

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: P645277

Luminaire Tested: **RLNL4079FSD2W1EWHDM-3500K**

Issue Date: 02/28/2023

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P645277
 Test Lab: ETA Testing Technology
 Issue Date: 02/28/2023
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: RLNL4079FSD2W1EWHDM-3500K
 Description: 4" 90 CRI COLOR TUNING RECESSED DOWNLIGHT DIRECT MOUNT FIXTURE w/
 NIGHTLIGHT
 Light Source: 90 CRI 3500K LEDS
 Ballast/Driver: ELECTRICAL DRIVER

Summary

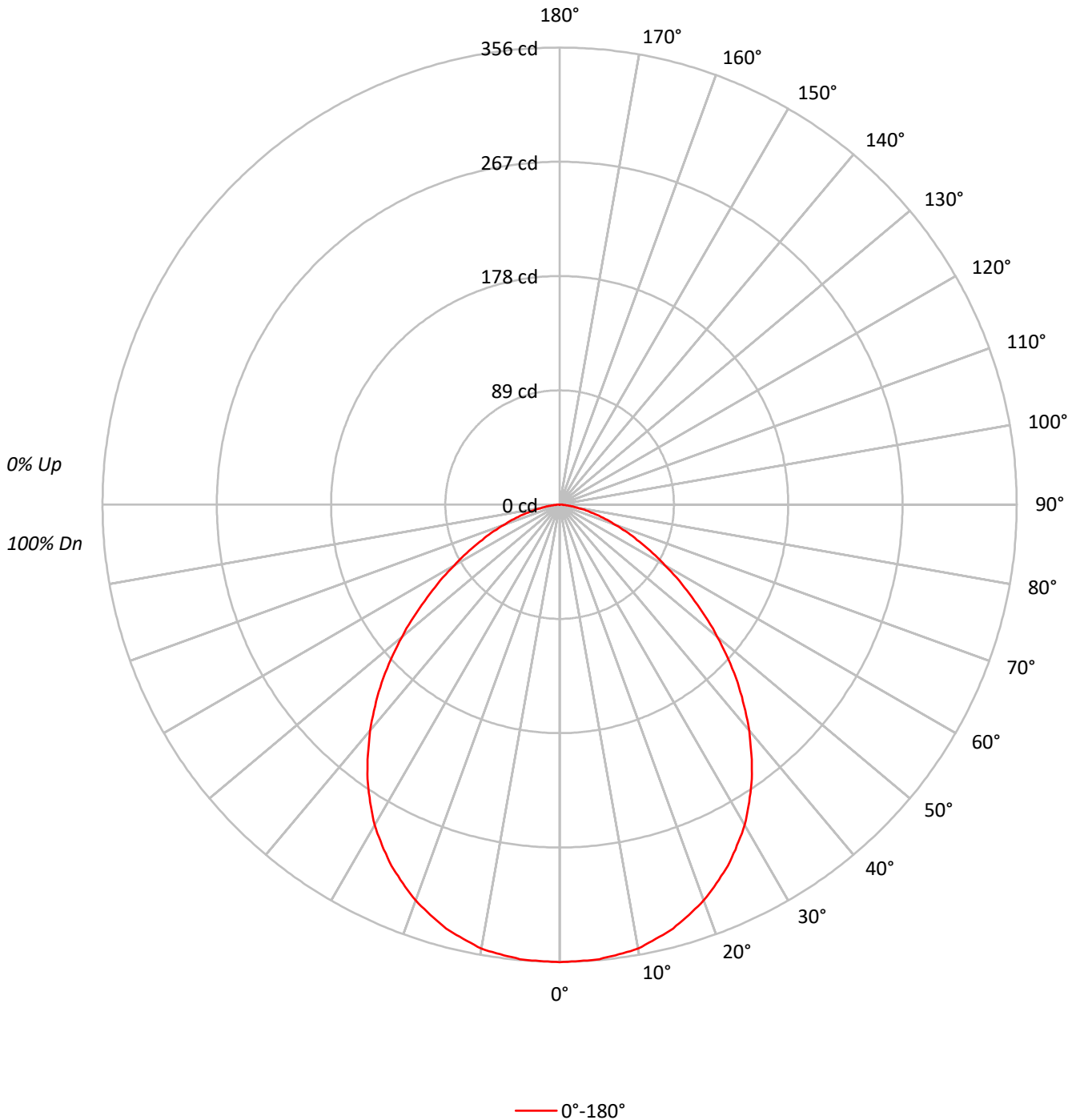
Lumens per Lamp: N/A
 Luminaire Lumens: 805.4 lumens
 Efficiency: N/A
 Efficacy: 85.7 lumens/watt
 Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.27
 Luminous Opening: Circular (Dia: 0.35' x H: 0')
 CIE Type: Direct

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	
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°	38938
5°	38972
10°	38958
15°	38653
20°	38147
25°	37404
30°	36367
35°	34813
40°	32741
45°	30287
50°	27260
55°	23960
60°	20751
65°	17697
70°	14832
75°	11905
80°	8771
85°	5629

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.8	4.2
10°-20°	96.3	12.0
20°-30°	142.7	17.7
30°-40°	162.7	20.2
40°-50°	150.8	18.7
50°-60°	113.2	14.1
60°-70°	68.8	8.5
70°-80°	30.8	3.8
80°-90°	6.2	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°	272.8	33.9
0°-40°	435.5	54.1
0°-60°	699.5	86.9
0°-90°	805.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	805.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	356	
5°	355	34
15°	342	96
25°	310	143
35°	261	163
45°	196	151
55°	126	113
65°	68	69
75°	28	31
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°	356.4
5°	355.3
10°	351.1
15°	341.7
20°	328.1
25°	310.3
30°	288.3
35°	261.0
40°	229.6
45°	196.0
50°	160.4
55°	125.8
60°	95.0
65°	68.5
70°	46.4
75°	28.2
80°	13.9
85°	4.5
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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