

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: P584082

Luminaire Tested: **HC820D010-HM80520940-81MDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584082
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC820D010-HM80520940-81MDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

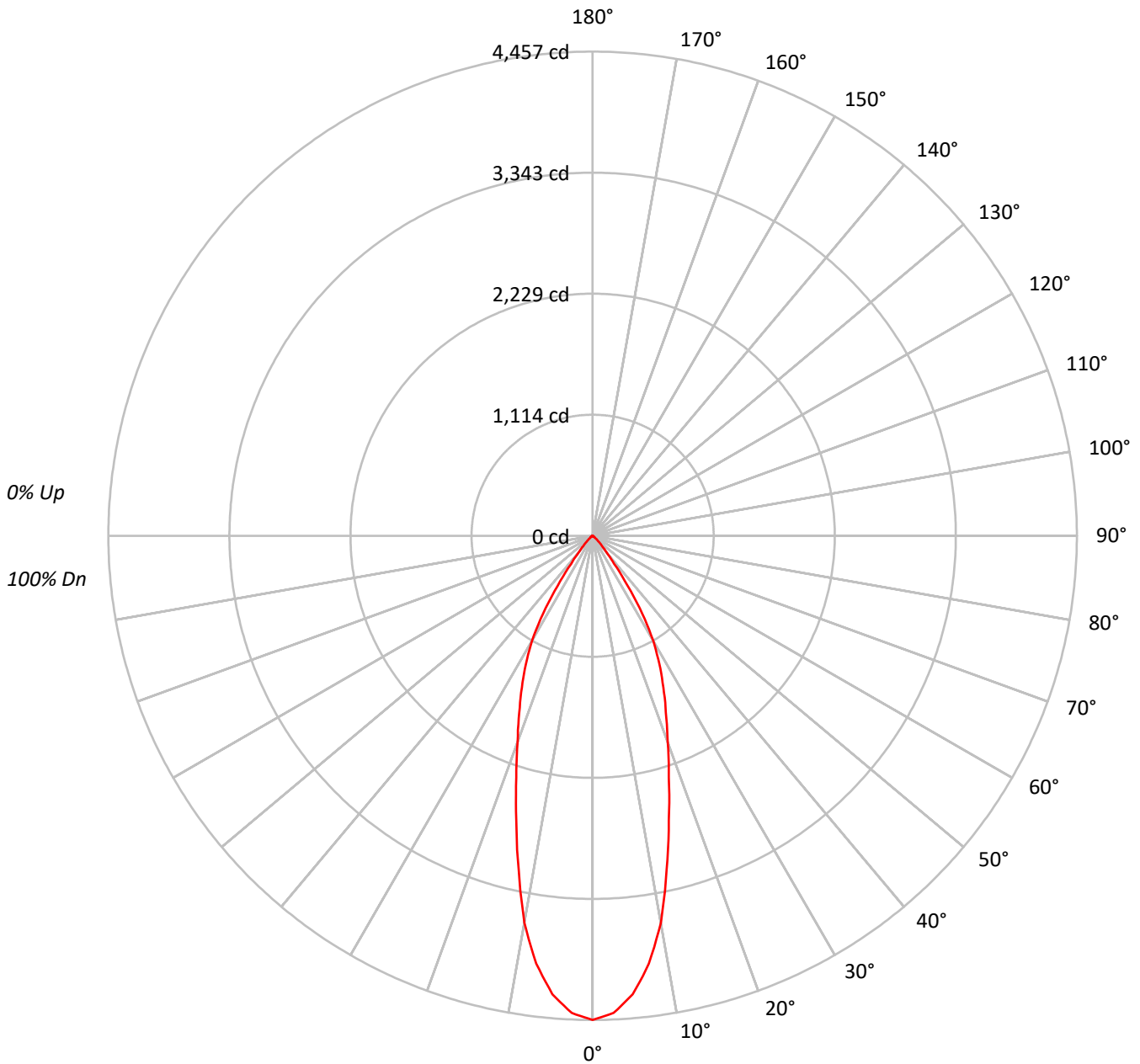
Lumens per Lamp: N/A
Luminaire Lumens: 2300.3 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.67
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P584082
CATALOG NUMBER: HC820D010-HM80520940-81MDC

Luminous Intensity Polar Plot





TEST NUMBER: P584082

CATALOG NUMBER: HC820D010-HM80520940-81MDC

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	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95	95	95	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89	89	89
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84	84	84	84
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79	79	79	79
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75	75	75	75
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71	71	71	71
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67	67	67	67
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64	64	64	64
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61	61	61	61
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	65	62	59	58	58	58	58

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	137441
5°	131134
10°	113215
15°	86575
20°	66241
25°	52407
30°	39588
35°	21058
40°	8023
45°	3851
50°	1641
55°	688
60°	265
65°	204
70°	126
75°	0
80°	0
85°	0



TEST NUMBER: P584082

CATALOG NUMBER: HC820D010-HM80520940-81MDC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.6	16.7
10°-20°	757.1	32.9
20°-30°	705.1	30.7
30°-40°	363.8	15.8
40°-50°	74.1	3.2
50°-60°	12.7	0.6
60°-70°	2.4	0.1
70°-80°	0.5	0.0
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°	1846.7	80.3
0°-40°	2210.5	96.1
0°-60°	2297.4	99.9
0°-90°	2300.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2300.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4457	
5°	4236	385
15°	2712	757
25°	1540	705
35°	559	364
45°	88	74
55°	13	13
65°	3	2
75°	0	1
85°	0	0
90°	0	



TEST NUMBER: P584082

CATALOG NUMBER: HC820D010-HM80520940-81MDC

CANDELA DISTRIBUTION (FULL):

	0°
0°	4457.1
2.5°	4397.3
5°	4236.4
7.5°	3971.6
10°	3615.7
12.5°	3148.8
15°	2711.9
17.5°	2333.1
20°	2018.6
22.5°	1762.4
25°	1540.3
27.5°	1329.6
30°	1111.8
32.5°	852.7
35°	559.4
37.5°	324.6
40°	199.3
42.5°	131.0
45°	88.3
47.5°	55.6
50°	34.2
52.5°	20.0
55°	12.8
57.5°	5.7
60°	4.3
62.5°	2.8
65°	2.8
67.5°	1.4
70°	1.4
72.5°	1.4
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)