

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: P886291

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-550LM-3000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886291
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-91)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-550LM-3000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

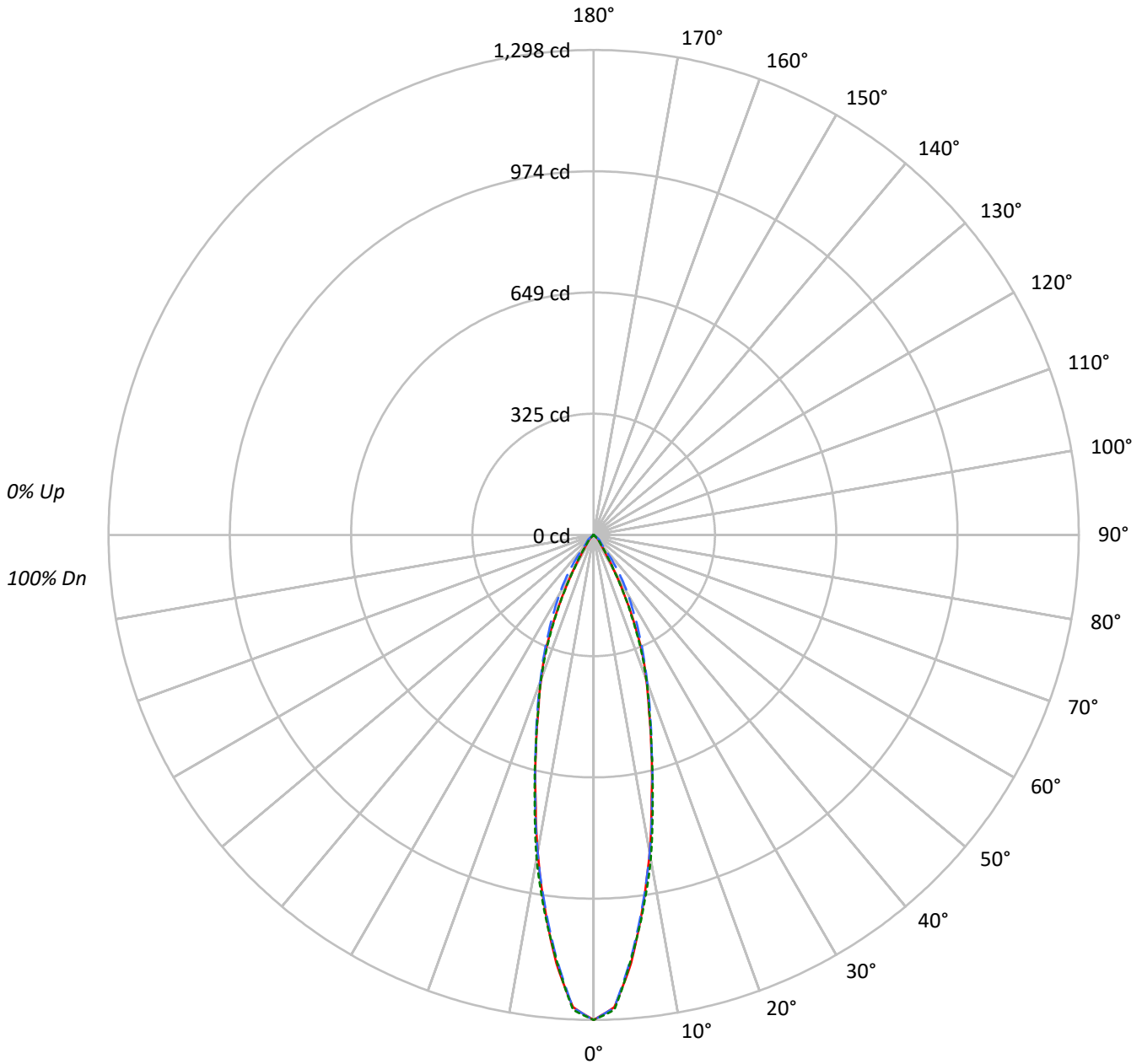
Lumens per Lamp: N/A
Luminaire Lumens: 447.5 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Spacing Criteria (0/90/45): 0.46 / 0.46 / 0.53
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	503129	503129	503129
5°	447560	442698	444331
10°	339217	340043	346142
15°	239297	240541	240100
20°	169648	171793	170102
25°	106077	121085	102999
30°	47161	81883	46266
35°	20057	47447	21051
40°	12039	18817	12039
45°	6795	13043	5644
50°	603	9947	603
55°	0	2094	676
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: 13043 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	22.4
10°-20°	167.5	37.4
20°-30°	121.5	27.2
30°-40°	43.7	9.8
40°-50°	12.8	2.9
50°-60°	1.6	0.3
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°	389.4	87.0
0°-40°	433.1	96.8
0°-60°	447.5	100.0
0°-90°	447.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	447.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1151	1140	1138	1148	1142	100
15°	596	596	600	592	598	167
25°	248	274	283	266	241	113
35°	42	58	100	58	44	31
45°	12	16	24	16	10	9
55°	0	1	3	1	1	0
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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1298.4	1298.4	1298.4	1298.4	1298.4
2.5°	1265.3	1262.2	1266.3	1267.4	1272.5
5°	1150.6	1140.2	1138.1	1147.5	1142.3
7.5°	1004.8	1005.8	1000.7	1012.0	1013.1
10°	862.1	863.2	864.2	868.3	879.7
12.5°	717.4	720.5	721.6	719.5	728.8
15°	596.5	596.5	599.6	592.3	598.5
17.5°	492.1	496.2	501.4	495.2	494.1
20°	411.4	414.5	416.6	415.6	412.5
22.5°	338.0	344.2	346.3	338.0	326.7
25°	248.1	273.9	283.2	265.7	240.9
27.5°	168.5	203.6	227.4	196.4	166.4
30°	105.4	135.4	183.0	135.4	103.4
32.5°	64.1	84.8	140.6	87.9	67.2
35°	42.4	57.9	100.3	57.9	44.5
37.5°	31.0	40.3	58.9	40.3	32.0
40°	23.8	27.9	37.2	28.9	23.8
42.5°	18.6	21.7	27.9	21.7	17.6
45°	12.4	16.5	23.8	16.5	10.3
47.5°	2.1	9.3	20.7	8.3	5.2
50°	1.0	1.0	16.5	3.1	1.0
52.5°	1.0	1.0	9.3	1.0	1.0
55°	0.0	1.0	3.1	1.0	1.0
57.5°	0.0	0.0	0.0	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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