

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: P964709

Luminaire Tested: **NAV-SB3C-830-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-830-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21047.3 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

Input Watts (W): 149.1
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

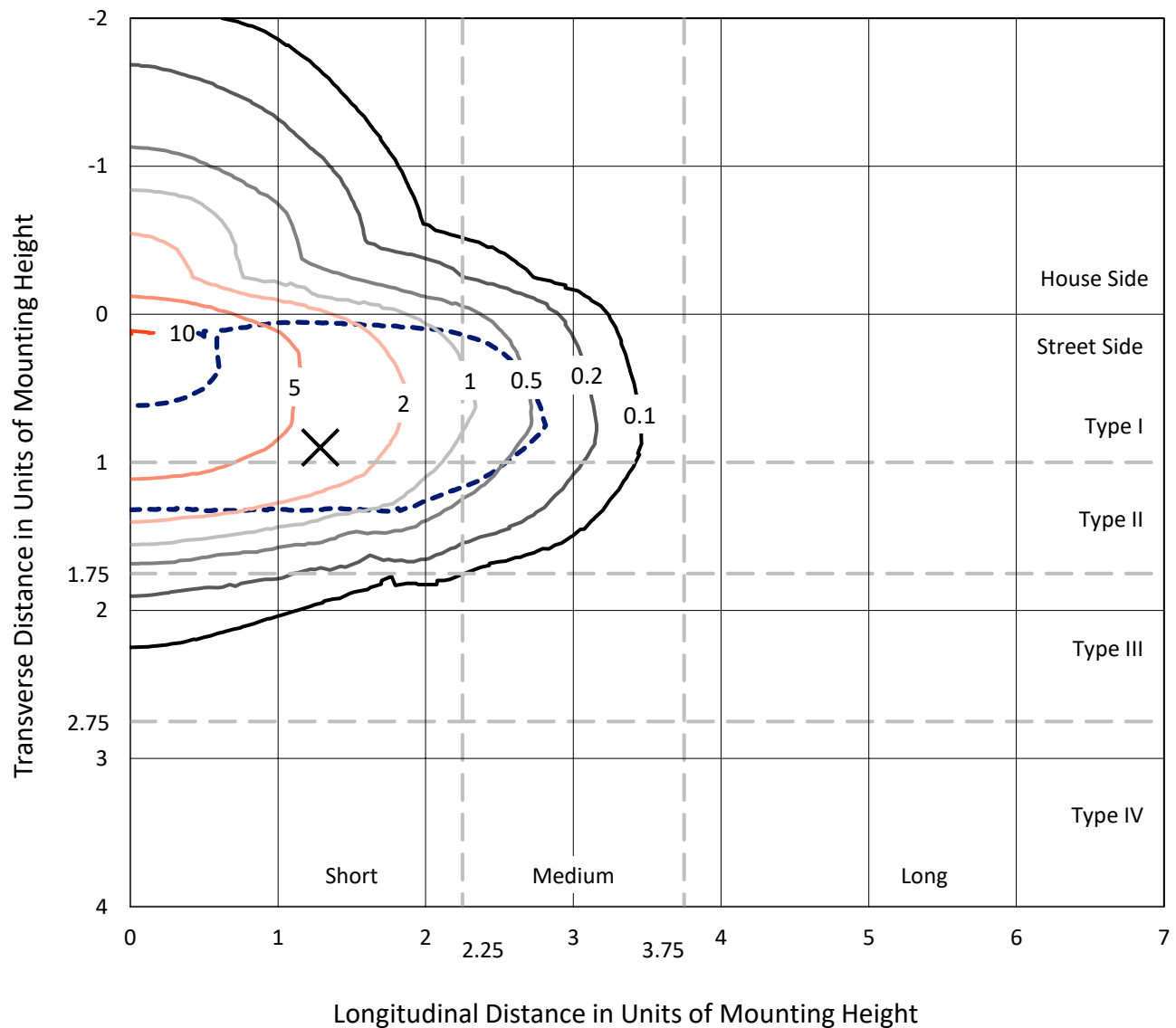


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

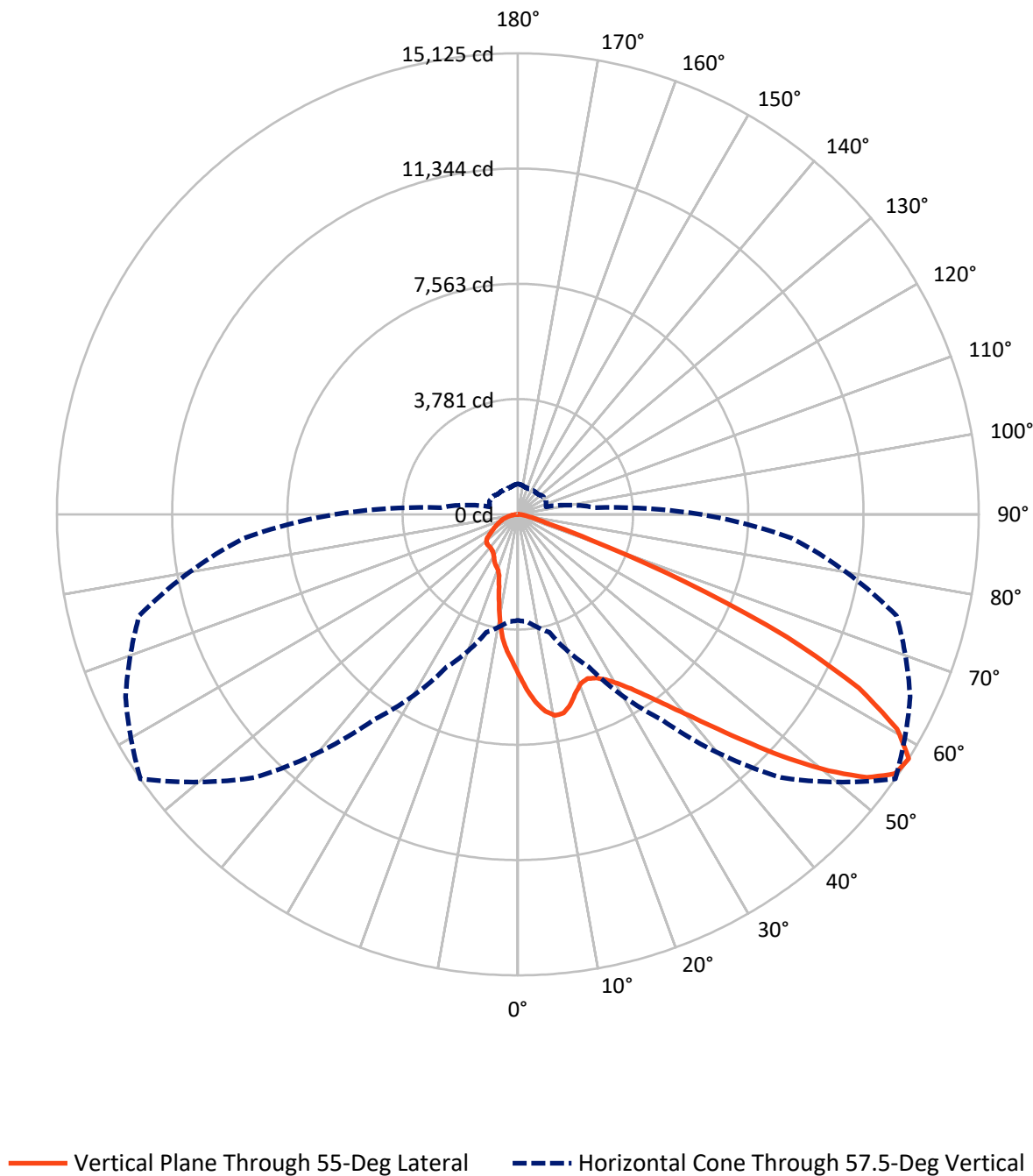


Based on 25 foot mounting height. Maximum calculated value = 10.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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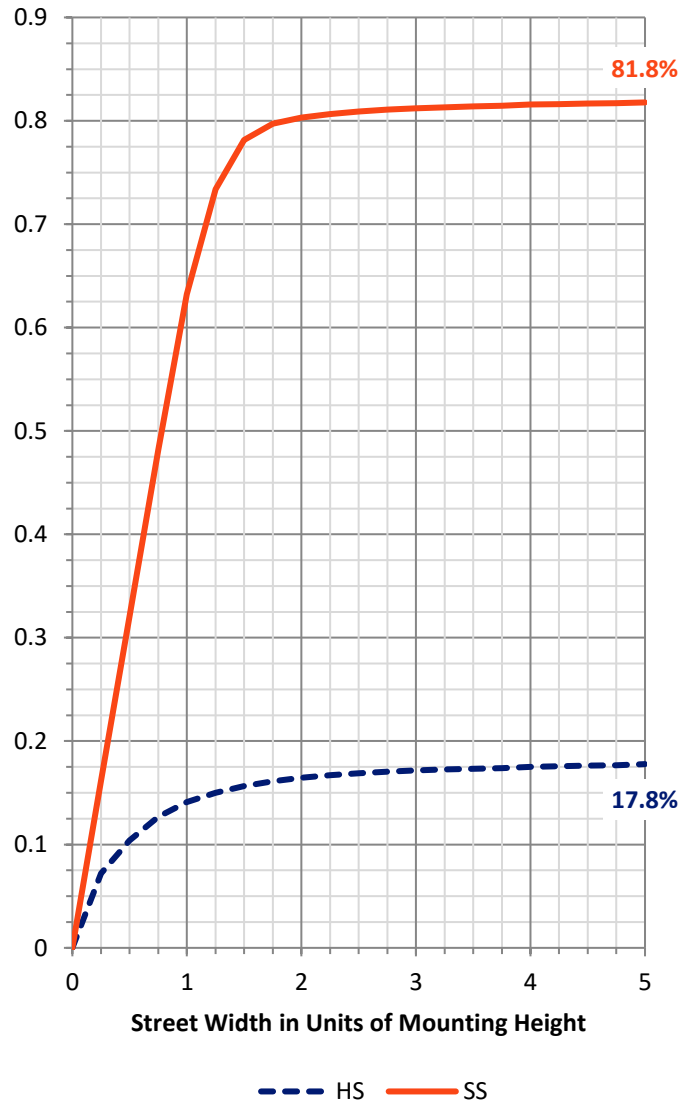
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3808.4	0.0	3808.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	17238.9	0.0	17238.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	21047.3	0.0	21047.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	489.4	2.3
10°-20°	1235.2	5.9
20°-30°	1971.0	9.4
30°-40°	3120.6	14.8
40°-50°	4776.5	22.7
50°-60°	5116.0	24.3
60°-70°	3218.5	15.3
70°-80°	951.8	4.5
80°-90°	168.3	0.8
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°	21047.3	100.0
0°-180°	21047.3	100.0

Coefficient of Utilization



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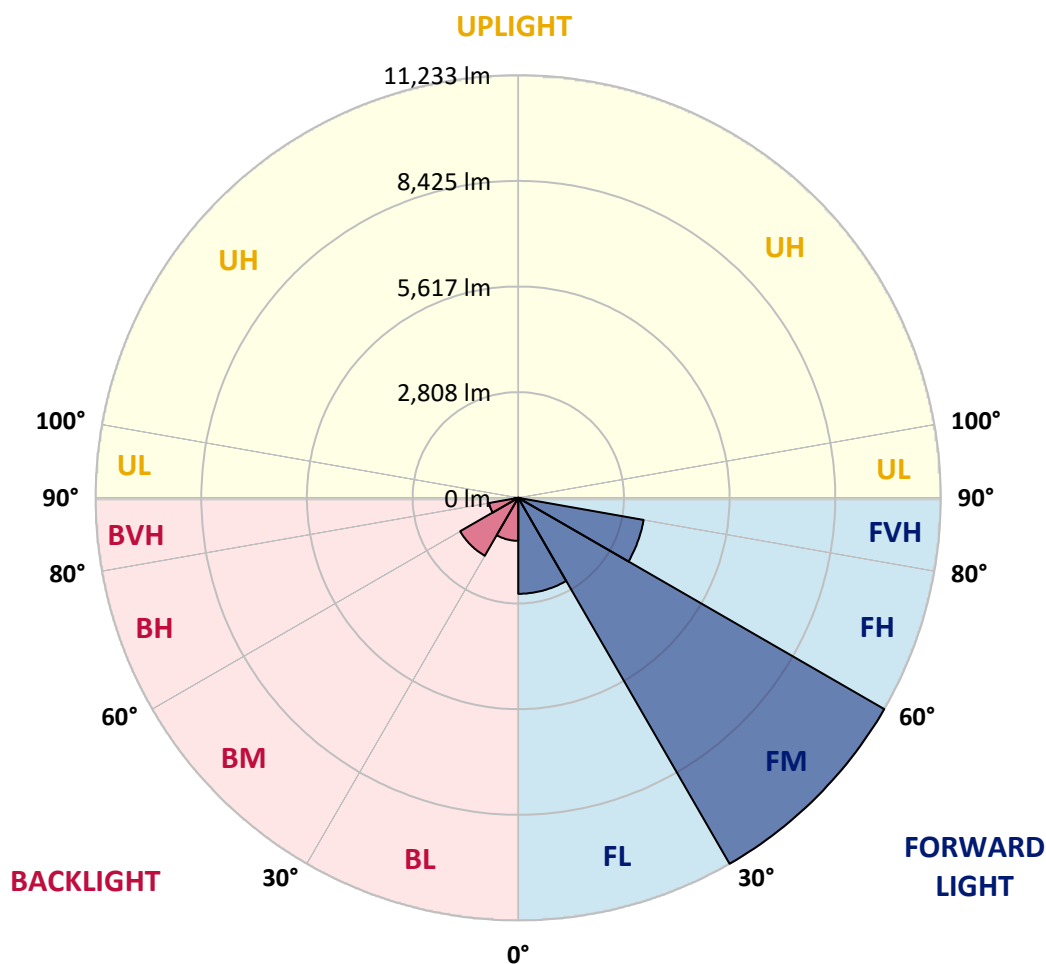
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2550.9	12.1			
FM	(30°-60°)	11233.1	53.4			
FH	(60°-80°)	3383.8	16.1			G2/5000
FVH	(80°-90°)	71.1	0.3			G1/100
BL	(0°-30°)	1144.7	5.4	B3/2500		
BM	(30°-60°)	1780.0	8.5	B2/2500		
BH	(60°-80°)	786.5	3.7	B2/1000		G2/1000
BVH	(80°-90°)	97.2	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8
2.5°	6050.7	6046.3	6070.3	5988.7	5933.1	5858.1	5759.1	5632.9	5496.9	5353.2	5291.2
5°	6595.8	6557.6	6582.8	6521.8	6460.9	6347.7	6200.8	5995.1	5743.8	5457.6	5305.3
7.5°	6509.8	6483.7	6547.9	6602.3	6647.9	6633.8	6526.2	6310.7	5986.4	5570.8	5350.0
10°	5816.7	5787.4	5877.7	6065.8	6342.3	6582.8	6713.2	6579.5	6234.6	5694.9	5393.4
12.5°	5205.3	5191.1	5251.0	5403.3	5710.1	6171.4	6689.4	6814.5	6492.3	5841.8	5452.2
15°	4944.1	4926.7	4964.8	5042.1	5237.9	5667.6	6471.7	6975.5	6745.9	6011.5	5545.8
17.5°	4886.5	4866.8	4883.2	4923.4	5049.7	5377.2	6143.1	7055.0	7010.3	6200.8	5624.2
20°	4993.1	4976.8	4978.9	4976.8	5064.8	5324.9	5914.7	7024.4	7241.0	6374.9	5700.3
22.5°	5251.0	5223.7	5224.8	5167.1	5215.0	5416.3	5854.8	6942.8	7446.6	6527.2	5757.9
25°	5670.9	5621.9	5631.8	5484.9	5471.8	5620.9	5948.4	6879.7	7651.2	6649.1	5768.8
27.5°	6245.4	6189.9	6160.6	5941.8	5837.4	5911.4	6138.8	6901.5	7844.8	6754.6	5741.6
30°	6963.5	6896.1	6836.2	6526.2	6336.9	6309.6	6434.7	7045.1	8073.3	6865.6	5694.9
32.5°	7843.7	7765.4	7656.6	7245.3	6978.7	6836.2	6817.7	7300.9	8341.0	7007.0	5670.9
35°	8891.6	8789.3	8634.8	8102.7	7765.4	7473.8	7322.6	7669.7	8707.7	7220.3	5698.1
37.5°	9970.9	9855.6	9714.1	9080.9	8666.4	8236.6	7938.4	8170.2	9196.2	7509.8	5769.9
40°	10966.5	10837.0	10705.3	10141.8	9696.7	9178.8	8692.4	8803.4	9793.6	7855.7	5891.8
42.5°	11554.0	11458.3	11408.2	11103.5	10759.7	10234.2	9630.4	9554.1	10464.8	8253.9	6031.1
45°	11527.9	11488.7	11643.3	11769.5	11687.9	11396.3	10729.3	10384.4	11138.4	8598.8	6159.4
47.5°	10912.0	10938.2	11283.1	11992.5	12304.8	12457.1	11980.5	11199.4	11723.7	8856.7	6217.1
50°	9236.5	9258.2	10056.9	11586.7	12463.6	13322.1	13222.0	11994.7	12177.5	9014.5	6204.0
52.5°	7910.1	7924.3	8267.0	10383.2	11939.2	13757.3	14340.5	12744.3	12509.3	9058.0	6131.1
55°	5958.1	6007.1	6391.2	8146.2	10574.7	13412.4	15021.6	13516.9	12719.3	9062.3	6055.0
57.5°	3480.7	3534.0	4008.4	5529.5	8219.2	12210.1	15125.0	14202.3	12861.8	9027.6	6009.3
60°	1705.0	1727.8	1934.6	2906.2	5068.1	9893.6	14293.7	14534.2	12941.2	9009.0	6007.1
62.5°	1149.0	1145.7	1154.5	1434.1	2497.1	6356.4	12561.6	13953.1	12898.8	8938.3	5985.4
65°	988.0	976.0	943.3	1006.4	1293.7	2907.3	9705.4	12218.8	12575.7	8761.0	5836.3
67.5°	854.1	855.2	856.3	836.7	923.7	1341.5	5931.0	9624.9	11415.8	7921.0	5261.8
70°	707.2	717.0	721.4	721.4	753.0	880.3	2531.9	6596.9	9004.7	6210.6	4238.0
72.5°	644.1	623.4	625.7	614.8	614.8	670.2	1019.5	3739.6	5673.1	3493.7	2586.3
75°	525.5	538.5	540.8	533.1	508.1	511.4	605.0	1569.0	2427.4	1449.2	1278.5
77.5°	453.8	453.8	458.1	452.6	433.1	383.0	403.6	608.2	825.8	594.1	638.7
80°	364.5	363.4	381.9	392.8	362.3	282.9	257.9	336.2	366.6	261.2	331.9
82.5°	177.3	188.2	262.2	299.2	275.3	204.6	157.7	208.9	195.9	115.3	149.0
85°	103.3	97.9	117.5	166.5	157.7	113.2	76.2	108.9	102.3	58.7	59.9
87.5°	32.6	30.4	24.0	56.6	45.7	31.6	20.7	31.6	28.3	13.0	13.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8	5273.8
2.5°	5214.0	5085.5	4958.2	4841.8	4771.1	4725.5	4679.7	4628.6	4609.0	4579.6
5°	5161.7	4913.6	4692.8	4502.3	4329.4	4193.4	4056.2	3945.2	3895.2	3928.9
7.5°	5131.3	4772.2	4431.6	4082.4	3746.2	3477.4	3243.5	3079.2	3005.2	3023.6
10°	5104.1	4612.3	4093.2	3541.6	3058.5	2725.6	2486.2	2361.1	2314.2	2324.1
12.5°	5079.0	4432.7	3685.2	2959.5	2446.0	2226.2	2157.6	2158.6	2167.4	2173.9
15°	5074.7	4216.2	3229.4	2450.3	2115.2	2101.0	2175.0	2221.8	2246.8	2254.5
17.5°	5068.1	3957.2	2764.7	2103.2	2034.6	2130.4	2198.9	2229.4	2249.0	2250.1
20°	5042.1	3628.6	2336.1	1937.9	2017.2	2099.9	2142.4	2166.3	2182.6	2188.1
22.5°	4961.5	3263.1	2002.0	1863.9	1947.6	2014.0	2064.0	2091.2	2101.0	2107.6
25°	4816.8	2853.9	1771.3	1793.1	1850.7	1934.6	1974.8	1980.3	1977.0	1986.8
27.5°	4627.5	2415.5	1627.7	1697.4	1771.3	1843.2	1864.9	1861.6	1855.1	1866.0
30°	4399.0	2021.6	1536.4	1589.7	1690.8	1756.1	1775.7	1768.1	1755.0	1767.0
32.5°	4157.4	1699.6	1461.2	1514.5	1624.4	1688.7	1708.3	1700.6	1690.8	1700.6
35°	3932.2	1474.4	1391.6	1464.5	1572.2	1635.4	1660.4	1661.4	1661.4	1673.4
37.5°	3725.5	1342.6	1333.9	1432.9	1536.4	1593.0	1628.8	1631.0	1584.2	1587.4
40°	3534.0	1287.2	1307.8	1412.2	1501.5	1555.9	1558.1	1436.2	1350.2	1348.1
42.5°	3377.3	1276.3	1315.5	1410.1	1476.5	1478.7	1325.2	1230.6	1206.6	1207.8
45°	3230.4	1273.0	1332.9	1410.1	1439.5	1277.4	1174.0	1149.0	1151.2	1159.9
47.5°	3066.1	1259.9	1336.1	1390.5	1332.9	1135.9	1105.5	1094.6	1090.2	1092.4
50°	2886.6	1213.2	1294.8	1351.4	1150.0	1075.0	1036.9	1033.6	1039.0	1042.3
52.5°	2697.3	1137.0	1224.1	1280.6	1066.3	1021.7	979.3	986.9	1010.8	1018.4
55°	2573.3	1047.8	1130.5	1139.2	1007.6	971.6	935.7	953.1	997.7	1011.9
57.5°	2540.6	953.1	1023.9	1014.0	932.4	928.1	906.3	921.6	978.2	998.9
60°	2530.8	868.3	919.4	911.7	859.6	880.3	874.8	882.4	902.0	908.6
62.5°	2454.7	800.8	825.8	815.0	794.3	830.1	843.3	826.9	842.1	849.7
65°	2260.9	746.4	734.4	726.8	735.5	768.1	794.3	761.7	775.8	797.6
67.5°	1941.0	672.4	639.8	648.5	675.7	693.1	726.8	689.8	701.8	738.8
70°	1570.1	578.8	549.5	574.5	600.6	636.5	642.0	616.9	645.2	686.5
72.5°	1110.9	484.2	463.5	514.7	523.4	570.1	558.2	546.2	585.4	599.5
75°	770.4	390.6	378.6	417.8	449.4	489.6	480.9	495.1	577.8	584.2
77.5°	487.5	303.6	295.9	320.9	364.5	409.1	423.2	584.2	986.9	1026.0
80°	282.9	226.3	217.6	237.2	275.3	316.6	408.1	717.0	650.7	643.1
82.5°	157.7	155.6	144.7	150.2	183.9	228.5	576.7	504.8	410.2	423.2
85°	74.0	91.4	78.3	75.0	103.3	267.6	385.2	288.3	191.5	187.2
87.5°	19.6	17.4	17.4	19.6	43.6	230.6	153.4	123.0	72.9	70.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)