

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: P964120

Luminaire Tested: **NAV-SB3B-760-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964120
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-SB3B-760-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 5700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18633.5 lumens
Efficiency: N/A
Efficacy: 170.6 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): 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

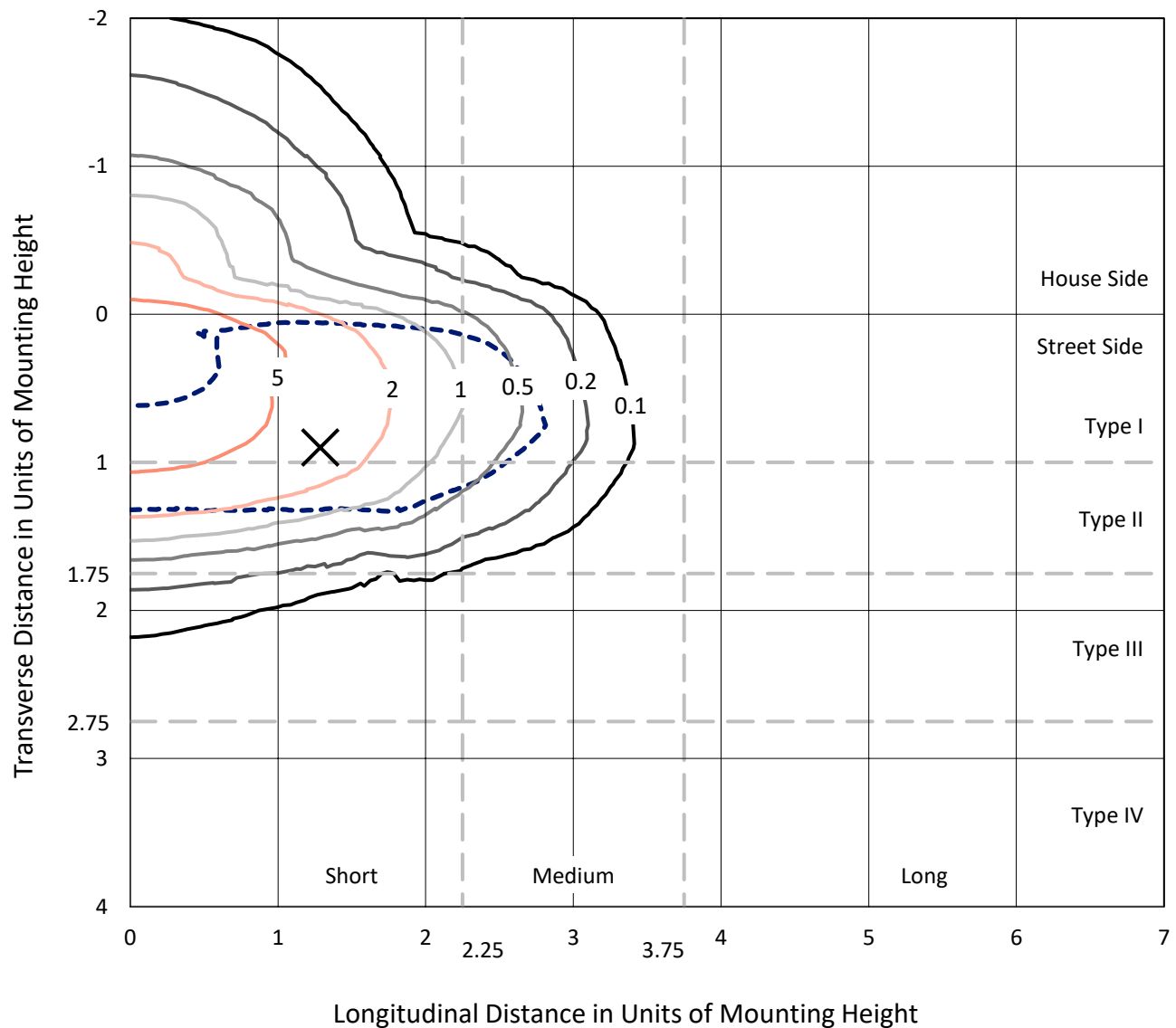


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

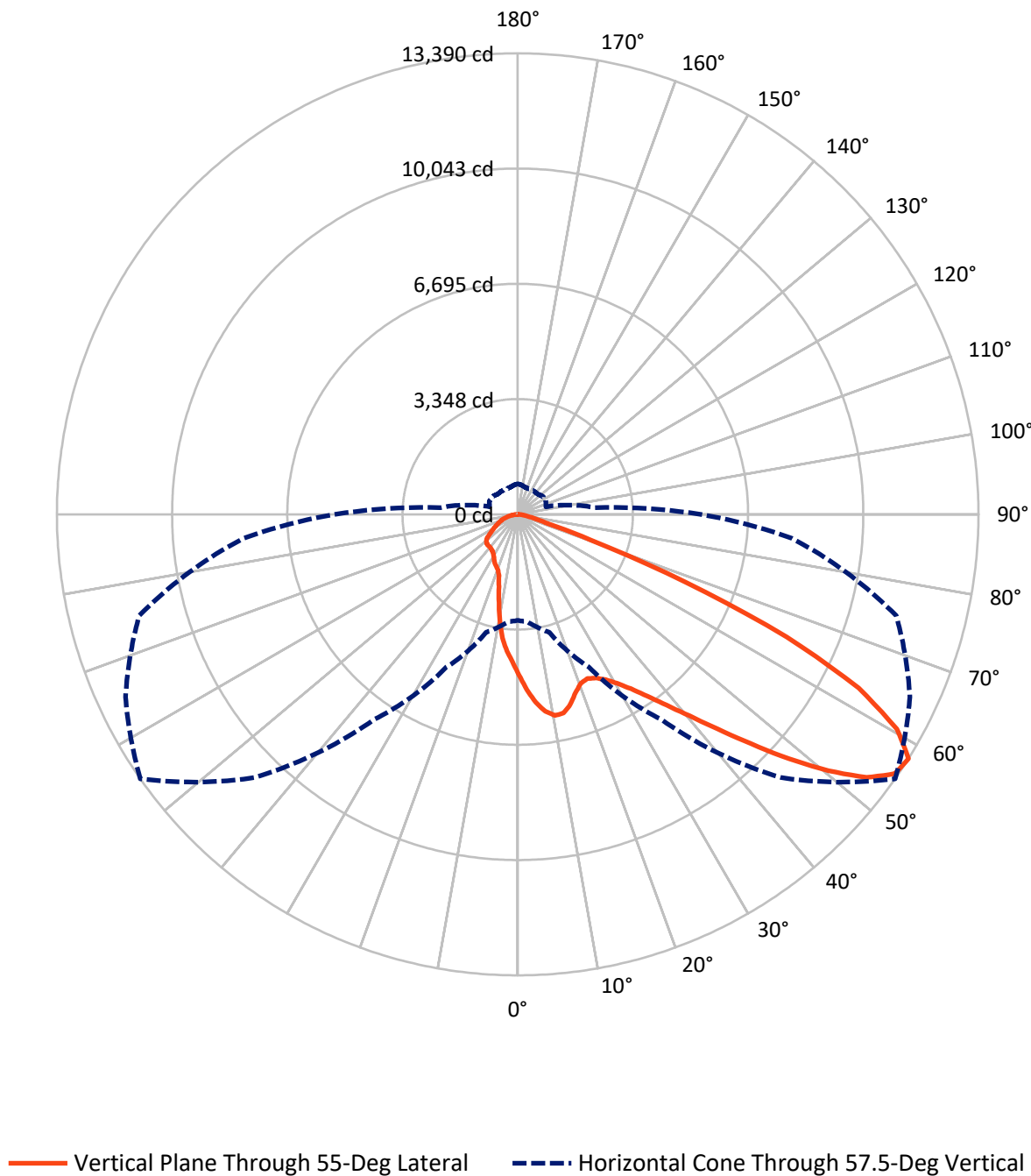


Based on 25 foot mounting height. Maximum calculated value = 9 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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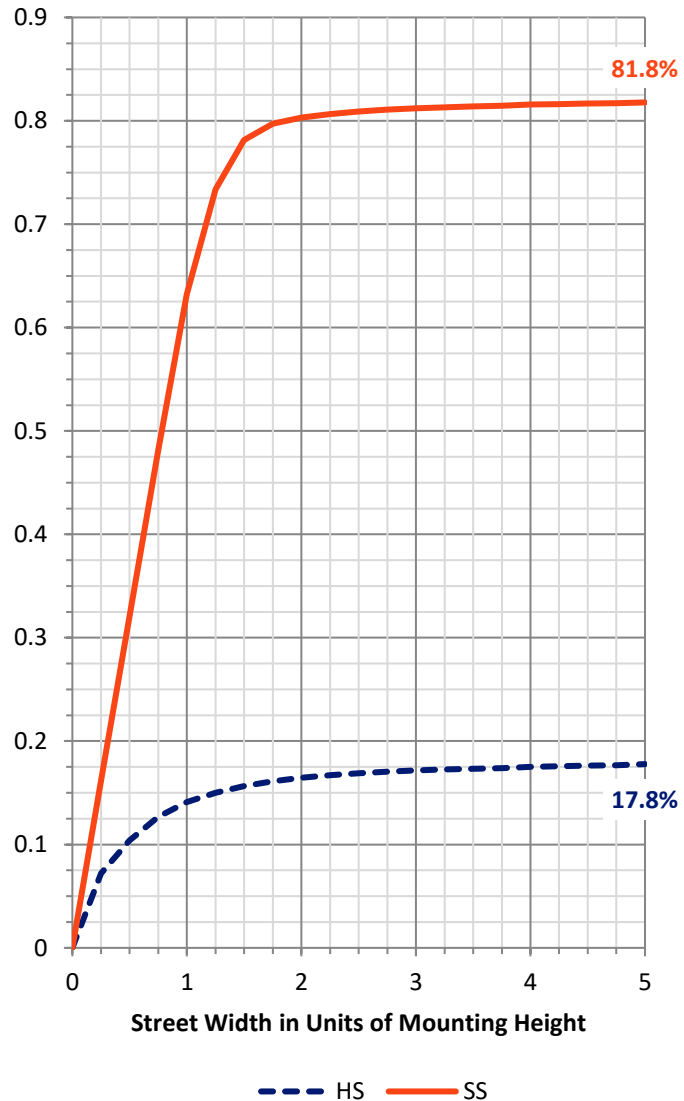
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3371.6	0.0	3371.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	15261.8	0.0	15261.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	18633.5	0.0	18633.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	433.2	2.3
10°-20°	1093.5	5.9
20°-30°	1745.0	9.4
30°-40°	2762.7	14.8
40°-50°	4228.7	22.7
50°-60°	4529.3	24.3
60°-70°	2849.4	15.3
70°-80°	842.6	4.5
80°-90°	149.0	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°	18633.5	100.0
0°-180°	18633.5	100.0

Coefficient of Utilization



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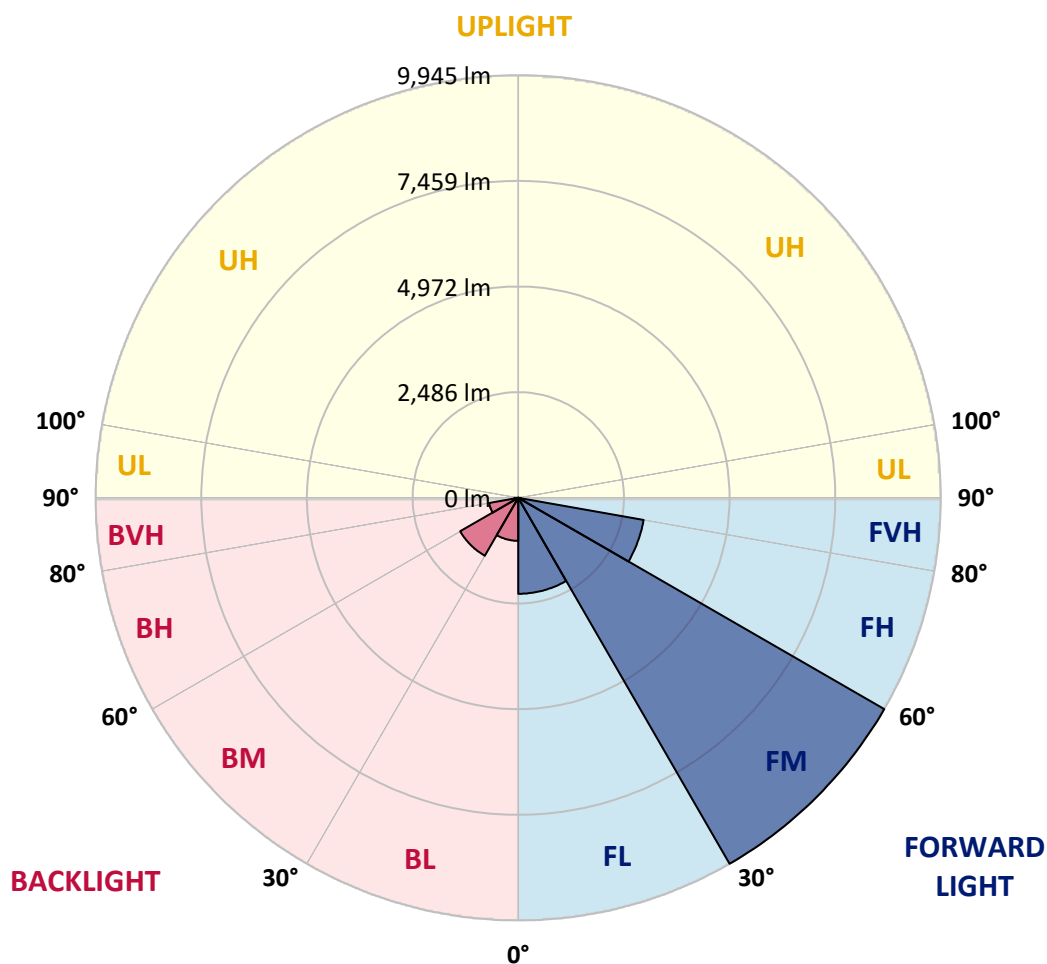
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2258.4	12.1			
FM	(30°-60°)	9944.8	53.4			
FH	(60°-80°)	2995.7	16.1			G2/5000
FVH	(80°-90°)	62.9	0.3			G1/100
BL	(0°-30°)	1013.4	5.4	B3/2500		
BM	(30°-60°)	1575.9	8.5	B2/2500		
BH	(60°-80°)	696.3	3.7	B2/1000		G2/1000
BVH	(80°-90°)	86.0	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°	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0
2.5°	5356.8	5352.9	5374.1	5301.8	5252.7	5186.2	5098.6	4986.8	4866.4	4739.3	4684.4
5°	5839.3	5805.6	5827.7	5773.8	5719.9	5619.7	5489.7	5307.6	5085.0	4831.7	4696.9
7.5°	5763.2	5740.1	5796.9	5845.1	5885.5	5873.0	5777.6	5587.0	5299.9	4931.9	4736.4
10°	5149.6	5123.6	5203.5	5370.2	5614.8	5827.7	5943.4	5824.9	5519.5	5041.8	4774.9
12.5°	4608.3	4595.7	4648.7	4783.6	5055.2	5463.7	5922.1	6032.9	5747.8	5171.7	4826.9
15°	4377.1	4361.7	4395.4	4463.8	4637.2	5017.7	5729.5	6175.5	5972.3	5322.0	4909.8
17.5°	4326.0	4308.7	4323.1	4358.8	4470.5	4760.4	5438.5	6245.8	6206.3	5489.7	4979.1
20°	4420.4	4406.0	4407.9	4406.0	4484.0	4714.2	5236.3	6218.9	6410.6	5643.8	5046.6
22.5°	4648.7	4624.6	4625.6	4574.6	4616.9	4795.2	5183.3	6146.6	6592.6	5778.6	5097.6
25°	5020.6	4977.2	4985.9	4855.8	4844.3	4976.3	5266.1	6090.8	6773.7	5886.5	5107.3
27.5°	5529.2	5480.1	5454.0	5260.4	5167.9	5233.4	5434.8	6110.0	6945.1	5980.0	5083.2
30°	6164.9	6105.2	6052.2	5777.6	5610.0	5585.9	5696.7	6237.1	7147.4	6078.2	5041.8
32.5°	6944.2	6874.8	6778.5	6414.3	6178.4	6052.2	6035.8	6463.5	7384.4	6203.4	5020.6
35°	7871.8	7781.3	7644.4	7173.5	6874.8	6616.7	6482.8	6790.0	7709.0	6392.2	5044.6
37.5°	8827.4	8725.2	8600.1	8039.4	7672.4	7292.0	7028.0	7233.1	8141.5	6648.5	5108.2
40°	9708.7	9594.1	9477.6	8978.6	8584.6	8126.1	7695.5	7793.8	8670.4	6954.7	5216.1
42.5°	10228.9	10144.1	10099.8	9830.2	9525.7	9060.5	8525.8	8458.4	9264.7	7307.3	5339.3
45°	10205.8	10171.1	10307.9	10419.6	10347.4	10089.3	9498.8	9193.4	9860.9	7612.7	5453.0
47.5°	9660.6	9683.7	9989.0	10617.1	10893.6	11028.4	10606.5	9914.9	10379.2	7840.9	5504.0
50°	8177.1	8196.4	8903.5	10257.8	11034.2	11794.2	11705.6	10619.0	10780.8	7980.6	5492.6
52.5°	7002.9	7015.4	7318.9	9192.4	10569.9	12179.6	12695.9	11282.7	11074.6	8019.2	5428.0
55°	5274.9	5318.2	5658.2	7212.0	9361.9	11874.2	13298.9	11966.7	11260.5	8023.0	5360.5
57.5°	3081.5	3128.7	3548.7	4895.3	7276.5	10809.8	13390.3	12573.5	11386.7	7992.2	5320.2
60°	1509.4	1529.7	1712.7	2572.9	4486.9	8758.9	12654.4	12867.3	11457.0	7975.8	5318.2
62.5°	1017.2	1014.3	1022.0	1269.6	2210.7	5627.4	11120.8	12352.9	11419.5	7913.2	5298.9
65°	874.6	864.1	835.2	891.0	1145.3	2573.9	8592.4	10817.4	11133.4	7756.2	5166.9
67.5°	756.1	757.2	758.1	740.8	817.8	1187.7	5250.8	8521.0	10106.6	7012.5	4658.3
70°	626.2	634.8	638.7	638.7	666.6	779.3	2241.5	5840.2	7971.9	5498.3	3751.9
72.5°	570.2	552.0	553.9	544.3	544.3	593.4	902.6	3310.7	5022.5	3093.0	2289.6
75°	465.2	476.8	478.8	472.0	449.9	452.7	535.6	1389.0	2149.0	1283.1	1131.8
77.5°	401.7	401.7	405.5	400.7	383.3	339.1	357.4	538.4	731.1	525.9	565.4
80°	322.7	321.7	338.1	347.8	320.7	250.4	228.3	297.7	324.6	231.1	293.8
82.5°	157.0	166.7	232.2	264.9	243.7	181.1	139.7	184.9	173.4	102.1	131.9
85°	91.5	86.7	104.0	147.4	139.7	100.1	67.4	96.4	90.5	52.0	53.0
87.5°	28.9	27.0	21.2	50.1	40.5	28.0	18.3	28.0	25.0	11.6	11.6
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°	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0	4669.0
2.5°	4616.0	4502.3	4389.6	4286.5	4223.9	4183.4	4143.0	4097.7	4080.4	4054.4
5°	4569.8	4350.1	4154.5	3986.0	3832.8	3712.4	3591.1	3492.8	3448.5	3478.3
7.5°	4542.8	4224.8	3923.4	3614.2	3316.5	3078.6	2871.5	2726.1	2660.5	2676.9
10°	4518.7	4083.3	3623.8	3135.5	2707.7	2413.0	2201.1	2090.3	2048.9	2057.5
12.5°	4496.5	3924.3	3262.6	2620.1	2165.4	1970.9	1910.2	1911.1	1918.8	1924.6
15°	4492.7	3732.6	2858.9	2169.3	1872.6	1860.1	1925.6	1967.0	1989.1	1995.9
17.5°	4486.9	3503.3	2447.7	1862.0	1801.3	1886.1	1946.8	1973.7	1991.1	1992.0
20°	4463.8	3212.5	2068.1	1715.5	1785.9	1859.1	1896.7	1917.9	1932.3	1937.1
22.5°	4392.5	2888.9	1772.4	1650.0	1724.3	1783.0	1827.3	1851.4	1860.1	1865.8
25°	4264.4	2526.6	1568.1	1587.4	1638.5	1712.7	1748.3	1753.2	1750.3	1758.9
27.5°	4096.7	2138.5	1441.0	1502.6	1568.1	1631.8	1651.1	1648.1	1642.4	1652.0
30°	3894.5	1789.8	1360.2	1407.3	1496.9	1554.7	1572.0	1565.3	1553.7	1564.4
32.5°	3680.7	1504.6	1293.7	1340.9	1438.2	1495.0	1512.3	1505.6	1496.9	1505.6
35°	3481.2	1305.2	1232.0	1296.5	1391.9	1447.8	1470.0	1470.9	1470.9	1481.5
37.5°	3298.2	1188.7	1181.0	1268.6	1360.2	1410.2	1442.0	1443.9	1402.5	1405.4
40°	3128.7	1139.5	1157.8	1250.3	1329.3	1377.5	1379.4	1271.5	1195.5	1193.5
42.5°	2989.9	1130.0	1164.6	1248.3	1307.2	1309.0	1173.2	1089.5	1068.3	1069.2
45°	2860.0	1127.0	1180.0	1248.3	1274.4	1130.9	1039.4	1017.2	1019.2	1026.8
47.5°	2714.5	1115.5	1182.8	1231.0	1180.0	1005.6	978.7	969.0	965.1	967.1
50°	2555.5	1074.0	1146.3	1196.4	1018.1	951.7	918.0	915.1	919.9	922.8
52.5°	2387.9	1006.7	1083.6	1133.8	944.0	904.5	866.9	873.7	894.8	901.6
55°	2278.2	927.6	1000.8	1008.5	892.0	860.2	828.4	843.8	883.3	895.8
57.5°	2249.3	843.8	906.4	897.8	825.5	821.6	802.4	815.9	866.0	884.3
60°	2240.5	768.6	814.0	807.2	761.0	779.3	774.5	781.3	798.6	804.3
62.5°	2173.1	709.0	731.1	721.5	703.2	734.9	746.5	732.1	745.6	752.3
65°	2001.6	660.8	650.2	643.5	651.2	680.1	703.2	674.2	686.9	706.1
67.5°	1718.5	595.3	566.4	574.1	598.2	613.6	643.5	610.7	621.4	654.1
70°	1390.0	512.5	486.5	508.6	531.8	563.5	568.4	546.1	571.2	607.8
72.5°	983.5	428.7	410.3	455.6	463.3	504.7	494.2	483.6	518.2	530.7
75°	682.0	345.8	335.2	369.9	397.8	433.5	425.8	438.3	511.5	517.3
77.5°	431.5	268.8	262.0	284.1	322.7	362.2	374.7	517.3	873.7	908.4
80°	250.4	200.4	192.7	210.0	243.7	280.3	361.2	634.8	576.0	569.3
82.5°	139.7	137.8	128.1	132.9	162.8	202.3	510.6	447.0	363.2	374.7
85°	65.5	80.9	69.4	66.4	91.5	237.0	341.0	255.2	169.5	165.6
87.5°	17.3	15.4	15.4	17.3	38.5	204.2	135.8	108.9	64.6	62.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)