

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: P886372

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDSL-550LM-3500K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886372
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-96)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDSL-550LM-3500K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

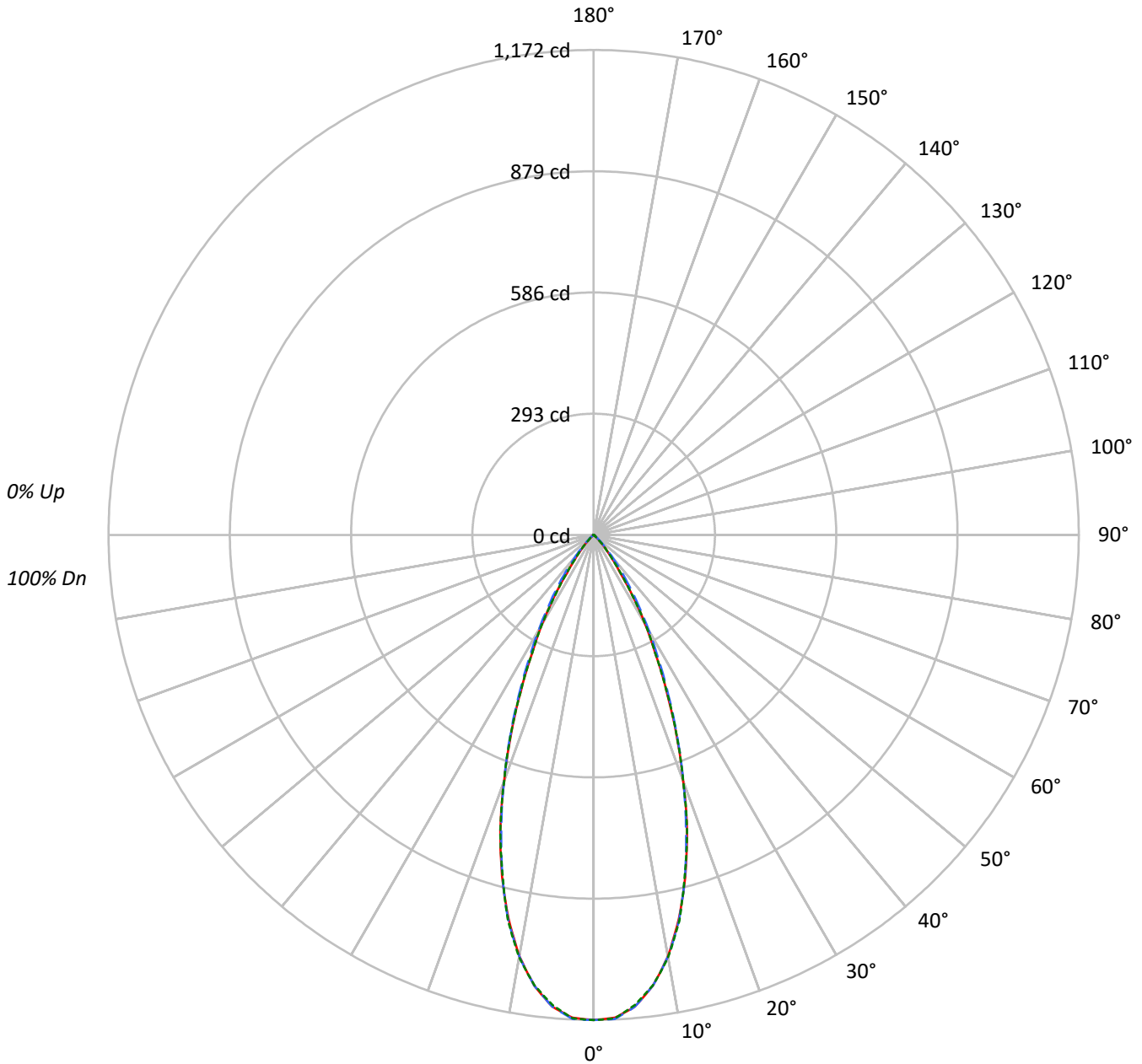
Lumens per Lamp: N/A
Luminaire Lumens: 642.4 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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	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	100	100	100	100		
	1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95	95	95	95	95	95		
	2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89	89	89	89	89	89		
	3	105	99	94	91	103	97	93	90	95	91	89	93	90	87	90	88	86	85	85	85	85	85	85		
	4	100	93	88	85	98	92	88	84	90	86	83	88	85	82	86	84	81	80	80	80	80	80	80		
	5	96	88	83	79	94	87	83	79	86	82	78	84	81	78	83	80	77	76	76	76	76	76	76		
	6	92	84	79	75	90	83	78	74	82	77	74	80	76	74	79	76	73	72	72	72	72	72	72		
	7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68	68	68	68	68	68		
	8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	72	69	66	65	65	65	65	65	65		
	9	81	72	67	64	80	72	67	64	71	66	63	70	66	63	69	66	63	62	62	62	62	62	62		
	10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59	59	59	59	59	59		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	113577	113577	113577
5°	111307	111307	110889
10°	101655	101764	101970
15°	85750	85530	85319
20°	65227	65330	65227
25°	44434	45696	44669
30°	27854	29643	28089
35°	13269	17444	13778
40°	6348	8916	6222
45°	2192	3809	2192
50°	799	1447	799
55°	355	355	355
60°	213	213	213
65°	252	252	252
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 3809 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.7	16.4
10°-20°	234.0	36.4
20°-30°	194.4	30.3
30°-40°	86.0	13.4
40°-50°	19.2	3.0
50°-60°	2.3	0.4
60°-70°	0.8	0.1
70°-80°	0.0	0.0
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°	534.0	83.1
0°-40°	620.0	96.5
0°-60°	641.5	99.9
0°-90°	642.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	642.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1145	1145	1145	1144	1140	106
15°	855	850	853	850	851	234
25°	416	424	428	425	418	192
35°	112	130	148	130	116	78
45°	16	21	28	20	16	16
55°	2	2	2	2	2	2
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1172.4	1172.4	1172.4	1172.4	1172.4
2.5°	1168.1	1169.2	1171.3	1168.1	1169.2
5°	1144.6	1144.6	1144.6	1143.5	1140.3
7.5°	1098.6	1097.6	1098.6	1096.5	1097.6
10°	1033.4	1036.6	1034.5	1034.5	1036.6
12.5°	950.1	959.7	953.3	952.2	955.4
15°	855.0	849.6	852.8	849.6	850.7
17.5°	750.2	739.5	741.7	746.0	750.2
20°	632.7	634.8	633.7	634.8	632.7
22.5°	522.6	529.0	526.9	526.9	524.7
25°	415.7	424.3	427.5	425.3	417.9
27.5°	322.7	328.1	339.8	329.2	321.7
30°	249.0	254.4	265.0	253.3	251.1
32.5°	178.5	190.2	200.9	189.2	175.3
35°	112.2	130.4	147.5	130.4	116.5
37.5°	73.7	83.4	105.8	83.4	75.9
40°	50.2	55.6	70.5	54.5	49.2
42.5°	31.0	36.3	44.9	35.3	31.0
45°	16.0	21.4	27.8	20.3	16.0
47.5°	8.5	9.6	18.2	10.7	7.5
50°	5.3	5.3	9.6	5.3	5.3
52.5°	3.2	3.2	4.3	3.2	3.2
55°	2.1	2.1	2.1	2.1	2.1
57.5°	1.1	1.1	2.1	1.1	1.1
60°	1.1	1.1	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	1.1	1.1	1.1
67.5°	1.1	1.1	0.0	0.0	1.1
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
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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