

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: P968416

Luminaire Tested: **NAV-SB5B-830-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968416
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-SB5B-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25958.1 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

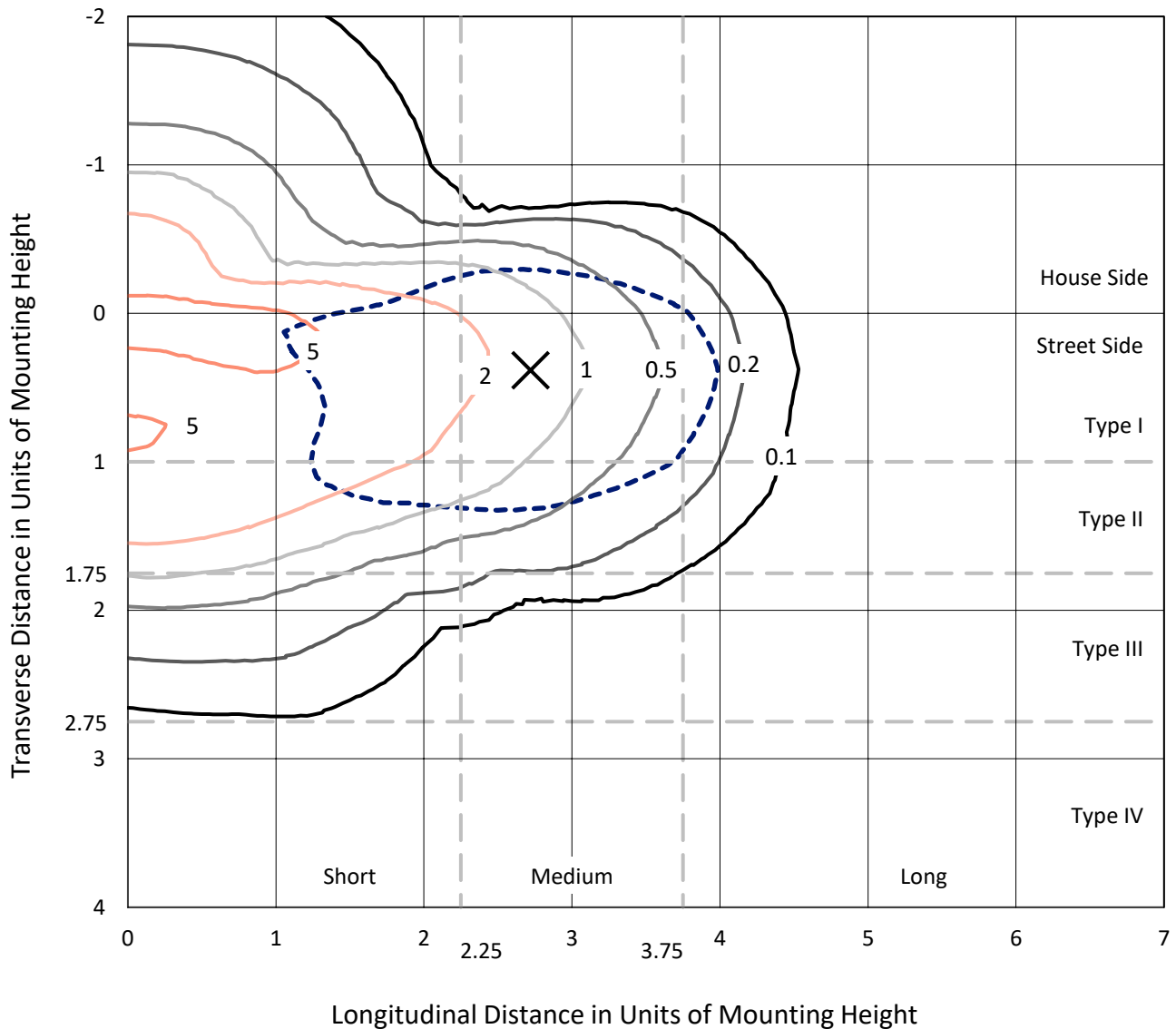
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P968416
CATALOG NUMBER: NAV-SB5B-830-U-T2

Iso-Footcandle Lines of Horizontal Illumination

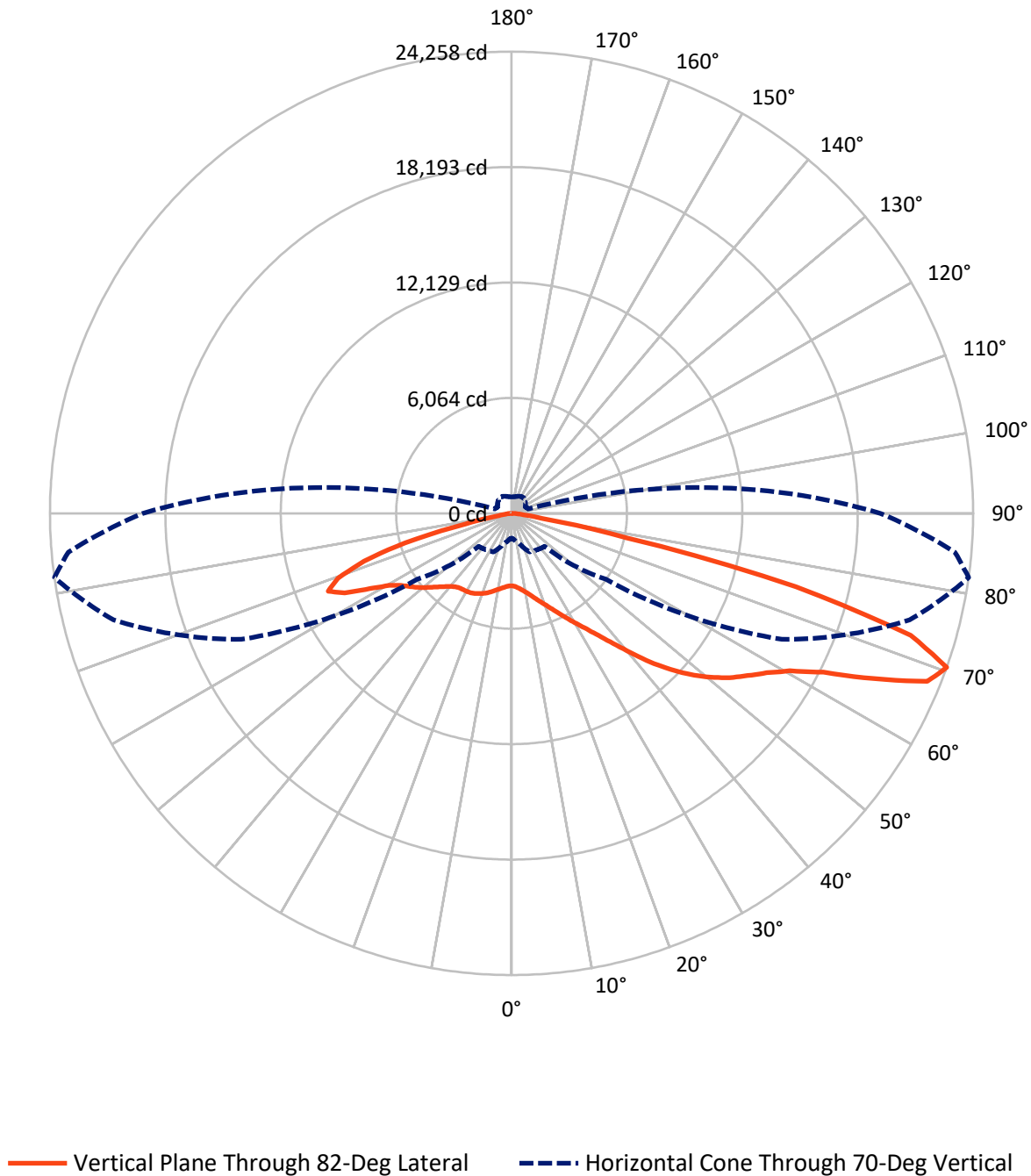
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
Type II - Medium - N/A

REPORT NUMBER: P968416
CATALOG NUMBER: NAV-SB5B-830-U-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P968416

CATALOG NUMBER: NAV-SB5B-830-U-T2

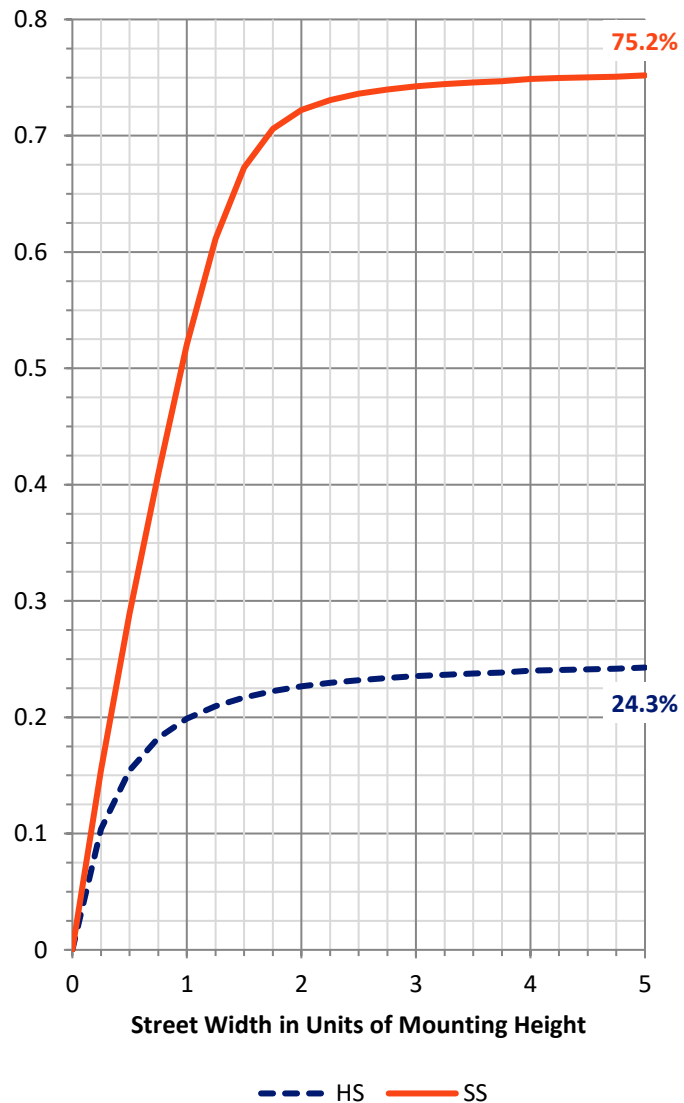
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6399.3	0.0	6399.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	19558.8	0.0	19558.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	25958.1	0.0	25958.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	359.3	1.4
10°-20°	1032.4	4.0
20°-30°	1727.1	6.7
30°-40°	2698.2	10.4
40°-50°	4297.1	16.6
50°-60°	5979.9	23.0
60°-70°	6255.3	24.1
70°-80°	3269.3	12.6
80°-90°	339.5	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°	25958.1	100.0
0°-180°	25958.1	100.0

Coefficient of Utilization



REPORT NUMBER: P968416

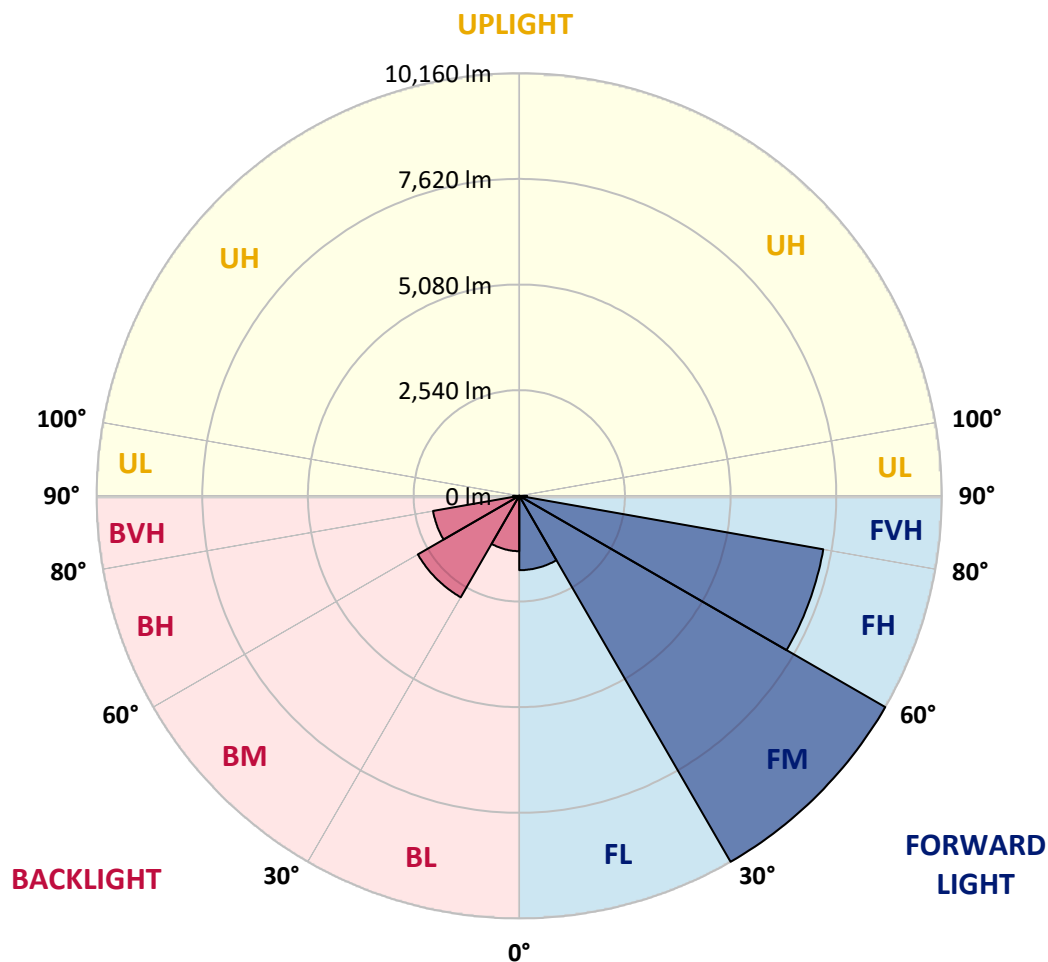
CATALOG NUMBER: NAV-SB5B-830-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1787.5	6.9			
FM	(30°-60°)	10159.8	39.1			
FH	(60°-80°)	7421.5	28.6			G3/7500
FVH	(80°-90°)	190.0	0.7			G2/225
BL	(0°-30°)	1331.3	5.1	B3/2500		
BM	(30°-60°)	2815.4	10.8	B3/5000		
BH	(60°-80°)	2103.1	8.1	B3/2500		G3/2500
BVH	(80°-90°)	149.4	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



REPORT NUMBER: P968416

CATALOG NUMBER: NAV-SB5B-830-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8
2.5°	3896.7	3918.8	3911.8	3904.9	3904.9	3895.3	3894.0	3880.1	3869.2	3851.2	3847.1
5°	3946.2	3969.7	3967.0	3972.5	3990.3	3994.5	3998.6	3990.3	3968.3	3946.2	3936.6
7.5°	3902.2	3928.4	3936.6	3969.7	4024.8	4074.4	4111.6	4126.8	4106.0	4074.4	4059.2
10°	3753.4	3782.4	3811.3	3889.8	3987.6	4104.7	4203.8	4263.1	4259.0	4228.6	4202.5
12.5°	3451.8	3482.1	3544.0	3697.0	3876.0	4082.7	4267.2	4391.2	4433.8	4411.8	4366.4
15°	3210.7	3237.0	3283.8	3440.8	3673.6	3987.6	4290.6	4531.7	4640.5	4628.1	4573.0
17.5°	3203.8	3214.9	3243.8	3318.2	3497.2	3838.8	4265.8	4669.4	4877.4	4876.0	4807.1
20°	3325.1	3329.2	3345.7	3360.9	3462.9	3725.9	4202.5	4783.8	5143.2	5143.2	5068.8
22.5°	3493.1	3490.3	3506.9	3493.1	3542.7	3716.2	4162.5	4884.3	5439.4	5461.4	5367.7
25°	3745.1	3731.4	3727.3	3695.6	3705.3	3805.8	4206.6	4998.6	5790.6	5836.0	5719.0
27.5°	4081.2	4059.2	4044.0	3971.1	3946.2	3990.3	4341.6	5136.4	6181.8	6260.3	6111.6
30°	4519.3	4479.4	4457.3	4330.6	4241.0	4247.9	4545.5	5319.5	6591.0	6717.6	6528.9
32.5°	5117.1	5055.1	4995.8	4787.9	4624.0	4570.3	4808.6	5573.0	7034.5	7236.9	6994.5
35°	5786.5	5736.9	5673.6	5352.7	5100.5	4976.6	5164.0	5927.0	7553.7	7874.7	7559.3
37.5°	6431.2	6388.4	6418.8	5986.2	5661.2	5480.7	5629.5	6402.3	8194.3	8668.0	8267.2
40°	7097.8	7064.7	7068.9	6655.6	6276.9	6074.4	6194.2	6998.6	8928.4	9611.5	9118.5
42.5°	7822.3	7797.5	7714.9	7348.5	6922.8	6734.1	6844.3	7687.3	9716.3	10685.9	10052.4
45°	8633.6	8618.5	8541.3	8121.2	7633.6	7421.5	7570.2	8447.6	10508.3	11697.0	10990.4
47.5°	9334.7	9347.1	9337.4	8983.5	8478.0	8166.7	8344.3	9241.1	11245.2	12647.4	11889.8
50°	9672.2	9736.9	9832.0	9721.7	9407.8	9090.9	9125.4	10006.9	11947.7	13538.6	12752.0
52.5°	9495.9	9618.5	9877.4	10053.7	10175.0	10108.9	10016.5	10767.2	12608.8	14342.9	13567.5
55°	8838.9	9011.0	9440.8	9866.3	10484.8	10965.6	11086.8	11610.2	13253.5	15051.0	14338.8
57.5°	7641.9	7921.5	8307.2	9168.0	10209.4	11380.2	12334.7	12779.6	13936.6	15807.1	15146.0
60°	5589.5	5964.2	6443.6	7724.5	9245.2	11158.4	13396.6	14575.8	14907.7	16786.5	16196.9
62.5°	3577.1	3808.5	4249.3	5456.0	7203.9	10022.0	13721.8	16821.0	16553.8	18392.6	17772.7
65°	2449.0	2597.8	3001.4	3679.0	4657.0	7460.1	12851.2	18504.1	19168.0	20938.0	20467.0
67.5°	1779.6	1892.6	2237.0	2830.5	3034.4	4414.6	9972.4	18427.0	21709.4	23560.6	22827.9
70°	1297.5	1377.4	1666.6	2237.0	2334.7	2455.9	6041.3	15663.9	21654.3	24257.5	23380.1
72.5°	961.4	1016.5	1210.7	1735.5	1889.8	1658.4	2990.3	11384.3	18607.4	21940.7	21236.9
75°	695.6	736.9	880.2	1327.8	1512.4	1263.1	1491.8	6652.9	12979.4	15433.9	15557.9
77.5°	531.7	563.3	657.0	972.4	1210.7	947.6	925.6	3060.6	6154.3	6184.5	6531.7
80°	427.0	447.6	498.7	684.6	928.3	709.4	603.3	1235.5	1944.9	1646.0	1727.2
82.5°	314.1	348.5	421.5	480.7	663.9	489.0	367.8	623.9	739.6	636.3	641.9
85°	179.1	202.4	254.8	344.4	424.2	298.9	210.7	276.9	344.4	282.4	252.0
87.5°	63.3	82.6	89.5	135.0	184.6	123.9	81.3	79.8	113.0	84.0	70.2
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: P968416

CATALOG NUMBER: NAV-SB5B-830-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8	3805.8
2.5°	3833.3	3826.4	3798.9	3761.7	3723.1	3685.9	3673.6	3647.4	3629.5	3619.8	3630.9
5°	3910.5	3888.4	3823.7	3741.0	3654.2	3560.6	3494.5	3433.9	3389.8	3348.5	3365.0
7.5°	4020.7	3982.1	3870.5	3725.9	3571.6	3416.0	3300.3	3212.1	3152.9	3114.4	3122.6
10°	4148.8	4089.5	3918.8	3702.5	3464.2	3241.0	3104.7	3028.9	2991.8	2971.1	2976.6
12.5°	4296.2	4212.1	3968.3	3648.8	3300.3	3045.5	2951.8	2929.8	2931.1	2932.5	2935.3
15°	4477.9	4360.9	4008.3	3531.6	3086.8	2895.3	2878.8	2914.6	2951.8	2969.7	2968.3
17.5°	4683.2	4517.9	4015.1	3338.8	2877.4	2798.9	2851.2	2928.4	2984.8	3009.6	3015.1
20°	4903.6	4677.7	3965.5	3066.1	2705.3	2720.4	2814.0	2913.3	2975.2	3006.8	3015.1
22.5°	5155.6	4848.5	3847.1	2779.6	2564.8	2635.0	2745.2	2841.6	2906.4	2938.1	2946.3
25°	5443.6	5039.9	3661.2	2538.6	2443.5	2538.6	2648.8	2728.7	2781.0	2809.9	2818.1
27.5°	5763.1	5239.7	3413.2	2347.1	2337.5	2439.4	2530.3	2592.3	2619.8	2641.8	2650.1
30°	6084.0	5421.5	3112.9	2202.5	2245.2	2341.6	2406.3	2433.9	2442.2	2446.3	2455.9
32.5°	6431.2	5578.6	2797.5	2082.6	2157.0	2246.6	2285.1	2297.5	2259.0	2232.8	2241.1
35°	6851.2	5746.6	2489.0	1987.6	2070.3	2147.4	2159.8	2148.8	2103.3	2049.6	2052.4
37.5°	7370.6	5956.0	2242.4	1920.1	1989.0	2040.0	2024.8	2022.0	2026.2	1962.8	1967.0
40°	8006.9	6228.6	2062.0	1867.8	1922.9	1933.9	1891.2	1914.6	1935.3	1838.8	1841.6
42.5°	8713.5	6557.8	1947.7	1832.0	1867.8	1841.6	1775.5	1801.6	1798.9	1672.2	1670.7
45°	9433.9	6916.0	1907.7	1805.7	1816.8	1764.4	1691.5	1698.3	1640.5	1526.1	1530.3
47.5°	10150.2	7300.3	1932.5	1783.7	1753.5	1694.2	1637.7	1607.4	1522.0	1436.6	1436.6
50°	10852.6	7703.9	2023.5	1739.6	1666.6	1632.2	1590.9	1537.2	1446.3	1373.3	1367.8
52.5°	11504.1	8110.2	2125.3	1666.6	1557.9	1578.5	1552.4	1490.4	1400.9	1326.5	1327.8
55°	12121.2	8516.5	2165.3	1566.1	1455.9	1531.7	1516.5	1402.2	1294.8	1234.2	1228.7
57.5°	12793.4	9005.5	2121.2	1438.0	1373.3	1477.9	1420.1	1293.3	1231.4	1185.9	1181.8
60°	13724.5	9772.8	2026.2	1279.6	1294.8	1398.1	1298.9	1246.6	1179.1	1128.1	1125.3
62.5°	15271.4	11203.9	1873.3	1122.6	1202.5	1279.6	1241.1	1188.7	1119.8	1070.2	1070.2
65°	17557.8	13192.9	1585.4	1000.0	1099.2	1163.9	1179.1	1126.7	1055.1	1002.8	1005.5
67.5°	19486.3	14440.8	1199.8	898.1	993.1	1070.2	1112.9	1062.0	986.3	935.3	936.6
70°	19380.2	13534.4	915.9	797.6	899.4	978.0	1033.1	993.1	911.8	863.7	867.8
72.5°	17213.5	11322.4	741.1	695.6	804.4	881.5	947.6	917.4	834.8	787.9	787.9
75°	12646.0	8037.2	592.2	592.2	685.9	780.9	854.0	834.8	758.9	725.9	716.3
77.5°	5330.6	3371.9	464.2	491.7	570.2	670.8	761.7	768.5	702.4	743.8	675.0
80°	1417.4	929.8	354.0	387.0	447.6	553.7	662.6	659.8	588.1	549.6	511.1
82.5°	540.0	366.4	252.0	272.8	323.7	424.2	524.8	541.3	469.7	406.3	406.3
85°	208.0	157.0	155.7	163.9	188.7	281.0	396.7	410.5	354.0	300.3	310.0
87.5°	53.7	46.8	57.8	55.1	86.8	150.2	227.2	235.5	216.3	125.4	179.1
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)