

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: P581639

Luminaire Tested: **HC610D010-HM60525927-61WWWB**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581639  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-18)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC610D010-HM60525927-61WWWB  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 878.2 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.09 / 1.17  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

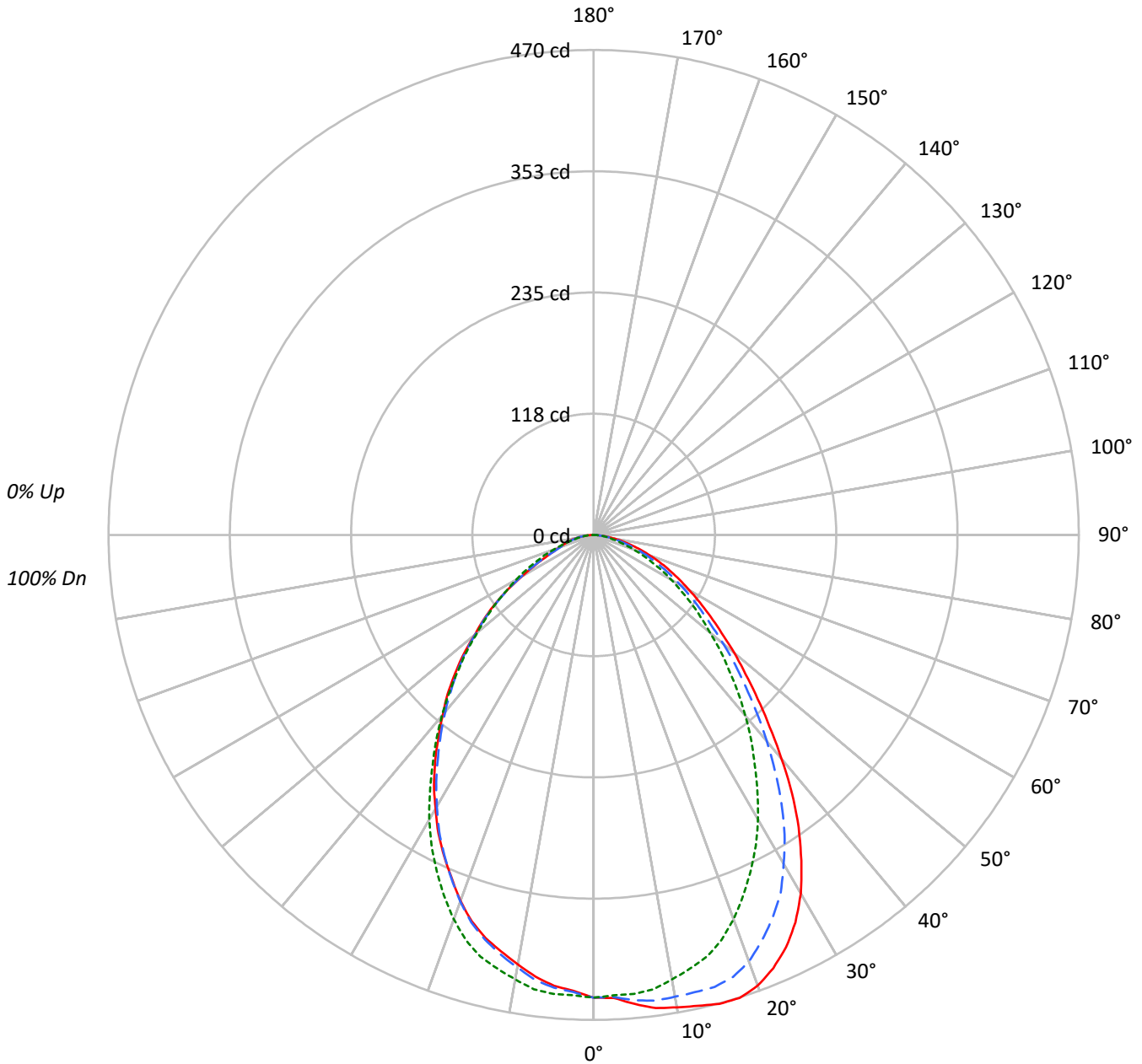
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P581639

CATALOG NUMBER: HC610D010-HM60525927-61WWWB

### Luminous Intensity Polar Plot





TEST NUMBER: P581639

CATALOG NUMBER: HC610D010-HM60525927-61WWWB

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66				66
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58				58
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52				52
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46				46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42				42
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				34
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	31				31

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

	0°	90°	180°
0°	24581	24581	24581
5°	25115	24576	24136
10°	25879	24348	23530
15°	26703	24024	22951
20°	27122	23120	22017
25°	26675	21751	20753
30°	25403	20161	19389
35°	23169	18203	17915
40°	20252	16359	16266
45°	17428	14389	14722
50°	15147	12537	12801
55°	13228	11001	11125
60°	11753	9528	8738
65°	10481	8029	6680
70°	9232	6588	5594
75°	7922	5189	5316
80°	6409	4420	5209
85°	4277	3837	4655



TEST NUMBER: P581639

CATALOG NUMBER: HC610D010-HM60525927-61WWWB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.5	4.8
10°-20°	120.9	13.8
20°-30°	172.5	19.6
30°-40°	180.7	20.6
40°-50°	152.2	17.3
50°-60°	108.3	12.3
60°-70°	63.4	7.2
70°-80°	30.0	3.4
80°-90°	7.7	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°	335.9	38.2
0°-40°	516.6	58.8
0°-60°	777.0	88.5
0°-90°	878.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	878.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	448	448	448	448	448	
5°	456	453	447	440	439	44
15°	470	453	423	406	404	133
25°	441	410	360	342	343	202
35°	346	317	272	263	268	215
45°	225	208	186	186	190	175
55°	138	127	115	115	116	125
65°	81	72	62	52	52	81
75°	37	31	24	24	25	40
85°	7	6	6	7	7	9
90°	0	0	0	0	0	



TEST NUMBER: P581639

CATALOG NUMBER: HC610D010-HM60525927-61WWWB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	448.4	448.4	448.4	448.4	448.4	448.4	448.4	448.4	448.4
2.5°	449.1	449.1	448.4	447.8	446.6	444.8	443.5	442.3	442.3
5°	456.4	455.2	452.7	449.6	446.6	443.0	440.5	438.6	438.6
7.5°	462.5	460.0	455.2	449.6	444.1	439.2	434.9	432.5	431.9
10°	464.9	461.9	454.5	446.0	437.4	430.6	425.7	422.7	422.7
12.5°	467.4	463.8	453.9	441.7	430.6	421.4	416.6	414.1	413.5
15°	470.5	465.6	453.4	438.0	423.3	412.8	406.2	404.4	404.4
17.5°	470.5	464.3	449.1	430.0	411.7	400.0	393.9	392.0	392.7
20°	464.9	458.2	439.9	416.6	396.3	384.1	378.0	376.7	377.4
22.5°	454.5	446.6	425.7	400.6	378.5	365.7	360.2	360.2	359.6
25°	441.0	432.5	409.8	383.5	359.6	346.7	342.4	343.1	343.1
27.5°	423.3	414.8	392.0	363.9	339.9	327.1	324.1	325.3	325.9
30°	401.3	392.0	368.1	340.6	318.5	305.6	303.8	305.6	306.3
32.5°	374.4	367.6	344.2	316.1	295.2	284.2	283.7	285.5	287.9
35°	346.2	338.8	317.3	291.6	272.0	262.9	262.9	265.9	267.7
37.5°	315.5	308.1	288.5	267.0	250.5	242.0	243.2	246.2	246.9
40°	283.0	277.5	260.9	242.6	228.6	221.8	223.6	226.6	227.3
42.5°	252.4	247.5	234.0	217.5	207.0	202.2	204.7	208.3	209.5
45°	224.8	219.3	208.3	194.3	185.6	183.2	186.2	188.7	189.9
47.5°	199.7	194.8	185.6	172.7	166.6	165.4	168.4	169.7	170.9
50°	177.6	172.7	163.6	151.9	147.0	147.0	149.4	150.7	150.1
52.5°	156.2	151.9	143.3	133.6	130.5	130.5	132.3	132.9	134.1
55°	138.4	134.1	126.8	117.6	115.1	114.0	115.1	115.1	116.4
57.5°	121.9	118.2	111.5	102.9	99.8	98.6	98.0	97.4	98.6
60°	107.2	104.1	96.8	89.4	86.9	83.9	81.5	79.0	79.7
62.5°	93.7	90.7	83.9	76.5	74.1	69.8	66.8	63.7	65.0
65°	80.8	77.8	71.7	65.5	61.9	56.9	52.1	50.3	51.5
67.5°	69.3	66.8	60.7	54.6	51.5	46.0	41.1	41.1	41.7
70°	57.6	55.1	50.3	44.7	41.1	36.1	34.3	34.9	34.9
72.5°	47.2	45.3	40.4	35.5	31.8	28.8	28.8	29.4	30.0
75°	37.4	36.1	31.2	26.9	24.5	22.6	23.9	24.5	25.1
77.5°	28.8	26.9	23.3	20.3	18.3	19.0	20.3	20.8	21.4
80°	20.3	19.6	16.5	14.7	14.0	14.7	16.0	16.5	16.5
82.5°	12.9	12.2	10.4	9.8	9.8	10.4	11.7	11.7	11.7
85°	6.8	6.1	5.5	5.5	6.1	6.8	7.4	7.4	7.4
87.5°	2.5	1.8	2.5	2.5	3.1	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)