

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: P968938

Luminaire Tested: **NAV-SB5C-830-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968938
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25442.6 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 249.5
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

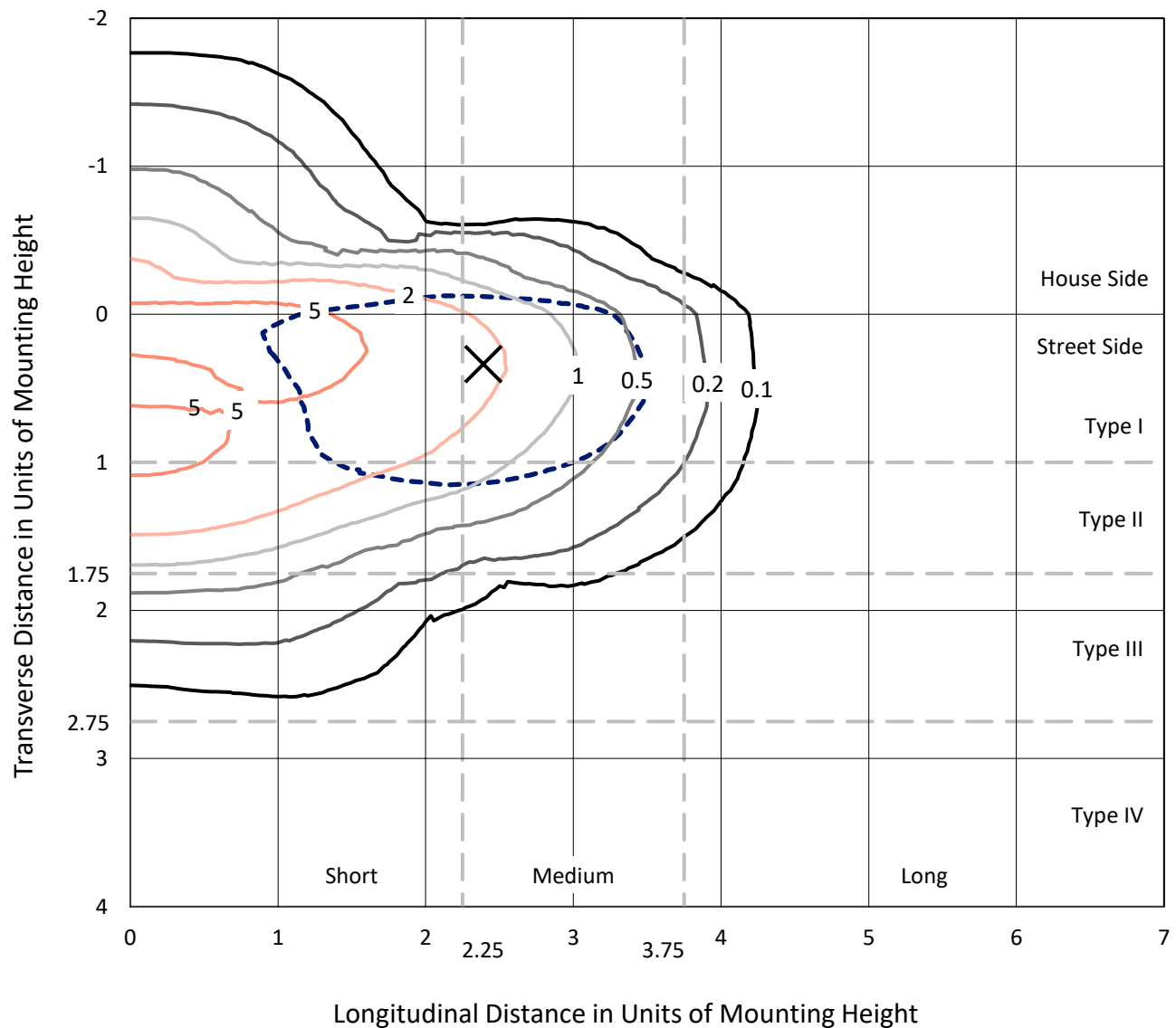


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Iso-Footcandle Lines of Horizontal Illumination

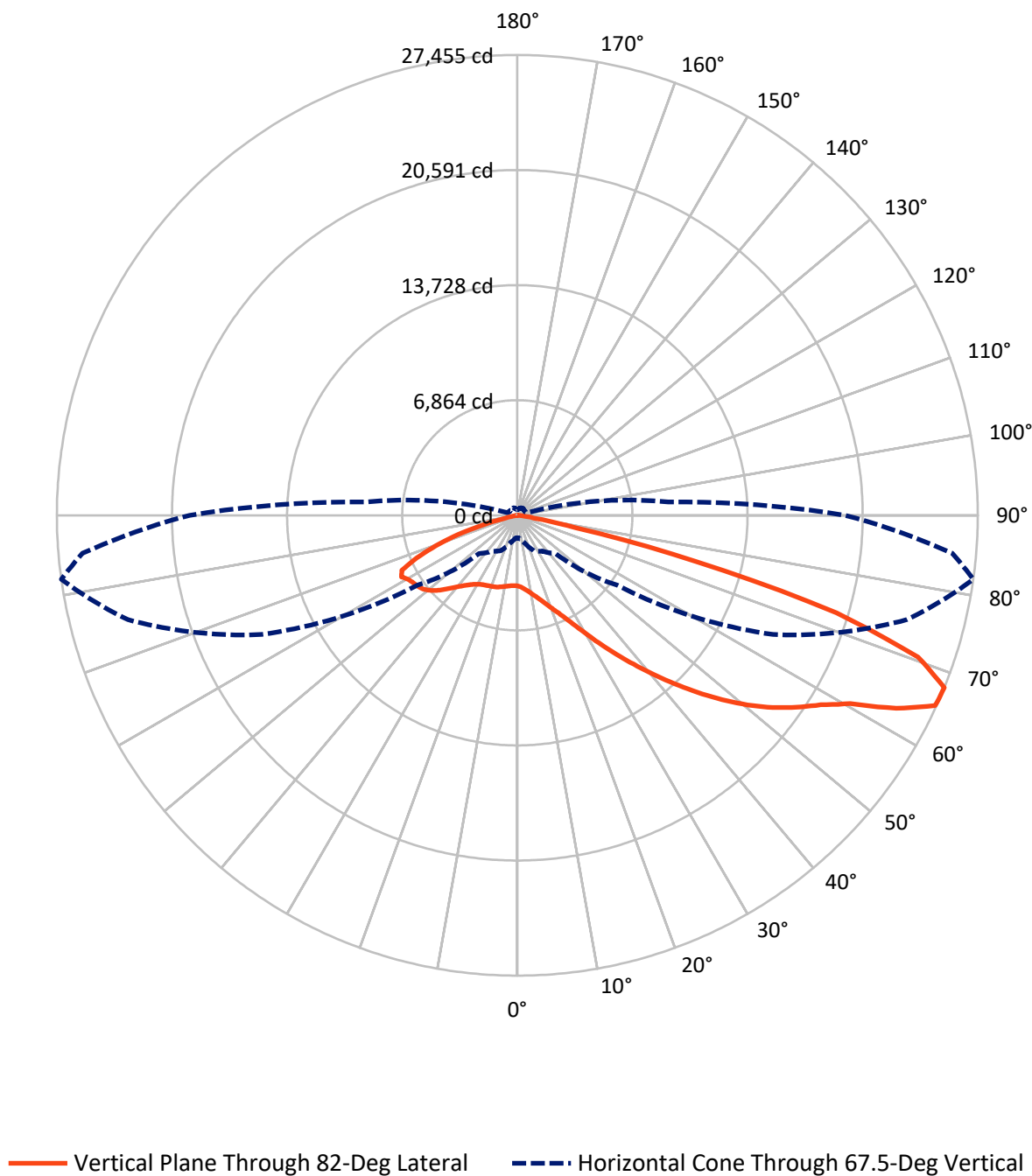
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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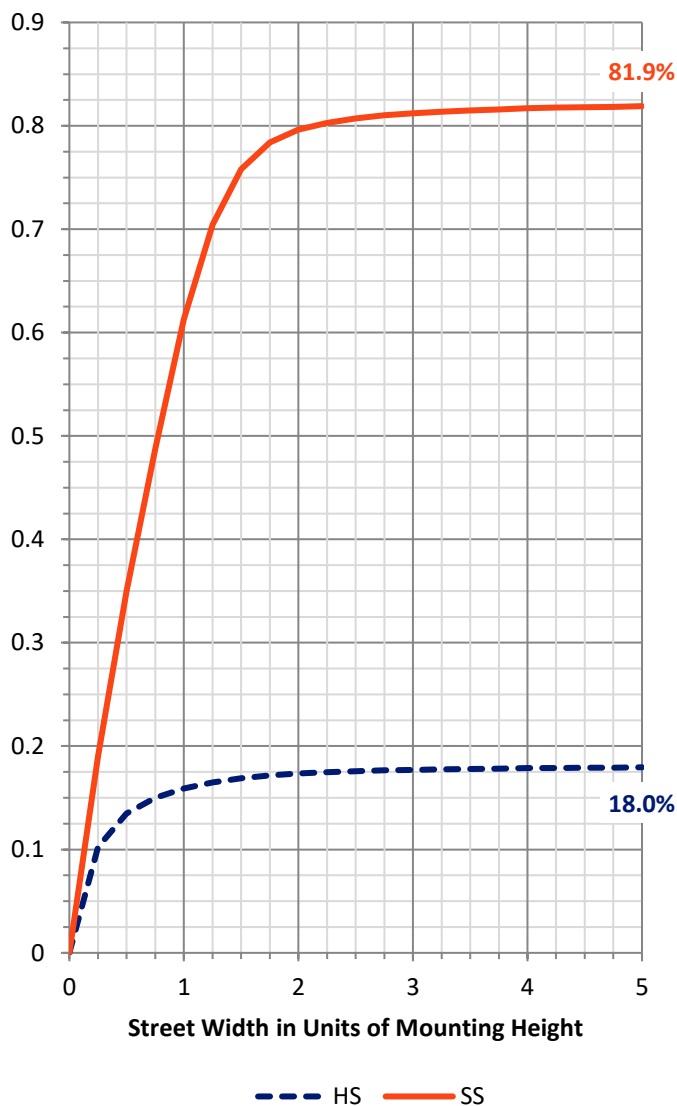
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4608.7	0.0	4608.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	20833.9	0.0	20833.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	25442.6	0.0	25442.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.5	1.5
10°-20°	975.8	3.8
20°-30°	1563.0	6.1
30°-40°	2763.8	10.9
40°-50°	4842.5	19.0
50°-60°	6458.5	25.4
60°-70°	6012.5	23.6
70°-80°	2307.6	9.1
80°-90°	143.3	0.6
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°	25442.6	100.0
0°-180°	25442.6	100.0

Coefficient of Utilization



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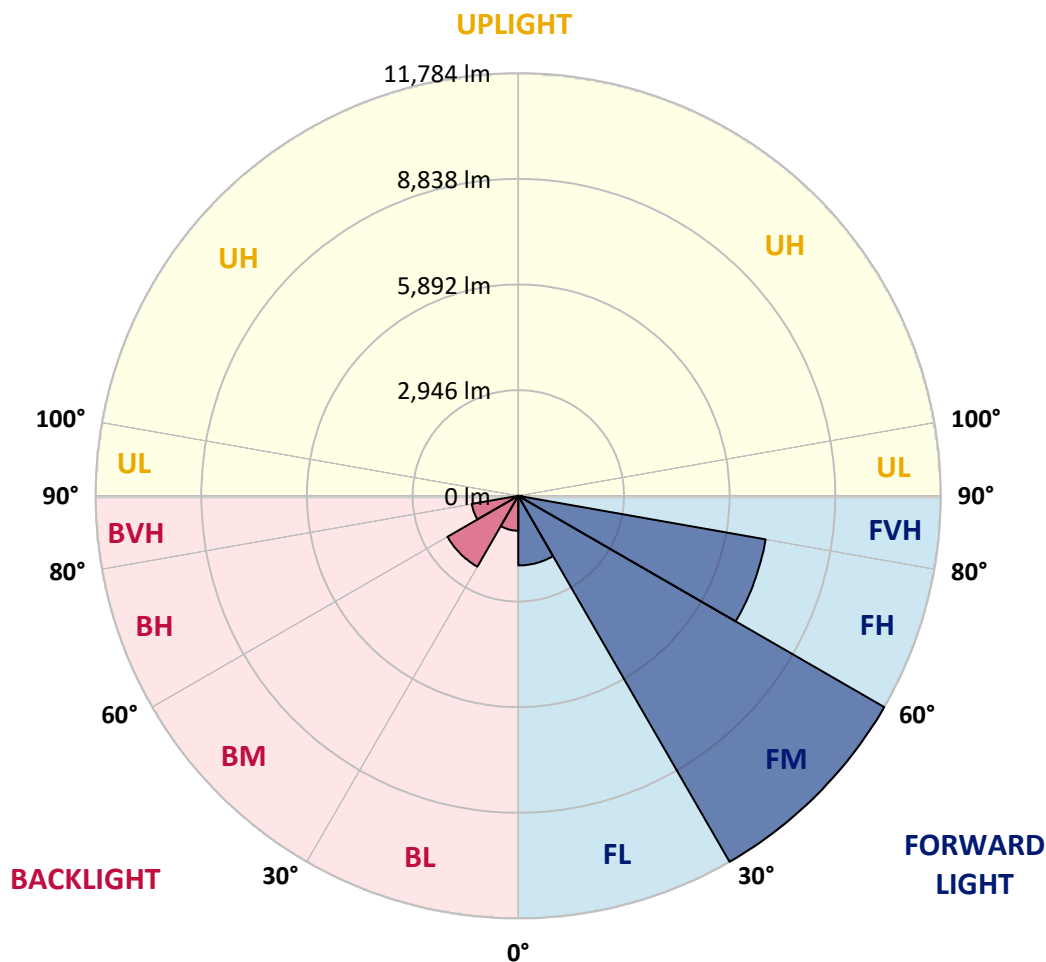
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1941.0	7.6			
FM	(30°-60°)	11784.0	46.3			
FH	(60°-80°)	7004.7	27.5			G3/7500
FVH	(80°-90°)	104.2	0.4			G2/225
BL	(0°-30°)	973.3	3.8	B2/1000		
BM	(30°-60°)	2280.8	9.0	B2/2500		
BH	(60°-80°)	1315.4	5.2	B3/2500		G3/2500
BVH	(80°-90°)	39.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0
2.5°	4455.0	4480.6	4465.9	4458.6	4445.7	4427.5	4412.8	4367.0	4319.3	4288.3	4277.2
5°	4544.6	4570.4	4568.5	4575.8	4585.0	4590.5	4586.9	4535.5	4467.8	4414.7	4383.5
7.5°	4467.8	4497.1	4520.9	4557.6	4621.6	4689.4	4722.4	4711.4	4641.8	4568.5	4530.1
10°	4249.8	4280.9	4337.7	4423.8	4559.3	4705.9	4828.7	4885.5	4841.5	4760.8	4707.7
12.5°	3850.4	3881.6	3993.3	4180.2	4407.3	4661.9	4896.4	5048.4	5059.4	4978.8	4916.5
15°	3401.7	3432.8	3551.8	3786.3	4132.5	4541.1	4933.0	5220.6	5317.7	5248.1	5173.0
17.5°	3123.2	3150.6	3240.4	3429.1	3790.0	4299.3	4920.2	5403.8	5625.4	5570.5	5480.8
20°	3038.9	3062.8	3104.9	3236.7	3537.2	4048.2	4836.0	5576.0	5957.0	5925.8	5825.1
22.5°	3128.7	3150.6	3163.6	3222.1	3410.8	3883.4	4729.7	5751.9	6341.7	6345.4	6222.6
25°	3335.7	3357.7	3343.0	3379.6	3462.1	3832.2	4689.4	5958.8	6825.3	6865.6	6726.4
27.5°	3676.5	3678.2	3643.5	3641.6	3654.4	3909.0	4731.5	6180.4	7435.2	7510.4	7338.2
30°	4359.6	4332.2	4198.5	4053.8	3987.9	4139.9	4848.8	6442.4	8155.2	8288.9	8072.7
32.5°	5412.9	5372.6	5127.3	4781.0	4432.9	4511.7	5059.4	6741.0	8939.2	9181.0	8917.2
35°	6556.0	6545.0	6288.6	5773.8	5165.7	5041.2	5402.0	7133.0	9794.6	10179.3	9866.0
37.5°	7618.4	7613.0	7466.4	6860.1	6120.1	5779.4	5951.6	7645.9	10710.5	11267.4	10897.4
40°	8589.3	8605.8	8459.2	7917.0	7171.5	6726.4	6698.9	8279.7	11729.0	12452.5	12012.9
42.5°	9428.3	9446.6	9298.2	8897.0	8210.1	7774.1	7616.6	9056.4	12723.6	13725.7	13205.5
45°	9998.0	10111.5	10089.6	9769.0	9276.2	8823.8	8719.4	10031.0	13857.6	15075.7	14465.7
47.5°	10159.2	10263.5	10428.5	10472.4	10172.0	9726.8	9851.4	11205.1	15004.3	16427.6	15733.3
50°	9761.7	9858.8	10201.3	10657.4	10866.2	10728.9	10952.3	12463.6	16178.5	17775.8	16977.1
52.5°	8977.7	9076.6	9508.8	10230.6	11082.4	11514.6	12056.9	13703.7	17316.0	19052.5	18155.0
55°	7843.8	7948.2	8503.2	9320.2	10670.2	11839.0	12978.3	14941.9	18358.3	20201.1	19217.4
57.5°	6301.4	6378.4	6955.3	8098.4	9633.5	11516.5	13657.9	16293.8	19340.1	21329.4	20270.7
60°	4106.9	4174.6	4845.1	6120.1	7915.2	10439.4	13793.4	17801.4	20644.4	22796.7	21690.3
62.5°	2731.2	2777.0	3174.5	4110.6	5574.2	8371.3	13000.3	19004.9	22556.8	25350.3	24124.8
65°	1873.9	1919.7	2317.2	2969.3	3601.3	5537.6	10719.7	18845.5	24289.6	27378.1	25929.1
67.5°	1337.2	1375.7	1712.8	2328.2	2606.7	3216.7	7266.7	16808.6	24040.6	27455.0	26026.2
70°	958.1	980.0	1258.5	1813.4	2071.7	1932.5	4041.0	12855.6	21049.2	25352.1	24044.2
72.5°	670.5	677.7	873.8	1381.2	1668.8	1410.5	1923.4	8570.9	15920.2	19898.8	18640.3
75°	454.3	463.4	588.0	1013.0	1339.1	1077.1	1018.4	4596.0	9345.8	11014.6	9873.4
77.5°	278.4	282.1	379.1	692.4	1002.0	820.6	655.8	1947.2	3616.0	3550.0	3026.1
80°	157.5	157.5	241.8	430.5	683.3	529.4	459.8	828.0	1144.9	1005.6	886.6
82.5°	87.9	89.8	175.9	267.4	452.4	313.2	252.8	382.8	494.6	437.8	381.0
85°	36.6	40.3	108.0	126.4	216.2	155.7	102.6	161.2	183.2	163.1	119.1
87.5°	3.7	5.5	33.0	23.8	25.6	31.2	14.7	31.2	25.6	25.6	18.3
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°	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0	4215.0
2.5°	4242.5	4215.0	4145.4	4064.7	3958.6	3907.2	3837.6	3790.0	3749.7	3753.3	3716.8
5°	4324.9	4255.3	4099.6	3905.4	3663.6	3491.5	3308.2	3181.8	3079.3	3057.3	3007.9
7.5°	4438.5	4328.6	4055.6	3705.7	3297.2	2987.7	2711.0	2533.4	2407.0	2366.7	2326.3
10°	4585.0	4425.6	3998.8	3454.8	2866.7	2472.9	2176.2	2037.0	1950.9	1921.6	1899.5
12.5°	4755.4	4537.4	3923.7	3148.9	2423.5	2044.3	1855.7	1786.0	1758.5	1749.4	1743.8
15°	4969.7	4676.6	3810.1	2786.2	2048.0	1782.4	1701.7	1692.6	1696.3	1692.6	1690.7
17.5°	5224.3	4828.7	3625.1	2412.4	1795.2	1648.6	1619.3	1626.7	1635.8	1634.0	1630.3
20°	5502.7	4978.8	3388.9	2081.0	1623.0	1553.4	1536.9	1544.2	1551.5	1547.9	1546.0
22.5°	5819.6	5140.1	3126.9	1822.7	1507.6	1465.4	1447.1	1448.9	1448.9	1441.7	1438.0
25°	6198.8	5317.7	2852.1	1639.5	1419.6	1386.7	1364.7	1357.4	1346.3	1324.4	1320.7
27.5°	6651.2	5506.4	2588.3	1511.3	1350.0	1318.9	1293.2	1274.9	1247.4	1210.8	1207.1
30°	7160.5	5735.4	2364.9	1430.6	1295.1	1263.9	1234.6	1207.1	1166.9	1121.0	1117.4
32.5°	7759.5	5980.9	2201.8	1377.5	1245.6	1212.7	1177.8	1144.9	1101.0	1055.1	1057.0
35°	8473.9	6277.6	2106.6	1340.9	1207.1	1163.2	1124.7	1088.0	1055.1	1014.9	1011.2
37.5°	9248.8	6592.6	2077.3	1322.6	1181.5	1113.8	1069.8	1044.2	1040.5	1016.7	1014.9
40°	10096.9	6966.3	2099.2	1311.6	1154.0	1066.1	1018.4	1013.0	1022.1	980.0	981.8
42.5°	10994.5	7409.6	2135.9	1298.8	1115.6	1018.4	972.7	972.7	965.3	906.7	906.7
45°	11965.3	7920.7	2172.5	1267.6	1069.8	970.9	936.0	923.2	892.1	835.3	833.4
47.5°	12943.5	8441.0	2200.0	1210.8	1014.9	930.6	899.4	870.1	824.3	773.1	771.2
50°	13872.2	8908.1	2170.6	1126.6	952.5	892.1	859.2	818.8	769.4	734.5	729.1
52.5°	14702.0	9312.8	2046.1	1027.7	886.6	851.8	822.5	780.3	740.0	703.5	699.8
55°	15423.8	9640.7	1826.3	934.2	828.0	817.0	787.7	734.5	679.6	648.4	644.8
57.5°	16116.2	9889.9	1551.5	857.3	774.9	778.5	734.5	687.0	635.6	602.7	599.0
60°	17037.6	10223.2	1273.0	785.9	718.1	729.1	681.4	646.7	582.5	540.4	534.8
62.5°	18510.4	10741.7	1011.2	697.9	652.1	655.8	635.6	593.5	516.6	467.1	463.4
65°	19679.0	10551.1	796.8	602.7	577.0	582.5	582.5	536.7	454.3	397.5	392.0
67.5°	19547.2	9034.5	635.6	509.2	505.5	509.2	522.0	483.6	403.0	357.2	349.8
70°	18006.6	7186.2	509.2	423.1	439.6	430.5	467.1	441.5	362.6	316.9	311.4
72.5°	14692.9	5176.7	388.4	349.8	337.0	351.7	421.3	397.5	302.3	250.9	245.5
75°	8585.6	2762.4	289.5	276.6	243.6	293.0	373.7	338.9	230.8	185.0	179.5
77.5°	2795.3	963.5	212.5	203.4	181.3	236.3	318.8	285.8	188.7	146.6	141.0
80°	749.2	291.3	144.7	133.8	117.3	175.9	252.8	227.1	135.5	95.2	93.4
82.5°	300.4	122.7	84.3	75.1	64.1	120.8	199.7	183.2	100.8	60.5	60.5
85°	97.1	40.3	31.2	23.8	29.3	75.1	119.1	124.5	71.4	31.2	23.8
87.5°	12.8	5.5	5.5	7.3	5.5	12.8	36.6	34.8	20.2	3.7	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)