

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: P886113

Luminaire Tested: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-4000K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-89)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-4000K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 459.7 lumens
Efficiency: N/A
Efficacy: 57.5 lumens/watt
Spacing Criteria (0/90/45): 0.46 / 0.47 / 0.55
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

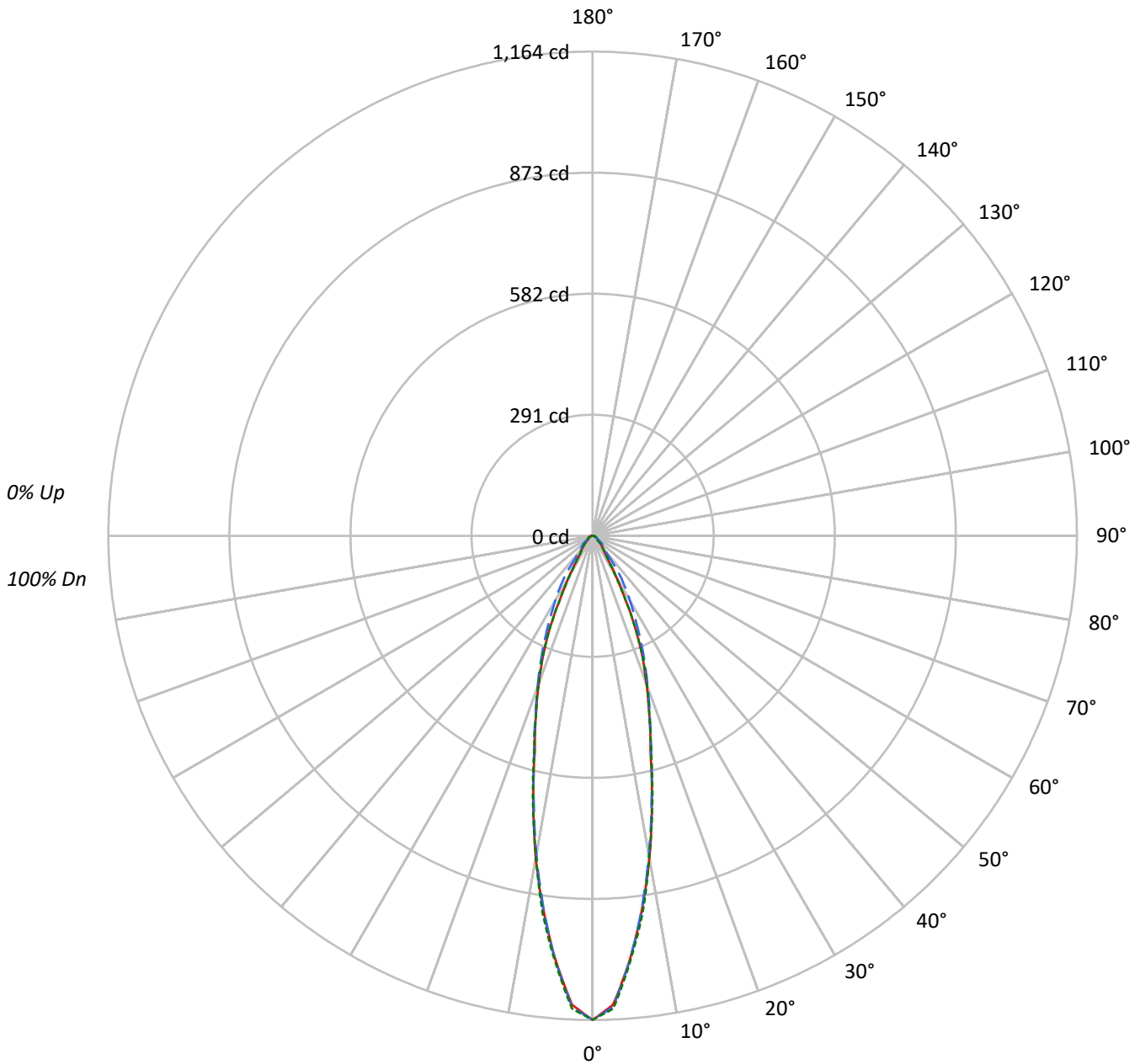
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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								
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	102	98	95	98	95	93	95	93	91	93	91	89	87								
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82								
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77								
5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73								
6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69								
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	74	70	67	66								
8	83	74	69	65	82	73	68	65	72	68	64	71	67	64	71	67	64	63								
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60								
10	77	68	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	450933	450933	450933
5°	398276	398626	400454
10°	309627	306361	308171
15°	215428	218396	218396
20°	155751	159215	157277
25°	102144	114799	102144
30°	49711	79959	48056
35°	24977	51657	24504
40°	18716	22965	18716
45°	14687	19783	14193
50°	9465	17844	9465
55°	9391	9999	9391
60°	9300	9300	9300
65°	8527	8527	8527
70°	7364	8384	7364
75°	6887	6887	6887
80°	6248	6248	6248
85°	4001	4001	4001

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 19783 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.3	19.6
10°-20°	152.7	33.2
20°-30°	115.8	25.2
30°-40°	48.6	10.6
40°-50°	22.9	5.0
50°-60°	13.3	2.9
60°-70°	9.4	2.0
70°-80°	5.0	1.1
80°-90°	1.6	0.4
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°	358.7	78.0
0°-40°	407.4	88.6
0°-60°	443.6	96.5
0°-90°	459.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	459.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1164	1164	1164	1164	1164	
5°	1024	1021	1025	1024	1030	90
15°	537	539	544	543	544	152
25°	239	258	268	258	239	107
35°	53	67	109	66	52	37
45°	27	30	36	30	26	20
55°	14	14	15	14	14	12
65°	9	9	9	9	9	9
75°	5	5	5	5	5	5
85°	1	2	1	2	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1163.7	1163.7	1163.7	1163.7	1163.7
2.5°	1128.5	1131.3	1133.2	1137.8	1137.8
5°	1023.9	1021.1	1024.8	1023.9	1029.5
7.5°	907.3	908.2	903.6	909.1	917.5
10°	786.9	779.5	778.6	782.3	783.2
12.5°	658.2	654.5	653.6	653.6	662.9
15°	537.0	538.8	544.4	543.4	544.4
17.5°	452.7	458.3	458.3	455.5	452.7
20°	377.7	382.3	386.1	382.3	381.4
22.5°	310.1	321.2	325.9	323.1	312.0
25°	238.9	258.3	268.5	258.3	238.9
27.5°	162.9	195.3	217.6	194.4	162.9
30°	111.1	135.2	178.7	133.3	107.4
32.5°	73.1	91.7	143.5	91.7	74.1
35°	52.8	66.7	109.2	65.7	51.8
37.5°	43.5	51.8	68.5	50.9	43.5
40°	37.0	39.8	45.4	40.7	37.0
42.5°	32.4	34.3	39.8	35.2	32.4
45°	26.8	29.6	36.1	29.6	25.9
47.5°	16.7	23.1	32.4	23.1	16.7
50°	15.7	15.7	29.6	15.7	15.7
52.5°	14.8	14.8	22.2	14.8	14.8
55°	13.9	13.9	14.8	13.9	13.9
57.5°	13.0	13.0	13.0	13.0	13.0
60°	12.0	12.0	12.0	12.0	12.0
62.5°	10.2	11.1	11.1	11.1	10.2
65°	9.3	9.3	9.3	9.3	9.3
67.5°	8.3	8.3	8.3	8.3	8.3
70°	6.5	7.4	7.4	7.4	6.5
72.5°	5.6	5.6	5.6	6.5	5.6
75°	4.6	4.6	4.6	4.6	4.6
77.5°	3.7	3.7	3.7	3.7	3.7
80°	2.8	2.8	2.8	2.8	2.8
82.5°	1.9	2.8	1.9	2.8	1.9
85°	0.9	1.9	0.9	1.9	0.9
87.5°	0.9	0.9	0.9	0.9	0.9
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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