

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: P581545

Luminaire Tested: **HC407D010-HM40525940-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P581545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC407D010-HM40525940-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 817.3 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

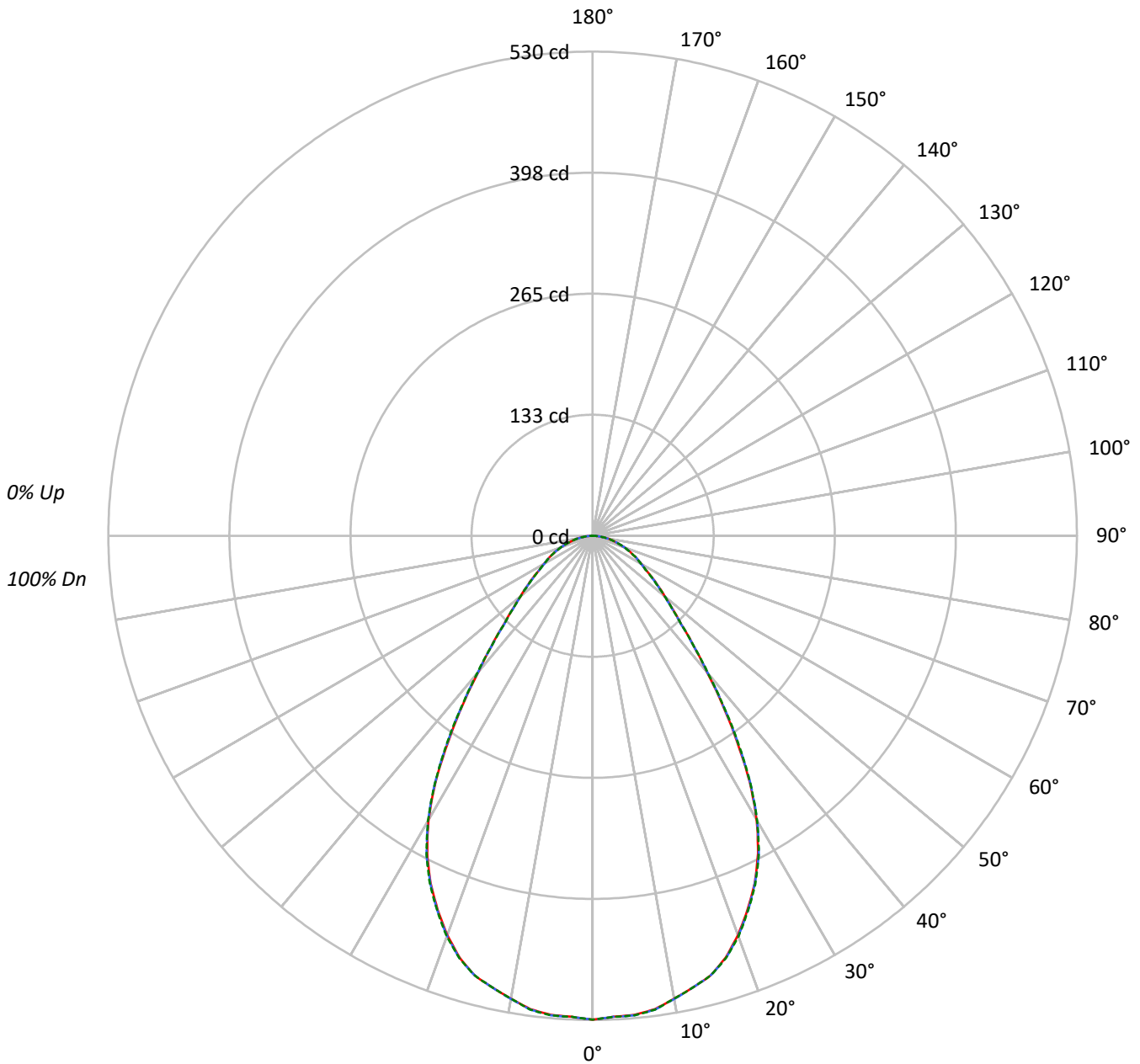
Input Watts (W): 8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89																			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78																			
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69																			
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51																			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																			
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42																			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39																			
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	65336	65336	65336
5°	65177	65251	65251
10°	64428	64490	64428
15°	63644	63644	63644
20°	61037	61181	61260
25°	57093	57161	57324
30°	51160	51317	51317
35°	41544	41860	41951
40°	31350	31511	31607
45°	24003	23915	23915
50°	19784	19669	19669
55°	16989	16860	16860
60°	15172	15023	15023
65°	14243	14243	14243
70°	13271	13271	13271
75°	12057	12248	12057
80°	11294	10939	11294
85°	9341	9341	9341



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	6.1
10°-20°	139.7	17.1
20°-30°	191.9	23.5
30°-40°	172.6	21.1
40°-50°	109.0	13.3
50°-60°	71.2	8.7
60°-70°	48.3	5.9
70°-80°	27.1	3.3
80°-90°	7.6	0.9
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°	381.5	46.7
0°-40°	554.1	67.8
0°-60°	734.3	89.8
0°-90°	817.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	817.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	526	526	527	527	527	50
15°	498	498	498	498	498	140
25°	420	420	420	421	421	191
35°	276	277	278	279	279	172
45°	138	137	137	137	137	109
55°	79	79	78	79	78	71
65°	49	49	49	49	49	48
75°	25	26	26	26	25	27
85°	7	7	7	7	7	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	529.7	529.7	529.7	529.7	529.7
2.5°	527.0	527.0	527.0	527.0	527.0
5°	526.4	526.4	527.0	527.0	527.0
7.5°	522.6	523.1	523.1	523.1	523.1
10°	514.4	514.4	514.9	514.9	514.4
12.5°	506.6	506.6	506.6	507.2	506.6
15°	498.4	498.4	498.4	498.4	498.4
17.5°	484.2	484.8	484.8	484.8	484.8
20°	465.0	466.1	466.1	466.7	466.7
22.5°	443.0	443.6	444.2	444.7	444.2
25°	419.5	420.0	420.0	421.2	421.2
27.5°	392.0	392.6	393.7	393.7	393.7
30°	359.2	359.7	360.3	360.3	360.3
32.5°	320.2	320.2	321.4	321.8	321.4
35°	275.9	276.9	278.0	279.2	278.6
37.5°	233.6	234.7	235.2	235.2	235.8
40°	194.7	195.7	195.7	196.9	196.3
42.5°	164.0	163.4	163.4	164.6	164.0
45°	137.6	137.1	137.1	137.1	137.1
47.5°	118.5	117.9	117.9	117.9	117.9
50°	103.1	102.5	102.5	102.5	102.5
52.5°	90.5	89.9	89.9	89.9	89.3
55°	79.0	79.0	78.4	79.0	78.4
57.5°	68.5	68.5	68.5	68.5	68.5
60°	61.5	60.9	60.9	60.9	60.9
62.5°	54.9	54.9	54.9	54.9	54.9
65°	48.8	48.8	48.8	48.8	48.8
67.5°	42.8	42.2	42.8	42.8	42.2
70°	36.8	36.2	36.8	36.8	36.8
72.5°	30.7	30.7	30.7	31.3	30.7
75°	25.3	25.7	25.7	25.7	25.3
77.5°	20.3	20.8	20.3	20.3	20.3
80°	15.9	15.4	15.4	15.4	15.9
82.5°	10.9	10.9	10.9	10.9	10.9
85°	6.6	6.6	6.6	6.6	6.6
87.5°	2.7	2.7	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)