

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: P886366

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMWB-550LM-3000K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886366  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-98)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDMWB-550LM-3000K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 631.5 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.69  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

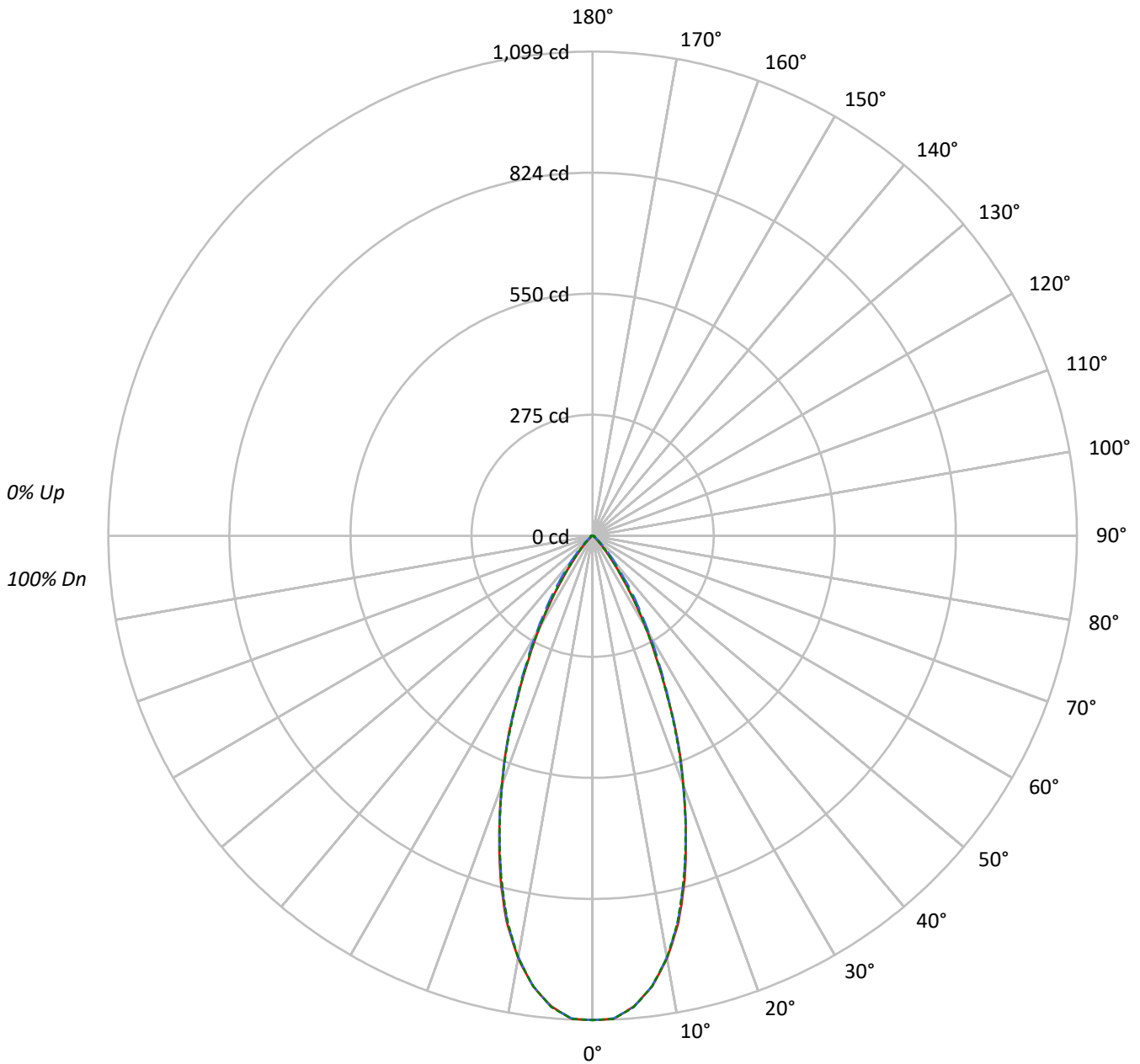
Input Watts (W): 7.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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									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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88																			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83																			
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78																			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74																			
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	78	74	71	70																			
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66																			
8	83	74	69	65	82	74	69	65	73	68	65	72	68	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	76	68	62	59	75	67	62	59	66	62	59	66	61	58	65	61	58	57																			

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

	0°	45°	90°
0°	106505	106505	106505
5°	104296	104393	104393
10°	95743	95537	95645
15°	80936	80415	80314
20°	61990	61887	62103
25°	42745	43408	42628
30°	27160	28659	26813
35°	14050	17479	14546
40°	6538	9674	6791
45°	2973	4672	3110
50°	1402	2487	1552
55°	1047	1402	1047
60°	1008	1008	1008
65°	940	940	940
70°	878	1161	878
75°	1160	1160	1160
80°	1172	1172	1172
85°	1112	1112	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 4672 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.2	15.7
10°-20°	220.6	34.9
20°-30°	186.4	29.5
30°-40°	86.8	13.7
40°-50°	23.5	3.7
50°-60°	6.7	1.1
60°-70°	4.4	0.7
70°-80°	3.0	0.5
80°-90°	0.8	0.1
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°	506.2	80.2
0°-40°	593.0	93.9
0°-60°	623.2	98.7
0°-90°	631.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	631.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1099	1099	1099	1099	1099	
5°	1072	1075	1074	1074	1074	99
15°	807	805	802	801	801	221
25°	400	407	406	407	399	185
35°	119	133	148	135	123	79
45°	22	27	34	27	23	19
55°	6	7	8	7	6	6
65°	4	4	4	4	4	4
75°	3	3	3	3	3	3
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°	1099.4	1099.4	1099.4	1099.4	1099.4
2.5°	1097.3	1096.3	1096.3	1096.3	1097.3
5°	1072.5	1074.6	1073.5	1073.5	1073.5
7.5°	1032.2	1031.2	1031.2	1031.2	1031.2
10°	973.3	972.3	971.2	975.4	972.3
12.5°	898.9	898.9	895.8	896.8	893.7
15°	807.0	804.9	801.8	800.8	800.8
17.5°	703.6	703.6	703.6	699.5	701.6
20°	601.3	604.4	600.3	604.4	602.4
22.5°	506.3	503.2	503.2	501.1	500.1
25°	399.9	407.1	406.1	407.1	398.8
27.5°	312.0	318.2	325.5	321.3	315.1
30°	242.8	245.9	256.2	248.0	239.7
32.5°	175.6	187.0	197.3	189.1	179.8
35°	118.8	133.3	147.8	135.4	123.0
37.5°	77.5	88.9	105.4	90.9	79.6
40°	51.7	56.8	76.5	58.9	53.7
42.5°	35.1	40.3	52.7	40.3	37.2
45°	21.7	26.9	34.1	26.9	22.7
47.5°	11.4	16.5	24.8	16.5	13.4
50°	9.3	10.3	16.5	10.3	10.3
52.5°	7.2	8.3	10.3	8.3	8.3
55°	6.2	7.2	8.3	7.2	6.2
57.5°	5.2	6.2	6.2	6.2	5.2
60°	5.2	5.2	5.2	5.2	5.2
62.5°	5.2	5.2	5.2	5.2	5.2
65°	4.1	4.1	4.1	4.1	4.1
67.5°	4.1	4.1	4.1	4.1	4.1
70°	3.1	4.1	4.1	4.1	3.1
72.5°	3.1	3.1	3.1	3.1	3.1
75°	3.1	3.1	3.1	3.1	3.1
77.5°	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	2.1	2.1	2.1
82.5°	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0
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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