

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: P886367

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMWB-550LM-3500K

Issue Date: 6/20/2024

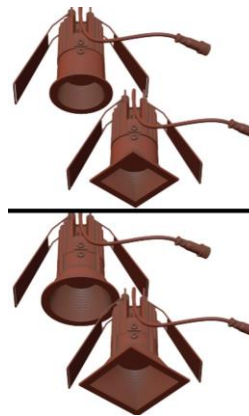
Test Information

Test Method: LM-79-2019
Report Number: P886367
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-98)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDMWB-550LM-3500K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 652.7 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.69
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

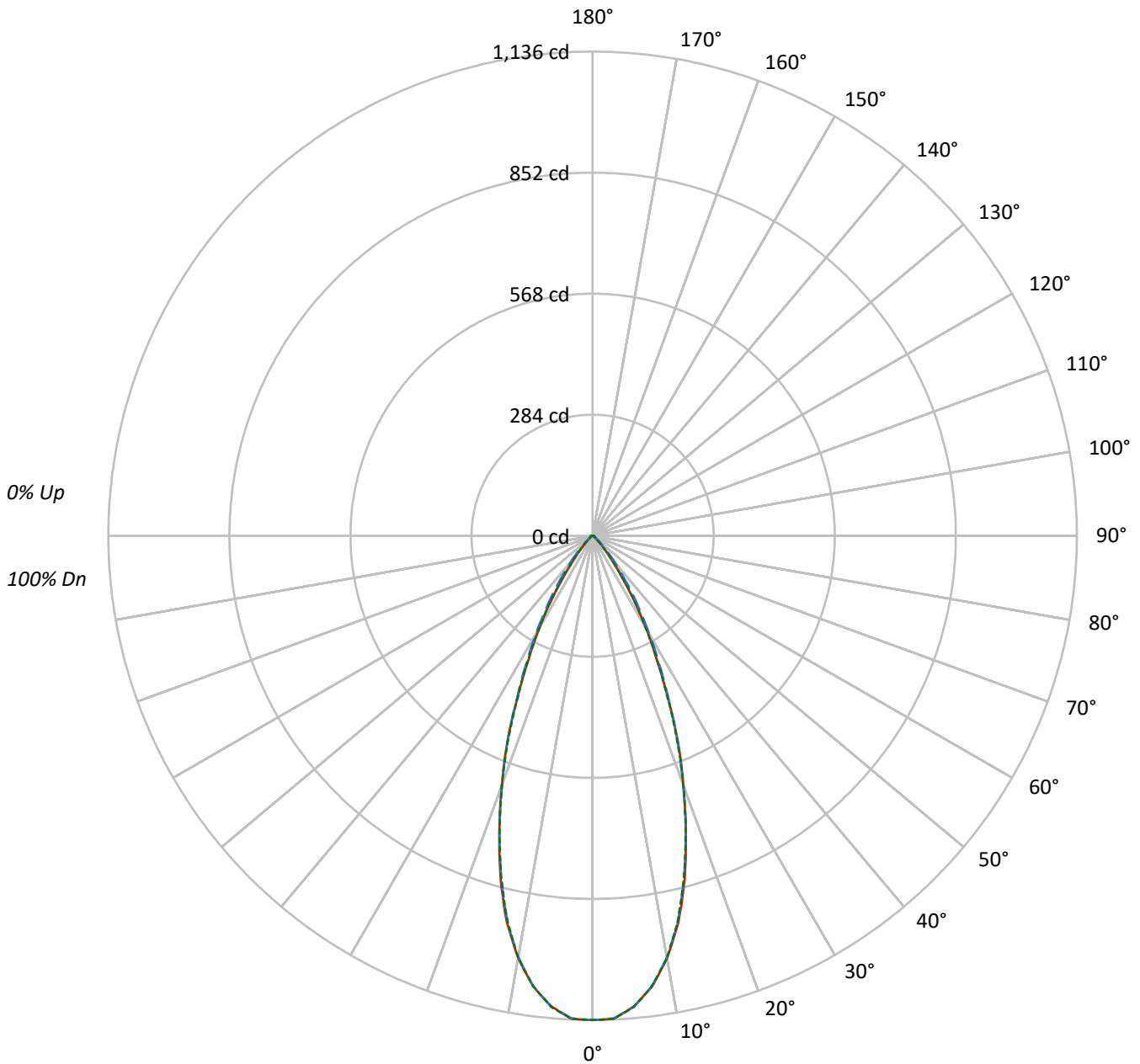
Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
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								
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94								
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88								
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83								
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78								
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74								
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	78	74	71	70								
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66								
8	83	74	69	65	82	74	69	65	73	68	65	72	68	64	71	67	64	63								
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60								
10	76	68	62	59	75	67	62	59	66	62	59	66	61	58	65	61	58	57								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	110080	110080	110080
5°	107806	107904	107904
10°	98960	98754	98862
15°	83654	83113	83012
20°	64082	63969	64186
25°	44178	44862	44060
30°	28077	29632	27719
35°	14523	18059	15031
40°	6753	9990	7019
45°	3069	4822	3220
50°	1447	2577	1613
55°	1081	1436	1081
60°	1027	1027	1027
65°	986	986	986
70°	906	1218	906
75°	1198	1198	1198
80°	1172	1172	1172
85°	1223	1223	1223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4822 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.6	15.7
10°-20°	228.0	34.9
20°-30°	192.6	29.5
30°-40°	89.7	13.7
40°-50°	24.3	3.7
50°-60°	7.0	1.1
60°-70°	4.6	0.7
70°-80°	3.1	0.5
80°-90°	0.9	0.1
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°	523.2	80.2
0°-40°	612.9	93.9
0°-60°	644.2	98.7
0°-90°	652.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	652.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1109	1111	1110	1110	1110	103
15°	834	832	829	828	828	229
25°	413	421	420	421	412	191
35°	123	138	153	140	127	82
45°	22	28	35	28	24	19
55°	6	8	8	8	6	6
65°	4	4	4	4	4	4
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°	1136.3	1136.3	1136.3	1136.3	1136.3
2.5°	1134.2	1133.1	1133.1	1133.1	1134.2
5°	1108.6	1110.7	1109.6	1109.6	1109.6
7.5°	1066.9	1065.8	1065.8	1065.8	1065.8
10°	1006.0	1005.0	1003.9	1008.2	1005.0
12.5°	929.1	929.1	925.9	927.0	923.8
15°	834.1	832.0	828.7	827.7	827.7
17.5°	727.3	727.3	727.3	723.0	725.2
20°	621.6	624.8	620.5	624.8	622.6
22.5°	523.3	520.1	520.1	518.0	516.9
25°	413.3	420.8	419.7	420.8	412.2
27.5°	322.5	328.9	336.4	332.1	325.7
30°	251.0	254.2	264.9	256.3	247.8
32.5°	181.6	193.3	204.0	195.4	185.8
35°	122.8	137.8	152.7	139.9	127.1
37.5°	80.1	91.8	108.9	94.0	82.2
40°	53.4	58.7	79.0	60.9	55.5
42.5°	36.3	41.7	54.5	41.7	38.4
45°	22.4	27.8	35.2	27.8	23.5
47.5°	11.7	17.1	25.6	17.1	13.9
50°	9.6	10.7	17.1	10.7	10.7
52.5°	7.5	8.5	10.7	8.5	8.5
55°	6.4	7.5	8.5	7.5	6.4
57.5°	5.3	6.4	6.4	6.4	5.3
60°	5.3	5.3	5.3	5.3	5.3
62.5°	5.3	5.3	5.3	5.3	5.3
65°	4.3	4.3	4.3	4.3	4.3
67.5°	4.3	4.3	4.3	4.3	4.3
70°	3.2	4.3	4.3	4.3	3.2
72.5°	3.2	3.2	3.2	3.2	3.2
75°	3.2	3.2	3.2	3.2	3.2
77.5°	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	2.1	2.1	2.1
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	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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