

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: P968769

Luminaire Tested: **NAV-SB5C-735-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968769
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33061.4 lumens
Efficiency: N/A
Efficacy: 132.5 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): 249.5
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

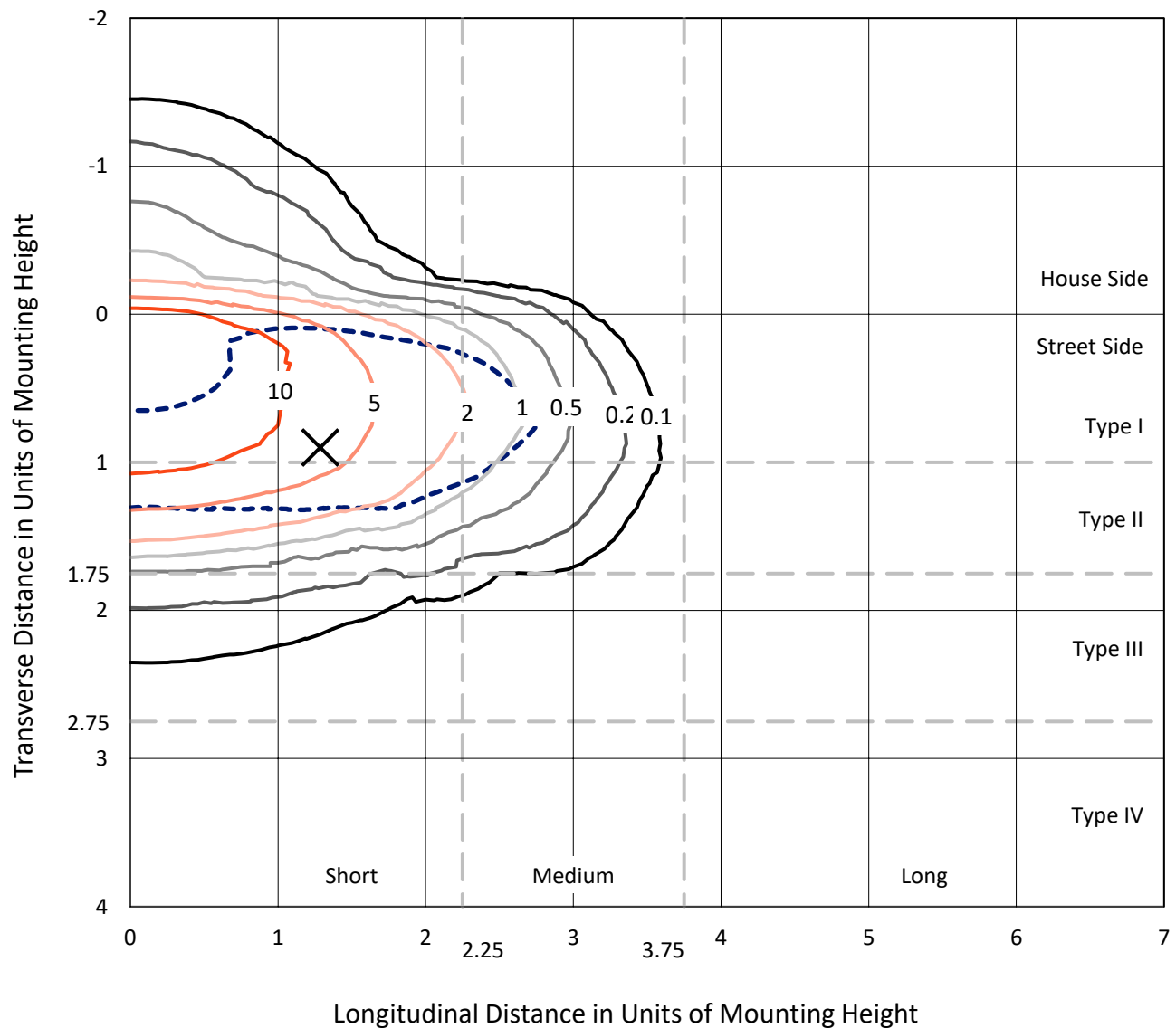


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

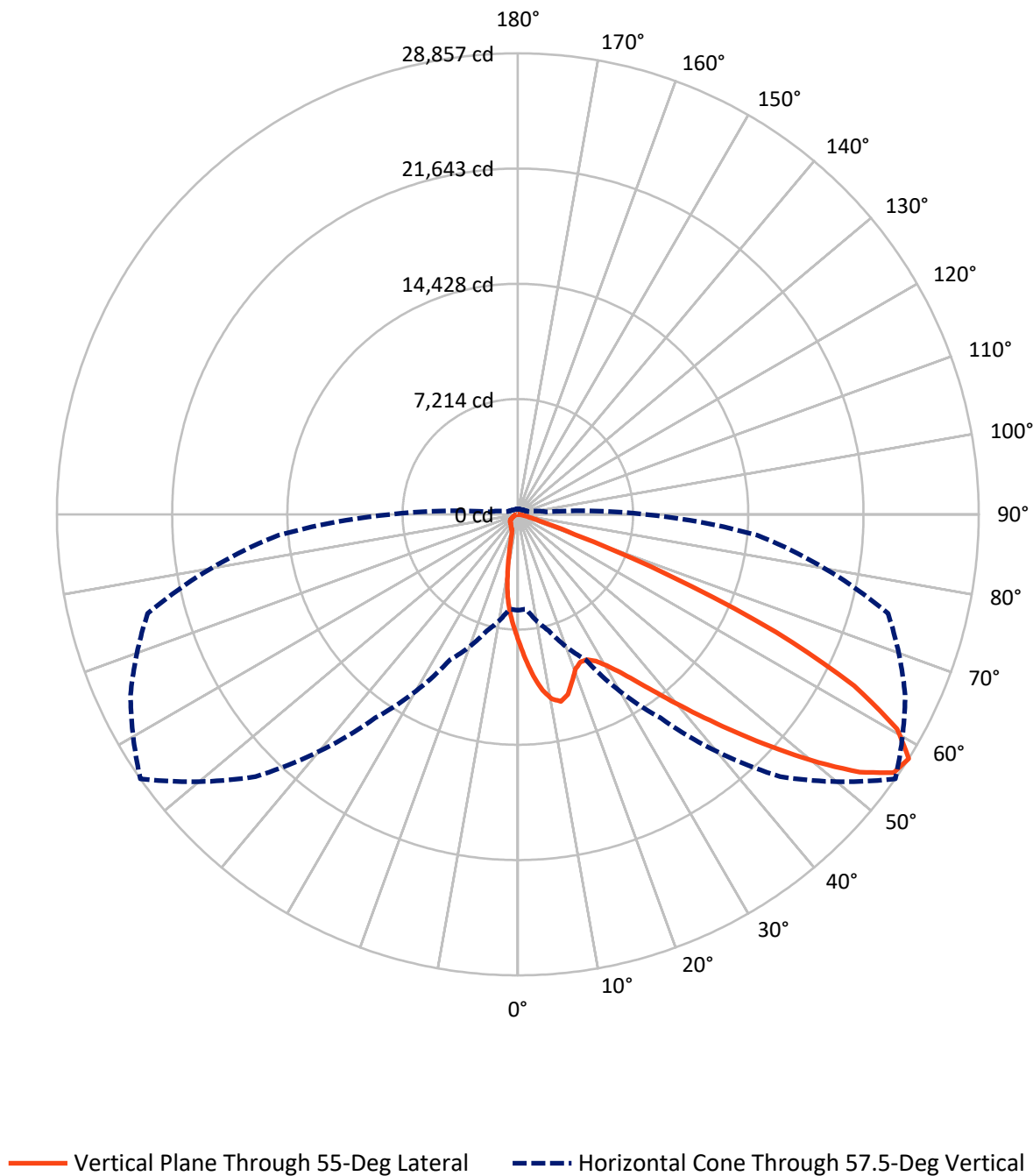


Based on 25 foot mounting height. Maximum calculated value = 18.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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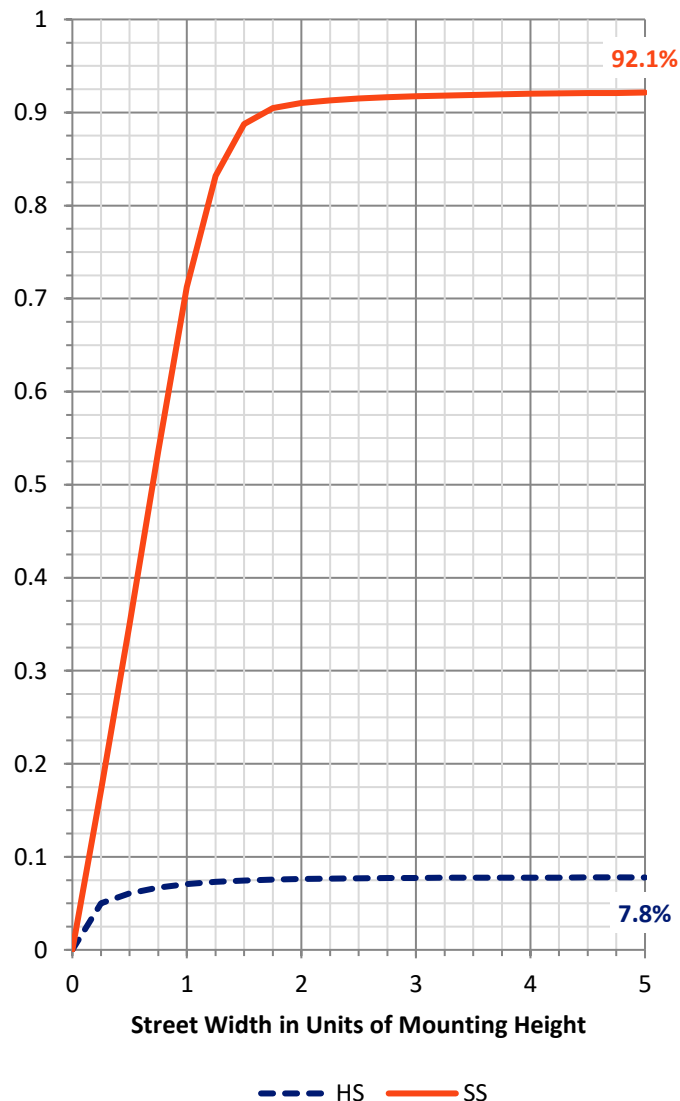
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2581.9	0.0	2581.9
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	30479.4	0.0	30479.4
	% Fixture	92.2	0.0	92.2
Total	Lumens	33061.4	0.0	33061.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	741.3	2.2
10°-20°	1790.6	5.4
20°-30°	2864.9	8.7
30°-40°	4849.0	14.7
40°-50°	7961.0	24.1
50°-60°	8749.7	26.5
60°-70°	5018.9	15.2
70°-80°	1025.5	3.1
80°-90°	60.5	0.2
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°	33061.4	100.0
0°-180°	33061.4	100.0

Coefficient of Utilization



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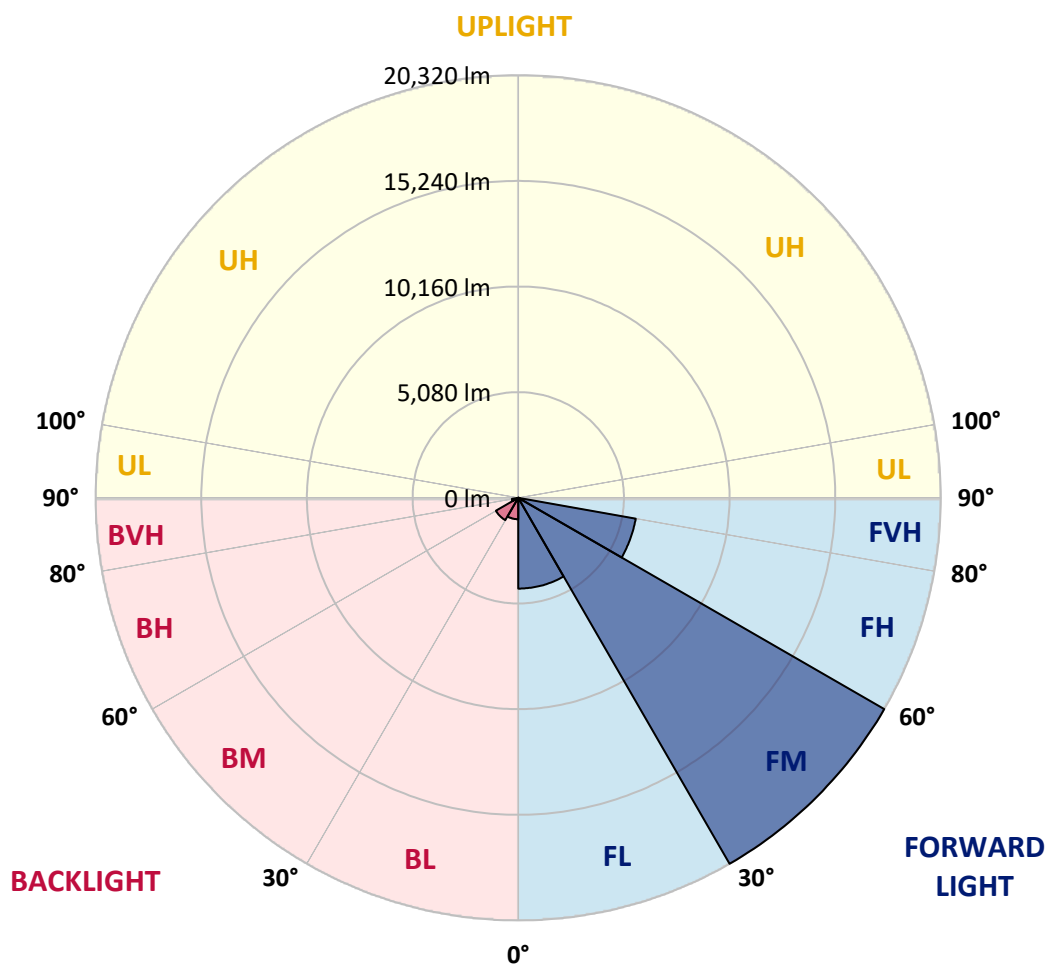
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4366.0	13.2			
FM	(30°-60°)	20319.8	61.5			
FH	(60°-80°)	5737.3	17.4			G3/7500
FVH	(80°-90°)	56.4	0.2			G1/100
BL	(0°-30°)	1030.8	3.1	B3/2500		
BM	(30°-60°)	1240.0	3.8	B2/2500		
BH	(60°-80°)	307.1	0.9	B1/500		G1/500
BVH	(80°-90°)	4.1	0.0			G0/10
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°	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0
2.5°	9885.3	9761.0	9742.6	9718.1	9481.7	9304.3	9047.5	8766.1	8450.1	8128.0	7985.4
5°	11420.4	11322.6	11304.2	11190.0	10921.0	10619.2	10162.6	9585.7	8996.5	8303.3	8005.7
7.5°	11718.1	11699.8	11783.3	11779.2	11742.5	11504.0	11118.7	10431.7	9547.0	8519.5	8058.8
10°	10390.9	10437.8	10686.5	10904.7	11493.8	11836.3	11752.8	11185.9	10113.7	8766.1	8117.8
12.5°	9182.1	9126.9	9304.3	9550.9	10236.0	11255.3	12015.7	11815.9	10762.0	9045.4	8205.5
15°	8423.7	8401.2	8501.1	8615.2	9137.2	10164.6	11709.9	12327.6	11385.8	9375.7	8338.0
17.5°	8181.0	8162.7	8193.2	8221.8	8560.2	9355.3	10982.2	12641.5	11983.1	9752.8	8484.7
20°	8378.8	8354.4	8350.3	8327.8	8468.4	9010.8	10323.6	12664.0	12519.2	10095.3	8611.2
22.5°	8955.7	8927.1	8827.3	8737.6	8749.8	9057.6	10030.0	12439.7	12922.9	10415.3	8690.7
25°	10001.5	9954.6	9746.7	9445.0	9253.4	9383.9	10074.9	12144.1	13308.2	10666.2	8651.9
27.5°	11310.4	11249.2	10982.2	10533.6	10095.3	9936.2	10399.0	11940.2	13628.3	10857.7	8568.4
30°	12592.6	12513.1	12250.2	11901.6	11261.4	10759.9	10984.1	12030.0	14009.5	11057.5	8458.3
32.5°	13976.9	13901.5	13552.9	13120.6	12590.6	11915.8	11785.3	12468.3	14476.3	11336.8	8380.8
35°	15728.0	15609.8	15114.4	14525.3	13962.6	13279.7	12869.9	13224.7	15098.1	11762.9	8423.7
37.5°	17721.8	17562.9	17028.7	16215.3	15481.4	14716.8	14190.9	14264.3	16009.4	12333.7	8556.2
40°	19601.5	19456.8	18963.3	18196.8	17275.4	16347.8	15787.2	15624.1	17267.3	13028.9	8788.6
42.5°	20728.8	20598.3	20390.4	20066.2	19289.6	18343.6	17636.3	17283.6	18755.4	13860.7	9071.9
45°	20792.0	20677.8	20957.1	21334.2	21181.4	20551.5	19689.1	19042.9	20249.7	14641.5	9365.5
47.5°	19780.9	19703.4	20551.5	21868.4	22524.9	22789.8	21994.8	20655.4	21483.1	15202.1	9485.8
50°	17024.6	16996.0	18741.1	21159.0	23036.6	24751.1	24426.9	22155.9	22439.2	15491.5	9371.6
52.5°	14761.7	14657.8	15675.0	18888.0	22292.4	25782.5	26804.0	23627.8	23107.9	15546.6	9104.6
55°	11196.2	11104.4	12380.7	15087.9	19893.0	25415.6	28542.9	25146.5	23587.0	15406.0	8625.5
57.5°	6005.8	5948.7	7561.3	10042.3	15550.7	23213.9	28856.8	26753.0	23990.6	15032.9	7954.7
60°	2338.3	2328.1	2931.6	4872.3	9451.1	18885.9	27272.8	27717.2	24243.4	14574.2	7394.1
62.5°	1414.8	1445.4	1543.2	2187.5	4175.1	11732.4	23621.6	26620.5	24412.6	14154.2	6931.4
65°	1170.1	1172.2	1184.5	1502.4	1999.9	4909.0	17783.0	23012.1	23994.7	13406.1	6274.9
67.5°	1003.0	1021.3	1068.3	1192.6	1410.7	2152.8	10238.0	17825.8	21452.5	11665.0	5251.5
70°	791.0	815.5	874.5	980.6	1088.7	1347.6	3783.7	11860.8	16388.5	8792.7	3971.3
72.5°	666.7	664.6	695.2	797.1	864.4	947.9	1455.6	6645.9	9524.5	4197.6	1965.2
75°	515.8	536.2	574.9	666.7	707.5	687.1	788.9	2428.0	3412.6	1272.1	668.7
77.5°	403.6	419.9	454.6	544.3	585.1	487.2	454.6	868.5	1096.8	456.6	301.8
80°	181.4	195.7	309.9	401.6	477.0	336.4	246.7	444.4	487.2	208.0	152.9
82.5°	32.6	55.0	181.4	212.0	244.7	218.1	128.4	230.3	238.5	83.5	53.0
85°	2.0	4.1	63.2	77.5	97.9	71.3	38.7	91.7	79.5	28.5	20.4
87.5°	0.0	0.0	0.0	2.0	2.0	10.1	12.2	16.3	12.2	10.1	8.2
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°	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0	7967.0
2.5°	7838.6	7549.0	7267.8	7037.3	6902.8	6674.5	6523.6	6499.1	6436.0	6491.0
5°	7687.7	7169.9	6645.9	6177.1	5791.8	5294.3	4923.3	4766.4	4629.7	4676.7
7.5°	7616.4	6798.8	5983.4	5182.2	4358.6	3563.5	2972.3	2725.7	2538.1	2564.5
10°	7520.5	6413.5	5135.4	3912.1	2809.2	2024.4	1616.6	1465.7	1382.2	1384.3
12.5°	7447.1	5952.8	4150.6	2652.3	1710.4	1292.5	1166.1	1129.4	1104.9	1107.0
15°	7410.4	5410.6	3178.2	1767.5	1223.1	1094.7	1064.2	1047.9	1031.6	1029.5
17.5°	7349.2	4807.0	2326.0	1290.5	1070.3	1025.4	999.0	980.6	960.2	956.1
20°	7257.5	4122.1	1700.3	1090.7	1003.0	968.3	931.6	907.2	882.7	878.6
22.5°	7088.3	3398.4	1306.8	1009.1	954.1	915.3	870.5	841.9	817.5	813.4
25°	6774.3	2719.5	1100.8	958.2	911.2	864.4	815.5	776.7	754.3	750.2
27.5°	6376.8	2136.5	999.0	911.2	856.2	813.4	758.4	721.7	701.3	697.2
30°	5908.0	1645.2	939.8	858.2	791.0	754.3	705.4	674.8	662.6	662.6
32.5°	5402.4	1314.9	915.3	805.2	733.9	693.1	654.4	642.2	638.1	636.0
35°	4927.4	1141.6	903.1	762.5	683.0	644.2	627.9	630.0	638.1	638.1
37.5°	4505.4	1086.6	897.0	731.8	638.1	603.4	613.7	632.0	623.8	623.8
40°	4124.2	1092.8	892.9	709.4	601.4	581.0	601.4	587.1	566.7	564.7
42.5°	3832.7	1143.7	884.8	691.1	579.0	564.7	556.6	534.1	532.1	536.2
45°	3620.6	1188.5	882.7	683.0	554.5	528.0	517.8	495.4	536.2	546.3
47.5°	3369.9	1188.5	882.7	654.4	513.7	503.6	487.2	462.8	503.6	513.7
50°	3045.7	1113.0	848.1	621.8	481.1	475.0	446.5	415.8	407.7	413.8
52.5°	2636.0	976.5	760.4	577.0	448.5	436.2	401.6	379.1	373.1	373.1
55°	2169.1	817.5	642.2	511.7	413.8	391.4	367.0	356.8	350.7	346.6
57.5°	1763.4	670.8	515.8	454.6	381.2	352.7	344.5	332.3	322.1	316.0
60°	1447.4	528.0	426.1	403.6	348.6	322.1	320.1	303.7	277.3	273.2
62.5°	1117.1	387.3	358.7	350.7	316.0	293.6	289.5	256.9	216.1	208.0
65°	788.9	301.8	289.5	307.8	281.4	261.0	250.7	201.8	159.0	152.9
67.5°	554.5	252.8	228.4	269.1	244.7	218.1	212.0	171.3	132.5	128.4
70°	395.4	205.9	187.6	230.3	195.7	191.7	179.4	142.7	108.0	103.9
72.5°	279.3	156.9	144.7	199.8	134.6	165.1	146.8	110.1	81.6	77.5
75°	205.9	112.1	101.9	116.2	97.9	124.3	103.9	73.4	50.9	48.9
77.5°	150.9	71.3	61.2	57.1	57.1	77.5	57.1	30.5	22.4	20.4
80°	106.0	32.6	28.5	24.5	22.4	18.3	8.2	4.1	2.0	2.0
82.5°	63.2	14.2	14.2	10.1	6.1	0.0	0.0	0.0	0.0	0.0
85°	14.2	6.1	6.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	2.0	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

(END OF REPORT)