

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: P960501

Luminaire Tested: **NAV-SB1C-830-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960501
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5265.4 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 54.4
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



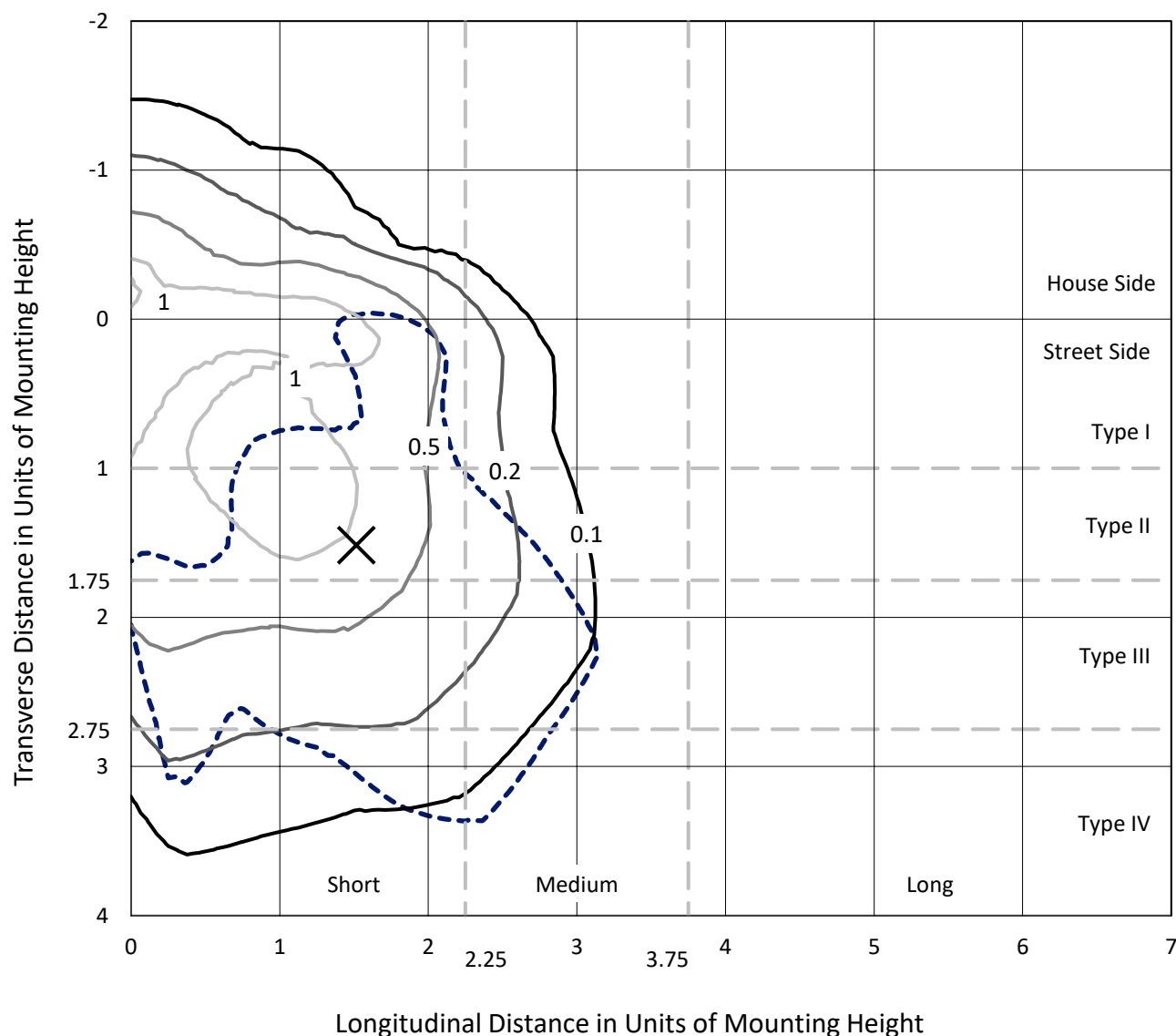
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

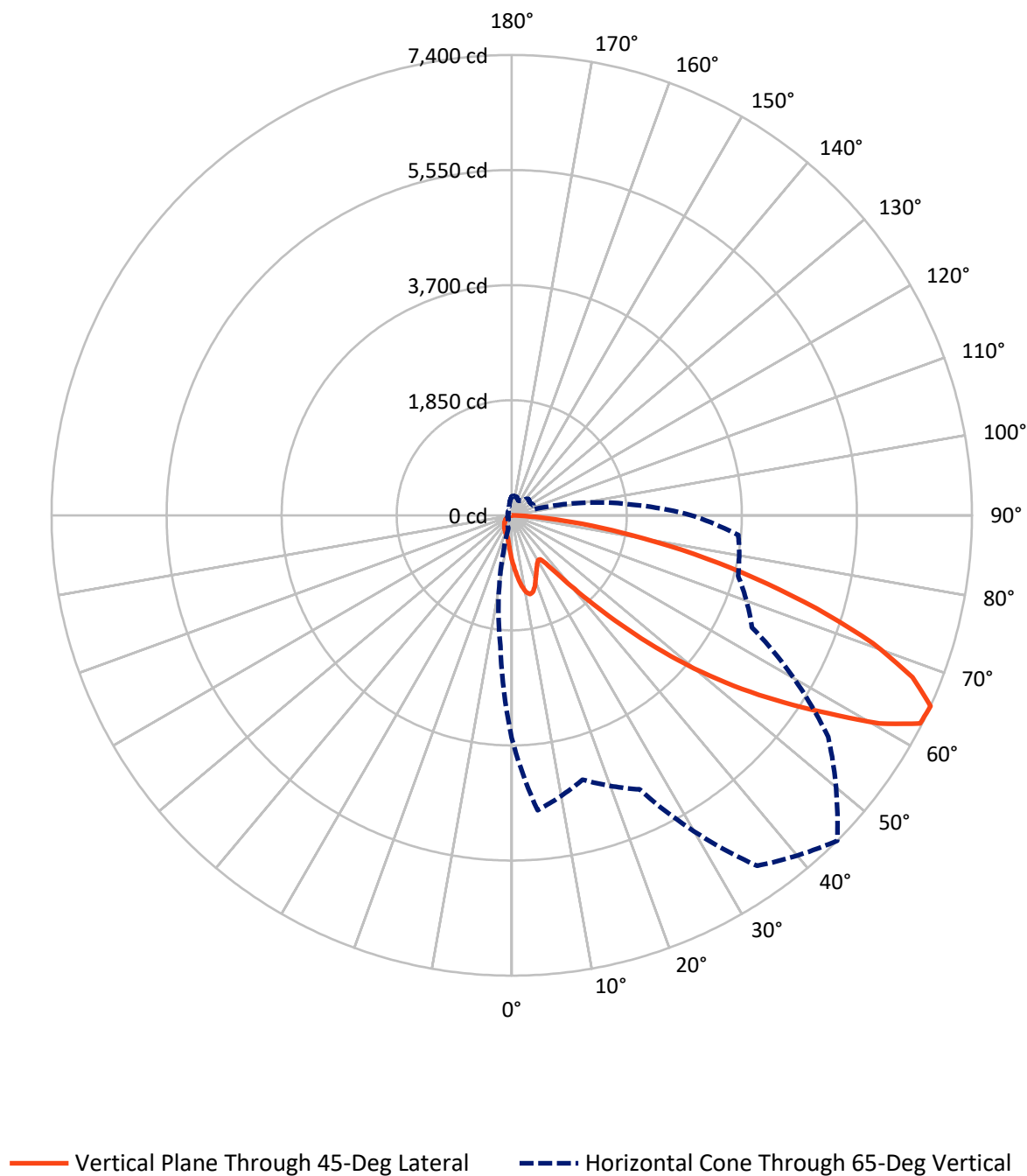


Based on 25 foot mounting height. Maximum calculated value = 1.9 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1046.6	0.0	1046.6
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	4218.8	0.0	4218.8
	% Fixture	80.1	0.0	80.1
Total	Lumens	5265.4	0.0	5265.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	1.4
10°-20°	215.2	4.1
20°-30°	317.0	6.0
30°-40°	407.3	7.7
40°-50°	658.7	12.5
50°-60°	1155.0	21.9
60°-70°	1445.3	27.4
70°-80°	844.5	16.0
80°-90°	150.7	2.9
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°	5265.4	100.0
0°-180°	5265.4	100.0

Coefficient of Utilization



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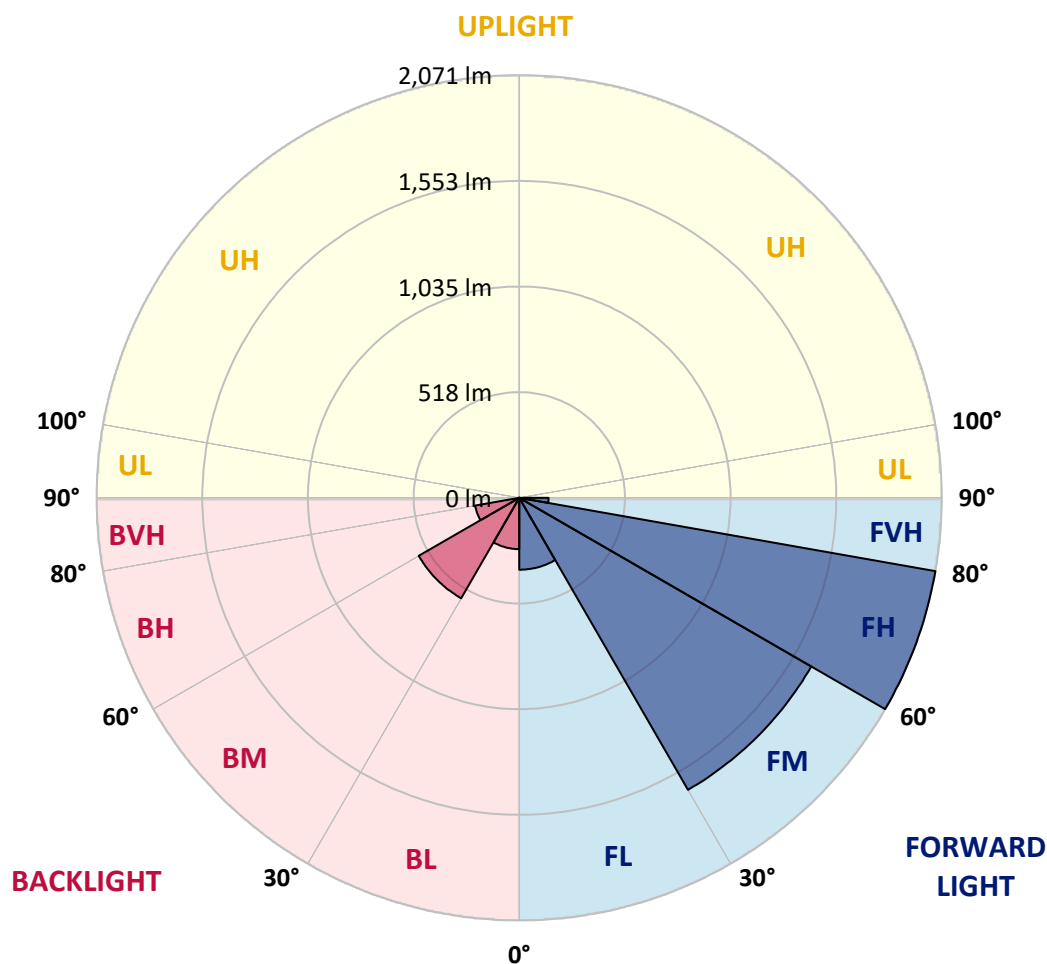
CATALOG NUMBER: NAV-SB1C-830-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	352.3	6.7			
FM	(30°-60°)	1652.3	31.4			
FH	(60°-80°)	2070.5	39.3			G2/5000
FVH	(80°-90°)	143.6	2.7			G2/225
BL	(0°-30°)	251.6	4.8	B1/500		
BM	(30°-60°)	568.6	10.8	B1/1000		
BH	(60°-80°)	219.3	4.2	B1/500		G1/500
BVH	(80°-90°)	7.1	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1
2.5°	816.9	823.1	836.8	844.1	855.4	856.1	856.1	846.2	845.9	825.9	823.8
5°	913.0	927.5	960.1	993.8	1001.1	1003.0	999.4	979.7	965.2	926.4	918.1
7.5°	1008.4	1036.4	1086.0	1131.0	1145.5	1145.5	1136.8	1104.8	1075.1	1019.0	997.8
10°	1087.4	1122.7	1190.1	1240.6	1257.3	1253.6	1235.8	1195.6	1154.6	1086.4	1058.8
12.5°	1139.7	1179.3	1253.3	1293.9	1310.9	1301.4	1281.1	1242.0	1198.8	1127.0	1095.8
15°	1165.8	1207.1	1271.4	1292.7	1288.0	1278.3	1275.7	1256.9	1224.3	1157.1	1123.0
17.5°	1177.1	1215.5	1260.1	1246.7	1206.8	1199.1	1224.6	1248.6	1240.6	1183.3	1151.3
20°	1187.6	1219.9	1233.3	1173.8	1104.1	1097.3	1145.8	1214.1	1248.9	1207.6	1178.1
22.5°	1202.1	1222.0	1194.4	1097.0	1021.8	1005.8	1059.5	1162.1	1251.4	1238.4	1209.0
25°	1222.0	1227.4	1151.7	1024.0	948.5	932.5	982.7	1104.5	1247.1	1271.7	1246.7
27.5°	1246.0	1234.7	1110.7	963.1	890.1	875.2	925.4	1049.0	1234.7	1305.1	1287.3
30°	1277.1	1244.1	1070.1	915.9	848.4	837.5	885.8	1001.1	1219.5	1347.6	1337.7
32.5°	1308.7	1248.1	1032.4	888.4	839.0	843.0	882.5	975.4	1202.8	1388.2	1392.9
35°	1342.9	1260.9	1013.8	915.5	917.7	952.5	968.8	999.4	1200.3	1443.3	1461.9
37.5°	1389.3	1289.1	1036.0	1050.8	1126.3	1198.4	1185.0	1116.5	1229.7	1525.6	1560.2
40°	1456.0	1338.9	1132.4	1281.1	1436.0	1553.2	1502.0	1329.4	1319.6	1644.3	1695.8
42.5°	1553.2	1417.9	1303.7	1562.6	1825.3	2018.2	1881.2	1604.0	1477.0	1813.6	1879.3
45°	1696.9	1546.0	1510.7	1859.8	2305.1	2609.1	2324.0	1896.8	1697.6	2070.1	2121.6
47.5°	1896.0	1734.2	1704.9	2172.8	2888.4	3281.6	2815.2	2168.1	1948.6	2419.8	2431.7
50°	2160.4	1987.8	1888.8	2515.1	3527.9	3967.2	3305.9	2430.0	2236.2	2847.0	2833.3
52.5°	2509.4	2341.4	2103.1	2841.3	4185.6	4638.2	3798.9	2659.9	2593.1	3342.9	3314.6
55°	2985.3	2873.6	2396.2	3152.5	4842.8	5313.3	4272.6	2876.9	3064.7	3932.0	3760.8
57.5°	3575.8	3655.7	2818.7	3513.4	5433.7	6009.1	4748.5	3180.1	3677.0	4590.8	4019.8
60°	3956.7	4695.5	3628.1	4047.0	6105.1	6795.7	5400.7	3756.8	4320.5	4826.9	3970.4
62.5°	3864.6	5026.4	4597.2	4728.2	6722.6	7367.8	6039.8	4336.1	4441.6	4479.0	3590.4
65°	3582.0	4759.4	4399.6	4860.7	6878.9	7400.1	6210.7	4261.3	3767.7	3656.7	2885.9
67.5°	3193.2	4442.8	3929.8	4509.5	6596.3	6948.9	5892.6	3769.5	2911.6	2744.0	2093.7
70°	2773.4	4092.3	3621.5	4115.6	6057.6	6162.5	5351.7	3315.4	2141.5	1853.2	1343.6
72.5°	2375.1	3727.4	3410.4	3711.8	5339.0	5122.1	4647.7	2913.9	1559.4	1336.7	955.1
75°	1967.8	3189.2	3109.7	3232.3	4394.2	4034.7	3861.7	2412.5	1223.8	967.1	659.1
77.5°	1518.4	2492.0	2674.8	2588.4	3093.0	2996.9	2993.3	1812.9	894.1	645.3	413.2
80°	1039.2	1736.8	2089.7	1826.0	2007.4	1958.4	2254.4	1216.3	648.5	388.5	230.0
82.5°	610.8	1057.4	1454.6	884.0	1110.0	1139.4	1342.4	591.6	381.6	89.6	50.0
85°	247.7	417.5	568.8	346.0	535.4	451.6	509.6	166.2	106.3	2.2	0.0
87.5°	62.4	133.5	93.6	38.8	62.0	57.0	45.0	20.3	4.3	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

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1
2.5°	809.6	801.2	780.6	759.9	743.2	720.8	705.9	688.1	671.1	655.8	652.9
5°	895.2	867.7	829.9	795.5	760.2	726.2	692.5	656.9	624.2	604.3	591.6
7.5°	964.8	916.2	866.2	822.4	779.9	739.9	695.4	652.2	601.1	573.8	549.2
10°	1016.7	952.9	887.2	836.8	794.1	755.2	717.5	673.9	612.3	578.2	541.2
12.5°	1050.8	975.0	898.1	840.5	792.5	762.5	745.8	728.8	667.4	627.5	573.8
15°	1074.4	990.7	905.8	832.1	773.4	751.2	767.9	787.5	748.4	702.2	632.2
17.5°	1100.1	1011.0	909.0	809.6	735.9	726.5	769.7	815.1	813.2	767.5	698.9
20°	1127.4	1028.7	906.8	773.4	690.6	698.9	754.1	806.7	828.8	804.2	743.2
22.5°	1155.3	1045.8	898.5	726.2	648.2	674.3	729.5	775.5	801.7	794.1	747.6
25°	1190.5	1069.7	886.1	675.4	613.1	649.3	700.8	738.2	756.3	755.9	724.1
27.5°	1232.6	1101.7	879.7	634.4	587.9	621.0	666.7	700.1	712.8	712.8	687.4
30°	1281.6	1139.4	872.4	607.6	573.5	591.6	627.2	659.8	672.5	672.5	651.1
32.5°	1336.0	1175.6	855.0	591.2	562.6	562.9	585.5	615.2	630.5	632.6	617.4
35°	1401.3	1214.4	816.9	578.2	549.9	535.0	545.9	570.6	588.8	593.5	584.0
37.5°	1486.9	1262.0	762.5	558.9	530.3	505.6	508.2	527.1	547.0	554.2	548.1
40°	1601.9	1317.8	705.9	531.4	502.8	473.3	472.3	486.1	505.6	513.6	510.3
42.5°	1753.8	1384.9	651.8	504.9	469.3	439.3	437.5	448.3	465.4	473.8	472.3
45°	1948.2	1467.3	605.4	484.2	436.8	407.0	406.3	415.3	430.2	438.9	437.1
47.5°	2218.5	1549.6	573.8	473.3	411.0	380.5	381.9	389.9	403.3	409.5	407.0
50°	2570.7	1574.6	557.9	473.3	397.2	356.9	364.2	370.7	380.9	384.5	381.2
52.5°	2908.7	1491.9	543.4	476.3	399.0	337.0	352.6	357.3	366.0	367.5	362.7
55°	3074.5	1282.6	523.5	477.0	410.2	319.9	343.2	351.9	355.2	354.8	346.8
57.5°	3017.6	1037.1	489.6	474.1	417.9	309.0	331.6	348.2	350.4	347.2	332.3
60°	2817.7	763.5	463.9	452.6	414.9	305.8	313.8	340.2	343.5	339.2	314.9
62.5°	2482.5	529.9	444.0	405.5	402.3	304.7	285.9	322.9	330.8	324.6	289.0
65°	1954.4	374.3	382.3	355.5	374.7	298.9	256.9	301.8	312.6	303.2	253.2
67.5°	1322.6	270.2	309.8	322.2	330.0	285.9	235.7	277.9	292.3	280.0	211.5
70°	714.2	189.7	204.6	271.3	280.4	263.3	216.9	253.6	270.2	256.9	172.3
72.5°	421.9	136.4	143.3	218.0	233.6	231.8	195.9	225.3	245.6	229.6	140.0
75°	232.5	92.1	102.3	158.2	189.7	178.9	168.3	190.8	211.5	195.9	108.1
77.5°	104.1	55.1	71.1	103.7	149.0	122.6	130.2	148.7	167.9	151.6	72.2
80°	40.3	30.9	47.2	56.6	108.4	67.9	83.7	109.6	123.3	110.3	43.9
82.5°	5.1	13.7	20.3	22.1	63.1	35.9	48.6	68.9	67.9	58.7	22.1
85°	0.0	2.6	2.9	1.4	27.2	13.0	16.0	22.4	21.0	16.0	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	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

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CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1
2.5°	635.2	622.1	615.5	610.1	615.2	618.1	618.1	630.5	637.7	640.6	660.9
5°	559.6	535.4	519.1	509.3	512.5	516.2	520.2	535.8	546.3	553.2	584.8
7.5°	500.2	463.2	440.3	428.3	430.2	432.8	436.0	451.2	461.8	470.8	506.0
10°	470.8	418.6	388.5	374.0	371.5	370.0	368.9	377.9	385.9	393.2	428.0
12.5°	472.3	399.3	362.7	344.9	337.3	328.6	321.7	323.2	328.3	337.3	359.5
15°	490.8	393.2	349.3	327.2	314.5	304.3	296.0	294.2	296.0	297.5	311.2
17.5°	515.8	392.5	337.7	310.2	297.0	288.7	281.2	278.6	278.9	280.7	284.3
20°	535.8	390.3	324.6	293.8	282.2	274.9	267.3	264.8	265.5	265.9	269.9
22.5°	546.3	387.0	310.2	277.5	267.7	260.5	253.6	253.2	253.2	255.3	258.3
25°	546.3	380.2	297.0	261.9	253.2	246.6	238.3	239.7	240.5	243.4	247.7
27.5°	533.2	367.1	286.6	248.5	239.4	232.9	225.3	227.0	228.2	231.4	236.9
30°	516.5	351.5	274.6	235.7	225.3	220.6	214.0	214.7	216.2	219.9	226.0
32.5°	498.8	333.0	264.8	223.0	212.6	208.9	201.7	202.7	204.2	208.2	215.1
35°	479.2	311.2	253.2	211.5	201.0	198.0	189.7	190.4	192.6	197.0	203.9
37.5°	458.5	293.5	241.6	200.2	189.3	186.4	177.7	178.5	181.0	186.0	192.6
40°	438.2	276.0	229.3	188.3	177.4	174.9	165.4	166.2	169.0	174.5	181.3
42.5°	416.0	262.6	213.3	175.9	164.3	161.7	153.0	154.2	157.4	162.9	169.7
45°	389.6	253.9	195.5	164.3	151.3	148.7	140.7	142.9	146.6	152.0	159.3
47.5°	362.3	250.3	180.6	152.0	137.9	135.7	129.1	132.7	136.7	141.1	149.0
50°	336.3	245.6	165.4	140.4	126.3	124.0	119.7	124.4	128.4	132.4	140.0
52.5°	306.5	235.4	151.6	130.2	116.4	115.7	113.6	117.9	121.6	125.2	131.7
55°	275.7	219.0	139.6	121.2	108.1	108.9	107.7	111.3	114.3	117.6	123.3
57.5°	248.9	198.4	130.2	111.3	100.9	103.0	101.6	103.4	105.2	109.2	113.9
60°	221.6	173.7	119.7	99.7	93.6	96.1	92.1	91.7	92.5	93.6	102.3
62.5°	185.0	148.0	106.6	89.6	85.6	86.7	79.0	73.3	73.3	74.3	87.4
65°	148.7	124.0	92.1	78.0	74.7	74.0	63.1	55.1	54.4	57.7	68.9
67.5°	122.3	103.0	77.6	64.9	62.7	63.4	55.5	47.6	46.8	50.4	58.7
70°	101.2	83.0	62.0	50.0	52.3	55.5	47.6	39.9	38.8	42.1	50.0
72.5°	80.6	64.9	47.6	37.0	43.2	47.2	38.8	31.6	30.9	33.7	41.3
75°	59.1	46.4	32.3	26.9	33.4	37.0	28.3	22.4	21.4	24.0	31.6
77.5°	36.6	26.1	20.3	16.0	22.9	24.7	14.9	13.0	12.7	14.6	20.0
80°	17.0	11.3	9.8	5.4	8.3	9.8	6.1	6.9	7.3	8.7	12.3
82.5°	4.7	1.8	0.4	0.0	0.0	2.9	1.4	2.9	3.6	5.4	8.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.8	3.3	5.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: NAV-SB1C-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	729.1	729.1	729.1	729.1	729.1	729.1	729.1	729.1
2.5°	676.1	690.6	713.8	737.8	761.4	785.4	808.5	816.9
5°	613.4	646.8	692.8	742.2	792.9	844.4	891.6	913.0
7.5°	543.4	591.2	660.5	737.8	818.7	899.5	974.0	1008.4
10°	468.6	529.2	608.3	712.8	828.8	940.5	1042.8	1087.4
12.5°	397.6	461.0	548.5	673.6	820.8	964.1	1087.1	1139.7
15°	338.0	394.3	488.6	627.2	795.1	965.6	1108.1	1165.8
17.5°	293.5	330.0	427.6	575.6	761.4	952.1	1115.4	1177.1
20°	271.3	281.5	348.6	509.6	729.8	939.5	1122.7	1187.6
22.5°	258.3	260.8	285.2	424.4	692.1	935.5	1135.4	1202.1
25°	247.7	248.5	255.0	336.3	634.4	933.0	1155.0	1222.0
27.5°	237.2	237.2	240.9	271.0	556.1	922.1	1180.3	1246.0
30°	226.7	226.7	229.3	239.7	464.3	900.7	1210.8	1277.1
32.5°	215.9	215.9	218.0	225.6	370.7	873.8	1238.7	1308.7
35°	204.9	204.2	207.2	215.1	294.9	839.7	1266.7	1342.9
37.5°	193.3	193.0	195.9	204.9	254.6	800.2	1287.7	1389.3
40°	181.0	181.0	184.3	194.0	243.0	750.5	1321.1	1456.0
42.5°	169.7	169.0	172.6	184.6	234.3	702.9	1380.9	1553.2
45°	158.9	157.4	160.7	175.6	219.0	686.3	1492.6	1696.9
47.5°	148.7	145.1	148.0	164.7	205.3	748.7	1675.5	1896.0
50°	140.4	133.5	136.0	153.8	194.7	884.0	1912.6	2160.4
52.5°	131.7	122.6	124.0	140.4	185.3	1012.7	2169.8	2509.4
55°	122.6	112.4	113.2	127.0	171.9	1032.0	2420.8	2985.3
57.5°	112.4	103.0	103.0	114.6	162.2	894.5	2613.9	3575.8
60°	101.2	95.0	93.2	104.9	170.9	631.2	2636.3	3956.7
62.5°	88.9	85.6	83.0	95.4	177.4	374.0	2455.4	3864.6
65°	74.7	74.0	72.2	104.9	149.4	220.9	2107.8	3582.0
67.5°	62.7	61.7	61.7	109.9	113.6	138.9	1646.8	3193.2
70°	54.0	50.0	50.0	83.0	68.9	96.1	1149.8	2773.4
72.5°	45.3	41.0	38.1	66.4	51.6	70.4	718.5	2375.1
75°	36.3	33.0	29.4	43.9	38.4	53.3	417.5	1967.8
77.5°	26.1	24.7	20.7	32.3	27.9	38.4	248.5	1518.4
80°	13.4	13.7	13.0	18.4	18.9	26.1	141.4	1039.2
82.5°	8.0	6.1	6.9	9.0	10.9	14.9	53.3	610.8
85°	5.1	3.3	3.3	4.3	5.4	5.8	16.3	247.7
87.5°	2.6	1.1	1.4	2.2	1.8	1.4	0.7	62.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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