

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: P966713

Luminaire Tested: **NAV-SB4C-740-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-740-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27097.9 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 200.7
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



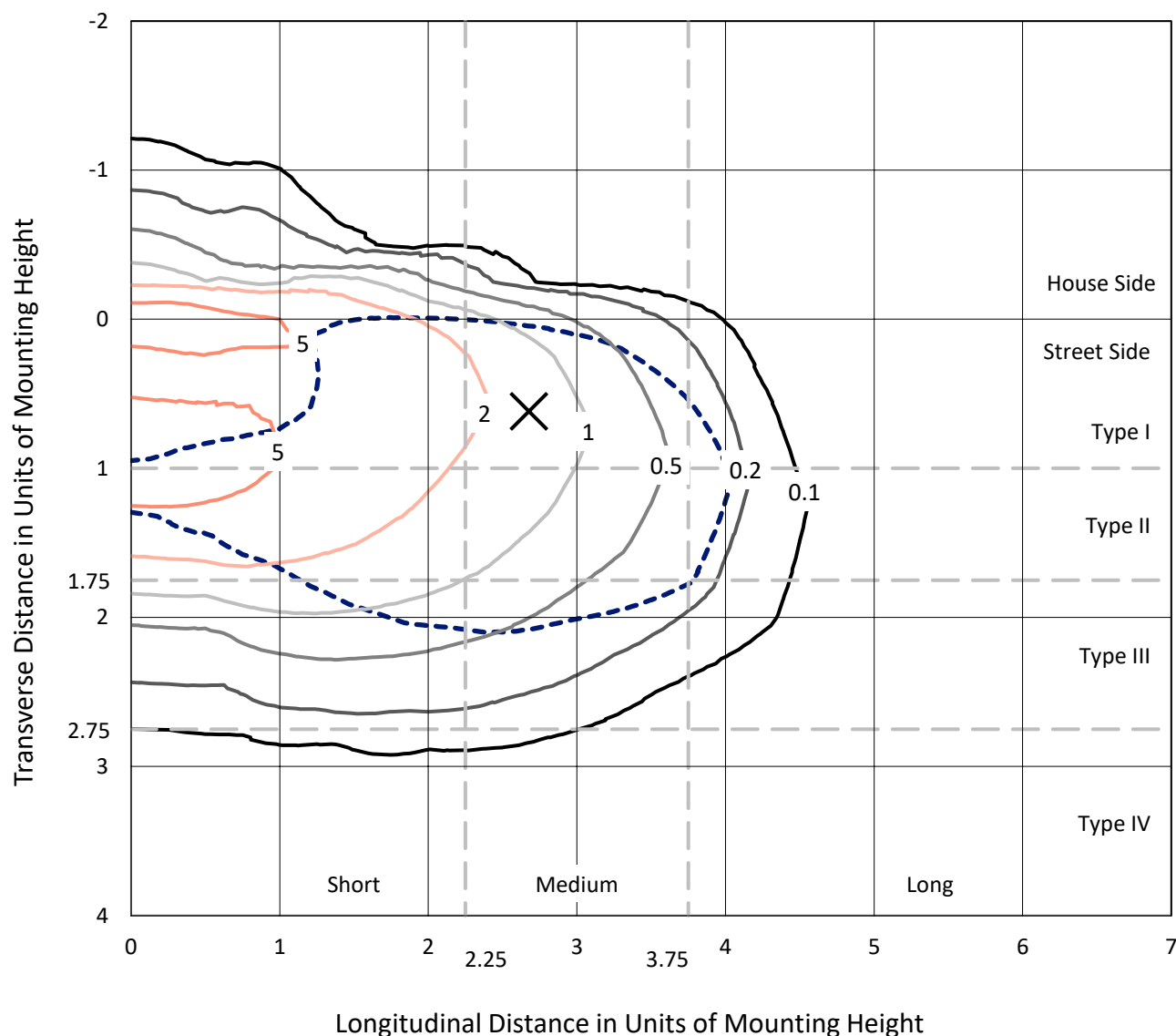
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

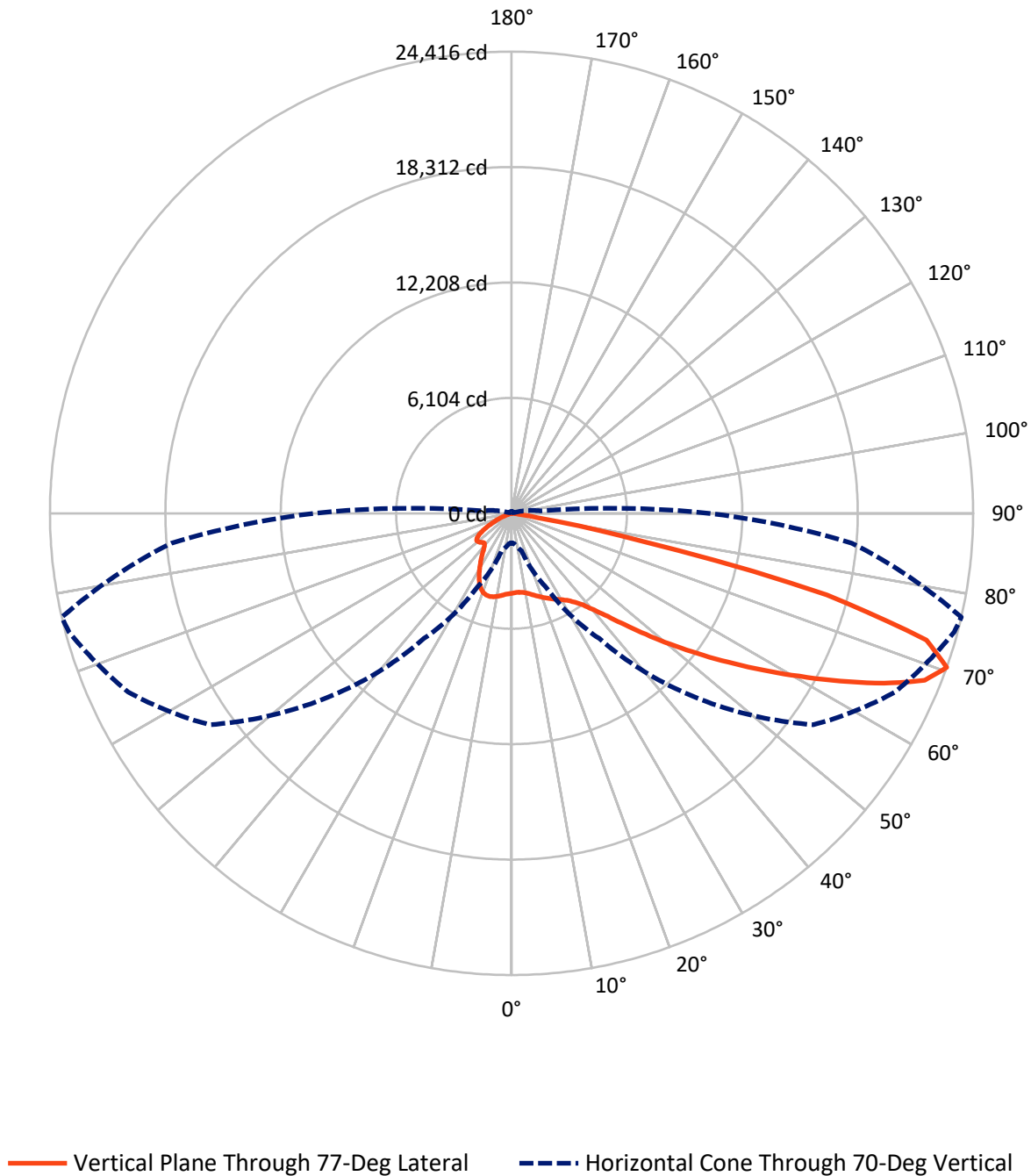


Based on 25 foot mounting height. Maximum calculated value = 7.9 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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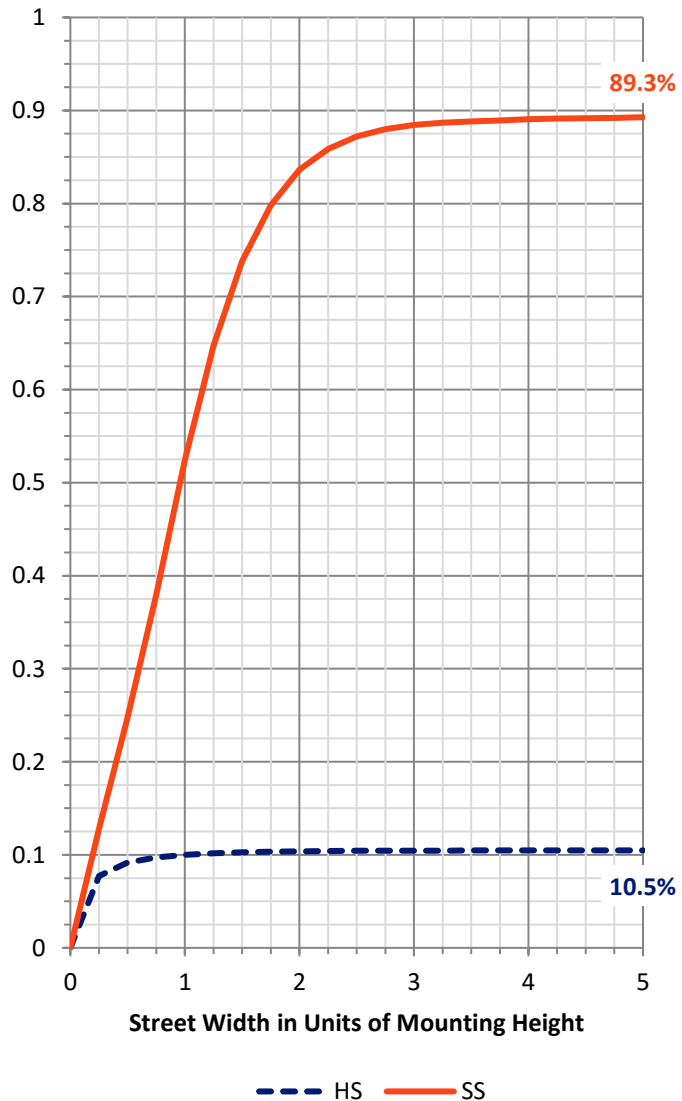
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2856.5	0.0	2856.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	24241.4	0.0	24241.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	27097.9	0.0	27097.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.3	1.3
10°-20°	864.8	3.2
20°-30°	1337.5	4.9
30°-40°	2427.1	9.0
40°-50°	4581.4	16.9
50°-60°	6619.7	24.4
60°-70°	7046.5	26.0
70°-80°	3734.1	13.8
80°-90°	122.6	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°	27097.9	100.0
0°-180°	27097.9	100.0

Coefficient of Utilization



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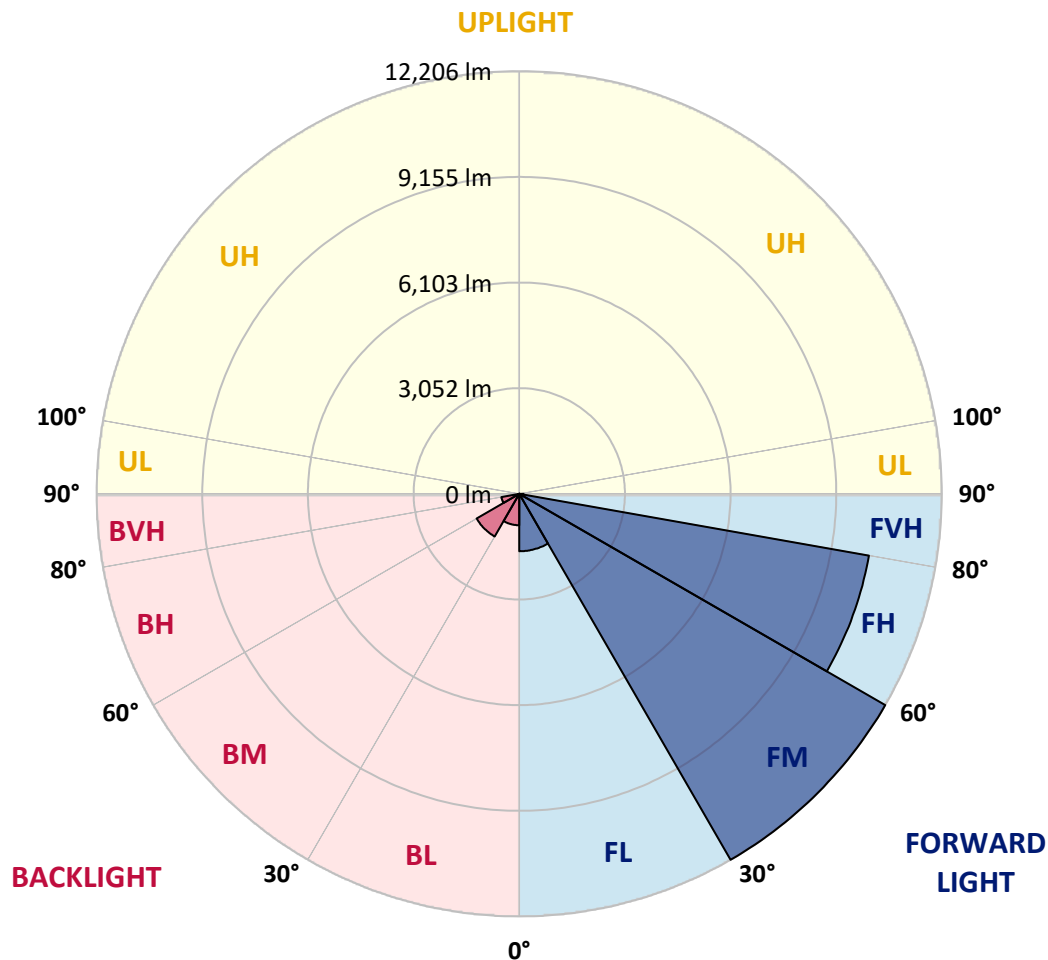
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1659.0	6.1			
FM	(30°-60°)	12206.1	45.0			
FH	(60°-80°)	10256.9	37.9			G4/12000
FVH	(80°-90°)	119.3	0.4			G2/225
BL	(0°-30°)	907.6	3.3	B2/1000		
BM	(30°-60°)	1422.0	5.2	B2/2500		
BH	(60°-80°)	523.7	1.9	B2/1000		G2/1000
BVH	(80°-90°)	3.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8
2.5°	3968.4	4004.4	3999.1	4023.1	4031.7	4066.0	4100.2	4146.3	4197.7	4195.9	4230.2
5°	3744.2	3780.2	3788.7	3821.2	3862.3	3915.3	3985.5	4077.9	4173.7	4189.2	4257.5
7.5°	3479.0	3516.6	3538.9	3603.9	3679.2	3788.7	3903.4	4038.5	4197.7	4219.9	4351.7
10°	3213.7	3247.9	3277.0	3369.5	3489.2	3651.8	3838.3	4033.4	4247.3	4279.8	4466.3
12.5°	3049.5	3082.0	3114.5	3194.9	3343.8	3542.3	3795.6	4057.4	4329.5	4375.6	4622.1
15°	2991.3	3020.4	3046.0	3117.9	3256.5	3482.4	3787.0	4107.0	4433.8	4495.4	4810.3
17.5°	2999.9	3015.2	3032.4	3087.1	3222.3	3455.0	3802.4	4192.6	4557.0	4611.8	4998.5
20°	3049.5	3058.0	3059.7	3097.3	3217.2	3451.6	3833.2	4274.7	4673.4	4747.0	5185.1
22.5°	3112.7	3116.2	3112.7	3138.4	3249.7	3477.2	3874.3	4374.0	4803.5	4871.9	5373.4
25°	3408.8	3343.8	3261.7	3212.0	3304.4	3526.9	3935.9	4507.4	4945.5	5012.2	5556.4
27.5°	4327.8	4141.2	3846.9	3516.6	3417.4	3598.8	4021.5	4642.6	5089.2	5149.2	5753.2
30°	5820.0	5575.3	5075.6	4331.1	3780.2	3749.3	4132.7	4777.8	5241.5	5306.6	5963.7
32.5°	7315.6	7255.7	6679.0	5648.9	4596.4	4084.7	4317.5	4960.9	5443.5	5494.8	6247.8
35°	8828.3	8706.9	8234.5	7216.3	5854.2	4767.6	4625.5	5200.4	5708.7	5767.0	6661.9
37.5°	9986.9	9913.3	9620.6	8782.1	7346.4	5821.7	5152.6	5571.8	6093.7	6158.8	7192.4
40°	11010.1	10975.9	10876.7	10324.0	9014.9	7200.9	5972.3	6146.8	6627.6	6704.6	7842.7
42.5°	11814.5	11894.9	11951.4	11797.3	10734.6	8775.3	7074.3	6954.5	7372.1	7450.8	8670.9
45°	12637.5	12665.0	12892.6	13115.0	12442.5	10421.5	8316.6	7900.8	8297.9	8395.4	9663.4
47.5°	13166.3	13275.9	13676.3	14068.2	13878.2	12054.0	9651.4	9018.3	9370.8	9553.9	10775.7
50°	13205.7	13412.7	13963.8	14646.6	14923.8	13607.9	11102.6	10291.4	10666.3	10868.2	11963.4
52.5°	12550.3	12872.1	13726.0	14725.4	15488.6	14923.8	12603.4	11564.7	12045.5	12309.0	13195.4
55°	9622.4	10043.4	12830.9	14297.5	15510.8	15921.4	14064.7	12890.8	13582.2	13879.9	14526.8
57.5°	8383.4	8595.6	10087.8	13554.8	15098.4	16323.6	15385.9	14153.7	15254.0	15623.7	15784.6
60°	6975.0	7254.0	8460.5	12339.9	14538.8	16363.0	16552.9	15782.8	17066.2	17482.1	16937.9
62.5°	4740.1	5043.1	6242.7	10252.0	13773.8	16344.1	17509.5	17459.8	19080.5	19527.1	17915.1
65°	2936.5	3126.5	3917.0	8371.5	12704.4	16364.6	18510.6	19496.2	21205.8	21659.3	18671.4
67.5°	2320.5	2407.7	2820.2	6427.5	10861.3	15902.7	19510.0	21411.1	23206.3	23565.6	18902.4
70°	1558.9	1612.0	2051.7	4308.9	8080.5	13770.5	19491.1	22372.9	24236.4	24416.1	18060.5
72.5°	821.4	862.4	1199.6	1995.4	4880.4	9788.3	16429.7	21222.9	23211.4	22941.0	15437.2
75°	410.7	479.2	807.7	1013.1	2084.3	5458.8	10202.4	16732.6	18269.3	17222.0	9904.7
77.5°	311.5	376.5	667.4	667.4	725.6	1837.9	4320.9	9126.1	8417.6	7009.3	2907.4
80°	198.5	256.7	583.5	504.8	302.9	467.2	1126.0	2556.7	1788.2	1360.5	528.8
82.5°	116.3	167.7	486.0	333.7	169.4	172.8	318.3	544.2	463.7	361.1	162.6
85°	46.2	109.5	333.7	131.8	66.7	42.7	95.8	116.3	95.8	71.9	41.1
87.5°	0.0	25.6	58.2	0.0	5.1	3.4	6.9	8.5	8.5	6.9	13.7
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°	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8	4226.8
2.5°	4245.7	4249.0	4259.3	4261.0	4237.0	4206.3	4194.3	4189.2	4168.6	4166.9	4170.3
5°	4296.9	4312.4	4296.9	4252.4	4146.3	3997.5	3884.5	3792.1	3708.2	3682.6	3667.2
7.5°	4399.6	4415.0	4368.9	4194.3	3927.3	3631.3	3364.4	3176.1	3006.6	2943.4	2917.7
10°	4546.8	4567.3	4421.8	4069.4	3597.0	3121.3	2669.5	2351.2	2103.1	2002.1	1959.4
12.5°	4731.6	4740.1	4451.0	3879.4	3167.6	2488.2	1848.2	1507.6	1286.9	1204.7	1179.1
15°	4935.3	4923.3	4454.3	3621.0	2582.3	1759.2	1206.4	990.8	901.8	874.4	874.4
17.5°	5149.2	5099.5	4386.0	3247.9	1940.5	1203.0	895.0	843.7	828.2	821.4	819.7
20°	5359.6	5248.4	4261.0	2760.2	1393.0	898.4	812.8	797.4	788.8	785.5	782.1
22.5°	5551.3	5361.4	4047.1	2193.8	1011.4	794.1	768.3	754.7	739.2	732.5	730.7
25°	5737.8	5426.3	3746.0	1665.0	809.4	742.7	722.1	696.5	676.0	667.4	664.0
27.5°	5919.2	5467.5	3369.5	1232.0	722.1	694.7	657.1	621.2	605.8	602.4	598.9
30°	6112.6	5481.1	2941.6	918.9	669.1	634.9	580.2	539.0	530.4	532.2	532.2
32.5°	6348.7	5501.7	2510.4	753.0	624.6	563.0	497.9	455.2	448.3	455.2	453.5
35°	6631.1	5542.7	2094.6	693.1	585.3	489.4	419.2	383.3	376.5	381.6	379.9
37.5°	7014.4	5609.5	1706.1	681.1	552.8	427.8	352.5	323.4	323.4	325.1	323.4
40°	7524.3	5787.5	1358.7	672.5	535.7	381.6	297.8	285.8	290.9	294.4	294.4
42.5°	8145.6	6165.7	1124.3	662.3	516.8	361.1	270.4	265.3	273.8	277.3	277.3
45°	8842.1	6644.8	1042.1	645.1	499.7	374.7	258.4	251.5	261.8	263.5	265.3
47.5°	9562.4	7113.7	1031.9	626.3	482.6	395.3	255.0	239.5	251.5	253.3	255.0
50°	10291.4	7420.0	1042.1	597.3	455.2	395.3	256.7	227.6	237.9	243.0	244.7
52.5°	11025.6	7560.3	1035.4	533.9	407.2	371.4	256.7	217.3	227.6	231.0	231.0
55°	11737.5	7532.9	930.9	439.8	345.6	328.5	249.8	208.8	215.7	217.3	217.3
57.5°	12300.5	7151.3	737.6	342.2	280.6	273.8	227.6	198.5	203.7	201.9	201.9
60°	12594.8	6312.8	527.1	263.5	220.8	215.7	200.2	184.8	188.2	179.7	177.9
62.5°	12598.2	5203.9	352.5	208.8	176.3	171.2	171.2	165.9	162.6	145.4	140.3
65°	12329.5	3973.5	234.4	165.9	142.1	133.5	143.7	142.1	130.1	106.1	102.7
67.5°	11720.4	2604.5	177.9	130.1	109.5	104.3	114.7	119.8	111.2	89.0	87.2
70°	10467.7	1516.2	147.2	101.0	82.1	77.0	92.5	102.7	92.5	71.9	68.5
72.5°	8694.9	817.9	119.8	75.3	56.5	51.4	73.6	83.8	73.6	53.1	51.4
75°	5642.0	438.1	92.5	49.6	29.1	32.5	54.7	61.6	51.4	34.2	30.9
77.5°	1894.3	193.4	58.2	24.0	13.7	13.7	32.5	37.6	24.0	12.0	10.2
80°	422.7	80.5	24.0	10.2	5.1	5.1	6.9	6.9	3.4	0.0	0.0
82.5°	138.6	32.5	10.2	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	53.1	12.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.5	1.7	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)