

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: P886110

Luminaire Tested: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-2700K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886110
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-2700K
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 416.3 lumens
Efficiency: N/A
Efficacy: 52.0 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

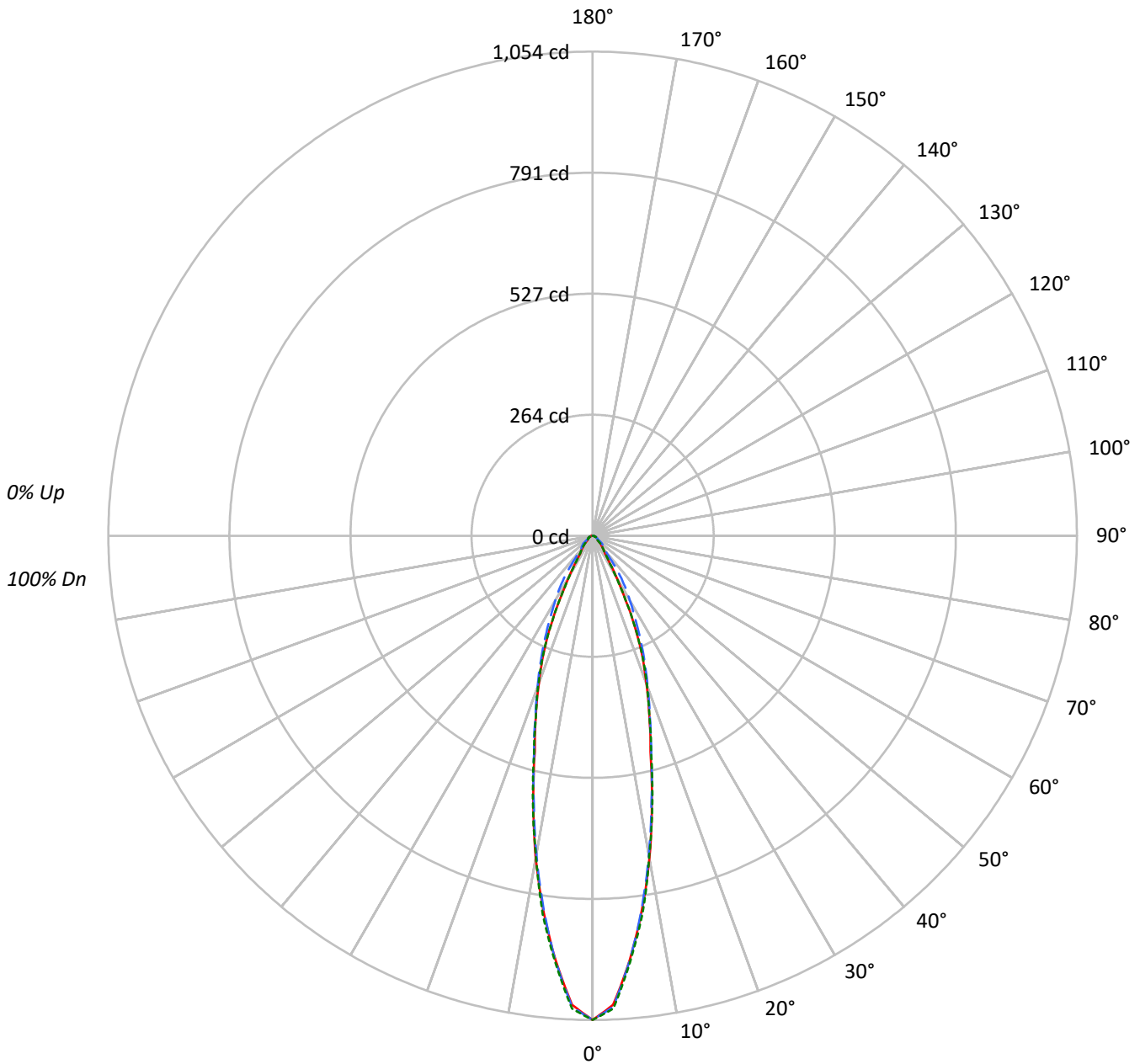
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P886110

CATALOG NUMBER: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P886110

CATALOG NUMBER: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-2700K

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	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	113	111	108	106	111	109	106	104	104	103	101	101	99	98	97	96	95	93	93	93	93	93	93		
	2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87	87	87	87	87	87		
	3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82	82	82	82	82	82		
	4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77	77	77	77	77	77		
	5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73	73	73	73	73	73		
	6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69	69	69	69	69	69		
	7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	74	70	67	66	66	66	66	66	66		
	8	83	74	69	65	82	73	68	65	72	68	64	71	67	64	71	67	64	63	63	63	63	63	63		
	9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60	60	60	60	60	60		
	10	77	68	62	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57	57	57	57	57	57		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	408386	408386	408386
5°	360701	361012	362646
10°	280431	277441	279093
15°	195088	197776	197776
20°	141071	144164	142432
25°	92481	103939	92481
30°	45013	72397	43536
35°	22612	46785	22233
40°	16946	20790	16946
45°	13317	17920	12878
50°	8621	16156	8621
55°	8512	9053	8512
60°	8447	8447	8447
65°	7702	7702	7702
70°	6685	7591	6685
75°	6288	6288	6288
80°	5579	5579	5579
85°	3557	3557	3557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17920 cd/sqm



TEST NUMBER: P886110

CATALOG NUMBER: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	19.6
10°-20°	138.3	33.2
20°-30°	104.9	25.2
30°-40°	44.0	10.6
40°-50°	20.8	5.0
50°-60°	12.0	2.9
60°-70°	8.5	2.0
70°-80°	4.6	1.1
80°-90°	1.5	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°	324.9	78.0
0°-40°	368.9	88.6
0°-60°	401.7	96.5
0°-90°	416.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	416.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	927	925	928	927	932	82
15°	486	488	493	492	493	138
25°	216	234	243	234	216	97
35°	48	60	99	60	47	34
45°	24	27	33	27	24	18
55°	13	13	13	13	13	11
65°	8	8	8	8	8	8
75°	4	4	4	4	4	4
85°	1	2	1	2	1	1
90°	0	0	0	0	0	



TEST NUMBER: P886110

CATALOG NUMBER: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMW-468LM-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.9	1053.9	1053.9	1053.9	1053.9
2.5°	1022.0	1024.6	1026.2	1030.4	1030.4
5°	927.3	924.8	928.1	927.3	932.3
7.5°	821.7	822.5	818.3	823.3	830.9
10°	712.7	706.0	705.1	708.5	709.3
12.5°	596.1	592.8	591.9	591.9	600.3
15°	486.3	488.0	493.0	492.2	493.0
17.5°	410.0	415.0	415.0	412.5	410.0
20°	342.1	346.3	349.6	346.3	345.4
22.5°	280.9	290.9	295.1	292.6	282.5
25°	216.3	233.9	243.1	233.9	216.3
27.5°	147.6	176.9	197.0	176.1	147.6
30°	100.6	122.4	161.8	120.7	97.3
32.5°	66.2	83.0	130.0	83.0	67.1
35°	47.8	60.4	98.9	59.5	47.0
37.5°	39.4	47.0	62.0	46.1	39.4
40°	33.5	36.1	41.1	36.9	33.5
42.5°	29.3	31.0	36.1	31.9	29.3
45°	24.3	26.8	32.7	26.8	23.5
47.5°	15.1	21.0	29.3	21.0	15.1
50°	14.3	14.3	26.8	14.3	14.3
52.5°	13.4	13.4	20.1	13.4	13.4
55°	12.6	12.6	13.4	12.6	12.6
57.5°	11.7	11.7	11.7	11.7	11.7
60°	10.9	10.9	10.9	10.9	10.9
62.5°	9.2	10.1	10.1	10.1	9.2
65°	8.4	8.4	8.4	8.4	8.4
67.5°	7.5	7.5	7.5	7.5	7.5
70°	5.9	6.7	6.7	6.7	5.9
72.5°	5.0	5.0	5.0	5.9	5.0
75°	4.2	4.2	4.2	4.2	4.2
77.5°	3.4	3.4	3.4	3.4	3.4
80°	2.5	2.5	2.5	2.5	2.5
82.5°	1.7	2.5	1.7	2.5	1.7
85°	0.8	1.7	0.8	1.7	0.8
87.5°	0.8	0.8	0.8	0.8	0.8
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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270°

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)