

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: P583977

Luminaire Tested: **HC820D010-HM80520827-81WDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC820D010-HM80520827-81WDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2445.6 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.05
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

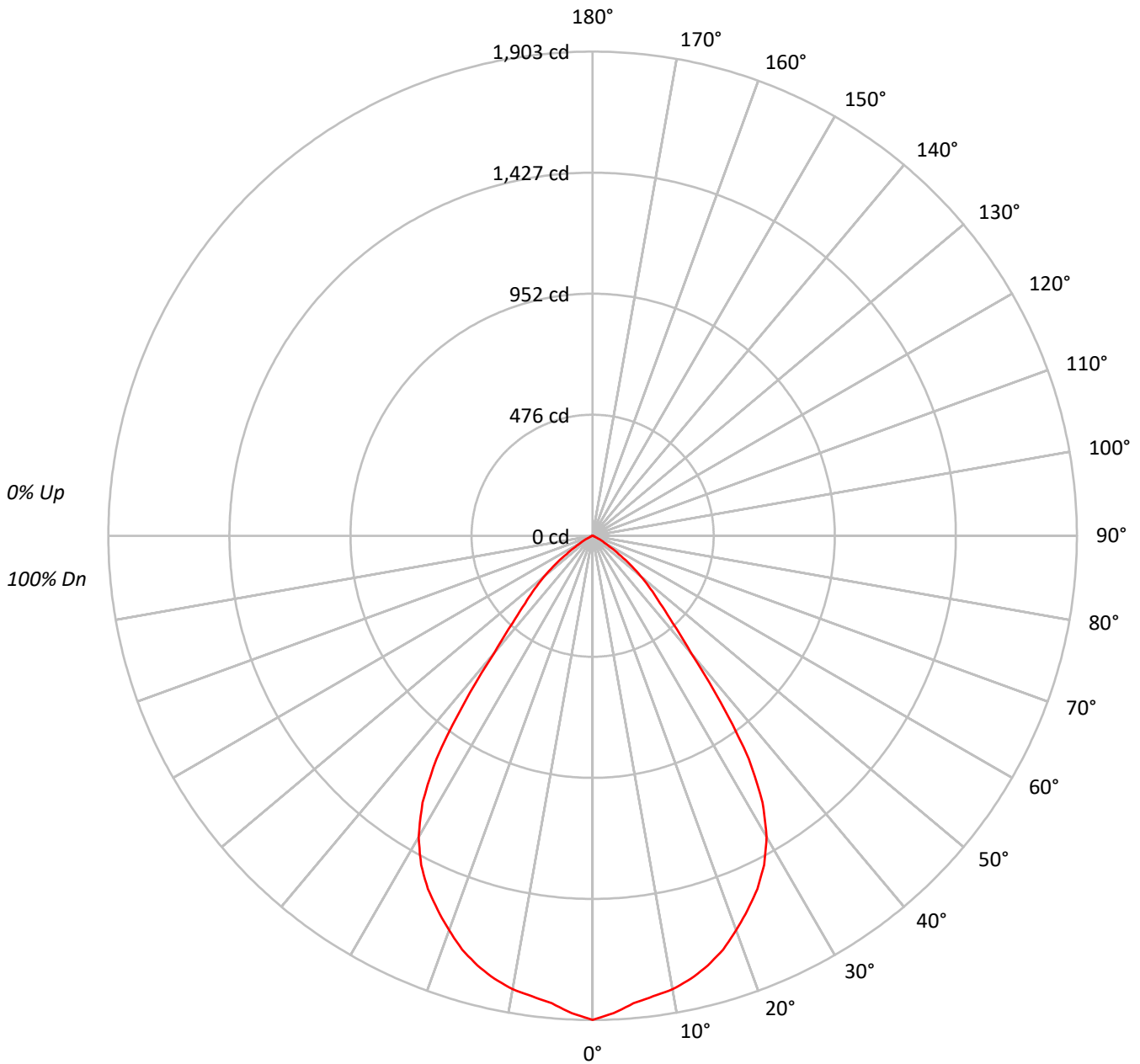
Input Watts (W): 20
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84	84	84	84
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	77	77	77	77
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	71	70	70	70	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	64
6	83	73	66	62	82	72	66	61	71	65	61	69	64	61	68	64	60	59	59	59	59
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	63	59	55	54	54	54	54
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50	50	50	50
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46	46	46	46
10	66	55	49	45	65	55	49	45	54	48	44	53	48	44	52	48	44	43	43	43	43

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	58678
5°	57098
10°	56668
15°	55819
20°	54132
25°	52111
30°	48678
35°	40283
40°	24321
45°	16380
50°	11806
55°	6731
60°	2960
65°	1058
70°	397
75°	167
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.3	7.2
10°-20°	491.4	20.1
20°-30°	701.0	28.7
30°-40°	638.3	26.1
40°-50°	301.1	12.3
50°-60°	118.4	4.8
60°-70°	18.9	0.8
70°-80°	1.3	0.1
80°-90°	0.0	0.0
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°	1367.6	55.9
0°-40°	2006.0	82.0
0°-60°	2425.5	99.2
0°-90°	2445.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2445.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1903	
5°	1845	175
15°	1748	491
25°	1532	701
35°	1070	638
45°	376	301
55°	125	118
65°	14	19
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1902.9
2.5°	1878.2
5°	1844.6
7.5°	1825.7
10°	1809.8
12.5°	1783.5
15°	1748.5
17.5°	1704.9
20°	1649.6
22.5°	1591.3
25°	1531.6
27.5°	1458.8
30°	1367.1
32.5°	1243.3
35°	1070.1
37.5°	826.9
40°	604.2
42.5°	464.4
45°	375.6
47.5°	308.6
50°	246.1
52.5°	184.9
55°	125.2
57.5°	78.6
60°	48.0
62.5°	29.1
65°	14.5
67.5°	7.3
70°	4.4
72.5°	1.4
75°	1.4
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)