

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: P584051

Luminaire Tested: **HC820D010-HM80520930-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584051
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-HM80520930-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1943.8 lumens
Efficiency: N/A
Efficacy: 97.2 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

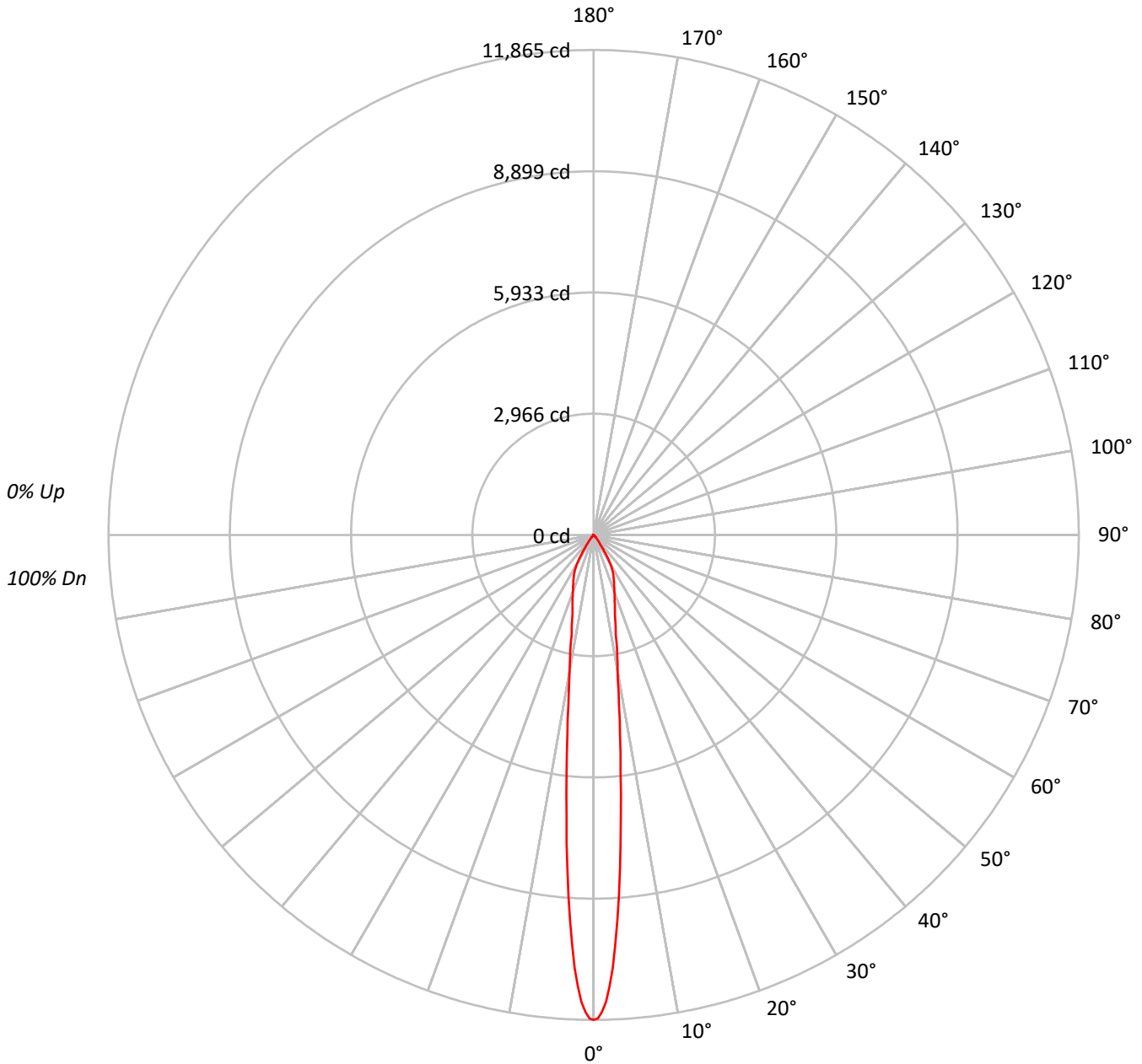
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			
1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96			
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91			
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87			
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83			
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80			
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76			
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73			
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71			
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68			
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	365885
5°	234685
10°	106016
15°	63966
20°	48744
25°	39362
30°	28845
35°	10442
40°	3897
45°	1766
50°	566
55°	140
60°	80
65°	95
70°	0
75°	0
80°	231
85°	460



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	578.2	29.7
10°-20°	587.3	30.2
20°-30°	525.8	27.0
30°-40°	211.8	10.9
40°-50°	34.7	1.8
50°-60°	3.1	0.2
60°-70°	1.1	0.1
70°-80°	0.9	0.0
80°-90°	1.2	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°	1691.3	87.0
0°-40°	1903.1	97.9
0°-60°	1940.9	99.9
0°-90°	1944.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	11865	
5°	7582	578
15°	2004	587
25°	1157	526
35°	277	212
45°	40	35
55°	3	3
65°	1	1
75°	0	1
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	11865.4
0.5°	11828.7
1°	11675.6
1.5°	11429.6
2°	11056.5
2.5°	10615.5
3°	10063.2
3.5°	9457.2
4°	8857.8
4.5°	8186.4
5°	7581.7
5.5°	6923.4
6°	6389.4
6.5°	5833.2
7°	5396.1
7.5°	4934.1
8°	4562.4
8.5°	4189.4
9°	3909.3
9.5°	3600.5
10°	3385.8
12.5°	2497.1
15°	2003.7
17.5°	1711.9
20°	1485.4
22.5°	1304.8
25°	1156.9
27.5°	1009.1
30°	810.1
32.5°	520.9
35°	277.4
37.5°	153.1
40°	96.8
42.5°	64.2
45°	40.5
47.5°	24.8
50°	11.8
52.5°	3.9
55°	2.6
57.5°	1.3
60°	1.3
62.5°	1.3
65°	1.3



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	1.3
80°	1.3
82.5°	1.3
85°	1.3
87.5°	1.3
90°	0.0



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— 0°-180°







67.5°		1.3
70°		0.0



(END OF REPORT)