

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 COMMERCIAL

Report Number: P434715

Luminaire Tested: **HCMR1R15930ED010MW**

Issue Date: 11/24/2020

Test Information

Test Method: LM-41-14
Report Number: P434715
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-933-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/24/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCMR1R15930ED010MW
Description: HALO COMMERCIAL 4INCH ADJUSTABLE MULTIPLE, 15 DEG REFLECTOR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1223.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 0.25 / 0.25 / 0.25
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

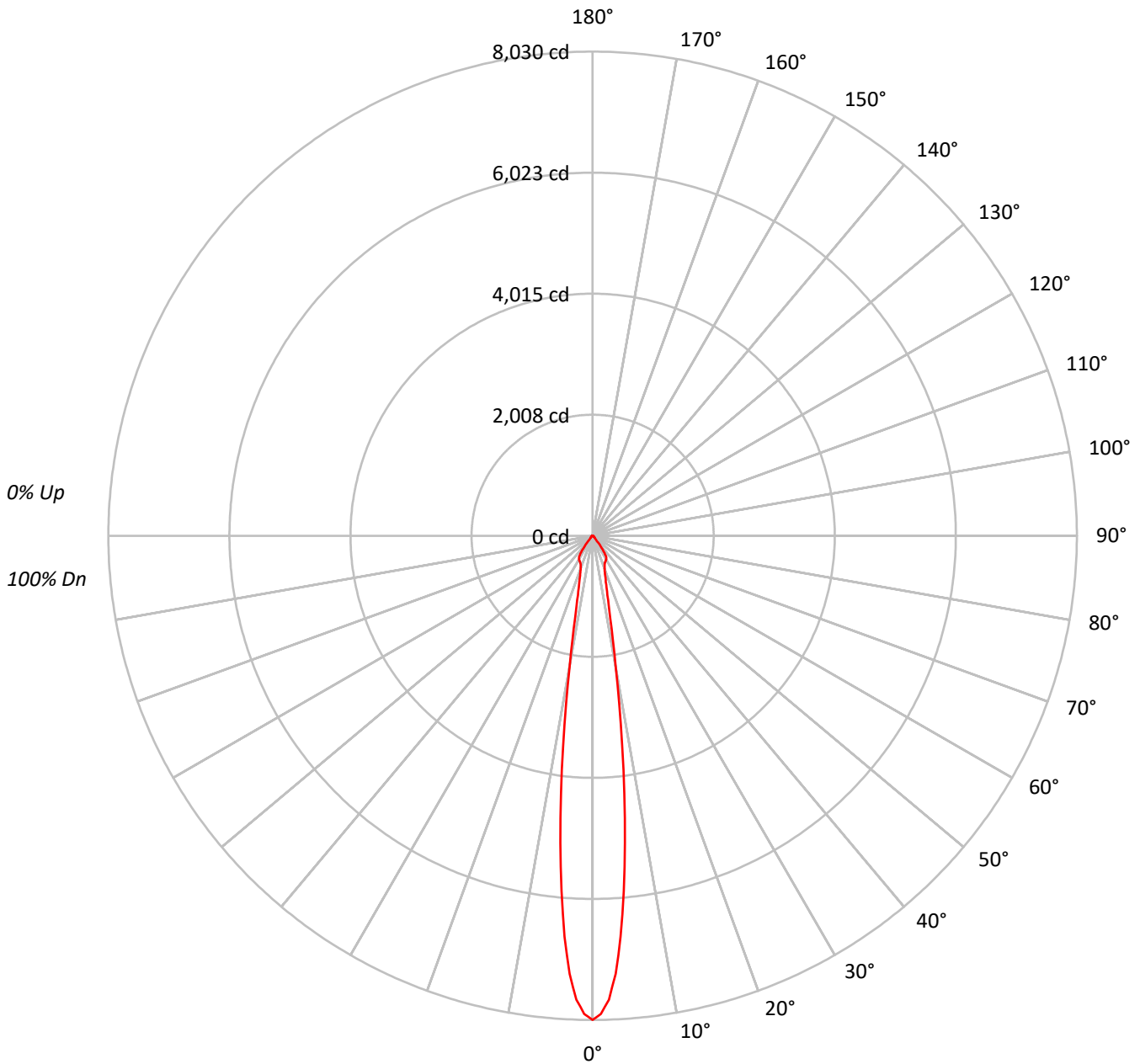
Input Watts (W): 14.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									20									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	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	100	100	100	100	100	100	100	100	100																	
	1	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95	95	94	93	91	89	89	88	86	85	85																	
	2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89	89	88	86	85	85	84	82	81	81	81																	
	3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	91	88	86	85	85	84	83	82	81	81	80	79	77	77																	
	4	101	94	89	86	99	93	88	85	91	87	84	89	86	83	87	84	82	81	81	80	79	79	79	79	78	77	77	77																	
	5	97	90	85	81	95	89	84	81	87	83	80	85	82	79	84	81	79	79	79	79	79	79	79	79	79	79	79	79																	
	6	93	86	81	77	92	85	80	77	83	79	76	82	79	76	81	78	75	74	74	74	74	74	74	74	74	74	74	74																	
	7	90	82	77	74	89	82	77	73	80	76	73	79	75	73	78	75	72	71	71	71	71	71	71	71	71	71	71	71																	
	8	87	79	74	71	86	78	74	70	77	73	70	77	73	70	76	72	70	68	68	68	68	68	68	68	68	68	68	68																	
	9	84	76	71	68	83	76	71	68	75	71	68	74	70	67	73	70	67	66	66	66	66	66	66	66	66	66	66	66																	
	10	81	74	69	66	81	73	69	66	72	68	65	72	68	65	71	68	65	64	64	64	64	64	64	64	64	64	64	64																	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3961739
5°	2931072
10°	1105386
15°	454394
20°	304840
25°	265061
30°	256766
35°	200206
40°	67240
45°	32724
50°	28630
55°	20128
60°	17860
65°	17395
70°	18465
75°	24400
80°	30401
85°	6227



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	435.9	35.6
10°-20°	274.1	22.4
20°-30°	228.3	18.7
30°-40°	190.6	15.6
40°-50°	40.5	3.3
50°-60°	22.3	1.8
60°-70°	14.9	1.2
70°-80°	13.0	1.1
80°-90°	3.5	0.3
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°	938.3	76.7
0°-40°	1128.9	92.3
0°-60°	1191.7	97.4
0°-90°	1223.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1223.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	8030	
5°	5918	436
15°	890	274
25°	487	228
35°	332	191
45°	47	40
55°	23	22
65°	15	15
75°	13	13
85°	1	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	8029.8
1°	7932.8
2°	7697.4
3°	7276.5
4°	6663.9
5°	5918.2
6°	5120.2
7°	4308.4
8°	3514.7
9°	2812.6
10°	2206.4
11°	1739.8
12°	1409.5
13°	1178.3
14°	1013.2
15°	889.6
16°	794.8
17°	721.3
18°	663.7
19°	619.0
20°	580.6
22.5°	515.6
25°	486.9
26°	478.4
27°	472.0
28°	465.6
29°	458.1
30°	450.7
32.5°	420.8
35°	332.4
37.5°	212.0
40°	104.4
42.5°	50.1
45°	46.9
47.5°	43.7
50°	37.3
52.5°	28.8
55°	23.4
57.5°	20.2
60°	18.1
62.5°	16.0
65°	14.9
67.5°	13.8



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CANDELA DISTRIBUTION (continued):

	0°
75°	12.8
77.5°	11.7
80°	10.7
82.5°	6.4
85°	1.1
87.5°	0.0
90°	0.0



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— 0°-180°







70°		12.8
72.5°		12.8



(END OF REPORT)