

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: P645275

Luminaire Tested: **RLNL4079FSD2W1EWHDM-2700K**

Issue Date: 02/28/2023

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P645275
 Test Lab: ETA Testing Technology
 Issue Date: 02/28/2023
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: RLNL4079FSD2W1EWHDM-2700K
 Description: 4" 90 CRI COLOR TUNING RECESSED DOWNLIGHT DIRECT MOUNT FIXTURE w/
 NIGHTLIGHT
 Light Source: 90 CRI 2700K LEDS
 Ballast/Driver: ELECTRICAL DRIVER

Summary

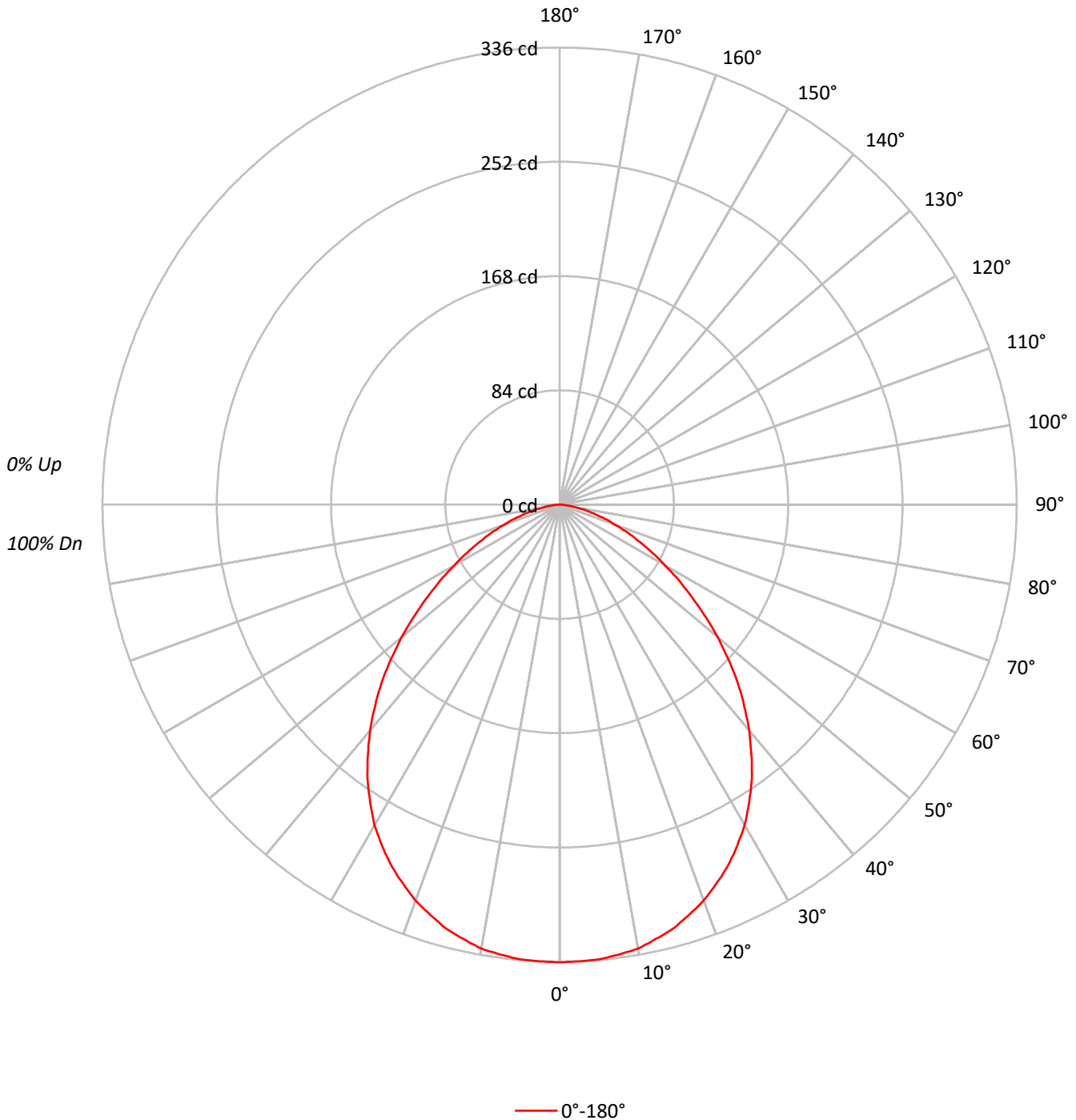
Lumens per Lamp: N/A
 Luminaire Lumens: 760.4 lumens
 Efficiency: N/A
 Efficacy: 80.9 lumens/watt
 Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.27
 Luminous Opening: Circular (Dia: 0.35' x H: 0')
 CIE Type: Direct

Input Watts (W): 9.4
 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	110	106	102	99	108	104	100	97	100	97	94		96	94	91		92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80		86	82	78		83	79	76	74
3	93	84	76	70	91	82	75	70	79	73	69		77	72	67		74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60		69	63	59		67	62	58	56
5	79	68	59	53	77	66	59	53	64	57	52		62	56	52		61	55	51	49
6	74	61	53	47	72	60	52	47	59	52	46		57	51	46		55	50	45	44
7	69	56	48	42	67	55	47	42	54	46	41		52	46	41		51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34		44	38	34		43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31		41	35	31		40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	36762
5°	36794
10°	36780
15°	36491
20°	36014
25°	35313
30°	34334
35°	32867
40°	30911
45°	28594
50°	25737
55°	22621
60°	19593
65°	16706
70°	14005
75°	11238
80°	8280
85°	5315

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	4.2
10°-20°	90.9	12.0
20°-30°	134.7	17.7
30°-40°	153.6	20.2
40°-50°	142.4	18.7
50°-60°	106.9	14.1
60°-70°	65.0	8.5
70°-80°	29.1	3.8
80°-90°	5.9	0.8
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°	257.5	33.9
0°-40°	411.2	54.1
0°-60°	660.4	86.9
0°-90°	760.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	760.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	336	
5°	335	32
15°	323	91
25°	293	135
35°	246	154
45°	185	142
55°	119	107
65°	65	65
75°	27	29
85°	4	6
90°	0	

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



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CANDELA DISTRIBUTION (FULL):

	0°
0°	336.5
5°	335.5
10°	331.5
15°	322.6
20°	309.7
25°	292.9
30°	272.1
35°	246.4
40°	216.7
45°	185.1
50°	151.4
55°	118.8
60°	89.7
65°	64.6
70°	43.8
75°	26.6
80°	13.2
85°	4.2
90°	0.0

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NVLAP Lab Code: 200050-0



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Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021
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(END OF REPORT)