

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: P968274

Luminaire Tested: **NAV-SB5B-740-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968274
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-SB5B-740-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31371.2 lumens
Efficiency: N/A
Efficacy: 171.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 182.7
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



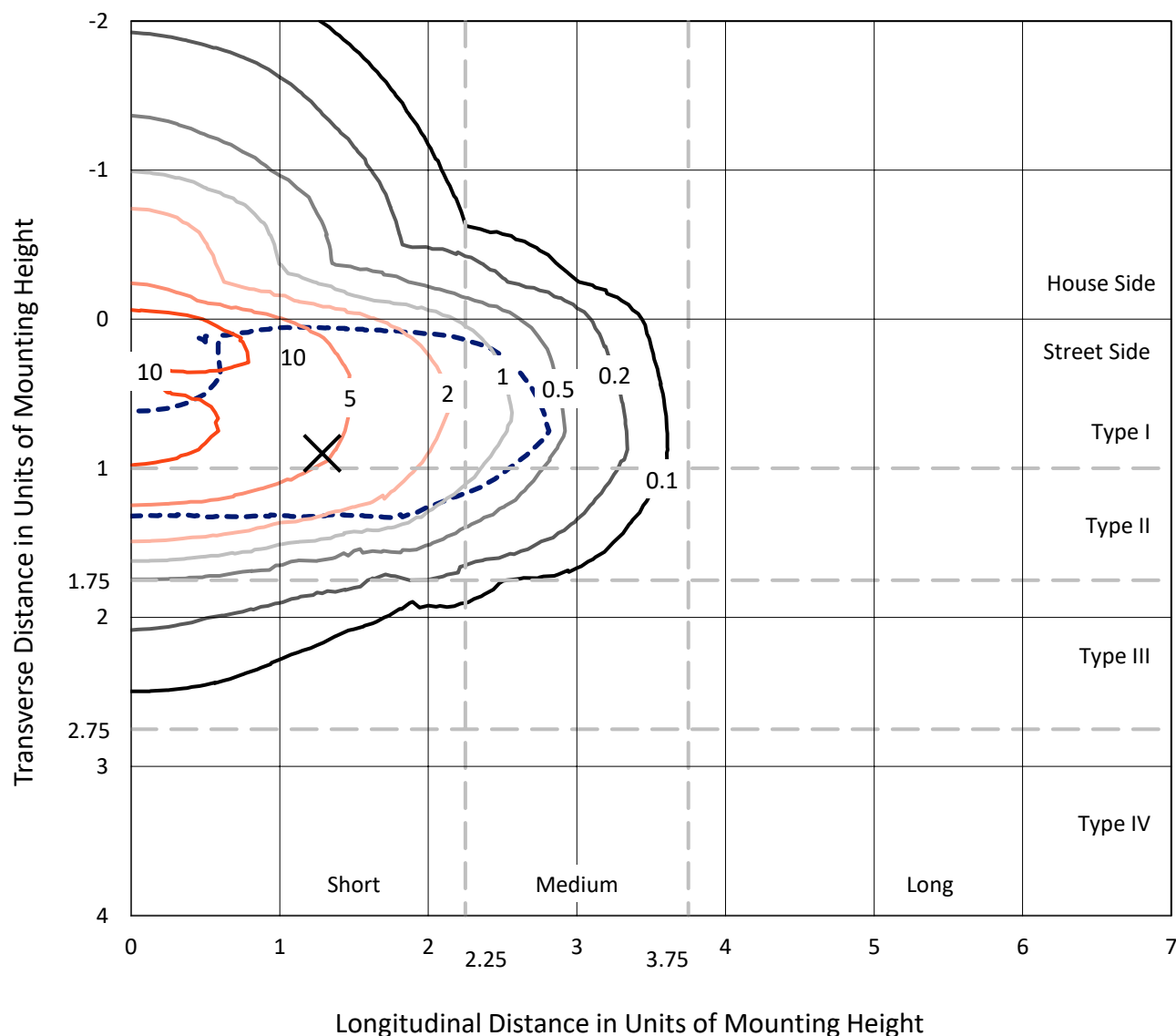
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

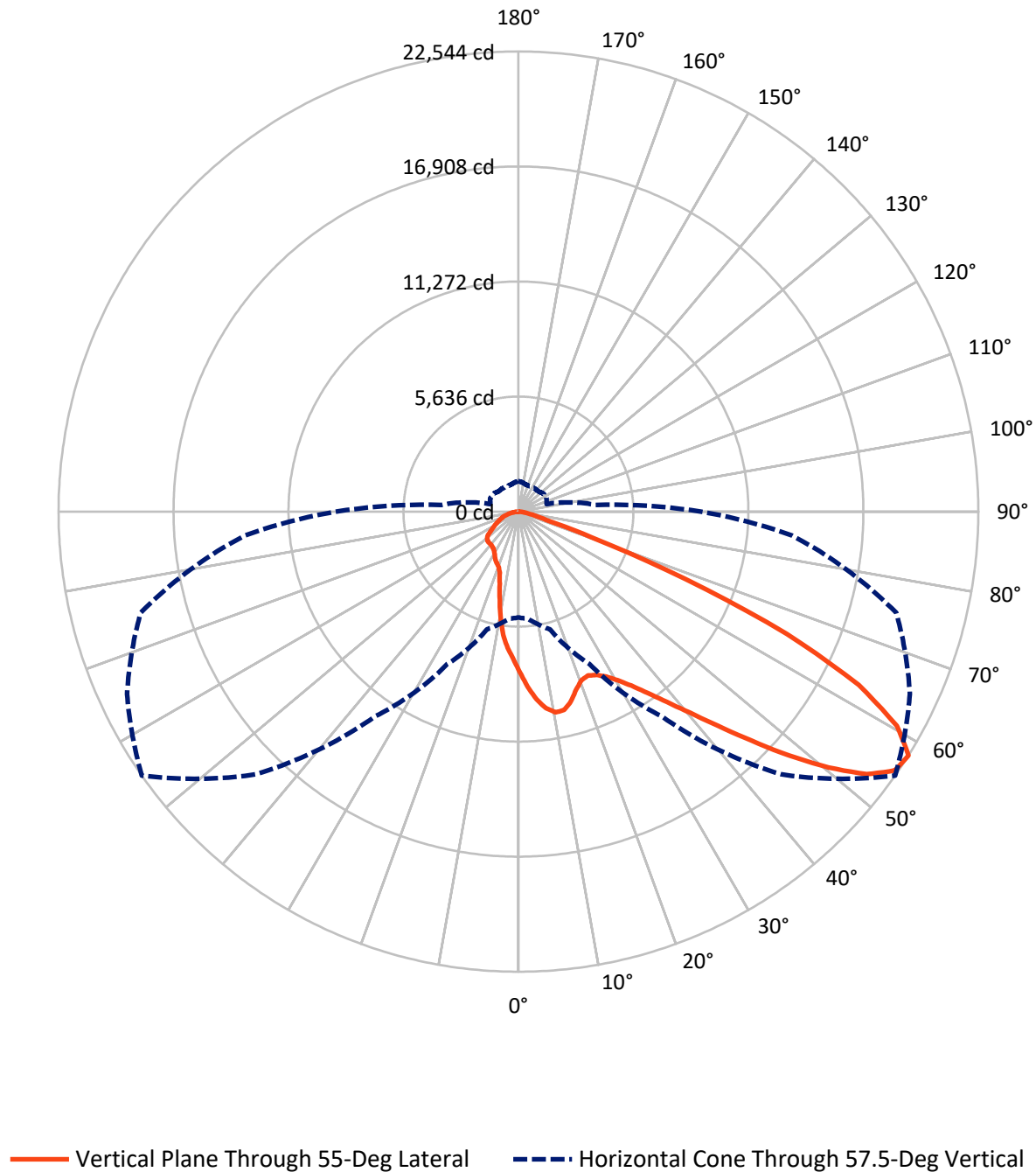


Based on 25 foot mounting height. Maximum calculated value = 15.2 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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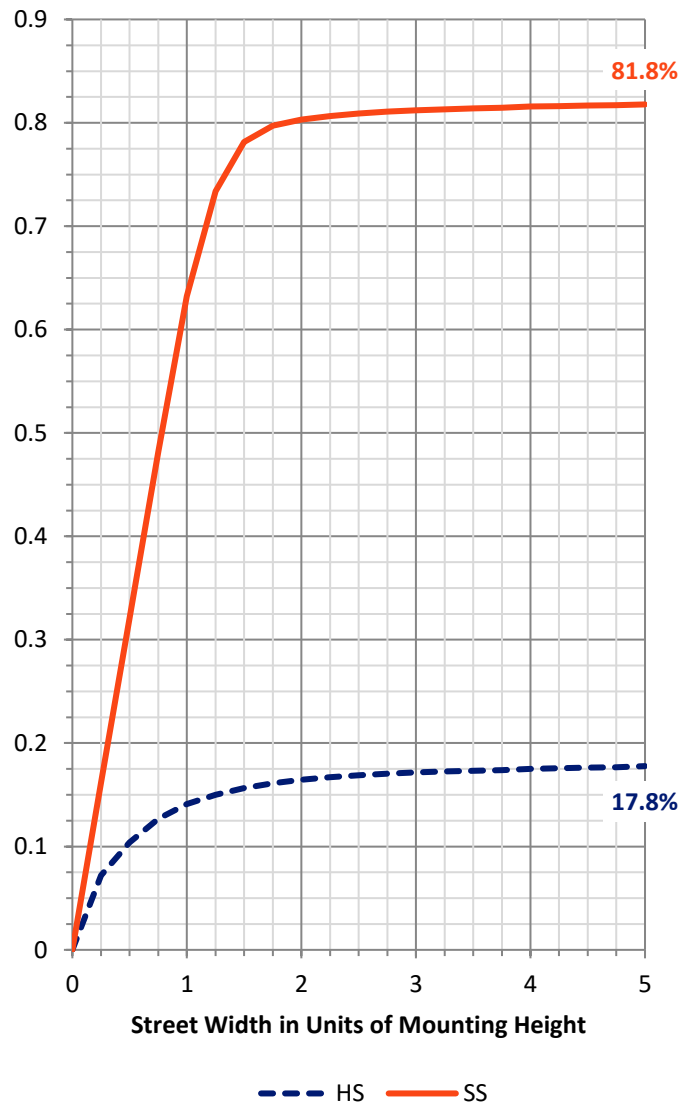
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5676.5	0.0	5676.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	25694.7	0.0	25694.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	31371.2	0.0	31371.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	729.4	2.3
10°-20°	1841.1	5.9
20°-30°	2937.8	9.4
30°-40°	4651.3	14.8
40°-50°	7119.3	22.7
50°-60°	7625.5	24.3
60°-70°	4797.2	15.3
70°-80°	1418.6	4.5
80°-90°	250.8	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°	31371.2	100.0
0°-180°	31371.2	100.0

Coefficient of Utilization



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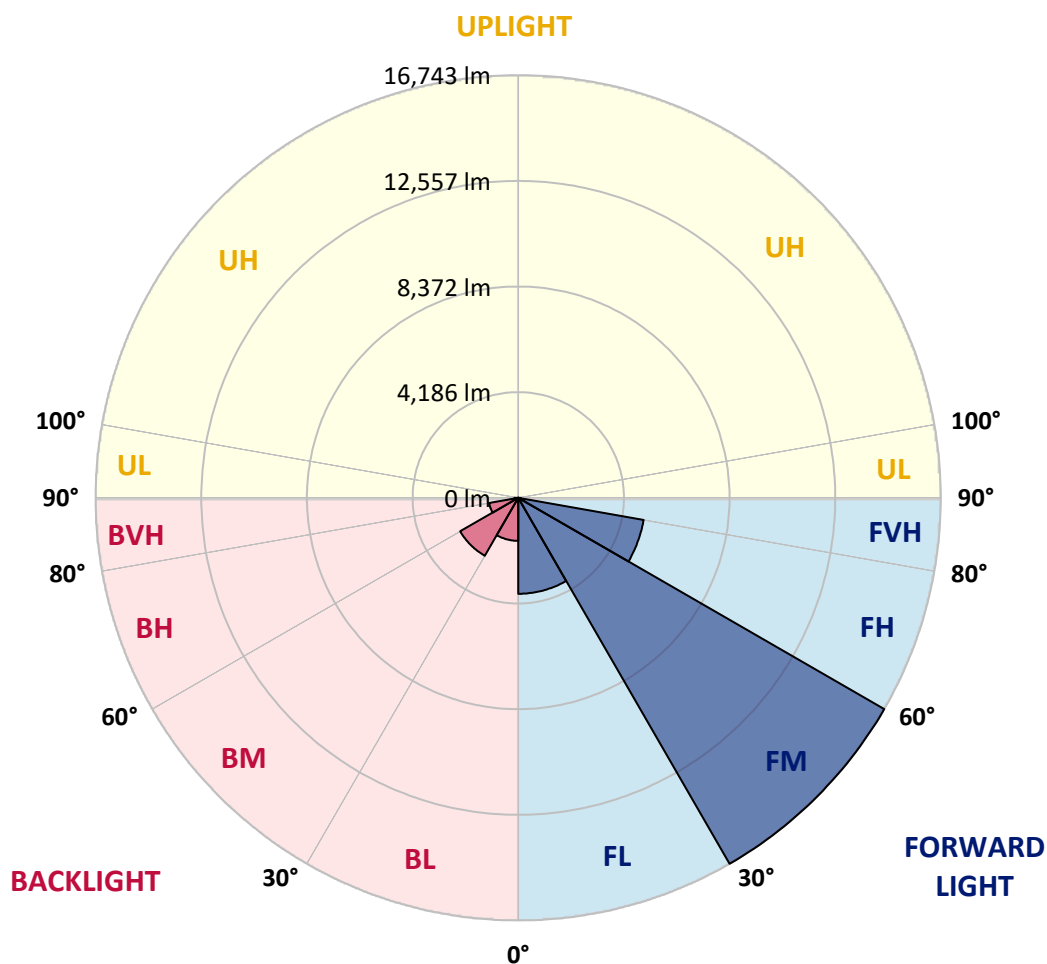
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3802.2	12.1			
FM	(30°-60°)	16743.0	53.4			
FH	(60°-80°)	5043.5	16.1			G3/7500
FVH	(80°-90°)	106.0	0.3			G2/225
BL	(0°-30°)	1706.2	5.4	B3/2500		
BM	(30°-60°)	2653.1	8.5	B3/5000		
BH	(60°-80°)	1172.3	3.7	B3/2500		G3/2500
BVH	(80°-90°)	144.9	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-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6
2.5°	9018.6	9012.0	9047.7	8926.1	8843.4	8731.5	8583.9	8395.8	8193.0	7979.0	7886.6
5°	9831.0	9774.3	9811.5	9720.7	9629.9	9461.3	9242.3	8935.8	8561.2	8134.7	7907.7
7.5°	9702.9	9664.0	9759.6	9840.7	9908.9	9887.8	9727.2	9406.1	8922.8	8303.3	7974.1
10°	8669.9	8626.1	8760.7	9041.2	9453.2	9811.5	10006.2	9806.7	9292.5	8488.2	8039.0
12.5°	7758.4	7737.3	7826.5	8053.6	8510.9	9198.6	9970.5	10156.9	9676.9	8707.2	8126.5
15°	7369.2	7343.3	7400.0	7515.2	7807.1	8447.6	9646.2	10397.0	10054.8	8960.1	8266.0
17.5°	7283.2	7254.0	7278.4	7338.4	7526.5	8014.7	9156.3	10515.4	10448.8	9242.3	8382.8
20°	7442.2	7417.8	7421.1	7417.8	7549.2	7936.8	8815.8	10470.0	10792.7	9501.8	8496.3
22.5°	7826.5	7786.0	7787.6	7701.6	7773.0	8073.0	8726.6	10348.3	11099.2	9728.9	8582.2
25°	8452.6	8379.6	8394.1	8175.2	8155.7	8377.9	8866.0	10254.3	11404.2	9910.5	8598.5
27.5°	9308.8	9226.1	9182.4	8856.3	8700.6	8810.9	9149.9	10286.7	11692.8	10067.8	8557.9
30°	10379.2	10278.6	10189.4	9727.2	9445.1	9404.5	9591.0	10500.8	12033.3	10233.2	8488.2
32.5°	11691.2	11574.4	11412.2	10799.2	10401.9	10189.4	10161.8	10881.9	12432.3	10444.0	8452.6
35°	13252.8	13100.4	12870.2	12077.2	11574.4	11139.8	10914.3	11431.7	12978.9	10761.9	8493.0
37.5°	14861.7	14689.8	14478.9	13535.0	12917.2	12276.6	11832.3	12177.7	13707.0	11193.3	8600.1
40°	16345.6	16152.6	15956.4	15116.3	14453.0	13681.0	12956.1	13121.5	14597.3	11709.0	8781.8
42.5°	17221.3	17078.6	17004.0	16549.9	16037.5	15254.2	14354.1	14240.5	15597.9	12302.6	8989.4
45°	17182.4	17124.0	17354.3	17542.4	17420.8	16986.1	15992.0	15477.9	16601.8	12816.6	9180.7
47.5°	16264.5	16303.3	16817.5	17874.9	18340.3	18567.4	17857.0	16692.6	17474.3	13201.0	9266.6
50°	13767.0	13799.4	14989.8	17269.9	18577.1	19856.6	19707.5	17878.2	18150.6	13436.1	9247.1
52.5°	11790.1	11811.2	12322.0	15476.3	17795.4	20505.3	21374.6	18995.5	18645.2	13501.0	9138.5
55°	8880.7	8953.7	9526.1	12141.9	15761.7	19991.2	22389.8	20146.9	18958.2	13507.6	9025.0
57.5°	5187.9	5267.4	5974.5	8241.7	12250.7	18199.2	22543.8	21168.6	19170.7	13455.6	8956.9
60°	2541.3	2575.3	2883.4	4331.6	7554.0	14746.5	21304.8	21663.3	19289.1	13428.0	8953.7
62.5°	1712.6	1707.6	1720.7	2137.4	3721.9	9474.2	18723.1	20797.2	19225.8	13322.6	8921.2
65°	1472.5	1454.7	1406.1	1500.1	1928.2	4333.3	14465.9	18212.2	18744.1	13058.3	8699.1
67.5°	1273.0	1274.7	1276.3	1247.1	1376.9	1999.6	8840.1	14345.9	17015.3	11806.3	7842.8
70°	1054.1	1068.8	1075.2	1075.2	1122.3	1312.0	3773.8	9832.6	13421.6	9256.9	6316.7
72.5°	960.1	929.3	932.5	916.2	916.2	999.0	1519.6	5574.0	8455.7	5207.4	3854.9
75°	783.3	802.8	806.0	794.7	757.4	762.2	901.7	2338.5	3618.1	2160.2	1905.6
77.5°	676.3	676.3	682.8	674.7	645.4	570.8	601.7	906.5	1230.9	885.5	951.9
80°	543.2	541.7	569.2	585.5	540.1	421.7	384.4	501.1	546.5	389.2	494.7
82.5°	264.3	280.5	390.8	446.0	410.3	304.9	235.1	311.4	291.9	171.9	222.2
85°	154.1	146.0	175.2	248.2	235.1	168.6	113.6	162.2	152.4	87.5	89.2
87.5°	48.7	45.4	35.7	84.4	68.2	47.0	30.9	47.0	42.1	19.5	19.5
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°	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6	7860.6
2.5°	7771.3	7580.1	7390.2	7216.7	7111.3	7043.2	6975.1	6898.9	6869.8	6825.9
5°	7693.5	7323.8	6994.6	6710.8	6452.9	6250.2	6045.9	5880.4	5805.8	5856.1
7.5°	7648.1	7113.0	6605.4	6084.8	5583.7	5183.1	4834.4	4589.5	4479.2	4506.8
10°	7607.6	6874.6	6101.0	5278.7	4558.7	4062.5	3705.7	3519.2	3449.4	3464.1
12.5°	7570.3	6606.9	5492.9	4411.2	3645.7	3318.1	3215.9	3217.6	3230.5	3240.2
15°	7563.8	6284.3	4813.3	3652.2	3152.7	3131.6	3241.9	3311.6	3348.9	3360.3
17.5°	7554.0	5898.3	4120.8	3134.9	3032.7	3175.3	3277.5	3322.9	3352.2	3353.8
20°	7515.2	5408.5	3481.9	2888.3	3006.7	3129.9	3193.2	3228.9	3253.2	3261.3
22.5°	7395.2	4863.6	2984.0	2778.1	2902.9	3001.8	3076.4	3117.0	3131.6	3141.3
25°	7179.5	4253.9	2640.2	2672.6	2758.6	2883.4	2943.5	2951.6	2946.7	2961.3
27.5°	6897.2	3600.3	2426.2	2529.9	2640.2	2747.2	2779.7	2774.8	2765.0	2781.3
30°	6556.7	3013.2	2290.0	2369.4	2520.2	2617.5	2646.7	2635.4	2615.9	2633.7
32.5°	6196.6	2533.2	2178.0	2257.5	2421.3	2517.0	2546.1	2534.8	2520.2	2534.8
35°	5861.0	2197.5	2074.2	2182.8	2343.5	2437.4	2474.8	2476.4	2476.4	2494.2
37.5°	5552.8	2001.2	1988.3	2135.8	2290.0	2374.2	2427.7	2431.0	2361.3	2366.1
40°	5267.4	1918.5	1949.3	2105.0	2238.0	2319.1	2322.3	2140.7	2012.6	2009.3
42.5°	5033.9	1902.3	1960.7	2101.8	2200.7	2204.0	1975.3	1834.2	1798.5	1800.1
45°	4814.9	1897.5	1986.7	2101.8	2145.5	1903.9	1749.9	1712.6	1715.8	1728.8
47.5°	4570.1	1878.0	1991.5	2072.5	1986.7	1693.1	1647.7	1631.5	1625.0	1628.2
50°	4302.4	1808.2	1929.9	2014.2	1714.2	1602.3	1545.5	1540.7	1548.8	1553.6
52.5°	4020.3	1694.7	1824.5	1908.8	1589.3	1522.8	1459.6	1470.9	1506.6	1517.9
55°	3835.4	1561.7	1685.0	1698.0	1501.7	1448.2	1394.7	1420.6	1487.2	1508.2
57.5°	3786.8	1420.6	1526.0	1511.5	1389.8	1383.3	1350.9	1373.6	1458.0	1488.7
60°	3772.2	1294.2	1370.3	1359.0	1281.1	1312.0	1303.9	1315.3	1344.4	1354.1
62.5°	3658.6	1193.6	1230.9	1214.7	1183.9	1237.4	1256.9	1232.6	1255.2	1266.6
65°	3370.0	1112.5	1094.7	1083.3	1096.3	1144.9	1183.9	1135.2	1156.3	1188.7
67.5°	2893.2	1002.2	953.6	966.6	1007.1	1033.1	1083.3	1028.2	1046.0	1101.2
70°	2340.2	862.7	819.0	856.3	895.2	948.7	956.8	919.5	961.7	1023.4
72.5°	1655.8	721.7	690.8	767.1	780.0	849.8	832.0	814.2	872.5	893.6
75°	1148.2	582.2	564.4	622.8	669.7	729.8	716.8	737.9	861.1	870.8
77.5°	726.5	452.4	441.2	478.4	543.2	609.8	630.9	870.8	1470.9	1529.3
80°	421.7	337.3	324.3	353.5	410.3	471.9	608.1	1068.8	969.8	958.5
82.5°	235.1	232.0	215.7	223.8	274.1	340.6	859.6	752.5	611.4	630.9
85°	110.3	136.2	116.7	111.9	154.1	398.9	574.1	429.8	285.5	278.9
87.5°	29.2	25.9	25.9	29.2	64.9	343.8	228.7	183.3	108.6	105.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)