

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: P580063

Luminaire Tested: **HC420D010-HM40525930-41MDC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580063
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC420D010-HM40525930-41MDC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

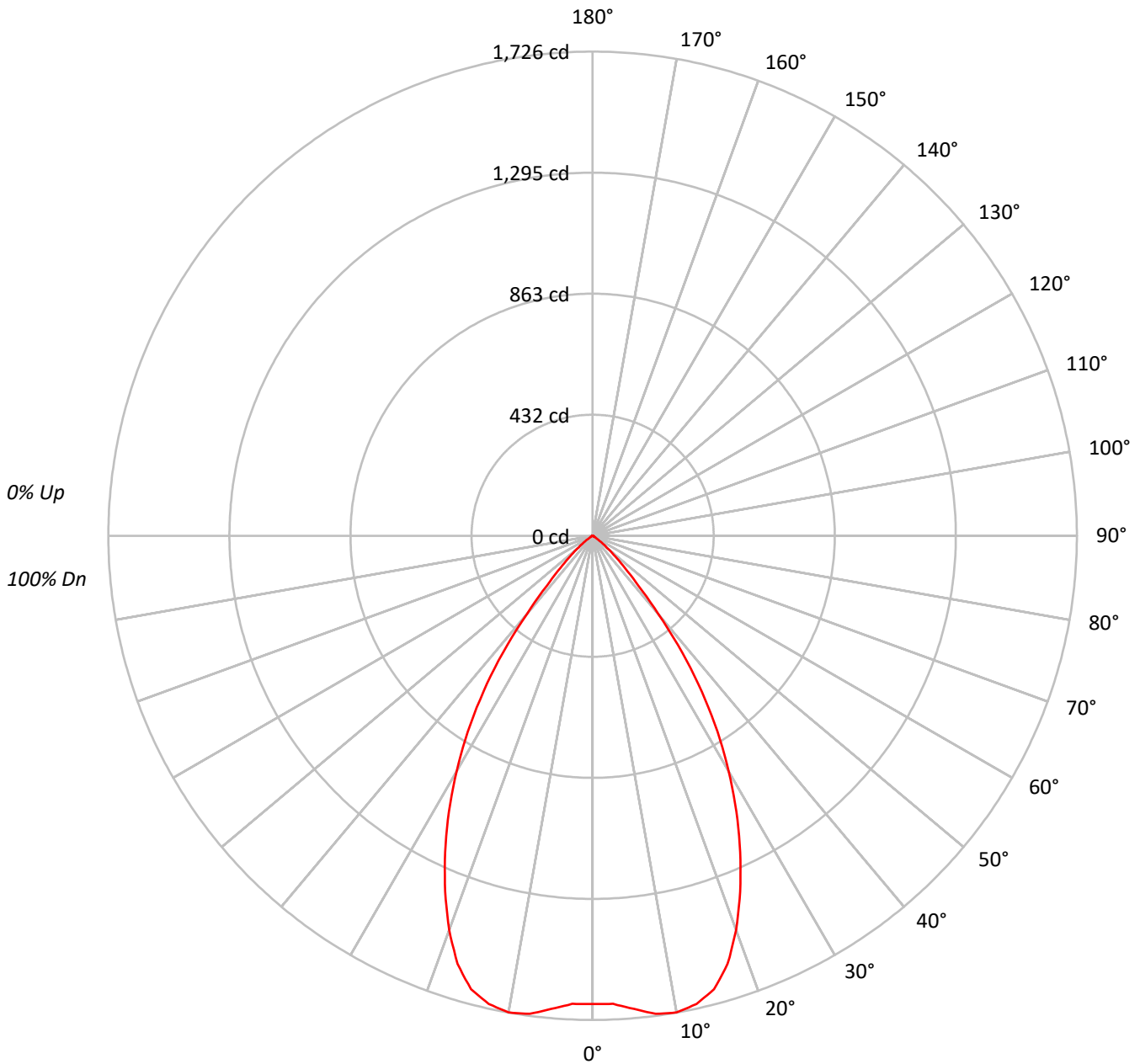
Lumens per Lamp: N/A
Luminaire Lumens: 1777.4 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 0.96
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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			
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86			
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80			
4	97	89	83	79	95	88	82	78	86	81	77	84	80	77	82	78	76	74			
5	91	83	77	72	90	82	76	72	80	75	72	78	74	71	77	73	70	69			
6	87	78	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64			
7	82	73	66	62	81	72	66	62	71	65	62	69	65	61	68	64	61	60			
8	78	68	62	58	77	68	62	58	67	61	57	65	61	57	65	60	57	56			
9	74	64	58	54	73	64	58	54	63	57	54	62	57	54	61	57	53	52			
10	71	61	55	51	69	60	54	51	59	54	50	58	54	50	58	53	50	49			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	205876
5°	209659
10°	216116
15°	213726
20°	196249
25°	169304
30°	137984
35°	102167
40°	58594
45°	28329
50°	13490
55°	4710
60°	1702
65°	992
70°	829
75°	524
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.9	9.2
10°-20°	464.0	26.1
20°-30°	566.6	31.9
30°-40°	416.6	23.4
40°-50°	138.1	7.8
50°-60°	24.4	1.4
60°-70°	3.7	0.2
70°-80°	1.2	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°	1193.5	67.2
0°-40°	1610.0	90.6
0°-60°	1772.5	99.7
0°-90°	1777.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1777.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1669	
5°	1693	163
15°	1674	464
25°	1244	567
35°	678	417
45°	162	138
55°	22	24
65°	3	4
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1669.1
2.5°	1670.3
5°	1693.3
7.5°	1718.7
10°	1725.5
12.5°	1709.4
15°	1673.7
17.5°	1600.0
20°	1495.1
22.5°	1373.1
25°	1244.0
27.5°	1109.3
30°	968.8
32.5°	828.2
35°	678.5
37.5°	526.4
40°	363.9
42.5°	240.8
45°	162.4
47.5°	108.3
50°	70.3
52.5°	41.5
55°	21.9
57.5°	9.2
60°	6.9
62.5°	4.6
65°	3.4
67.5°	2.3
70°	2.3
72.5°	1.1
75°	1.1
77.5°	1.1
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)