

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: P961919

Luminaire Tested: **NAV-SB2B-735-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961919
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-SB2B-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11739.3 lumens
Efficiency: N/A
Efficacy: 158.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 73.9
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

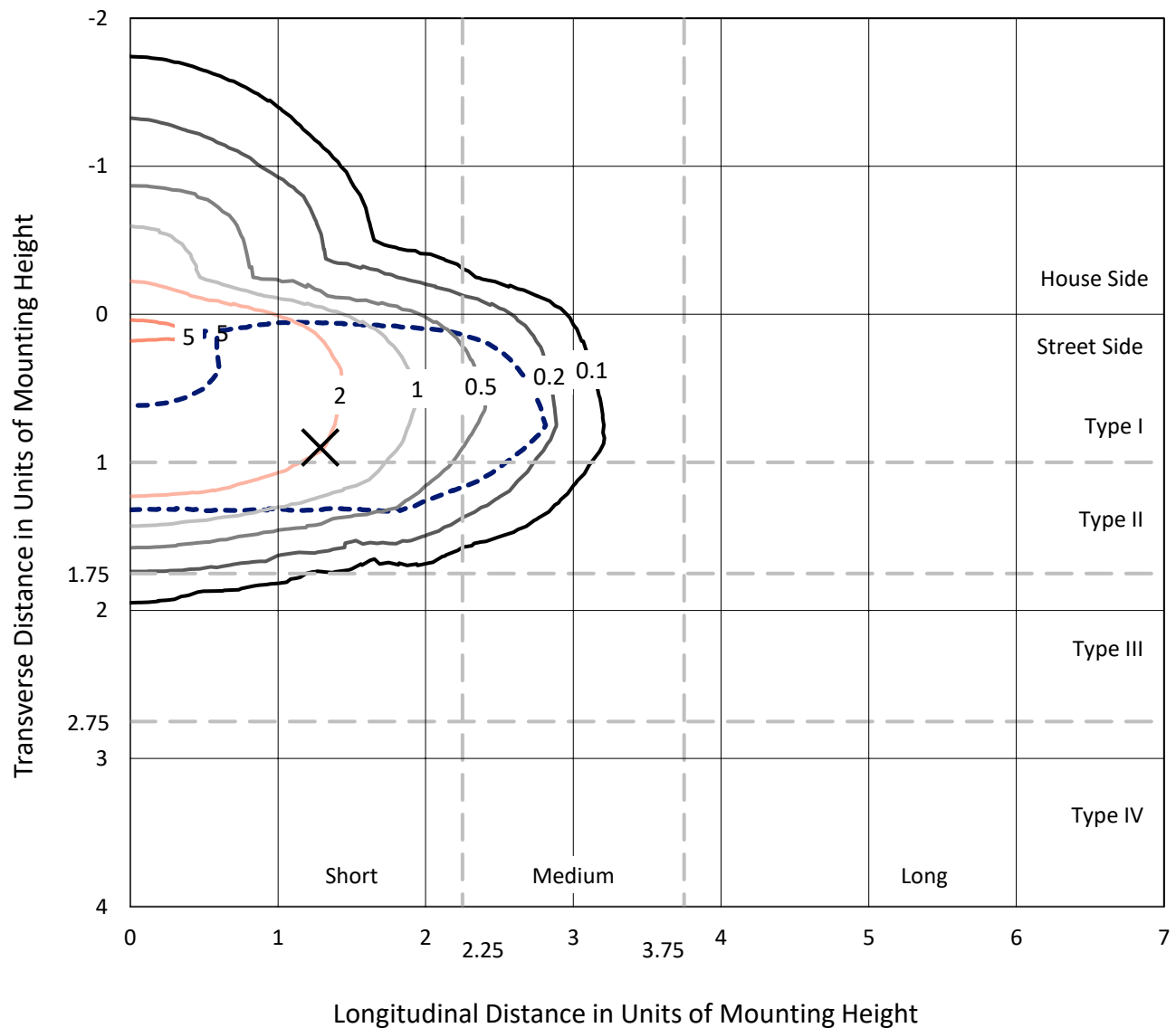


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Iso-Footcandle Lines of Horizontal Illumination

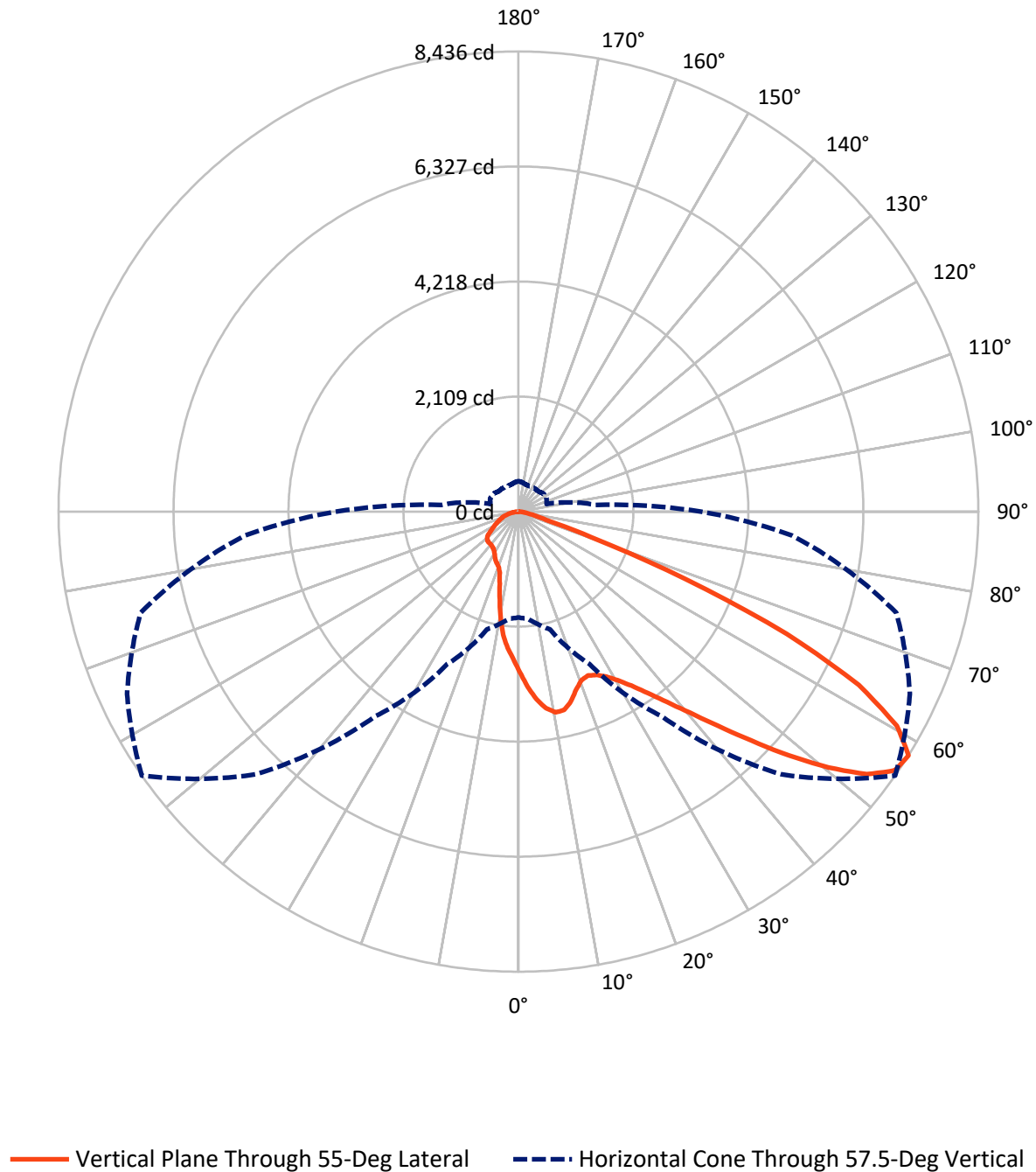
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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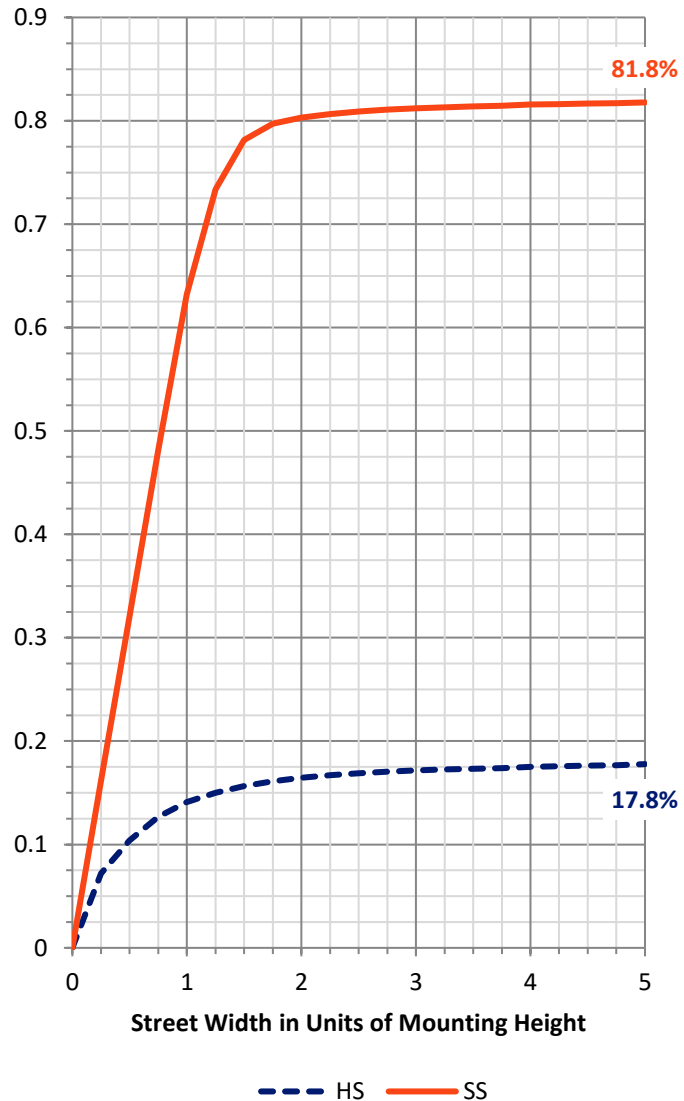
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2124.2	0.0	2124.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	9615.1	0.0	9615.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	11739.3	0.0	11739.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.0	2.3
10°-20°	688.9	5.9
20°-30°	1099.4	9.4
30°-40°	1740.6	14.8
40°-50°	2664.1	22.7
50°-60°	2853.5	24.3
60°-70°	1795.2	15.3
70°-80°	530.9	4.5
80°-90°	93.9	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°	11739.3	100.0
0°-180°	11739.3	100.0

Coefficient of Utilization



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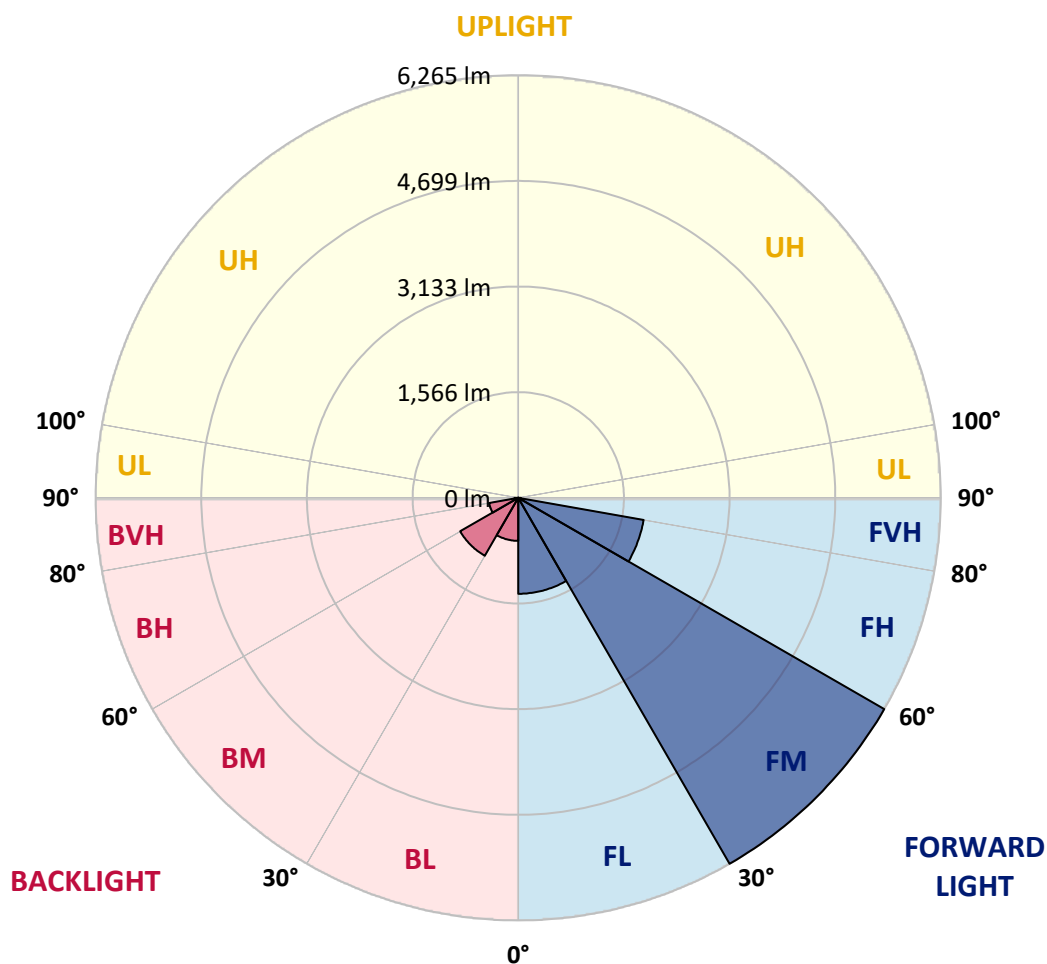
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1422.8	12.1			
FM	(30°-60°)	6265.4	53.4			
FH	(60°-80°)	1887.3	16.1			G2/5000
FVH	(80°-90°)	39.7	0.3			G1/100
BL	(0°-30°)	638.5	5.4	B2/1000		
BM	(30°-60°)	992.8	8.5	B1/1000		
BH	(60°-80°)	438.7	3.7	B1/500		G1/500
BVH	(80°-90°)	54.2	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5
2.5°	3374.8	3372.4	3385.7	3340.2	3309.2	3267.4	3212.1	3141.7	3065.9	2985.8	2951.2
5°	3678.8	3657.6	3671.6	3637.6	3603.6	3540.5	3458.6	3343.9	3203.6	3044.0	2959.1
7.5°	3630.9	3616.3	3652.2	3682.5	3707.9	3700.0	3640.0	3519.8	3339.0	3107.2	2984.0
10°	3244.3	3227.9	3278.3	3383.3	3537.5	3671.6	3744.4	3669.7	3477.3	3176.4	3008.3
12.5°	2903.2	2895.4	2928.7	3013.7	3184.9	3442.2	3731.0	3800.8	3621.2	3258.3	3041.0
15°	2757.7	2747.9	2769.1	2812.2	2921.5	3161.2	3609.6	3890.6	3762.6	3353.0	3093.2
17.5°	2725.5	2714.5	2723.6	2746.1	2816.5	2999.1	3426.4	3935.0	3910.1	3458.6	3136.9
20°	2784.9	2775.8	2777.0	2775.8	2825.0	2970.0	3299.0	3918.0	4038.7	3555.6	3179.3
22.5°	2928.7	2913.6	2914.2	2882.0	2908.7	3021.0	3265.5	3872.4	4153.4	3640.6	3211.5
25°	3163.0	3135.7	3141.1	3059.2	3051.9	3135.1	3317.7	3837.2	4267.5	3708.6	3217.6
27.5°	3483.5	3452.5	3436.1	3314.1	3255.8	3297.1	3423.9	3849.4	4375.5	3767.5	3202.4
30°	3883.9	3846.3	3813.0	3640.0	3534.4	3519.2	3589.0	3929.4	4502.9	3829.3	3176.4
32.5°	4374.9	4331.2	4270.6	4041.2	3892.4	3813.0	3802.6	4072.1	4652.3	3908.2	3163.0
35°	4959.4	4902.3	4816.1	4519.3	4331.2	4168.6	4084.2	4277.8	4856.8	4027.2	3178.2
37.5°	5561.3	5497.0	5418.2	5064.9	4833.7	4593.9	4427.7	4556.9	5129.3	4188.6	3218.2
40°	6116.6	6044.4	5970.9	5656.7	5408.4	5119.6	4848.2	4910.2	5462.4	4381.6	3286.2
42.5°	6444.4	6391.0	6363.0	6193.0	6001.4	5708.2	5371.4	5328.9	5836.9	4603.7	3363.8
45°	6429.8	6407.9	6494.1	6564.5	6519.0	6356.3	5984.4	5792.0	6212.5	4796.1	3435.5
47.5°	6086.2	6100.9	6293.2	6688.9	6863.1	6948.1	6682.3	6246.5	6539.0	4939.9	3467.7
50°	5151.8	5163.8	5609.3	6462.5	6951.7	7430.5	7374.7	6690.1	6792.1	5027.9	3460.4
52.5°	4411.9	4419.8	4611.0	5791.4	6659.2	7673.3	7998.5	7108.3	6977.2	5052.2	3419.7
55°	3323.3	3350.5	3564.7	4543.6	5898.2	7480.9	8378.5	7539.2	7094.3	5054.6	3377.3
57.5°	1941.4	1971.1	2235.7	3084.1	4584.3	6810.3	8436.1	7921.5	7173.8	5035.2	3351.7
60°	951.0	963.7	1079.0	1620.9	2826.7	5518.3	7972.4	8106.5	7218.0	5024.9	3350.5
62.5°	640.8	639.0	643.9	799.8	1392.8	3545.4	7006.3	7782.5	7194.5	4985.4	3338.4
65°	551.0	544.4	526.1	561.4	721.6	1621.6	5413.2	6815.1	7014.2	4886.5	3255.2
67.5°	476.4	477.0	477.6	466.7	515.3	748.2	3308.1	5368.3	6367.3	4418.0	2934.8
70°	394.4	400.0	402.3	402.3	419.9	491.0	1412.1	3679.4	5022.4	3464.0	2363.8
72.5°	359.3	347.8	348.9	342.9	342.9	373.8	568.7	2085.8	3164.2	1948.6	1442.5
75°	293.2	300.4	301.7	297.4	283.4	285.3	337.4	875.1	1353.9	808.3	713.1
77.5°	253.1	253.1	255.5	252.5	241.5	213.6	225.2	339.3	460.6	331.4	356.2
80°	203.3	202.7	213.0	219.0	202.1	157.7	143.8	187.5	204.5	145.7	185.1
82.5°	98.9	105.0	146.3	166.9	153.5	114.1	87.9	116.5	109.3	64.4	83.1
85°	57.6	54.6	65.5	92.9	87.9	63.1	42.4	60.7	57.1	32.8	33.4
87.5°	18.2	17.0	13.3	31.6	25.5	17.6	11.5	17.6	15.8	7.3	7.3
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°	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5	2941.5
2.5°	2908.1	2836.5	2765.6	2700.6	2661.1	2635.6	2610.2	2581.7	2570.7	2554.3
5°	2879.0	2740.6	2617.4	2511.2	2414.7	2338.8	2262.4	2200.5	2172.6	2191.4
7.5°	2862.0	2661.7	2471.8	2276.9	2089.5	1939.5	1809.1	1717.5	1676.2	1686.5
10°	2846.8	2572.5	2283.1	1975.4	1705.9	1520.2	1386.7	1316.9	1290.8	1296.3
12.5°	2832.9	2472.4	2055.4	1650.7	1364.3	1241.7	1203.5	1204.1	1208.9	1212.6
15°	2830.4	2351.7	1801.2	1366.6	1179.8	1171.9	1213.1	1239.2	1253.2	1257.5
17.5°	2826.7	2207.1	1542.0	1173.1	1134.9	1188.3	1226.5	1243.4	1254.4	1255.0
20°	2812.2	2023.9	1303.0	1080.9	1125.1	1171.3	1194.9	1208.3	1217.4	1220.4
22.5°	2767.3	1820.0	1116.6	1039.6	1086.3	1123.3	1151.3	1166.4	1171.9	1175.5
25°	2686.6	1591.8	988.0	1000.1	1032.3	1079.0	1101.5	1104.5	1102.7	1108.1
27.5°	2581.1	1347.3	907.8	946.7	988.0	1028.1	1040.2	1038.3	1034.7	1040.8
30°	2453.5	1127.6	856.9	886.6	943.1	979.5	990.5	986.2	978.9	985.5
32.5°	2318.9	947.9	815.0	844.8	906.1	941.9	952.7	948.5	943.1	948.5
35°	2193.2	822.4	776.2	816.8	876.9	912.1	926.1	926.7	926.7	933.4
37.5°	2077.9	748.9	744.0	799.3	856.9	888.5	908.5	909.7	883.6	885.4
40°	1971.1	717.9	729.5	787.7	837.5	867.9	869.0	801.0	753.2	751.9
42.5°	1883.7	711.9	733.7	786.5	823.5	824.7	739.1	686.3	673.0	673.6
45°	1801.7	710.0	743.4	786.5	802.9	712.5	654.8	640.8	642.1	646.9
47.5°	1710.1	702.7	745.3	775.6	743.4	633.6	616.5	610.5	608.1	609.3
50°	1610.1	676.7	722.2	753.7	641.4	599.6	578.3	576.6	579.5	581.4
52.5°	1504.4	634.2	682.8	714.3	594.7	569.9	546.2	550.4	563.8	568.1
55°	1435.2	584.5	630.6	635.4	562.0	541.9	521.9	531.7	556.5	564.4
57.5°	1417.1	531.7	571.0	565.6	520.1	517.6	505.5	514.0	545.6	557.1
60°	1411.5	484.3	512.8	508.6	479.4	491.0	487.9	492.2	503.1	506.8
62.5°	1369.1	446.7	460.6	454.6	443.0	463.0	470.4	461.2	469.8	474.0
65°	1261.1	416.4	409.6	405.4	410.2	428.4	443.0	424.8	432.7	444.8
67.5°	1082.6	375.0	356.8	361.7	376.9	386.5	405.4	384.8	391.4	412.0
70°	875.8	322.9	306.5	320.4	335.0	355.1	358.0	344.1	359.9	382.9
72.5°	619.6	270.1	258.5	287.0	291.9	318.0	311.3	304.6	326.5	334.4
75°	429.7	217.9	211.2	233.1	250.6	273.1	268.2	276.1	322.3	325.8
77.5°	271.8	169.3	165.0	179.1	203.3	228.2	236.1	325.8	550.4	572.3
80°	157.7	126.2	121.4	132.3	153.5	176.6	227.6	400.0	363.0	358.6
82.5°	87.9	86.8	80.7	83.7	102.6	127.4	321.6	281.6	228.8	236.1
85°	41.3	50.9	43.7	41.9	57.6	149.2	214.8	160.8	106.8	104.3
87.5°	11.0	9.7	9.7	11.0	24.3	128.6	85.6	68.6	40.7	39.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)