

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: P886351

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2SDMB-550LM-3000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886351
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-3000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

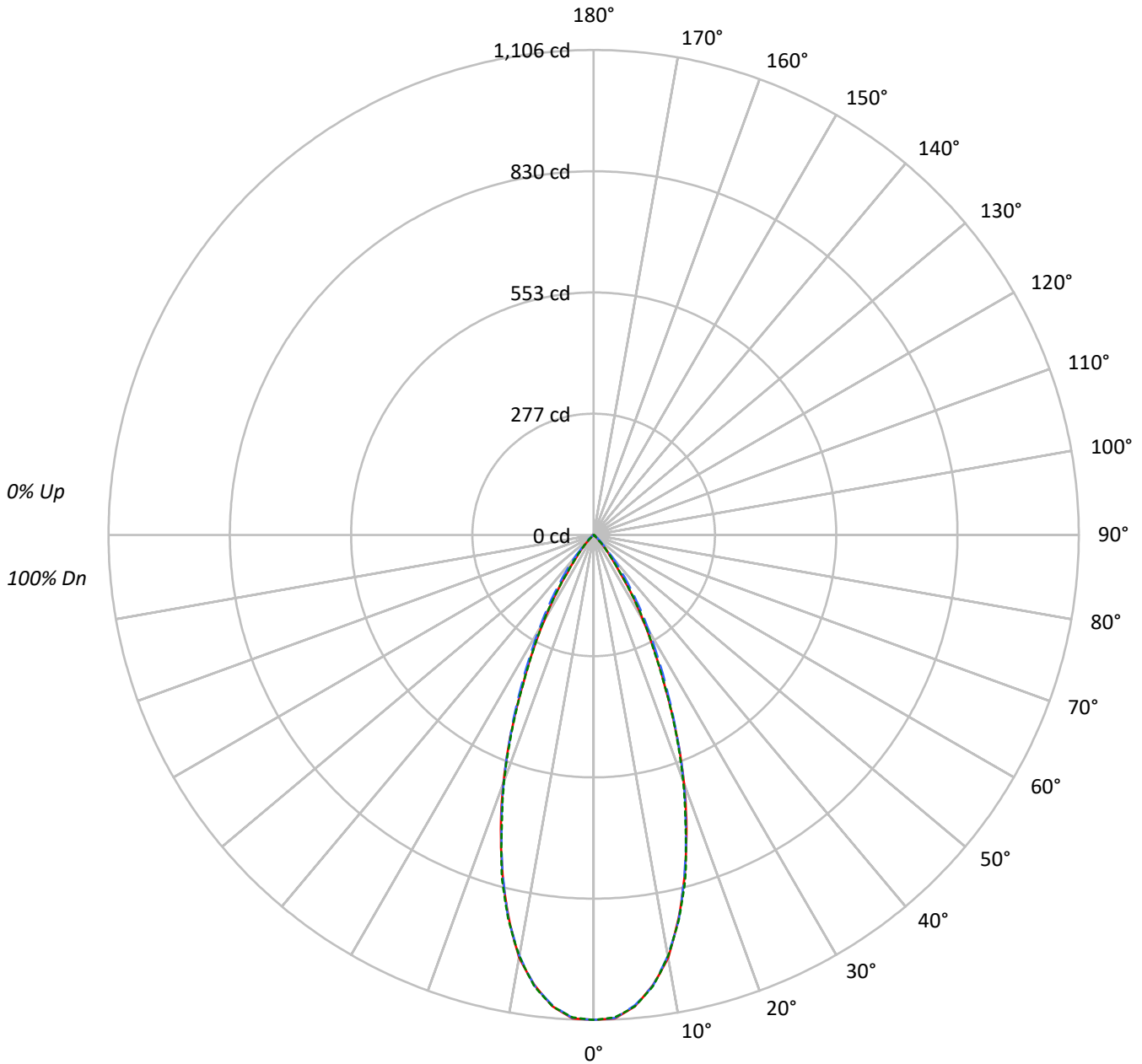
Lumens per Lamp: N/A
Luminaire Lumens: 600.2 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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°	107135	107135	107135
5°	104928	104724	104928
10°	96275	95871	95970
15°	80435	80335	81057
20°	62113	61907	61588
25°	41538	42970	41431
30°	25314	27865	25784
35°	11980	16131	12347
40°	5615	8359	5362
45°	1699	3398	1699
50°	467	1251	467
55°	169	169	169
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: 3398 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.7	16.6
10°-20°	220.4	36.7
20°-30°	182.6	30.4
30°-40°	79.5	13.2
40°-50°	16.6	2.8
50°-60°	1.3	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°	502.7	83.8
0°-40°	582.2	97.0
0°-60°	600.2	100.0
0°-90°	600.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	600.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1106	1106	1106	1106	1106	
5°	1079	1080	1077	1078	1079	100
15°	802	800	801	805	808	221
25°	389	399	402	394	388	180
35°	101	120	136	119	104	71
45°	12	19	25	19	12	13
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°	1105.9	1105.9	1105.9	1105.9	1105.9
2.5°	1103.8	1102.8	1102.8	1102.8	1101.7
5°	1079.0	1080.0	1076.9	1077.9	1079.0
7.5°	1035.6	1035.6	1036.6	1038.7	1037.6
10°	978.7	974.6	974.6	976.7	975.6
12.5°	895.0	897.1	897.1	901.2	898.1
15°	802.0	799.9	801.0	805.1	808.2
17.5°	703.8	702.8	698.7	699.7	696.6
20°	602.5	600.5	600.5	596.3	597.4
22.5°	495.1	498.2	496.1	497.1	490.9
25°	388.6	398.9	402.0	393.8	387.6
27.5°	302.8	308.0	319.4	311.1	299.7
30°	226.3	236.7	249.1	238.7	230.5
32.5°	164.3	177.8	189.1	179.8	165.4
35°	101.3	119.9	136.4	118.9	104.4
37.5°	66.1	76.5	97.1	75.4	66.1
40°	44.4	48.6	66.1	49.6	42.4
42.5°	26.9	31.0	39.3	32.0	25.8
45°	12.4	18.6	24.8	18.6	12.4
47.5°	5.2	8.3	16.5	7.2	5.2
50°	3.1	4.1	8.3	4.1	3.1
52.5°	2.1	2.1	3.1	2.1	2.1
55°	1.0	1.0	1.0	1.0	1.0
57.5°	0.0	0.0	1.0	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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