

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: E395894

Luminaire Tested: **H7-78**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: E395894  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H7-78  
Description: HALO RECESSED INC. - H7 HOUSING, EYEBALL, 0 DEG. TILT  
Light Source: 75R30SP, 900 LUMENS  
Ballast/Driver: -

**Summary**

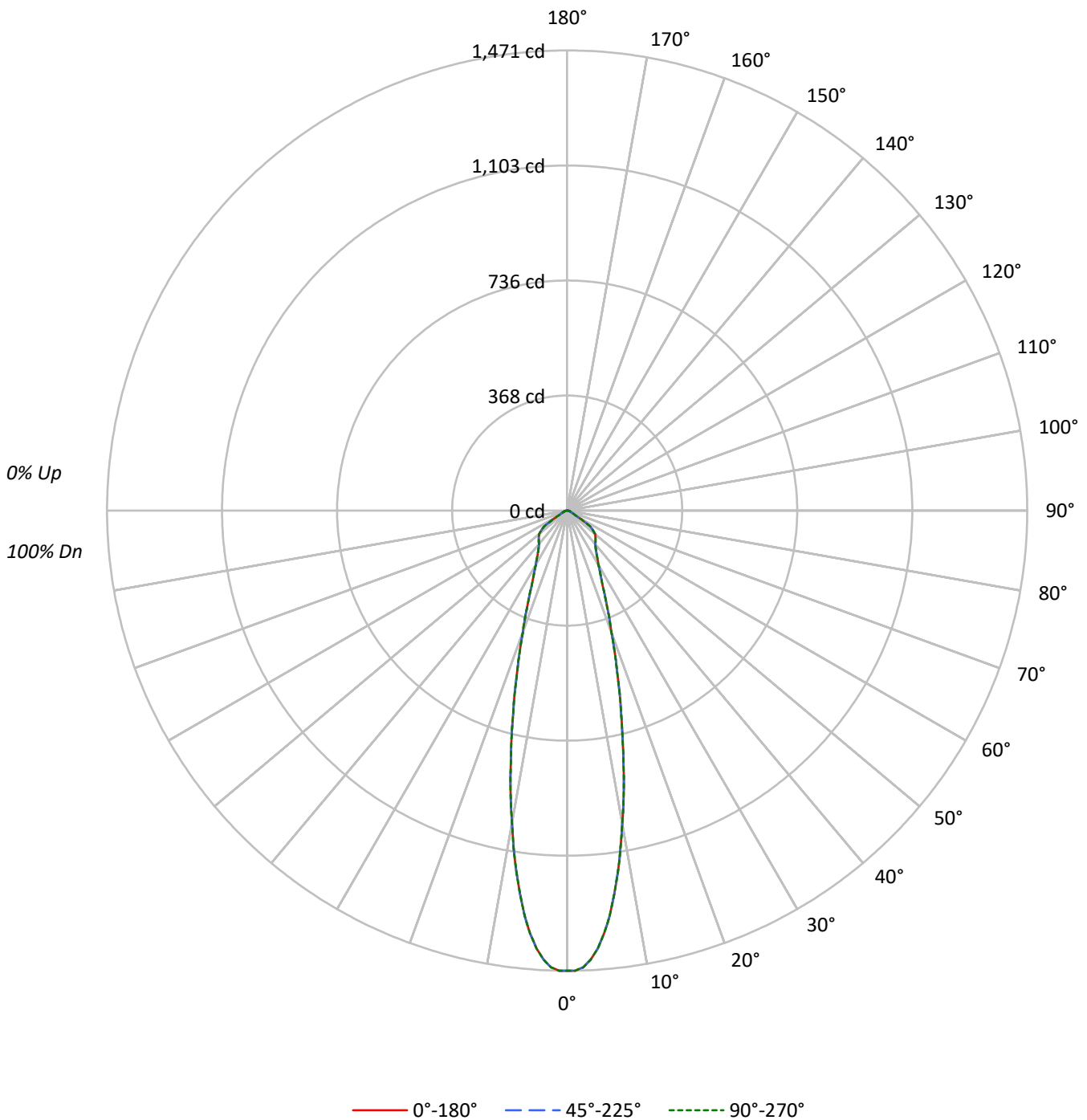
Lumens per Lamp: 900 (1 lamp)  
Luminaire Lumens: 741.6 lumens  
Efficiency: 82.4%  
Efficacy: 9.9 lumens/watt  
Spacing Criteria (0/90/45): 0.46 / 0.46 / 0.5  
Luminous Opening: (L: 0 ' x W: -0.34 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 75  
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						
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10			
RCR																							
0	98	98	98	98	96	96	96	96	92	92	92	88	88	88	84	84	84	82	82	82	80	80	80
1	93	90	88	85	91	88	86	84	85	83	81	82	80	79	79	78	77	75	75	75	73	73	73
2	87	82	79	75	85	81	77	74	78	75	73	76	73	71	73	71	70	68	68	68	66	66	66
3	82	76	71	67	80	75	70	67	73	69	66	70	67	65	69	66	64	62	62	62	60	60	60
4	77	70	65	61	76	69	64	61	67	63	60	66	62	59	64	61	59	57	57	57	55	55	55
5	73	65	60	56	72	64	59	56	63	59	55	62	58	55	60	57	54	53	53	53	51	51	51
6	69	61	56	52	68	60	55	51	59	54	51	58	54	51	57	53	50	49	49	49	47	47	47
7	66	57	52	48	64	57	52	48	56	51	48	55	50	47	54	50	47	46	46	46	44	44	44
8	62	54	49	45	61	53	48	45	53	48	45	52	47	44	51	47	44	43	43	43	41	41	41
9	59	51	46	42	59	51	46	42	50	45	42	49	45	42	48	45	42	41	41	41	39	39	39
10	57	48	43	40	56	48	43	40	47	43	40	47	43	40	46	42	40	38	38	38	36	36	36

**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°	118.2	15.9	13.1
10°-20°	185.0	24.9	20.6
20°-30°	129.2	17.4	14.4
30°-40°	102.9	13.9	11.4
40°-50°	99.1	13.4	11.0
50°-60°	73.6	9.9	8.2
60°-70°	18.8	2.5	2.1
70°-80°	9.8	1.3	1.1
80°-90°	4.6	0.6	0.5
90°-100°	0.3	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°	432.4	58.3	48.0
0°-40°	535.3	72.2	59.5
0°-60°	708.1	95.5	78.7
0°-90°	741.3	100.0	82.4
90°-120°	0.3	0.0	0.0
90°-150°	0.3	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	741.6	100.0	82.4

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1471	1471	1471	1471	1471	
5°	1357	1357	1357	1357	1357	118
15°	665	665	665	665	665	185
25°	271	271	271	271	271	129
35°	162	162	162	162	162	103
45°	128	128	128	128	128	99
55°	92	92	92	92	92	74
65°	17	17	17	17	17	19
75°	9	9	9	9	9	10
85°	4	4	4	4	4	4
90°	2	2	2	2	2	1
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	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°	1471	1471	1471	1471	1471	1471	1471	1471	1471
1°	1471	1471	1471	1471	1471	1471	1471	1471	1471
2°	1461	1461	1461	1461	1461	1461	1461	1461	1461
3°	1438	1438	1438	1438	1438	1438	1438	1438	1438
4°	1403	1403	1403	1403	1403	1403	1403	1403	1403
5°	1357	1357	1357	1357	1357	1357	1357	1357	1357
6°	1302	1302	1302	1302	1302	1302	1302	1302	1302
7°	1235	1235	1235	1235	1235	1235	1235	1235	1235
8°	1167	1167	1167	1167	1167	1167	1167	1167	1167
9°	1092	1092	1092	1092	1092	1092	1092	1092	1092
10°	1016	1016	1016	1016	1016	1016	1016	1016	1016
11°	943	943	943	943	943	943	943	943	943
12°	872	872	872	872	872	872	872	872	872
13°	797	797	797	797	797	797	797	797	797
14°	730	730	730	730	730	730	730	730	730
15°	665	665	665	665	665	665	665	665	665
17.5°	525	525	525	525	525	525	525	525	525
20°	415	415	415	415	415	415	415	415	415
22.5°	333	333	333	333	333	333	333	333	333
25°	271	271	271	271	271	271	271	271	271
27.5°	230	230	230	230	230	230	230	230	230
30°	200	200	200	200	200	200	200	200	200
32.5°	179	179	179	179	179	179	179	179	179
35°	162	162	162	162	162	162	162	162	162
37.5°	149	149	149	149	149	149	149	149	149
40°	140	140	140	140	140	140	140	140	140
45°	128	128	128	128	128	128	128	128	128
50°	117	117	117	117	117	117	117	117	117
55°	92	92	92	92	92	92	92	92	92
60°	30	30	30	30	30	30	30	30	30
65°	17	17	17	17	17	17	17	17	17
70°	12	12	12	12	12	12	12	12	12
75°	9	9	9	9	9	9	9	9	9
80°	7	7	7	7	7	7	7	7	7
85°	4	4	4	4	4	4	4	4	4
90°	2	2	2	2	2	2	2	2	2
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
135°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)