

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: P885973

Luminaire Tested: ML104LSFL9FS1E-TIR1D55WFL-TL1SDMWB-400LM-2700K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885973
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-151)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D55WFL-TL1SDMWB-400LM-2700K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

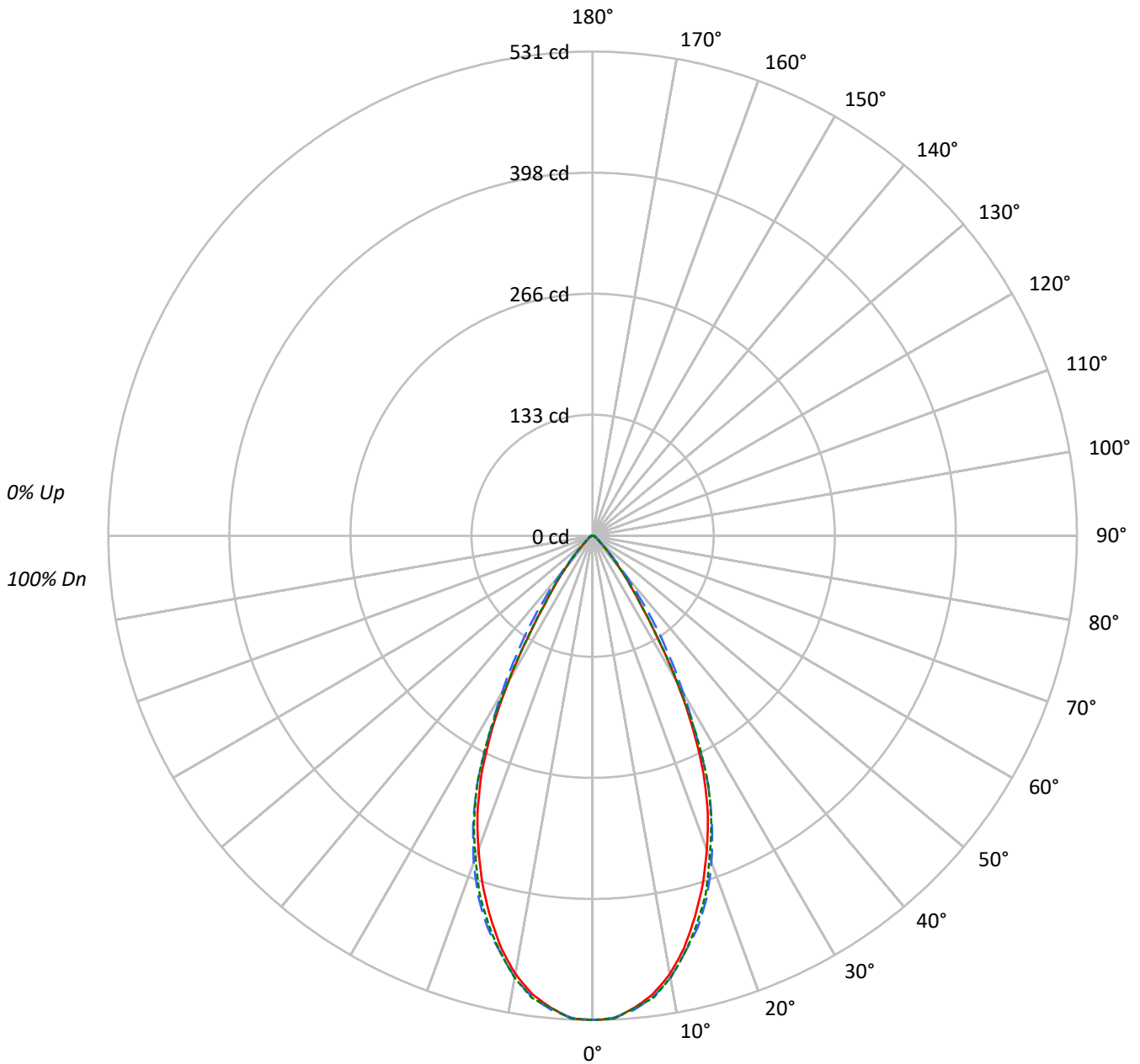
Lumens per Lamp: N/A
Luminaire Lumens: 402.7 lumens
Efficiency: N/A
Efficacy: 67.1 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.83 / 0.81
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 6
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					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	101	98	95	98	95	93	95	93	91	92	90	89	87				
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81				
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76				
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71				
6	88	80	74	70	87	79	73	69	77	73	69	76	72	69	75	71	68	67				
7	84	75	69	65	83	75	69	65	73	68	65	72	68	64	71	67	64	63				
8	80	71	65	61	79	71	65	61	70	65	61	69	64	61	68	63	60	59				
9	77	67	62	58	76	67	61	58	66	61	58	65	61	57	64	60	57	56				
10	73	64	58	55	72	64	58	55	63	58	54	62	57	54	61	57	54	53				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	823059	823059	823059
5°	809087	812199	809087
10°	768077	774372	774372
15°	694833	714089	707670
20°	603714	628457	618560
25°	492553	511366	511366
30°	329324	356171	332904
35°	172192	225174	174084
40°	91053	111287	93077
45°	46033	52609	46033
50°	21703	28937	24114
55°	16214	18917	16214
60°	15500	15500	15500
65°	14671	14671	14671
70°	13596	13596	13596
75°	11978	11978	11978
80°	8926	8926	8926
85°	17784	17784	17784

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 52609 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.8	12.1
10°-20°	122.5	30.4
20°-30°	132.2	32.8
30°-40°	67.2	16.7
40°-50°	18.9	4.7
50°-60°	6.2	1.5
60°-70°	3.8	1.0
70°-80°	2.4	0.6
80°-90°	0.7	0.2
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°	303.5	75.4
0°-40°	370.7	92.1
0°-60°	395.7	98.3
0°-90°	402.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	402.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	520	522	522	522	520	49
15°	433	438	445	444	441	120
25°	288	292	299	299	299	128
35°	91	100	119	102	92	61
45°	21	22	24	22	21	17
55°	6	6	7	7	6	6
65°	4	4	4	4	4	4
75°	2	2	2	2	2	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	531	531	531	531	531
2.5°	530	529	529	530	530
5°	520	522	522	522	520
7.5°	507	508	510	510	511
10°	488	490	492	492	492
12.5°	463	465	468	469	468
15°	433	438	445	444	441
17.5°	401	407	416	413	412
20°	366	373	381	378	375
22.5°	330	336	342	342	340
25°	288	292	299	299	299
27.5°	238	243	245	249	246
30°	184	191	199	197	186
32.5°	131	142	156	146	133
35°	91	100	119	102	92
37.5°	65	68	83	68	66
40°	45	47	55	47	46
42.5°	31	33	36	33	30
45°	21	22	24	22	21
47.5°	13	14	16	15	14
50°	9	10	12	11	10
52.5°	7	8	9	8	8
55°	6	6	7	7	6
57.5°	5	5	6	5	5
60°	5	5	5	5	5
62.5°	4	4	4	4	4
65°	4	4	4	4	4
67.5°	3	4	3	4	3
70°	3	3	3	3	3
72.5°	3	3	3	3	3
75°	2	2	2	2	2
77.5°	2	2	2	2	2
80°	1	1	1	2	1
82.5°	1	1	1	1	1
85°	1	1	1	1	1
87.5°	0	0	0	0	0
90°	0	0	0	0	0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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