

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: P886311

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2SDSL-550LM-3000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886311
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-90)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2SDSL-550LM-3000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 493.1 lumens
Efficiency: N/A
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.54
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

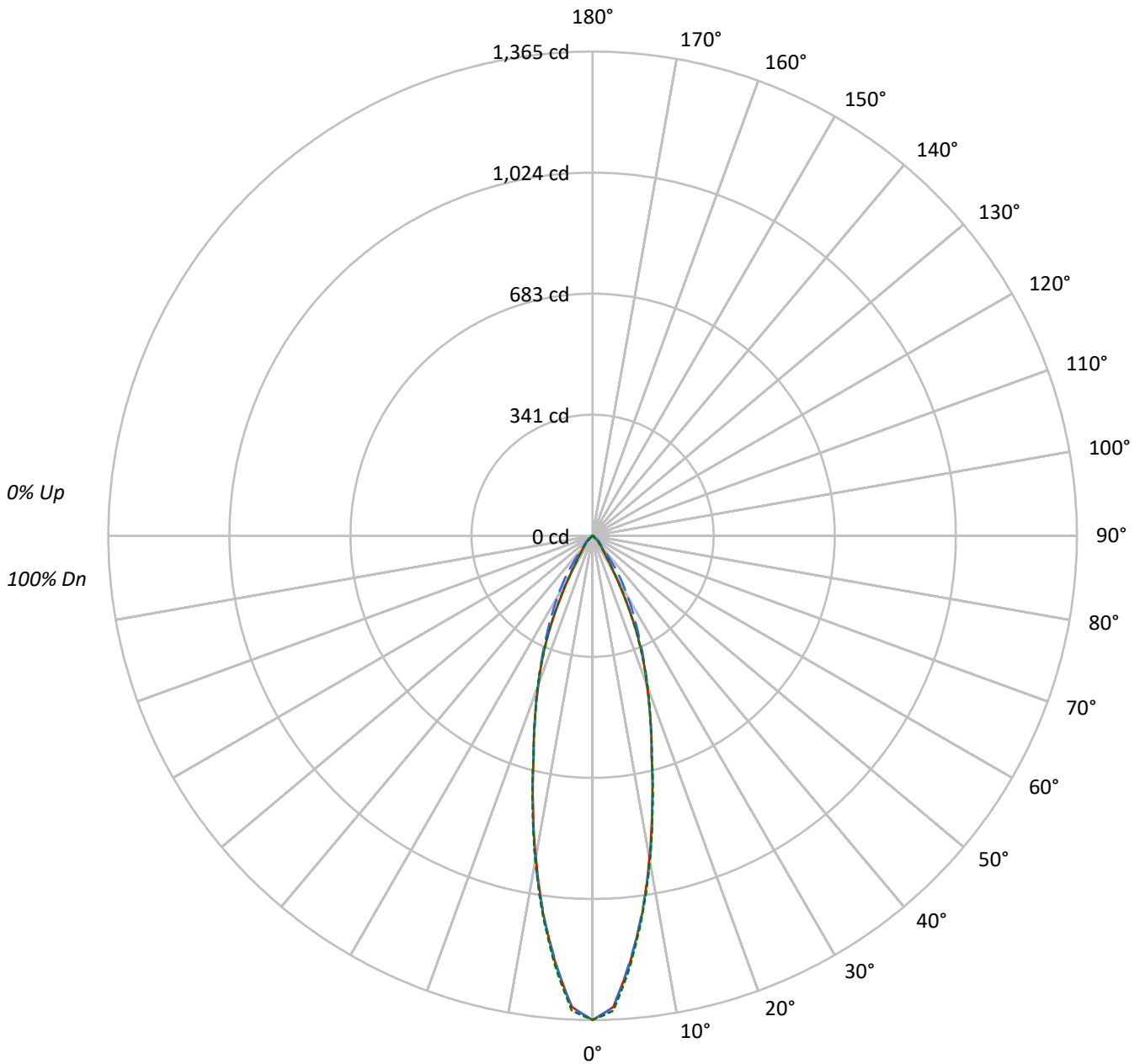
Input Watts (W): 7.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95								
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90								
3	105	100	95	92	103	98	94	91	96	92	90	93	91	88	91	89	87	86								
4	101	94	90	86	99	93	89	85	91	87	85	89	86	84	87	85	83	81								
5	97	90	85	81	95	89	84	81	87	83	80	85	82	79	84	81	79	77								
6	93	85	80	77	92	85	80	76	83	79	76	82	78	75	81	77	75	74								
7	89	82	76	73	88	81	76	73	80	75	72	79	75	72	78	74	72	70								
8	86	78	73	69	85	77	73	69	76	72	69	76	72	69	75	71	68	67								
9	83	75	70	66	82	74	70	66	73	69	66	73	69	66	72	68	66	65								
10	80	72	67	64	79	71	67	64	71	66	63	70	66	63	69	66	63	62								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	528898	528898	528898
5°	469848	468643	473038
10°	362668	365501	365894
15°	257390	258634	258634
20°	184081	185772	187050
25°	119716	130320	118818
30°	55483	87386	55483
35°	25923	52319	26396
40°	17249	20386	16743
45°	9042	15837	9645
50°	3135	11816	3135
55°	2094	2770	2094
60°	1627	1627	1627
65°	917	917	917
70°	1133	1133	1133
75°	1497	0	1497
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15837 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.5	21.6
10°-20°	180.6	36.6
20°-30°	133.3	27.0
30°-40°	50.5	10.2
40°-50°	16.7	3.4
50°-60°	3.8	0.8
60°-70°	1.2	0.2
70°-80°	0.5	0.1
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°	420.4	85.3
0°-40°	470.9	95.5
0°-60°	491.4	99.7
0°-90°	493.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	493.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1208	1205	1205	1210	1216	106
15°	642	642	645	644	645	180
25°	280	296	305	294	278	125
35°	55	68	111	69	56	39
45°	16	22	29	22	18	13
55°	3	3	4	3	3	3
65°	1	1	1	1	1	1
75°	1	1	0	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.9	1364.9	1364.9	1364.9	1364.9
2.5°	1329.8	1329.8	1330.8	1333.9	1340.1
5°	1207.9	1204.8	1204.8	1209.9	1216.1
7.5°	1071.5	1070.4	1069.4	1069.4	1076.6
10°	921.7	926.8	928.9	919.6	929.9
12.5°	776.0	767.7	779.1	772.9	781.1
15°	641.6	641.6	644.7	643.7	644.7
17.5°	541.4	542.5	537.3	539.4	538.3
20°	446.4	449.5	450.5	451.5	453.6
22.5°	366.8	370.9	374.0	372.0	363.7
25°	280.0	296.5	304.8	294.5	277.9
27.5°	188.1	219.0	248.0	222.1	194.3
30°	124.0	150.9	195.3	149.8	124.0
32.5°	80.6	99.2	152.9	98.2	79.6
35°	54.8	68.2	110.6	69.2	55.8
37.5°	42.4	48.6	66.1	48.6	42.4
40°	34.1	35.1	40.3	36.2	33.1
42.5°	26.9	27.9	33.1	27.9	25.8
45°	16.5	21.7	28.9	21.7	17.6
47.5°	7.2	12.4	23.8	12.4	7.2
50°	5.2	5.2	19.6	5.2	5.2
52.5°	4.1	4.1	12.4	4.1	4.1
55°	3.1	3.1	4.1	3.1	3.1
57.5°	3.1	2.1	2.1	2.1	3.1
60°	2.1	2.1	2.1	2.1	2.1
62.5°	2.1	1.0	1.0	1.0	2.1
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	0.0	1.0	1.0
75°	1.0	1.0	0.0	1.0	1.0
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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