

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: P434675

Luminaire Tested: **HCM4R15927ED010MMS**

Issue Date: 11/24/2020

Test Information

Test Method: LM-41-14
Report Number: P434675
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: HCM4R15927ED010MMS
Description: HALO COMMERCIAL 4INCH ADJUSTABLE MULTIPLE, 15 DEG REFLECTOR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4476.1 lumens
Efficiency: N/A
Efficacy: 82.7 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

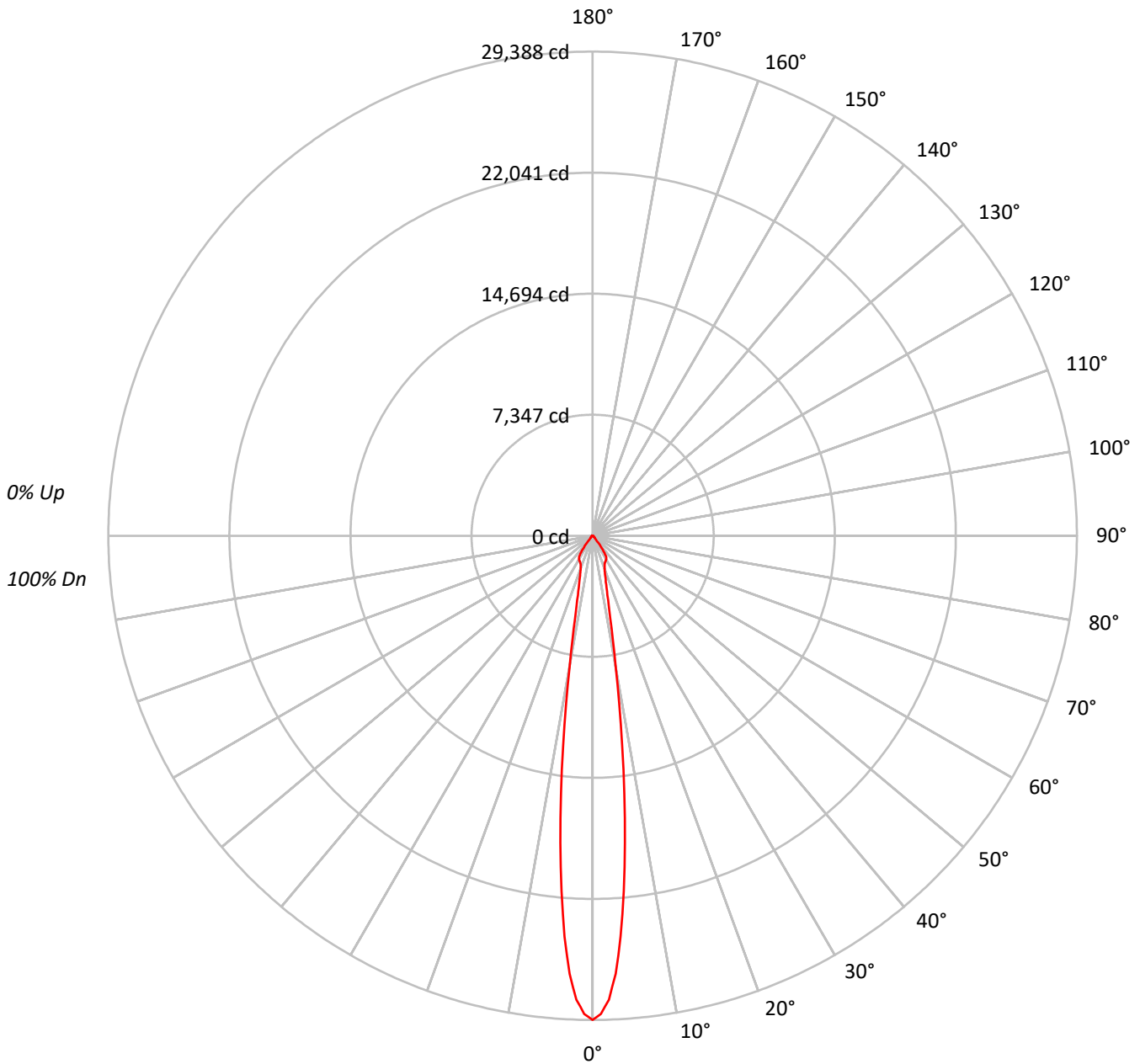
Input Watts (W): 54.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P434675

CATALOG NUMBER: HCM4R15927ED010MMS

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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	14499290
5°	10727224
10°	4045550
15°	1663011
20°	1115718
25°	970038
30°	939615
35°	732704
40°	246096
45°	119733
50°	104772
55°	73804
60°	65422
65°	63742
70°	67511
75°	89214
80°	110809
85°	22077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1595.3	35.6
10°-20°	1003.3	22.4
20°-30°	835.5	18.7
30°-40°	697.5	15.6
40°-50°	148.1	3.3
50°-60°	81.6	1.8
60°-70°	54.6	1.2
70°-80°	47.4	1.1
80°-90°	12.7	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°	3434.1	76.7
0°-40°	4131.6	92.3
0°-60°	4361.4	97.4
0°-90°	4476.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4476.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	29388	
5°	21660	###
15°	3256	1003
25°	1782	835
35°	1216	698
45°	172	148
55°	86	82
65°	55	55
75°	47	47
85°	4	13
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	29387.7
1°	29032.9
2°	28171.2
3°	26631.0
4°	24389.0
5°	21659.6
6°	18739.2
7°	15768.1
8°	12863.2
9°	10293.7
10°	8075.1
11°	6367.3
12°	5158.5
13°	4312.4
14°	3708.1
15°	3255.8
16°	2908.7
17°	2639.7
18°	2429.2
19°	2265.4
20°	2125.0
22.5°	1887.2
25°	1781.9
26°	1750.7
27°	1727.3
28°	1703.9
29°	1676.6
30°	1649.3
32.5°	1540.2
35°	1216.5
37.5°	775.9
40°	382.1
42.5°	183.3
45°	171.6
47.5°	159.9
50°	136.5
52.5°	105.3
55°	85.8
57.5°	74.1
60°	66.3
62.5°	58.5
65°	54.6
67.5°	50.7



TEST NUMBER: P434675

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CANDELA DISTRIBUTION (continued):

	0°
75°	46.8
77.5°	42.9
80°	39.0
82.5°	23.4
85°	3.9
87.5°	0.0
90°	0.0



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— 0°-180°







70°	46.8
72.5°	46.8



(END OF REPORT)