

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: P580021

Luminaire Tested: **HC420D010-HM40525840-41WDBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580021
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC420D010-HM40525840-41WDBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1809.7 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.03
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

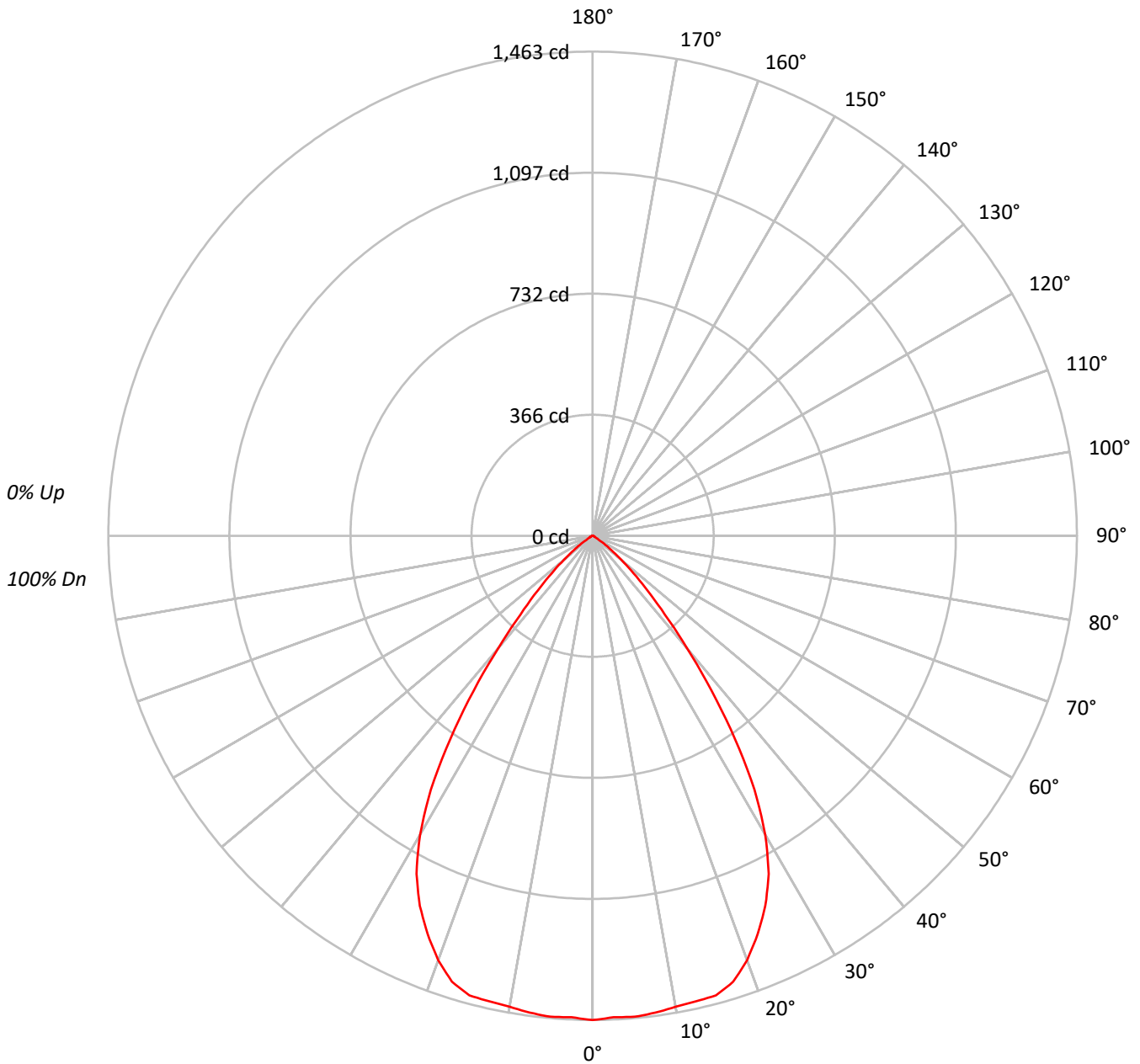
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78	78	78	78
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	73	72	72	72	72
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66	66	66	66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61	61	61	61
7	80	70	64	59	79	69	63	59	68	63	59	67	62	58	66	61	58	56	56	56	56
8	76	65	59	55	74	65	59	54	64	58	54	63	58	54	62	57	54	52	52	52	52
9	72	61	55	51	71	61	55	51	60	54	50	59	54	50	58	53	50	49	49	49	49
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45	45	45	45

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	180479
5°	180649
10°	180984
15°	183641
20°	179054
25°	167998
30°	148594
35°	112993
40°	71201
45°	40871
50°	21684
55°	9010
60°	2393
65°	2043
70°	1479
75°	1334
80°	994
85°	1981



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	7.7
10°-20°	402.7	22.3
20°-30°	562.0	31.1
30°-40°	462.5	25.6
40°-50°	190.5	10.5
50°-60°	42.9	2.4
60°-70°	6.9	0.4
70°-80°	2.6	0.1
80°-90°	1.0	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°	1103.4	61.0
0°-40°	1565.9	86.5
0°-60°	1799.3	99.4
0°-90°	1809.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1809.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1463	
5°	1459	139
15°	1438	403
25°	1234	562
35°	750	462
45°	234	190
55°	42	43
65°	7	7
75°	3	3
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1463.2
2.5°	1456.2
5°	1459.0
7.5°	1453.4
10°	1445.0
12.5°	1440.9
15°	1438.1
17.5°	1413.0
20°	1364.1
22.5°	1302.8
25°	1234.4
27.5°	1152.2
30°	1043.3
32.5°	909.5
35°	750.4
37.5°	590.0
40°	442.2
42.5°	322.2
45°	234.3
47.5°	167.3
50°	113.0
52.5°	71.1
55°	41.9
57.5°	20.9
60°	9.7
62.5°	8.4
65°	7.0
67.5°	5.6
70°	4.1
72.5°	2.8
75°	2.8
77.5°	1.4
80°	1.4
82.5°	1.4
85°	1.4
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)