

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: P886363

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-4000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886363
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-95)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-4000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 671.0 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

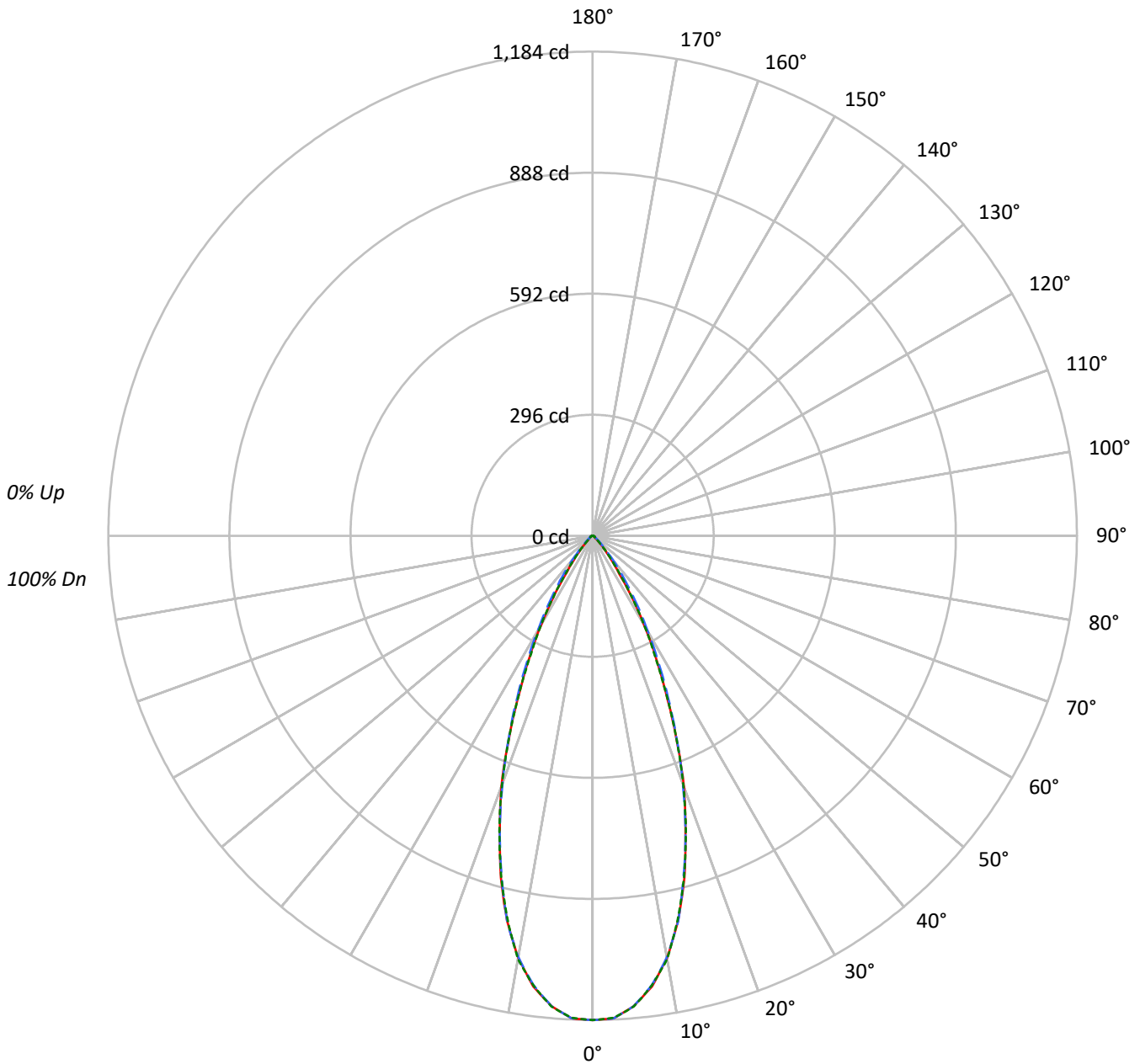
Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94					94			
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88					88			
3	104	98	93	90	102	96	92	89	94	90	87	91	89	86	89	87	85	83					83			
4	99	92	87	83	97	91	86	83	89	85	82	87	84	81	85	82	80	78					78			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74					74			
6	91	83	77	73	89	82	77	73	80	76	72	79	75	72	78	74	71	70					70			
7	87	78	73	69	86	78	73	69	76	72	68	75	71	68	74	71	68	66					66			
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63					63			
9	80	71	66	62	79	71	65	62	70	65	62	69	65	62	68	64	61	60					60			
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	59	57					57			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	114739	114739	114739
5°	112280	112280	112387
10°	103042	102934	103367
15°	86904	86242	86573
20°	67258	66454	66794
25°	45193	46604	45193
30°	28279	30124	28156
35°	13577	18011	14487
40°	6842	9497	6842
45°	2726	4685	3028
50°	1492	2502	1658
55°	1115	1486	1301
60°	1066	1279	1066
65°	1009	1261	1009
70°	935	1246	935
75°	1235	1235	1235
80°	1227	1227	1227
85°	1223	1223	1223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4685 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.8	15.9
10°-20°	237.1	35.3
20°-30°	197.8	29.5
30°-40°	89.0	13.3
40°-50°	23.4	3.5
50°-60°	7.6	1.1
60°-70°	5.0	0.8
70°-80°	3.2	0.5
80°-90°	1.0	0.2
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°	541.7	80.7
0°-40°	630.7	94.0
0°-60°	661.7	98.6
0°-90°	671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1155	1156	1155	1155	1156	107
15°	866	863	860	861	863	238
25°	423	430	436	432	423	196
35°	115	134	152	136	122	80
45°	20	26	34	26	22	19
55°	7	8	9	8	8	7
65°	4	6	6	6	4	5
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°	1184.4	1184.4	1184.4	1184.4	1184.4
2.5°	1181.1	1181.1	1181.1	1182.2	1180.0
5°	1154.6	1155.7	1154.6	1154.6	1155.7
7.5°	1111.5	1111.5	1108.2	1109.3	1109.3
10°	1047.5	1045.3	1046.4	1045.3	1050.8
12.5°	964.7	965.8	965.8	968.0	961.4
15°	866.5	863.2	859.9	861.0	863.2
17.5°	753.9	753.9	755.0	752.8	758.3
20°	652.4	647.9	644.6	640.2	647.9
22.5°	533.1	535.4	536.5	533.1	534.2
25°	422.8	430.5	436.0	431.6	422.8
27.5°	333.4	333.4	347.7	337.8	327.8
30°	252.8	259.4	269.3	259.4	251.7
32.5°	179.9	193.2	206.4	194.3	181.0
35°	114.8	133.6	152.3	135.8	122.5
37.5°	78.4	89.4	110.4	90.5	81.7
40°	54.1	59.6	75.1	60.7	54.1
42.5°	35.3	40.8	50.8	40.8	35.3
45°	19.9	26.5	34.2	26.5	22.1
47.5°	12.1	15.5	24.3	16.6	14.3
50°	9.9	12.1	16.6	11.0	11.0
52.5°	8.8	9.9	11.0	9.9	8.8
55°	6.6	7.7	8.8	7.7	7.7
57.5°	6.6	6.6	7.7	6.6	6.6
60°	5.5	6.6	6.6	6.6	5.5
62.5°	5.5	5.5	5.5	5.5	5.5
65°	4.4	5.5	5.5	5.5	4.4
67.5°	4.4	4.4	4.4	4.4	4.4
70°	3.3	4.4	4.4	4.4	3.3
72.5°	3.3	3.3	3.3	3.3	3.3
75°	3.3	3.3	3.3	3.3	3.3
77.5°	2.2	2.2	2.2	2.2	2.2
80°	2.2	2.2	2.2	2.2	2.2
82.5°	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	1.1
87.5°	0.0	1.1	0.0	1.1	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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