

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: P886111

Luminaire Tested: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-3000K

Issue Date: 6/20/2024

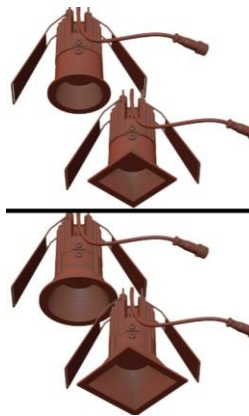
**Test Information**

Test Method: LM-79-2019  
Report Number: P886111  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-89)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-3000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

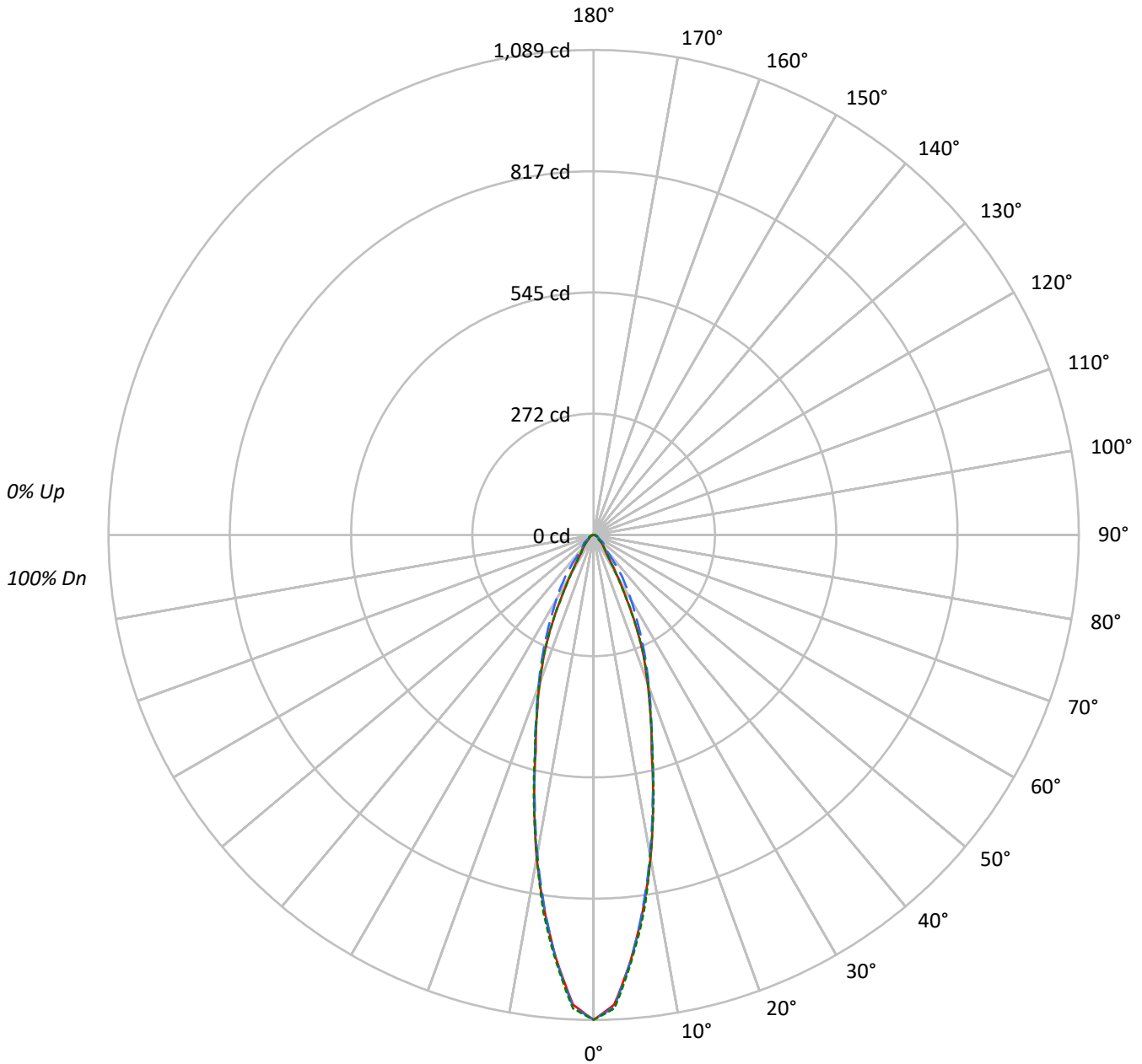
Lumens per Lamp: N/A  
Luminaire Lumens: 430.0 lumens  
Efficiency: N/A  
Efficacy: 53.8 lumens/watt  
Spacing Criteria (0/90/45): 0.46 / 0.47 / 0.55  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 8  
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									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	113	111	108	106	111	109	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82																			
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77																			
5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73																			
6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69																			
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	74	70	67	66																			
8	83	74	69	65	82	73	68	65	72	68	64	71	67	64	71	67	64	63																			
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60																			
10	77	68	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57																			

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

	0°	45°	90°
0°	421871	421871	421871
5°	372604	372915	374626
10°	289678	286609	288301
15°	201507	204315	204315
20°	145731	148947	147133
25°	95517	107403	95517
30°	46490	74813	44968
35°	23369	48346	22943
40°	17502	21448	17502
45°	13755	18523	13317
50°	8862	16699	8862
55°	8783	9391	8783
60°	8757	8757	8757
65°	7977	7977	7977
70°	6911	7818	6911
75°	6438	6438	6438
80°	5802	5802	5802
85°	4001	4001	4001

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 18523 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.5	19.6
10°-20°	142.8	33.2
20°-30°	108.3	25.2
30°-40°	45.5	10.6
40°-50°	21.4	5.0
50°-60°	12.4	2.9
60°-70°	8.8	2.1
70°-80°	4.7	1.1
80°-90°	1.5	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°	335.6	78.0
0°-40°	381.1	88.6
0°-60°	415.0	96.5
0°-90°	430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	430.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	958	955	959	958	963	84
15°	502	504	509	508	509	142
25°	223	242	251	242	223	100
35°	49	62	102	62	48	35
45°	25	28	34	28	24	18
55°	13	13	14	13	13	12
65°	9	9	9	9	9	9
75°	4	4	4	4	4	5
85°	1	2	1	2	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1088.7	1088.7	1088.7	1088.7	1088.7
2.5°	1055.7	1058.3	1060.1	1064.4	1064.4
5°	957.9	955.3	958.7	957.9	963.1
7.5°	848.8	849.6	845.3	850.5	858.3
10°	736.2	729.2	728.4	731.8	732.7
12.5°	615.8	612.3	611.4	611.4	620.1
15°	502.3	504.1	509.3	508.4	509.3
17.5°	423.5	428.7	428.7	426.1	423.5
20°	353.4	357.7	361.2	357.7	356.8
22.5°	290.1	300.5	304.9	302.3	291.9
25°	223.4	241.6	251.2	241.6	223.4
27.5°	152.4	182.7	203.5	181.9	152.4
30°	103.9	126.4	167.2	124.7	100.5
32.5°	68.4	85.7	134.2	85.7	69.3
35°	49.4	62.4	102.2	61.5	48.5
37.5°	40.7	48.5	64.1	47.6	40.7
40°	34.6	37.2	42.4	38.1	34.6
42.5°	30.3	32.0	37.2	32.9	30.3
45°	25.1	27.7	33.8	27.7	24.3
47.5°	15.6	21.7	30.3	21.7	15.6
50°	14.7	14.7	27.7	14.7	14.7
52.5°	13.9	13.9	20.8	13.9	13.9
55°	13.0	13.0	13.9	13.0	13.0
57.5°	12.1	12.1	12.1	12.1	12.1
60°	11.3	11.3	11.3	11.3	11.3
62.5°	9.5	10.4	10.4	10.4	9.5
65°	8.7	8.7	8.7	8.7	8.7
67.5°	7.8	7.8	7.8	7.8	7.8
70°	6.1	6.9	6.9	6.9	6.1
72.5°	5.2	5.2	5.2	6.1	5.2
75°	4.3	4.3	4.3	4.3	4.3
77.5°	3.5	3.5	3.5	3.5	3.5
80°	2.6	2.6	2.6	2.6	2.6
82.5°	1.7	2.6	1.7	2.6	1.7
85°	0.9	1.7	0.9	1.7	0.9
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



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Scaled Data Report







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

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