

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: P581604

Luminaire Tested: **HC610D010-HM60525835-61WWWB**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581604  
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-HM60525835-61WWWB  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1136.3 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.09 / 1.17  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

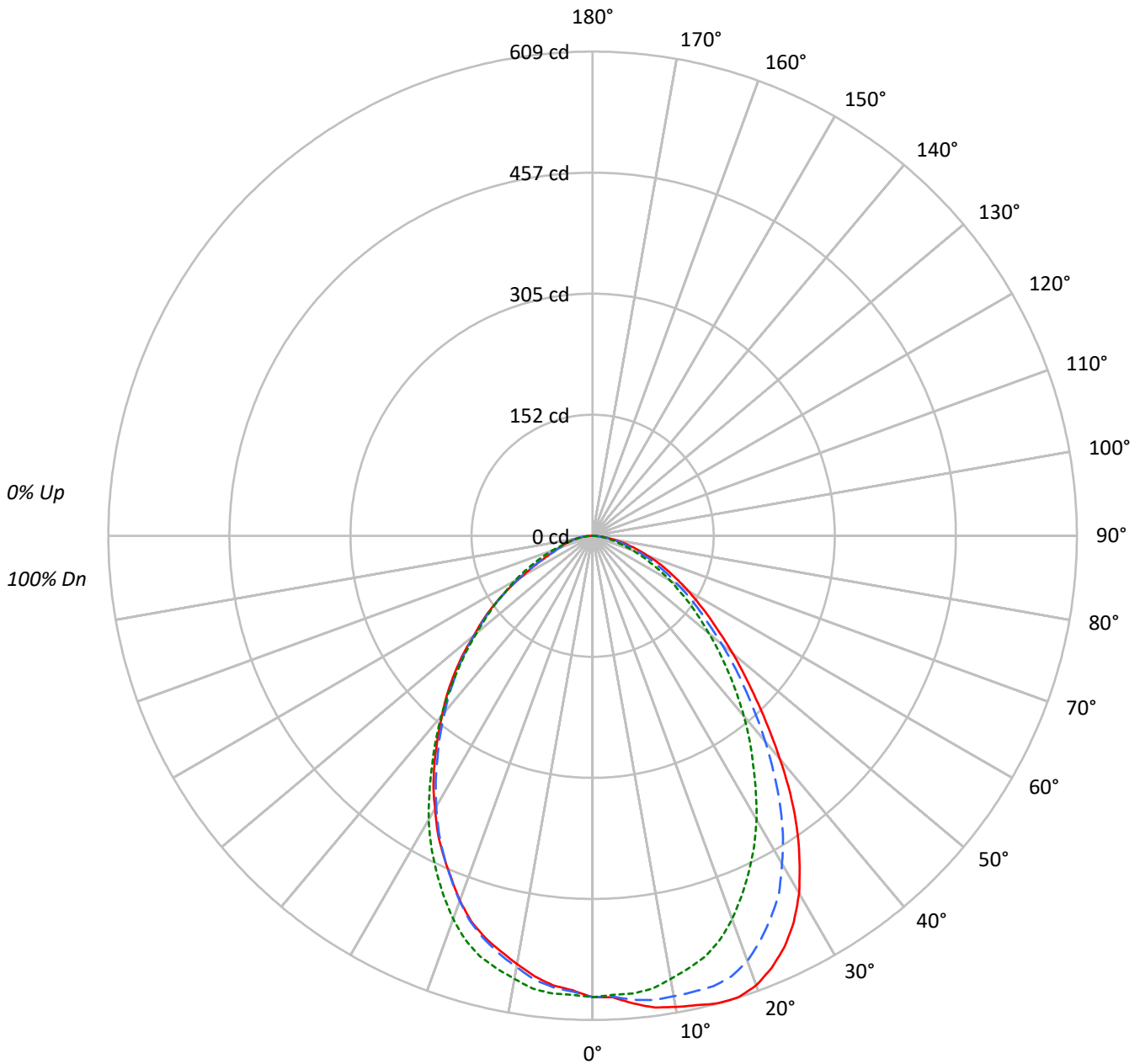
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66																			
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58																			
5	81	70	61	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52																			
6	75	63	55	49	74	62	55	49	61	54	49	59	53	48	58	52	48	46																			
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42																			
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38																			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34																			
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31																			

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

	0°	90°	180°
0°	31812	31812	31812
5°	32500	31802	31235
10°	33494	31507	30449
15°	34552	31090	29694
20°	35102	29922	28481
25°	34526	28145	26850
30°	32866	26093	25086
35°	29968	23550	23182
40°	26206	21161	21047
45°	22553	18622	19056
50°	19607	16230	16571
55°	17127	14241	14394
60°	15207	12335	11293
65°	13568	10377	8639
70°	11941	8511	7245
75°	10230	6714	6884
80°	8240	5746	6756
85°	5472	4969	5975



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.9	4.8
10°-20°	156.4	13.8
20°-30°	223.3	19.6
30°-40°	233.9	20.6
40°-50°	196.9	17.3
50°-60°	140.1	12.3
60°-70°	82.0	7.2
70°-80°	38.8	3.4
80°-90°	10.0	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°	434.6	38.2
0°-40°	668.5	58.8
0°-60°	1005.5	88.5
0°-90°	1136.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1136.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	580	580	580	580	580	
5°	591	586	578	570	568	57
15°	609	587	548	526	523	172
25°	571	530	465	443	444	261
35°	448	411	352	340	346	278
45°	291	270	240	241	246	226
55°	179	164	149	149	151	161
65°	105	93	80	67	67	104
75°	48	40	32	31	32	52
85°	9	7	8	10	10	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	580.3	580.3	580.3	580.3	580.3	580.3	580.3	580.3	580.3
2.5°	581.1	581.1	580.3	579.5	577.9	575.5	573.9	572.3	572.3
5°	590.6	589.0	585.8	581.8	577.9	573.1	570.0	567.6	567.6
7.5°	598.5	595.3	589.0	581.8	574.7	568.4	562.8	559.7	558.9
10°	601.7	597.7	588.2	577.1	566.0	557.3	550.9	547.0	547.0
12.5°	604.8	600.1	587.4	571.5	557.3	545.4	539.1	535.9	535.1
15°	608.8	602.5	586.6	566.8	547.8	534.3	525.6	523.2	523.2
17.5°	608.8	600.9	581.1	556.5	532.7	517.7	509.7	507.4	508.2
20°	601.7	592.9	569.2	539.1	512.9	496.9	489.0	487.4	488.2
22.5°	588.2	577.9	550.9	518.5	489.8	473.2	466.0	466.0	465.3
25°	570.8	559.7	530.3	496.2	465.3	448.6	443.1	443.9	443.9
27.5°	547.8	536.7	507.4	470.8	439.9	423.3	419.3	420.9	421.7
30°	519.2	507.4	476.3	440.7	412.2	395.5	393.1	395.5	396.3
32.5°	484.3	475.6	445.4	409.0	382.0	367.8	367.0	369.4	372.5
35°	447.8	438.3	410.6	377.3	351.9	340.1	340.1	344.0	346.4
37.5°	408.2	398.7	373.3	345.6	324.2	313.1	314.7	318.7	319.5
40°	366.2	359.1	337.7	313.9	295.7	287.0	289.3	293.3	294.1
42.5°	326.6	320.2	302.8	281.4	267.9	261.6	264.8	269.5	271.1
45°	290.9	283.8	269.5	251.3	240.2	237.0	241.0	244.2	245.8
47.5°	258.4	252.1	240.2	223.6	215.6	214.1	218.0	219.6	221.2
50°	229.9	223.6	211.7	196.6	190.3	190.3	193.5	195.0	194.3
52.5°	202.2	196.6	185.5	172.9	168.9	168.9	171.3	172.1	173.6
55°	179.2	173.6	164.0	152.1	149.0	147.4	149.0	149.0	150.6
57.5°	157.7	152.9	144.2	133.1	129.2	127.6	126.8	126.0	127.6
60°	138.7	134.7	125.2	115.7	112.5	108.6	105.4	102.2	103.0
62.5°	121.2	117.3	108.6	99.0	95.9	90.3	86.4	82.4	84.0
65°	104.6	100.6	92.7	84.8	80.0	73.7	67.4	65.0	66.6
67.5°	89.5	86.4	78.4	70.5	66.6	59.4	53.1	53.1	53.9
70°	74.5	71.3	65.0	57.8	53.1	46.8	44.4	45.2	45.2
72.5°	61.0	58.6	52.3	46.0	41.2	37.2	37.2	38.0	38.8
75°	48.3	46.8	40.4	34.9	31.7	29.3	30.9	31.7	32.5
77.5°	37.2	34.9	30.1	26.1	23.8	24.6	26.1	26.9	27.7
80°	26.1	25.4	21.4	19.0	18.2	19.0	20.6	21.4	21.4
82.5°	16.6	15.8	13.5	12.7	12.7	13.5	15.1	15.1	15.1
85°	8.7	7.9	7.1	7.1	7.9	8.7	9.5	9.5	9.5
87.5°	3.2	2.4	3.2	3.2	4.0	4.0	4.0	4.0	4.0
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)