

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: P584289

Luminaire Tested: **HC830D010-HM82555840-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584289
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-HM82555840-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3699.0 lumens
Efficiency: N/A
Efficacy: 132.1 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

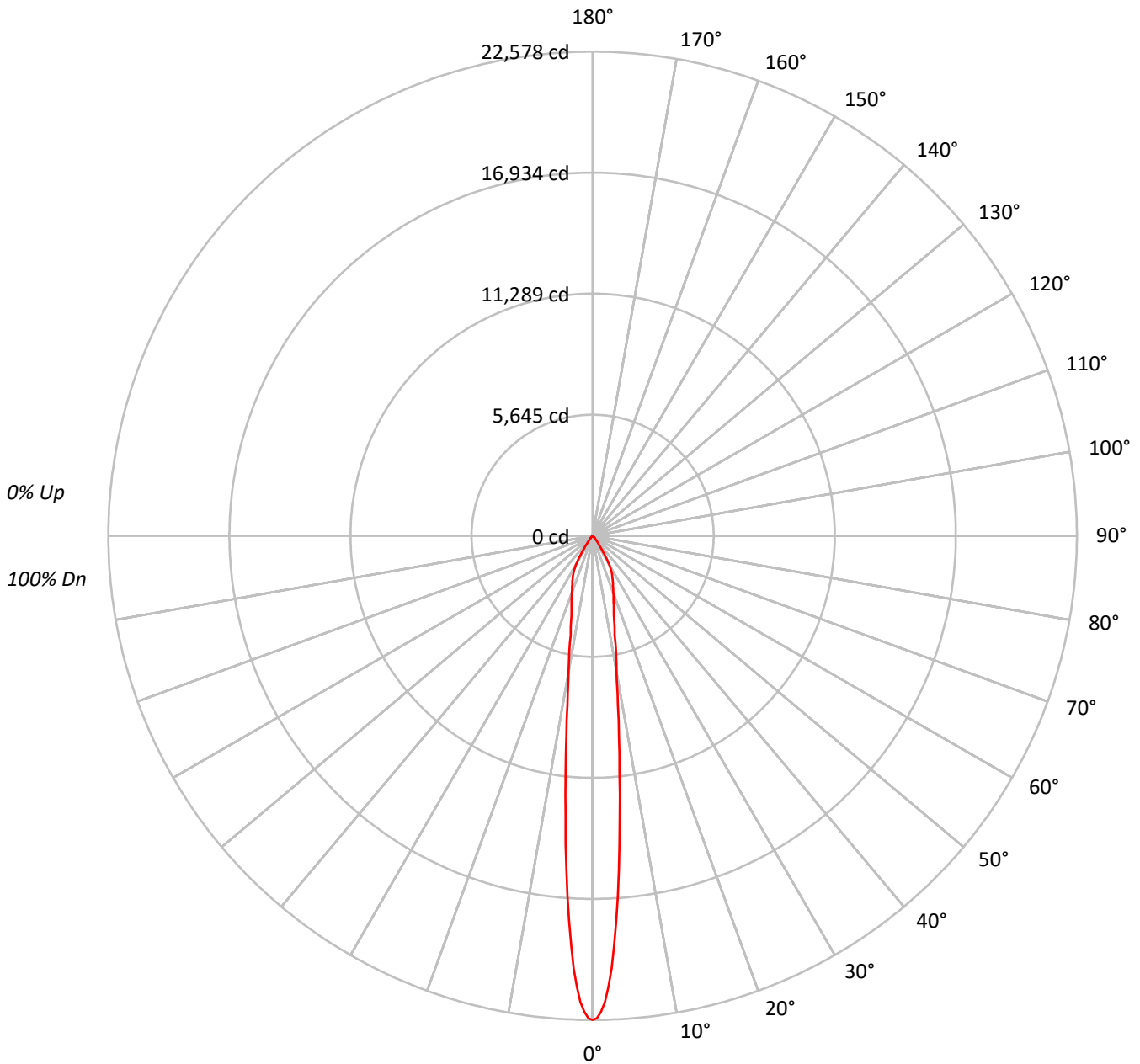
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20																	
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	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	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	96	94	93	91	91	90	89	87	87	85	83	83	81	80													
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	89	89	87	87	85	83	83	81	80	78	76	76	73	71												
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87	87	85	83	83	81	80	78	76	76	73	71	71	68	68	66												
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83	83	81	80	78	76	76	73	71	71	68	68	66	66	66	66												
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80	78	76	76	73	71	71	68	68	66	66	66	66	66	66	66												
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76	76	73	71	71	68	68	66	66	66	66	66	66	66	66	66	66											
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73	73	71	71	68	68	66	66	66	66	66	66	66	66	66	66	66											
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	68	68	66	66	66	66	66	66	66	66	66	66	66	66	66											
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68	68	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66											
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66											

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	696216
5°	446566
10°	201731
15°	121720
20°	92756
25°	74907
30°	54888
35°	19872
40°	7419
45°	3367
50°	1079
55°	269
60°	154
65°	182
70°	0
75°	0
80°	444
85°	885



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1100.3	29.7
10°-20°	1117.6	30.2
20°-30°	1000.5	27.0
30°-40°	403.0	10.9
40°-50°	66.1	1.8
50°-60°	6.0	0.2
60°-70°	2.2	0.1
70°-80°	1.7	0.0
80°-90°	2.4	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°	3218.3	87.0
0°-40°	3621.3	97.9
0°-60°	3693.4	99.8
0°-90°	3699.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3699.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	22578	
5°	14427	###
15°	3813	1118
25°	2202	1000
35°	528	403
45°	77	66
55°	5	6
65°	2	2
75°	0	2
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	22577.8
0.5°	22508.0
1°	22216.7
1.5°	21748.5
2°	21038.8
2.5°	20199.4
3°	19148.5
3.5°	17995.5
4°	16854.9
4.5°	15577.3
5°	14426.7
5.5°	13174.1
6°	12158.0
6.5°	11099.7
7°	10267.8
7.5°	9388.7
8°	8681.5
8.5°	7971.7
9°	7438.7
9.5°	6851.0
10°	6442.6
12.5°	4751.6
15°	3812.8
17.5°	3257.4
20°	2826.6
22.5°	2482.9
25°	2201.6
27.5°	1920.1
30°	1541.5
32.5°	991.2
35°	527.9
37.5°	291.4
40°	184.3
42.5°	122.0
45°	77.2
47.5°	47.3
50°	22.5
52.5°	7.5
55°	5.0
57.5°	2.5
60°	2.5
62.5°	2.5
65°	2.5



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	2.5
80°	2.5
82.5°	2.5
85°	2.5
87.5°	2.5
90°	0.0



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— 0°-180°







67.5°		2.5
70°		0.0



(END OF REPORT)