

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: P593069

Luminaire Tested: **HC610D010-HM60525850-61WWWB**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593069  
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-HM60525850-61WWWB  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1172.9 lumens  
Efficiency: N/A  
Efficacy: 118.5 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

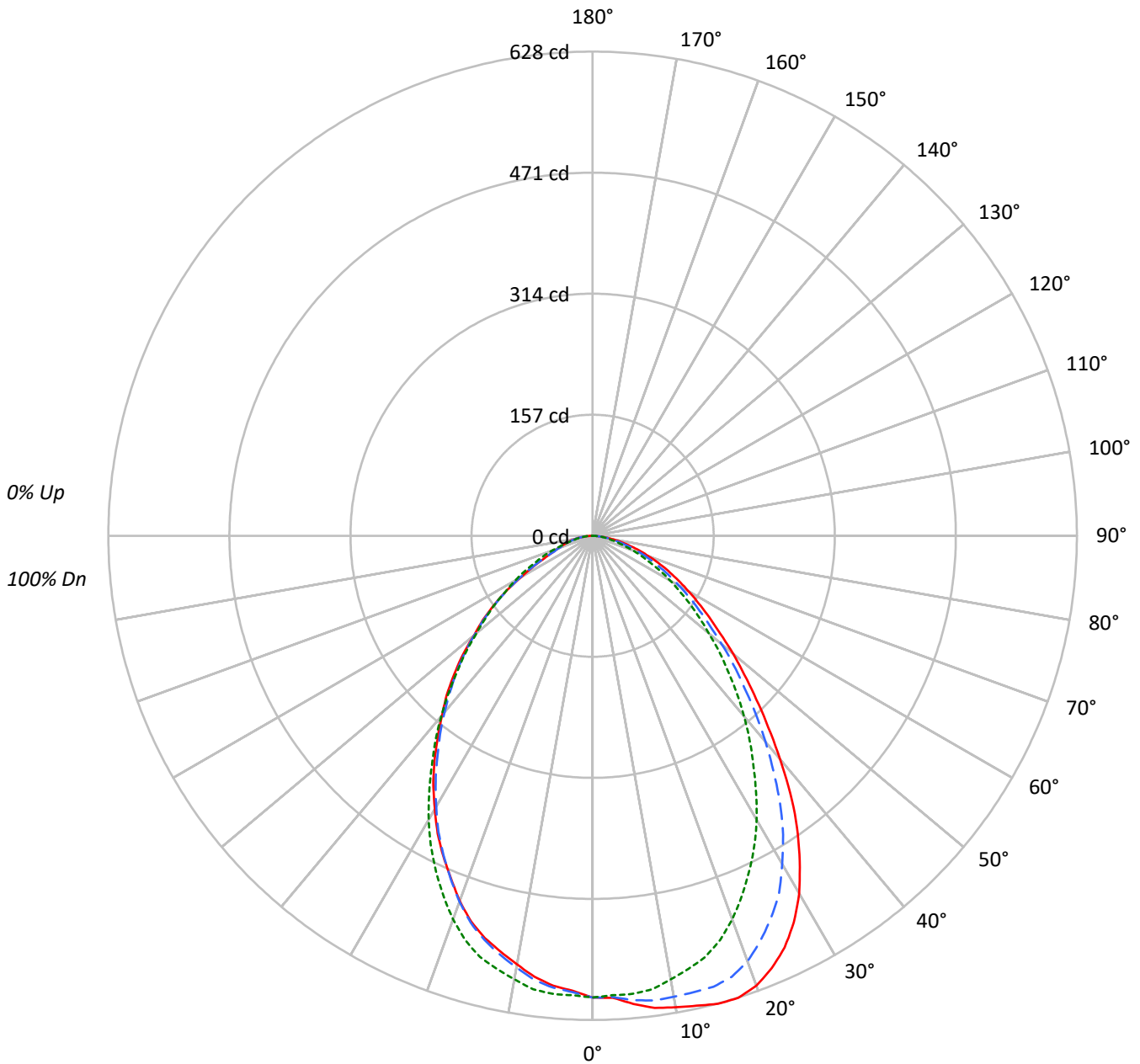
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	33	44	38	33	43	37	33	43	37	33	31																			

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

	0°	90°	180°
0°	32832	32832	32832
5°	33546	32825	32236
10°	34568	32520	31423
15°	35664	32083	30647
20°	36228	30879	29403
25°	35633	29052	27715
30°	33923	26928	25896
35°	30939	24313	23932
40°	27051	21841	21726
45°	23281	19219	19669
50°	20238	16750	17100
55°	17672	14700	14853
60°	15700	12729	11666
65°	14009	10715	8911
70°	12326	8784	7469
75°	10569	6926	7096
80°	8555	5935	6977
85°	5724	5158	6164



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.7	4.8
10°-20°	161.4	13.8
20°-30°	230.5	19.6
30°-40°	241.4	20.6
40°-50°	203.2	17.3
50°-60°	144.6	12.3
60°-70°	84.7	7.2
70°-80°	40.1	3.4
80°-90°	10.3	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°	448.6	38.2
0°-40°	690.0	58.8
0°-60°	1037.9	88.5
0°-90°	1172.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1172.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	599	599	599	599	599	
5°	610	605	596	588	586	59
15°	628	606	565	542	540	177
25°	589	547	480	457	458	270
35°	462	424	363	351	358	287
45°	300	278	248	249	254	233
55°	185	169	154	154	155	167
65°	108	96	83	70	69	108
75°	50	42	33	32	34	54
85°	9	7	8	10	10	12
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°	598.9	598.9	598.9	598.9	598.9	598.9	598.9	598.9	598.9
2.5°	599.7	599.7	598.9	598.1	596.5	594.0	592.4	590.8	590.8
5°	609.6	607.9	604.6	600.5	596.5	591.6	588.3	585.8	585.8
7.5°	617.7	614.4	607.9	600.5	593.2	586.6	580.9	577.7	576.9
10°	621.0	616.9	607.1	595.7	584.2	575.2	568.6	564.5	564.5
12.5°	624.3	619.3	606.3	589.9	575.2	562.9	556.4	553.1	552.3
15°	628.4	621.8	605.5	585.0	565.3	551.5	542.5	540.0	540.0
17.5°	628.4	620.2	599.7	574.4	549.8	534.3	526.2	523.7	524.5
20°	621.0	612.0	587.5	556.4	529.3	513.0	504.9	503.2	504.0
22.5°	607.1	596.5	568.6	535.1	505.7	488.5	481.1	481.1	480.3
25°	589.1	577.7	547.3	512.2	480.3	463.1	457.3	458.2	458.2
27.5°	565.3	553.9	523.7	486.0	454.0	437.0	432.9	434.5	435.3
30°	535.9	523.7	491.7	455.0	425.4	408.3	405.8	408.3	409.1
32.5°	499.9	490.9	459.8	422.2	394.4	379.7	378.9	381.3	384.5
35°	462.3	452.5	423.8	389.4	363.3	351.0	351.0	355.1	357.6
37.5°	421.3	411.6	385.3	356.7	334.6	323.2	324.8	329.0	329.8
40°	378.0	370.6	348.5	324.0	305.2	296.1	298.6	302.7	303.6
42.5°	337.1	330.5	312.5	290.5	276.5	270.0	273.3	278.1	279.8
45°	300.3	293.0	278.1	259.3	247.9	244.6	248.7	252.0	253.7
47.5°	266.7	260.1	247.9	230.7	222.6	221.0	225.0	226.6	228.3
50°	237.3	230.7	218.5	203.0	196.4	196.4	199.7	201.3	200.5
52.5°	208.6	203.0	191.4	178.4	174.3	174.3	176.7	177.5	179.2
55°	184.9	179.2	169.3	157.1	153.8	152.1	153.8	153.8	155.4
57.5°	162.8	157.9	148.9	137.4	133.3	131.8	130.9	130.1	131.8
60°	143.2	139.1	129.3	119.4	116.1	112.1	108.8	105.5	106.4
62.5°	125.2	121.1	112.1	102.2	99.0	93.3	89.2	85.1	86.7
65°	108.0	103.9	95.8	87.5	82.6	76.1	69.5	67.1	68.7
67.5°	92.5	89.2	81.1	72.8	68.7	61.4	54.8	54.8	55.6
70°	76.9	73.7	67.1	59.8	54.8	48.2	45.8	46.6	46.6
72.5°	63.1	60.6	54.0	47.4	42.6	38.5	38.5	39.3	40.1
75°	49.9	48.2	41.8	36.0	32.7	30.2	31.9	32.7	33.5
77.5°	38.5	36.0	31.1	27.1	24.6	25.4	27.1	27.8	28.6
80°	27.1	26.1	22.1	19.6	18.8	19.6	21.3	22.1	22.1
82.5°	17.2	16.4	13.9	13.1	13.1	13.9	15.5	15.5	15.5
85°	9.1	8.2	7.4	7.4	8.2	9.1	9.8	9.8	9.8
87.5°	3.3	2.5	3.3	3.3	4.1	4.1	4.1	4.1	4.1
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)