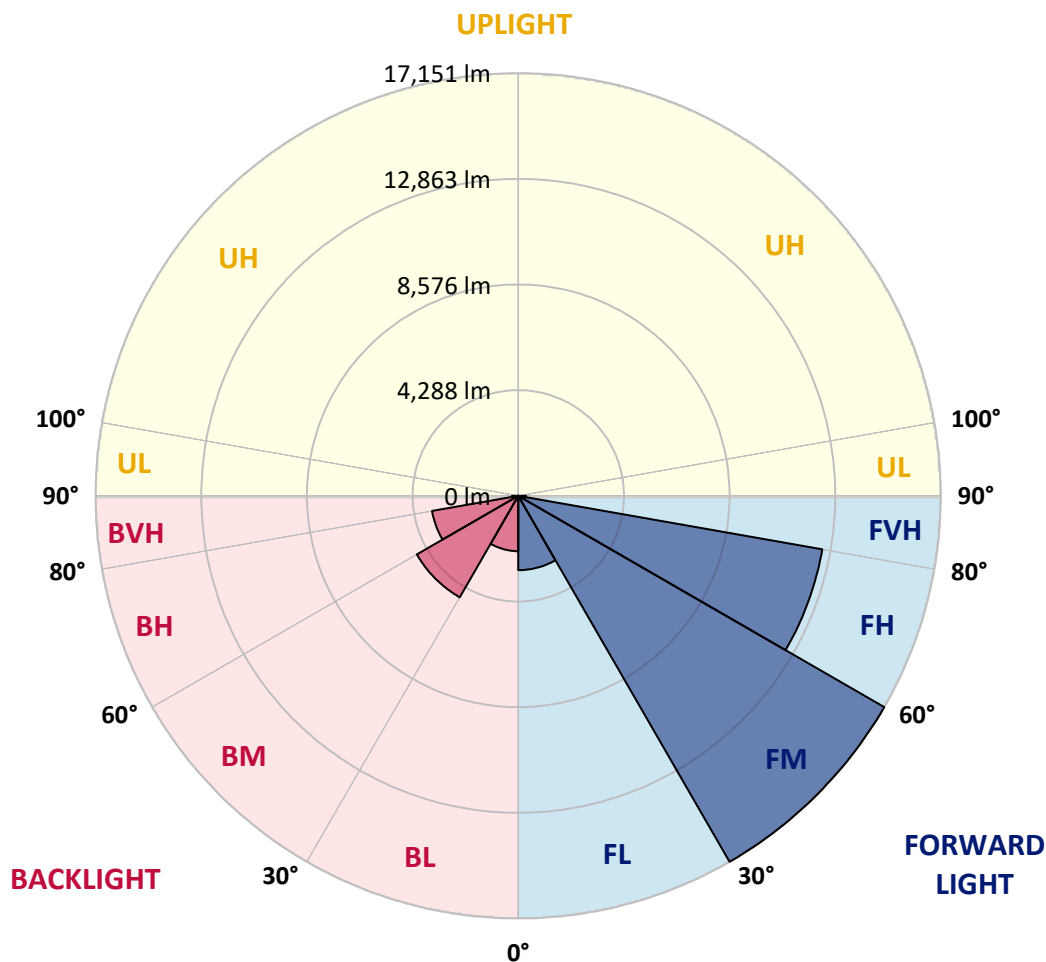
CATALOG NUMBER: NAV-SB4D-740-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3017.6	6.9			
FM	(30°-60°)	17151.0	39.1			
FH	(60°-80°)	12528.5	28.6			G5
FVH	(80°-90°)	320.8	0.7			G3/500
BL	(0°-30°)	2247.4	5.1	B3/2500		
BM	(30°-60°)	4752.8	10.8	B3/5000		
BH	(60°-80°)	3550.4	8.1	B4/5000		G4/5000
BVH	(80°-90°)	252.3	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Medium



REPORT NUMBER: P967238

CATALOG NUMBER: NAV-SB4D-740-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7
2.5°	6578.1	6615.4	6603.8	6592.1	6592.1	6575.8	6573.5	6550.3	6531.6	6501.4	6494.4
5°	6661.9	6701.3	6696.7	6706.1	6736.3	6743.3	6750.2	6736.3	6699.1	6661.9	6645.6
7.5°	6587.5	6631.6	6645.6	6701.3	6794.4	6878.1	6940.9	6966.4	6931.6	6878.1	6852.5
10°	6336.3	6385.1	6434.0	6566.6	6731.6	6929.3	7096.7	7196.6	7189.7	7138.5	7094.3
12.5°	5827.1	5878.3	5982.9	6241.0	6543.3	6892.1	7203.6	7412.9	7485.0	7447.8	7371.1
15°	5420.2	5464.4	5543.4	5808.5	6201.5	6731.6	7243.2	7650.1	7833.8	7812.9	7719.9
17.5°	5408.5	5427.2	5476.0	5601.5	5903.8	6480.5	7201.3	7882.7	8233.7	8231.4	8115.1
20°	5613.2	5620.2	5648.1	5673.6	5845.7	6289.8	7094.3	8075.6	8682.5	8682.5	8556.9
22.5°	5896.8	5892.2	5920.1	5896.8	5980.6	6273.5	7026.9	8245.3	9182.5	9219.7	9061.5
25°	6322.4	6299.1	6292.2	6238.7	6255.0	6424.7	7101.3	8438.3	9775.3	9852.1	9654.5
27.5°	6889.7	6852.5	6826.9	6703.7	6661.9	6736.3	7329.2	8670.9	10435.7	10568.3	10317.1
30°	7629.2	7561.7	7524.5	7310.6	7159.4	7171.1	7673.4	8980.1	11126.4	11340.3	11021.7
32.5°	8638.3	8533.6	8433.7	8082.5	7805.9	7715.2	8117.5	9408.0	11875.0	12216.9	11807.6
35°	9768.4	9684.7	9577.7	9035.9	8610.4	8401.1	8717.4	10005.5	12751.7	13293.4	12761.0
37.5°	10856.6	10784.5	10835.7	10105.6	9556.8	9252.2	9503.3	10807.8	13832.9	14632.8	13956.2
40°	11982.0	11926.2	11933.3	11235.6	10596.1	10254.4	10456.6	11814.7	15072.3	16225.6	15393.1
42.5°	13205.1	13163.3	13023.8	12405.3	11686.7	11368.2	11554.2	12977.2	16402.4	18039.3	16969.7
45°	14574.7	14549.2	14418.9	13709.7	12886.6	12528.5	12779.6	14260.8	17739.4	19746.0	18553.2
47.5°	15758.2	15779.2	15762.9	15165.3	14312.0	13786.5	14086.4	15600.1	18983.4	21350.4	20071.6
50°	16327.9	16437.2	16597.6	16411.7	15881.5	15346.7	15404.8	16892.9	20169.2	22854.9	21527.2
52.5°	16030.3	16237.2	16674.4	16972.1	17176.6	17065.0	16909.2	18176.5	21285.4	24212.9	22903.7
55°	14921.1	15211.8	15937.3	16655.8	17699.8	18511.4	18716.0	19599.5	22373.6	25408.0	24205.9
57.5°	12900.5	13372.6	14023.6	15476.9	17234.8	19211.3	20822.7	21573.7	23526.9	26684.6	25568.5
60°	9435.8	10068.4	10877.5	13040.0	15607.1	18836.8	22615.4	24605.8	25166.2	28337.9	27342.7
62.5°	6038.7	6429.3	7173.4	9210.3	12161.1	16918.5	23164.2	28396.0	27944.9	31049.1	30002.8
65°	4134.3	4385.5	5066.8	6210.8	7861.6	12593.6	21694.6	31237.5	32358.2	35346.2	34550.9
67.5°	3004.3	3194.9	3776.2	4778.4	5122.5	7452.5	16834.8	31107.2	36648.4	39773.5	38536.4
70°	2190.4	2325.2	2813.5	3776.2	3941.3	4145.9	10198.5	26442.7	36555.3	40950.1	39468.9
72.5°	1623.0	1716.1	2043.8	2929.9	3190.2	2799.6	5048.1	19218.2	31411.8	37039.0	35850.8
75°	1174.2	1244.0	1485.8	2241.6	2553.2	2132.3	2518.2	11231.0	21910.9	26054.5	26263.8
77.5°	897.6	951.0	1109.2	1641.6	2043.8	1599.8	1562.6	5166.7	10389.2	10440.3	11026.3
80°	720.8	755.7	841.7	1155.7	1567.2	1197.5	1018.4	2085.8	3283.3	2778.7	2915.8
82.5°	530.1	588.2	711.6	811.5	1120.7	825.4	620.8	1053.3	1248.7	1074.3	1083.5
85°	302.3	341.8	430.2	581.3	716.2	504.6	355.8	467.4	581.3	476.7	425.5
87.5°	107.0	139.5	151.2	227.9	311.6	209.3	137.1	134.9	190.6	141.9	118.6
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: P967238

CATALOG NUMBER: NAV-SB4D-740-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7	6424.7
2.5°	6471.1	6459.5	6413.0	6350.3	6285.2	6222.4	6201.5	6157.3	6127.0	6110.7	6129.4
5°	6601.4	6564.2	6454.9	6315.4	6168.9	6010.8	5899.2	5796.9	5722.5	5652.7	5680.5
7.5°	6787.4	6722.4	6534.0	6289.8	6029.4	5766.6	5571.3	5422.5	5322.5	5257.4	5271.4
10°	7003.6	6903.7	6615.4	6250.2	5848.0	5471.3	5241.1	5113.2	5050.5	5015.5	5024.9
12.5°	7252.5	7110.6	6699.1	6159.6	5571.3	5141.1	4983.0	4945.8	4948.2	4950.4	4955.2
15°	7559.4	7361.8	6766.5	5961.9	5210.9	4887.7	4859.7	4920.2	4983.0	5013.3	5010.9
17.5°	7905.8	7626.8	6778.1	5636.4	4857.5	4724.9	4813.3	4943.5	5038.8	5080.7	5089.9
20°	8277.9	7896.6	6694.4	5176.0	4566.8	4592.4	4750.5	4918.0	5022.5	5076.0	5089.9
22.5°	8703.4	8184.9	6494.4	4692.3	4329.6	4448.2	4634.2	4797.0	4906.3	4959.8	4973.7
25°	9189.4	8508.1	6180.5	4285.4	4125.0	4285.4	4471.5	4606.3	4694.7	4743.5	4757.4
27.5°	9728.9	8845.2	5761.9	3962.2	3945.9	4118.0	4271.5	4376.1	4422.7	4459.9	4473.8
30°	10270.6	9152.2	5255.1	3718.1	3790.1	3952.9	4062.2	4108.7	4122.7	4129.6	4145.9
32.5°	10856.6	9417.3	4722.6	3515.7	3641.3	3792.5	3857.6	3878.5	3813.4	3769.2	3783.2
35°	11565.8	9701.0	4201.8	3355.3	3494.8	3625.1	3646.0	3627.4	3550.7	3460.0	3464.6
37.5°	12442.5	10054.4	3785.5	3241.4	3357.7	3443.7	3418.2	3413.5	3420.4	3313.5	3320.5
40°	13516.7	10514.8	3480.9	3153.0	3246.1	3264.6	3192.6	3232.1	3267.0	3104.2	3108.8
42.5°	14709.6	11070.5	3287.9	3092.6	3153.0	3108.8	2997.2	3041.5	3036.8	2822.8	2820.5
45°	15925.6	11675.1	3220.4	3048.5	3067.0	2978.6	2855.4	2867.0	2769.3	2576.3	2583.3
47.5°	17134.8	12323.9	3262.4	3011.2	2960.1	2860.1	2764.7	2713.6	2569.4	2425.3	2425.3
50°	18320.6	13005.1	3415.8	2936.8	2813.5	2755.4	2685.7	2595.0	2441.5	2318.2	2309.0
52.5°	19420.6	13691.1	3587.9	2813.5	2629.8	2664.7	2620.5	2516.0	2364.8	2239.2	2241.6
55°	20462.3	14377.1	3655.3	2643.8	2457.7	2585.7	2560.1	2367.1	2185.7	2083.4	2074.1
57.5°	21597.0	15202.5	3580.9	2427.6	2318.2	2495.0	2397.4	2183.5	2078.8	2002.0	1995.1
60°	23168.8	16497.7	3420.4	2160.2	2185.7	2360.2	2192.7	2104.3	1990.4	1904.3	1899.7
62.5°	25780.1	18913.6	3162.3	1895.1	2029.9	2160.2	2095.1	2006.7	1890.4	1806.8	1806.8
65°	29640.0	22271.3	2676.4	1688.2	1855.6	1964.8	1990.4	1902.1	1781.1	1692.8	1697.4
67.5°	32895.3	24378.0	2025.3	1516.1	1676.5	1806.8	1878.8	1792.7	1664.9	1578.8	1581.2
70°	32716.4	22848.0	1546.3	1346.3	1518.4	1651.0	1743.9	1676.5	1539.3	1458.0	1464.9
72.5°	29058.7	19113.6	1251.0	1174.2	1357.9	1488.2	1599.8	1548.6	1409.1	1330.0	1330.0
75°	21348.2	13567.8	999.9	999.9	1157.9	1318.5	1441.7	1409.1	1281.2	1225.4	1209.1
77.5°	8998.8	5692.2	783.6	830.1	962.7	1132.4	1285.9	1297.4	1185.9	1255.6	1139.4
80°	2392.7	1569.6	597.6	653.4	755.7	934.8	1118.5	1113.8	992.9	927.7	862.6
82.5°	911.5	618.5	425.5	460.4	546.4	716.2	885.9	913.8	792.9	685.9	685.9
85°	351.1	265.1	262.7	276.8	318.6	474.4	669.6	692.9	597.6	506.9	523.2
87.5°	90.7	79.0	97.7	93.0	146.5	253.5	383.7	397.6	365.1	211.6	302.3
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)