

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: P968950

Luminaire Tested: **NAV-SB5C-830-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968950
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26838.6 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

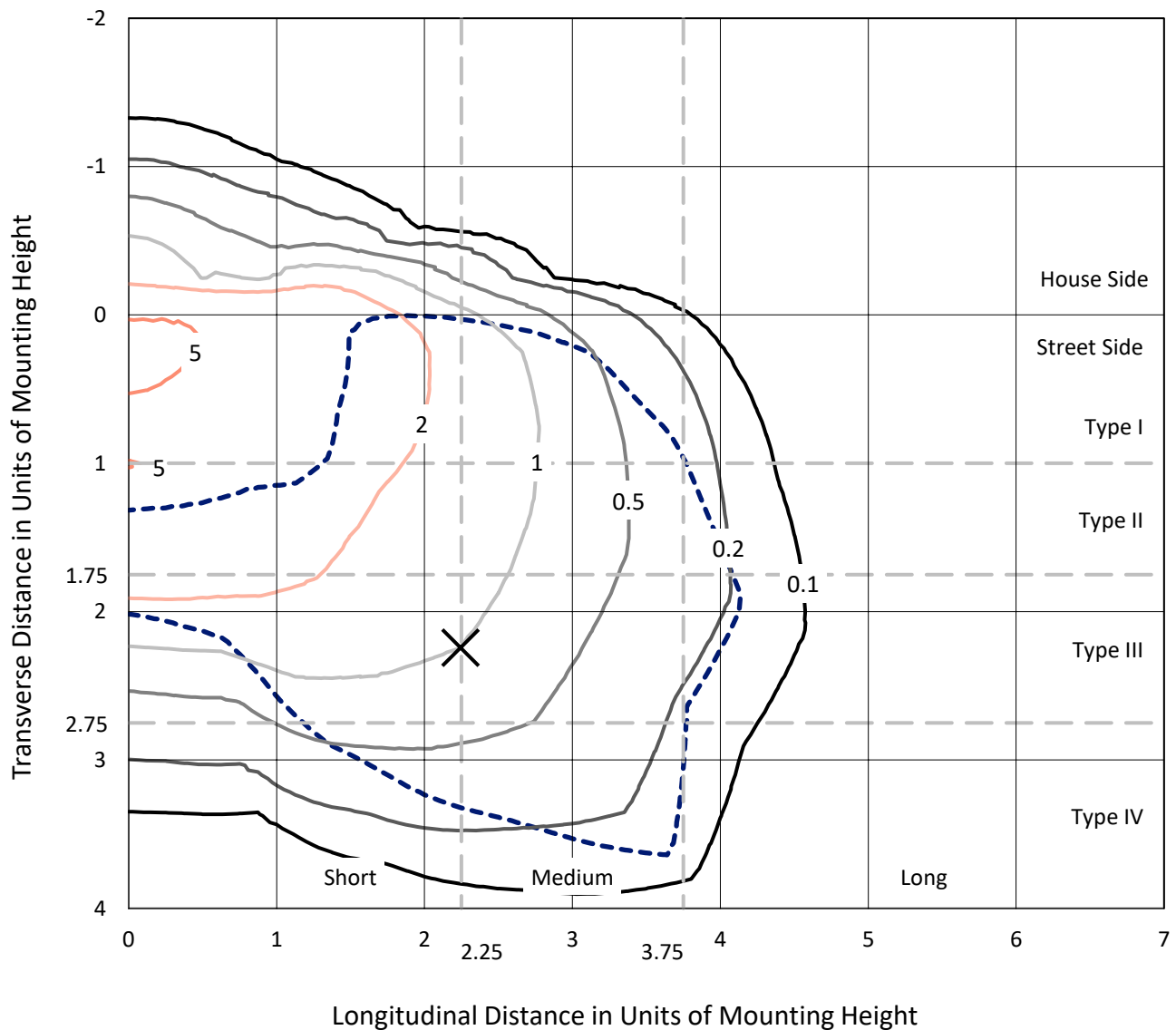
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

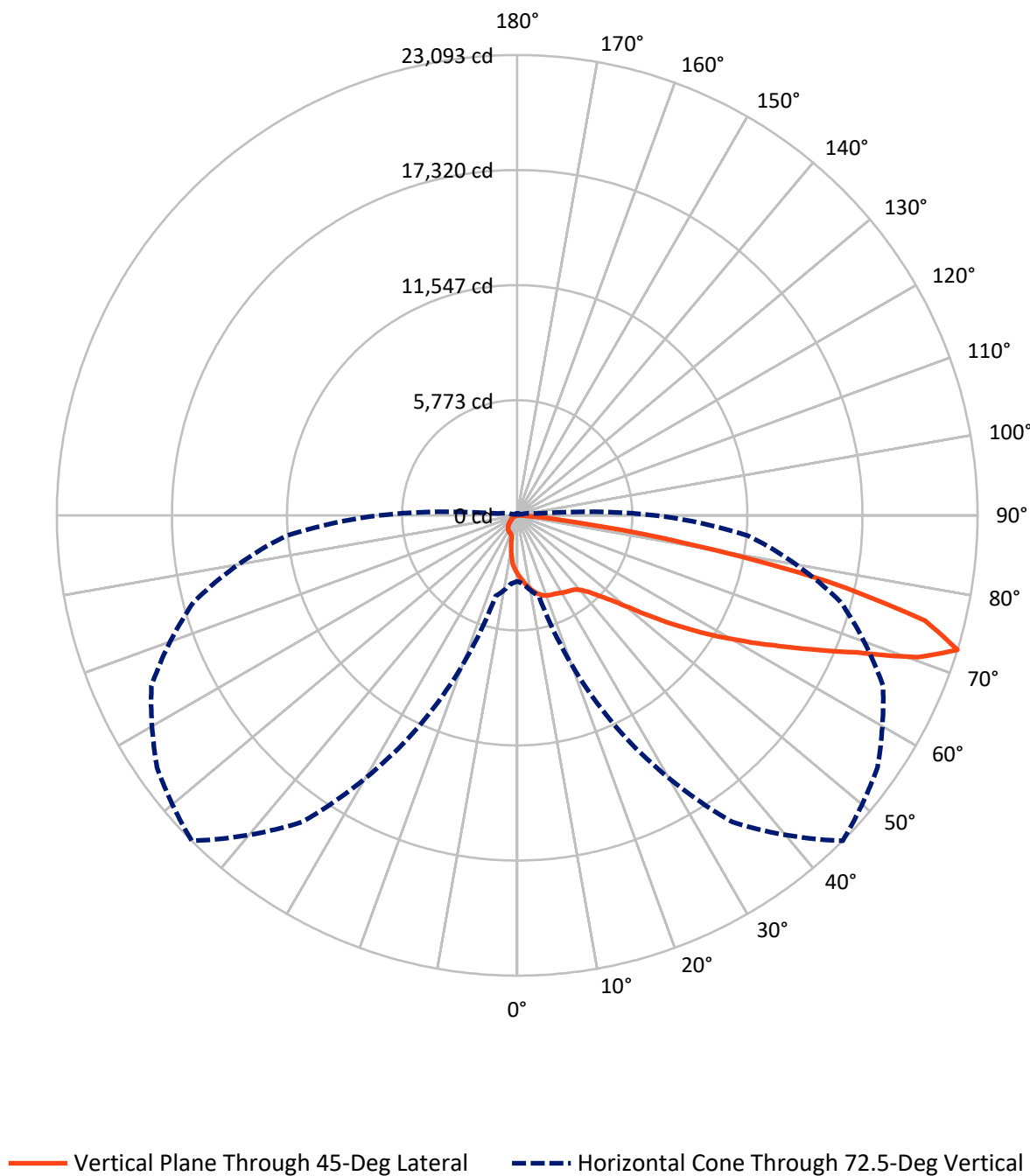
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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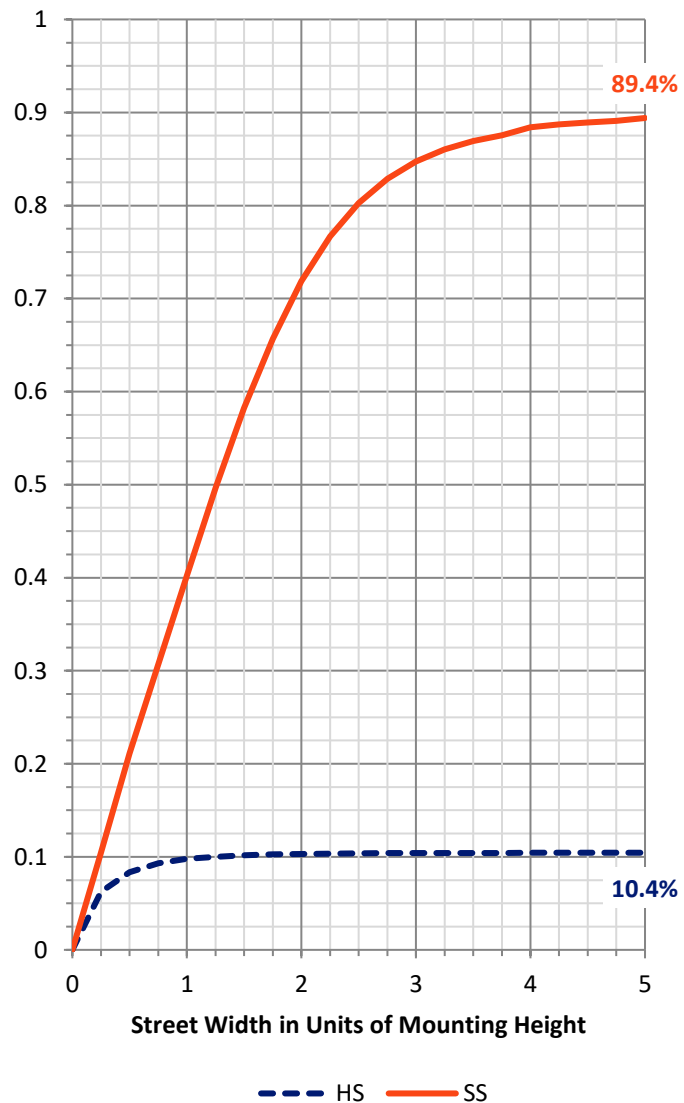
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2820.0	0.0	2820.0
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	24018.6	0.0	24018.6
	% Fixture	89.5	0.0	89.5
Total	Lumens	26838.6	0.0	26838.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.0	1.0
10°-20°	809.6	3.0
20°-30°	1329.6	5.0
30°-40°	1885.6	7.0
40°-50°	3116.7	11.6
50°-60°	5598.8	20.9
60°-70°	7774.3	29.0
70°-80°	5639.2	21.0
80°-90°	407.7	1.5
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°	26838.6	100.0
0°-180°	26838.6	100.0

Coefficient of Utilization



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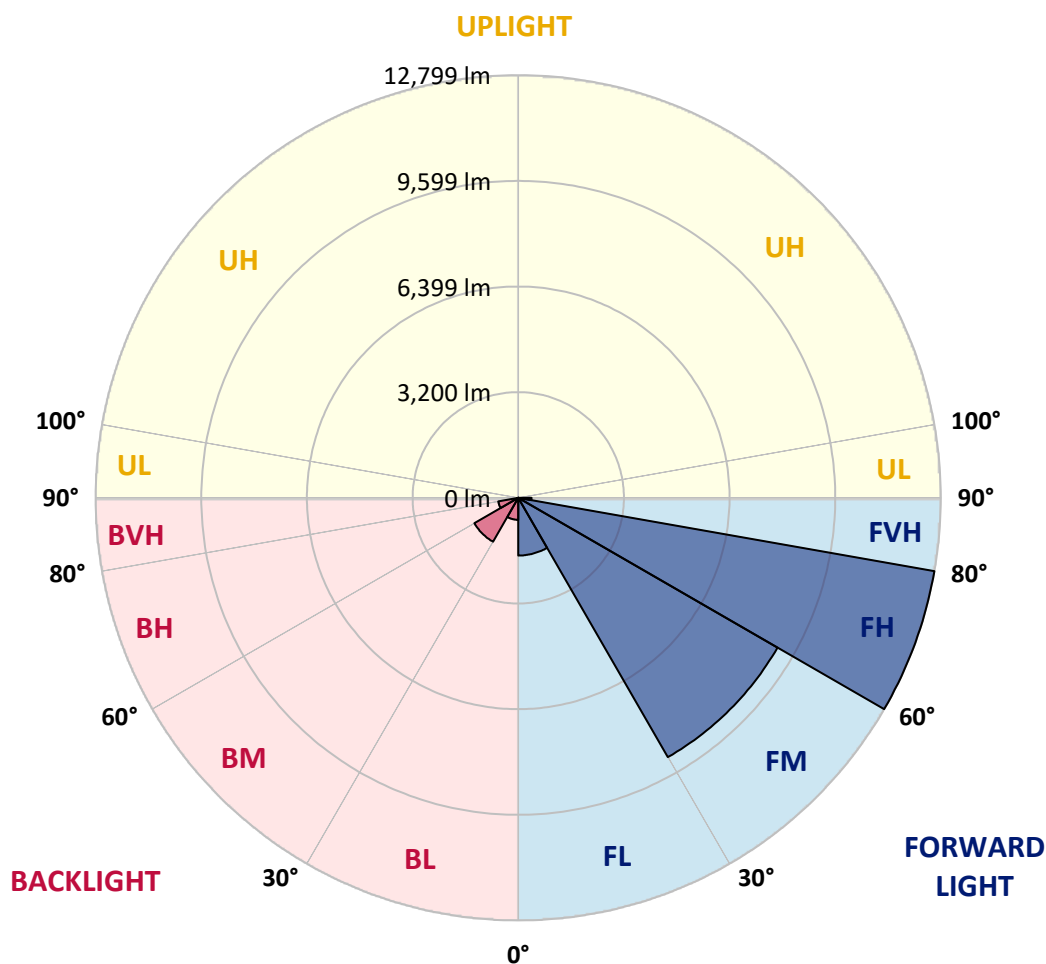
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1748.3	6.5			
FM	(30°-60°)	9067.5	33.8			
FH	(60°-80°)	12798.6	47.7			G5
FVH	(80°-90°)	404.3	1.5			G3/500
BL	(0°-30°)	667.9	2.5	B2/1000		
BM	(30°-60°)	1533.7	5.7	B2/2500		
BH	(60°-80°)	614.9	2.3	B2/1000		G2/1000
BVH	(80°-90°)	3.4	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-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2
2.5°	3211.3	3216.9	3213.2	3191.2	3154.5	3134.4	3123.4	3086.8	3063.0	3020.9	2976.9
5°	3506.3	3528.3	3515.4	3471.5	3401.9	3352.4	3337.7	3262.7	3194.8	3116.1	3024.5
7.5°	3819.6	3830.5	3806.7	3750.0	3656.5	3572.2	3559.4	3455.0	3346.9	3226.0	3101.4
10°	4090.7	4103.5	4066.9	3984.4	3878.2	3773.7	3755.4	3640.0	3511.8	3363.4	3204.0
12.5°	4317.8	4330.6	4283.1	4184.0	4066.9	3958.8	3940.4	3819.6	3678.5	3513.6	3315.8
15°	4490.0	4513.8	4449.7	4343.4	4217.1	4109.0	4099.8	3980.8	3843.3	3660.2	3449.5
17.5°	4590.8	4614.5	4554.2	4426.0	4317.8	4226.3	4215.2	4116.3	3988.1	3812.2	3579.6
20°	4607.3	4629.2	4565.1	4453.4	4363.6	4290.3	4284.8	4213.4	4120.0	3951.5	3720.6
22.5°	4557.8	4585.3	4526.7	4436.9	4374.6	4336.2	4328.8	4288.5	4235.4	4092.5	3852.6
25°	4506.5	4528.4	4484.6	4405.8	4372.8	4369.2	4374.6	4367.3	4356.2	4235.4	4006.4
27.5°	4502.8	4526.7	4477.2	4402.1	4383.8	4422.3	4427.7	4462.5	4471.7	4365.5	4154.8
30°	4534.0	4550.5	4502.8	4424.1	4414.9	4502.8	4504.7	4567.0	4581.6	4475.4	4301.3
32.5°	4601.7	4620.1	4572.4	4457.0	4444.2	4567.0	4572.4	4654.9	4678.7	4592.6	4455.3
35°	4761.1	4783.2	4728.2	4548.6	4502.8	4627.5	4643.9	4741.0	4788.6	4717.2	4614.5
37.5°	5158.7	5094.6	5019.4	4733.7	4636.6	4722.7	4750.2	4863.7	4948.0	4865.6	4805.1
40°	6146.1	5944.6	5710.1	5048.7	4871.1	4926.0	4948.0	5061.6	5177.0	5096.4	5067.1
42.5°	7628.0	7389.9	7012.5	5774.2	5224.6	5252.1	5268.6	5367.5	5530.6	5466.4	5473.8
45°	8948.9	8862.8	8478.1	7012.5	5886.0	5750.4	5770.5	5821.8	6061.8	6038.0	6085.6
47.5°	9963.8	9914.3	9617.6	8434.1	7003.4	6360.4	6417.2	6441.0	6787.2	6871.5	6999.7
50°	10744.2	10725.9	10460.2	9698.1	8463.4	7259.9	7280.1	7228.7	7747.2	7956.0	8199.7
52.5°	11480.6	11542.9	11346.9	10872.4	10022.4	8437.8	8434.1	8192.3	8892.1	9207.2	9623.0
55°	12145.6	12167.6	12187.8	12070.5	11590.5	9778.8	9744.0	9348.3	10220.3	10546.3	10997.0
57.5°	12770.3	12779.5	12959.0	13198.9	13222.8	11218.6	11154.6	10680.1	11671.2	11903.8	12180.4
60°	13189.8	13231.9	13611.2	14277.9	14569.2	12704.4	12669.5	12185.9	13147.7	13255.7	13204.5
62.5°	12585.3	12841.7	13798.0	15120.6	15840.6	14351.2	14334.7	13880.4	14701.2	14613.2	14173.5
65°	10187.3	10621.5	12303.2	15690.4	17088.1	16190.5	16214.3	15730.7	16296.7	16010.9	14961.3
67.5°	7126.1	7584.2	9573.6	15736.2	18482.2	18350.3	18487.7	17729.3	17991.2	17350.1	15148.1
70°	4927.9	5164.2	6459.3	14750.6	19568.5	21325.3	21321.6	20184.1	19676.6	17960.2	14195.5
72.5°	3313.9	3436.7	4195.1	11702.3	18769.8	23093.1	22986.9	22059.9	20244.5	16796.9	11597.9
75°	1397.8	1487.5	1941.9	6576.6	14849.5	21127.5	20839.9	19495.3	17987.6	13226.4	7236.1
77.5°	443.3	481.7	765.8	2354.0	8179.5	15880.8	15576.8	12174.9	12055.8	6635.2	2645.3
80°	210.6	245.5	430.5	945.3	3218.7	8637.5	8595.3	5523.2	5186.2	1791.6	531.3
82.5°	91.6	108.0	238.1	505.6	1439.9	3081.3	3143.6	1879.5	1555.3	679.7	163.1
85°	29.3	38.4	109.9	232.7	608.2	765.8	756.6	447.0	626.5	370.0	56.8
87.5°	0.0	0.0	36.6	53.1	62.3	44.0	49.5	38.4	174.0	102.6	20.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2	2940.2
2.5°	2954.9	2925.6	2874.3	2826.6	2784.5	2742.4	2716.8	2680.1	2676.5	2676.5	2685.6
5°	2975.1	2927.4	2835.8	2738.7	2627.0	2520.7	2414.5	2311.9	2278.9	2255.1	2266.1
7.5°	3033.7	2958.6	2813.8	2628.8	2416.3	2183.7	2020.6	1844.7	1776.9	1740.3	1745.8
10°	3117.9	3015.3	2795.5	2471.3	2126.9	1809.9	1577.3	1386.7	1313.4	1282.4	1282.4
12.5°	3211.3	3084.9	2762.6	2275.2	1809.9	1430.7	1203.6	1115.6	1104.6	1104.6	1104.6
15°	3323.0	3169.2	2705.7	2044.5	1478.4	1132.1	1051.5	1055.1	1066.2	1073.5	1073.5
17.5°	3438.5	3259.0	2616.0	1786.2	1185.2	1018.5	1020.4	1025.9	1035.0	1042.3	1042.3
20°	3563.1	3348.8	2496.9	1511.4	1016.7	985.5	991.1	996.6	1003.9	1007.6	1009.4
22.5°	3696.8	3433.0	2355.9	1242.0	959.9	958.1	959.9	965.4	974.6	974.6	978.3
25°	3839.6	3526.4	2194.6	1046.0	930.6	930.6	934.3	938.0	945.3	945.3	947.1
27.5°	3986.2	3612.5	2024.3	943.4	905.0	903.1	903.1	908.7	912.2	914.1	915.9
30°	4147.5	3713.3	1853.9	921.5	884.8	875.7	870.1	873.8	877.5	879.3	882.9
32.5°	4312.4	3810.3	1701.8	930.6	864.7	848.2	829.8	826.2	826.2	833.5	839.1
35°	4495.5	3916.6	1584.6	961.8	853.7	807.9	778.6	762.1	763.9	774.9	780.4
37.5°	4715.3	4044.9	1498.6	989.2	846.3	762.1	714.4	694.3	681.5	694.3	690.6
40°	5002.9	4233.6	1436.2	1011.3	837.2	709.0	644.8	611.8	588.0	595.4	591.7
42.5°	5426.1	4530.3	1412.4	1013.0	817.0	646.7	573.4	529.4	494.7	496.4	489.1
45°	6019.7	4999.3	1535.1	989.2	773.1	578.9	498.3	439.6	417.7	412.2	404.9
47.5°	6833.1	5682.6	1819.1	939.8	709.0	512.9	425.0	375.6	359.1	349.9	344.4
50°	7923.0	6560.1	2134.2	884.8	644.8	450.7	364.6	333.4	322.5	313.2	311.4
52.5°	9187.1	7450.4	2392.5	829.8	580.8	395.6	326.1	307.8	298.6	291.3	289.5
55°	10346.7	8064.1	2377.8	771.2	518.4	351.7	298.6	287.6	276.6	269.3	265.6
57.5°	11068.5	8150.2	1960.1	707.1	447.0	316.9	273.0	265.6	252.8	243.6	241.8
60°	11400.0	7659.2	1373.9	622.9	375.6	283.9	245.5	241.8	225.3	212.5	208.8
62.5°	11460.4	6747.0	915.9	518.4	313.2	252.8	218.0	212.5	190.5	168.5	157.5
65°	11215.0	5442.6	633.9	404.9	267.4	219.9	186.9	175.9	152.0	130.1	122.7
67.5°	10438.3	3821.4	441.5	291.3	227.1	174.0	148.4	144.7	126.4	108.0	102.6
70°	9014.9	2178.1	294.9	218.0	179.5	119.1	117.3	121.0	102.6	87.9	80.6
72.5°	6911.8	996.6	183.2	159.4	122.7	80.6	93.4	95.2	78.8	65.9	58.6
75°	4068.6	426.8	115.4	102.6	62.3	53.1	67.8	69.6	53.1	42.1	36.6
77.5°	1385.0	161.2	73.3	60.5	31.2	29.3	44.0	44.0	29.3	16.5	12.8
80°	315.1	60.5	36.6	23.8	14.7	12.8	14.7	12.8	7.3	1.8	0.0
82.5°	89.8	23.8	14.7	9.1	5.5	5.5	1.8	0.0	0.0	0.0	0.0
85°	25.6	11.0	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.0	1.8	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)