

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: P886297

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMBB-550LM-3500K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886297  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-94)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMBB-550LM-3500K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

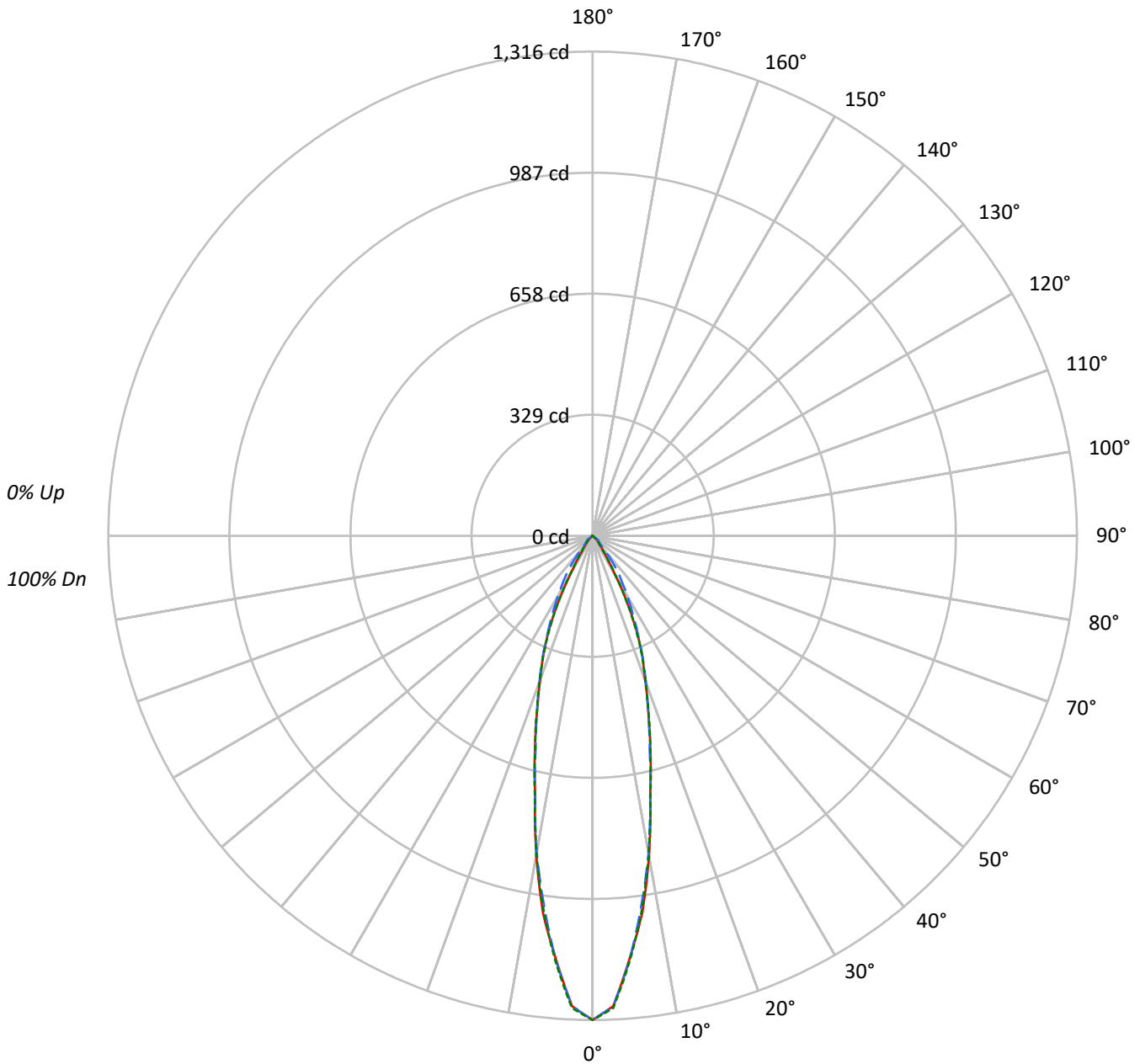
Lumens per Lamp: N/A  
Luminaire Lumens: 467.0 lumens  
Efficiency: N/A  
Efficacy: 59.1 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.54  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.9  
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					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	0		
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100		
	1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	95	95	95		
	2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90	90	90	90	90	90		
	3	105	100	96	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86	86	86	86	86	86		
	4	101	95	90	86	99	93	89	86	91	88	85	90	86	84	88	85	83	82	82	82	82	82	82		
	5	97	90	85	81	95	89	84	81	87	83	80	86	82	80	84	81	79	78	78	78	78	78	78		
	6	93	86	81	77	92	85	80	77	84	79	76	82	79	76	81	78	75	74	74	74	74	74	74		
	7	90	82	77	73	88	81	76	73	80	76	73	79	75	72	78	74	72	71	71	71	71	71	71		
	8	86	78	73	70	85	78	73	70	77	72	69	76	72	69	75	71	69	68	68	68	68	68	68		
	9	83	75	70	67	82	75	70	67	74	69	66	73	69	66	72	69	66	65	65	65	65	65	65		
	10	80	72	67	64	79	72	67	64	71	67	64	70	66	63	69	66	63	62	62	62	62	62	62		

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

	0°	45°	90°
0°	509949	509949	509949
5°	448260	449505	451177
10°	347008	344096	345355
15°	243148	239739	242306
20°	171463	174143	173236
25°	118818	122495	116552
30°	54991	83225	55483
35°	22754	55631	23747
40°	13000	22712	13506
45°	8220	14084	8768
50°	663	11575	663
55°	743	2905	743
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 14084 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.7	21.8
10°-20°	169.4	36.3
20°-30°	128.7	27.6
30°-40°	50.2	10.7
40°-50°	14.9	3.2
50°-60°	2.1	0.5
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	399.8	85.6
0°-40°	450.0	96.3
0°-60°	467.0	100.0
0°-90°	467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	467.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1152	1159	1156	1154	1160	102
15°	606	602	598	606	604	169
25°	278	289	286	286	273	123
35°	48	64	118	66	50	36
45°	15	19	26	19	16	10
55°	1	1	4	1	1	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1316.0	1316.0	1316.0	1316.0	1316.0
2.5°	1279.6	1280.7	1279.6	1285.0	1285.0
5°	1152.4	1158.8	1155.6	1153.5	1159.9
7.5°	1033.7	1019.8	1013.4	1017.7	1025.2
10°	881.9	877.7	874.5	878.7	877.7
12.5°	722.7	725.9	722.7	728.0	724.8
15°	606.1	601.9	597.6	606.1	604.0
17.5°	502.4	506.7	502.4	504.6	504.6
20°	415.8	423.3	422.3	423.3	420.1
22.5°	351.7	350.6	352.8	351.7	348.5
25°	277.9	288.6	286.5	286.5	272.6
27.5°	198.8	221.3	233.0	224.5	196.7
30°	122.9	160.4	186.0	155.0	124.0
32.5°	78.0	102.6	148.6	100.5	79.1
35°	48.1	64.1	117.6	66.3	50.2
37.5°	34.2	46.0	81.2	46.0	34.2
40°	25.7	32.1	44.9	32.1	26.7
42.5°	20.3	24.6	29.9	24.6	21.4
45°	15.0	19.2	25.7	19.2	16.0
47.5°	4.3	12.8	22.4	12.8	6.4
50°	1.1	2.1	19.2	4.3	1.1
52.5°	1.1	1.1	13.9	1.1	1.1
55°	1.1	1.1	4.3	1.1	1.1
57.5°	0.0	0.0	1.1	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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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