

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: P581148

Luminaire Tested: **HC455D010-HM44560830-41PSMDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581148  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC455D010-HM44560830-41PSMDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4635.9 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 0.99  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

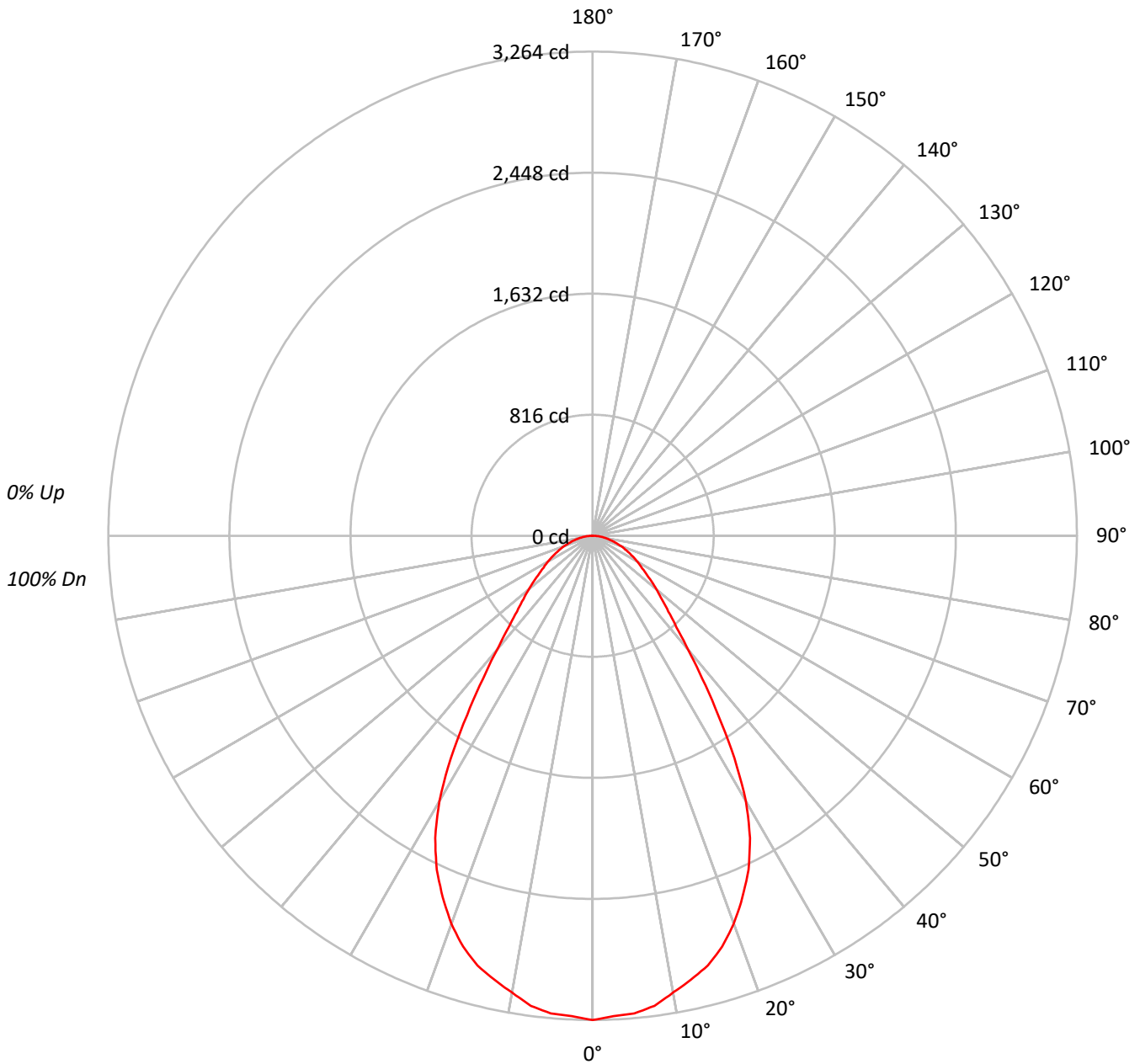
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89			89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78			78
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70			70
4	90	80	73	68	88	79	72	67	77	71	66	74	69	65	72	68	65	63			63
5	84	74	66	61	82	72	66	60	71	64	60	69	63	59	67	62	59	57			57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52			52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44			44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40			40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			37

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

	0°
0°	402662
5°	400151
10°	391639
15°	382963
20°	365275
25°	338133
30°	294098
35°	222101
40°	160968
45°	125787
50°	107555
55°	93051
60°	85701
65°	78452
70°	73282
75°	67196
80°	62863
85°	60289



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.2	6.6
10°-20°	840.1	18.1
20°-30°	1129.7	24.4
30°-40°	928.9	20.0
40°-50°	570.4	12.3
50°-60°	394.8	8.5
60°-70°	269.1	5.8
70°-80°	150.0	3.2
80°-90°	47.7	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°	2275.0	49.1
0°-40°	3203.9	69.1
0°-60°	4169.1	89.9
0°-90°	4635.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4635.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3264	
5°	3232	305
15°	2999	840
25°	2484	1130
35°	1475	929
45°	721	570
55°	433	395
65°	269	269
75°	141	150
85°	43	48
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3264.5
2.5°	3241.6
5°	3231.8
7.5°	3195.8
10°	3126.9
12.5°	3064.6
15°	2999.0
17.5°	2904.1
20°	2782.8
22.5°	2638.6
25°	2484.5
27.5°	2297.7
30°	2064.9
32.5°	1779.8
35°	1475.0
37.5°	1212.8
40°	999.7
42.5°	835.8
45°	721.1
47.5°	632.6
50°	560.5
52.5°	494.9
55°	432.7
57.5°	386.8
60°	347.4
62.5°	308.1
65°	268.8
67.5°	236.0
70°	203.2
72.5°	170.4
75°	141.0
77.5°	111.5
80°	88.5
82.5°	65.6
85°	42.6
87.5°	23.0
90°	0.0



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— 0°-180°







(END OF REPORT)