

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO

Report Number: P645280

Luminaire Tested: **RLNL6109FSD2W1EWHDM-2700K**

Issue Date: 02/28/2023

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P645280
 Test Lab: ETA Testing Technology
 Issue Date: 02/28/2023
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: RLNL6109FSD2W1EWHDM-2700K
 Description: 6" 90 CRI COLOR TUNING RECESSED DOWNLIGHT DIRECT MOUNT FIXTURE w/
 NIGHTLIGHT
 Light Source: 90 CRI 2700K LEDS
 Ballast/Driver: ELECTRICAL DRIVER

Summary

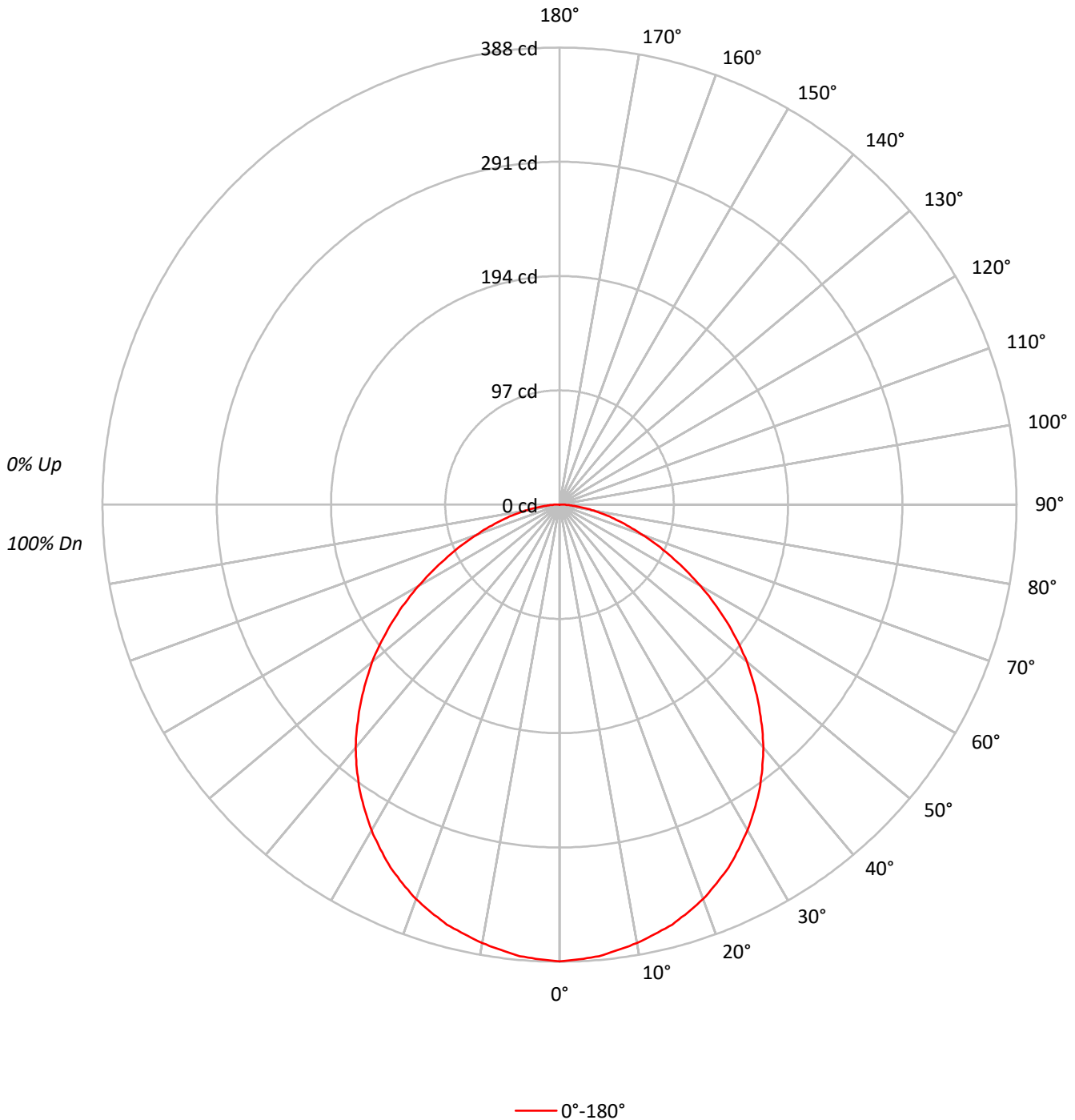
Lumens per Lamp: N/A
 Luminaire Lumens: 994.7 lumens
 Efficiency: N/A
 Efficacy: 86.5 lumens/watt
 Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.33
 Luminous Opening: Circular (Dia: 0.35' x H: 0')
 CIE Type: Direct

Input Watts (W): 11.5
 Input Voltage (V): 120
 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: 25 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021

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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	92		94	92	90		91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77		83	79	75		80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56		66	60	55		64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49		60	53	48		58	52	48	46
6	71	58	50	43	70	58	49	43	56	48	43		54	48	43		52	47	42	40
7	66	53	45	39	65	52	44	38	51	43	38		49	43	38		48	42	38	36
8	62	49	40	34	60	48	40	34	47	39	34		45	39	34		44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	42360
5°	42204
10°	41927
15°	41751
20°	41440
25°	40965
30°	40271
35°	39455
40°	38410
45°	36914
50°	35288
55°	33031
60°	30156
65°	27094
70°	23927
75°	21150
80°	18499
85°	15670

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.5	3.7
10°-20°	104.1	10.5
20°-30°	156.4	15.7
30°-40°	184.8	18.6
40°-50°	184.3	18.5
50°-60°	154.8	15.6
60°-70°	104.5	10.5
70°-80°	53.9	5.4
80°-90°	15.2	1.5
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°	297.0	29.9
0°-40°	481.9	48.4
0°-60°	821.0	82.5
0°-90°	994.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	994.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	388	
5°	385	37
15°	369	104
25°	340	156
35°	296	185
45°	239	184
55°	173	155
65°	105	105
75°	50	54
85°	12	15
90°	2	

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


NVLAP Lab Code: 200050-0



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CANDELA DISTRIBUTION (FULL):

	0°
0°	387.7
5°	384.8
10°	377.9
15°	369.1
20°	356.4
25°	339.8
30°	319.2
35°	295.8
40°	269.3
45°	238.9
50°	207.6
55°	173.4
60°	138.0
65°	104.8
70°	74.9
75°	50.1
80°	29.4
85°	12.5
90°	1.6

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Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021
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