

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: P964072

Luminaire Tested: **NAV-SB3B-740-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964072
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-740-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15512.3 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 109.2
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



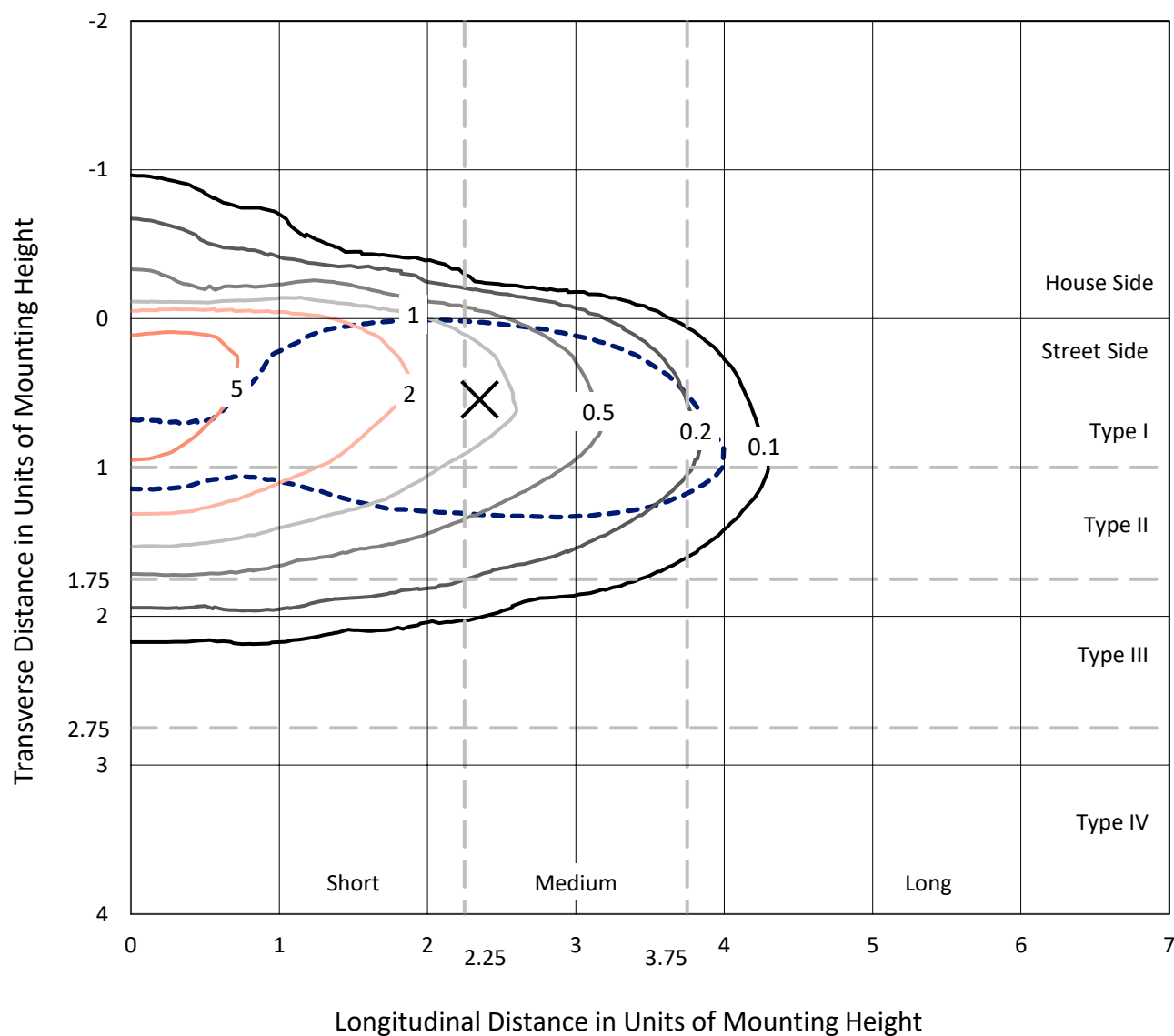
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

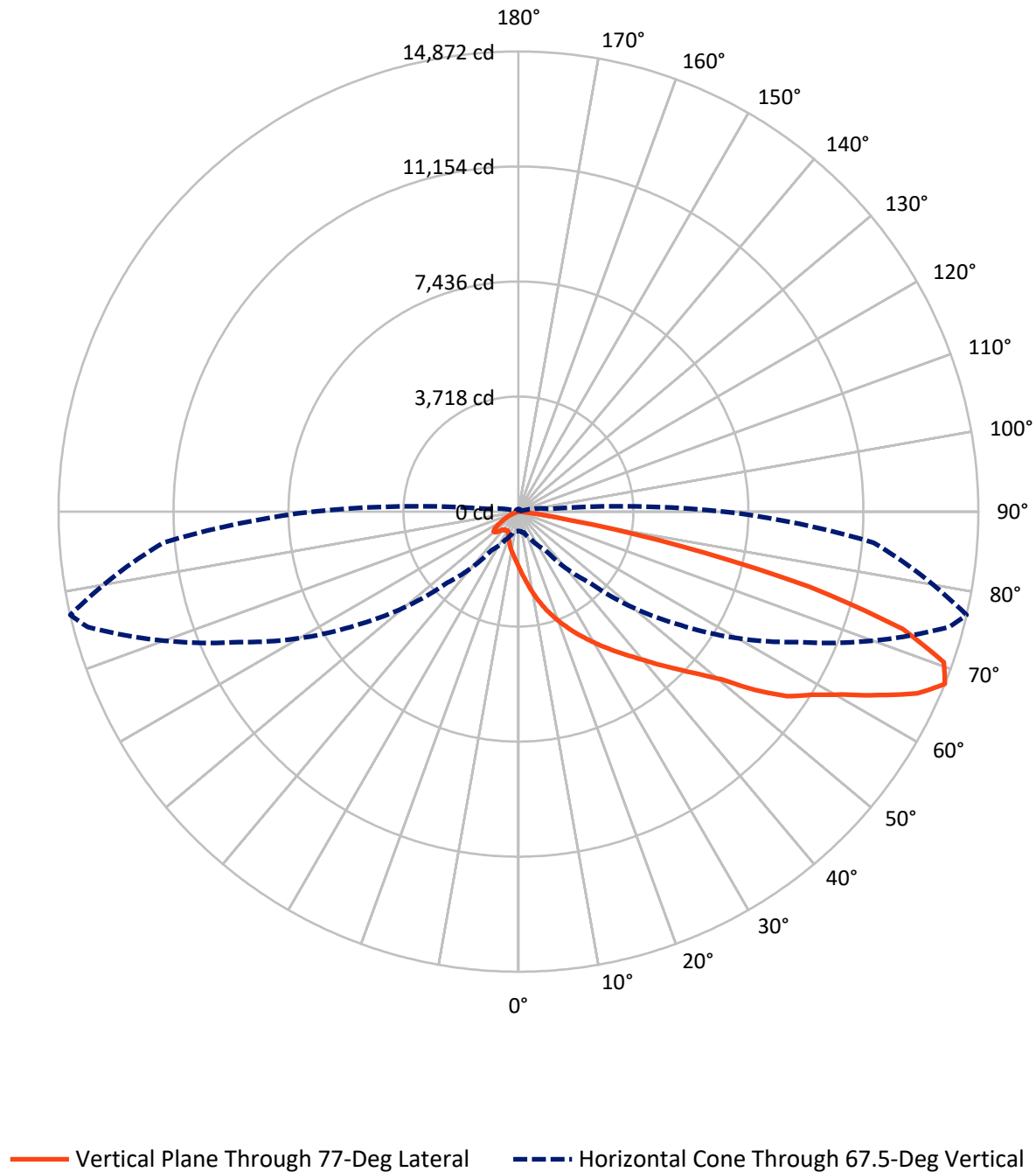
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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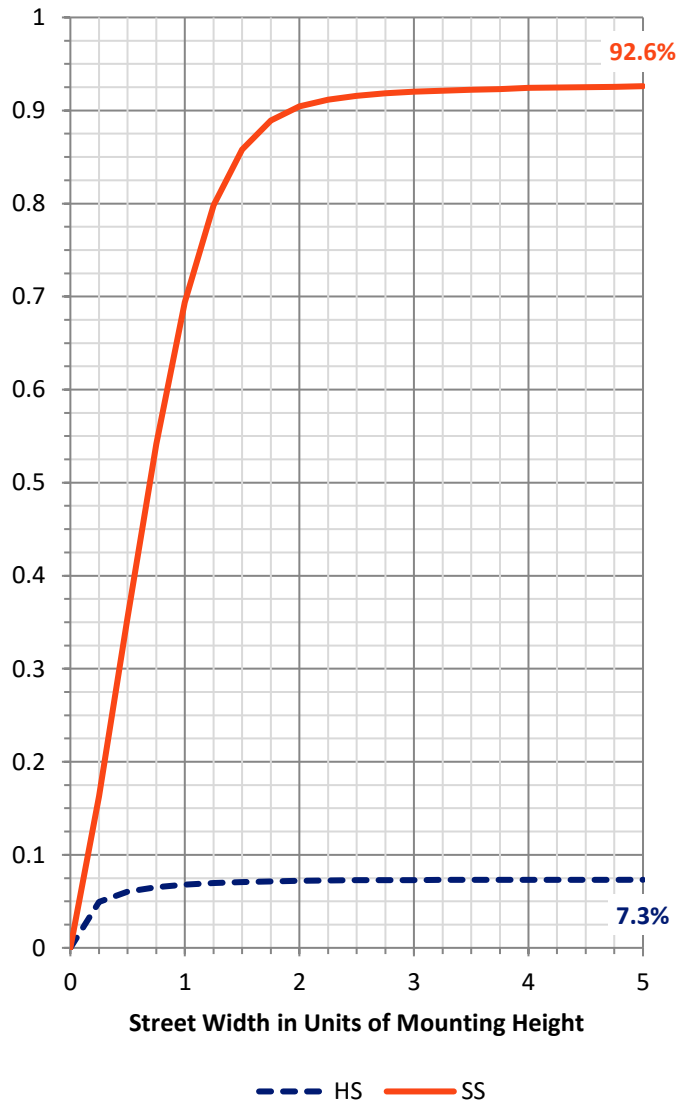
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1141.3	0.0	1141.3
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	14371.1	0.0	14371.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	15512.3	0.0	15512.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	1.2
10°-20°	639.4	4.1
20°-30°	1233.8	8.0
30°-40°	2141.9	13.8
40°-50°	3110.0	20.0
50°-60°	3571.4	23.0
60°-70°	3100.7	20.0
70°-80°	1460.4	9.4
80°-90°	72.2	0.5
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°	15512.3	100.0
0°-180°	15512.3	100.0

Coefficient of Utilization



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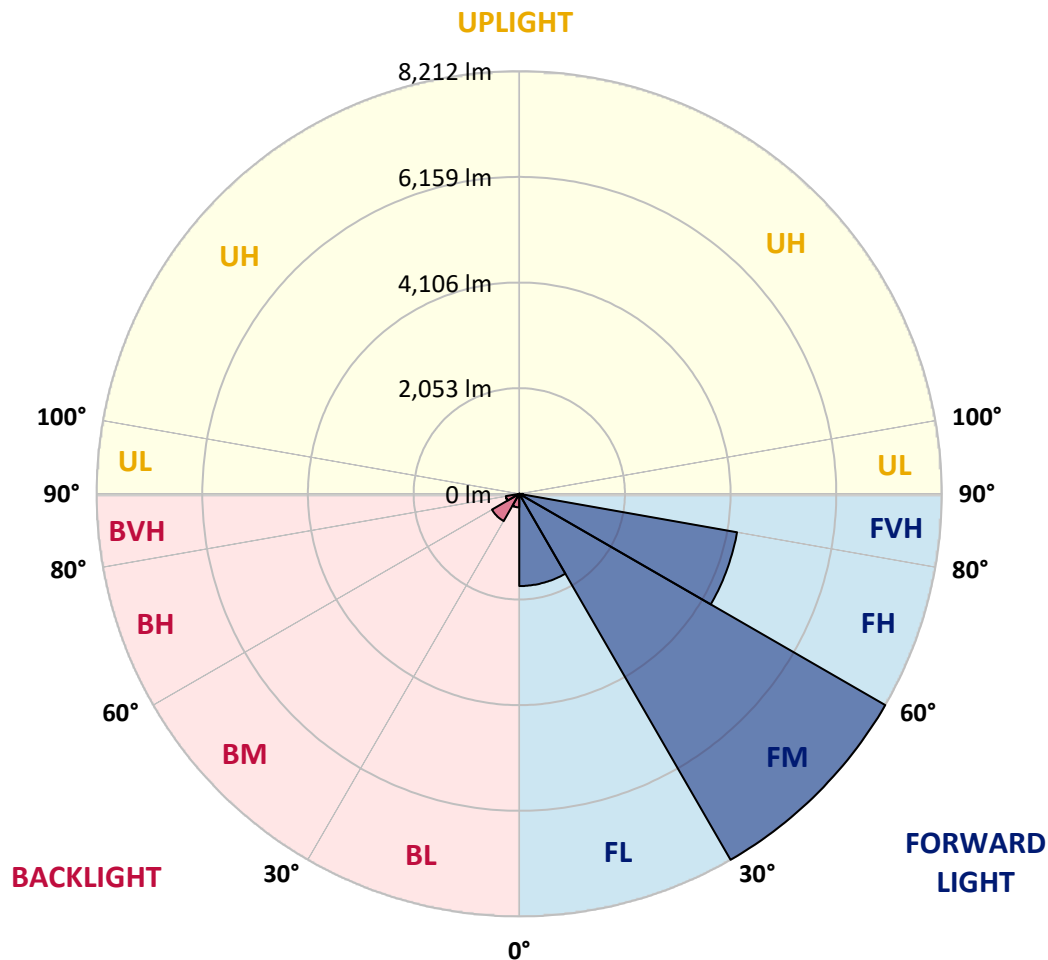
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1791.5	11.5			
FM	(30°-60°)	8211.8	52.9			
FH	(60°-80°)	4296.9	27.7			G2/5000
FVH	(80°-90°)	70.9	0.5			G1/100
BL	(0°-30°)	264.2	1.7	B1/500		
BM	(30°-60°)	611.5	3.9	B1/1000		
BH	(60°-80°)	264.2	1.7	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8
2.5°	2476.6	2492.0	2469.8	2427.4	2363.9	2322.4	2221.3	2126.0	2020.0	1986.2	1880.4
5°	3018.9	3032.4	3007.4	2961.1	2876.4	2795.4	2662.5	2463.1	2256.0	2189.5	2001.7
7.5°	3420.6	3428.3	3418.7	3376.2	3295.4	3203.8	3055.5	2819.5	2512.2	2439.0	2151.0
10°	3709.6	3734.6	3731.7	3715.3	3661.4	3587.2	3429.2	3160.5	2799.3	2704.9	2319.6
12.5°	3901.3	3929.2	3945.5	3982.2	3979.3	3932.1	3793.4	3509.2	3085.4	2974.5	2509.3
15°	3957.1	3987.0	4049.6	4134.3	4209.5	4233.6	4136.3	3851.1	3400.3	3258.8	2704.0
17.5°	3925.3	3971.6	4046.7	4180.6	4345.4	4454.1	4443.6	4181.6	3686.4	3524.7	2894.6
20°	3995.7	4039.9	4098.8	4211.4	4403.1	4600.6	4679.6	4497.5	3970.6	3801.1	3095.0
22.5°	4384.8	4377.2	4382.9	4401.2	4515.8	4711.4	4874.2	4784.6	4251.9	4078.5	3307.0
25°	5001.3	4966.6	4907.9	4808.7	4779.8	4874.2	5043.7	5038.9	4548.5	4362.7	3523.6
27.5°	5708.3	5702.6	5564.8	5325.9	5191.1	5154.5	5235.4	5286.4	4842.4	4644.0	3741.4
30°	6385.5	6400.9	6215.1	5949.2	5701.7	5558.1	5484.9	5521.5	5141.0	4947.4	3965.8
32.5°	6975.1	6991.4	6789.2	6478.0	6171.7	5998.3	5844.1	5753.6	5466.6	5255.6	4212.4
35°	7473.1	7489.5	7257.3	6913.4	6586.9	6429.8	6255.5	6007.9	5794.1	5597.6	4486.9
37.5°	7918.1	7913.3	7602.1	7255.4	6934.6	6810.3	6718.9	6321.0	6131.2	5941.5	4791.4
40°	8181.1	8201.3	7935.4	7553.0	7241.9	7151.3	7145.6	6709.2	6520.4	6336.4	5124.6
42.5°	8258.1	8293.8	8101.2	7787.1	7504.8	7406.6	7557.8	7129.2	6973.2	6794.0	5501.3
45°	8119.4	8154.1	8066.4	7848.7	7684.0	7620.5	7912.4	7564.6	7456.7	7279.4	5926.0
47.5°	7714.9	7758.2	7779.4	7733.2	7731.3	7795.7	8230.2	8023.1	8030.9	7849.8	6418.3
50°	6931.8	7005.0	7199.5	7363.3	7616.6	7934.5	8539.5	8520.2	8678.2	8522.1	7059.9
52.5°	5508.0	5612.1	6282.4	6730.4	7299.7	7908.5	8879.5	9317.8	9813.9	9585.6	7964.4
55°	4426.3	4426.3	4971.5	5809.5	6681.3	7737.0	9027.8	9836.0	10587.3	10533.4	8601.1
57.5°	3608.4	3651.8	3999.6	4740.3	5786.4	7328.6	9119.3	10161.5	11210.6	11171.1	9223.4
60°	2227.1	2320.5	2977.5	3708.7	4768.2	6601.3	9061.5	10491.1	11966.8	11998.5	9972.7
62.5°	1254.2	1288.8	1581.7	2668.3	3707.6	5623.6	8619.4	10675.0	12933.9	13068.7	10745.4
65°	866.0	883.3	996.0	1660.7	2570.0	4477.3	7755.4	10560.4	13903.0	14175.5	11400.4
67.5°	629.0	637.7	708.0	1014.3	1524.9	3246.3	6400.9	9982.4	14416.4	14872.0	11525.6
70°	483.6	489.3	540.4	666.6	900.7	2003.6	4648.8	8833.2	14044.6	14588.8	10884.1
72.5°	393.0	398.8	438.3	493.2	597.3	1184.8	2817.6	7173.5	12403.1	12990.7	9265.8
75°	331.4	339.1	374.7	410.3	468.1	761.0	1321.6	4995.5	9327.4	9712.7	6443.4
77.5°	184.0	169.5	304.4	340.0	394.9	481.6	618.4	2939.9	5223.8	5330.7	2859.0
80°	114.6	118.5	241.8	273.6	303.4	242.7	283.2	1131.8	1811.0	1720.4	553.9
82.5°	6.8	15.4	185.9	197.5	208.1	104.0	106.9	384.4	436.3	400.7	98.3
85°	0.0	0.0	84.8	68.4	72.3	29.8	30.9	89.6	58.7	63.6	19.3
87.5°	0.0	0.0	0.0	1.9	0.0	2.9	5.7	7.7	2.9	3.9	6.8
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°	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8	1788.8
2.5°	1812.9	1745.5	1608.6	1474.8	1365.9	1264.7	1192.5	1124.1	1089.5	1087.5	1085.6
5°	1867.8	1726.2	1452.6	1210.8	1016.3	860.2	759.0	686.9	650.3	637.7	635.8
7.5°	1944.8	1731.9	1315.8	979.7	750.4	616.5	558.7	535.6	527.9	519.2	517.3
10°	2042.1	1745.5	1193.5	788.9	591.4	524.0	500.9	491.3	485.4	479.7	477.8
12.5°	2151.0	1758.0	1072.1	655.1	520.2	485.4	469.1	457.6	449.9	443.1	441.2
15°	2256.9	1765.7	946.0	561.6	483.6	455.6	438.3	425.8	415.1	407.4	406.5
17.5°	2361.9	1776.3	827.5	505.7	453.7	425.8	408.5	393.0	384.4	375.7	374.7
20°	2478.6	1774.4	715.8	466.3	423.8	395.9	377.6	363.2	354.4	344.8	343.9
22.5°	2586.4	1764.7	617.5	432.6	393.0	366.0	345.8	331.4	322.7	315.0	314.1
25°	2710.6	1757.1	535.6	401.7	364.1	337.1	315.0	301.6	291.9	285.2	284.1
27.5°	2830.1	1745.5	475.9	373.7	336.2	310.2	288.9	273.6	264.9	260.0	260.0
30°	2947.6	1742.6	453.7	346.8	311.1	285.2	263.9	249.5	242.7	240.8	239.8
32.5°	3089.2	1750.3	463.3	337.1	288.0	262.0	241.8	231.1	224.5	224.5	224.5
35°	3240.4	1748.3	477.8	345.8	272.6	238.9	223.4	216.8	210.0	210.0	210.0
37.5°	3430.3	1751.2	489.3	360.3	266.8	219.7	210.9	202.3	198.4	198.4	198.4
40°	3713.5	1846.6	483.6	372.8	264.9	206.1	188.8	185.9	183.1	183.1	183.1
42.5°	4060.2	2053.7	491.3	373.7	263.9	196.5	173.4	179.2	172.4	171.5	170.5
45°	4439.7	2280.1	540.4	353.5	263.0	191.7	165.6	172.4	161.8	161.8	161.8
47.5°	4816.4	2504.5	590.5	324.6	260.0	190.8	159.0	155.1	152.2	153.1	153.1
50°	5335.5	2687.5	609.8	285.2	253.4	188.8	146.4	147.4	145.4	147.4	147.4
52.5°	5901.0	2726.1	586.6	240.8	234.1	183.1	137.8	141.6	140.6	142.6	142.6
55°	6253.6	2684.7	484.5	200.4	204.2	159.9	129.0	136.7	136.7	136.7	136.7
57.5°	6617.7	2508.4	343.9	162.8	169.5	131.0	121.4	131.9	131.0	130.1	130.1
60°	6879.7	2223.2	226.3	133.9	134.9	107.9	112.7	124.2	123.3	118.5	118.5
62.5°	7075.3	1908.2	145.4	113.7	103.1	97.3	103.1	112.7	108.9	98.3	96.4
65°	7053.1	1471.9	111.7	97.3	84.8	84.8	89.6	98.3	86.7	69.4	67.4
67.5°	6641.8	996.0	92.5	81.9	71.2	70.3	74.2	81.9	74.2	58.7	56.8
70°	5906.8	651.2	74.2	63.6	56.8	52.0	59.8	70.3	62.6	47.2	45.3
72.5°	4794.2	396.9	55.9	46.2	41.4	33.7	47.2	57.8	50.1	34.6	32.8
75°	3101.8	202.3	38.5	29.8	22.1	20.2	34.6	43.4	34.6	21.2	18.3
77.5°	1186.7	84.8	21.2	13.5	11.6	9.6	19.3	26.0	14.5	4.8	3.9
80°	228.3	35.7	10.6	6.8	5.7	3.9	2.9	1.9	0.0	0.0	0.0
82.5°	39.5	11.6	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)