

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: P886354

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMB-550LM-5000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-97)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2SDMB-550LM-5000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

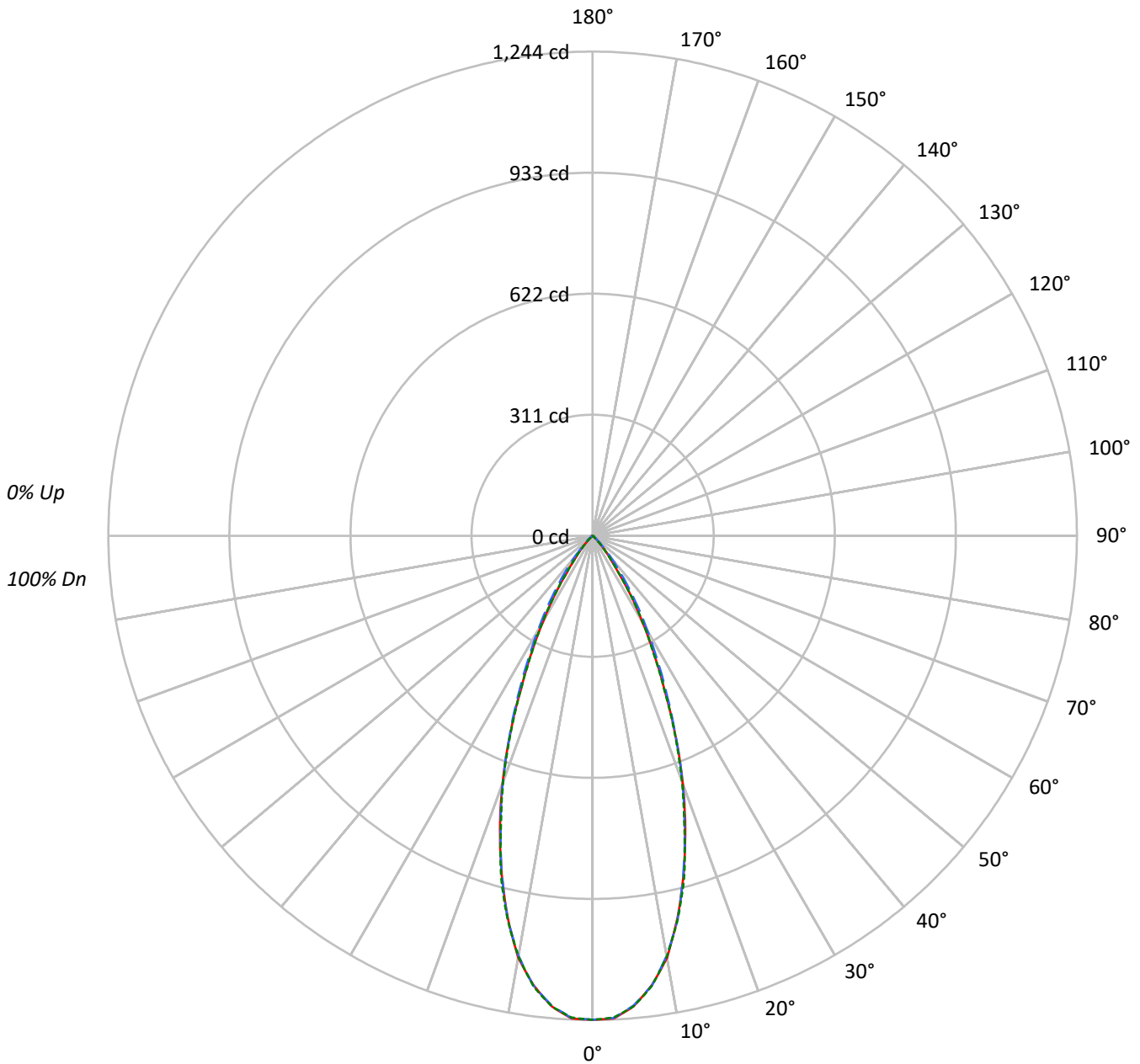
Lumens per Lamp: N/A
Luminaire Lumens: 674.9 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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	110	108	106	105	104	102	102	101	99	98	97	97	95	95	95	95	95	95		
	2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	90	90	90	90	90	90		
	3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	90	88	86	85	85	85	85	85	85		
	4	100	94	89	85	98	92	88	84	90	87	83	88	85	83	87	84	82	80	80	80	80	80	80		
	5	96	89	83	80	94	88	83	79	86	82	79	84	81	78	83	80	77	76	76	76	76	76	76		
	6	92	84	79	75	91	83	78	75	82	78	74	81	77	74	79	76	73	72	72	72	72	72	72		
	7	88	80	75	71	87	79	74	71	78	74	70	77	73	70	76	72	70	68	68	68	68	68	68		
	8	85	76	71	67	83	76	71	67	75	70	67	74	70	67	73	69	66	65	65	65	65	65	65		
	9	81	73	67	64	80	72	67	64	71	67	64	71	66	63	70	66	63	62	62	62	62	62	62		
	10	78	69	64	61	77	69	64	61	68	64	61	68	63	61	67	63	60	59	59	59	59	59	59		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	120474	120474	120474
5°	117998	117774	117998
10°	108276	107813	107931
15°	90454	90344	91156
20°	69856	69618	69258
25°	46711	48325	46583
30°	28469	31333	28995
35°	13470	18142	13884
40°	6323	9409	6032
45°	1904	3822	1904
50°	527	1402	527
55°	203	203	203
60°	0	0	0
65°	0	0	0
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: 3822 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	16.6
10°-20°	247.9	36.7
20°-30°	205.3	30.4
30°-40°	89.4	13.3
40°-50°	18.7	2.8
50°-60°	1.5	0.2
60°-70°	0.0	0.0
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°	565.3	83.8
0°-40°	654.7	97.0
0°-60°	674.9	100.0
0°-90°	674.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	674.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1244	1244	1244	1244	1244	
5°	1213	1215	1211	1212	1213	112
15°	902	900	901	905	909	248
25°	437	449	452	443	436	203
35°	114	135	153	134	117	80
45°	14	21	28	21	14	14
55°	1	1	1	1	1	1
65°	0	0	0	0	0	0
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°	1243.6	1243.6	1243.6	1243.6	1243.6
2.5°	1241.3	1240.1	1240.1	1240.1	1239.0
5°	1213.4	1214.6	1211.1	1212.2	1213.4
7.5°	1164.6	1164.6	1165.7	1168.1	1166.9
10°	1100.7	1096.0	1096.0	1098.3	1097.2
12.5°	1006.5	1008.8	1008.8	1013.5	1010.0
15°	901.9	899.6	900.8	905.4	908.9
17.5°	791.5	790.3	785.7	786.8	783.4
20°	677.6	675.3	675.3	670.6	671.8
22.5°	556.7	560.2	557.9	559.0	552.1
25°	437.0	448.6	452.1	442.8	435.8
27.5°	340.5	346.4	359.1	349.8	337.1
30°	254.5	266.2	280.1	268.5	259.2
32.5°	184.8	199.9	212.7	202.2	186.0
35°	113.9	134.8	153.4	133.7	117.4
37.5°	74.4	86.0	109.3	84.8	74.4
40°	50.0	54.6	74.4	55.8	47.7
42.5°	30.2	34.9	44.2	36.0	29.1
45°	13.9	20.9	27.9	20.9	13.9
47.5°	5.8	9.3	18.6	8.1	5.8
50°	3.5	4.6	9.3	4.6	3.5
52.5°	2.3	2.3	3.5	2.3	2.3
55°	1.2	1.2	1.2	1.2	1.2
57.5°	0.0	0.0	1.2	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
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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