

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: P886360

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMW-550LM-2700K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886360
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-2700K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 607.7 lumens
Efficiency: N/A
Efficacy: 76.9 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

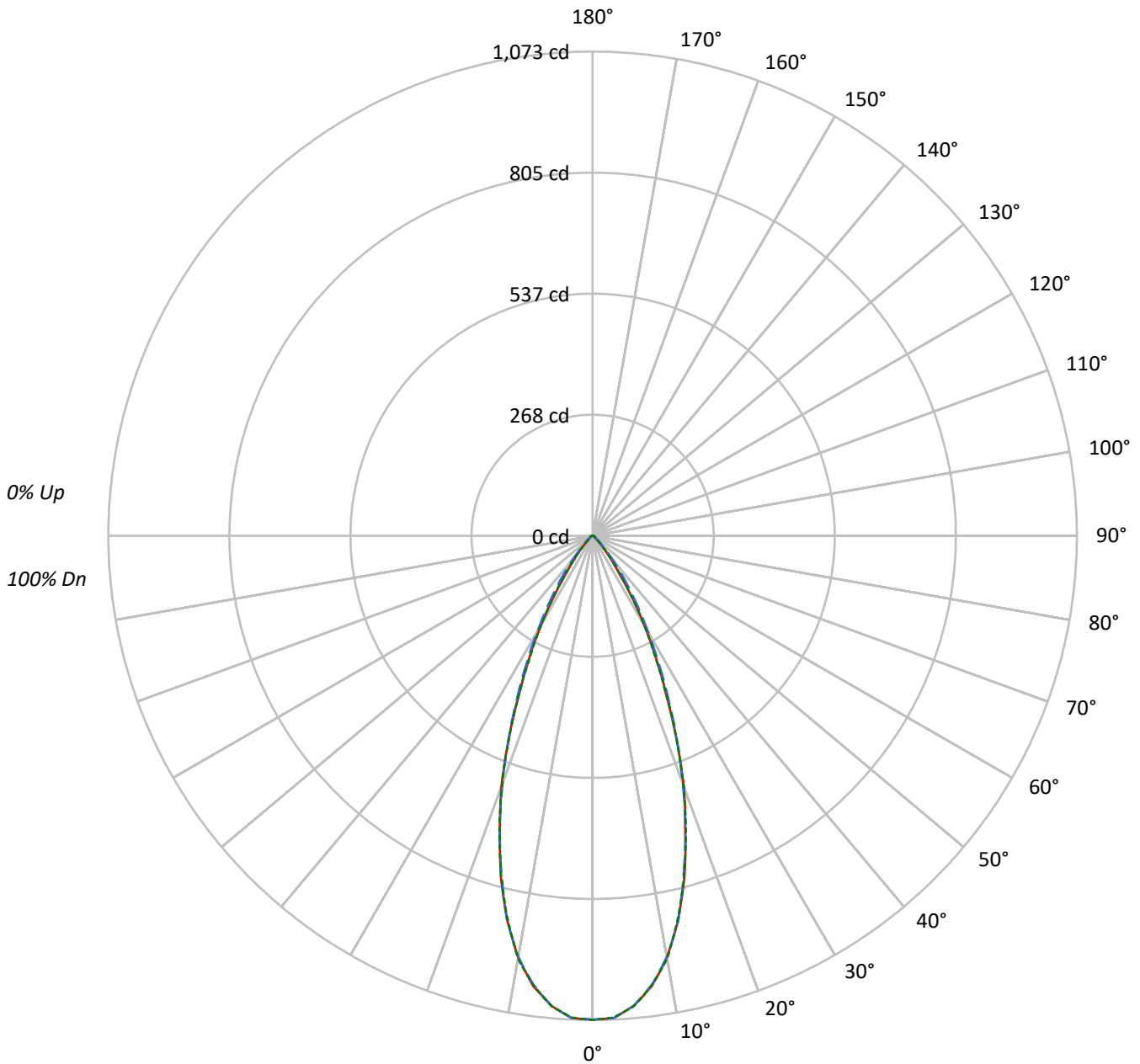
Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	103909	103909	103909
5°	101680	101680	101777
10°	93324	93225	93619
15°	78700	78098	78399
20°	60907	60186	60495
25°	40928	42211	40928
30°	25605	27283	25493
35°	12299	16320	13127
40°	6197	8599	6197
45°	2466	4247	2740
50°	1356	2261	1507
55°	1013	1351	1182
60°	969	1163	969
65°	917	1146	917
70°	850	1133	850
75°	1123	1123	1123
80°	1116	1116	1116
85°	1112	1112	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4247 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	15.9
10°-20°	214.7	35.3
20°-30°	179.2	29.5
30°-40°	80.6	13.3
40°-50°	21.2	3.5
50°-60°	6.9	1.1
60°-70°	4.6	0.8
70°-80°	2.9	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°	490.6	80.7
0°-40°	571.2	94.0
0°-60°	599.3	98.6
0°-90°	607.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	607.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1073	1073	1073	1073	1073	
5°	1046	1047	1046	1046	1047	97
15°	785	782	779	780	782	215
25°	383	390	395	391	383	178
35°	104	121	138	123	111	73
45°	18	24	31	24	20	17
55°	6	7	8	7	7	6
65°	4	5	5	5	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°	1072.6	1072.6	1072.6	1072.6	1072.6
2.5°	1069.6	1069.6	1069.6	1070.6	1068.6
5°	1045.6	1046.6	1045.6	1045.6	1046.6
7.5°	1006.7	1006.7	1003.7	1004.7	1004.7
10°	948.7	946.7	947.7	946.7	951.7
12.5°	873.7	874.7	874.7	876.7	870.7
15°	784.7	781.7	778.7	779.7	781.7
17.5°	682.8	682.8	683.8	681.8	686.8
20°	590.8	586.8	583.8	579.8	586.8
22.5°	482.8	484.8	485.8	482.8	483.8
25°	382.9	389.9	394.9	390.9	382.9
27.5°	301.9	301.9	314.9	305.9	296.9
30°	228.9	234.9	243.9	234.9	227.9
32.5°	162.9	174.9	186.9	175.9	163.9
35°	104.0	121.0	138.0	123.0	111.0
37.5°	71.0	81.0	100.0	82.0	74.0
40°	49.0	54.0	68.0	55.0	49.0
42.5°	32.0	37.0	46.0	37.0	32.0
45°	18.0	24.0	31.0	24.0	20.0
47.5°	11.0	14.0	22.0	15.0	13.0
50°	9.0	11.0	15.0	10.0	10.0
52.5°	8.0	9.0	10.0	9.0	8.0
55°	6.0	7.0	8.0	7.0	7.0
57.5°	6.0	6.0	7.0	6.0	6.0
60°	5.0	6.0	6.0	6.0	5.0
62.5°	5.0	5.0	5.0	5.0	5.0
65°	4.0	5.0	5.0	5.0	4.0
67.5°	4.0	4.0	4.0	4.0	4.0
70°	3.0	4.0	4.0	4.0	3.0
72.5°	3.0	3.0	3.0	3.0	3.0
75°	3.0	3.0	3.0	3.0	3.0
77.5°	2.0	2.0	2.0	2.0	2.0
80°	2.0	2.0	2.0	2.0	2.0
82.5°	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	1.0	0.0	1.0	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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