

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: P966868

Luminaire Tested: **NAV-SB4C-835-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966868
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-835-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 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: 23757.4 lumens
Efficiency: N/A
Efficacy: 118.4 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



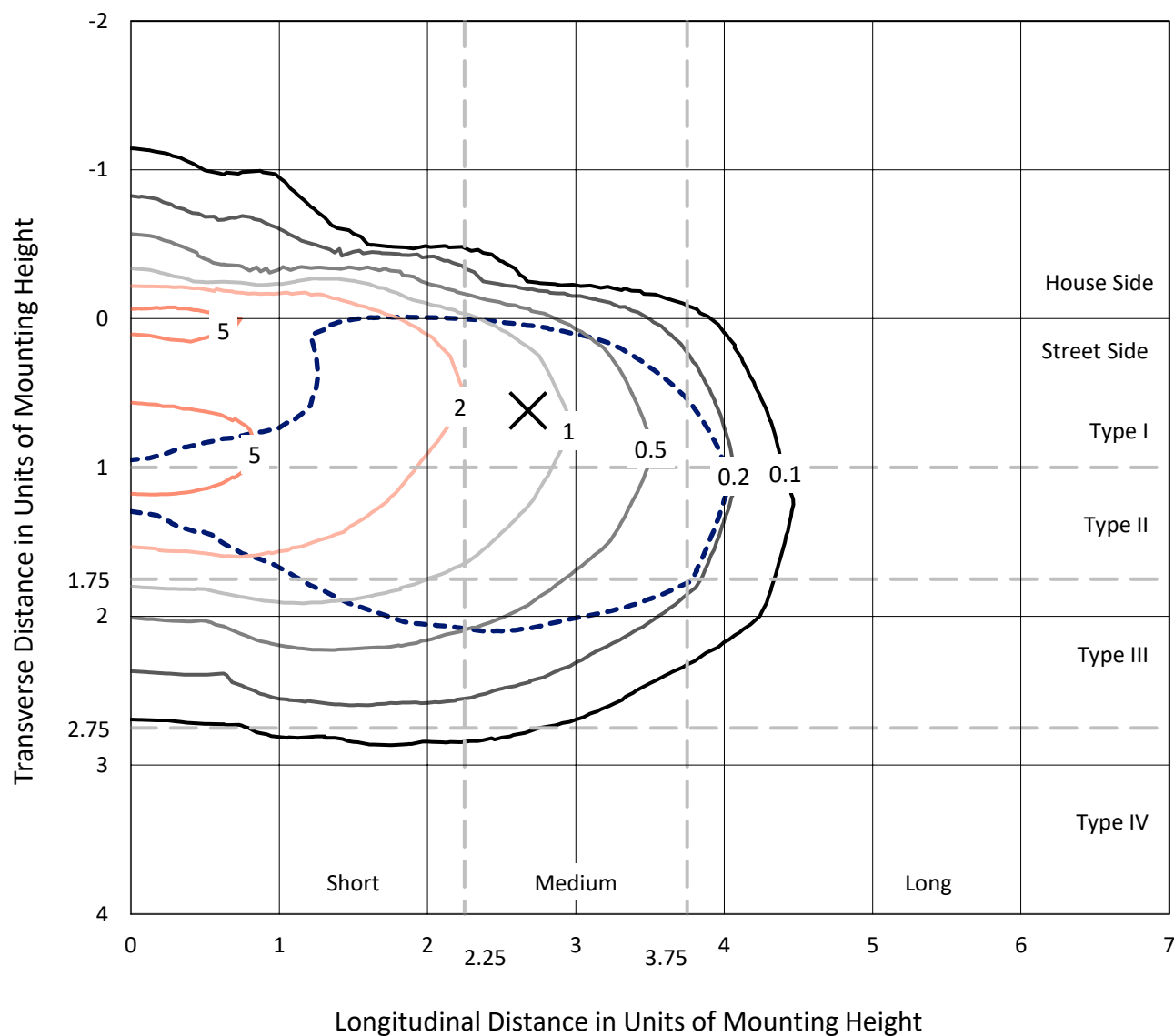
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

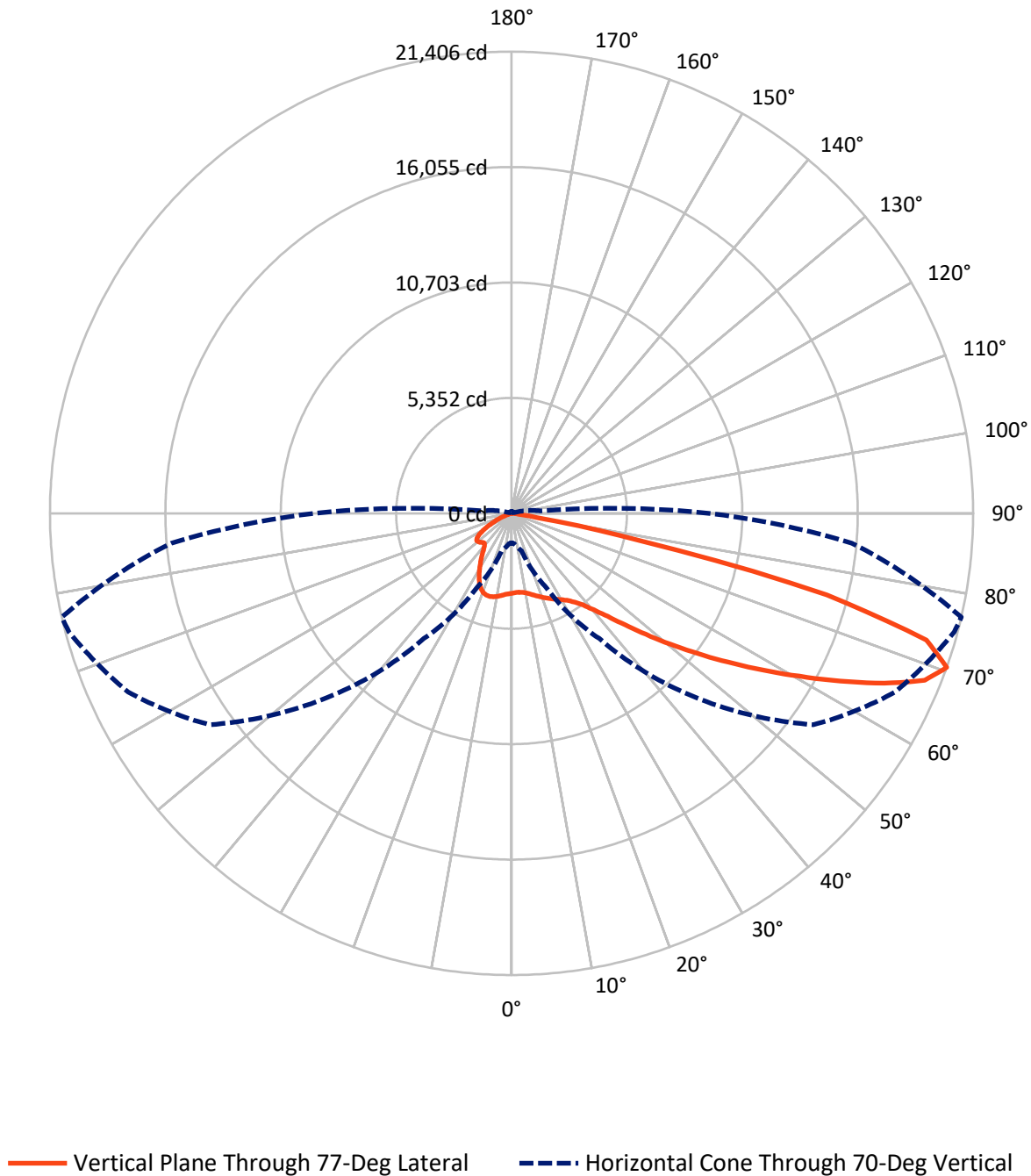


Based on 25 foot mounting height. Maximum calculated value = 7 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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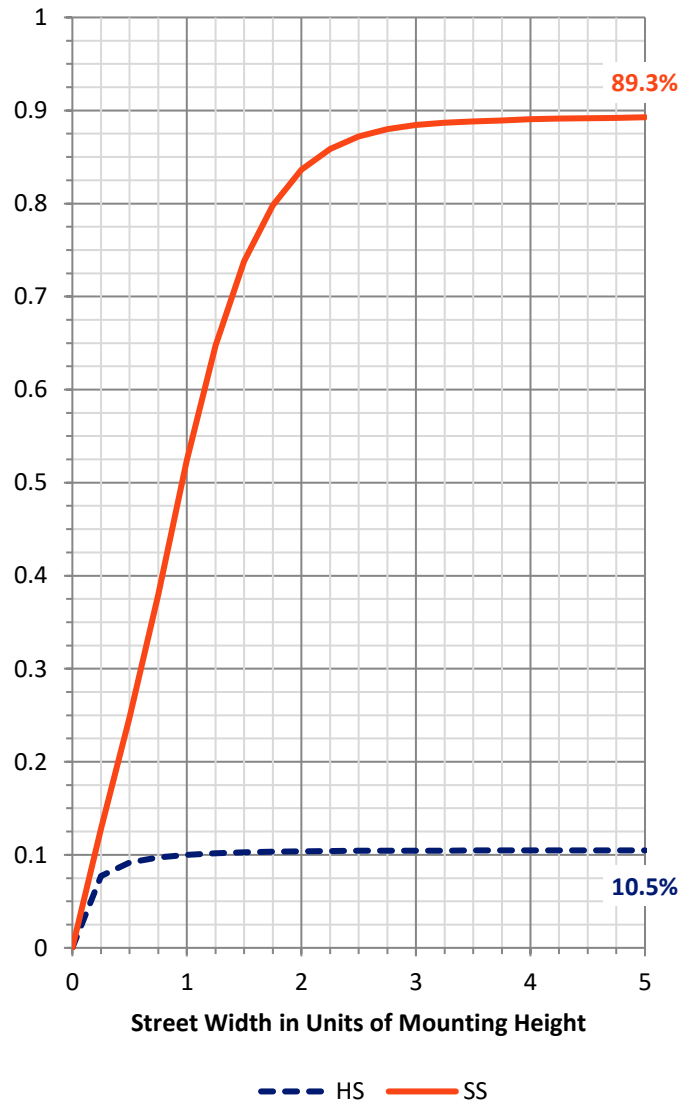
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2504.4	0.0	2504.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	21253.1	0.0	21253.1
	% Fixture	89.5	0.0	89.5
Total	Lumens	23757.4	0.0	23757.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.4	1.3
10°-20°	758.2	3.2
20°-30°	1172.7	4.9
30°-40°	2127.9	9.0
40°-50°	4016.6	16.9
50°-60°	5803.7	24.4
60°-70°	6177.8	26.0
70°-80°	3273.8	13.8
80°-90°	107.5	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°	23757.4	100.0
0°-180°	23757.4	100.0

Coefficient of Utilization



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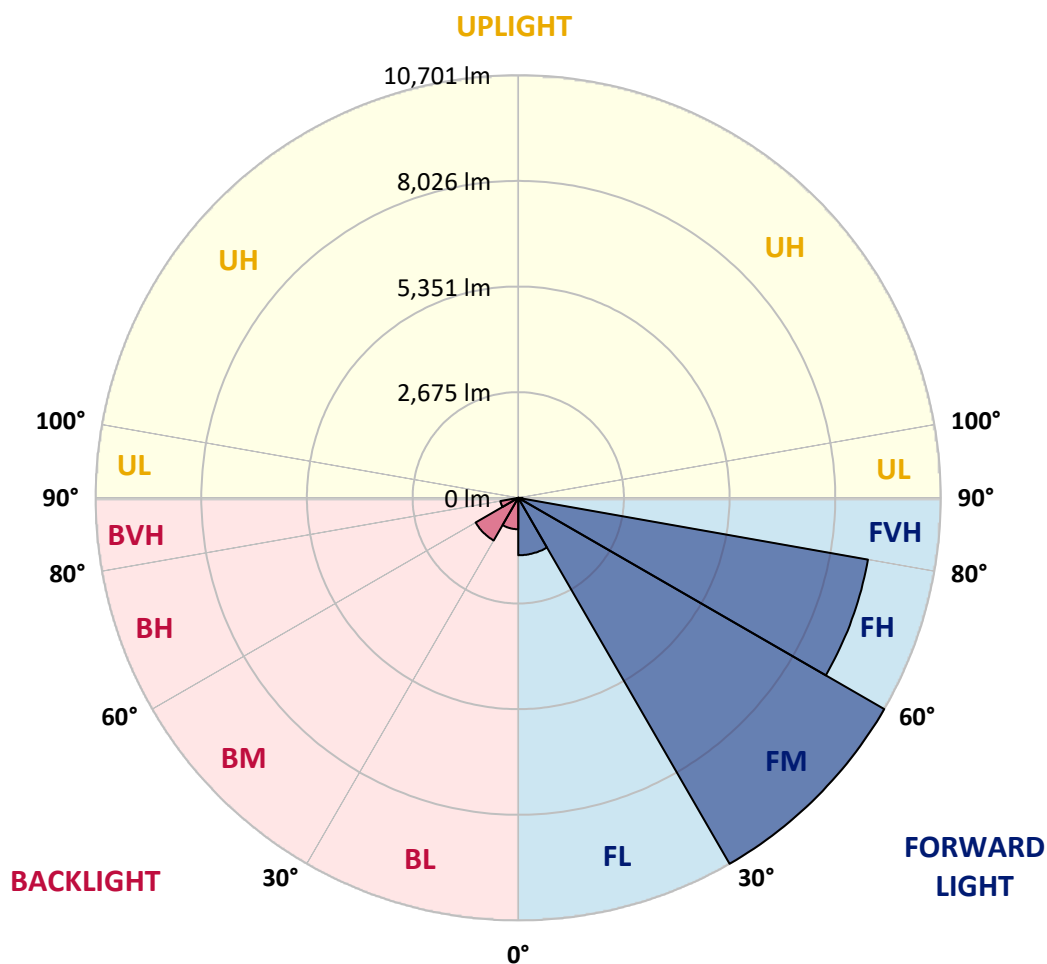
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1454.5	6.1			
FM	(30°-60°)	10701.4	45.0			
FH	(60°-80°)	8992.5	37.9			G4/12000
FVH	(80°-90°)	104.6	0.4			G2/225
BL	(0°-30°)	795.7	3.3	B2/1000		
BM	(30°-60°)	1246.7	5.2	B2/2500		
BH	(60°-80°)	459.1	1.9	B1/500		G1/500
BVH	(80°-90°)	2.9	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°	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7
2.5°	3479.2	3510.7	3506.2	3527.2	3534.7	3564.7	3594.7	3635.3	3680.3	3678.7	3708.8
5°	3282.7	3314.1	3321.6	3350.2	3386.2	3432.7	3494.2	3575.2	3659.2	3672.7	3732.7
7.5°	3050.1	3083.1	3102.6	3159.7	3225.7	3321.6	3422.2	3540.7	3680.3	3699.7	3815.3
10°	2817.5	2847.6	2873.1	2954.0	3059.1	3201.6	3365.2	3536.2	3723.7	3752.2	3915.8
12.5°	2673.5	2702.0	2730.5	2801.0	2931.6	3105.6	3327.7	3557.2	3795.8	3836.3	4052.3
15°	2622.6	2648.0	2670.5	2733.6	2855.0	3053.1	3320.2	3600.7	3887.3	3941.3	4217.4
17.5°	2630.0	2643.5	2658.5	2706.5	2825.1	3029.1	3333.7	3675.8	3995.2	4043.3	4382.4
20°	2673.5	2681.0	2682.5	2715.5	2820.6	3026.1	3360.7	3747.7	4097.3	4161.8	4545.9
22.5°	2729.1	2732.0	2729.1	2751.5	2849.1	3048.6	3396.6	3834.7	4211.3	4271.4	4710.9
25°	2988.6	2931.6	2859.5	2816.1	2897.1	3092.1	3450.7	3951.8	4335.9	4394.4	4871.4
27.5°	3794.2	3630.8	3372.7	3083.1	2996.1	3155.2	3525.7	4070.3	4461.9	4514.4	5044.0
30°	5102.6	4887.9	4449.8	3797.2	3314.1	3287.2	3623.2	4188.9	4595.4	4652.4	5228.5
32.5°	6413.7	6361.3	5855.6	4952.5	4029.8	3581.2	3785.2	4349.4	4772.4	4817.5	5477.6
35°	7740.1	7633.5	7219.4	6326.7	5132.5	4179.8	4055.3	4559.4	5005.0	5056.0	5840.7
37.5°	8755.8	8691.2	8434.6	7699.5	6440.8	5104.0	4517.4	4884.9	5342.6	5399.6	6305.7
40°	9652.9	9622.9	9535.9	9051.3	7903.6	6313.3	5236.0	5389.0	5810.6	5878.2	6875.9
42.5°	10358.0	10428.6	10478.1	10343.1	9411.3	7693.5	6202.3	6097.2	6463.2	6532.3	7602.0
45°	11079.7	11103.7	11303.2	11498.2	10908.7	9136.8	7291.4	6926.8	7274.9	7360.4	8472.1
47.5°	11543.2	11639.3	11990.3	12333.9	12167.4	10568.1	8461.7	7906.5	8215.6	8376.2	9447.3
50°	11577.8	11759.3	12242.4	12841.0	13084.1	11930.4	9733.9	9022.8	9351.4	9528.4	10488.6
52.5°	11003.2	11285.2	12033.9	12910.1	13579.2	13084.1	11049.7	10139.0	10560.6	10791.6	11568.8
55°	8436.2	8805.3	11249.3	12534.9	13598.7	13958.8	12331.0	11301.8	11907.8	12168.9	12736.0
57.5°	7350.0	7536.0	8844.2	11883.8	13237.2	14311.4	13489.2	12409.0	13373.7	13697.7	13838.7
60°	6115.3	6359.7	7417.5	10818.7	12746.5	14345.8	14512.4	13837.2	14962.4	15327.0	14849.9
62.5°	4155.9	4421.3	5473.1	8988.3	12075.9	14329.3	15351.0	15307.6	16728.3	17119.9	15706.6
65°	2574.5	2741.1	3434.2	7339.4	11138.2	14347.3	16228.7	17092.9	18591.7	18989.3	16369.8
67.5°	2034.4	2110.9	2472.5	5635.1	9522.4	13942.3	17104.9	18771.7	20345.5	20660.6	16572.3
70°	1366.7	1413.3	1798.9	3777.7	7084.4	12072.9	17088.4	19614.9	21248.7	21406.2	15834.1
72.5°	720.2	756.1	1051.8	1749.4	4278.9	8581.7	14404.3	18606.7	20350.0	20113.0	13534.2
75°	360.1	420.0	708.2	888.2	1827.4	4785.9	8944.8	14669.9	16017.2	15099.0	8683.7
77.5°	273.1	330.0	585.1	585.1	636.1	1611.3	3788.3	8001.0	7380.0	6145.2	2549.0
80°	174.0	225.1	511.6	442.6	265.6	409.6	987.2	2241.5	1567.8	1192.7	463.6
82.5°	102.0	147.0	426.1	292.5	148.5	151.5	279.0	477.1	406.6	316.5	142.6
85°	40.5	96.0	292.5	115.5	58.5	37.5	84.0	102.0	84.0	63.0	36.0
87.5°	0.0	22.5	51.0	0.0	4.5	3.0	6.0	7.5	7.5	6.0	12.0
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°	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7	3705.7
2.5°	3722.3	3725.3	3734.3	3735.7	3714.7	3687.7	3677.2	3672.7	3654.7	3653.2	3656.2
5°	3767.3	3780.7	3767.3	3728.2	3635.3	3504.7	3405.7	3324.7	3251.1	3228.6	3215.1
7.5°	3857.3	3870.8	3830.2	3677.2	3443.2	3183.6	2949.5	2784.5	2636.0	2580.5	2558.0
10°	3986.3	4004.3	3876.8	3567.7	3153.6	2736.5	2340.5	2061.4	1843.9	1755.3	1717.8
12.5°	4148.3	4155.9	3902.3	3401.2	2777.0	2181.4	1620.3	1321.7	1128.2	1056.2	1033.7
15°	4326.8	4316.4	3905.2	3174.6	2263.9	1542.3	1057.7	868.7	790.7	766.7	766.7
17.5°	4514.4	4470.8	3845.3	2847.6	1701.3	1054.7	784.6	739.6	726.1	720.2	718.6
20°	4698.9	4601.4	3735.7	2420.0	1221.3	787.6	712.7	699.2	691.7	688.6	685.6
22.5°	4867.0	4700.4	3548.2	1923.4	886.6	696.2	673.6	661.6	648.1	642.2	640.6
25°	5030.5	4757.4	3284.1	1459.8	709.6	651.1	633.1	610.6	592.7	585.1	582.1
27.5°	5189.6	4793.4	2954.0	1080.2	633.1	609.2	576.2	544.6	531.2	528.1	525.1
30°	5359.1	4805.4	2579.0	805.6	586.6	556.6	508.6	472.6	465.0	466.6	466.6
32.5°	5566.1	4823.4	2201.0	660.1	547.7	493.6	436.5	399.0	393.1	399.0	397.6
35°	5813.7	4859.4	1836.4	607.6	513.1	429.1	367.6	336.1	330.0	334.6	333.0
37.5°	6149.7	4918.0	1495.8	597.2	484.6	375.0	309.0	283.5	283.5	285.1	283.5
40°	6596.8	5074.0	1191.3	589.6	469.6	334.6	261.1	250.5	255.0	258.1	258.1
42.5°	7141.4	5405.5	985.7	580.7	453.0	316.5	237.1	232.6	240.1	243.0	243.0
45°	7752.1	5825.7	913.7	565.6	438.1	328.6	226.5	220.6	229.5	231.0	232.6
47.5°	8383.7	6236.7	904.7	549.1	423.1	346.6	223.6	210.0	220.6	222.0	223.6
50°	9022.8	6505.3	913.7	523.6	399.0	346.6	225.1	199.6	208.6	213.0	214.5
52.5°	9666.4	6628.3	907.6	468.1	357.1	325.5	225.1	190.5	199.6	202.5	202.5
55°	10290.5	6604.3	816.2	385.6	303.1	288.0	219.0	183.1	189.0	190.5	190.5
57.5°	10784.1	6269.7	646.7	300.0	246.0	240.1	199.6	174.0	178.6	177.0	177.0
60°	11042.2	5534.6	462.1	231.0	193.5	189.0	175.6	162.1	165.0	157.5	156.0
62.5°	11045.2	4562.4	309.0	183.1	154.6	150.1	150.1	145.5	142.6	127.5	123.0
65°	10809.6	3483.7	205.5	145.5	124.5	117.1	126.1	124.5	114.0	93.0	90.0
67.5°	10275.5	2283.5	156.0	114.0	96.0	91.5	100.6	105.1	97.5	78.0	76.5
70°	9177.3	1329.2	129.0	88.6	72.1	67.5	81.0	90.0	81.0	63.0	60.0
72.5°	7623.0	717.2	105.1	66.0	49.5	45.0	64.5	73.5	64.5	46.5	45.0
75°	4946.4	384.1	81.0	43.5	25.5	28.5	48.0	54.0	45.0	30.0	27.0
77.5°	1660.8	169.5	51.0	21.0	12.0	12.0	28.5	33.0	21.0	10.5	9.0
80°	370.5	70.5	21.0	9.0	4.5	4.5	6.0	6.0	3.0	0.0	0.0
82.5°	121.6	28.5	9.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	46.5	10.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	18.0	1.5	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)