

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: P886294

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMB-550LM-5000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886294
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-5000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 503.3 lumens
Efficiency: N/A
Efficacy: 63.7 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

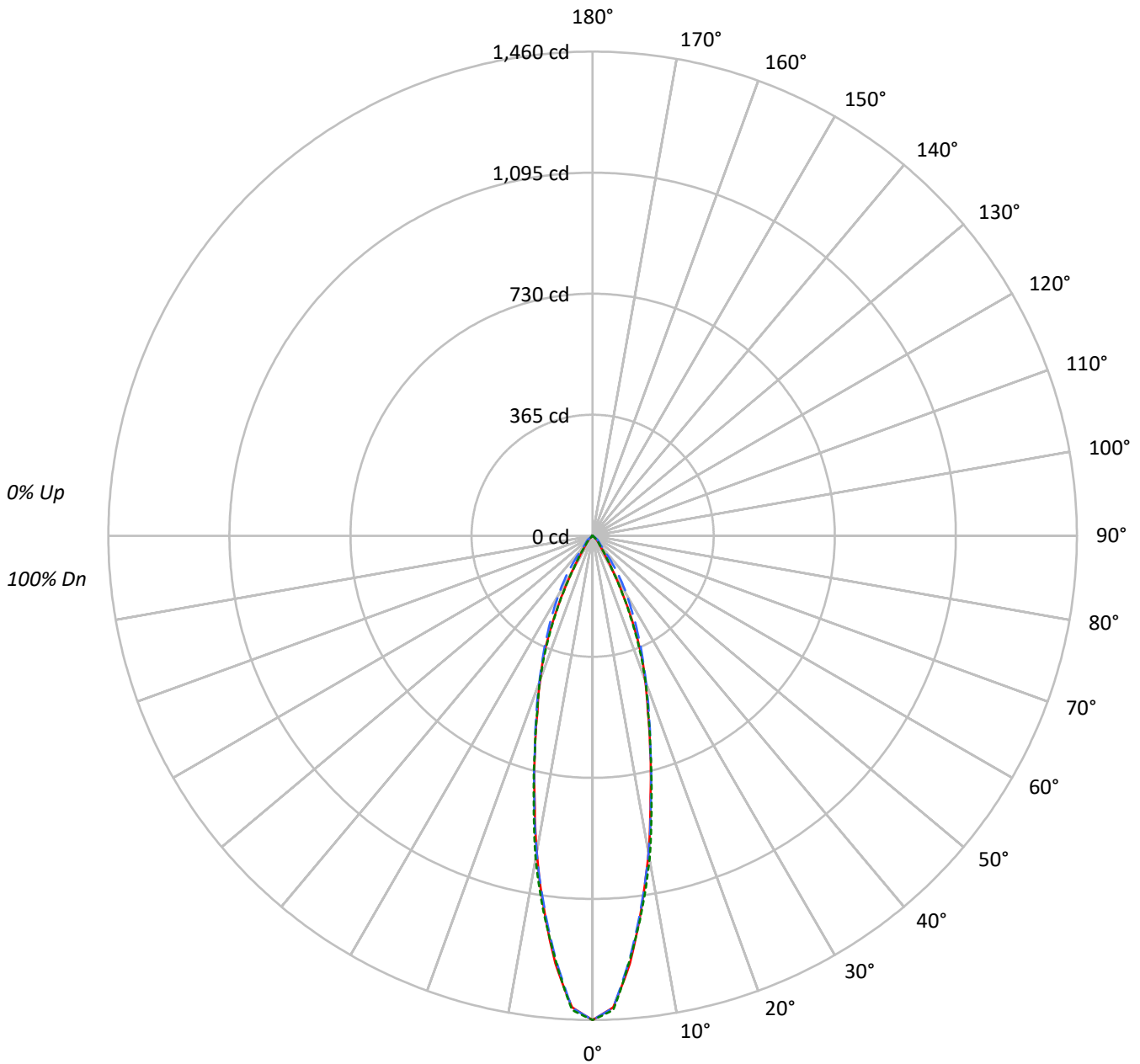
Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	99	98	97	95	
	1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	94	92	91	91	91	
	2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	94	92	91	91	90	88	86	86	86	
	3	105	100	96	93	104	99	95	92	96	93	90	94	91	89	92	90	88	86	86	85	83	82	82	82	
	4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82	82	80	78	75	75	75	
	5	97	90	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78	78	76	74	72	72	72	
	6	94	86	81	78	92	86	81	77	84	80	77	83	79	76	82	78	76	75	75	73	71	69	69	69	
	7	90	82	77	74	89	82	77	74	81	76	73	80	76	73	79	75	73	72	72	70	68	66	66	66	
	8	87	79	74	71	86	78	74	70	77	73	70	77	73	70	76	72	70	68	68	66	64	62	62	62	
	9	84	76	71	68	83	75	71	67	74	70	67	74	70	67	73	69	67	66	66	64	62	60	60	60	
	10	81	73	68	65	80	72	68	65	72	67	65	71	67	64	70	67	64	63	63	61	59	57	57	57	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	565788	565788	565788
5°	503301	497855	499683
10°	381476	382420	389267
15°	269104	270508	270027
20°	190803	193195	191256
25°	119289	136177	115826
30°	53067	92084	52038
35°	22564	53360	23652
40°	13506	21195	13506
45°	7672	14632	6357
50°	723	11213	723
55°	0	2365	811
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: 14632 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.9	22.4
10°-20°	188.3	37.4
20°-30°	136.7	27.2
30°-40°	49.2	9.8
40°-50°	14.4	2.9
50°-60°	1.8	0.4
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°	437.9	87.0
0°-40°	487.1	96.8
0°-60°	503.3	100.0
0°-90°	503.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	503.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1460	1460	1460	1460	1460	
5°	1294	1282	1280	1290	1285	113
15°	671	671	674	666	673	187
25°	279	308	318	299	271	127
35°	48	65	113	65	50	35
45°	14	19	27	19	12	10
55°	0	1	4	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°	1460.1	1460.1	1460.1	1460.1	1460.1
2.5°	1422.9	1419.4	1424.1	1425.3	1431.1
5°	1293.9	1282.3	1279.9	1290.4	1284.6
7.5°	1130.0	1131.1	1125.3	1138.1	1139.3
10°	969.5	970.7	971.9	976.5	989.3
12.5°	806.8	810.3	811.4	809.1	819.6
15°	670.8	670.8	674.3	666.1	673.1
17.5°	553.4	558.0	563.8	556.8	555.7
20°	462.7	466.2	468.5	467.3	463.8
22.5°	380.1	387.1	389.4	380.1	367.4
25°	279.0	308.1	318.5	298.8	270.9
27.5°	189.5	229.0	255.8	220.9	187.2
30°	118.6	152.3	205.8	152.3	116.3
32.5°	72.1	95.3	158.1	98.8	75.6
35°	47.7	65.1	112.8	65.1	50.0
37.5°	34.9	45.3	66.3	45.3	36.0
40°	26.7	31.4	41.9	32.6	26.7
42.5°	20.9	24.4	31.4	24.4	19.8
45°	14.0	18.6	26.7	18.6	11.6
47.5°	2.3	10.5	23.3	9.3	5.8
50°	1.2	1.2	18.6	3.5	1.2
52.5°	1.2	1.2	10.5	1.2	1.2
55°	0.0	1.2	3.5	1.2	1.2
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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