

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: P581511

Luminaire Tested: **HC407D010-HM40525930-41RWWH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581511  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC407D010-HM40525930-41RWWH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 770.9 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

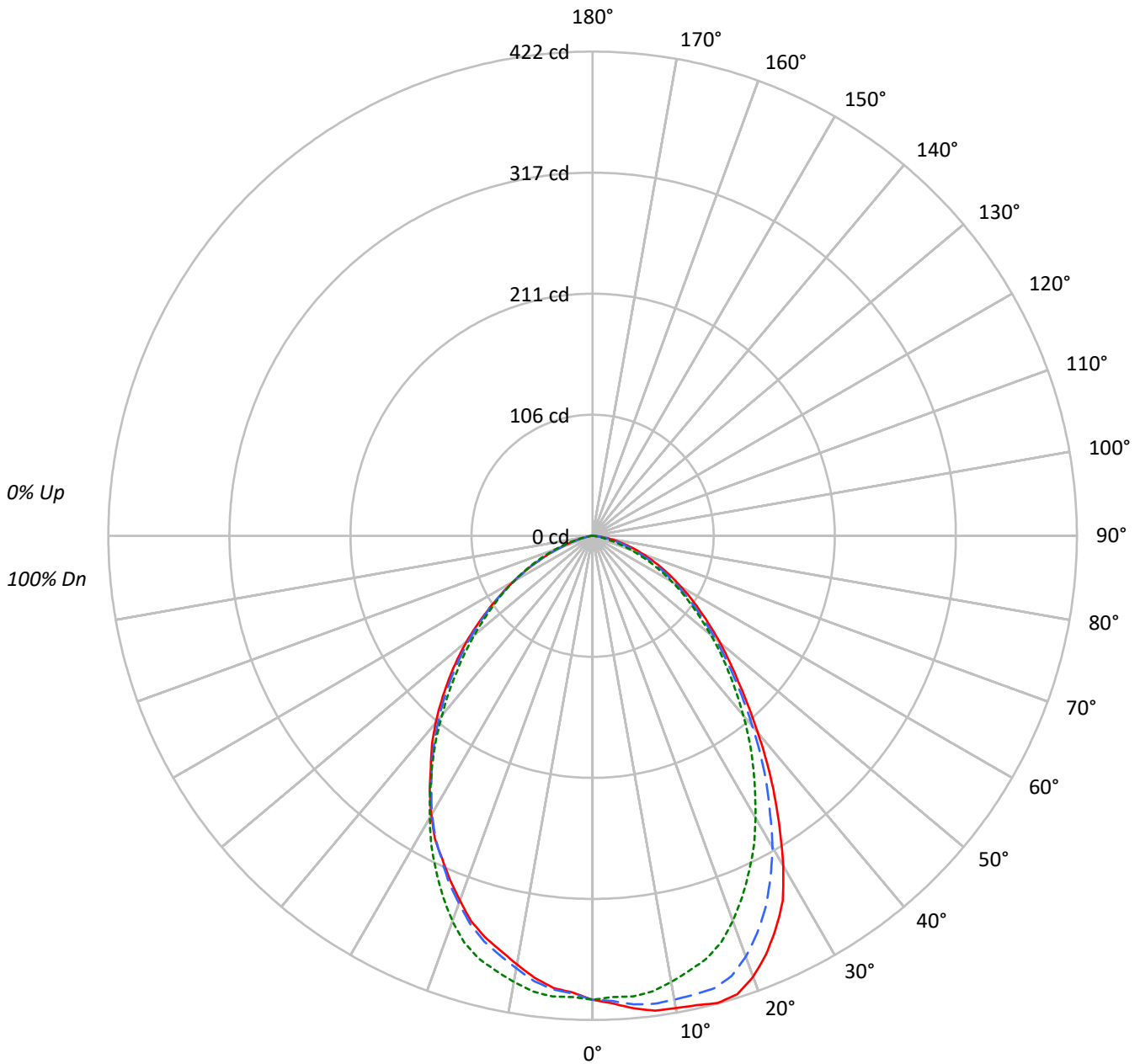
Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P581511

CATALOG NUMBER: HC407D010-HM40525930-41RWWH

### Luminous Intensity Polar Plot





TEST NUMBER: P581511

CATALOG NUMBER: HC407D010-HM40525930-41RWWH

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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																			
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77																			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67																			
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47																			
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35																			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

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

	0°	90°	180°
0°	49881	49881	49881
5°	51198	49898	48970
10°	52354	49461	47507
15°	53824	48755	46252
20°	53686	46887	44380
25°	51417	43891	42244
30°	47300	40421	40008
35°	41604	36681	36997
40°	36003	32831	34232
45°	31277	29183	30928
50°	27786	25752	27479
55°	24644	22580	23548
60°	21931	19587	19587
65°	19496	16286	15235
70°	16878	12298	10891
75°	14106	8149	6720
80°	10655	3978	3552
85°	5661	1415	1415



TEST NUMBER: P581511

CATALOG NUMBER: HC407D010-HM40525930-41RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.3	5.0
10°-20°	108.6	14.1
20°-30°	153.1	19.9
30°-40°	158.2	20.5
40°-50°	134.1	17.4
50°-60°	97.6	12.7
60°-70°	57.0	7.4
70°-80°	21.2	2.7
80°-90°	2.8	0.4
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°	300.0	38.9
0°-40°	458.2	59.4
0°-60°	689.9	89.5
0°-90°	770.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	770.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	404	404	404	404	404	
5°	414	410	403	397	396	40
15°	422	408	382	366	362	118
25°	378	357	322	311	310	173
35°	276	264	244	244	246	173
45°	179	174	167	173	177	140
55°	115	109	105	109	110	103
65°	67	61	56	52	52	66
75°	30	25	17	14	14	32
85°	4	2	1	1	1	6
90°	0	0	0	0	0	



TEST NUMBER: P581511

CATALOG NUMBER: HC407D010-HM40525930-41RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	404.4	404.4	404.4	404.4	404.4	404.4	404.4	404.4	404.4
2.5°	408.0	406.9	405.9	404.4	402.4	400.9	399.4	398.4	398.4
5°	413.5	412.0	410.0	406.5	403.0	399.9	396.9	395.5	395.5
7.5°	417.5	415.5	411.5	406.5	400.5	395.9	391.4	389.4	388.4
10°	418.0	416.1	410.5	403.0	394.9	387.8	382.8	379.9	379.3
12.5°	419.0	416.5	409.5	398.9	388.4	379.9	374.3	371.3	370.3
15°	421.5	418.0	408.4	394.9	381.8	371.8	365.8	363.2	362.2
17.5°	419.0	414.0	402.4	386.4	371.8	360.7	354.7	352.2	352.2
20°	409.0	404.0	390.3	372.8	357.2	346.6	340.6	339.1	338.1
22.5°	394.9	389.4	374.9	356.2	340.6	331.0	327.1	325.0	324.6
25°	377.8	372.2	356.8	337.6	322.5	314.5	311.0	311.0	310.4
27.5°	358.7	351.6	335.6	319.1	304.4	298.4	296.9	296.9	297.5
30°	332.1	327.1	313.5	297.5	283.8	279.8	279.8	280.9	280.9
32.5°	303.5	300.0	287.9	273.8	263.2	260.7	261.7	263.8	264.2
35°	276.3	272.3	264.2	251.7	243.6	242.6	244.2	245.7	245.7
37.5°	249.7	245.7	240.1	230.1	224.1	224.5	226.6	228.6	230.1
40°	223.6	220.5	216.6	208.5	203.9	206.0	208.5	210.5	212.6
42.5°	200.5	197.4	194.5	188.5	185.4	187.9	191.0	192.9	194.9
45°	179.3	177.3	174.3	169.3	167.3	169.8	173.3	175.4	177.3
47.5°	161.3	160.2	156.2	151.7	150.7	153.3	156.2	158.8	160.2
50°	144.8	143.2	139.6	135.2	134.2	138.2	140.2	141.7	143.2
52.5°	128.6	127.1	123.1	119.0	119.0	122.1	123.6	124.0	125.6
55°	114.6	113.0	109.0	106.1	105.0	107.5	108.6	108.6	109.5
57.5°	101.5	100.0	95.9	92.4	92.0	93.4	93.4	93.4	94.0
60°	88.9	87.4	83.4	80.3	79.4	79.9	79.4	78.9	79.4
62.5°	77.4	75.9	71.8	68.3	67.4	67.4	65.8	65.3	65.8
65°	66.8	64.3	61.3	57.8	55.8	54.3	52.2	52.2	52.2
67.5°	56.2	54.3	50.8	47.2	44.7	42.2	39.1	40.2	40.7
70°	46.8	45.2	41.2	37.7	34.1	31.2	28.7	29.6	30.2
72.5°	38.2	36.2	32.7	28.7	25.6	21.6	20.1	21.1	21.1
75°	29.6	27.7	24.6	20.6	17.1	13.5	13.5	14.1	14.1
77.5°	22.1	20.1	17.1	13.5	10.6	8.1	8.5	8.5	8.5
80°	15.0	13.5	11.0	8.1	5.6	4.6	4.6	4.6	5.0
82.5°	8.5	7.5	6.0	4.0	2.5	2.5	2.5	2.5	2.5
85°	4.0	3.0	2.5	1.5	1.0	1.0	1.0	1.0	1.0
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)