

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: P960942

Luminaire Tested: **NAV-SB1D-750-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960942
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-SB1D-750-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 5000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11243.2 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - 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

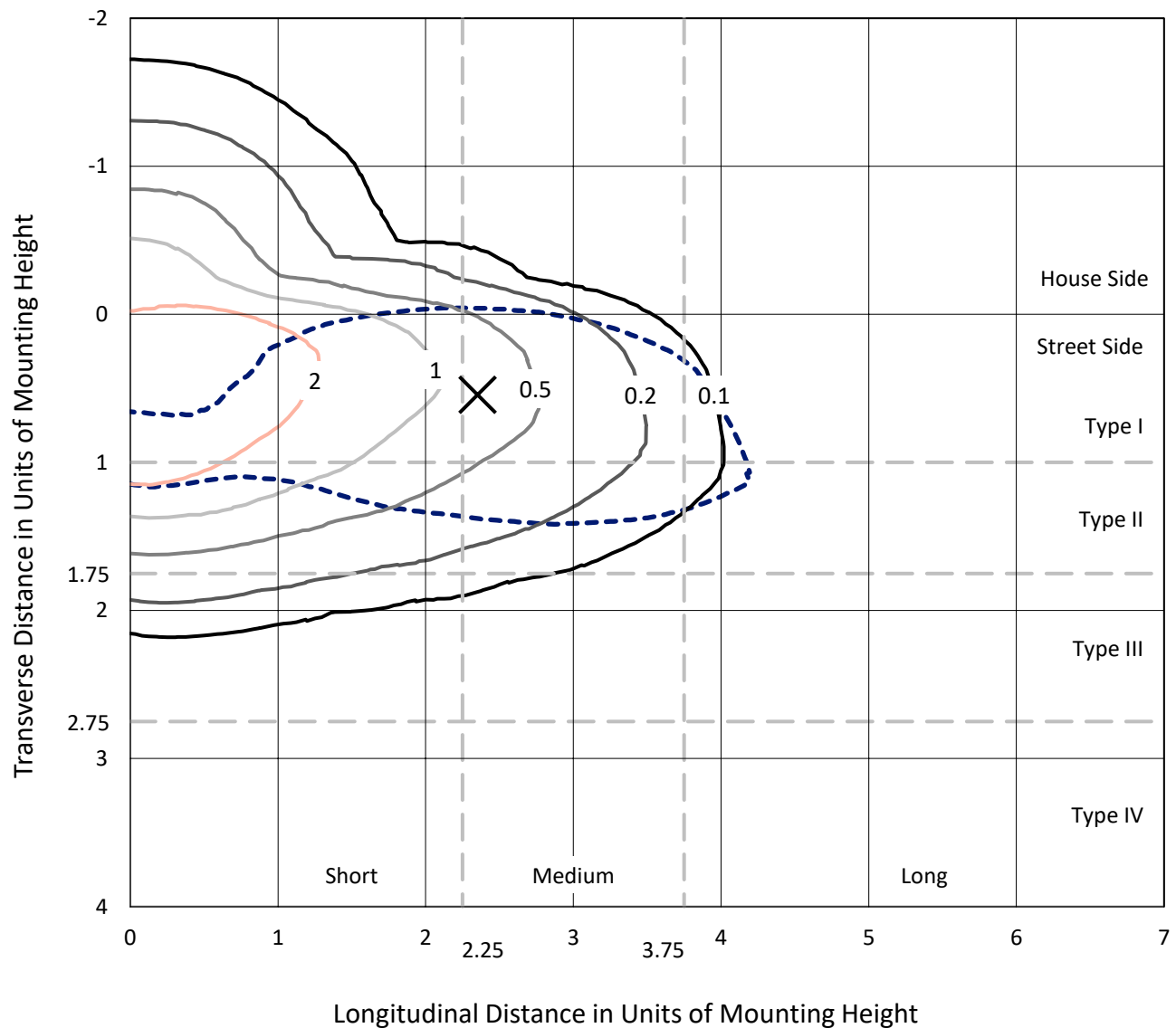


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Iso-Footcandle Lines of Horizontal Illumination

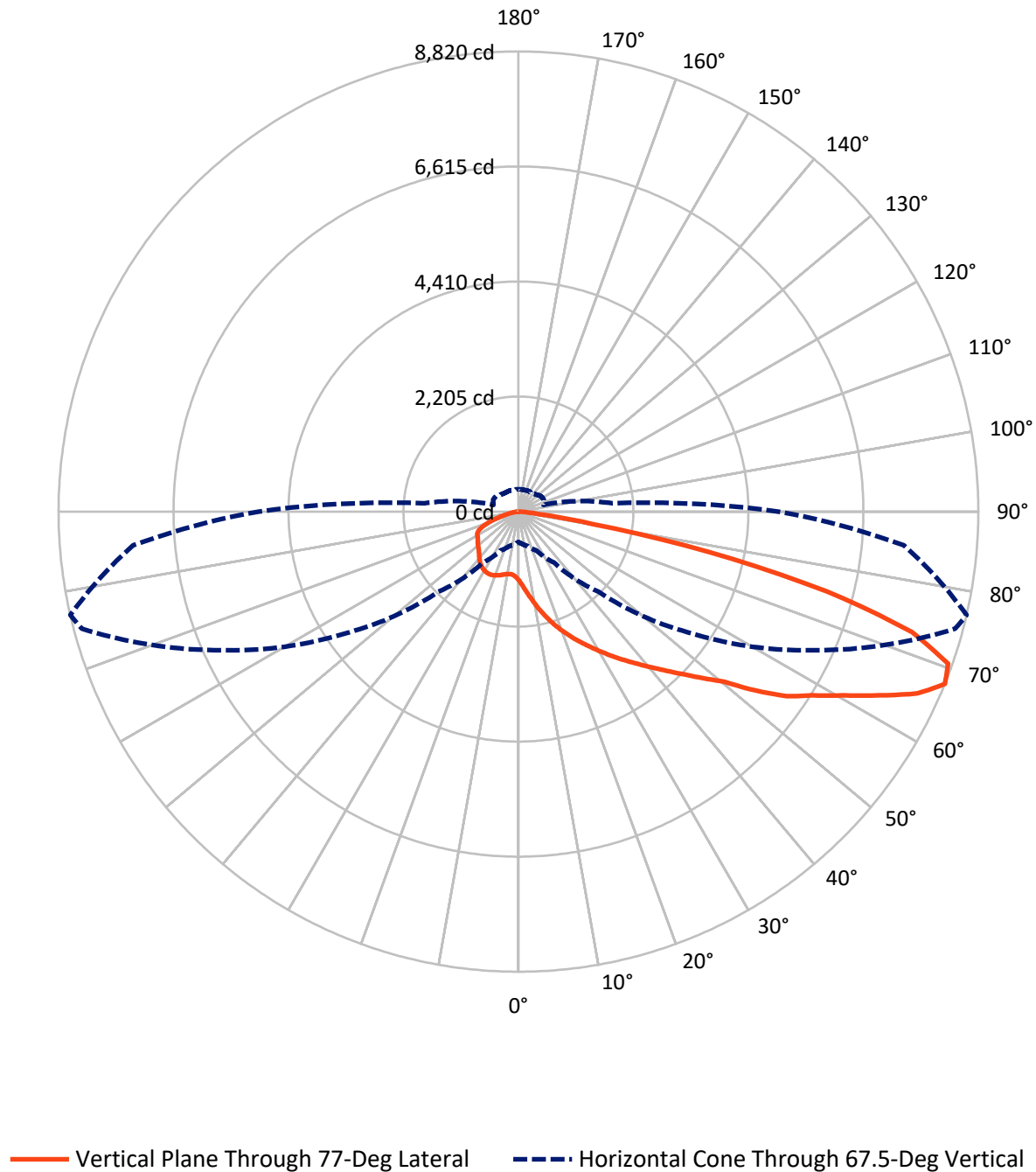
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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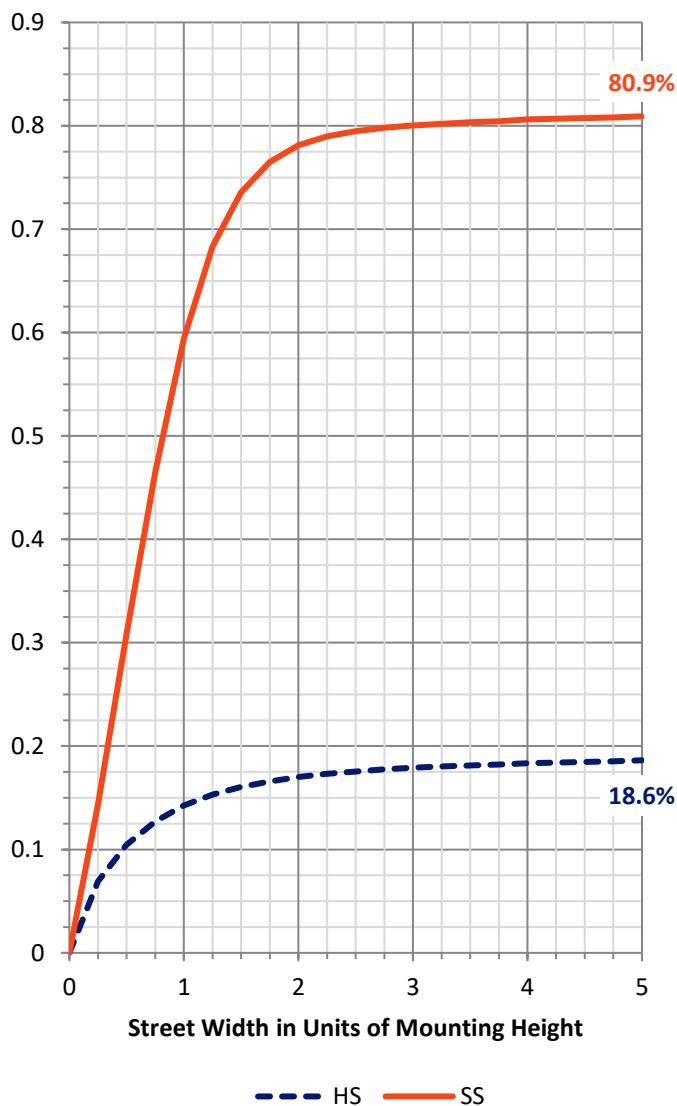
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2126.8	0.0	2126.8
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	9116.5	0.0	9116.5
	% Fixture	81.1	0.0	81.1
Total	Lumens	11243.2	0.0	11243.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.4	1.3
10°-20°	508.0	4.5
20°-30°	959.1	8.5
30°-40°	1545.1	13.7
40°-50°	2113.5	18.8
50°-60°	2384.0	21.2
60°-70°	2225.2	19.8
70°-80°	1219.8	10.8
80°-90°	147.1	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°	11243.2	100.0
0°-180°	11243.2	100.0

Coefficient of Utilization



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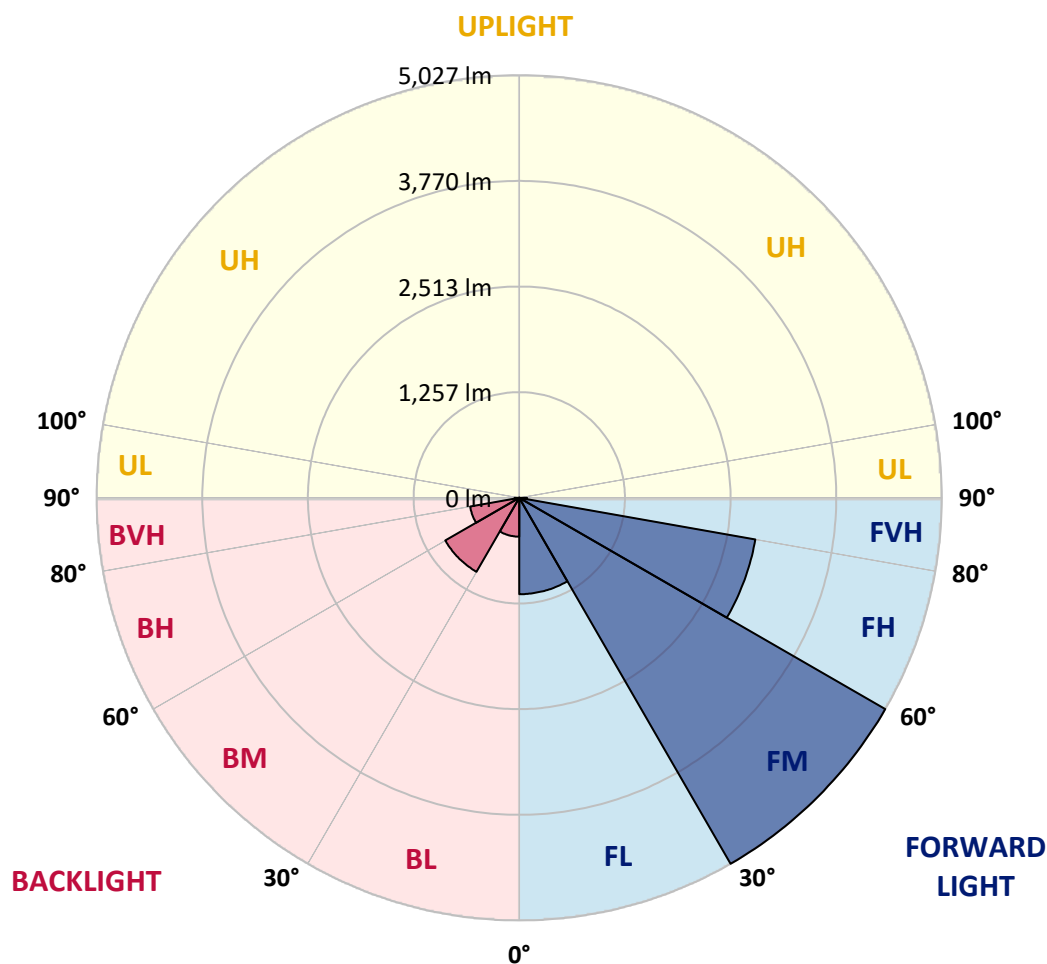
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1146.1	10.2			
FM	(30°-60°)	5026.7	44.7			
FH	(60°-80°)	2851.6	25.4			G2/5000
FVH	(80°-90°)	92.0	0.8			G1/100
BL	(0°-30°)	462.4	4.1	B1/500		
BM	(30°-60°)	1015.9	9.0	B2/2500		
BH	(60°-80°)	593.3	5.3	B2/1000		G2/1000
BVH	(80°-90°)	55.1	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°	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2
2.5°	1651.7	1663.4	1648.8	1648.8	1600.1	1574.5	1525.8	1488.6	1421.9	1410.3	1366.2
5°	1952.3	1966.9	1946.6	1937.9	1880.4	1827.6	1745.8	1665.1	1546.1	1533.9	1430.1
7.5°	2185.1	2203.6	2185.7	2176.4	2125.3	2066.1	1970.4	1857.8	1690.0	1666.2	1516.0
10°	2374.8	2377.8	2372.0	2375.4	2335.4	2286.7	2188.6	2057.4	1847.9	1815.4	1619.8
12.5°	2482.2	2495.6	2507.1	2528.1	2521.1	2491.0	2402.7	2246.0	2015.0	1973.2	1733.0
15°	2532.8	2555.9	2582.1	2630.3	2669.1	2676.7	2609.3	2448.6	2185.1	2134.6	1847.4
17.5°	2550.7	2572.8	2614.0	2683.7	2767.2	2823.5	2793.3	2645.3	2353.4	2295.4	1967.5
20°	2641.8	2648.2	2673.2	2739.3	2829.9	2923.3	2946.0	2834.5	2520.0	2454.4	2091.6
22.5°	2836.9	2824.1	2831.0	2861.2	2926.3	3016.8	3068.4	3001.7	2691.1	2615.7	2217.0
25°	3158.9	3121.8	3084.6	3049.9	3082.9	3134.0	3192.6	3168.8	2870.5	2774.8	2343.6
27.5°	3565.8	3520.6	3438.7	3324.4	3284.3	3302.3	3328.4	3323.8	3036.5	2939.6	2474.1
30°	3966.2	3913.4	3816.0	3650.5	3544.9	3497.3	3477.6	3464.2	3217.0	3113.6	2605.9
32.5°	4286.0	4244.2	4148.5	3963.4	3810.1	3728.8	3663.2	3615.7	3405.6	3302.3	2745.2
35°	4565.8	4526.9	4417.2	4215.2	4048.6	3962.1	3876.2	3774.8	3601.7	3497.3	2894.9
37.5°	4821.1	4782.2	4632.0	4421.8	4254.1	4194.3	4117.7	3945.3	3798.5	3699.8	3053.4
40°	4982.4	4973.8	4833.3	4595.4	4421.2	4391.6	4366.1	4143.3	4016.8	3925.0	3227.4
42.5°	5023.6	5042.8	4931.4	4735.8	4569.9	4546.1	4605.8	4367.3	4261.6	4174.0	3424.7
45°	4924.4	4979.6	4906.5	4773.5	4675.4	4662.7	4818.2	4612.2	4532.7	4452.6	3662.7
47.5°	4673.2	4766.6	4736.4	4717.9	4703.9	4759.1	5005.1	4872.2	4839.7	4770.0	3934.4
50°	4165.9	4342.9	4395.7	4513.0	4647.6	4833.9	5175.1	5156.0	5198.4	5128.2	4265.1
52.5°	3288.9	3532.7	3839.1	4132.8	4474.6	4808.9	5362.1	5563.4	5742.2	5703.9	4791.0
55°	2714.9	2824.7	3060.2	3598.9	4139.2	4703.9	5446.2	5892.5	6281.9	6247.7	5189.7
57.5°	2273.9	2372.0	2517.1	2966.9	3632.0	4465.4	5498.4	6093.3	6651.6	6648.2	5583.2
60°	1800.9	1904.8	2053.4	2372.0	3039.4	4053.3	5486.8	6322.0	7123.4	7152.4	6063.1
62.5°	1266.9	1381.3	1546.1	1843.3	2434.1	3519.3	5250.0	6487.3	7678.9	7757.8	6640.6
65°	832.8	908.3	1032.5	1289.0	1813.6	2832.8	4797.9	6508.9	8273.2	8406.6	7182.7
67.5°	583.8	612.8	686.0	825.3	1195.6	2172.3	4077.7	6286.5	8669.6	8819.9	7417.7
70°	455.6	470.1	507.3	562.9	751.0	1460.8	3124.7	5708.5	8584.8	8741.5	7172.2
72.5°	393.5	407.4	421.4	428.3	503.8	901.9	2116.6	4772.9	7786.8	7893.0	6236.1
75°	356.9	360.4	372.0	369.7	384.2	585.0	1221.7	3477.6	6143.7	6107.3	4603.5
77.5°	300.0	304.7	323.8	320.9	341.2	399.9	634.4	2244.2	3983.0	3734.7	2562.3
80°	254.2	256.6	277.5	274.0	296.5	289.6	323.8	1143.9	1689.4	1431.2	738.8
82.5°	88.3	109.1	211.9	218.2	226.3	175.3	186.9	466.6	516.0	395.2	155.0
85°	42.9	45.8	107.9	153.2	152.6	88.3	91.1	166.6	162.5	127.7	51.7
87.5°	7.0	8.7	12.8	59.8	47.6	23.2	31.4	32.5	33.6	29.0	11.6
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°	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2	1319.2
2.5°	1333.7	1304.6	1243.7	1187.5	1143.3	1101.0	1077.2	1056.9	1045.3	1042.9	1042.9
5°	1369.7	1309.8	1199.0	1105.6	1044.7	999.4	975.6	960.5	952.9	948.3	947.7
7.5°	1421.4	1333.7	1175.8	1069.6	1005.7	973.2	961.1	958.8	958.2	958.8	960.5
10°	1492.7	1372.6	1173.5	1060.9	1007.5	989.5	988.9	989.5	991.9	992.4	993.0
12.5°	1569.9	1412.7	1182.7	1068.5	1029.6	1019.7	1017.9	1017.4	1019.2	1020.3	1020.9
15°	1654.0	1465.4	1198.4	1084.8	1053.9	1043.6	1041.8	1038.3	1037.7	1037.1	1036.6
17.5°	1740.6	1517.6	1215.9	1102.1	1069.6	1055.1	1048.7	1040.6	1034.2	1032.5	1034.2
20°	1828.2	1569.3	1228.1	1110.8	1070.8	1050.4	1037.7	1023.8	1012.7	1006.3	1008.7
22.5°	1921.6	1623.3	1235.6	1108.5	1060.4	1032.5	1009.2	993.0	976.2	965.1	965.8
25°	2012.7	1670.3	1235.0	1096.3	1040.1	1004.6	975.0	954.2	930.9	919.3	919.3
27.5°	2100.3	1712.7	1220.5	1074.8	1011.0	971.5	936.1	911.2	888.6	877.5	876.9
30°	2190.9	1748.0	1197.9	1043.6	976.7	933.3	894.3	872.9	852.6	842.1	841.5
32.5°	2280.8	1780.5	1165.9	1004.6	937.3	895.5	857.2	837.4	825.3	825.3	825.8
35°	2376.1	1803.2	1123.6	959.4	895.5	855.5	825.3	813.6	812.5	805.5	803.8
37.5°	2476.4	1817.7	1071.9	913.0	854.3	816.6	807.3	793.3	781.8	766.7	764.3
40°	2582.1	1832.2	1009.8	864.8	810.8	789.9	785.9	767.2	734.2	697.0	691.8
42.5°	2710.3	1842.1	945.5	816.6	765.0	758.0	763.7	731.8	679.1	651.2	651.8
45°	2858.9	1858.3	886.2	769.0	717.9	717.9	742.3	700.5	657.0	639.6	642.5
47.5°	3051.6	1896.0	831.1	716.8	674.3	686.0	694.7	662.8	638.4	616.9	616.3
50°	3330.1	1986.7	774.2	663.9	641.3	664.5	652.3	633.8	605.4	587.9	586.2
52.5°	3676.1	2040.0	723.8	616.3	612.8	636.1	618.7	601.3	579.7	556.6	552.0
55°	3911.7	2049.9	681.3	581.5	593.7	591.4	585.0	569.4	557.7	527.0	527.6
57.5°	4175.1	2069.6	646.6	560.7	581.5	556.0	553.7	540.3	525.2	504.3	497.3
60°	4490.3	2100.3	616.3	552.5	571.1	532.8	521.2	516.0	500.8	490.5	493.3
62.5°	4833.9	2128.2	585.6	553.7	558.9	510.1	492.7	491.0	481.7	478.3	478.3
65°	5068.3	2052.2	547.2	552.5	539.8	487.0	464.8	464.3	456.7	455.6	455.0
67.5°	4986.5	1811.4	495.6	536.3	520.0	463.7	439.3	437.1	427.1	427.7	427.7
70°	4576.8	1467.8	424.2	496.2	495.6	442.8	412.7	405.1	391.8	394.1	396.4
72.5°	3808.4	1087.6	328.5	429.5	456.7	423.6	381.9	369.7	352.9	355.2	354.6
75°	2750.4	739.4	239.1	326.8	397.6	401.1	351.7	330.8	310.5	314.0	315.2
77.5°	1407.4	419.0	175.9	225.2	312.2	364.5	324.4	296.5	291.9	324.4	319.8
80°	459.1	210.1	121.9	157.8	204.9	298.3	284.3	252.5	251.3	258.8	222.3
82.5°	136.9	88.8	78.3	103.9	113.2	228.7	245.5	191.0	164.2	172.9	178.8
85°	47.0	42.9	44.7	51.7	54.0	134.1	171.8	126.5	119.5	131.7	130.0
87.5°	11.1	15.1	12.8	11.6	11.6	32.5	66.7	52.8	73.1	48.8	47.0
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)