

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: P960487

Luminaire Tested: **NAV-SB1C-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960487
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-827-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5143.4 lumens
Efficiency: N/A
Efficacy: 94.5 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

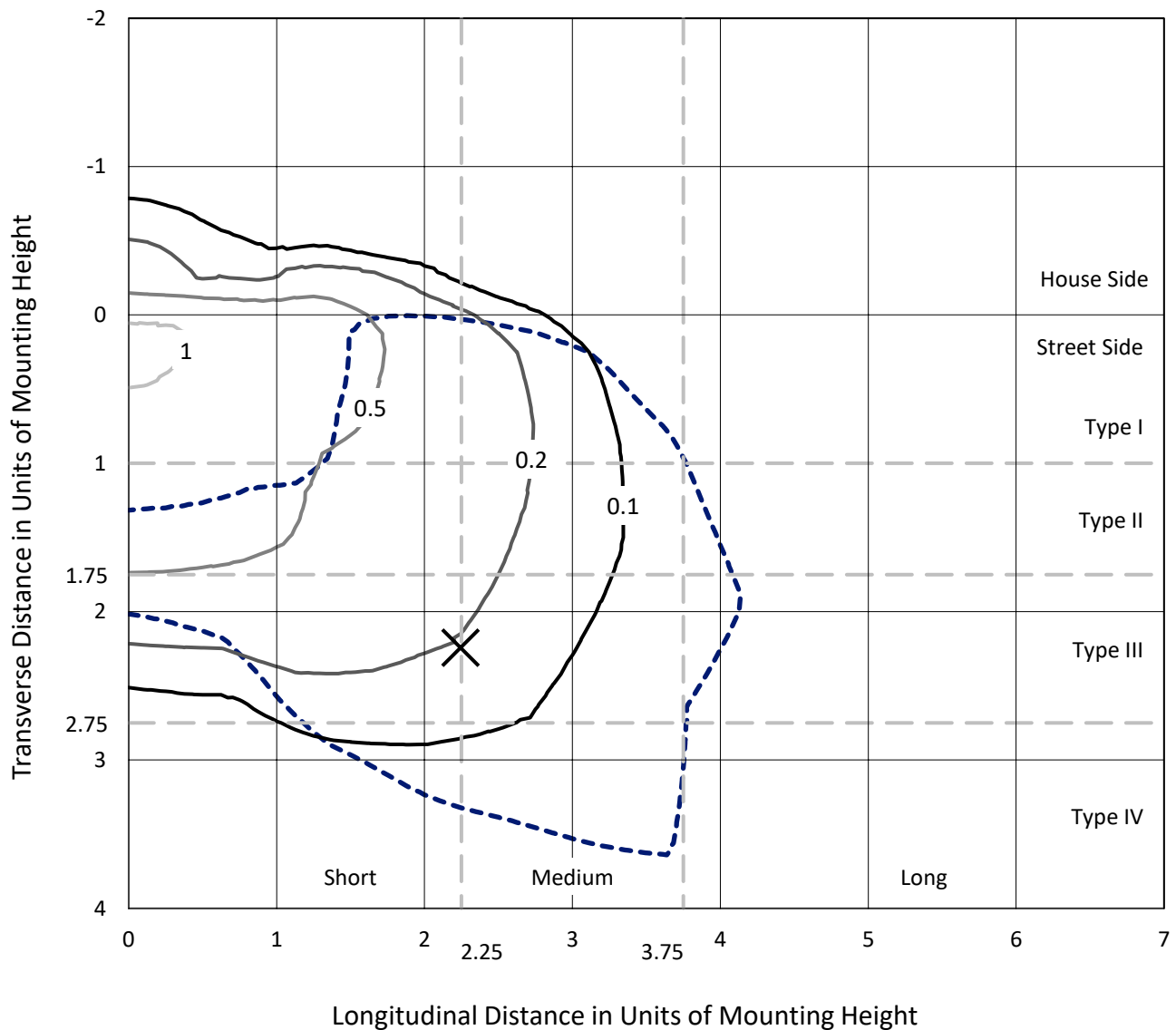
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

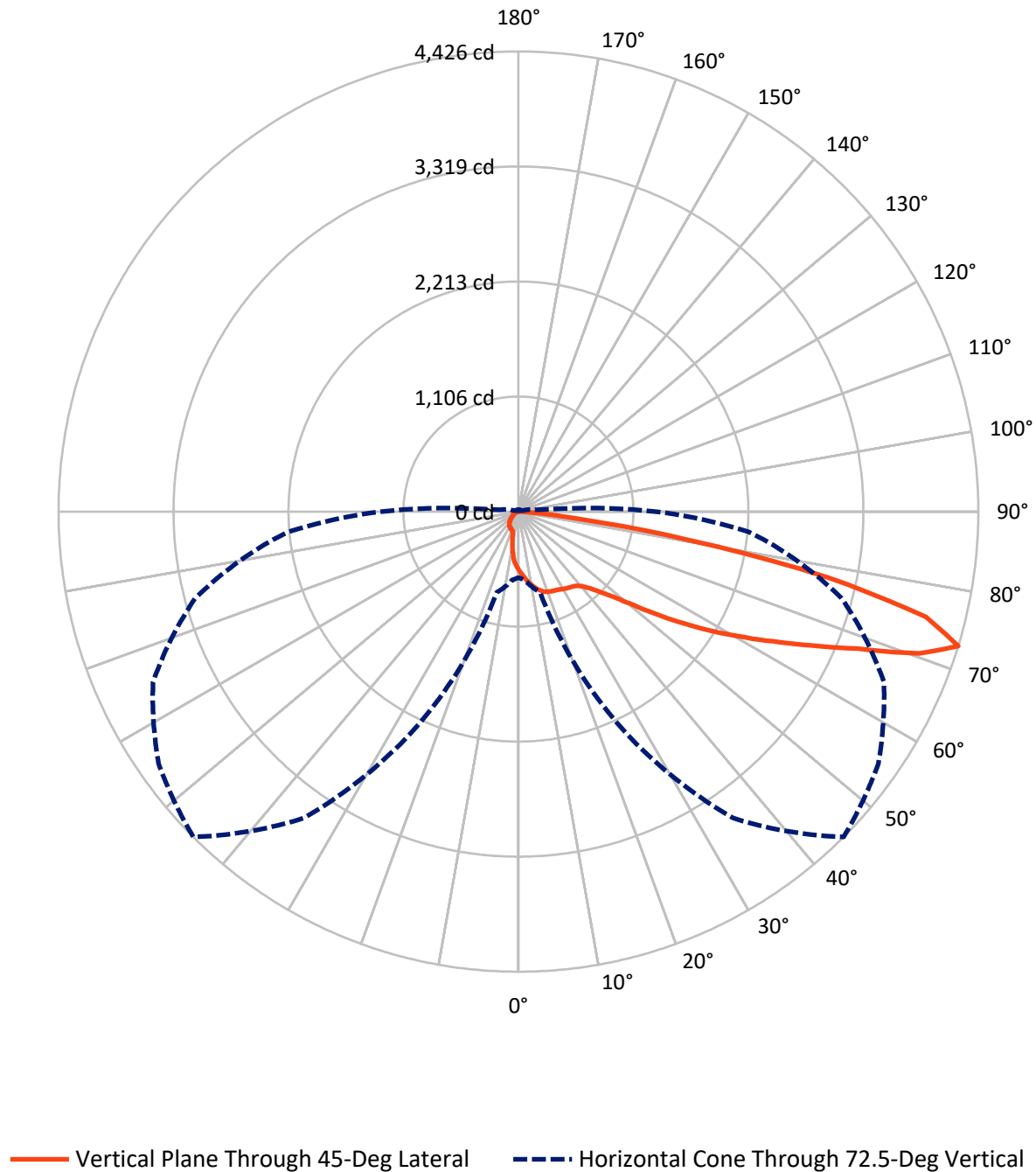
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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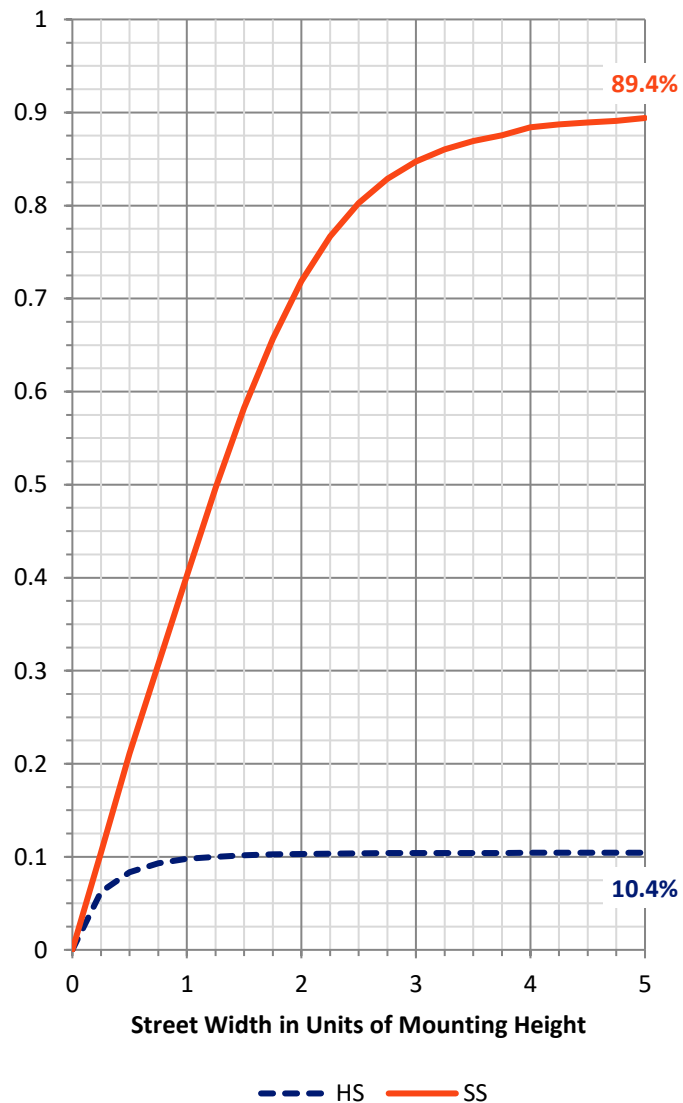
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	540.4	0.0	540.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	4603.0	0.0	4603.0
	% Fixture	89.5	0.0	89.5
Total	Lumens	5143.4	0.0	5143.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	1.0
10°-20°	155.2	3.0
20°-30°	254.8	5.0
30°-40°	361.4	7.0
40°-50°	597.3	11.6
50°-60°	1073.0	20.9
60°-70°	1489.9	29.0
70°-80°	1080.7	21.0
80°-90°	78.1	1.5
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°	5143.4	100.0
0°-180°	5143.4	100.0

Coefficient of Utilization



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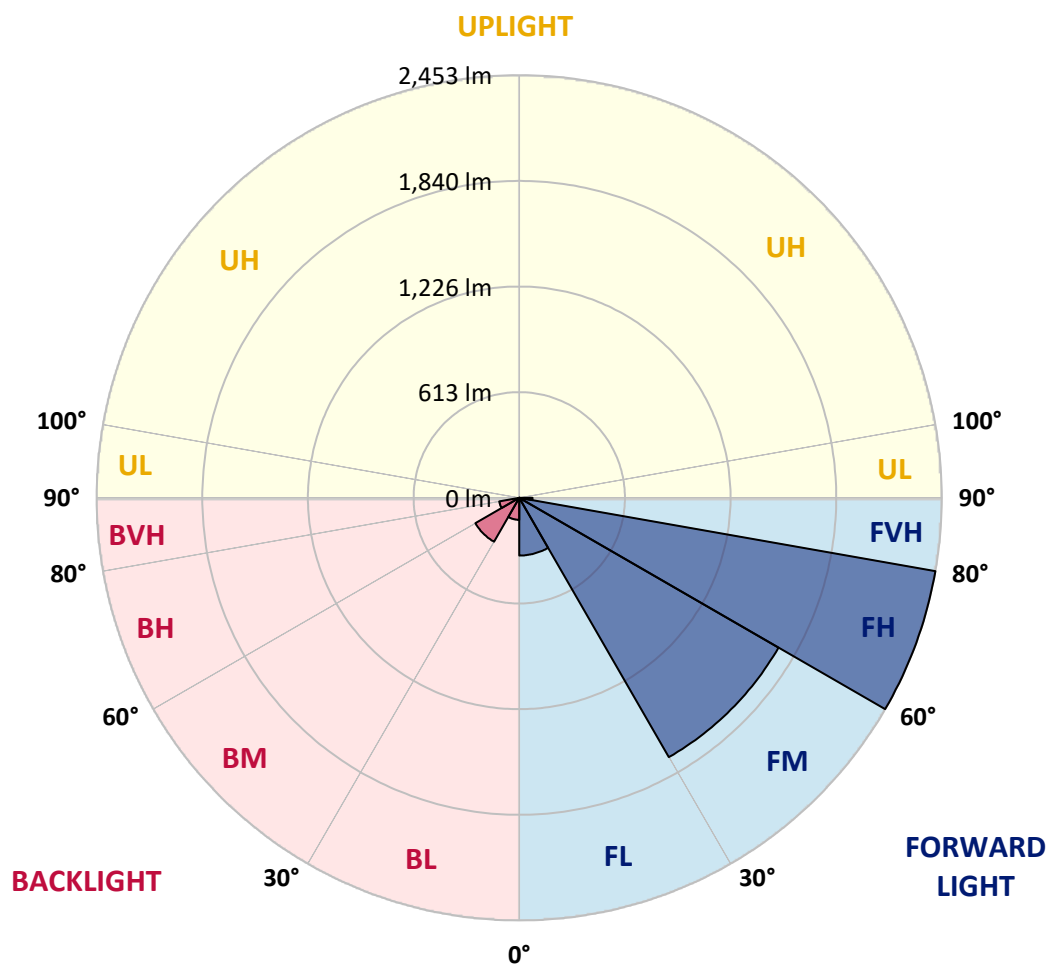
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	335.0	6.5			
FM	(30°-60°)	1737.7	33.8			
FH	(60°-80°)	2452.8	47.7			G2/5000
FVH	(80°-90°)	77.5	1.5			G1/100
BL	(0°-30°)	128.0	2.5	B1/500		
BM	(30°-60°)	293.9	5.7	B1/1000		
BH	(60°-80°)	117.8	2.3	B1/500		G1/500
BVH	(80°-90°)	0.7	0.0			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°	46°	55°	65°	75°	85°
0°	563.4	563.4	563.4	563.4	563.4	563.4	563.4	563.4	563.4	563.4	563.4
2.5°	615.4	616.5	615.8	611.6	604.5	600.6	598.6	591.5	587.0	578.9	570.5
5°	672.0	676.2	673.7	665.3	651.9	642.5	639.7	625.2	612.2	597.2	579.6
7.5°	732.0	734.1	729.5	718.6	700.8	684.6	682.1	662.2	641.4	618.3	594.4
10°	783.9	786.4	779.4	763.6	743.2	723.2	719.8	697.6	673.0	644.6	614.1
12.5°	827.5	829.9	820.8	801.9	779.4	758.7	755.1	732.0	705.0	673.3	635.4
15°	860.5	865.1	852.8	832.4	808.2	787.5	785.7	762.9	736.6	701.4	661.1
17.5°	879.8	884.4	872.8	848.2	827.5	810.0	807.8	788.8	764.2	730.6	686.0
20°	882.9	887.1	874.8	853.4	836.3	822.3	821.1	807.5	789.6	757.3	713.0
22.5°	873.5	878.7	867.5	850.3	838.3	831.0	829.6	821.8	811.7	784.3	738.3
25°	863.7	867.9	859.5	844.3	838.0	837.3	838.3	836.9	834.9	811.7	767.8
27.5°	862.9	867.5	858.0	843.7	840.1	847.5	848.6	855.3	857.0	836.6	796.2
30°	868.9	872.1	862.9	847.9	846.1	862.9	863.3	875.2	878.0	857.7	824.3
32.5°	881.9	885.4	876.3	854.1	851.7	875.2	876.3	892.1	896.7	880.2	853.8
35°	912.5	916.7	906.1	871.8	862.9	886.8	890.0	908.6	917.7	904.0	884.4
37.5°	988.6	976.3	962.0	907.2	888.6	905.1	910.3	932.1	948.2	932.4	920.9
40°	1177.8	1139.3	1094.3	967.6	933.5	944.0	948.2	970.1	992.1	976.7	971.1
42.5°	1461.9	1416.2	1343.9	1106.6	1001.2	1006.6	1009.7	1028.7	1059.8	1047.7	1049.0
45°	1715.0	1698.5	1624.7	1343.9	1128.0	1102.0	1105.9	1115.7	1161.7	1157.1	1166.2
47.5°	1909.5	1900.0	1843.2	1616.3	1342.1	1218.9	1229.8	1234.4	1300.7	1316.9	1341.4
50°	2059.0	2055.5	2004.6	1858.6	1622.0	1391.3	1395.1	1385.4	1484.7	1524.7	1571.4
52.5°	2200.2	2212.2	2174.5	2083.6	1920.7	1617.0	1616.3	1570.0	1704.2	1764.5	1844.2
55°	2327.7	2331.9	2335.7	2313.2	2221.3	1874.0	1867.3	1791.5	1958.7	2021.1	2107.5
57.5°	2447.4	2449.1	2483.5	2529.5	2534.1	2149.9	2137.7	2046.7	2236.7	2281.2	2334.3
60°	2527.8	2535.8	2608.5	2736.2	2792.1	2434.7	2428.0	2335.4	2519.7	2540.4	2530.5
62.5°	2411.9	2461.0	2644.3	2897.8	3035.7	2750.3	2747.2	2660.1	2817.4	2800.5	2716.2
65°	1952.3	2035.5	2357.8	3006.9	3274.9	3102.8	3107.4	3014.7	3123.2	3068.4	2867.2
67.5°	1365.7	1453.4	1834.7	3015.8	3542.0	3516.7	3543.0	3397.7	3447.9	3325.0	2903.0
70°	944.4	989.6	1237.9	2826.8	3750.2	4086.9	4086.2	3868.1	3770.9	3442.0	2720.5
72.5°	635.1	658.7	804.0	2242.7	3597.1	4425.6	4405.2	4227.6	3879.7	3219.0	2222.6
75°	267.8	285.1	372.2	1260.3	2845.8	4049.0	3993.8	3736.1	3447.2	2534.7	1386.7
77.5°	85.0	92.4	146.8	451.1	1567.5	3043.4	2985.2	2333.2	2310.5	1271.6	507.0
80°	40.4	47.0	82.5	181.1	616.8	1655.3	1647.3	1058.5	993.9	343.4	101.8
82.5°	17.5	20.7	45.6	96.9	275.9	590.5	602.5	360.2	298.1	130.3	31.3
85°	5.6	7.4	21.1	44.6	116.5	146.8	145.0	85.7	120.0	70.9	10.9
87.5°	0.0	0.0	7.1	10.1	11.9	8.4	9.4	7.4	33.3	19.7	3.9
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	563.4	563.4	563.4	563.4	563.4	563.4	563.4	563.4	563.4	563.4	563.4
2.5°	566.3	560.7	550.8	541.7	533.6	525.5	520.6	513.6	512.9	512.9	514.7
5°	570.1	561.0	543.5	524.9	503.5	483.1	462.7	443.1	436.8	432.1	434.3
7.5°	581.4	567.0	539.3	503.8	463.1	418.5	387.2	353.5	340.5	333.5	334.6
10°	597.6	577.9	535.8	473.6	407.6	346.9	302.3	265.8	251.7	245.8	245.8
12.5°	615.4	591.2	529.4	436.0	346.9	274.2	230.6	213.8	211.7	211.7	211.7
15°	636.8	607.3	518.5	391.8	283.3	217.0	201.5	202.2	204.3	205.7	205.7
17.5°	659.0	624.5	501.3	342.2	227.1	195.2	195.6	196.6	198.3	199.8	199.8
20°	682.9	641.8	478.5	289.7	194.9	188.9	189.9	191.0	192.4	193.1	193.4
22.5°	708.5	657.9	451.5	238.0	184.0	183.6	184.0	185.0	186.8	186.8	187.5
25°	735.8	675.8	420.6	200.5	178.4	178.4	179.1	179.8	181.1	181.1	181.5
27.5°	763.9	692.3	388.0	180.8	173.4	173.1	173.1	174.1	174.9	175.2	175.6
30°	794.8	711.7	355.3	176.6	169.5	167.8	166.8	167.5	168.2	168.5	169.2
32.5°	826.5	730.2	326.2	178.4	165.7	162.6	159.1	158.4	158.4	159.7	160.8
35°	861.5	750.6	303.7	184.3	163.6	154.8	149.2	146.1	146.4	148.5	149.5
37.5°	903.6	775.2	287.2	189.6	162.2	146.1	136.9	133.0	130.6	133.0	132.3
40°	958.8	811.3	275.2	193.8	160.4	135.9	123.6	117.3	112.6	114.1	113.4
42.5°	1039.9	868.2	270.7	194.1	156.6	123.9	109.9	101.5	94.8	95.1	93.8
45°	1153.6	958.1	294.2	189.6	148.1	110.9	95.5	84.3	80.1	79.0	77.6
47.5°	1309.5	1089.1	348.6	180.1	135.9	98.3	81.5	72.0	68.8	67.0	66.0
50°	1518.4	1257.2	409.0	169.5	123.6	86.4	69.9	63.9	61.8	60.1	59.7
52.5°	1760.6	1427.8	458.5	159.1	111.3	75.8	62.5	58.9	57.2	55.9	55.5
55°	1982.9	1545.4	455.7	147.8	99.3	67.4	57.2	55.1	53.0	51.6	50.9
57.5°	2121.2	1561.9	375.7	135.5	85.7	60.8	52.3	50.9	48.5	46.7	46.3
60°	2184.8	1467.8	263.3	119.4	72.0	54.4	47.0	46.3	43.2	40.7	40.0
62.5°	2196.4	1293.0	175.6	99.3	60.1	48.5	41.8	40.7	36.5	32.3	30.2
65°	2149.3	1043.0	121.5	77.6	51.2	42.1	35.8	33.7	29.1	24.9	23.5
67.5°	2000.4	732.4	84.6	55.9	43.6	33.3	28.4	27.8	24.2	20.7	19.7
70°	1727.6	417.4	56.5	41.8	34.4	22.9	22.4	23.2	19.7	16.8	15.5
72.5°	1324.6	191.0	35.2	30.5	23.5	15.5	17.9	18.2	15.1	12.6	11.3
75°	779.7	81.8	22.1	19.7	11.9	10.1	13.0	13.3	10.1	8.1	7.1
77.5°	265.4	30.9	14.0	11.6	5.9	5.6	8.4	8.4	5.6	3.2	2.5
80°	60.4	11.6	7.1	4.6	2.8	2.5	2.8	2.5	1.4	0.3	0.0
82.5°	17.2	4.6	2.8	1.7	1.0	1.0	0.3	0.0	0.0	0.0	0.0
85°	4.9	2.2	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	0.3	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)