

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: P886779

Luminaire Tested: ML310LSFLD2W1E-TIR4D25AWW-TL3SWMB-600LM-3000K

Issue Date: 7/8/2024

Test Information

Test Method: LM-79-2019
Report Number: P886779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-24)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/8/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFLD2W1E-TIR4D25AWW-TL3SWMB-600LM-3000K
Description: 3IN SQUARE ML FLEX, SELECTABLE CCT, WITH WW TIR, MATTE BLACK TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT
Ballast/Driver: -

Summary

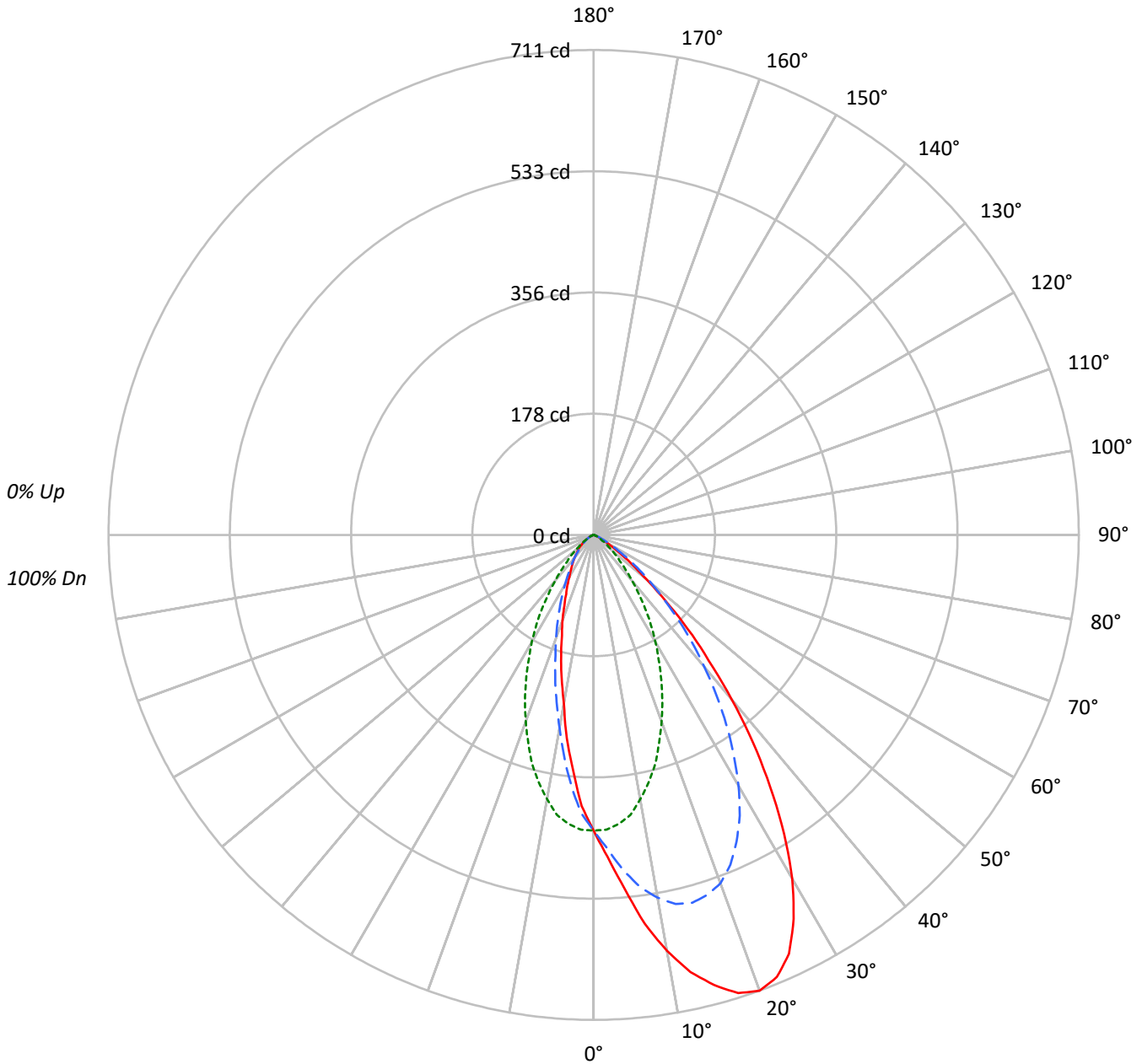
Lumens per Lamp: N/A
Luminaire Lumens: 522.5 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 0.8 / 1
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 9.5
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					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			
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69					69			
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63					63			
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58					58			
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53					53			
8	74	63	56	52	72	62	56	52	61	55	51	60	55	51	59	54	51	49					49			
9	70	59	52	48	69	58	52	48	57	52	48	56	51	47	56	51	47	46					46			
10	66	55	49	44	65	55	49	44	54	48	44	53	48	44	52	47	44	43					43			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	74624	74624	74624	74624	74624
5°	89984	85178	73492	64035	59834
10°	108268	94452	68798	50243	43860
15°	121831	99544	62066	38798	32896
20°	130327	99592	53388	29489	24412
25°	128705	94139	44561	22347	18110
30°	115740	84418	36015	16665	14119
35°	94778	71189	27710	12510	11648
40°	70819	56677	19762	9735	9735
45°	47567	42647	13323	7234	8062
50°	26445	29687	9244	5439	6511
55°	13992	18466	5675	4264	5074
60°	6992	10023	3720	3272	3479
65°	3301	4972	2486	1915	2201
70°	1712	2065	1360	1007	705
75°	466	932	466	466	0
80°	0	0	0	0	0
85°	0	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 47738 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.6	7.8
10°-20°	109.0	20.9
20°-30°	140.7	26.9
30°-40°	121.8	23.3
40°-50°	72.1	13.8
50°-60°	29.1	5.6
60°-70°	8.1	1.5
70°-80°	1.1	0.2
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°	290.3	55.6
0°-40°	412.1	78.9
0°-60°	513.3	98.2
0°-90°	522.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	522.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	433	433	433	433	433	
5°	520	493	425	370	346	53
15°	683	558	348	218	184	193
25°	677	495	234	118	95	306
35°	451	339	132	60	55	280
45°	195	175	55	30	33	151
55°	47	62	19	14	17	46
65°	8	12	6	5	5	9
75°	1	1	1	1	0	1
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°	112.5°	135°	157.5°	180°
0°	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3	433.3
2.5°	472.5	466.4	460.3	445.4	432.6	419.1	408.9	400.8	398.1
5°	520.5	515.7	492.7	459.6	425.1	394.1	370.4	354.2	346.1
7.5°	575.2	558.3	520.5	466.4	413.7	365.7	329.2	306.2	300.8
10°	619.1	598.9	540.1	466.4	393.4	335.9	287.3	261.6	250.8
12.5°	656.3	629.3	554.2	459.6	371.8	303.5	250.8	222.4	215.6
15°	683.3	651.6	558.3	446.8	348.1	269.0	217.6	192.0	184.5
17.5°	704.3	663.1	553.6	429.9	319.0	237.9	185.9	163.6	154.8
20°	711.1	664.4	543.4	406.2	291.3	208.2	160.9	139.2	133.2
22.5°	701.6	652.9	523.2	382.6	262.9	180.5	137.9	118.3	112.2
25°	677.3	626.6	495.4	351.5	234.5	155.5	117.6	99.4	95.3
27.5°	634.7	587.4	463.7	320.4	206.2	133.2	99.4	85.2	83.1
30°	582.0	539.4	424.5	287.9	181.1	113.6	83.8	73.7	71.0
32.5°	519.8	485.3	381.9	256.8	156.1	96.7	71.0	63.5	62.9
35°	450.8	426.5	338.6	221.0	131.8	80.4	59.5	54.7	55.4
37.5°	383.9	363.6	294.7	187.9	108.1	65.6	51.4	48.0	48.7
40°	315.0	303.5	252.1	155.5	87.9	53.4	43.3	41.9	43.3
42.5°	249.4	246.7	212.2	129.1	70.3	43.3	36.5	35.8	37.9
45°	195.3	196.0	175.1	103.4	54.7	33.8	29.7	31.8	33.1
47.5°	141.9	150.7	138.6	79.8	44.6	27.7	24.3	27.7	29.1
50°	98.7	111.5	110.8	61.5	34.5	23.0	20.3	24.3	24.3
52.5°	71.6	79.8	84.5	46.0	25.7	18.2	16.9	21.0	20.3
55°	46.6	56.8	61.5	33.1	18.9	13.5	14.2	17.6	16.9
57.5°	31.1	39.9	42.6	23.0	13.5	10.1	11.5	14.2	13.5
60°	20.3	27.0	29.1	16.2	10.8	8.1	9.5	10.8	10.1
62.5°	12.8	18.2	18.9	10.8	8.1	6.8	6.8	8.1	7.4
65°	8.1	11.5	12.2	8.1	6.1	4.7	4.7	6.1	5.4
67.5°	5.4	7.4	7.4	5.4	4.7	3.4	3.4	4.1	3.4
70°	3.4	4.1	4.1	4.1	2.7	2.7	2.0	2.0	1.4
72.5°	2.0	2.0	2.0	2.0	1.4	1.4	1.4	0.7	0.7
75°	0.7	0.7	1.4	0.7	0.7	0.7	0.7	0.0	0.0
77.5°	0.0	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	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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— 0°-180° - - 45°-225° - - - - 90°-270°

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