

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: P581514

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581514
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC407D010-HM40525930-41WWWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 759.4 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

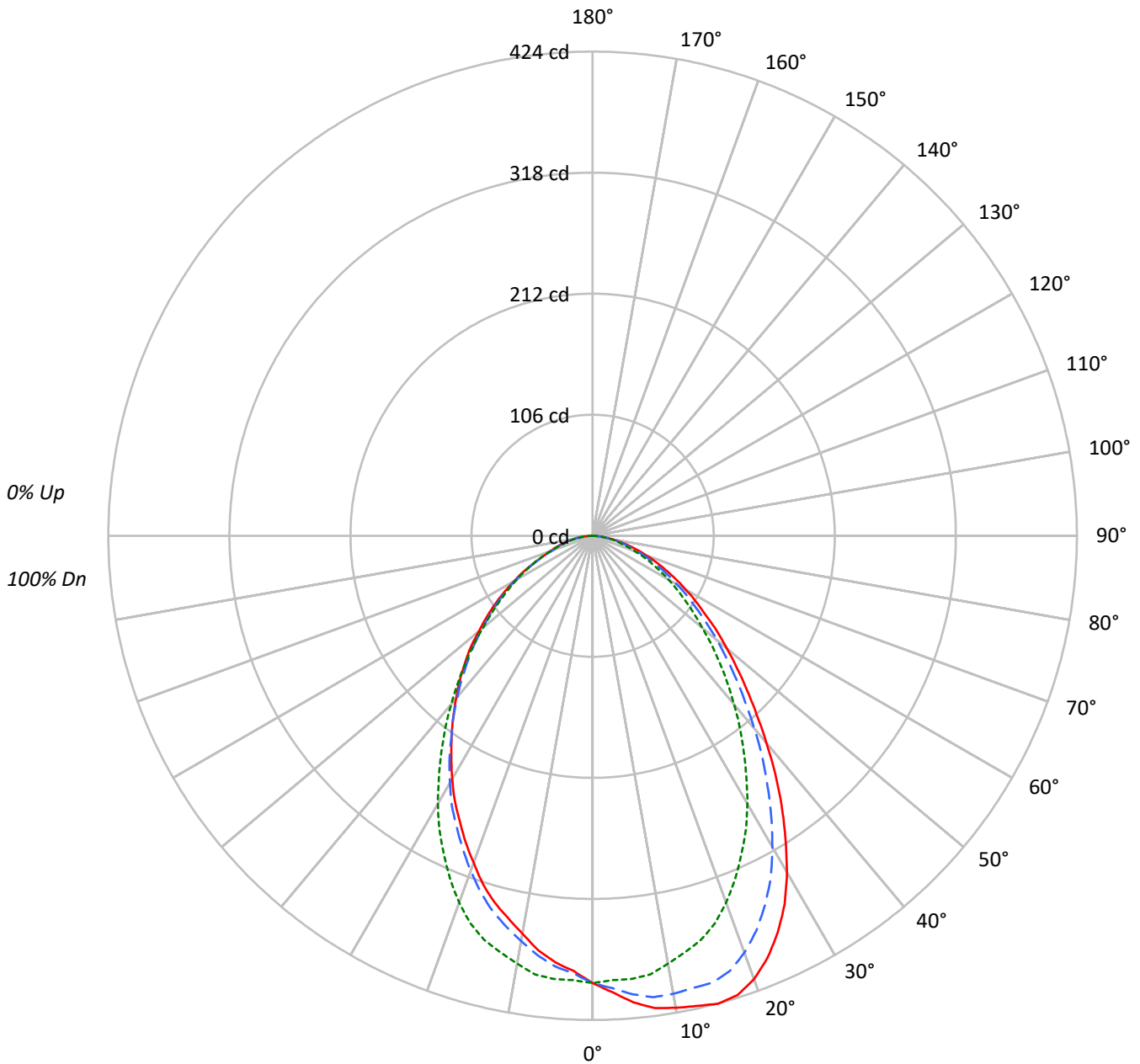
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581514

CATALOG NUMBER: HC407D010-HM40525930-41WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P581514

CATALOG NUMBER: HC407D010-HM40525930-41WWWB

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								
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58								
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46								
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41								
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	48302	48302	48302
5°	50777	48227	46431
10°	52567	47645	44313
15°	54169	46788	42421
20°	54237	44852	39982
25°	52193	41931	37481
30°	48468	38598	35009
35°	43442	34738	32389
40°	38113	30996	29933
45°	33317	27439	27613
50°	29417	24025	24888
55°	25935	21290	22365
60°	23189	18847	19587
65°	20518	16578	16578
70°	17924	14173	14173
75°	15346	11962	13392
80°	12146	10726	12146
85°	7925	9199	11463



TEST NUMBER: P581514

CATALOG NUMBER: HC407D010-HM40525930-41WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.1	4.9
10°-20°	104.5	13.8
20°-30°	146.4	19.3
30°-40°	150.8	19.9
40°-50°	128.4	16.9
50°-60°	95.1	12.5
60°-70°	59.7	7.9
70°-80°	29.7	3.9
80°-90°	7.8	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°	287.9	37.9
0°-40°	438.7	57.8
0°-60°	662.2	87.2
0°-90°	759.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	759.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	392	392	392	392	392	
5°	410	403	390	378	375	39
15°	424	405	366	340	332	119
25°	384	357	308	281	275	175
35°	288	267	231	216	215	180
45°	191	178	157	154	158	148
55°	121	111	99	101	104	109
65°	70	63	57	56	57	70
75°	32	29	25	27	28	34
85°	6	6	6	8	8	7
90°	0	0	0	0	0	



TEST NUMBER: P581514

CATALOG NUMBER: HC407D010-HM40525930-41WWWB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6
2.5°	400.1	398.5	396.6	393.1	389.5	386.5	383.5	382.0	381.5
5°	410.1	407.2	403.1	396.6	389.5	383.5	378.5	376.0	375.0
7.5°	417.2	414.1	407.6	397.6	387.5	378.5	370.4	366.9	365.9
10°	419.7	416.2	407.2	393.5	380.4	369.4	360.4	355.9	353.8
12.5°	421.7	417.2	405.6	389.5	373.5	359.8	350.3	344.2	342.8
15°	424.2	419.2	405.1	385.6	366.4	350.3	339.8	334.2	332.2
17.5°	421.7	416.2	399.6	377.5	355.9	338.2	326.7	321.7	319.7
20°	413.2	407.2	388.5	365.0	341.7	323.6	312.2	307.1	304.6
22.5°	400.1	393.5	374.4	349.4	325.7	308.1	297.0	292.0	290.5
25°	383.5	377.0	356.9	331.3	308.1	291.0	281.4	277.0	275.4
27.5°	363.9	357.3	337.8	312.6	290.5	274.5	266.9	262.4	261.4
30°	340.3	333.8	314.7	291.6	271.0	255.8	249.8	246.3	245.8
32.5°	314.1	308.6	291.0	269.9	250.4	237.7	233.2	230.7	230.2
35°	288.5	282.5	266.9	247.7	230.7	219.6	215.7	215.1	215.1
37.5°	262.4	256.4	243.8	226.2	211.6	201.5	200.1	200.5	200.5
40°	236.7	231.2	220.2	205.5	192.5	184.9	184.5	185.5	185.9
42.5°	212.6	208.1	198.0	185.5	174.5	168.4	168.9	170.9	172.4
45°	191.0	187.0	178.0	166.8	157.3	152.8	154.3	156.8	158.3
47.5°	171.4	167.9	159.3	149.3	141.2	138.3	140.2	143.3	145.2
50°	153.3	150.3	142.2	131.7	125.2	123.1	125.6	128.7	129.7
52.5°	137.2	134.2	125.6	116.6	111.6	110.6	113.1	115.6	117.1
55°	120.6	118.1	111.1	103.0	99.0	98.6	101.1	103.0	104.0
57.5°	107.1	104.6	98.0	90.9	87.5	86.9	89.4	90.9	91.5
60°	94.0	91.5	85.5	78.9	76.4	76.4	78.0	78.9	79.4
62.5°	81.9	79.4	73.9	68.4	66.3	66.3	66.3	66.8	68.4
65°	70.3	68.4	63.4	58.3	56.8	55.8	55.8	55.8	56.8
67.5°	59.9	57.8	53.8	49.3	47.8	46.2	45.7	46.8	46.8
70°	49.7	48.3	44.3	40.7	39.3	37.7	37.2	39.3	39.3
72.5°	40.7	39.3	36.6	33.2	31.6	31.2	32.2	33.2	33.7
75°	32.2	30.6	28.7	26.6	25.1	25.6	27.2	27.7	28.1
77.5°	24.1	23.7	21.6	20.1	20.1	20.6	21.6	22.6	23.1
80°	17.1	16.6	15.6	14.6	15.1	16.0	16.6	17.6	17.1
82.5°	10.6	10.6	10.0	10.0	10.6	11.6	12.1	12.5	13.1
85°	5.6	5.6	5.6	6.0	6.5	7.1	7.5	8.1	8.1
87.5°	1.5	2.0	2.0	2.5	3.1	3.1	3.5	3.5	3.5
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)