

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: P886570

Luminaire Tested: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMB-850LM-4000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D25NFL-TL3SDMB-850LM-4000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1034.4 lumens
Efficiency: N/A
Efficacy: 76.1 lumens/watt
Spacing Criteria (0/90/45): 0.5 / 0.49 / 0.52
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')

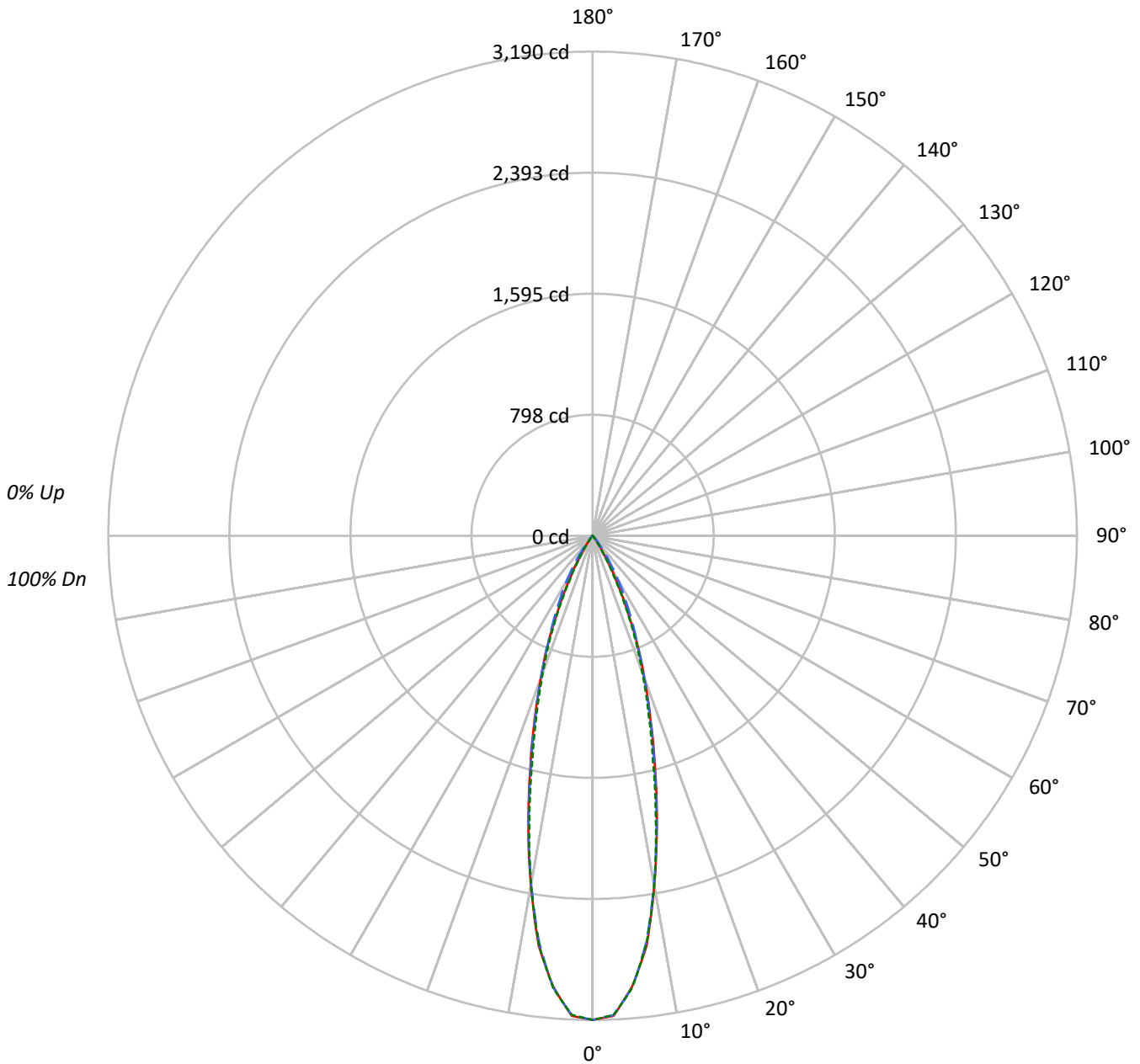
CIE Type: Direct

Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): 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									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	115	112	110	109	112	110	108	107	106	105	104	103	102	100	99	98	98	96																			
2	110	107	103	101	108	105	102	100	102	99	97	99	97	95	96	95	93	92																			
3	106	101	98	94	105	100	97	94	98	95	92	95	93	91	93	91	89	88																			
4	103	97	93	89	101	96	92	89	94	90	88	92	89	87	90	88	86	84																			
5	99	93	88	85	98	92	88	84	90	86	84	89	85	83	87	84	82	81																			
6	96	89	84	81	94	88	84	81	87	83	80	85	82	80	84	81	79	78																			
7	92	85	81	77	91	85	80	77	84	80	77	83	79	77	82	78	76	75																			
8	89	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72																			
9	87	79	75	72	86	79	74	71	78	74	71	77	74	71	76	73	71	70																			
10	84	76	72	69	83	76	72	69	75	71	69	75	71	69	74	71	68	67																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	549304	549304	549304
5°	515305	516342	516878
10°	409253	407329	409078
15°	283351	280677	272974
20°	182707	182707	174991
25°	100733	113503	95773
30°	42517	66282	36929
35°	13287	28488	10975
40°	2698	10162	2698
45°	974	2436	974
50°	268	804	268
55°	0	300	0
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: 2436 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.3	25.6
10°-20°	435.8	42.1
20°-30°	261.1	25.2
30°-40°	66.0	6.4
40°-50°	6.5	0.6
50°-60°	0.5	0.1
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°	961.3	92.9
0°-40°	1027.3	99.3
0°-60°	1034.4	100.0
0°-90°	1034.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1034.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3190	3190	3190	3190	3190	
5°	2981	2992	2987	2987	2990	265
15°	1589	1580	1574	1563	1531	440
25°	530	575	597	559	504	250
35°	63	90	136	79	52	48
45°	4	6	10	6	4	4
55°	0	0	1	0	0	0
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°	3189.5	3189.5	3189.5	3189.5	3189.5
2.5°	3165.4	3158.4	3160.4	3158.4	3159.4
5°	2980.7	2991.8	2986.7	2986.7	2989.8
7.5°	2723.7	2706.6	2703.6	2702.6	2712.7
10°	2340.2	2351.2	2329.2	2335.2	2339.2
12.5°	1954.7	1951.7	1949.7	1939.6	1925.6
15°	1589.2	1580.2	1574.2	1563.1	1531.0
17.5°	1269.0	1268.0	1254.9	1233.9	1221.8
20°	996.9	1001.9	996.9	975.8	954.8
22.5°	764.0	788.1	769.0	761.0	727.9
25°	530.1	575.3	597.3	559.2	504.0
27.5°	351.4	399.6	455.8	377.5	322.3
30°	213.8	256.0	333.3	239.9	185.7
32.5°	121.5	158.6	226.9	144.6	102.4
35°	63.2	90.4	135.5	79.3	52.2
37.5°	26.1	45.2	78.3	39.2	23.1
40°	12.0	19.1	45.2	18.1	12.0
42.5°	7.0	9.0	23.1	9.0	7.0
45°	4.0	6.0	10.0	6.0	4.0
47.5°	3.0	3.0	5.0	3.0	3.0
50°	1.0	2.0	3.0	2.0	1.0
52.5°	1.0	1.0	2.0	1.0	1.0
55°	0.0	0.0	1.0	0.0	0.0
57.5°	0.0	0.0	0.0	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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