

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: P886359

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMBB-550LM-5000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886359
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-100)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDMBB-550LM-5000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 680.4 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

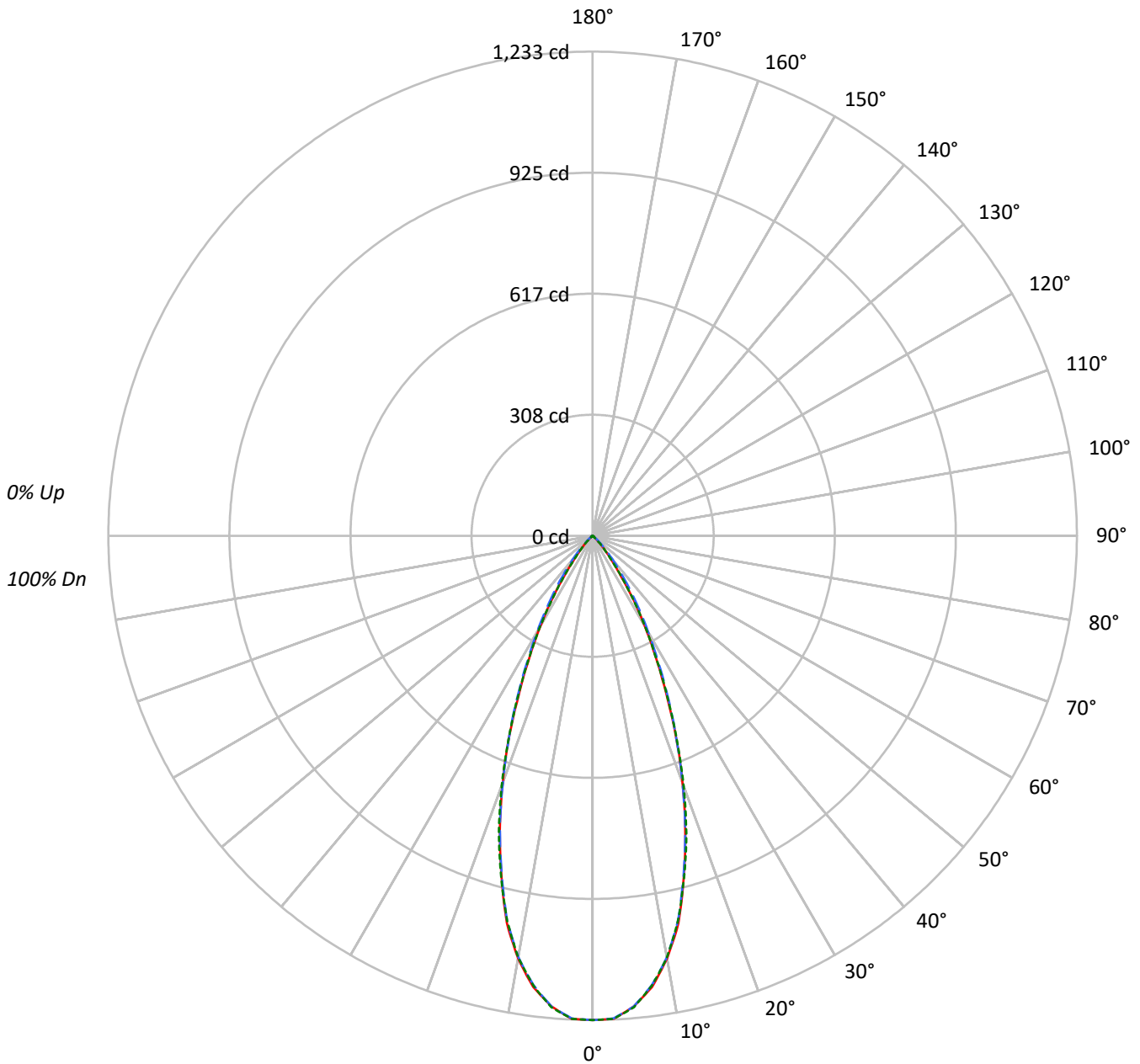
Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	114	112	109	107	112	109	107	106	105	104	102	102	101	99	98	97	96	95				
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	90				
3	105	99	94	91	103	97	93	90	95	92	89	93	90	87	90	88	86	85				
4	100	93	88	85	98	92	88	84	90	86	83	88	85	82	86	84	81	80				
5	96	88	83	79	94	87	83	79	86	82	78	84	81	78	83	80	77	76				
6	92	84	79	75	90	83	78	74	82	77	74	80	76	73	79	76	73	72				
7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68				
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65				
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62				
10	78	69	64	61	77	69	64	60	68	63	60	67	63	60	67	63	60	59				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	477942	477942	477942
5°	468020	468020	468915
10°	429992	428615	429048
15°	360049	358645	360972
20°	276122	275173	279008
25°	188895	193855	191375
30°	118618	126403	119647
35°	59935	75357	60503
40°	27063	40012	26456
45°	9535	17207	8933
50°	2110	6993	2833
55°	811	1554	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: 17207 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.2	16.3
10°-20°	246.8	36.3
20°-30°	206.6	30.4
30°-40°	93.2	13.7
40°-50°	20.8	3.1
50°-60°	1.8	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°	564.6	83.0
0°-40°	657.9	96.7
0°-60°	680.4	100.0
0°-90°	680.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	680.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1233	1233	1233	1233	1233	
5°	1203	1203	1203	1202	1206	111
15°	898	896	894	901	900	247
25°	442	451	453	450	448	204
35°	127	144	159	142	128	85
45°	17	23	31	22	16	16
55°	1	1	2	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°	1233.4	1233.4	1233.4	1233.4	1233.4
2.5°	1231.1	1231.1	1229.9	1229.9	1231.1
5°	1203.2	1203.2	1203.2	1202.0	1205.5
7.5°	1159.0	1157.9	1154.4	1154.4	1155.5
10°	1092.8	1090.4	1089.3	1092.8	1090.4
12.5°	1010.2	1006.7	1004.4	1005.6	1004.4
15°	897.5	896.3	894.0	900.9	899.8
17.5°	784.7	781.2	784.7	783.5	794.0
20°	669.6	673.1	667.3	671.9	676.6
22.5°	555.7	560.3	555.7	556.8	558.0
25°	441.8	451.1	453.4	449.9	447.6
27.5°	346.4	354.6	359.2	354.6	347.6
30°	265.1	268.5	282.5	272.0	267.4
32.5°	193.0	205.8	216.2	205.8	191.8
35°	126.7	144.2	159.3	141.8	127.9
37.5°	81.4	91.8	113.9	93.0	80.2
40°	53.5	58.1	79.1	59.3	52.3
42.5°	33.7	39.5	51.2	38.4	32.6
45°	17.4	23.3	31.4	22.1	16.3
47.5°	5.8	10.5	19.8	11.6	7.0
50°	3.5	4.7	11.6	4.7	4.7
52.5°	2.3	2.3	4.7	2.3	2.3
55°	1.2	1.2	2.3	1.2	1.2
57.5°	0.0	0.0	1.2	1.2	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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