

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: P968800

Luminaire Tested: **NAV-SB5C-740-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968800
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-740-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 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: 34978.1 lumens
Efficiency: N/A
Efficacy: 140.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

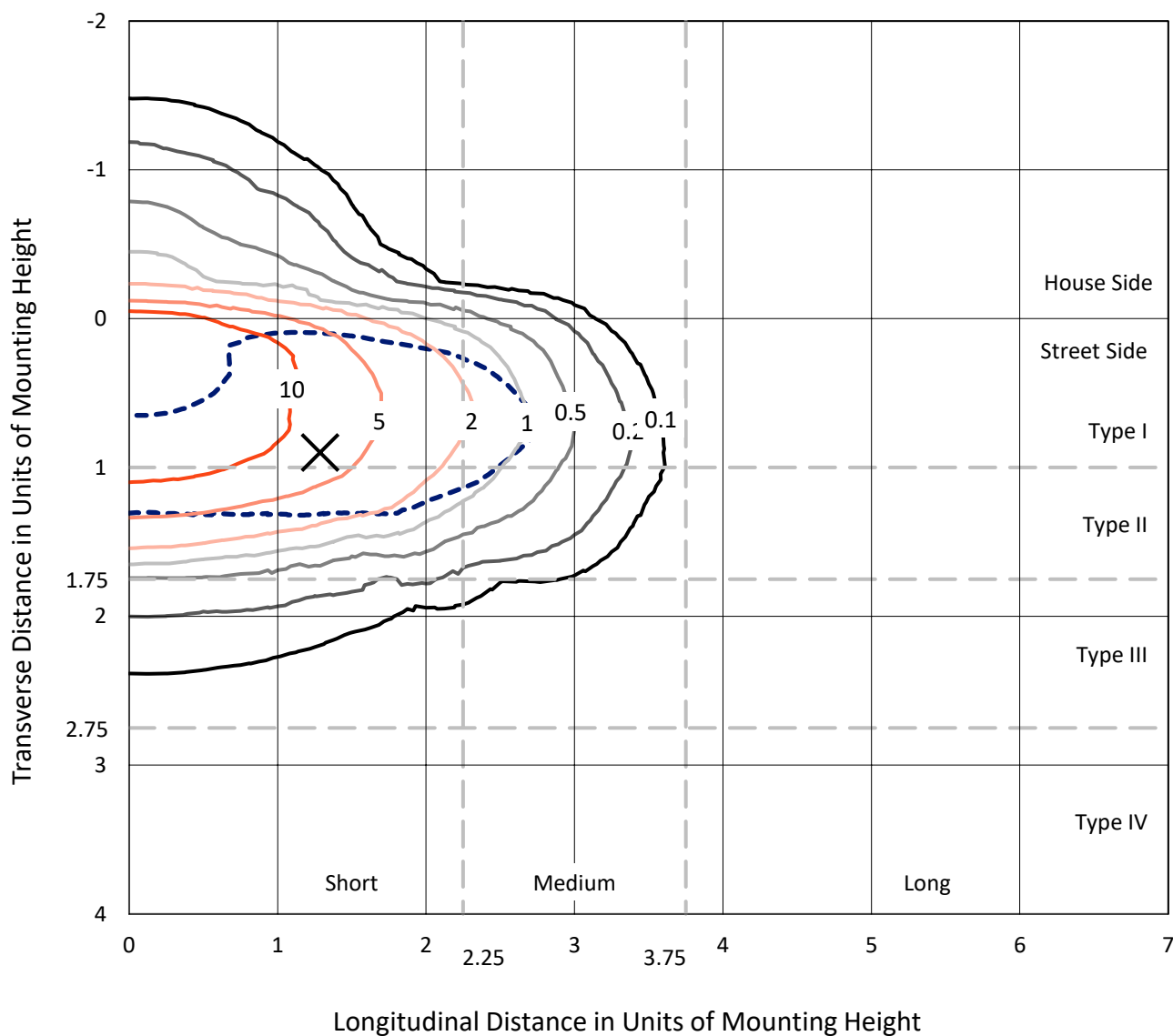
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

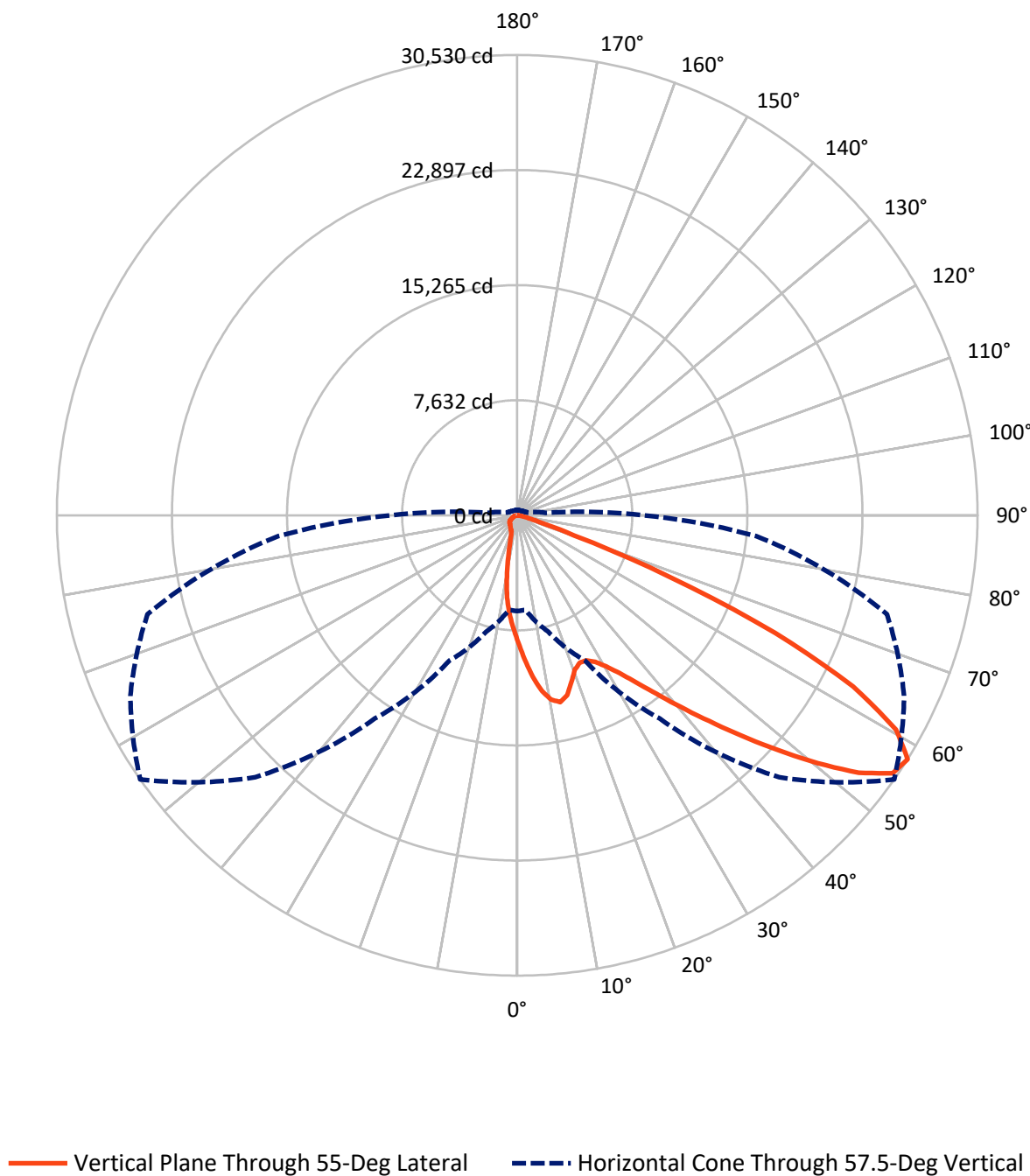
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 19.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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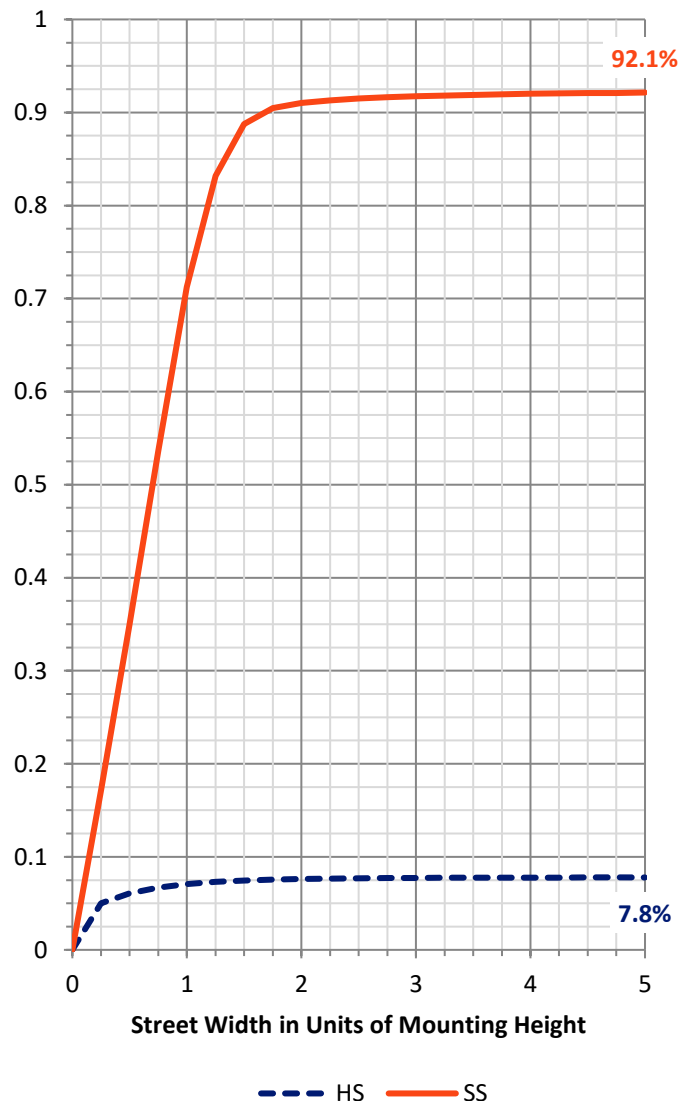
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2731.6	0.0	2731.6
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	32246.5	0.0	32246.5
	% Fixture	92.2	0.0	92.2
Total	Lumens	34978.1	0.0	34978.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	784.3	2.2
10°-20°	1894.4	5.4
20°-30°	3031.0	8.7
30°-40°	5130.1	14.7
40°-50°	8422.6	24.1
50°-60°	9257.0	26.5
60°-70°	5309.8	15.2
70°-80°	1085.0	3.1
80°-90°	64.0	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°	34978.1	100.0
0°-180°	34978.1	100.0

Coefficient of Utilization



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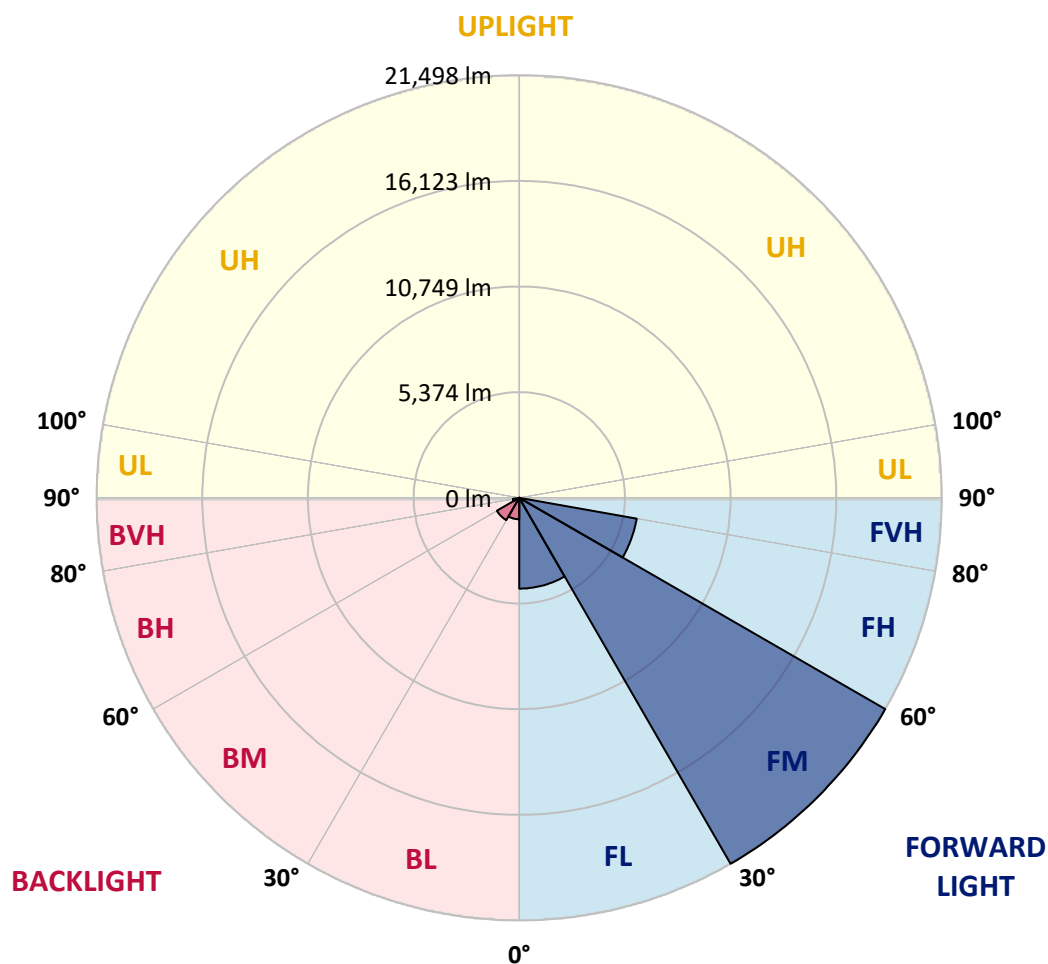
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4619.1	13.2			
FM	(30°-60°)	21497.8	61.5			
FH	(60°-80°)	6069.9	17.4			G3/7500
FVH	(80°-90°)	59.7	0.2			G1/100
BL	(0°-30°)	1090.5	3.1	B3/2500		
BM	(30°-60°)	1311.9	3.8	B2/2500		
BH	(60°-80°)	324.9	0.9	B1/500		G1/500
BVH	(80°-90°)	4.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9
2.5°	10458.5	10326.9	10307.5	10281.6	10031.4	9843.8	9572.0	9274.3	8940.0	8599.2	8448.3
5°	12082.5	11979.0	11959.6	11838.9	11554.1	11234.9	10751.7	10141.3	9518.0	8784.8	8469.9
7.5°	12397.4	12378.0	12466.5	12462.2	12423.3	12171.0	11763.3	11036.5	10100.5	9013.3	8525.9
10°	10993.3	11042.9	11306.1	11536.9	12160.2	12522.5	12434.1	11834.4	10700.0	9274.3	8588.5
12.5°	9714.3	9656.1	9843.8	10104.8	10829.4	11907.8	12712.4	12500.9	11385.9	9569.8	8681.2
15°	8912.0	8888.3	8994.0	9114.7	9666.9	10753.9	12388.8	13042.3	12045.9	9919.2	8821.5
17.5°	8655.3	8635.9	8668.3	8698.5	9056.5	9897.7	11618.8	13374.5	12677.8	10318.3	8976.7
20°	8864.5	8838.7	8834.4	8810.6	8959.4	9533.1	10922.2	13398.2	13245.0	10680.6	9110.4
22.5°	9474.9	9444.8	9339.1	9244.2	9257.1	9582.7	10611.6	13160.9	13672.1	11019.2	9194.6
25°	10581.4	10531.8	10311.8	9992.5	9789.8	9927.8	10659.0	12848.2	14079.7	11284.5	9153.6
27.5°	11966.1	11901.4	11618.8	11144.3	10680.6	10512.4	11001.9	12632.5	14418.4	11487.3	9065.1
30°	13322.7	13238.6	12960.3	12591.5	11914.3	11383.8	11620.9	12727.4	14821.7	11698.6	8948.7
32.5°	14787.2	14707.4	14338.5	13881.3	13320.6	12606.7	12468.6	13191.1	15315.7	11994.1	8866.7
35°	16639.8	16514.8	15990.7	15367.4	14772.1	14049.6	13616.0	13991.4	15973.4	12444.8	8912.0
37.5°	18749.3	18581.0	18015.9	17155.4	16378.9	15570.1	15013.7	15091.3	16937.5	13048.8	9052.2
40°	20737.9	20584.8	20062.7	19251.8	18276.9	17295.5	16702.5	16529.9	18268.3	13784.3	9298.1
42.5°	21930.6	21792.5	21572.6	21229.6	20407.9	19407.1	18658.7	18285.6	19842.8	14664.3	9597.9
45°	21997.4	21876.7	22172.2	22571.1	22409.4	21742.9	20830.6	20146.9	21423.7	15490.3	9908.5
47.5°	20927.6	20845.7	21742.9	23136.2	23830.7	24111.2	23270.0	21852.9	22728.6	16083.5	10035.7
50°	18011.6	17981.5	19827.7	22385.7	24372.1	26186.0	25843.0	23440.3	23740.1	16389.8	9914.9
52.5°	15617.5	15507.5	16583.8	19983.0	23584.8	27277.3	28358.0	24997.6	24447.6	16448.0	9632.3
55°	11845.3	11748.2	13098.4	15962.6	21046.3	26889.1	30197.7	26604.4	24954.4	16299.1	9125.5
57.5°	6354.0	6293.6	7999.6	10624.5	16452.3	24559.7	30529.8	28304.0	25381.5	15904.4	8416.0
60°	2473.8	2463.1	3101.5	5154.8	9999.1	19980.8	28854.0	29324.1	25649.0	15419.2	7822.8
62.5°	1496.8	1529.2	1632.7	2314.2	4417.1	12412.5	24991.1	28163.8	25827.9	14974.8	7333.2
65°	1238.0	1240.1	1253.2	1589.6	2115.8	5193.7	18814.0	24346.2	25385.8	14183.2	6638.7
67.5°	1061.2	1080.6	1130.2	1261.8	1492.5	2277.7	10831.6	18859.3	22696.3	12341.3	5556.0
70°	836.8	862.7	925.3	1037.4	1151.8	1425.7	4003.0	12548.4	17338.7	9302.4	4201.5
72.5°	705.3	703.2	735.4	843.3	914.5	1003.0	1540.0	7031.3	10076.7	4440.9	2079.2
75°	545.7	567.2	608.2	705.3	748.5	726.8	834.7	2568.8	3610.6	1345.8	707.5
77.5°	427.0	444.3	480.9	575.8	619.0	515.5	480.9	918.8	1160.4	483.1	319.2
80°	192.0	207.0	327.8	424.9	504.7	355.9	261.0	470.2	515.5	220.0	161.7
82.5°	34.5	58.2	192.0	224.3	258.8	230.8	135.9	243.7	252.4	88.5	56.1
85°	2.2	4.3	66.8	82.0	103.5	75.4	41.0	97.1	84.2	30.2	21.5
87.5°	0.0	0.0	0.0	2.2	2.2	10.8	12.9	17.2	12.9	10.8	8.6
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°	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9	8428.9
2.5°	8293.0	7986.7	7689.0	7445.4	7303.0	7061.4	6901.8	6875.9	6809.1	6867.3
5°	8133.4	7585.5	7031.3	6535.2	6127.6	5601.3	5208.7	5042.7	4898.2	4947.8
7.5°	8057.9	7193.0	6330.3	5482.6	4611.3	3770.2	3144.6	2883.6	2685.3	2713.3
10°	7956.6	6785.4	5433.0	4139.0	2972.1	2141.7	1710.3	1550.7	1462.4	1464.5
12.5°	7878.9	6297.9	4391.3	2806.0	1809.5	1367.5	1233.7	1194.8	1169.0	1171.2
15°	7840.0	5724.2	3362.5	1870.0	1294.1	1158.2	1125.9	1108.6	1091.3	1089.2
17.5°	7775.3	5085.7	2460.9	1365.3	1132.3	1084.9	1056.9	1037.4	1015.9	1011.6
20°	7678.3	4361.1	1798.8	1153.9	1061.2	1024.5	985.6	959.8	933.9	929.6
22.5°	7499.3	3595.4	1382.5	1067.6	1009.4	968.4	921.0	890.7	864.9	860.6
25°	7167.1	2877.2	1164.7	1013.7	964.1	914.5	862.7	821.7	798.1	793.8
27.5°	6746.6	2260.3	1056.9	964.1	905.9	860.6	802.4	763.5	742.0	737.6
30°	6250.4	1740.6	994.2	908.0	836.8	798.1	746.3	713.9	701.0	701.0
32.5°	5715.6	1391.1	968.4	852.0	776.4	733.3	692.4	679.4	675.1	672.9
35°	5213.0	1207.9	955.5	806.7	722.5	681.5	664.3	666.5	675.1	675.1
37.5°	4766.6	1149.5	949.0	774.3	675.1	638.4	649.2	668.6	660.0	660.0
40°	4363.2	1156.1	944.6	750.6	636.2	614.7	636.2	621.2	599.6	597.5
42.5°	4054.8	1210.0	936.0	731.1	612.5	597.5	588.9	565.1	562.9	567.2
45°	3830.5	1257.5	933.9	722.5	586.6	558.6	547.9	524.1	567.2	578.0
47.5°	3565.3	1257.5	933.9	692.4	543.6	532.7	515.5	489.6	532.7	543.6
50°	3222.3	1177.6	897.3	657.8	509.0	502.6	472.3	440.0	431.3	437.9
52.5°	2788.8	1033.1	804.5	610.4	474.5	461.6	424.9	401.2	394.7	394.7
55°	2294.9	864.9	679.4	541.4	437.9	414.1	388.3	377.4	370.9	366.6
57.5°	1865.6	709.6	545.7	480.9	403.3	373.1	364.5	351.6	340.8	334.4
60°	1531.4	558.6	450.8	427.0	368.8	340.8	338.7	321.3	293.4	289.0
62.5°	1181.9	409.8	379.6	370.9	334.4	310.6	306.3	271.7	228.6	220.0
65°	834.7	319.2	306.3	325.6	297.7	276.0	265.3	213.5	168.2	161.7
67.5°	586.6	267.4	241.6	284.7	258.8	230.8	224.3	181.2	140.2	135.9
70°	418.4	217.8	198.4	243.7	207.0	202.7	189.8	151.0	114.3	110.0
72.5°	295.5	166.0	153.1	211.4	142.4	174.7	155.3	116.4	86.3	82.0
75°	217.8	118.6	107.8	122.9	103.5	131.6	110.0	77.7	53.9	51.8
77.5°	159.6	75.4	64.7	60.4	60.4	82.0	60.4	32.4	23.7	21.5
80°	112.1	34.5	30.2	25.9	23.7	19.4	8.6	4.3	2.2	2.2
82.5°	66.8	15.1	15.1	10.8	6.5	0.0	0.0	0.0	0.0	0.0
85°	15.1	6.5	6.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	2.2	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)