

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: P885659

Luminaire Tested: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMW-340LM-3000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885659  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-136)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMW-340LM-3000K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

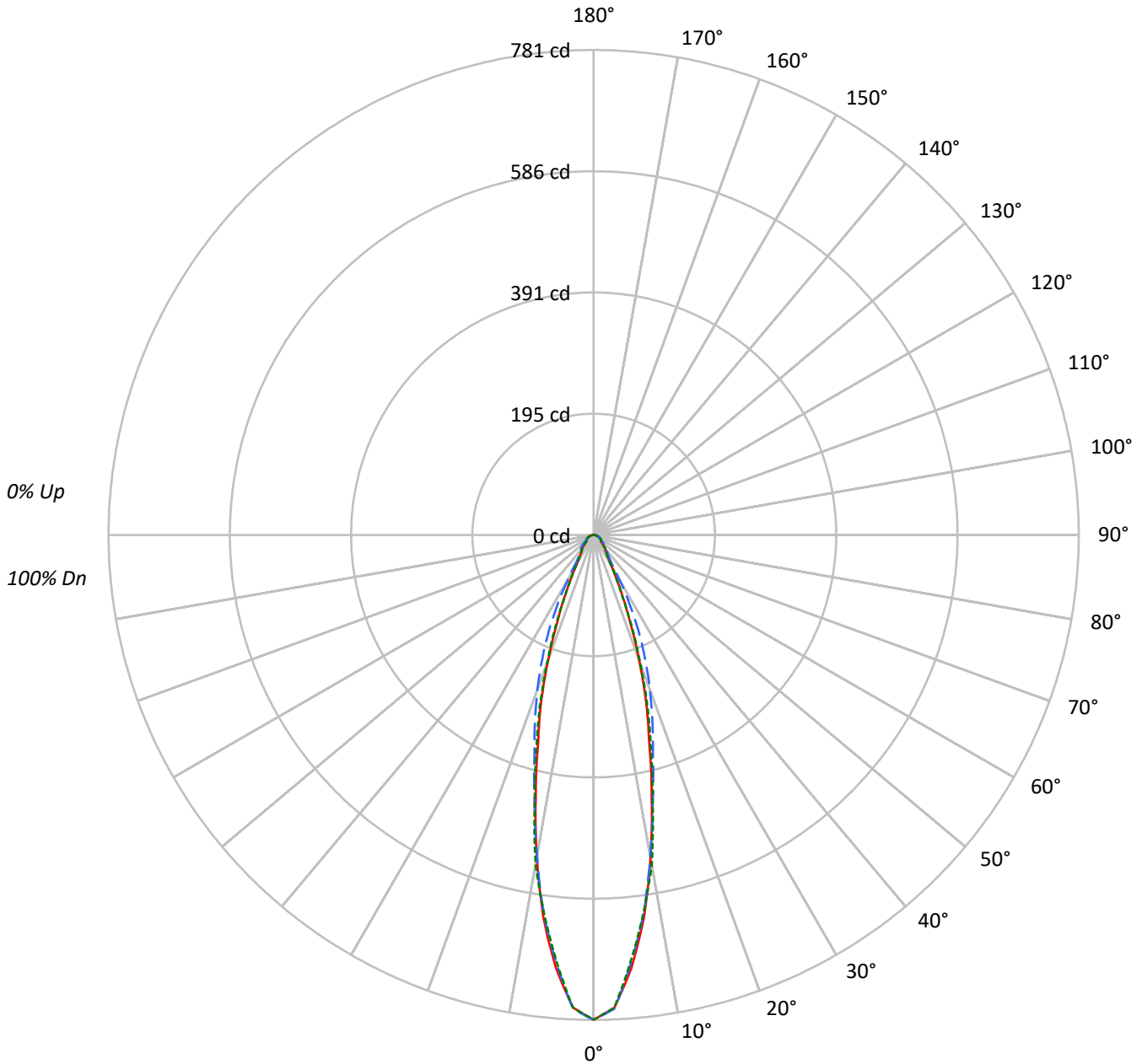
Lumens per Lamp: N/A  
Luminaire Lumens: 300.8 lumens  
Efficiency: N/A  
Efficacy: 49.3 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.46 / 0.55  
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P885659  
CATALOG NUMBER: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMW-340LM-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P885659

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMW-340LM-3000K

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

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	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	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92		
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86		
3	102	95	90	86	100	94	89	85	91	87	84	89	86	83	87	84	82	80		
4	97	90	84	80	95	88	83	79	86	82	78	84	80	77	82	79	77	75		
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71		
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67		
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64		
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61		
9	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	62	59	58		
10	76	67	61	58	75	66	61	58	65	61	57	65	60	57	64	60	57	56		

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

	0°	45°	90°
0°	1210098	1210098	1210098
5°	1088378	1076708	1070796
10°	828988	825997	848032
15°	552978	590367	570950
20°	351177	435961	358930
25°	191719	292282	186931
30°	98618	147122	98618
35°	67174	77770	68877
40°	56655	66165	58476
45°	42964	59405	44937
50°	35930	51845	35930
55°	37833	37833	37833
60°	40610	37510	40610
65°	37777	37777	37777
70°	38068	38068	38068
75°	33537	33537	33537
80°	33027	33027	33027
85°	33790	16006	33790

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 59405 cd/sqm



TEST NUMBER: P885659

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMW-340LM-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.1	20.3
10°-20°	100.4	33.4
20°-30°	63.4	21.1
30°-40°	26.8	8.9
40°-50°	17.9	6.0
50°-60°	12.8	4.3
60°-70°	10.4	3.4
70°-80°	6.1	2.0
80°-90°	2.0	0.7
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°	224.9	74.7
0°-40°	251.7	83.7
0°-60°	282.4	93.9
0°-90°	300.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	300.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	700	694	692	686	688	61
15°	345	355	368	360	356	97
25°	112	128	171	130	109	53
35°	36	42	41	41	36	23
45°	20	23	27	23	20	16
55°	14	14	14	14	14	13
65°	10	10	10	10	10	10
75°	6	6	6	6	6	6
85°	2	2	1	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P885659

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMW-340LM-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	780.7	780.7	780.7	780.7	780.7
2.5°	762.0	762.0	763.9	762.0	762.0
5°	699.5	693.8	692.0	686.4	688.2
7.5°	621.0	619.1	615.4	615.4	613.5
10°	526.7	528.6	524.8	530.4	538.8
12.5°	431.4	432.4	439.8	443.6	438.9
15°	344.6	354.9	367.9	360.5	355.8
17.5°	280.2	290.4	313.8	295.1	287.6
20°	212.9	232.5	264.3	237.2	217.6
22.5°	155.0	179.3	216.7	181.2	161.6
25°	112.1	127.9	170.9	129.8	109.3
27.5°	78.4	91.5	124.2	92.5	77.5
30°	55.1	69.1	82.2	67.2	55.1
32.5°	43.0	54.2	52.3	52.3	42.0
35°	35.5	42.0	41.1	41.1	36.4
37.5°	30.8	33.6	36.4	34.6	31.8
40°	28.0	29.9	32.7	29.9	28.9
42.5°	24.3	27.1	29.9	27.1	25.2
45°	19.6	23.3	27.1	23.3	20.5
47.5°	15.9	17.7	25.2	18.7	15.9
50°	14.9	14.9	21.5	14.9	14.9
52.5°	14.9	14.9	16.8	14.9	14.9
55°	14.0	14.0	14.0	14.0	14.0
57.5°	13.1	13.1	13.1	13.1	13.1
60°	13.1	13.1	12.1	13.1	13.1
62.5°	11.2	12.1	11.2	12.1	11.2
65°	10.3	10.3	10.3	10.3	10.3
67.5°	9.3	9.3	9.3	9.3	9.3
70°	8.4	8.4	8.4	8.4	8.4
72.5°	6.5	6.5	6.5	7.5	6.5
75°	5.6	5.6	5.6	5.6	5.6
77.5°	4.7	4.7	4.7	4.7	4.7
80°	3.7	3.7	3.7	3.7	3.7
82.5°	2.8	2.8	2.8	2.8	2.8
85°	1.9	1.9	0.9	1.9	1.9
87.5°	0.9	0.9	0.9	0.9	0.9
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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report







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

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)