

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: P962461

Luminaire Tested: **NAV-SB2C-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15636.4 lumens
Efficiency: N/A
Efficacy: 155.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 100.9
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

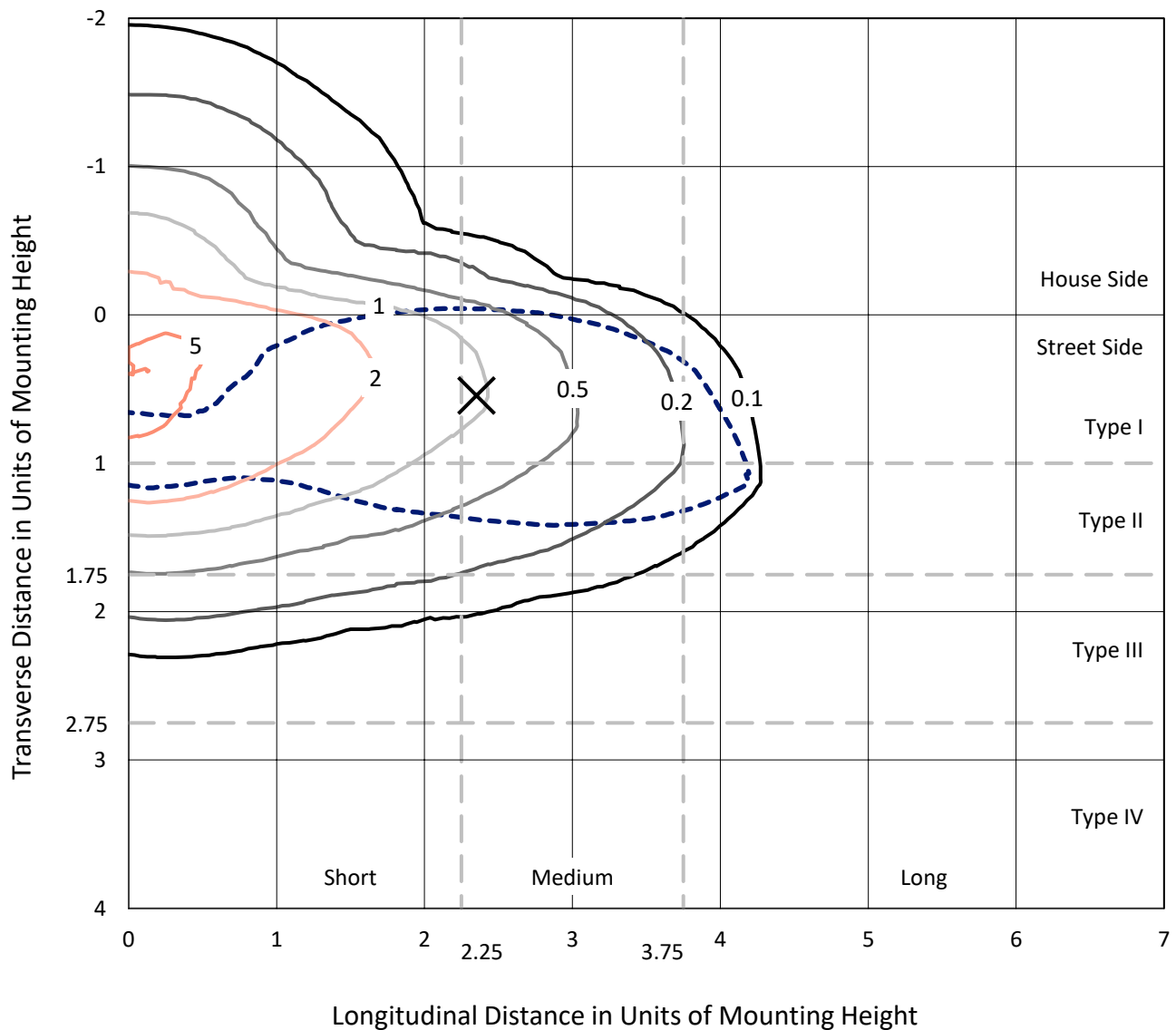


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Iso-Footcandle Lines of Horizontal Illumination

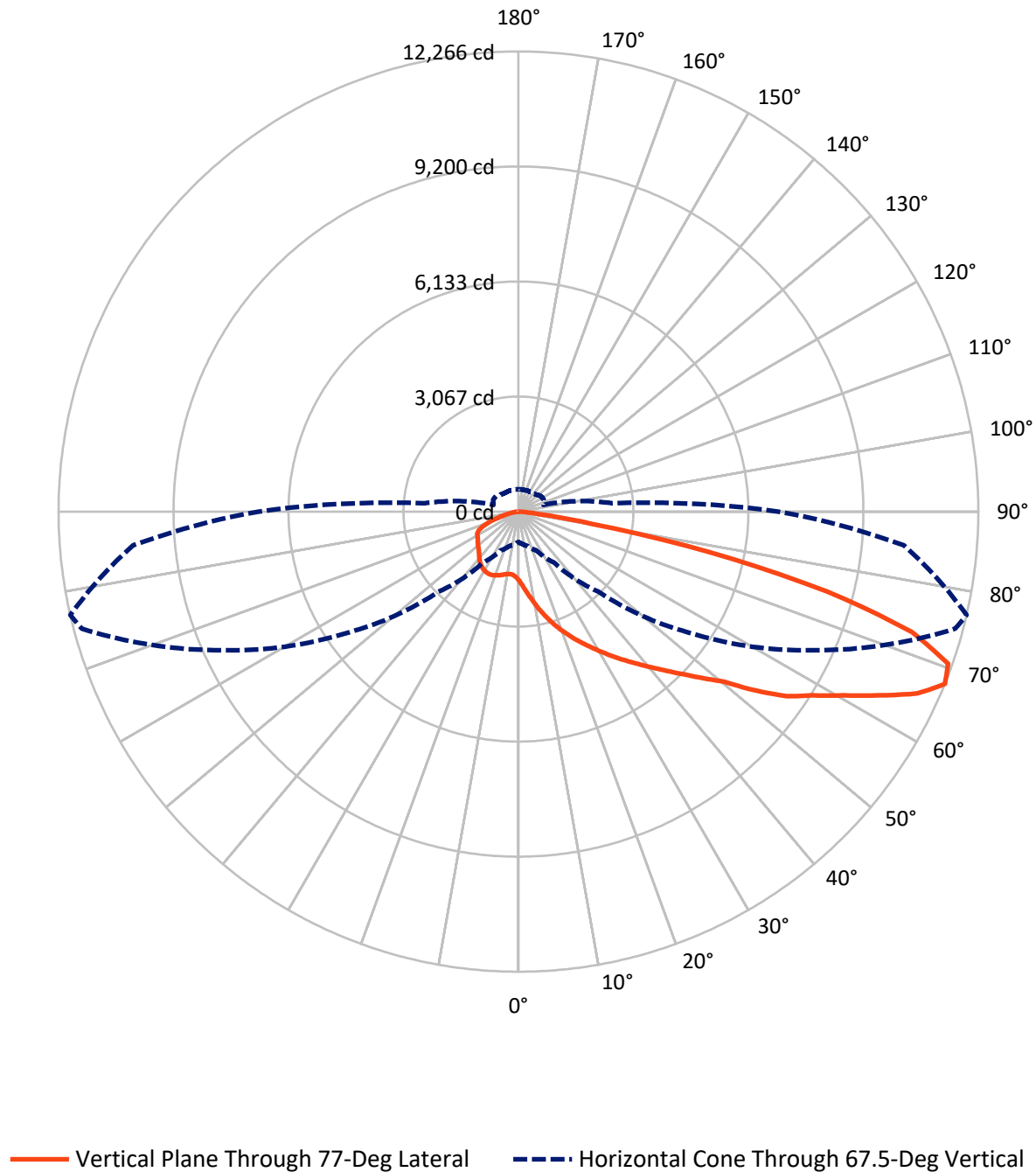
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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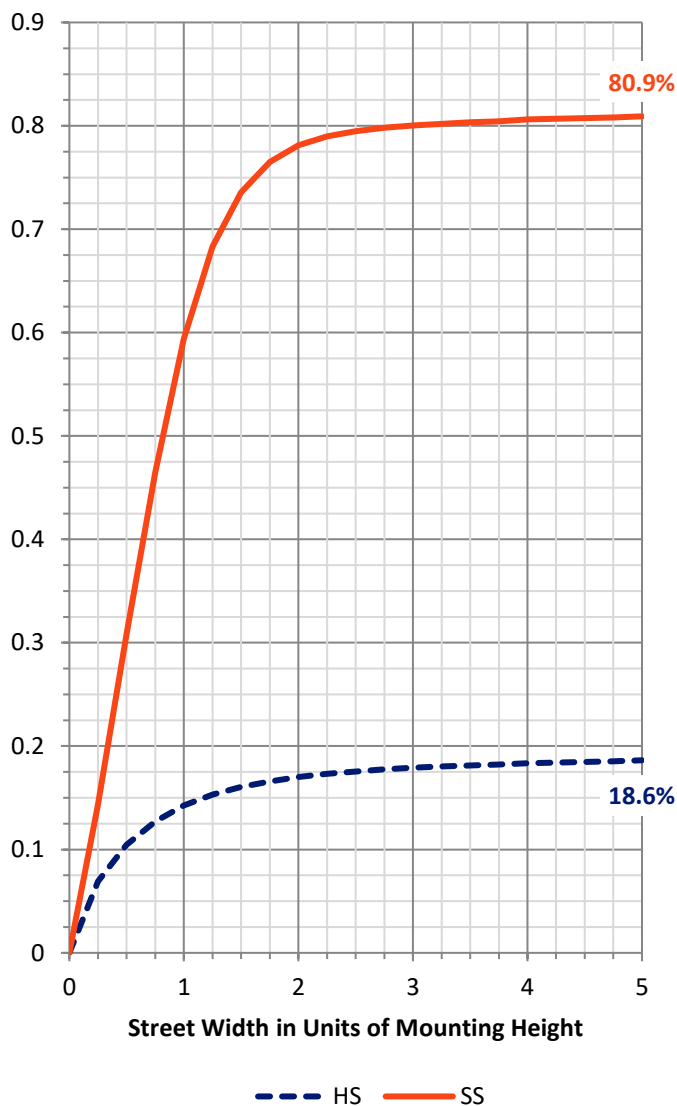
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2957.8	0.0	2957.8
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	12678.6	0.0	12678.6
	% Fixture	81.1	0.0	81.1
Total	Lumens	15636.4	0.0	15636.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.6	1.3
10°-20°	706.5	4.5
20°-30°	1333.9	8.5
30°-40°	2148.9	13.7
40°-50°	2939.3	18.8
50°-60°	3315.5	21.2
60°-70°	3094.6	19.8
70°-80°	1696.4	10.8
80°-90°	204.6	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°	15636.4	100.0
0°-180°	15636.4	100.0

Coefficient of Utilization



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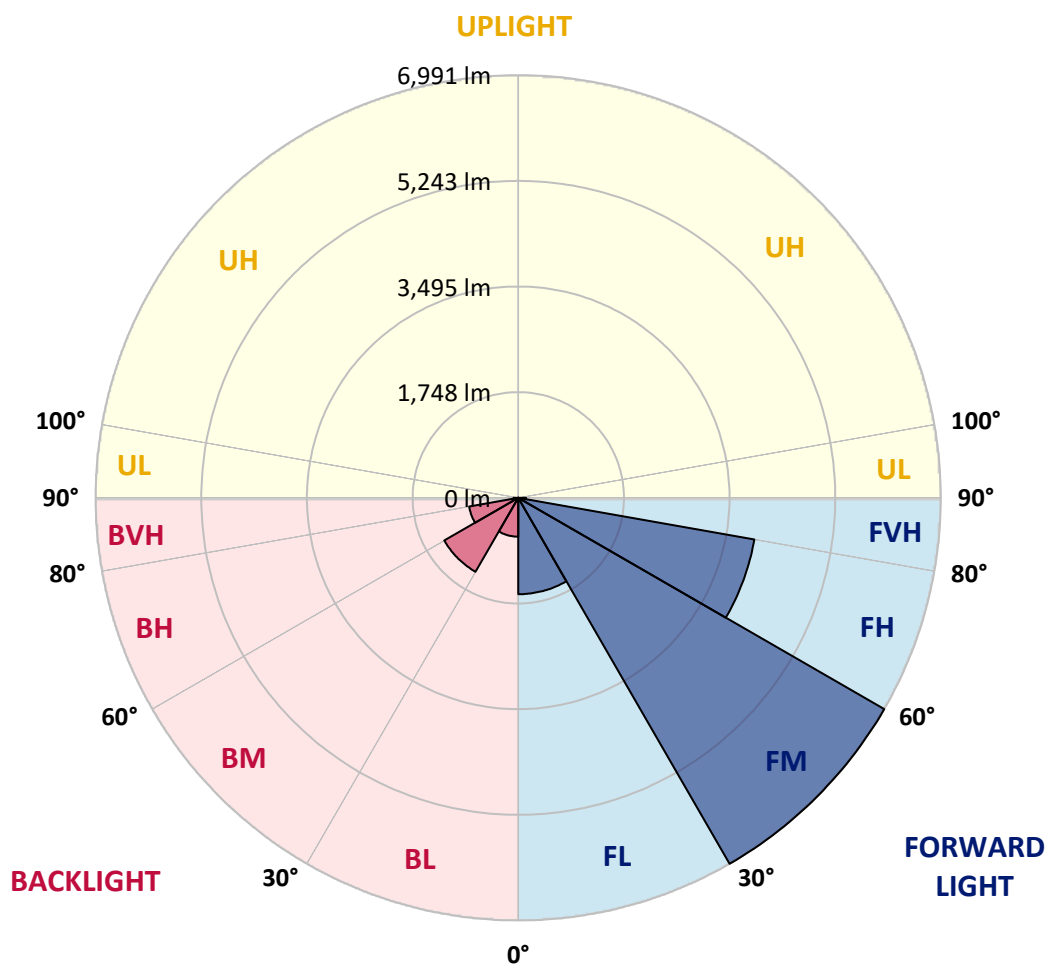
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1593.9	10.2			
FM	(30°-60°)	6990.8	44.7			
FH	(60°-80°)	3965.8	25.4			G2/5000
FVH	(80°-90°)	128.0	0.8			G2/225
BL	(0°-30°)	643.1	4.1	B2/1000		
BM	(30°-60°)	1412.9	9.0	B2/2500		
BH	(60°-80°)	825.2	5.3	B2/1000		G2/1000
BVH	(80°-90°)	76.7	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6
2.5°	2297.1	2313.2	2293.1	2293.1	2225.3	2189.8	2122.0	2070.3	1977.5	1961.3	1900.0
5°	2715.2	2735.4	2707.1	2695.0	2615.2	2541.7	2427.9	2315.7	2150.2	2133.2	1988.8
7.5°	3038.9	3064.7	3039.7	3026.8	2955.8	2873.4	2740.2	2583.6	2350.4	2317.3	2108.2
10°	3302.9	3306.9	3298.8	3303.7	3247.9	3180.2	3043.7	2861.3	2570.0	2524.8	2252.7
12.5°	3452.1	3470.8	3486.8	3516.0	3506.2	3464.3	3341.6	3123.7	2802.4	2744.2	2410.1
15°	3522.4	3554.7	3591.0	3657.9	3712.0	3722.5	3628.9	3405.4	3038.9	2968.7	2569.2
17.5°	3547.4	3578.1	3635.4	3732.2	3848.5	3926.8	3884.7	3678.9	3272.9	3192.3	2736.2
20°	3674.1	3683.0	3717.7	3809.7	3935.6	4065.6	4097.0	3942.0	3504.6	3413.4	2909.0
22.5°	3945.3	3927.6	3937.2	3979.3	4069.6	4195.5	4267.4	4174.5	3742.7	3637.8	3083.3
25°	4393.3	4341.6	4289.9	4241.6	4287.6	4358.6	4440.1	4407.0	3992.2	3858.9	3259.2
27.5°	4959.1	4896.1	4782.3	4623.3	4567.6	4592.6	4629.0	4622.5	4223.0	4088.2	3440.8
30°	5516.0	5442.5	5306.9	5076.9	4930.0	4863.8	4836.4	4817.8	4474.0	4330.3	3624.1
32.5°	5960.8	5902.7	5769.4	5511.9	5298.8	5185.9	5094.7	5028.4	4736.3	4592.6	3817.8
35°	6349.8	6295.7	6143.1	5862.3	5630.6	5510.4	5390.9	5249.6	5009.1	4863.8	4026.0
37.5°	6704.9	6650.8	6441.8	6149.6	5916.3	5833.2	5726.7	5486.9	5282.7	5145.5	4246.4
40°	6929.3	6917.2	6721.8	6391.0	6148.8	6107.7	6072.1	5762.1	5586.2	5458.7	4488.5
42.5°	6986.6	7013.3	6858.3	6586.2	6355.4	6322.3	6405.4	6073.7	5926.9	5805.0	4763.0
45°	6848.6	6925.3	6823.5	6638.7	6502.3	6484.6	6700.9	6414.3	6303.7	6192.4	5093.8
47.5°	6499.1	6629.1	6587.1	6561.2	6541.9	6618.5	6960.8	6776.0	6730.8	6633.9	5471.7
50°	5793.7	6039.8	6113.3	6276.4	6463.5	6722.7	7197.2	7170.7	7229.5	7132.0	5931.7
52.5°	4574.1	4913.0	5339.2	5747.7	6223.1	6688.0	7457.2	7737.2	7985.9	7932.6	6662.9
55°	3775.8	3928.3	4256.1	5005.1	5756.5	6541.9	7574.2	8194.9	8736.5	8688.9	7217.4
57.5°	3162.3	3298.8	3500.6	4126.1	5051.1	6210.2	7646.8	8474.2	9250.6	9245.8	7764.7
60°	2504.6	2649.0	2855.6	3298.8	4227.0	5637.1	7630.7	8792.1	9906.8	9947.2	8432.2
62.5°	1762.0	1921.0	2150.2	2563.5	3385.2	4894.5	7301.4	9022.3	10679.3	10789.0	9235.4
65°	1158.2	1263.2	1435.9	1792.6	2522.3	3939.7	6672.6	9052.1	11505.8	11691.5	9989.1
67.5°	812.0	852.4	954.1	1147.8	1662.8	3021.1	5671.0	8742.9	12057.1	12266.2	10316.1
70°	633.7	653.7	705.4	782.9	1044.5	2031.5	4345.7	7939.0	11939.2	12157.1	9974.7
72.5°	547.2	566.6	586.0	595.6	700.6	1254.3	2943.6	6637.9	10829.4	10977.1	8672.7
75°	496.4	501.2	517.4	514.1	534.3	813.6	1699.0	4836.4	8544.4	8493.6	6402.3
77.5°	417.3	423.7	450.4	446.4	474.6	556.2	882.2	3121.2	5539.4	5194.0	3563.5
80°	353.5	356.8	385.8	381.0	412.5	402.7	450.4	1590.9	2349.6	1990.4	1027.5
82.5°	122.7	151.7	294.6	303.5	314.8	243.7	259.9	648.9	717.5	549.7	215.6
85°	59.8	63.8	150.2	213.1	212.3	122.7	126.7	231.6	226.0	177.5	71.9
87.5°	9.6	12.1	17.7	83.1	66.2	32.3	43.6	45.2	46.8	40.4	16.1
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°	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6	1834.6
2.5°	1854.8	1814.5	1729.7	1651.4	1590.1	1531.1	1498.0	1469.8	1453.7	1450.5	1450.5
5°	1904.9	1821.7	1667.6	1537.6	1452.8	1389.9	1356.8	1335.8	1325.3	1318.9	1318.0
7.5°	1976.7	1854.8	1635.3	1487.6	1398.8	1353.6	1336.6	1333.4	1332.6	1333.4	1335.8
10°	2075.9	1908.9	1632.0	1475.5	1401.2	1376.2	1375.3	1376.2	1379.4	1380.2	1381.0
12.5°	2183.4	1964.6	1644.9	1485.9	1431.8	1418.2	1415.7	1414.9	1417.4	1418.9	1419.7
15°	2300.3	2038.0	1666.8	1508.6	1465.7	1451.2	1448.8	1444.0	1443.2	1442.4	1441.6
17.5°	2420.6	2110.7	1690.9	1532.8	1487.6	1467.4	1458.5	1447.2	1438.3	1435.9	1438.3
20°	2542.5	2182.5	1708.0	1544.9	1489.2	1460.9	1443.2	1423.8	1408.5	1399.5	1402.8
22.5°	2672.5	2257.6	1718.4	1541.6	1474.7	1435.9	1403.6	1381.0	1357.6	1342.2	1343.1
25°	2799.2	2323.0	1717.6	1524.7	1446.4	1397.2	1356.0	1327.0	1294.7	1278.5	1278.5
27.5°	2921.0	2381.9	1697.4	1494.9	1406.0	1351.2	1302.0	1267.2	1235.7	1220.4	1219.5
30°	3046.9	2431.1	1665.9	1451.2	1358.4	1297.9	1243.8	1213.9	1185.7	1171.2	1170.3
32.5°	3172.1	2476.3	1621.6	1397.2	1303.5	1245.4	1192.2	1164.7	1147.8	1147.8	1148.5
35°	3304.4	2507.8	1562.6	1334.2	1245.4	1189.7	1147.8	1131.6	1130.0	1120.3	1117.9
37.5°	3444.1	2528.0	1490.8	1269.7	1188.1	1135.6	1122.8	1103.4	1087.2	1066.2	1063.0
40°	3591.0	2548.1	1404.5	1202.6	1127.6	1098.5	1092.9	1067.0	1021.0	969.3	962.1
42.5°	3769.3	2561.9	1314.9	1135.6	1063.8	1054.1	1062.2	1017.8	944.3	905.6	906.4
45°	3976.0	2584.4	1232.5	1069.5	998.5	998.5	1032.4	974.3	913.7	889.5	893.5
47.5°	4243.9	2636.9	1155.8	996.8	937.9	954.1	966.2	921.8	887.9	858.0	857.2
50°	4631.4	2762.9	1076.8	923.3	891.9	924.1	907.2	881.4	841.8	817.6	815.2
52.5°	5112.4	2837.1	1006.6	857.2	852.4	884.7	860.4	836.2	806.4	774.1	767.6
55°	5440.1	2850.8	947.6	808.7	825.7	822.5	813.6	791.8	775.6	732.9	733.7
57.5°	5806.6	2878.3	899.1	779.7	808.7	773.3	770.0	751.4	730.4	701.4	691.7
60°	6244.8	2921.0	857.2	768.4	794.3	741.0	724.8	717.5	696.6	682.0	686.0
62.5°	6722.7	2959.8	814.4	770.0	777.3	709.5	685.2	682.9	669.9	665.1	665.1
65°	7048.7	2854.0	761.2	768.4	750.6	677.2	646.6	645.8	635.2	633.7	632.8
67.5°	6934.9	2519.0	689.3	745.8	723.2	644.9	611.0	607.8	594.1	594.9	594.9
70°	6365.1	2041.3	590.0	690.1	689.3	615.8	573.9	563.3	544.8	548.1	551.2
72.5°	5296.5	1512.6	456.8	597.3	635.2	589.2	531.1	514.1	490.8	493.9	493.1
75°	3825.0	1028.3	332.5	454.4	552.9	557.7	489.1	460.0	431.8	436.6	438.3
77.5°	1957.3	582.7	244.6	313.1	434.3	506.9	451.2	412.5	406.0	451.2	444.7
80°	638.5	292.2	169.5	219.6	285.0	414.9	395.5	351.1	349.5	360.0	309.1
82.5°	190.4	123.5	109.0	144.5	157.4	318.1	341.4	265.6	228.4	240.6	248.6
85°	65.4	59.8	62.1	71.9	75.0	186.4	238.9	176.0	166.3	183.3	180.8
87.5°	15.4	21.0	17.7	16.1	16.1	45.2	92.9	73.5	101.7	67.8	65.4
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)