

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: P581619

Luminaire Tested: **HC610D010-HM60525840-61WWBB**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581619  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC610D010-HM60525840-61WWBB  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1037.0 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.06 / 1.14  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

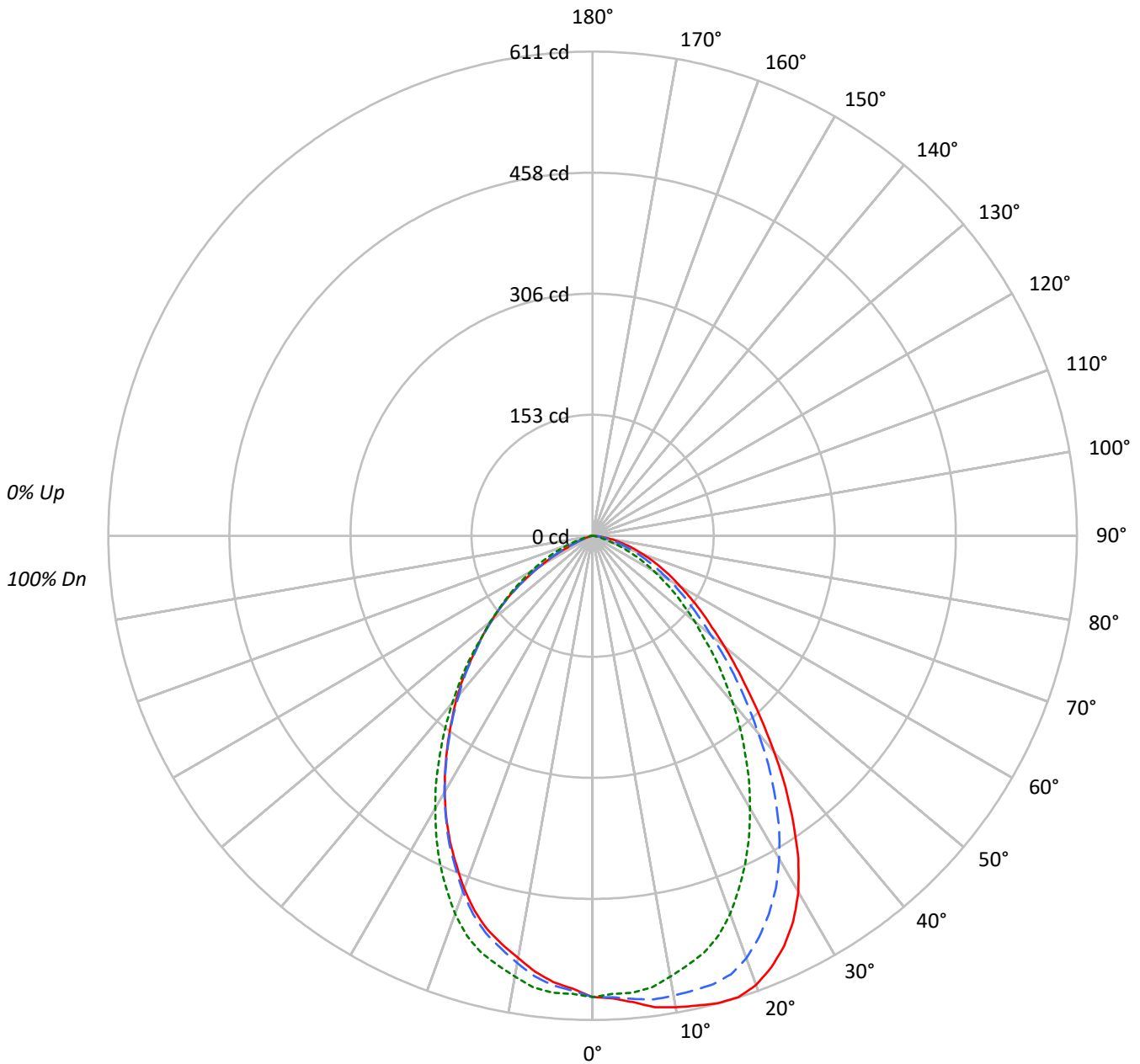
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	100	100
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89	89	89	89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78	78	78	78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69	69	69	69
4	89	79	71	66	87	78	71	65	75	69	64	73	68	64	71	66	63	61	61	61	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54	54	54	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49	49	49	49
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44	44	44	44
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40	40	40	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37	37	37	37
10	60	48	40	36	58	47	40	36	46	40	36	45	40	35	45	39	35	34	34	34	34

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

	0°	90°	180°
0°	31905	31905	31905
5°	32517	31846	31119
10°	33622	31440	30115
15°	34654	30891	29172
20°	35190	29607	27647
25°	34556	27576	25743
30°	32847	25130	23624
35°	29520	22453	21308
40°	25476	19680	19036
45°	21568	16947	16498
50°	18498	14311	14174
55°	16038	12043	11574
60°	14001	9780	8256
65°	12323	7536	4566
70°	10627	4985	2228
75°	9023	2415	868
80°	6977	1042	505
85°	4151	503	503



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.9	5.3
10°-20°	155.3	15.0
20°-30°	218.7	21.1
30°-40°	223.4	21.5
40°-50°	180.1	17.4
50°-60°	120.8	11.7
60°-70°	61.1	5.9
70°-80°	19.5	1.9
80°-90°	3.0	0.3
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°	428.9	41.4
0°-40°	652.3	62.9
0°-60°	953.3	91.9
0°-90°	1037.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1037.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	582	582	582	582	582	
5°	591	587	579	570	566	57
15°	611	586	544	520	514	172
25°	571	526	456	428	426	262
35°	441	401	336	317	318	275
45°	278	256	219	211	213	216
55°	168	149	126	120	121	151
65°	95	79	58	38	35	95
75°	43	30	11	4	4	46
85°	7	3	1	1	1	9
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°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0
2.5°	584.3	583.5	582.8	581.2	578.7	576.2	574.6	572.9	572.1
5°	590.9	589.3	586.8	583.5	578.7	572.9	569.6	566.3	565.5
7.5°	600.0	596.7	590.1	582.8	574.6	566.3	560.7	557.4	554.9
10°	604.0	598.3	589.3	577.0	564.8	554.9	547.5	542.7	541.0
12.5°	607.3	600.8	587.6	571.3	554.9	541.8	533.6	529.5	528.0
15°	610.6	604.0	586.0	564.8	544.3	528.8	519.7	515.6	514.0
17.5°	610.6	601.5	580.3	553.3	528.8	510.0	500.9	496.8	496.0
20°	603.2	593.4	567.2	535.3	507.5	486.2	478.0	475.6	473.9
22.5°	589.3	577.9	548.3	512.3	482.1	461.6	452.6	451.0	449.3
25°	571.3	559.9	526.3	487.8	455.9	435.5	428.0	426.4	425.6
27.5°	548.3	536.1	500.9	461.6	427.2	407.6	401.1	401.1	400.3
30°	518.9	505.0	470.6	431.3	397.0	379.0	374.0	374.0	373.2
32.5°	482.9	469.0	437.9	400.3	367.4	348.7	344.6	346.2	345.4
35°	441.1	429.7	401.1	364.3	335.5	318.4	316.7	318.4	318.4
37.5°	399.4	388.7	364.3	332.4	305.3	289.8	289.8	292.2	291.4
40°	356.0	347.9	324.9	297.2	275.0	264.3	262.7	265.2	266.0
42.5°	315.1	308.6	288.9	266.0	246.3	235.7	238.2	239.8	240.7
45°	278.2	271.7	256.2	232.4	218.6	211.1	211.1	213.6	212.8
47.5°	245.5	240.7	225.0	202.2	189.8	186.7	188.3	189.8	189.8
50°	216.9	209.5	194.8	176.8	167.8	163.7	165.4	166.2	166.2
52.5°	189.8	185.0	170.3	153.8	145.7	143.2	143.2	144.1	144.1
55°	167.8	162.1	149.0	132.6	126.0	122.8	120.3	119.5	121.1
57.5°	146.5	141.6	129.3	113.8	106.4	103.1	98.3	96.6	98.3
60°	127.7	123.6	111.3	96.6	89.2	82.6	77.0	73.7	75.3
62.5°	111.3	106.4	94.1	81.8	73.7	66.3	57.3	52.4	54.8
65°	95.0	90.9	78.6	66.3	58.1	49.1	38.5	35.2	35.2
67.5°	80.3	76.1	64.6	54.0	44.1	33.5	23.8	22.9	23.8
70°	66.3	62.3	52.4	41.8	31.1	20.5	13.9	13.9	13.9
72.5°	54.8	49.9	41.0	30.3	19.7	10.6	7.4	8.2	8.2
75°	42.6	38.5	30.3	20.5	11.4	4.9	4.1	4.1	4.1
77.5°	31.9	28.6	21.3	13.1	5.8	1.6	1.6	1.6	1.6
80°	22.1	18.8	13.9	8.2	3.3	1.6	1.6	1.6	1.6
82.5°	13.1	11.4	8.2	4.1	1.6	0.8	0.8	0.8	0.8
85°	6.6	5.8	3.3	1.6	0.8	0.8	0.8	0.8	0.8
87.5°	1.6	1.6	0.8	0.8	0.0	0.8	0.8	0.0	0.0
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)