

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: P581528

Luminaire Tested: **HC407D010-HM40525935-41RWWC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581528
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC407D010-HM40525935-41RWWC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 816.3 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.15 / 1.21
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

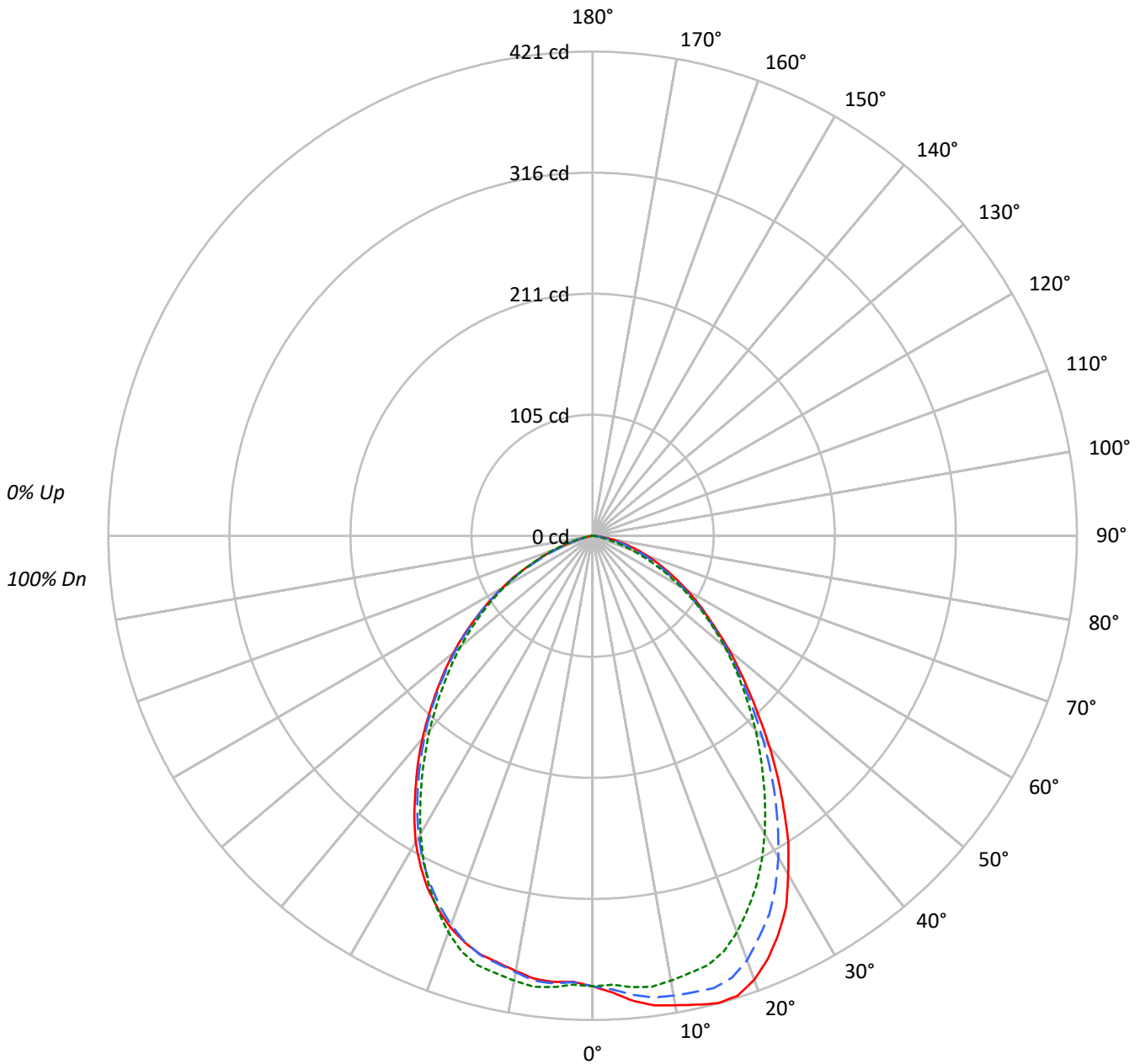
Input Watts (W): 8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P581528

CATALOG NUMBER: HC407D010-HM40525935-41RWWC

Luminous Intensity Polar Plot





TEST NUMBER: P581528

CATALOG NUMBER: HC407D010-HM40525935-41RWWC

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				100															
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88															
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76				76															
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67				67															
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				58															
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52				52															
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46				46															
7	70	58	50	44	69	57	49	44	56	49	44	54	48	44	53	47	43	41				41															
8	66	53	45	40	64	53	45	40	51	44	40	50	44	39	49	43	39	37				37															
9	62	49	42	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34				34															
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31				31															

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	48314	48314	48314
5°	50270	48771	48227
10°	51915	49185	48133
15°	53735	49355	48129
20°	53922	48147	47530
25°	52003	45756	46110
30°	48397	42600	43796
35°	43592	38984	40400
40°	38451	35456	37066
45°	33614	31939	33509
50°	29762	28745	30261
55°	26193	25375	26408
60°	23386	21684	22326
65°	20547	17599	17307
70°	17924	12983	11829
75°	14869	7816	6291
80°	11294	2983	1847
85°	5378	849	849



TEST NUMBER: P581528

CATALOG NUMBER: HC407D010-HM40525935-41RWWC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.8	4.6
10°-20°	110.3	13.5
20°-30°	159.7	19.6
30°-40°	168.5	20.6
40°-50°	145.8	17.9
50°-60°	108.0	13.2
60°-70°	62.3	7.6
70°-80°	21.7	2.7
80°-90°	2.3	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°	307.7	37.7
0°-40°	476.2	58.3
0°-60°	730.0	89.4
0°-90°	816.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	816.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	392	392	392	392	392	
5°	406	401	394	391	390	39
15°	421	407	386	377	377	118
25°	382	363	336	334	339	175
35°	290	276	259	265	268	181
45°	193	187	183	190	192	150
55°	122	119	118	122	123	110
65°	70	66	60	57	59	70
75°	31	26	16	13	13	34
85°	4	2	1	1	1	6
90°	0	0	0	0	0	



TEST NUMBER: P581528

CATALOG NUMBER: HC407D010-HM40525935-41RWWC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	391.7	391.7	391.7	391.7	391.7	391.7	391.7	391.7	391.7
2.5°	397.5	396.5	394.9	392.7	390.7	389.1	388.5	388.1	388.1
5°	406.0	403.9	400.7	396.5	393.9	392.3	390.7	389.5	389.5
7.5°	411.8	409.7	404.9	399.1	395.5	392.3	390.1	388.5	388.5
10°	414.5	411.8	406.0	398.6	392.7	388.5	385.3	384.3	384.3
12.5°	417.6	414.5	406.5	397.0	389.5	384.3	381.1	380.1	380.1
15°	420.8	417.1	407.1	395.9	386.5	380.1	377.4	376.9	376.9
17.5°	419.2	414.5	402.9	389.5	379.0	372.7	370.0	370.0	370.5
20°	410.8	406.0	392.7	377.9	366.8	362.1	359.9	361.0	362.1
22.5°	398.1	392.3	377.9	363.7	352.0	347.8	347.8	349.4	351.0
25°	382.1	376.9	363.1	347.2	336.2	333.0	334.0	336.6	338.8
27.5°	364.2	358.4	344.0	329.2	318.2	316.6	319.2	322.9	324.0
30°	339.8	335.0	322.9	308.6	299.1	298.5	302.3	304.9	307.5
32.5°	316.6	311.2	299.6	285.9	278.9	279.5	283.7	286.9	288.5
35°	289.5	284.7	276.3	265.2	258.9	259.9	264.7	267.9	268.3
37.5°	264.1	260.9	252.5	244.0	239.2	241.4	245.6	249.3	249.3
40°	238.8	236.1	229.8	222.8	220.2	222.8	227.0	230.2	230.2
42.5°	214.4	212.8	207.5	202.8	201.2	204.8	208.6	211.2	210.6
45°	192.7	191.1	187.4	183.7	183.1	186.9	190.0	191.6	192.1
47.5°	173.1	172.1	168.9	166.3	166.3	169.9	172.5	174.1	174.7
50°	155.1	154.1	151.4	149.3	149.8	153.5	155.7	157.2	157.7
52.5°	137.1	136.6	134.4	131.8	133.4	136.0	138.7	139.7	140.3
55°	121.8	121.8	119.1	117.0	118.0	120.7	122.2	122.8	122.8
57.5°	108.0	107.4	104.2	102.2	102.6	105.4	106.4	107.0	107.0
60°	94.8	94.2	91.0	87.9	87.9	89.4	90.0	90.5	90.5
62.5°	82.0	81.5	77.8	75.2	74.1	73.6	73.6	74.7	76.7
65°	70.4	69.9	66.1	61.9	60.3	58.7	57.1	58.3	59.3
67.5°	59.9	58.7	55.1	51.3	47.7	45.0	42.3	43.9	46.1
70°	49.7	48.7	44.5	40.3	36.0	31.8	29.6	31.8	32.8
72.5°	40.3	39.1	34.9	30.7	25.4	21.2	20.6	21.2	21.7
75°	31.2	30.7	26.5	21.7	16.4	13.2	13.2	13.2	13.2
77.5°	23.3	22.2	18.0	13.8	9.6	7.4	6.8	6.8	6.8
80°	15.9	14.8	11.2	8.0	4.2	3.2	3.2	2.6	2.6
82.5°	9.0	8.4	5.8	3.2	1.6	1.0	1.0	1.0	1.0
85°	3.8	3.2	2.2	1.0	0.6	0.6	0.6	0.6	0.6
87.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
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)