

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P382124

Luminaire Tested: **RA4069S1EWHMDMR-3500K**

Test Date: 12/10/2019

**Test Information**

Test Method: LM-41-14  
Report Number: P382124  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1912-596-4)  
Test Lab: INNOVATION CENTER (G2)  
Test Date: 12/10/2019  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: RA4069S1EWHMDMR-3500K  
Description: HALO RA Direct Mount Downlight 4" 3500K  
Light Source: (24) 90 CRI LEDS  
BRIDGELUX2835  
Ballast/Driver: ELECTRICAL DRIVER

**Summary**

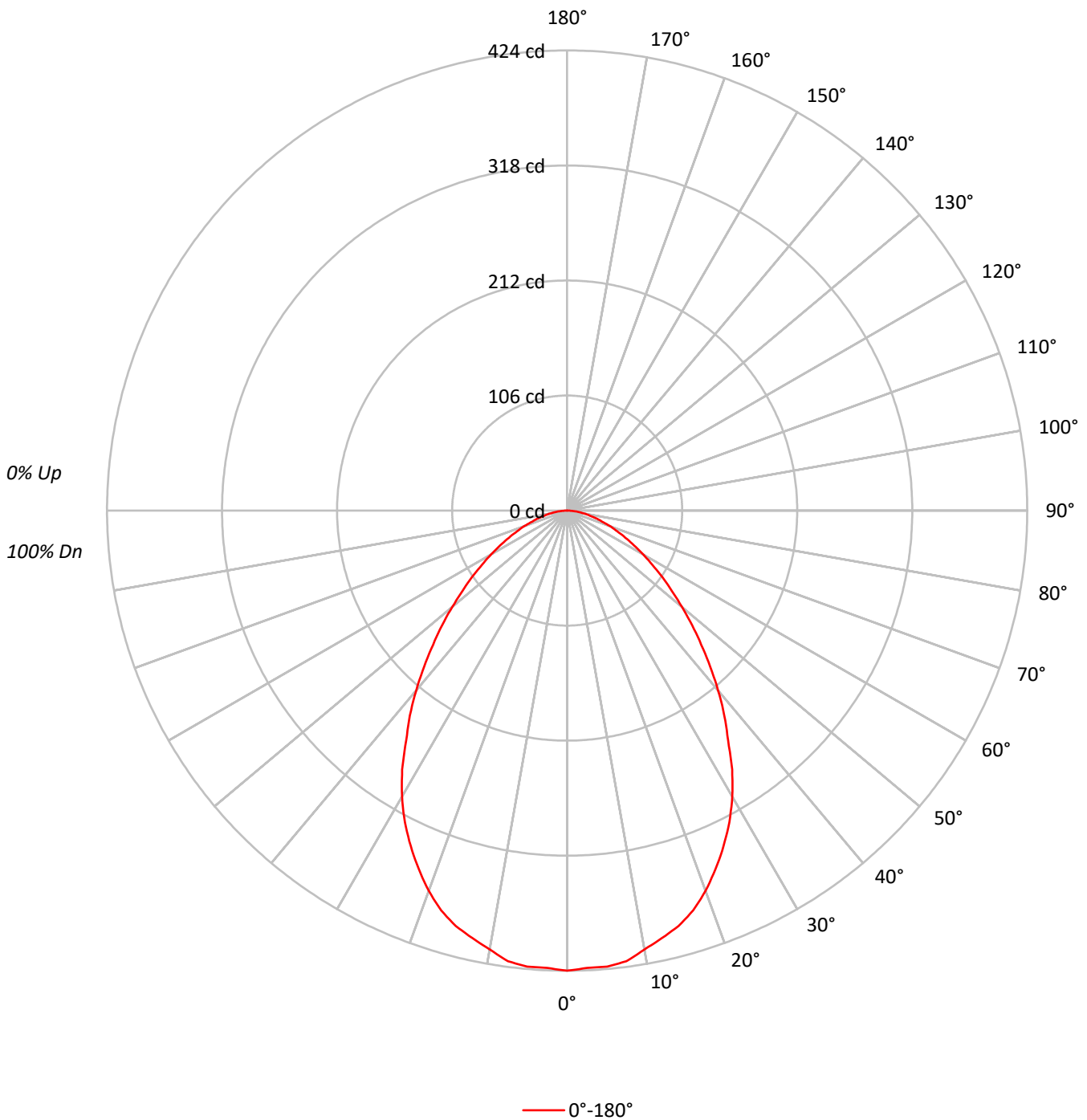
Lumens per Lamp: N/A  
Luminaire Lumens: 798.7 lumens  
Efficiency: N/A  
Efficacy: 96.1 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.14  
Luminous Opening: Circular (Dia: 0.23' x H: 0')  
CIE Type: Direct

Input Watts (W): 8.31  
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



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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	103	100	108	104	101	98	100	97	95		96	94	92		93	91	89	87
2	102	95	89	84	99	93	88	83	90	85	81		86	83	79		83	80	78	76
3	94	85	78	72	92	83	77	72	81	75	70		78	73	69		75	71	68	66
4	87	77	69	63	85	75	68	62	73	67	62		71	65	61		69	64	60	58
5	81	69	61	55	79	68	61	55	66	60	55		64	59	54		63	58	54	52
6	75	63	55	49	74	62	55	49	61	54	49		59	53	48		58	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44		54	48	44		53	48	43	42
8	66	53	46	40	64	53	45	40	51	45	40		50	44	40		49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36		47	41	36		46	40	36	34
10	58	46	39	34	57	45	38	34	44	38	33		44	38	33		43	37	33	32

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	110622
5°	110494
10°	108804
15°	107067
20°	103558
25°	98216
30°	91726
35°	82320
40°	73753
45°	64474
50°	55985
55°	48819
60°	42119
65°	36555
70°	31970
75°	27828
80°	24646
85°	21558



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.9	5.0
10°-20°	111.3	13.9
20°-30°	156.6	19.6
30°-40°	162.2	20.3
40°-50°	135.3	16.9
50°-60°	96.2	12.0
60°-70°	59.3	7.4
70°-80°	29.5	3.7
80°-90°	8.4	1.0
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°	307.8	38.5
0°-40°	470.0	58.8
0°-60°	701.5	87.8
0°-90°	798.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	798.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	424	
5°	422	40
15°	396	111
25°	341	157
35°	258	162
45°	175	135
55°	107	96
65°	59	59
75°	28	30
85°	7	8
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	423.9
2.5°	421.8
5°	421.8
7.5°	418.8
10°	410.6
12.5°	403.5
15°	396.3
17.5°	386.2
20°	372.9
22.5°	357.5
25°	341.1
27.5°	323.8
30°	304.4
32.5°	282.9
35°	258.4
37.5°	238.0
40°	216.5
42.5°	195.0
45°	174.7
47.5°	156.2
50°	137.9
52.5°	121.6
55°	107.3
57.5°	93.0
60°	80.7
62.5°	69.4
65°	59.2
67.5°	50.0
70°	41.9
72.5°	33.7
75°	27.6
77.5°	21.5
80°	16.4
82.5°	12.2
85°	7.2
87.5°	3.1
90°	0.0

(END OF REPORT)