

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: P593587

Luminaire Tested: **HC820D010-HM80520850-81NDH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593587
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC820D010-HM80520850-81NDH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2191.3 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

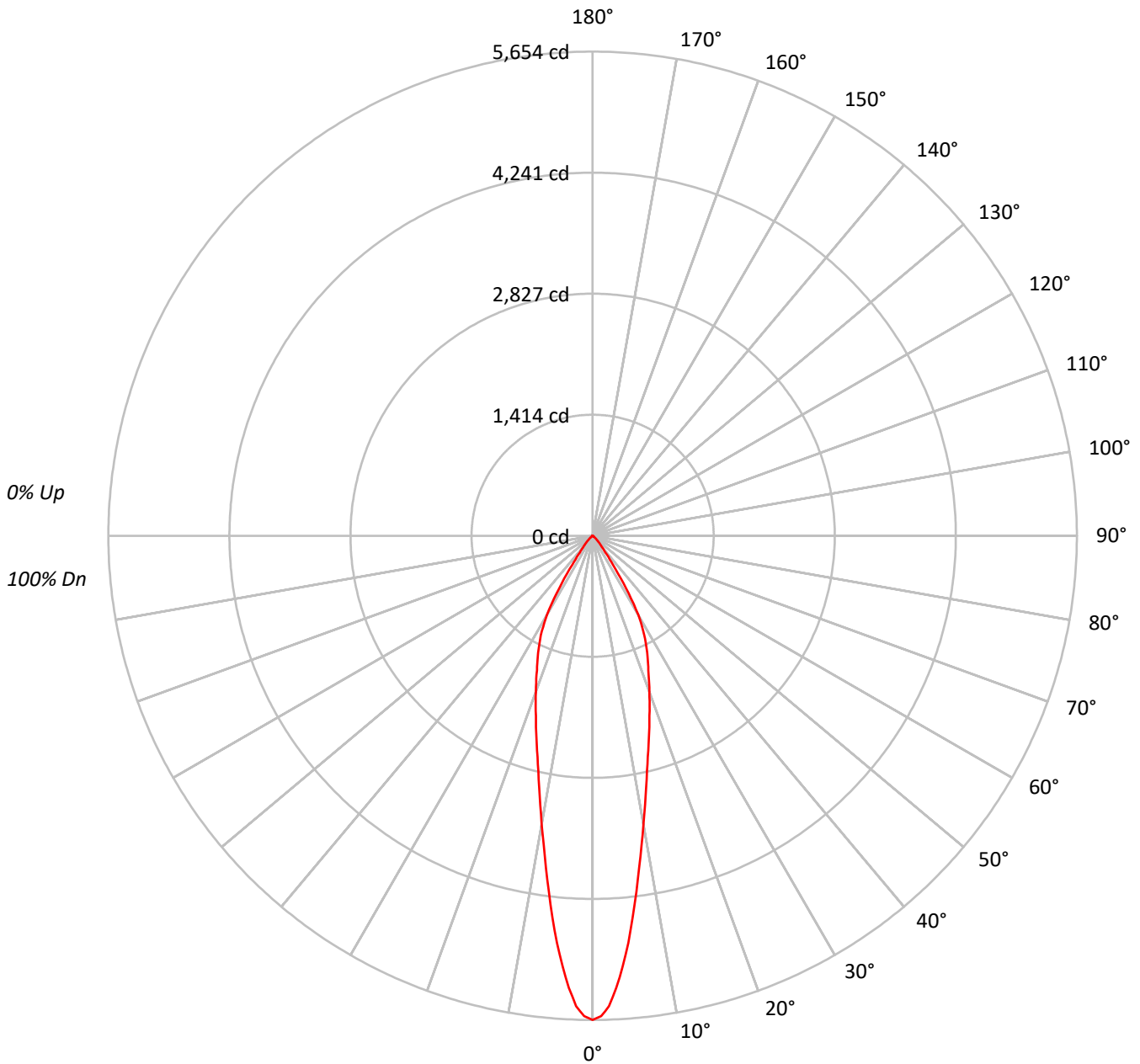
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
1	114	112	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95			95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84			84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80			80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75			75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72			72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68			68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65			65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62			62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59			59

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	174355
5°	147716
10°	107175
15°	80484
20°	63504
25°	51223
30°	37957
35°	15378
40°	6485
45°	3480
50°	1559
55°	790
60°	506
65°	350
70°	298
75°	203
80°	302
85°	601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	409.7	18.7
10°-20°	708.1	32.3
20°-30°	684.6	31.2
30°-40°	300.7	13.7
40°-50°	65.0	3.0
50°-60°	14.6	0.7
60°-70°	5.0	0.2
70°-80°	2.0	0.1
80°-90°	1.6	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°	1802.4	82.3
0°-40°	2103.1	96.0
0°-60°	2182.7	99.6
0°-90°	2191.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2191.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	5654	
5°	4772	410
15°	2521	708
25°	1506	685
35°	408	301
45°	80	65
55°	15	15
65°	5	5
75°	2	2
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	5654.2
1°	5611.9
2°	5496.4
3°	5288.0
4°	5039.0
5°	4772.1
6°	4480.7
7°	4187.8
8°	3912.8
9°	3657.2
10°	3422.8
11°	3201.4
12°	3002.9
13°	2822.3
14°	2662.7
15°	2521.1
17.5°	2203.7
20°	1935.2
22.5°	1699.2
25°	1505.5
27.5°	1308.6
30°	1066.0
32.5°	724.3
35°	408.5
37.5°	240.9
40°	161.1
42.5°	113.9
45°	79.8
47.5°	52.1
50°	32.5
52.5°	19.5
55°	14.7
57.5°	11.3
60°	8.2
62.5°	6.5
65°	4.8
67.5°	3.3
70°	3.3
72.5°	1.7
75°	1.7
77.5°	1.7
80°	1.7
82.5°	1.7



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CANDELA DISTRIBUTION (continued):

0°
90° | 0.0



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— 0°-180°







85°	1.7
87.5°	1.7



(END OF REPORT)