

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

Report Number: E395765

Luminaire Tested: **H7-77**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: E395765  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H7-77  
Description: HALO RECESSED INC - H7 ADJ, EYEBALL, 0 DEG TILT  
Light Source: 50R20FL, 440 LUMENS  
Ballast/Driver: -

**Summary**

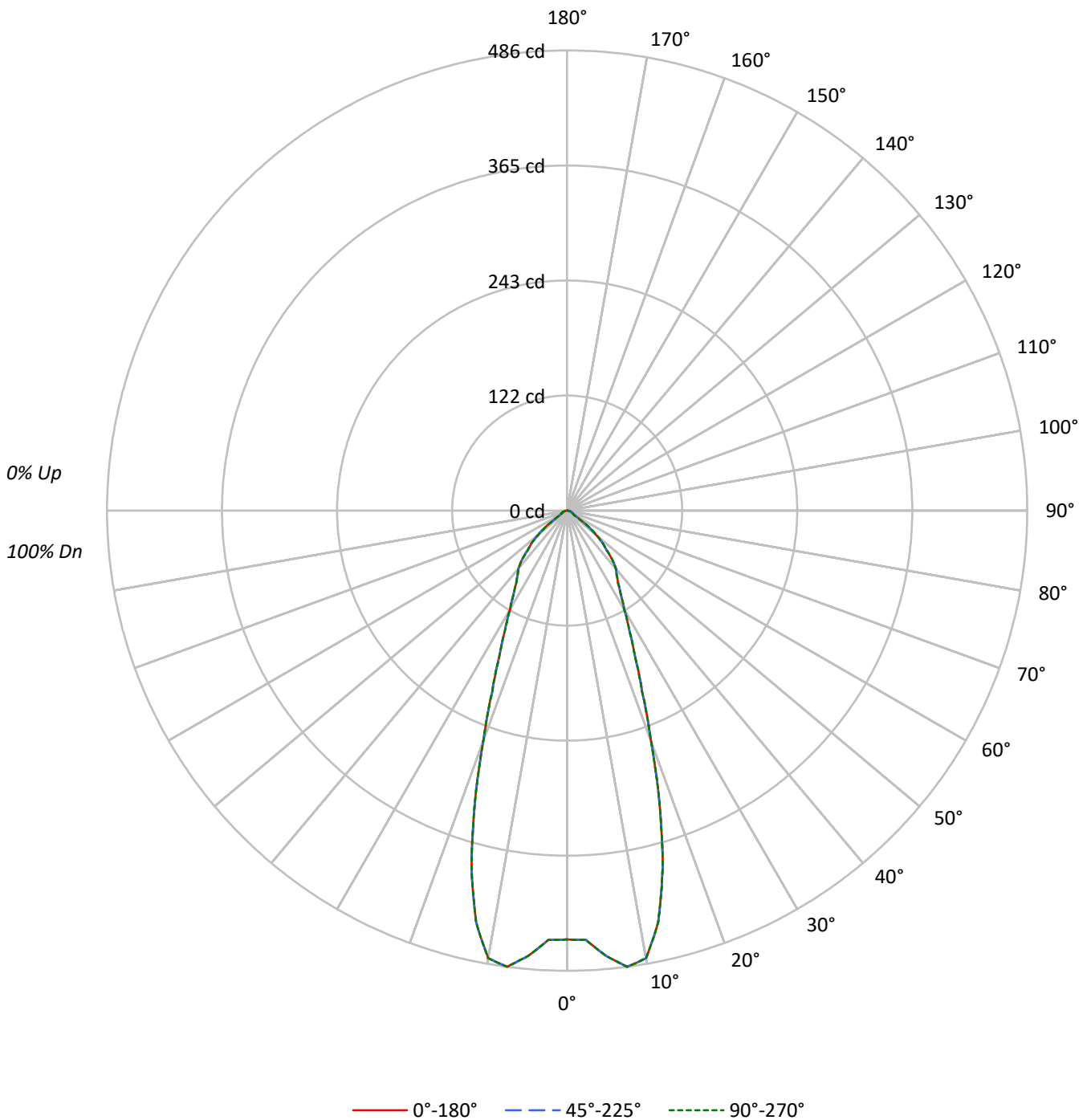
Lumens per Lamp: 440 (1 lamp)  
Luminaire Lumens: 365.1 lumens  
Efficiency: 83.0%  
Efficacy: 7.3 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 0.71 / 0.69  
Luminous Opening: (L: 0 ' x W: -0.23 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 50  
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				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	0
RCR																				
0	99	99	99	99	96	96	96	96	92	92	92		88	88	88		85	85	85	83
1	94	91	89	87	92	89	87	85	86	84	83		83	82	80		80	79	78	76
2	89	84	80	77	87	83	79	76	80	77	75		77	75	73		75	73	72	70
3	84	78	73	70	82	77	73	69	74	71	68		72	69	67		70	68	66	65
4	79	72	67	64	78	71	67	63	70	66	62		68	64	62		66	63	61	60
5	75	67	62	58	73	67	62	58	65	61	58		64	60	57		62	59	57	55
6	71	63	58	54	70	62	57	54	61	57	53		60	56	53		59	55	53	51
7	67	59	54	50	66	59	54	50	58	53	50		57	53	50		56	52	49	48
8	64	56	51	47	63	55	50	47	54	50	47		53	49	46		53	49	46	45
9	61	53	48	44	60	52	47	44	51	47	44		51	47	44		50	46	44	42
10	58	50	45	42	57	50	45	42	49	44	41		48	44	41		48	44	41	40

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

	0°	90°	180°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	45.5	12.4	10.3
10°-20°	105.0	28.8	23.9
20°-30°	80.1	21.9	18.2
30°-40°	60.2	16.5	13.7
40°-50°	46.2	12.7	10.5
50°-60°	17.4	4.8	4.0
60°-70°	6.1	1.7	1.4
70°-80°	3.6	1.0	0.8
80°-90°	1.1	0.3	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	230.6	63.1	52.4
0°-40°	290.8	79.6	66.1
0°-60°	354.4	97.1	80.5
0°-90°	365.1	100.0	83.0
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	365.1	100.0	83.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	453	453	453	453	453	
5°	472	472	472	472	472	45
15°	390	390	390	390	390	105
25°	169	169	169	169	169	80
35°	94	94	94	94	94	60
45°	59	59	59	59	59	46
55°	16	16	16	16	16	17
65°	6	6	6	6	6	6
75°	3	3	3	3	3	4
85°	1	1	1	1	1	1
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°	453	453	453	453	453	453	453	453	453
2.5°	454	454	454	454	454	454	454	454	454
5°	472	472	472	472	472	472	472	472	472
7.5°	486	486	486	486	486	486	486	486	486
10°	480	480	480	480	480	480	480	480	480
12.5°	445	445	445	445	445	445	445	445	445
15°	390	390	390	390	390	390	390	390	390
17.5°	324	324	324	324	324	324	324	324	324
20°	259	259	259	259	259	259	259	259	259
22.5°	207	207	207	207	207	207	207	207	207
25°	169	169	169	169	169	169	169	169	169
27.5°	142	142	142	142	142	142	142	142	142
30°	121	121	121	121	121	121	121	121	121
32.5°	106	106	106	106	106	106	106	106	106
35°	94	94	94	94	94	94	94	94	94
37.5°	86	86	86	86	86	86	86	86	86
40°	80	80	80	80	80	80	80	80	80
42.5°	71	71	71	71	71	71	71	71	71
45°	59	59	59	59	59	59	59	59	59
47.5°	51	51	51	51	51	51	51	51	51
50°	40	40	40	40	40	40	40	40	40
52.5°	30	30	30	30	30	30	30	30	30
55°	16	16	16	16	16	16	16	16	16
57.5°	9	9	9	9	9	9	9	9	9
60°	8	8	8	8	8	8	8	8	8
62.5°	7	7	7	7	7	7	7	7	7
65°	6	6	6	6	6	6	6	6	6
67.5°	5	5	5	5	5	5	5	5	5
70°	5	5	5	5	5	5	5	5	5
72.5°	4	4	4	4	4	4	4	4	4
75°	3	3	3	3	3	3	3	3	3
77.5°	3	3	3	3	3	3	3	3	3
80°	2	2	2	2	2	2	2	2	2
82.5°	2	2	2	2	2	2	2	2	2
85°	1	1	1	1	1	1	1	1	1
87.5°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)