

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: P584060

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

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584060  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC820D010-HM80520930-81WDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2010.7 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.06  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

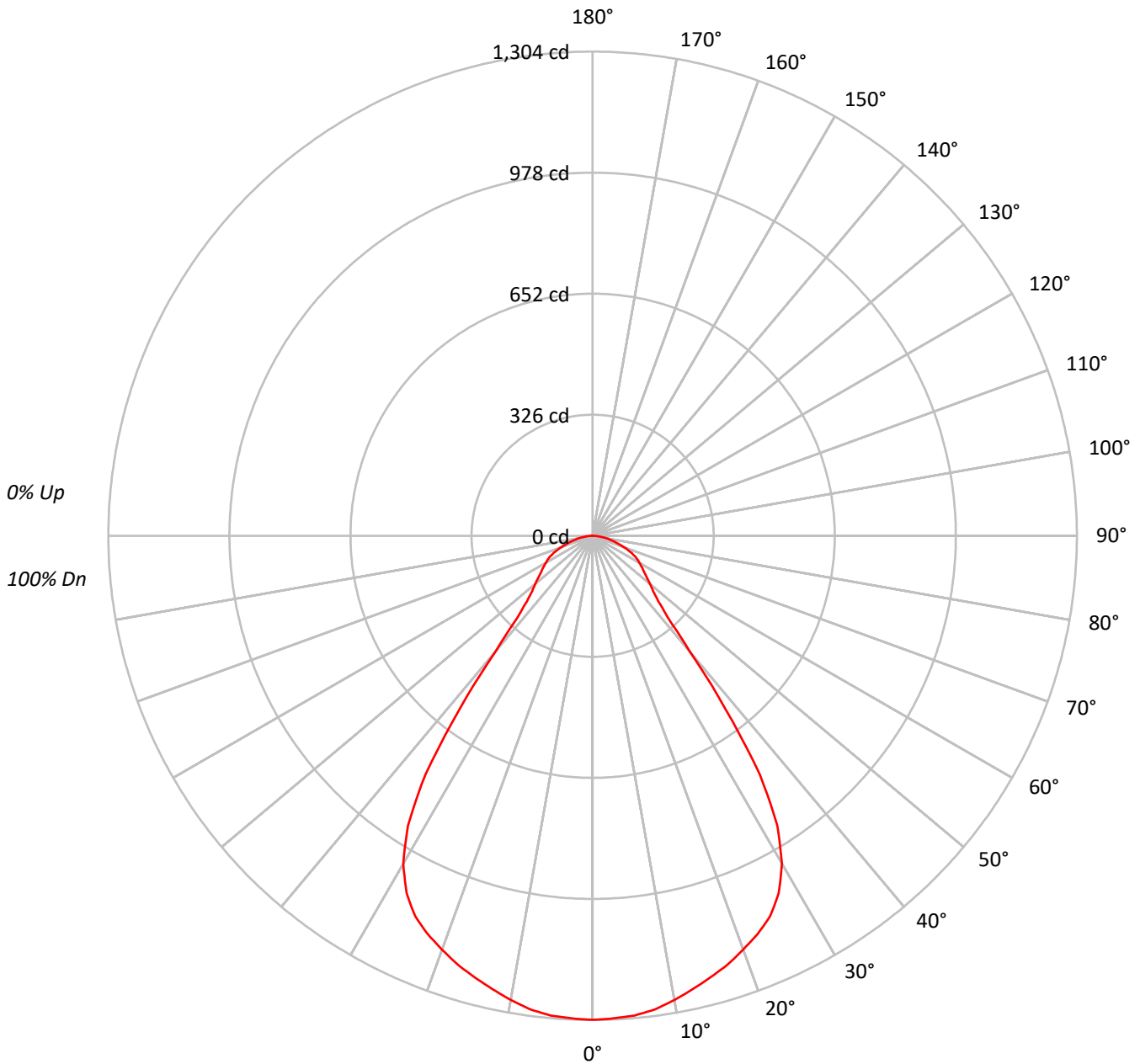
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P584060

CATALOG NUMBER: HC820D010-HM80520930-81WDW

### Luminous Intensity Polar Plot





TEST NUMBER: P584060

CATALOG NUMBER: HC820D010-HM80520930-81WDW

**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
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89			89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70			70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63			63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57			57
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52			52
7	74	63	56	50	73	62	55	50	61	54	50	59	54	50	58	53	49	48			48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			44
9	66	54	47	43	65	54	47	42	53	47	42	52	46	42	51	46	42	40			40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			37

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	40198
5°	40147
10°	39754
15°	39276
20°	38912
25°	38474
30°	36305
35°	29562
40°	16335
45°	10902
50°	9667
55°	9075
60°	8961
65°	8880
70°	8024
75°	7172
80°	6269
85°	5555



TEST NUMBER: P584060

CATALOG NUMBER: HC820D010-HM80520930-81WDW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.9	6.1
10°-20°	347.4	17.3
20°-30°	516.2	25.7
30°-40°	464.9	23.1
40°-50°	206.1	10.2
50°-60°	152.6	7.6
60°-70°	118.7	5.9
70°-80°	64.4	3.2
80°-90°	17.6	0.9
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°	986.5	49.1
0°-40°	1451.4	72.2
0°-60°	1810.1	90.0
0°-90°	2010.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2010.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1304	
5°	1297	123
15°	1230	347
25°	1131	516
35°	785	465
45°	250	206
55°	169	153
65°	122	119
75°	60	64
85°	16	18
90°	0	



TEST NUMBER: P584060

CATALOG NUMBER: HC820D010-HM80520930-81WDW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1303.6
2.5°	1301.0
5°	1297.0
7.5°	1286.6
10°	1269.6
12.5°	1250.0
15°	1230.3
17.5°	1210.6
20°	1185.8
22.5°	1161.0
25°	1130.8
27.5°	1085.0
30°	1019.6
32.5°	925.4
35°	785.3
37.5°	586.4
40°	405.8
42.5°	299.8
45°	250.0
47.5°	221.2
50°	201.5
52.5°	183.2
55°	168.8
57.5°	157.1
60°	145.3
62.5°	134.9
65°	121.7
67.5°	106.0
70°	89.0
72.5°	74.6
75°	60.2
77.5°	47.2
80°	35.3
82.5°	24.8
85°	15.7
87.5°	6.5
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)