

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: P584034

Luminaire Tested: **HC820D010-HM80520927-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584034
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: HC820D010-HM80520927-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1755.3 lumens
Efficiency: N/A
Efficacy: 87.8 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

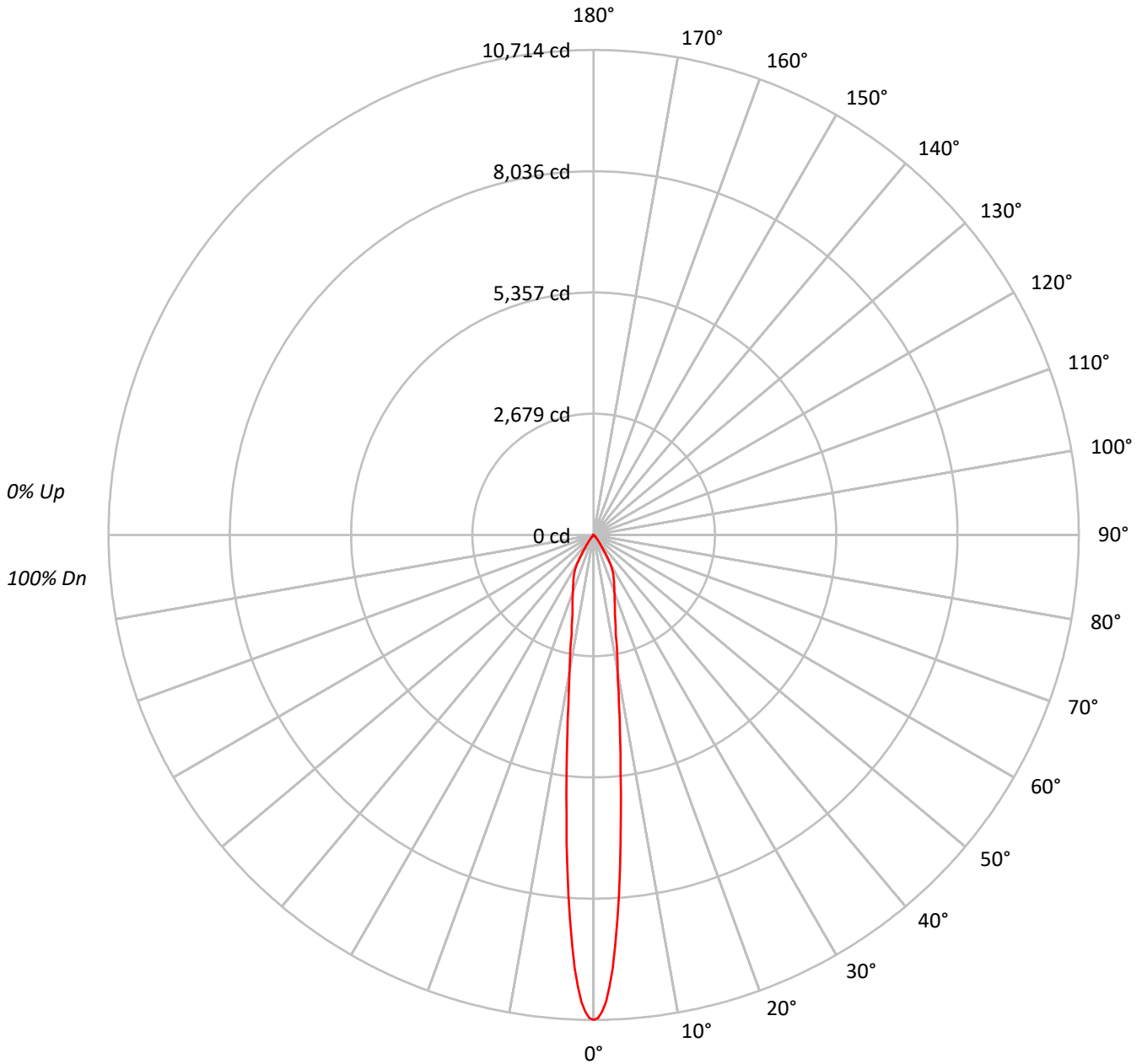
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	330377
5°	211912
10°	95727
15°	57760
20°	44015
25°	35545
30°	26046
35°	9434
40°	3522
45°	1596
50°	509
55°	129
60°	74
65°	88
70°	0
75°	0
80°	213
85°	425



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	522.1	29.7
10°-20°	530.3	30.2
20°-30°	474.7	27.0
30°-40°	191.2	10.9
40°-50°	31.4	1.8
50°-60°	2.9	0.2
60°-70°	1.0	0.1
70°-80°	0.8	0.0
80°-90°	1.1	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°	1527.2	87.0
0°-40°	1718.4	97.9
0°-60°	1752.7	99.8
0°-90°	1755.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1755.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	10714	
5°	6846	522
15°	1809	530
25°	1045	475
35°	251	191
45°	37	31
55°	2	3
65°	1	1
75°	0	1
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	10713.9
0.5°	10680.8
1°	10542.5
1.5°	10320.4
2°	9983.5
2.5°	9585.3
3°	9086.6
3.5°	8539.5
4°	7998.2
4.5°	7392.0
5°	6846.0
5.5°	6251.6
6°	5769.3
6.5°	5267.1
7°	4872.4
7.5°	4455.3
8°	4119.6
8.5°	3782.9
9°	3529.9
9.5°	3251.1
10°	3057.2
12.5°	2254.8
15°	1809.3
17.5°	1545.7
20°	1341.3
22.5°	1178.2
25°	1044.7
27.5°	911.1
30°	731.5
32.5°	470.3
35°	250.6
37.5°	138.3
40°	87.5
42.5°	57.9
45°	36.6
47.5°	22.5
50°	10.6
52.5°	3.5
55°	2.4
57.5°	1.2
60°	1.2
62.5°	1.2
65°	1.2



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	1.2
80°	1.2
82.5°	1.2
85°	1.2
87.5°	1.2
90°	0.0



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— 0°-180°







67.5°		1.2
70°		0.0



(END OF REPORT)