

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: P964740

Luminaire Tested: **NAV-SB3C-835-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964740
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-835-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21726.9 lumens
Efficiency: N/A
Efficacy: 145.7 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

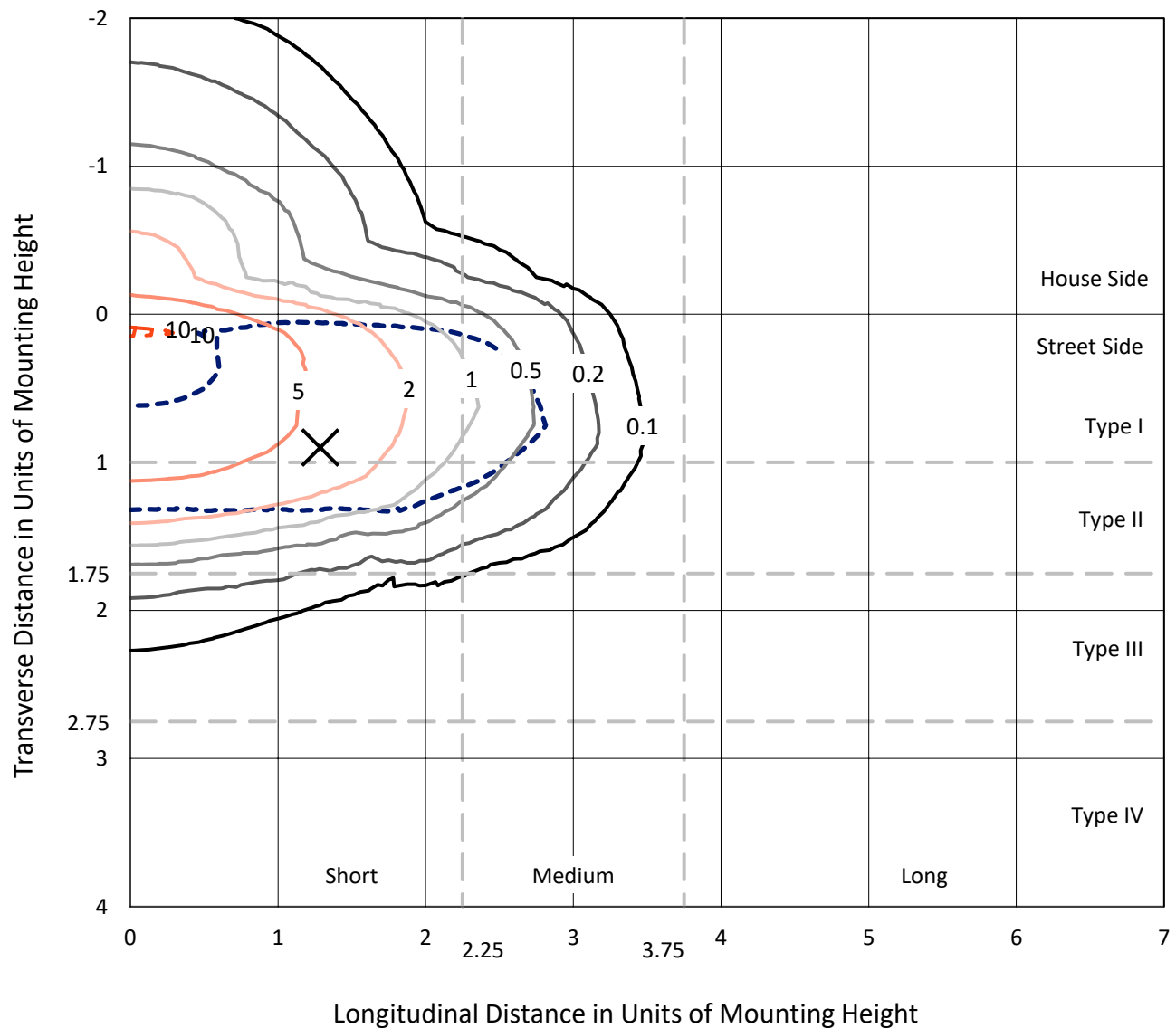


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Iso-Footcandle Lines of Horizontal Illumination

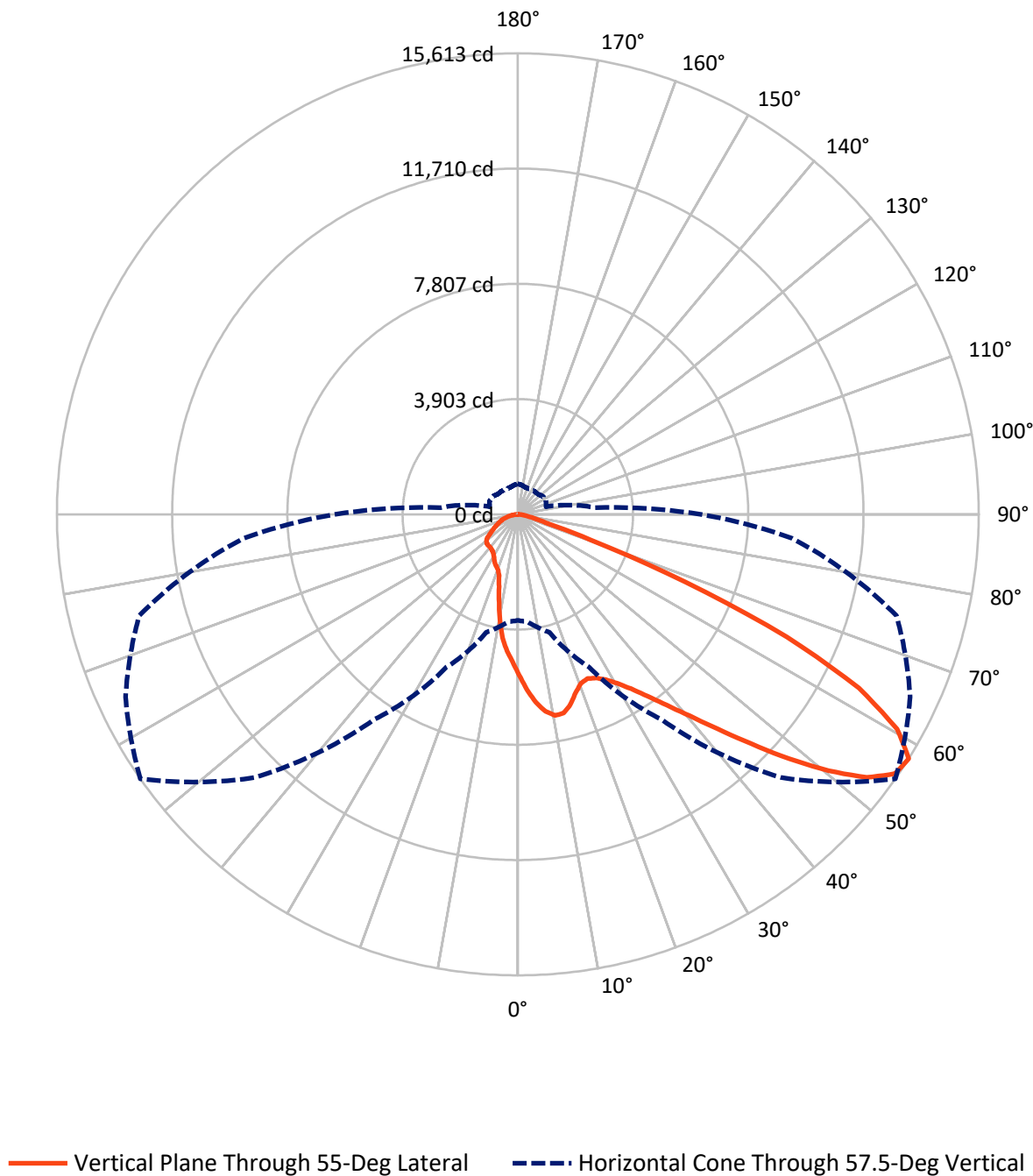
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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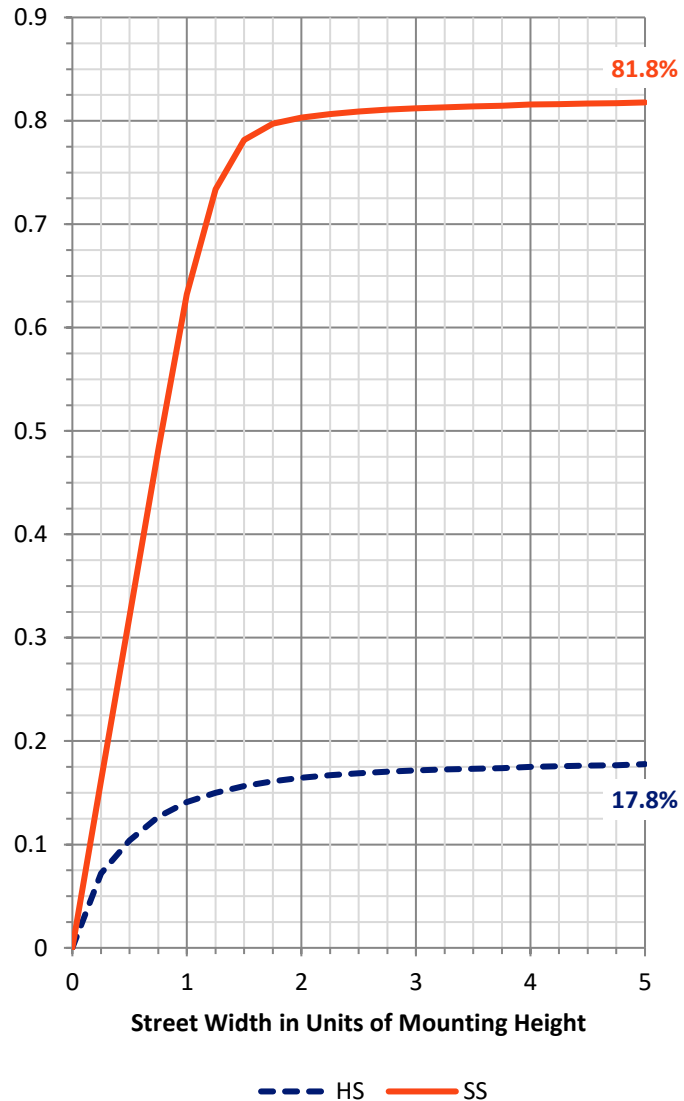
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3931.4	0.0	3931.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	17795.5	0.0	17795.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	21726.9	0.0	21726.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.2	2.3
10°-20°	1275.1	5.9
20°-30°	2034.7	9.4
30°-40°	3221.4	14.8
40°-50°	4930.7	22.7
50°-60°	5281.2	24.3
60°-70°	3322.4	15.3
70°-80°	982.5	4.5
80°-90°	173.7	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°	21726.9	100.0
0°-180°	21726.9	100.0

Coefficient of Utilization



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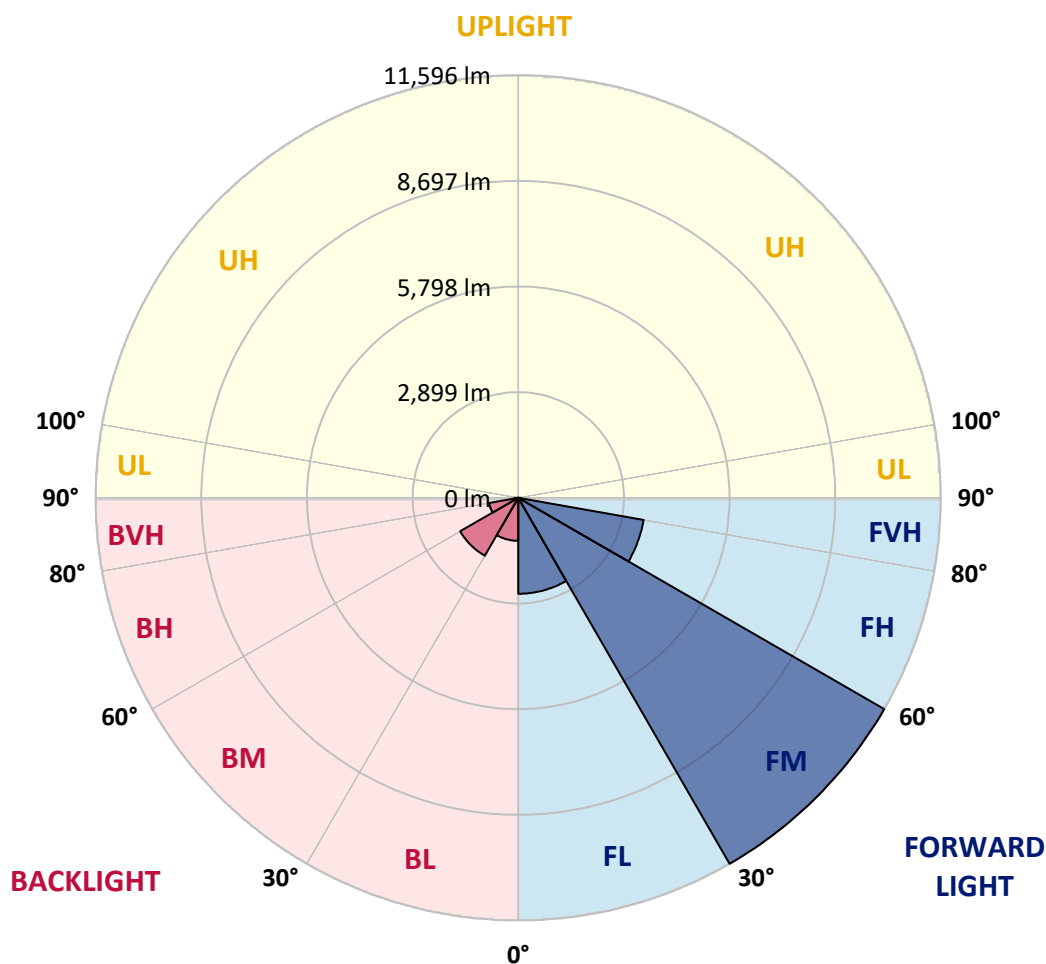
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2633.3	12.1			
FM	(30°-60°)	11595.8	53.4			
FH	(60°-80°)	3493.0	16.1			G2/5000
FVH	(80°-90°)	73.4	0.3			G1/100
BL	(0°-30°)	1181.6	5.4	B3/2500		
BM	(30°-60°)	1837.5	8.5	B2/2500		
BH	(60°-80°)	811.9	3.7	B2/1000		G2/1000
BVH	(80°-90°)	100.3	0.5			G2/225
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°	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1
2.5°	6246.0	6241.5	6266.2	6182.0	6124.7	6047.2	5945.0	5814.7	5674.3	5526.1	5462.0
5°	6808.8	6769.4	6795.2	6732.3	6669.5	6552.6	6401.0	6188.7	5929.3	5633.9	5476.7
7.5°	6720.0	6693.0	6759.3	6815.4	6862.7	6848.0	6736.8	6514.5	6179.7	5750.7	5522.7
10°	6004.6	5974.2	6067.4	6261.7	6547.0	6795.2	6930.0	6791.9	6435.9	5878.7	5567.6
12.5°	5373.3	5358.7	5420.5	5577.7	5894.5	6370.7	6905.3	7034.5	6702.1	6030.4	5628.3
15°	5103.8	5085.7	5125.1	5204.8	5407.0	5850.7	6680.6	7200.7	6963.7	6205.6	5724.8
17.5°	5044.2	5024.0	5040.8	5082.4	5212.6	5550.8	6341.5	7282.7	7236.7	6401.0	5805.7
20°	5154.3	5137.4	5139.7	5137.4	5228.4	5496.9	6105.6	7251.3	7474.8	6580.7	5884.3
22.5°	5420.5	5392.4	5393.5	5334.0	5383.4	5591.2	6043.8	7167.0	7687.1	6737.9	5943.9
25°	5854.0	5803.4	5813.6	5662.0	5648.5	5802.3	6140.5	7101.9	7898.2	6863.8	5955.1
27.5°	6447.0	6389.7	6359.4	6133.7	6025.9	6102.2	6337.0	7124.4	8098.1	6972.7	5927.1
30°	7188.3	7118.7	7056.9	6736.8	6541.4	6513.4	6642.5	7272.6	8334.0	7087.3	5878.7
32.5°	8097.0	8016.1	7903.9	7479.2	7204.1	7056.9	7037.9	7536.5	8610.3	7233.3	5854.0
35°	9178.7	9073.1	8913.6	8364.3	8016.1	7715.2	7559.0	7917.3	8988.8	7453.4	5882.1
37.5°	10292.8	10173.7	10027.8	9374.0	8946.1	8502.5	8194.8	8434.0	9493.1	7752.2	5956.3
40°	11320.5	11186.8	11050.9	10469.1	10009.8	9475.2	8973.1	9087.6	10109.8	8109.4	6082.0
42.5°	11927.1	11828.2	11776.5	11462.1	11107.1	10564.7	9941.3	9862.7	10802.8	8520.4	6225.7
45°	11900.1	11859.7	12019.2	12149.4	12065.2	11764.2	11075.7	10719.7	11498.0	8876.5	6358.4
47.5°	11264.3	11291.3	11647.4	12379.7	12702.1	12859.3	12367.3	11560.9	12102.3	9142.7	6417.8
50°	9534.7	9557.2	10381.6	11960.7	12866.0	13752.2	13648.9	12382.0	12570.6	9305.6	6404.4
52.5°	8165.6	8180.1	8533.9	10718.5	12324.7	14201.5	14803.6	13155.9	12913.3	9350.5	6329.2
55°	6150.5	6201.0	6597.6	8409.3	10916.2	13845.5	15506.6	13953.3	13130.0	9355.0	6250.6
57.5°	3593.0	3648.1	4137.8	5708.0	8484.5	12604.3	15613.3	14660.9	13277.1	9319.0	6203.3
60°	1760.0	1783.6	1997.0	3000.0	5231.8	10213.1	14755.3	15003.4	13359.1	9299.9	6201.0
62.5°	1186.1	1182.7	1191.7	1480.3	2577.7	6561.6	12967.2	14403.7	13315.4	9226.9	6178.6
65°	1019.9	1007.5	973.7	1038.9	1335.5	3001.1	10018.8	12613.3	12981.7	9043.9	6024.7
67.5°	881.7	882.8	884.0	863.8	953.6	1384.9	6122.4	9935.6	11784.4	8176.7	5431.7
70°	730.1	740.2	744.7	744.7	777.3	908.7	2613.6	6809.9	9295.4	6411.2	4374.8
72.5°	664.9	643.6	645.9	634.6	634.6	691.9	1052.5	3860.4	5856.2	3606.6	2669.8
75°	542.5	556.0	558.2	550.3	524.5	527.9	624.5	1619.6	2505.8	1496.1	1319.7
77.5°	468.3	468.3	472.8	467.2	447.0	395.3	416.7	627.8	852.5	613.3	659.3
80°	376.3	375.2	394.2	405.5	374.0	292.0	266.2	347.1	378.5	269.6	342.6
82.5°	183.1	194.3	270.7	308.8	284.1	211.2	162.9	215.7	202.1	119.1	153.9
85°	106.7	101.1	121.3	171.9	162.9	116.8	78.6	112.3	105.6	60.7	61.8
87.5°	33.7	31.5	24.7	58.4	47.2	32.6	21.3	32.6	29.2	13.4	13.4
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1	5444.1
2.5°	5382.3	5249.7	5118.3	4998.2	4925.1	4878.0	4830.8	4778.0	4757.8	4727.5
5°	5328.4	5072.3	4844.3	4647.8	4469.1	4328.8	4187.2	4072.6	4021.0	4055.8
7.5°	5296.9	4926.3	4574.7	4214.2	3867.1	3589.7	3348.2	3178.6	3102.3	3121.3
10°	5268.8	4761.1	4225.5	3656.0	3157.3	2813.5	2566.5	2437.3	2389.0	2399.1
12.5°	5243.0	4575.8	3804.2	3055.0	2524.9	2298.0	2227.2	2228.4	2237.4	2244.1
15°	5238.6	4352.4	3333.6	2529.4	2183.5	2168.9	2245.3	2293.5	2319.4	2327.3
17.5°	5231.8	4085.0	2854.0	2171.2	2100.3	2199.2	2270.0	2301.4	2321.6	2322.8
20°	5204.8	3745.9	2411.5	2000.4	2082.4	2167.8	2211.5	2236.2	2253.1	2258.7
22.5°	5121.7	3368.5	2066.6	1924.0	2010.5	2079.0	2130.7	2158.8	2168.9	2175.6
25°	4972.3	2946.1	1828.5	1851.0	1910.5	1997.0	2038.6	2044.2	2040.8	2050.9
27.5°	4776.9	2493.4	1680.3	1752.1	1828.5	1902.7	1925.2	1921.8	1915.0	1926.3
30°	4541.1	2086.9	1586.0	1640.9	1745.5	1812.8	1833.0	1825.2	1811.7	1824.1
32.5°	4291.7	1754.4	1508.4	1563.4	1676.9	1743.2	1763.4	1755.5	1745.5	1755.5
35°	4059.2	1521.9	1436.5	1511.8	1623.0	1688.2	1714.0	1715.1	1715.1	1727.4
37.5°	3845.8	1386.0	1377.0	1479.3	1586.0	1644.3	1681.4	1683.7	1635.4	1638.8
40°	3648.1	1328.7	1350.0	1457.9	1550.0	1606.2	1608.4	1482.6	1393.9	1391.6
42.5°	3486.3	1317.5	1357.9	1455.6	1524.2	1526.4	1368.1	1270.3	1245.6	1246.7
45°	3334.7	1314.2	1375.9	1455.6	1485.9	1318.7	1212.0	1186.1	1188.3	1197.3
47.5°	3165.1	1300.6	1379.2	1435.4	1375.9	1172.6	1141.1	1130.0	1125.4	1127.7
50°	2979.8	1252.3	1336.6	1395.0	1187.2	1109.7	1070.4	1067.0	1072.7	1076.0
52.5°	2784.4	1173.7	1263.6	1321.9	1100.7	1054.6	1010.9	1018.7	1043.4	1051.3
55°	2656.3	1081.6	1167.0	1176.0	1040.1	1003.0	966.0	983.9	1029.9	1044.6
57.5°	2622.7	983.9	1056.9	1046.8	962.6	958.1	935.6	951.3	1009.7	1031.0
60°	2612.5	896.3	949.0	941.3	887.3	908.7	903.0	910.9	931.1	937.9
62.5°	2533.9	826.7	852.5	841.2	819.9	857.0	870.4	853.6	869.3	877.2
65°	2333.9	770.5	758.2	750.3	759.3	792.9	819.9	786.3	800.8	823.3
67.5°	2003.8	694.1	660.4	669.4	697.5	715.4	750.3	712.1	724.5	762.6
70°	1620.7	597.6	567.2	593.1	620.0	657.0	662.7	636.8	666.0	708.7
72.5°	1146.8	499.8	478.5	531.3	540.3	588.6	576.2	563.9	604.2	618.9
75°	795.2	403.2	390.8	431.3	463.9	505.4	496.4	511.1	596.4	603.1
77.5°	503.2	313.3	305.6	331.4	376.3	422.3	437.0	603.1	1018.7	1059.1
80°	292.0	233.6	224.7	244.9	284.1	326.9	421.2	740.2	671.7	663.8
82.5°	162.9	160.6	149.3	155.0	189.8	235.9	595.3	521.1	423.4	437.0
85°	76.4	94.3	80.9	77.5	106.7	276.3	397.6	297.7	197.7	193.2
87.5°	20.2	17.9	17.9	20.2	44.9	238.1	158.4	126.9	75.2	73.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)