

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: P584003

Luminaire Tested: **HC820D010-HM80520835-81NDH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584003
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-HM80520835-81NDH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2039.5 lumens
Efficiency: N/A
Efficacy: 102.0 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

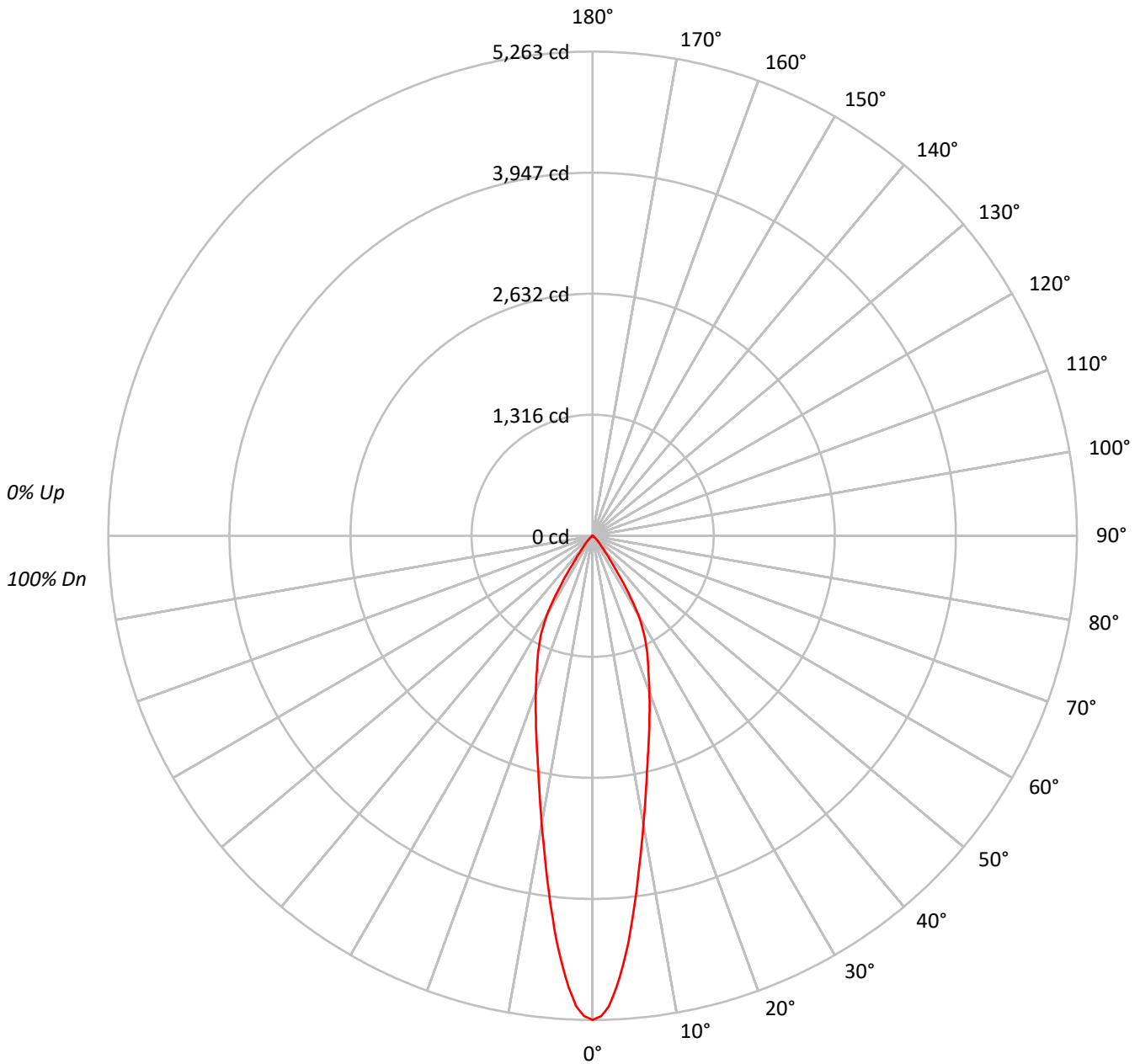
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95																																				
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89																																				
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84																																				
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80																																				
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75																																				
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72																																				
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68																																				
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65																																				
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62																																				
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59																																				

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	162288
5°	137489
10°	99754
15°	74913
20°	59107
25°	47678
30°	35333
35°	14312
40°	6038
45°	3236
50°	1454
55°	731
60°	469
65°	328
70°	279
75°	179
80°	266
85°	531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.4	18.7
10°-20°	659.1	32.3
20°-30°	637.2	31.2
30°-40°	279.9	13.7
40°-50°	60.5	3.0
50°-60°	13.6	0.7
60°-70°	4.7	0.2
70°-80°	1.8	0.1
80°-90°	1.4	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°	1677.6	82.3
0°-40°	1957.5	96.0
0°-60°	2031.6	99.6
0°-90°	2039.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2039.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	5263	
5°	4442	381
15°	2347	659
25°	1401	637
35°	380	280
45°	74	60
55°	14	14
65°	4	5
75°	2	2
85°	2	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	5262.9
1°	5223.4
2°	5115.8
3°	4922.0
4°	4690.2
5°	4441.7
6°	4170.6
7°	3897.9
8°	3641.9
9°	3404.0
10°	3185.8
11°	2979.8
12°	2795.0
13°	2626.9
14°	2478.4
15°	2346.6
17.5°	2051.2
20°	1801.2
22.5°	1581.5
25°	1401.3
27.5°	1217.9
30°	992.3
32.5°	674.1
35°	380.2
37.5°	224.2
40°	150.0
42.5°	106.0
45°	74.2
47.5°	48.5
50°	30.3
52.5°	18.2
55°	13.6
57.5°	10.6
60°	7.6
62.5°	6.0
65°	4.5
67.5°	3.1
70°	3.1
72.5°	1.5
75°	1.5
77.5°	1.5
80°	1.5
82.5°	1.5



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CANDELA DISTRIBUTION (continued):

0°
90° | 0.0



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— 0°-180°







85°		1.5
87.5°		1.5



(END OF REPORT)