

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P885664

Luminaire Tested: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMWB-340LM-3000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885664  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-139)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMWB-340LM-3000K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

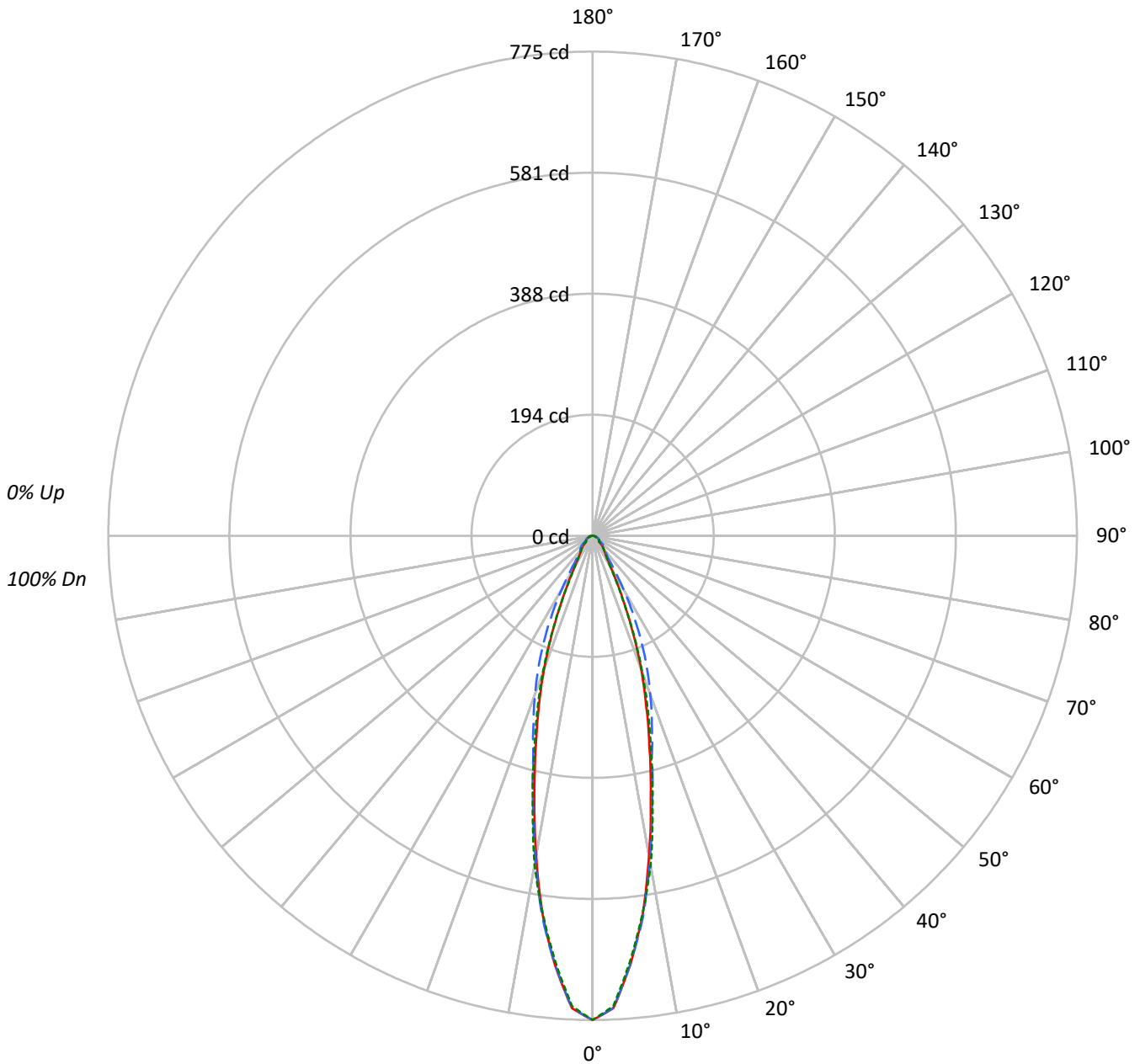
Lumens per Lamp: N/A  
Luminaire Lumens: 301.8 lumens  
Efficiency: N/A  
Efficacy: 49.5 lumens/watt  
Spacing Criteria (0/90/45): 0.46 / 0.47 / 0.56  
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')  
CIE Type: Direct

Input Watts (W): 6.1  
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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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20										
RC	80					70					50					30					10					0					
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0				
RCR																															
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100													
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93													
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86													
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81													
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76													
5	93	85	80	75	92	84	79	75	83	78	74	81	77	74	79	76	73	72													
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68													
7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65													
8	82	73	68	64	81	73	67	64	72	67	63	71	66	63	70	66	63	62													
9	79	70	65	61	78	70	64	61	69	64	61	68	63	60	67	63	60	59													
10	76	67	62	58	75	67	62	58	66	61	58	65	61	58	64	61	58	56													

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1201418	1201418	1201418
5°	1073597	1072196	1064883
10°	818128	829932	841737
15°	564211	588121	579134
20°	374765	444208	382517
25°	204717	310240	201468
30°	102019	175759	100408
35°	67174	79662	67174
40°	54834	64344	54834
45°	42964	57432	45156
50°	33760	49675	33760
55°	35401	32969	35401
60°	34720	34720	34720
65°	34109	34109	34109
70°	29458	29458	29458
75°	28147	28147	28147
80°	24993	24993	24993
85°	16006	16006	16006

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 57432 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.7	20.1
10°-20°	101.6	33.7
20°-30°	67.7	22.4
30°-40°	27.6	9.1
40°-50°	17.4	5.8
50°-60°	11.7	3.9
60°-70°	9.0	3.0
70°-80°	4.9	1.6
80°-90°	1.1	0.4
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°-30°	230.0	76.2
0°-40°	257.6	85.4
0°-60°	286.7	95.0
0°-90°	301.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	301.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	690	688	689	687	684	61
15°	352	360	366	367	361	98
25°	120	140	181	143	118	57
35°	36	42	42	41	36	23
45°	20	22	26	23	21	15
55°	13	13	12	13	13	11
65°	9	9	9	9	9	9
75°	5	5	5	5	5	5
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	775.1	775.1	775.1	775.1	775.1
2.5°	757.3	758.3	756.4	755.5	753.6
5°	690.0	688.1	689.1	687.2	684.4
7.5°	612.4	610.5	616.1	612.4	610.5
10°	519.8	521.7	527.3	526.4	534.8
12.5°	430.1	435.7	440.4	441.3	443.2
15°	351.6	360.0	366.5	367.4	360.9
17.5°	285.2	300.1	315.1	304.8	294.5
20°	227.2	244.0	269.3	247.8	231.9
22.5°	170.2	189.8	225.3	195.4	173.0
25°	119.7	140.2	181.4	143.1	117.8
27.5°	82.3	96.3	138.4	99.1	79.5
30°	57.0	71.1	98.2	71.1	56.1
32.5°	42.1	55.2	63.6	53.3	43.0
35°	35.5	42.1	42.1	41.1	35.5
37.5°	30.9	33.7	35.5	33.7	30.9
40°	27.1	29.0	31.8	29.0	27.1
42.5°	24.3	26.2	29.0	26.2	24.3
45°	19.6	22.4	26.2	23.4	20.6
47.5°	14.0	17.8	24.3	18.7	14.0
50°	14.0	14.0	20.6	14.0	14.0
52.5°	13.1	13.1	15.9	13.1	13.1
55°	13.1	13.1	12.2	13.1	13.1
57.5°	12.2	12.2	12.2	12.2	12.2
60°	11.2	11.2	11.2	11.2	11.2
62.5°	10.3	10.3	10.3	10.3	10.3
65°	9.3	9.3	9.3	9.3	9.3
67.5°	7.5	8.4	7.5	8.4	8.4
70°	6.5	6.5	6.5	6.5	6.5
72.5°	5.6	5.6	5.6	5.6	5.6
75°	4.7	4.7	4.7	4.7	4.7
77.5°	3.7	3.7	3.7	3.7	3.7
80°	2.8	2.8	2.8	2.8	2.8
82.5°	1.9	1.9	1.9	1.9	1.9
85°	0.9	0.9	0.9	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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