

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: P968815

Luminaire Tested: **NAV-SB5C-740-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968815
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-740-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34734.2 lumens
Efficiency: N/A
Efficacy: 139.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 249.5
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

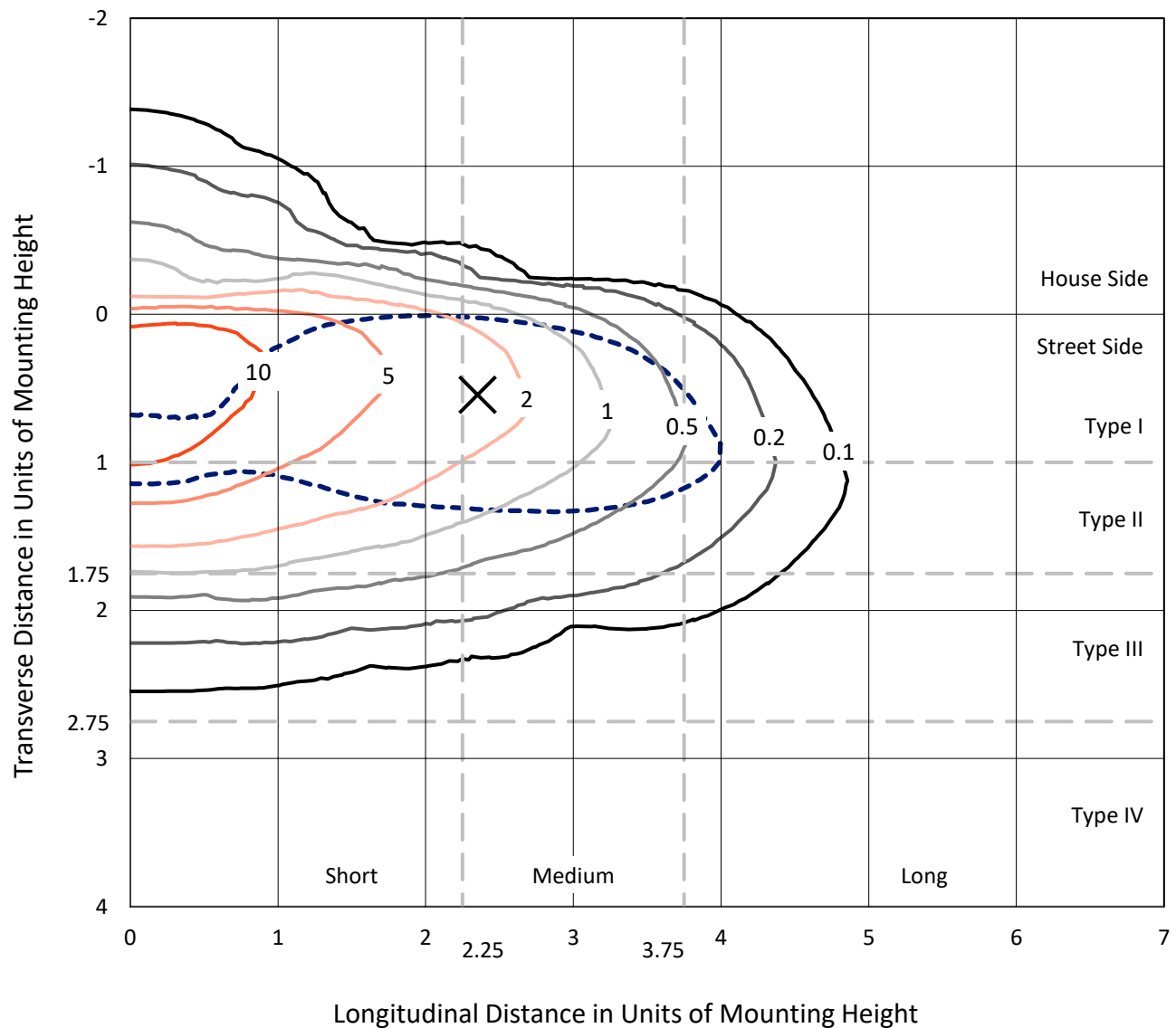


REPORT NUMBER: P968815

CATALOG NUMBER: NAV-SB5C-740-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

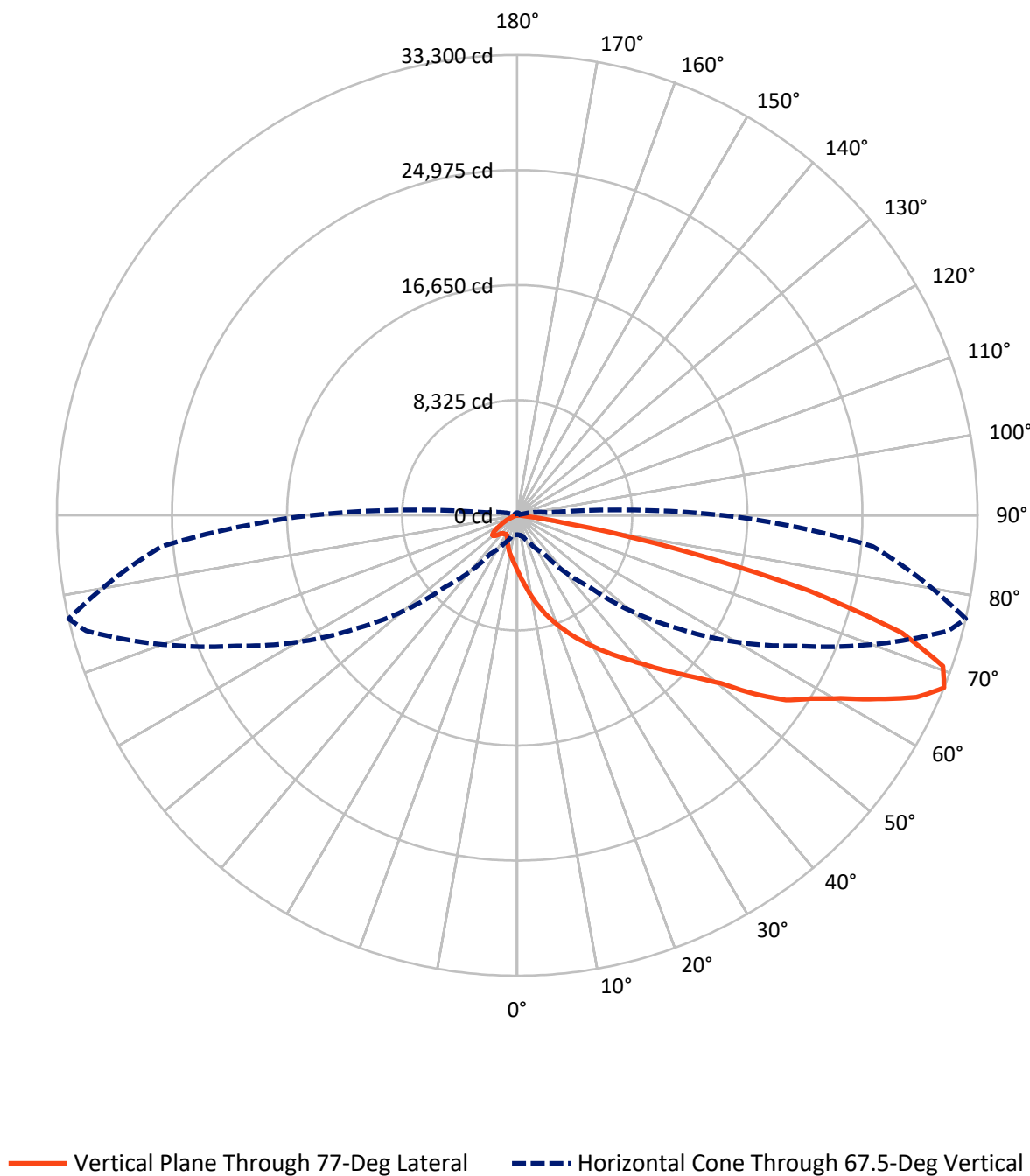
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15 fc
Type II - Medium - N/A

REPORT NUMBER: P968815
CATALOG NUMBER: NAV-SB5C-740-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968815

CATALOG NUMBER: NAV-SB5C-740-U-T2R-HSS

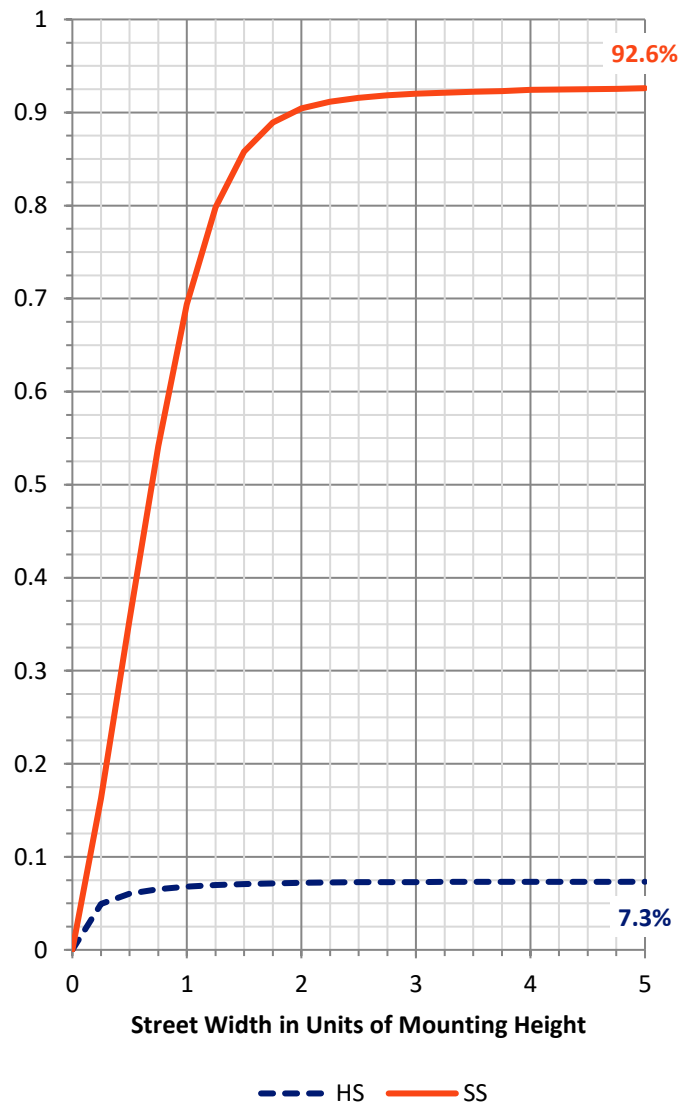
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2555.4	0.0	2555.4
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	32178.8	0.0	32178.8
	% Fixture	92.6	0.0	92.6
Total	Lumens	34734.2	0.0	34734.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	408.8	1.2
10°-20°	1431.6	4.1
20°-30°	2762.6	8.0
30°-40°	4796.1	13.8
40°-50°	6963.6	20.0
50°-60°	7996.9	23.0
60°-70°	6942.7	20.0
70°-80°	3270.1	9.4
80°-90°	161.7	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°	34734.2	100.0
0°-180°	34734.2	100.0

Coefficient of Utilization



REPORT NUMBER: P968815

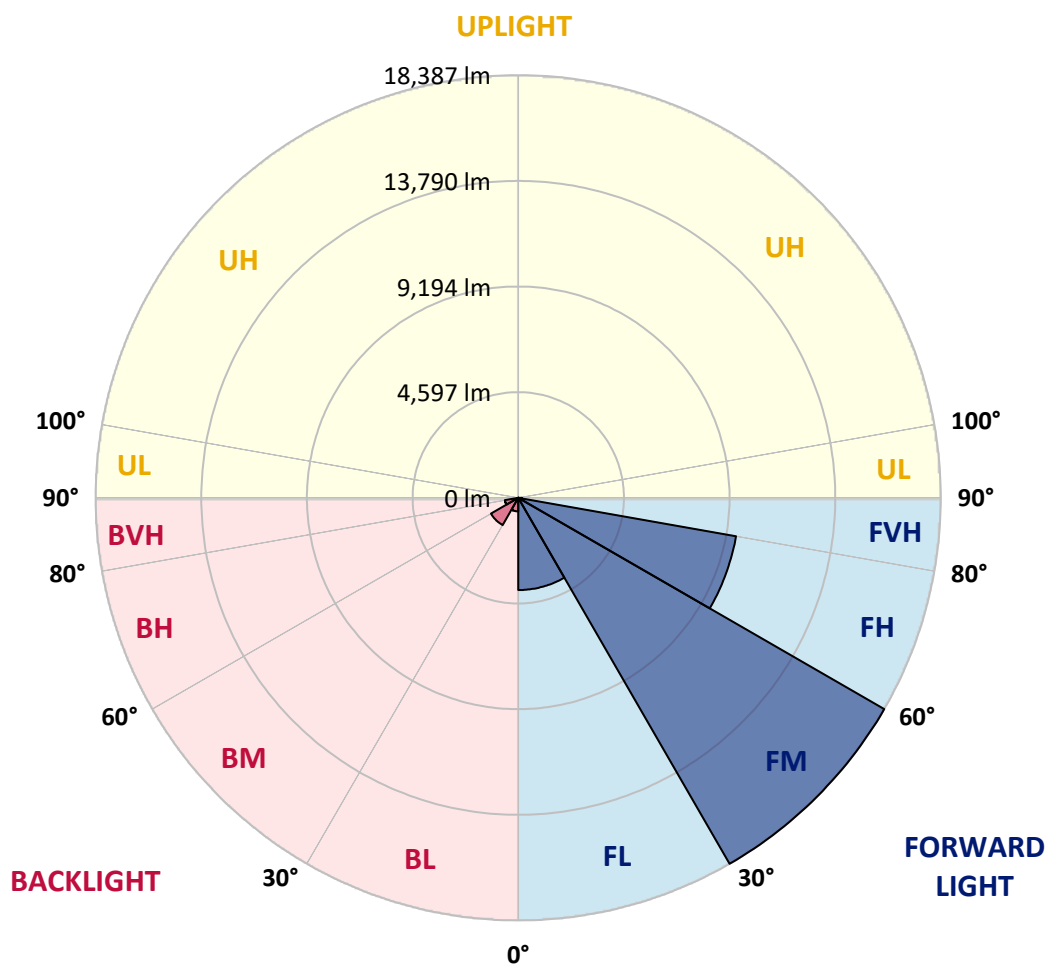
CATALOG NUMBER: NAV-SB5C-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4011.4	11.5			
FM	(30°-60°)	18387.3	52.9			
FH	(60°-80°)	9621.3	27.7			G4/12000
FVH	(80°-90°)	158.7	0.5			G2/225
BL	(0°-30°)	591.6	1.7	B2/1000		
BM	(30°-60°)	1369.2	3.9	B2/2500		
BH	(60°-80°)	591.6	1.7	B2/1000		G2/1000
BVH	(80°-90°)	3.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type II Medium



REPORT NUMBER: P968815

CATALOG NUMBER: NAV-SB5C-740-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4
2.5°	5545.4	5579.9	5530.3	5435.4	5293.0	5200.2	4973.8	4760.3	4523.0	4447.5	4210.3
5°	6759.7	6789.9	6733.8	6630.3	6440.5	6259.4	5961.7	5515.2	5051.5	4902.7	4482.0
7.5°	7659.1	7676.4	7654.8	7559.9	7378.8	7173.9	6841.7	6313.3	5625.2	5461.3	4816.4
10°	8306.2	8362.3	8355.8	8319.2	8198.4	8032.3	7678.6	7076.8	6268.0	6056.6	5193.8
12.5°	8735.5	8798.0	8834.7	8916.6	8910.1	8804.4	8493.9	7857.5	6908.5	6660.6	5618.7
15°	8860.5	8927.4	9067.6	9257.4	9425.7	9479.6	9261.7	8623.3	7613.8	7296.8	6054.4
17.5°	8789.4	8892.9	9061.1	9360.9	9729.8	9973.5	9949.8	9363.1	8254.4	7892.1	6481.5
20°	8946.8	9046.0	9177.6	9430.0	9859.2	10301.4	10478.2	10070.5	8890.7	8511.1	6930.1
22.5°	9818.2	9800.9	9813.9	9854.9	10111.5	10549.4	10913.9	10713.3	9520.5	9132.3	7404.6
25°	11198.6	11120.9	10989.4	10767.2	10702.5	10913.9	11293.6	11282.7	10184.9	9768.6	7889.9
27.5°	12781.7	12768.8	12460.4	11925.5	11623.5	11541.6	11722.7	11837.1	10842.8	10398.4	8377.4
30°	14298.0	14332.6	13916.3	13321.0	12766.7	12445.3	12281.3	12363.3	11511.4	11077.8	8880.0
32.5°	15618.1	15654.7	15201.8	14505.2	13819.3	13431.0	13085.9	12883.1	12240.4	11768.0	9432.2
35°	16733.2	16769.9	16250.0	15480.1	14748.8	14397.3	14006.9	13452.6	12973.7	12533.7	10046.8
37.5°	17729.7	17719.0	17022.3	16245.7	15527.5	15249.2	15044.3	14153.6	13728.6	13303.8	10728.4
40°	18318.5	18363.8	17768.6	16912.2	16215.6	16012.9	15999.8	15022.8	14600.0	14188.0	11474.7
42.5°	18491.1	18570.8	18139.5	17436.4	16804.4	16584.4	16923.1	15963.2	15613.8	15212.6	12318.0
45°	18180.5	18258.1	18061.8	17574.4	17205.5	17063.2	17716.7	16938.1	16696.5	16299.7	13269.2
47.5°	17274.6	17371.7	17419.2	17315.6	17311.2	17455.8	18428.6	17964.8	17982.1	17576.6	14371.4
50°	15521.1	15685.0	16120.7	16487.3	17054.6	17766.3	19120.9	19077.8	19431.5	19082.1	15808.0
52.5°	12333.1	12566.1	14067.3	15070.3	16345.0	17708.1	19882.3	20863.7	21974.5	21463.3	17833.3
55°	9910.9	9910.9	11131.7	13008.3	14960.3	17324.2	20214.4	22024.1	23706.5	23585.7	19258.9
57.5°	8079.8	8176.8	8955.4	10614.1	12956.5	16409.6	20419.3	22753.2	25101.9	25013.6	20652.3
60°	4986.7	5195.9	6667.0	8304.0	10676.6	14781.2	20290.0	23490.7	26795.1	26866.4	22330.3
62.5°	2808.3	2885.9	3541.6	5974.6	8301.9	12592.0	19299.9	23902.8	28960.7	29262.6	24060.2
65°	1939.1	1977.8	2230.2	3718.5	5754.6	10025.2	17365.2	23646.0	31130.5	31741.0	25526.9
67.5°	1408.5	1427.8	1585.4	2271.2	3414.4	7268.8	14332.6	22352.0	32280.1	33300.4	25807.2
70°	1082.8	1095.7	1210.0	1492.6	2016.7	4486.3	10409.2	19778.8	31447.6	32666.2	24370.8
72.5°	880.1	893.0	981.4	1104.3	1337.3	2653.0	6309.0	16062.5	27772.3	29088.0	20747.2
75°	742.0	759.2	839.1	918.8	1048.3	1704.0	2959.3	11185.7	20885.3	21748.0	14427.5
77.5°	411.9	379.7	681.6	761.4	884.4	1078.4	1384.8	6582.9	11696.9	11936.2	6401.6
80°	256.7	265.3	541.4	612.5	679.5	543.6	634.2	2534.3	4055.0	3852.3	1240.2
82.5°	15.1	34.5	416.3	442.2	465.9	233.0	239.4	860.6	977.0	897.3	220.0
85°	0.0	0.0	189.8	153.1	161.7	66.8	69.0	200.6	131.6	142.4	43.2
87.5°	0.0	0.0	0.0	4.3	0.0	6.5	12.9	17.2	6.5	8.6	15.1
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: P968815

CATALOG NUMBER: NAV-SB5C-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4	4005.4
2.5°	4059.3	3908.3	3602.1	3302.2	3058.5	2832.0	2670.2	2517.1	2439.5	2435.1	2430.8
5°	4182.2	3865.2	3252.6	2711.2	2275.5	1926.1	1699.7	1537.9	1455.9	1427.8	1423.5
7.5°	4354.8	3878.1	2946.4	2193.6	1680.2	1380.4	1251.0	1199.2	1182.0	1162.6	1158.2
10°	4572.6	3908.3	2672.4	1766.5	1324.3	1173.3	1121.6	1100.0	1087.1	1074.1	1069.8
12.5°	4816.4	3936.3	2400.7	1466.7	1164.7	1087.1	1050.4	1024.5	1007.3	992.2	987.9
15°	5053.7	3953.6	2118.1	1257.5	1082.8	1020.2	981.4	953.4	929.6	912.4	910.2
17.5°	5288.7	3977.3	1852.8	1132.4	1015.9	953.4	914.5	880.1	860.6	841.2	839.1
20°	5549.7	3973.0	1602.6	1044.0	949.0	886.5	845.5	813.1	793.8	772.1	770.0
22.5°	5791.2	3951.5	1382.6	968.4	880.1	819.6	774.3	742.0	722.5	705.3	703.2
25°	6069.5	3934.2	1199.2	899.4	815.3	754.9	705.3	675.1	653.5	638.5	636.3
27.5°	6337.0	3908.3	1065.5	836.9	752.8	694.5	647.1	612.5	593.2	582.4	582.4
30°	6600.1	3901.9	1015.9	776.4	696.7	638.5	591.0	558.6	543.6	539.3	537.1
32.5°	6917.2	3919.1	1037.5	754.9	644.9	586.7	541.4	517.6	502.6	502.6	502.6
35°	7255.8	3914.8	1069.8	774.3	610.4	534.9	500.4	485.3	470.2	470.2	470.2
37.5°	7680.7	3921.2	1095.7	806.7	597.5	491.8	472.3	452.9	444.3	444.3	444.3
40°	8314.8	4134.7	1082.8	834.8	593.2	461.6	422.7	416.3	409.8	409.8	409.8
42.5°	9091.3	4598.5	1100.0	836.9	591.0	440.0	388.3	401.2	386.1	384.0	381.8
45°	9941.2	5105.4	1210.0	791.6	588.9	429.3	370.9	386.1	362.3	362.3	362.3
47.5°	10784.5	5608.0	1322.1	726.8	582.4	427.0	355.9	347.3	340.8	343.0	343.0
50°	11947.1	6017.8	1365.3	638.5	567.2	422.7	327.9	330.0	325.6	330.0	330.0
52.5°	13213.2	6104.0	1313.5	539.3	524.1	409.8	308.4	317.0	314.9	319.2	319.2
55°	14002.6	6011.3	1085.0	448.6	457.3	358.0	289.0	306.3	306.3	306.3	306.3
57.5°	14817.9	5616.6	770.0	364.5	379.7	293.4	271.7	295.5	293.4	291.2	291.2
60°	15404.5	4978.1	506.9	299.8	302.0	241.6	252.4	278.3	276.0	265.3	265.3
62.5°	15842.4	4272.8	325.6	254.5	230.8	217.8	230.8	252.4	243.7	220.0	215.7
65°	15792.8	3295.8	250.2	217.8	189.8	189.8	200.6	220.0	194.1	155.3	151.0
67.5°	14871.8	2230.2	207.0	183.4	159.6	157.4	166.0	183.4	166.0	131.6	127.3
70°	13226.1	1458.1	166.0	142.4	127.3	116.4	133.8	157.4	140.2	105.7	101.4
72.5°	10734.9	888.7	125.0	103.5	92.8	75.5	105.7	129.5	112.1	77.7	73.3
75°	6945.2	452.9	86.3	66.8	49.6	45.3	77.7	97.1	77.7	47.5	41.0
77.5°	2657.3	189.8	47.5	30.2	25.9	21.5	43.2	58.2	32.4	10.8	8.6
80°	511.2	79.8	23.7	15.1	12.9	8.6	6.5	4.3	0.0	0.0	0.0
82.5°	88.5	25.9	8.6	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	30.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.8	0.0	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)