

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: P886300

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMW-550LM-2700K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-89)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2SDMW-550LM-2700K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 496.7 lumens
Efficiency: N/A
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 0.46 / 0.47 / 0.55
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

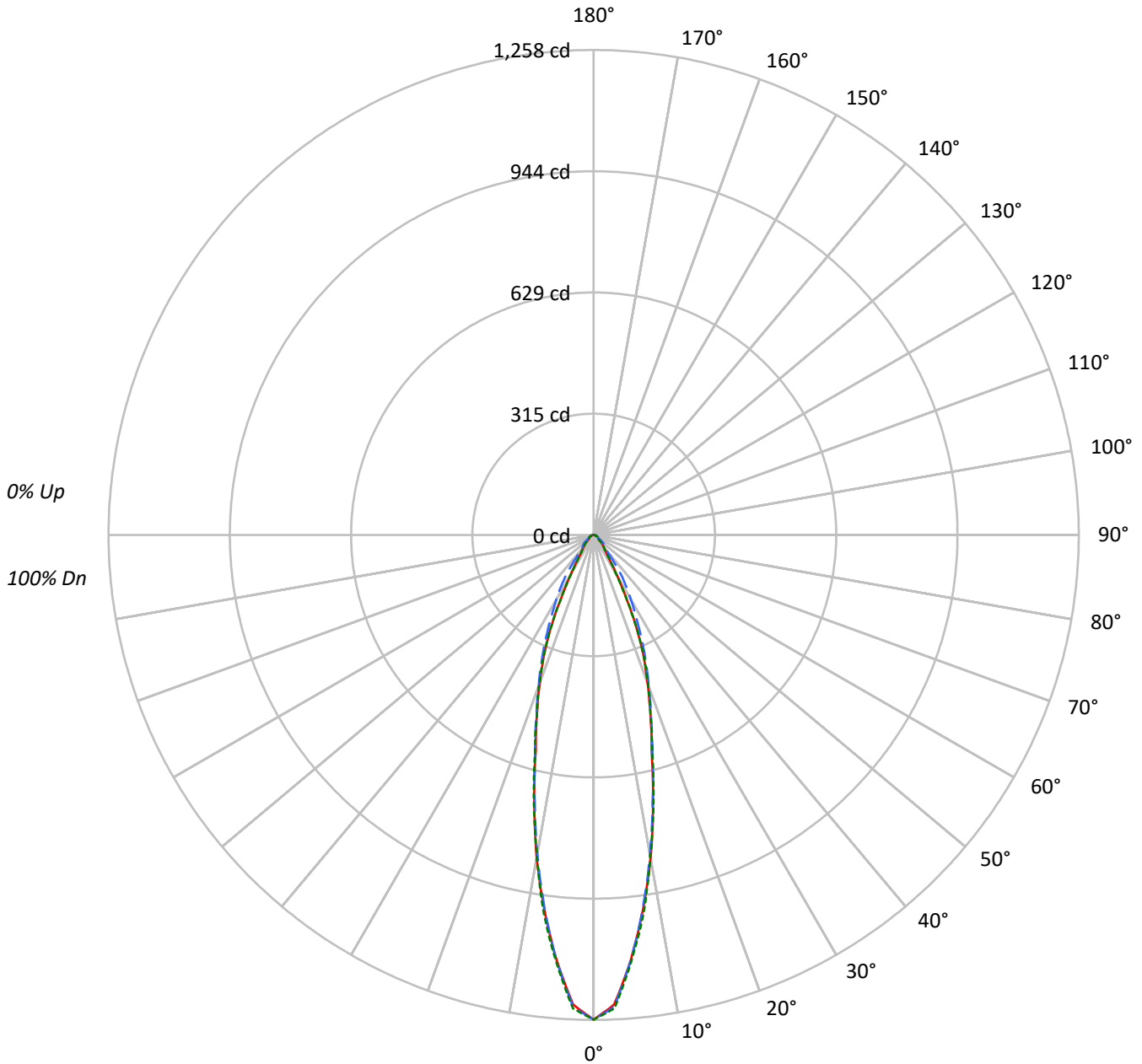
Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	113	111	108	106	111	109	106	104	104	103	101	101	99	98	97	96	95	93								
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87								
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82								
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77								
5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73								
6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69								
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	74	70	67	66								
8	83	74	69	65	82	73	68	65	72	68	64	71	67	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	77	68	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	487280	487280	487280
5°	430367	430756	432740
10°	334574	331032	333000
15°	232758	235968	235968
20°	168329	172040	169978
25°	110353	124035	110353
30°	53693	86402	51904
35°	26964	55820	26491
40°	20234	24786	20234
45°	15892	21372	15344
50°	10248	19291	10248
55°	10134	10809	10134
60°	10075	10075	10075
65°	9169	9169	9169
70°	7931	9064	7931
75°	7486	7486	7486
80°	6695	6695	6695
85°	4446	4446	4446

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21372 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.6	19.6
10°-20°	165.0	33.2
20°-30°	125.1	25.2
30°-40°	52.5	10.6
40°-50°	24.8	5.0
50°-60°	14.3	2.9
60°-70°	10.2	2.0
70°-80°	5.4	1.1
80°-90°	1.8	0.4
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°	387.7	78.1
0°-40°	440.2	88.6
0°-60°	479.3	96.5
0°-90°	496.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	496.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1258	1258	1258	1258	1258	
5°	1106	1103	1107	1106	1112	98
15°	580	582	588	587	588	164
25°	258	279	290	279	258	116
35°	57	72	118	71	56	40
45°	29	32	39	32	28	21
55°	15	15	16	15	15	13
65°	10	10	10	10	10	10
75°	5	5	5	5	5	5
85°	1	2	1	2	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1257.5	1257.5	1257.5	1257.5	1257.5
2.5°	1219.5	1222.5	1224.5	1229.5	1229.5
5°	1106.4	1103.4	1107.4	1106.4	1112.5
7.5°	980.4	981.4	976.4	982.4	991.4
10°	850.3	842.3	841.3	845.3	846.3
12.5°	711.3	707.3	706.3	706.3	716.3
15°	580.2	582.2	588.2	587.2	588.2
17.5°	489.2	495.2	495.2	492.2	489.2
20°	408.2	413.2	417.2	413.2	412.2
22.5°	335.1	347.1	352.1	349.1	337.1
25°	258.1	279.1	290.1	279.1	258.1
27.5°	176.1	211.1	235.1	210.1	176.1
30°	120.0	146.1	193.1	144.1	116.0
32.5°	79.0	99.0	155.1	99.0	80.0
35°	57.0	72.0	118.0	71.0	56.0
37.5°	47.0	56.0	74.0	55.0	47.0
40°	40.0	43.0	49.0	44.0	40.0
42.5°	35.0	37.0	43.0	38.0	35.0
45°	29.0	32.0	39.0	32.0	28.0
47.5°	18.0	25.0	35.0	25.0	18.0
50°	17.0	17.0	32.0	17.0	17.0
52.5°	16.0	16.0	24.0	16.0	16.0
55°	15.0	15.0	16.0	15.0	15.0
57.5°	14.0	14.0	14.0	14.0	14.0
60°	13.0	13.0	13.0	13.0	13.0
62.5°	11.0	12.0	12.0	12.0	11.0
65°	10.0	10.0	10.0	10.0	10.0
67.5°	9.0	9.0	9.0	9.0	9.0
70°	7.0	8.0	8.0	8.0	7.0
72.5°	6.0	6.0	6.0	7.0	6.0
75°	5.0	5.0	5.0	5.0	5.0
77.5°	4.0	4.0	4.0	4.0	4.0
80°	3.0	3.0	3.0	3.0	3.0
82.5°	2.0	3.0	2.0	3.0	2.0
85°	1.0	2.0	1.0	2.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0
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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