

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: P961039

Luminaire Tested: **NAV-SB1D-830-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961039
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7353.3 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 79.6
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

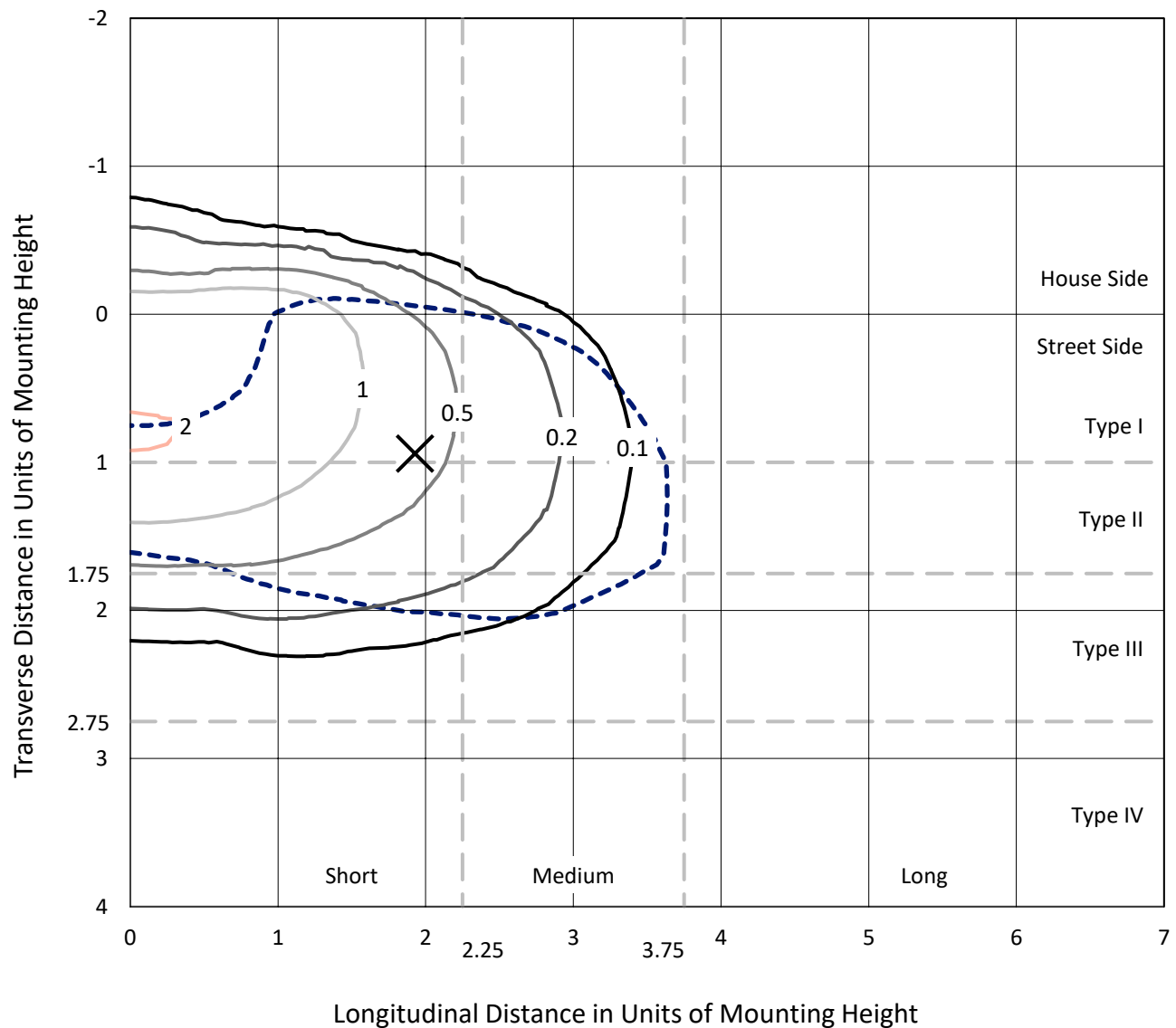


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

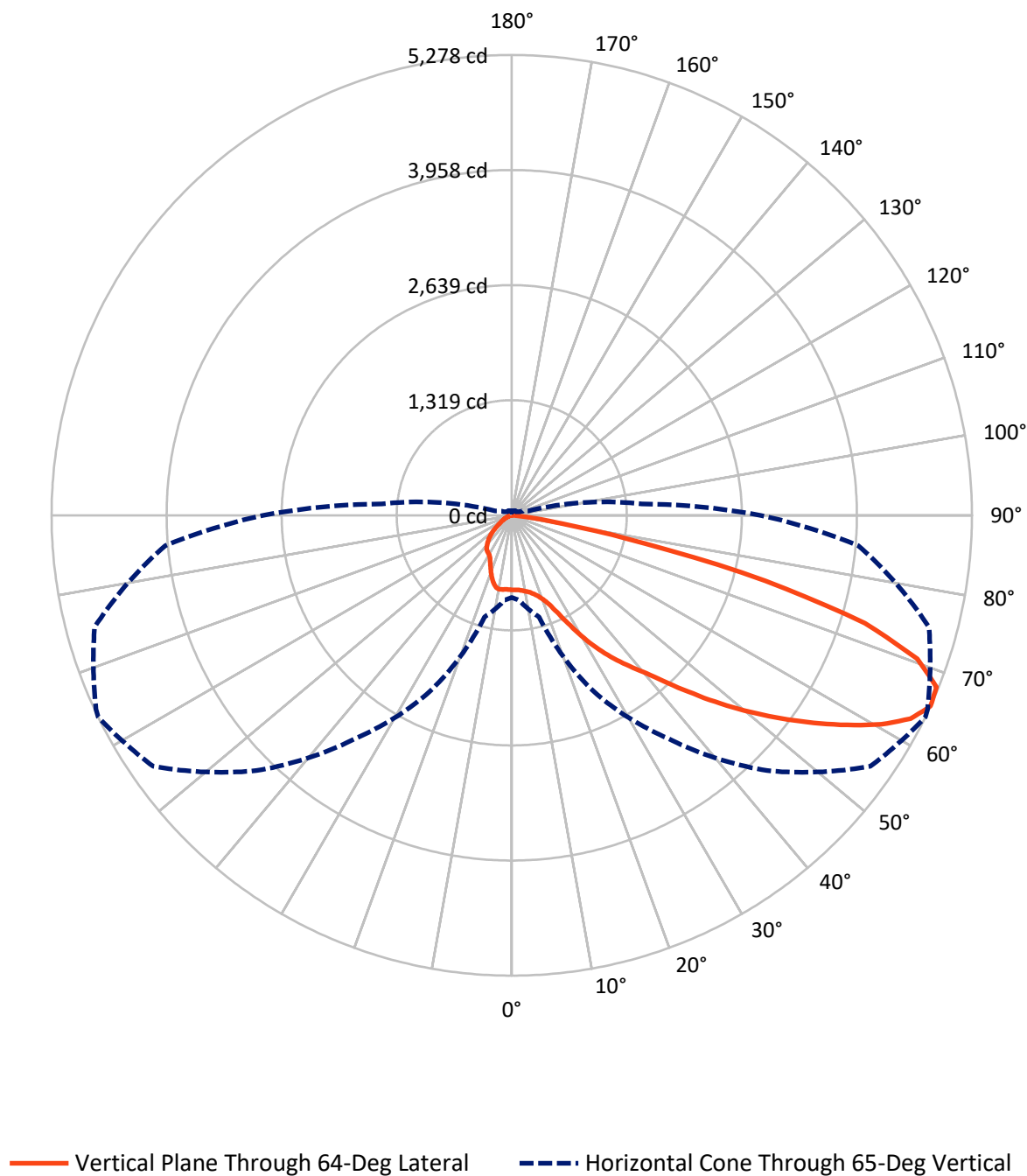


Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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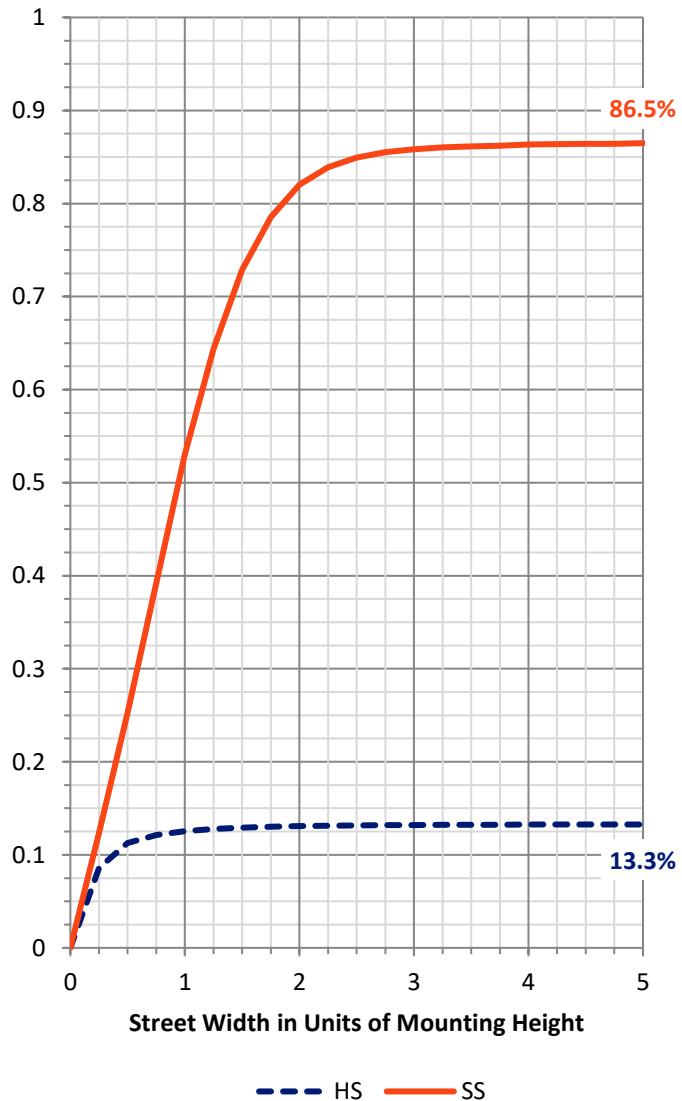
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	983.4	0.0	983.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	6370.0	0.0	6370.0
	% Fixture	86.6	0.0	86.6
Total	Lumens	7353.3	0.0	7353.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	1.1
10°-20°	214.0	2.9
20°-30°	405.5	5.5
30°-40°	820.6	11.2
40°-50°	1398.0	19.0
50°-60°	1901.1	25.9
60°-70°	1785.2	24.3
70°-80°	715.2	9.7
80°-90°	34.7	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°	7353.3	100.0
0°-180°	7353.3	100.0

Coefficient of Utilization



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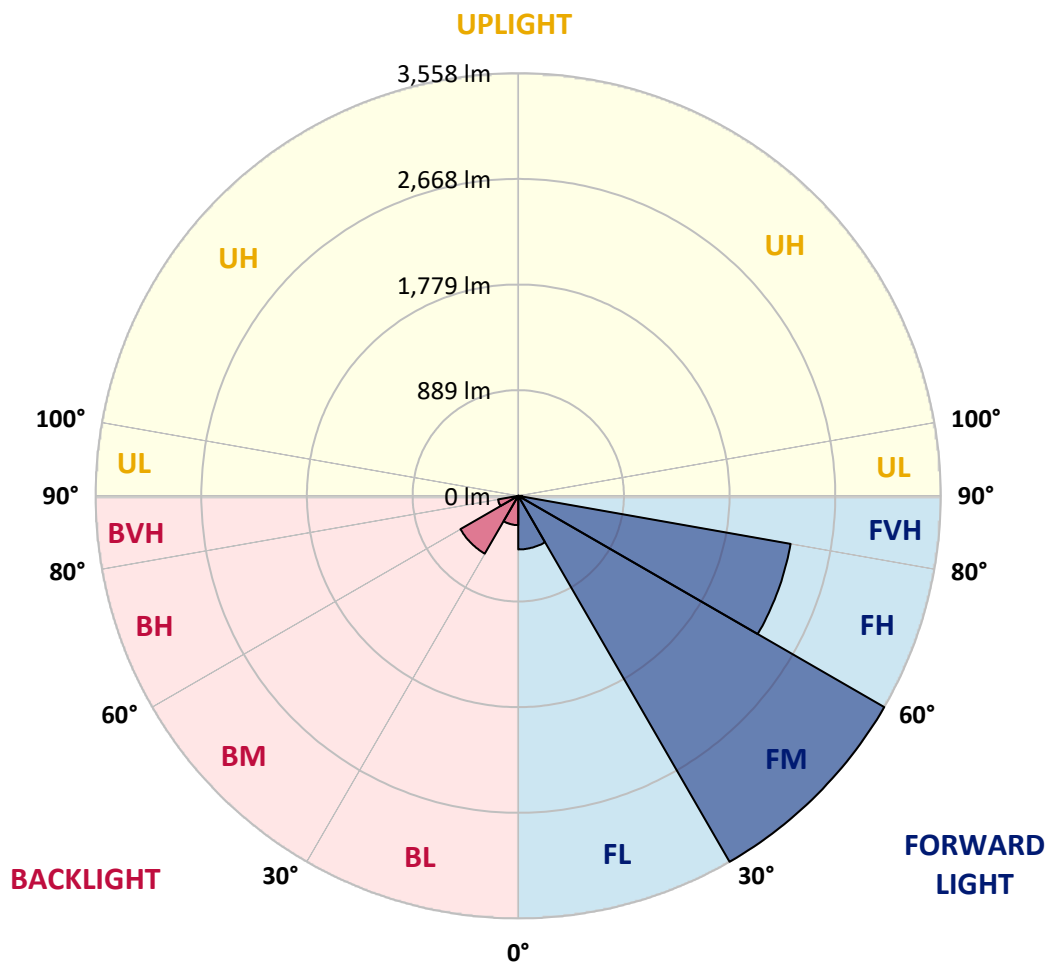
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	451.6	6.1			
FM	(30°-60°)	3557.5	48.4			
FH	(60°-80°)	2327.9	31.7			G2/5000
FVH	(80°-90°)	33.0	0.4			G1/100
BL	(0°-30°)	246.9	3.4	B1/500		
BM	(30°-60°)	562.2	7.6	B1/1000		
BH	(60°-80°)	172.6	2.3	B1/500		G1/500
BVH	(80°-90°)	1.7	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	855.3	855.3	855.3	855.3	855.3	855.3	855.3	855.3	855.3	855.3	855.3
2.5°	852.3	858.2	856.8	855.3	854.7	855.8	856.3	855.8	855.8	855.8	856.3
5°	836.1	841.0	841.0	844.4	849.3	855.3	859.7	860.7	861.7	863.2	862.6
7.5°	805.0	808.9	811.9	823.3	835.6	851.4	864.6	871.6	872.5	877.9	880.0
10°	783.8	788.7	793.7	805.4	823.3	846.9	869.6	886.3	888.8	901.6	907.5
12.5°	782.8	787.7	794.2	807.0	827.7	852.8	880.4	904.6	909.0	927.7	940.0
15°	793.1	799.1	805.0	820.7	843.0	873.5	903.1	933.2	937.6	964.2	977.5
17.5°	814.4	822.3	826.7	842.4	866.1	900.2	939.1	973.5	977.5	1008.6	1025.3
20°	856.3	865.6	867.2	880.0	903.1	939.5	985.9	1028.8	1033.7	1069.2	1087.9
22.5°	943.0	956.3	944.5	950.9	971.6	1008.1	1058.4	1112.6	1119.5	1159.9	1176.7
25°	1095.8	1114.6	1084.0	1073.2	1082.0	1120.0	1183.1	1251.6	1259.5	1292.0	1300.4
27.5°	1396.0	1371.9	1325.5	1280.2	1253.6	1275.3	1346.2	1431.0	1440.9	1472.4	1462.6
30°	1725.8	1704.7	1642.0	1541.5	1478.4	1474.9	1540.5	1635.1	1646.5	1676.5	1646.5
32.5°	2056.1	2035.9	1967.9	1844.2	1734.7	1680.5	1725.8	1830.9	1836.7	1856.0	1811.6
35°	2381.0	2360.3	2292.2	2165.5	2030.9	1907.7	1898.8	2017.2	2019.1	2039.3	1973.3
37.5°	2707.7	2690.5	2618.1	2493.8	2361.2	2191.1	2108.8	2193.6	2196.1	2215.8	2147.3
40°	2940.9	2948.3	2898.6	2802.5	2688.6	2502.7	2344.5	2381.5	2366.6	2399.7	2358.7
42.5°	3141.1	3155.9	3112.5	3064.2	2998.1	2834.4	2636.3	2629.9	2606.3	2624.0	2581.6
45°	3314.1	3326.4	3287.5	3276.1	3274.7	3159.9	2955.3	2916.8	2883.7	2880.4	2829.5
47.5°	3377.7	3401.4	3418.2	3456.1	3530.0	3481.7	3285.0	3225.4	3188.4	3161.3	3080.9
50°	3401.9	3427.0	3484.2	3594.6	3769.6	3790.3	3613.3	3546.3	3501.0	3451.7	3333.3
52.5°	3369.3	3414.2	3491.0	3676.9	3930.8	4037.8	3928.3	3869.7	3817.9	3737.6	3562.1
55°	3177.6	3222.4	3379.6	3676.0	4011.1	4211.3	4226.1	4199.9	4141.8	4015.1	3746.9
57.5°	2773.3	2839.9	3088.8	3550.7	4009.7	4360.7	4517.9	4536.6	4471.6	4290.1	3892.3
60°	2213.4	2303.6	2607.2	3273.2	3886.0	4441.5	4773.7	4867.4	4798.4	4561.2	4010.2
62.5°	1544.4	1648.9	1936.3	2838.4	3603.0	4383.3	4960.6	5133.6	5081.3	4803.8	4055.5
65°	942.1	975.6	1207.2	2233.6	3121.8	4139.8	5018.3	5277.5	5260.3	4952.2	3988.5
67.5°	627.5	655.6	722.2	1531.6	2423.3	3653.3	4880.2	5252.4	5257.3	4928.0	3743.0
70°	378.1	402.2	445.7	890.7	1570.5	2891.6	4452.8	4932.0	4960.6	4605.1	3277.6
72.5°	155.8	172.0	211.5	403.7	813.3	1835.3	3545.8	4234.5	4301.0	3872.1	2515.6
75°	88.3	96.7	124.2	202.6	352.9	855.3	2147.8	3006.0	3104.1	2668.8	1513.4
77.5°	58.6	62.6	80.4	131.1	198.6	291.8	917.9	1566.1	1753.5	1457.7	655.2
80°	39.5	42.8	55.2	87.7	129.1	125.3	292.3	580.3	713.8	500.8	159.7
82.5°	26.6	27.2	39.5	57.7	81.8	60.7	86.3	180.4	226.7	144.9	60.7
85°	15.3	14.8	29.1	33.5	36.5	25.1	26.1	54.2	71.0	61.1	34.5
87.5°	1.9	3.0	11.4	8.9	4.9	5.4	5.4	9.3	13.8	14.8	7.4
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°	855.3	855.3	855.3	855.3	855.3	855.3	855.3	855.3	855.3	855.3	855.3
2.5°	856.3	855.8	854.2	852.8	849.3	847.4	848.4	847.4	846.9	847.4	849.3
5°	862.6	861.2	857.2	852.3	845.4	837.0	831.6	823.7	816.3	811.9	812.9
7.5°	880.0	878.4	873.0	859.3	837.0	802.1	770.0	741.9	720.7	708.4	708.9
10°	907.5	905.1	896.7	866.1	807.9	731.5	668.0	615.2	580.7	564.5	562.9
12.5°	940.0	937.1	922.3	859.7	752.8	633.4	545.7	487.1	455.0	440.6	439.2
15°	978.5	974.6	945.5	829.1	672.4	525.0	444.6	400.8	380.1	367.3	367.8
17.5°	1026.3	1019.5	962.8	783.3	585.2	442.2	382.5	349.5	331.3	319.0	318.0
20°	1088.4	1077.1	976.5	728.6	504.8	389.9	340.6	313.0	299.2	288.3	286.4
22.5°	1175.2	1159.0	993.3	669.4	448.1	353.9	309.5	289.4	278.0	265.7	263.7
25°	1282.7	1263.4	1014.0	614.7	409.2	322.9	286.9	270.1	256.9	242.5	241.1
27.5°	1433.1	1398.5	1038.6	569.9	375.7	296.2	266.2	247.4	232.2	220.4	217.9
30°	1600.6	1544.0	1060.4	542.7	345.0	271.6	239.1	220.4	206.0	197.7	196.2
32.5°	1759.3	1682.4	1074.6	530.9	317.4	243.5	209.5	189.3	178.5	176.0	177.4
35°	1909.2	1807.7	1073.2	519.6	292.8	215.5	180.4	159.7	151.3	152.8	152.8
37.5°	2081.8	1941.2	1062.8	501.8	272.6	189.8	155.3	137.0	129.7	130.2	132.1
40°	2282.4	2095.5	1056.4	468.3	250.4	166.2	134.6	119.8	114.4	112.4	111.9
42.5°	2496.3	2244.9	1057.4	430.4	222.8	144.9	120.2	107.9	103.0	101.6	101.1
45°	2711.2	2387.3	1058.8	390.9	193.7	128.6	109.9	99.5	96.7	94.6	94.6
47.5°	2913.4	2508.6	1031.3	348.5	165.1	116.3	101.6	94.6	92.1	89.7	89.7
50°	3101.6	2589.5	964.7	299.2	142.5	106.5	95.1	90.2	87.7	85.3	85.3
52.5°	3248.0	2602.3	854.7	248.5	126.7	99.1	91.2	86.7	83.8	81.4	80.9
55°	3313.1	2521.9	698.5	201.1	114.4	92.7	87.2	82.8	79.3	76.9	76.4
57.5°	3296.4	2352.9	544.7	161.6	102.5	86.3	82.3	79.3	75.4	71.4	71.0
60°	3214.1	2126.6	410.6	134.6	91.7	79.3	76.9	74.4	69.0	63.1	62.1
62.5°	3071.6	1842.1	292.8	111.4	79.8	71.4	70.5	68.5	60.7	49.8	48.8
65°	2853.7	1496.6	197.2	92.7	68.5	62.6	63.1	59.7	49.3	37.0	36.0
67.5°	2535.2	1094.4	126.2	76.0	57.2	52.3	52.8	50.7	41.9	31.6	30.0
70°	2129.5	724.7	82.3	57.7	45.8	40.4	43.4	43.9	35.5	25.6	24.6
72.5°	1561.2	427.8	57.7	42.8	33.5	28.1	35.5	36.5	28.6	19.3	18.2
75°	889.8	203.1	43.4	31.1	20.7	19.7	27.6	27.6	19.7	12.8	11.8
77.5°	373.6	84.8	30.5	20.2	11.8	11.4	18.8	17.2	9.8	5.9	5.9
80°	107.9	37.9	16.3	9.8	4.9	4.4	7.4	5.4	2.5	1.0	1.0
82.5°	42.4	16.8	6.5	3.9	1.9	1.9	1.0	0.0	0.0	0.0	0.0
85°	25.1	6.9	3.0	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	1.4	1.0	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)