

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: P582559

Luminaire Tested: **HC645D010-HM64560827-61MDC**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P582559  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC645D010-HM64560827-61MDC  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4811.5 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 0.96  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

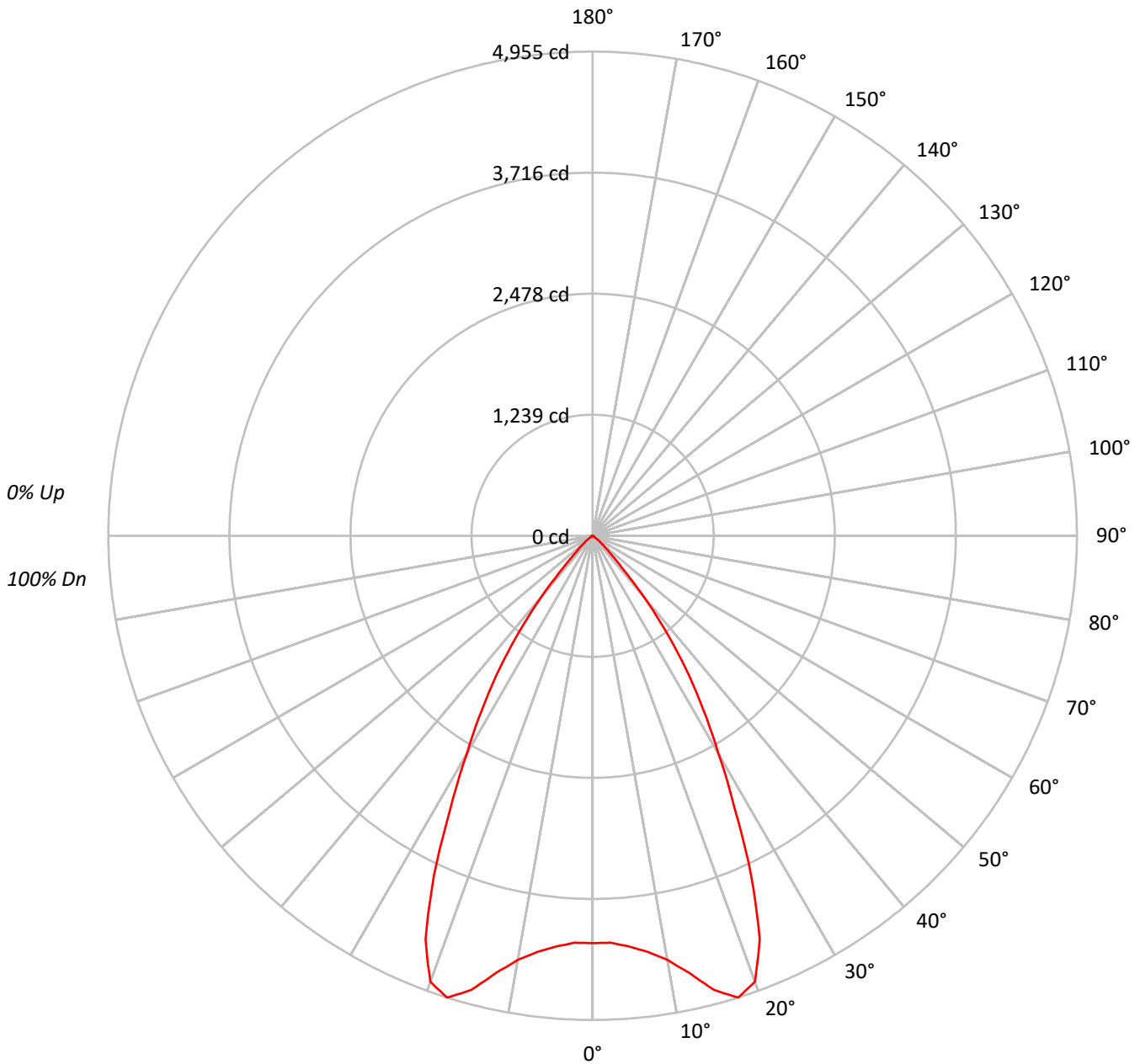
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P582559

CATALOG NUMBER: HC645D010-HM64560827-61MDC

### Luminous Intensity Polar Plot





TEST NUMBER: P582559

CATALOG NUMBER: HC645D010-HM64560827-61MDC

**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	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	90	89	87			
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81			
4	97	90	84	80	95	89	83	80	86	82	79	84	81	78	83	79	77	75			
5	92	84	78	74	91	83	78	73	81	76	73	80	75	72	78	74	72	70			
6	88	79	73	68	86	78	72	68	76	71	68	75	71	67	74	70	67	65			
7	83	74	68	64	82	73	68	63	72	67	63	71	66	63	70	66	62	61			
8	79	70	63	59	78	69	63	59	68	63	59	67	62	59	66	62	58	57			
9	75	66	60	56	74	65	59	55	64	59	55	63	58	55	62	58	55	54			
10	72	62	56	52	71	61	56	52	61	55	52	60	55	52	59	55	52	50			

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

	0°
0°	228490
5°	232049
10°	245264
15°	273095
20°	283210
25°	232368
30°	162829
35°	111086
40°	57858
45°	20343
50°	9100
55°	2915
60°	1667
65°	1180
70°	978
75°	635
80°	0
85°	0



TEST NUMBER: P582559

CATALOG NUMBER: HC645D010-HM64560827-61MDC

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	408.5	8.5
10°-20°	1353.3	28.1
20°-30°	1723.1	35.8
30°-40°	1026.9	21.3
40°-50°	249.0	5.2
50°-60°	38.2	0.8
60°-70°	9.4	0.2
70°-80°	3.2	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°	3484.8	72.4
0°-40°	4511.8	93.8
0°-60°	4799.0	99.7
0°-90°	4811.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4811.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4168	
5°	4217	408
15°	4812	1353
25°	3842	1723
35°	1660	1027
45°	262	249
55°	30	38
65°	9	9
75°	3	3
85°	0	0
90°	0	



TEST NUMBER: P582559

CATALOG NUMBER: HC645D010-HM64560827-61MDC

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4168.0
2.5°	4168.0
5°	4216.8
7.5°	4293.2
10°	4406.0
12.5°	4583.0
15°	4811.9
17.5°	4955.2
20°	4854.6
22.5°	4467.0
25°	3841.6
27.5°	3152.0
30°	2572.3
32.5°	2102.4
35°	1659.9
37.5°	1223.6
40°	808.5
42.5°	436.4
45°	262.4
47.5°	164.8
50°	106.7
52.5°	64.0
55°	30.5
57.5°	18.3
60°	15.2
62.5°	12.2
65°	9.1
67.5°	6.1
70°	6.1
72.5°	3.0
75°	3.0
77.5°	3.0
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)