

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: P593675

Luminaire Tested: **HC830D010-HM82555950-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593675
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC830D010-HM82555950-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3520.6 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

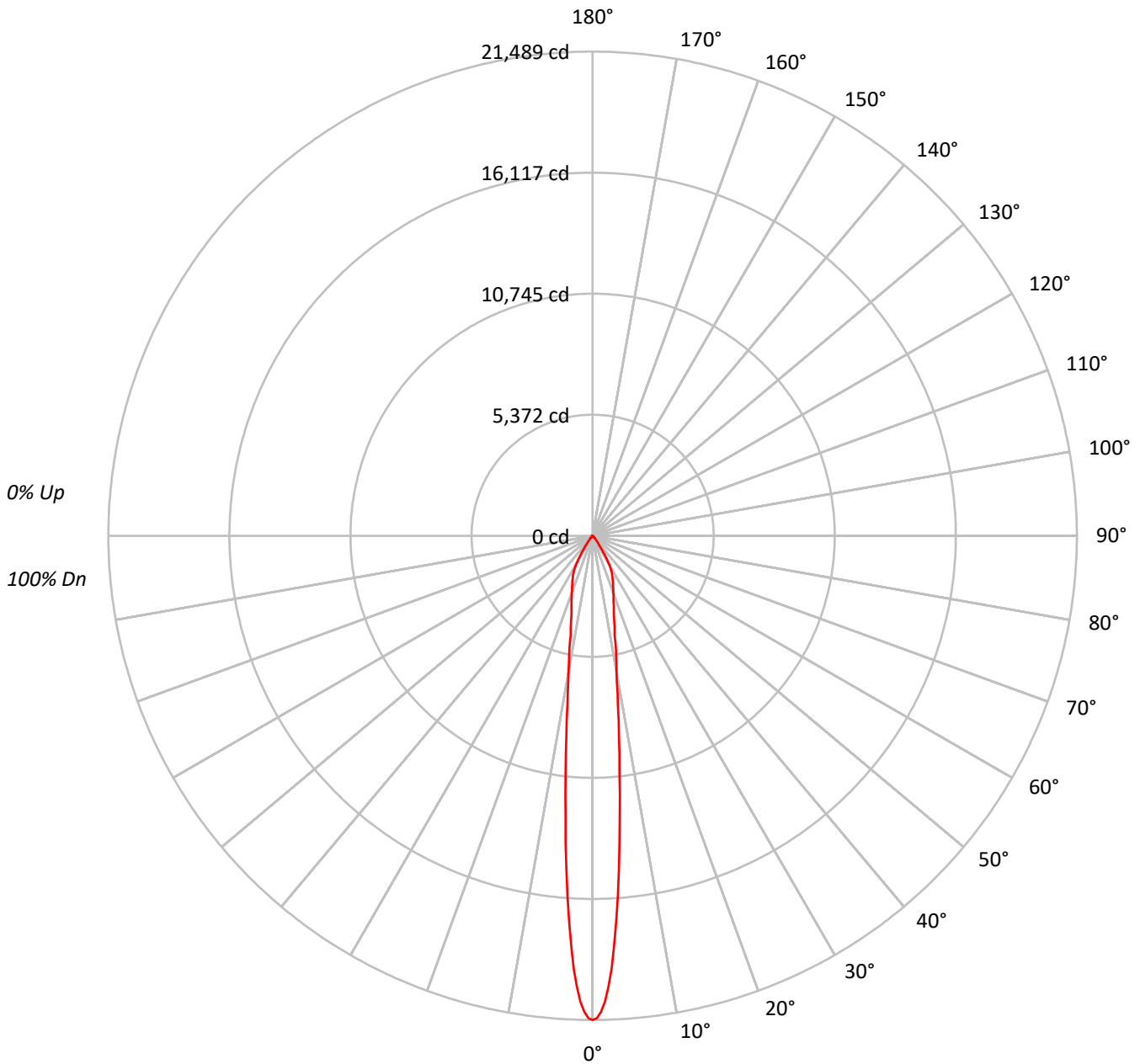
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	100	100
1	115	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87	87	87	87
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83	83	83	83
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80	80	80	80
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76	76	76	76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73	73	73	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	71	71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68	68	68	68
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66	66	66	66

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	662629
5°	425025
10°	191999
15°	115846
20°	88280
25°	71291
30°	52242
35°	18916
40°	7061
45°	3205
50°	1022
55°	258
60°	148
65°	175
70°	0
75°	0
80°	426
85°	849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1047.2	29.7
10°-20°	1063.7	30.2
20°-30°	952.2	27.0
30°-40°	383.6	10.9
40°-50°	62.9	1.8
50°-60°	5.7	0.2
60°-70°	2.1	0.1
70°-80°	1.6	0.0
80°-90°	2.3	0.1
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°	3063.1	87.0
0°-40°	3446.6	97.9
0°-60°	3515.3	99.8
0°-90°	3521.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3520.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	21489	
5°	13731	###
15°	3629	1064
25°	2095	952
35°	502	384
45°	74	63
55°	5	6
65°	2	2
75°	0	2
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	21488.6
0.5°	21422.2
1°	21144.9
1.5°	20699.3
2°	20023.8
2.5°	19225.1
3°	18224.8
3.5°	17127.3
4°	16041.8
4.5°	14825.9
5°	13730.8
5.5°	12538.6
6°	11571.5
6.5°	10564.1
7°	9772.5
7.5°	8935.8
8°	8262.6
8.5°	7587.1
9°	7079.9
9.5°	6520.5
10°	6131.8
12.5°	4522.4
15°	3628.8
17.5°	3100.3
20°	2690.2
22.5°	2363.1
25°	2095.3
27.5°	1827.5
30°	1467.2
32.5°	943.4
35°	502.5
37.5°	277.3
40°	175.4
42.5°	116.2
45°	73.5
47.5°	45.1
50°	21.3
52.5°	7.1
55°	4.8
57.5°	2.4
60°	2.4
62.5°	2.4
65°	2.4



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	2.4
80°	2.4
82.5°	2.4
85°	2.4
87.5°	2.4
90°	0.0



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— 0°-180°







67.5°		2.4
70°		0.0



(END OF REPORT)