

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: P886308

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMWB-550LM-4000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886308
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-92)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMWB-550LM-4000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

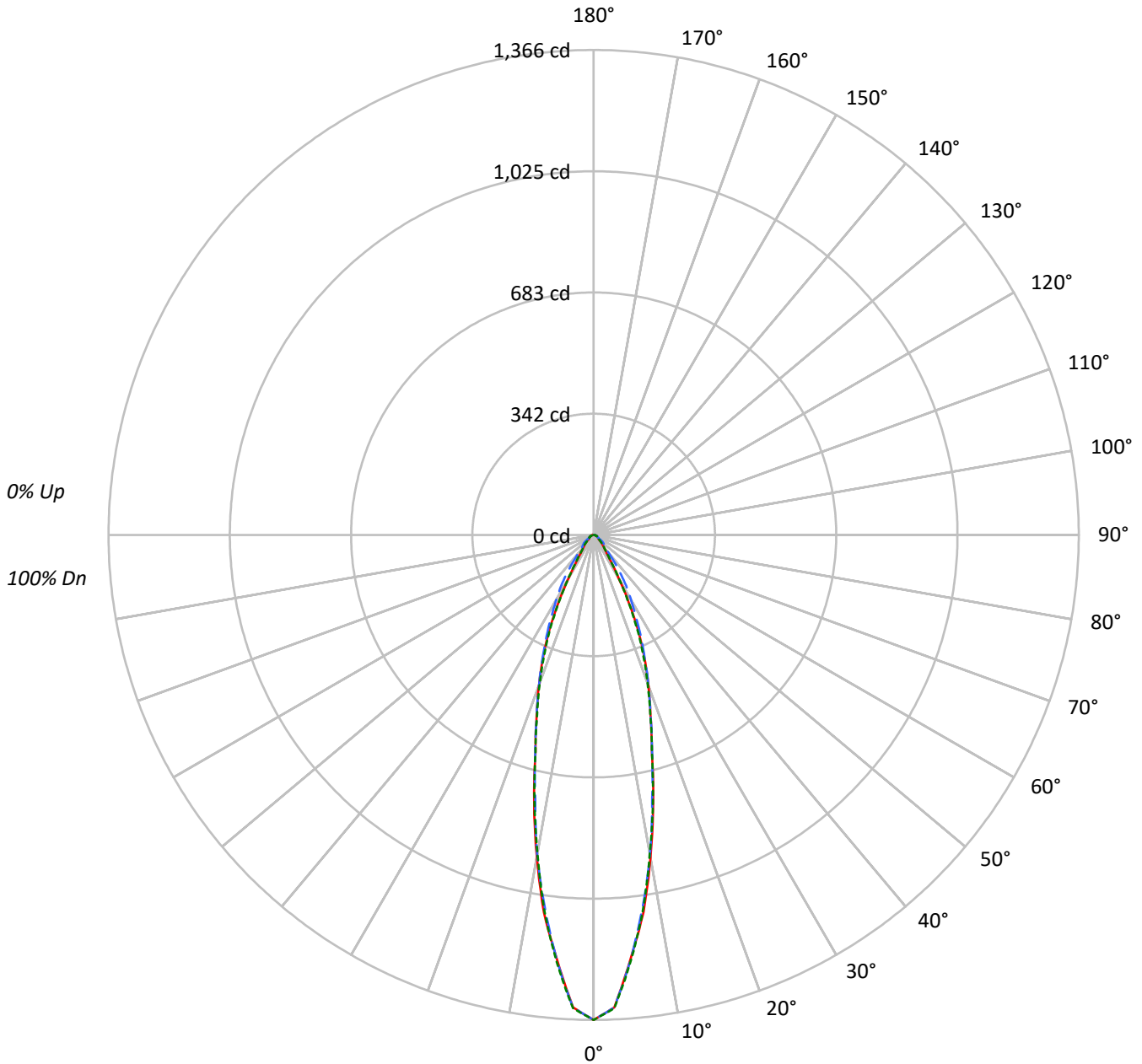
Lumens per Lamp: N/A
Luminaire Lumens: 546.8 lumens
Efficiency: N/A
Efficacy: 69.2 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.46 / 0.54
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

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									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	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	90	89	87																			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	82																			
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77																			
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	72																			
6	90	81	76	72	88	81	75	71	79	74	71	78	74	70	76	73	70	69																			
7	86	77	72	68	85	77	71	68	75	71	67	74	70	67	73	69	67	65																			
8	82	74	68	64	81	73	68	64	72	67	64	71	67	64	70	66	63	62																			
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	61	59																			
10	76	67	62	58	75	67	62	58	66	61	58	65	61	58	65	61	58	57																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	529440	529440	529440
5°	465336	466620	468331
10°	362589	359992	358261
15°	253699	254582	253699
20°	185689	185689	182473
25°	126472	133997	122196
30°	63224	93337	65193
35°	30796	61071	32357
40°	21751	32930	22308
45°	17536	23564	16331
50°	10670	21280	10670
55°	10472	13444	10472
60°	10230	10230	10230
65°	10086	10086	10086
70°	8724	9970	9970
75°	9881	9881	9881
80°	9819	7364	9819
85°	9781	4891	9781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 23564 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.7	19.3
10°-20°	178.4	32.6
20°-30°	137.8	25.2
30°-40°	61.3	11.2
40°-50°	28.2	5.2
50°-60°	15.6	2.8
60°-70°	10.9	2.0
70°-80°	6.8	1.2
80°-90°	2.1	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°	421.9	77.2
0°-40°	483.2	88.4
0°-60°	526.9	96.4
0°-90°	546.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	546.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1366	1366	1366	1366	1366	
5°	1196	1201	1200	1202	1204	106
15°	632	636	635	636	632	179
25°	296	309	313	302	286	132
35°	65	84	129	86	68	47
45°	32	36	43	35	30	24
55°	16	16	20	16	16	14
65°	11	11	11	11	11	11
75°	7	7	7	7	7	7
85°	2	2	1	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1366.3	1366.3	1366.3	1366.3	1366.3
2.5°	1332.1	1331.0	1332.1	1334.3	1334.3
5°	1196.3	1200.7	1199.6	1201.8	1204.0
7.5°	1072.7	1062.8	1056.2	1058.4	1065.0
10°	921.5	909.4	914.9	911.6	910.5
12.5°	774.7	762.6	760.4	763.7	770.3
15°	632.4	635.7	634.6	635.7	632.4
17.5°	533.0	531.9	533.0	533.0	529.7
20°	450.3	447.0	450.3	448.1	442.5
22.5°	373.0	377.4	375.2	376.3	363.1
25°	295.8	309.0	313.4	302.4	285.8
27.5°	214.1	238.4	253.8	232.9	207.5
30°	141.3	173.3	208.6	170.0	145.7
32.5°	96.0	119.2	170.0	121.4	98.2
35°	65.1	83.9	129.1	86.1	68.4
37.5°	51.9	62.9	92.7	64.0	53.0
40°	43.0	50.8	65.1	50.8	44.1
42.5°	37.5	41.9	49.7	41.9	38.6
45°	32.0	36.4	43.0	35.3	29.8
47.5°	23.2	28.7	38.6	27.6	24.3
50°	17.7	19.9	35.3	22.1	17.7
52.5°	16.6	16.6	28.7	16.6	16.6
55°	15.5	15.5	19.9	15.5	15.5
57.5°	14.3	14.3	15.5	15.5	14.3
60°	13.2	13.2	13.2	14.3	13.2
62.5°	12.1	12.1	12.1	12.1	12.1
65°	11.0	11.0	11.0	11.0	11.0
67.5°	9.9	9.9	9.9	9.9	9.9
70°	7.7	8.8	8.8	8.8	8.8
72.5°	6.6	7.7	7.7	7.7	6.6
75°	6.6	6.6	6.6	6.6	6.6
77.5°	5.5	5.5	5.5	5.5	4.4
80°	4.4	4.4	3.3	4.4	4.4
82.5°	2.2	3.3	2.2	3.3	2.2
85°	2.2	2.2	1.1	2.2	2.2
87.5°	1.1	1.1	1.1	1.1	1.1
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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