

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: E385741

Luminaire Tested: **H7-418**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: E385741  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H7-418  
Description: HALO RECESSED INC - H7 ADJ, REGRESSED EYEBALL, 30 DEG TILT  
Light Source: 75R30FL, 900 LUMENS  
Ballast/Driver: -

**Summary**

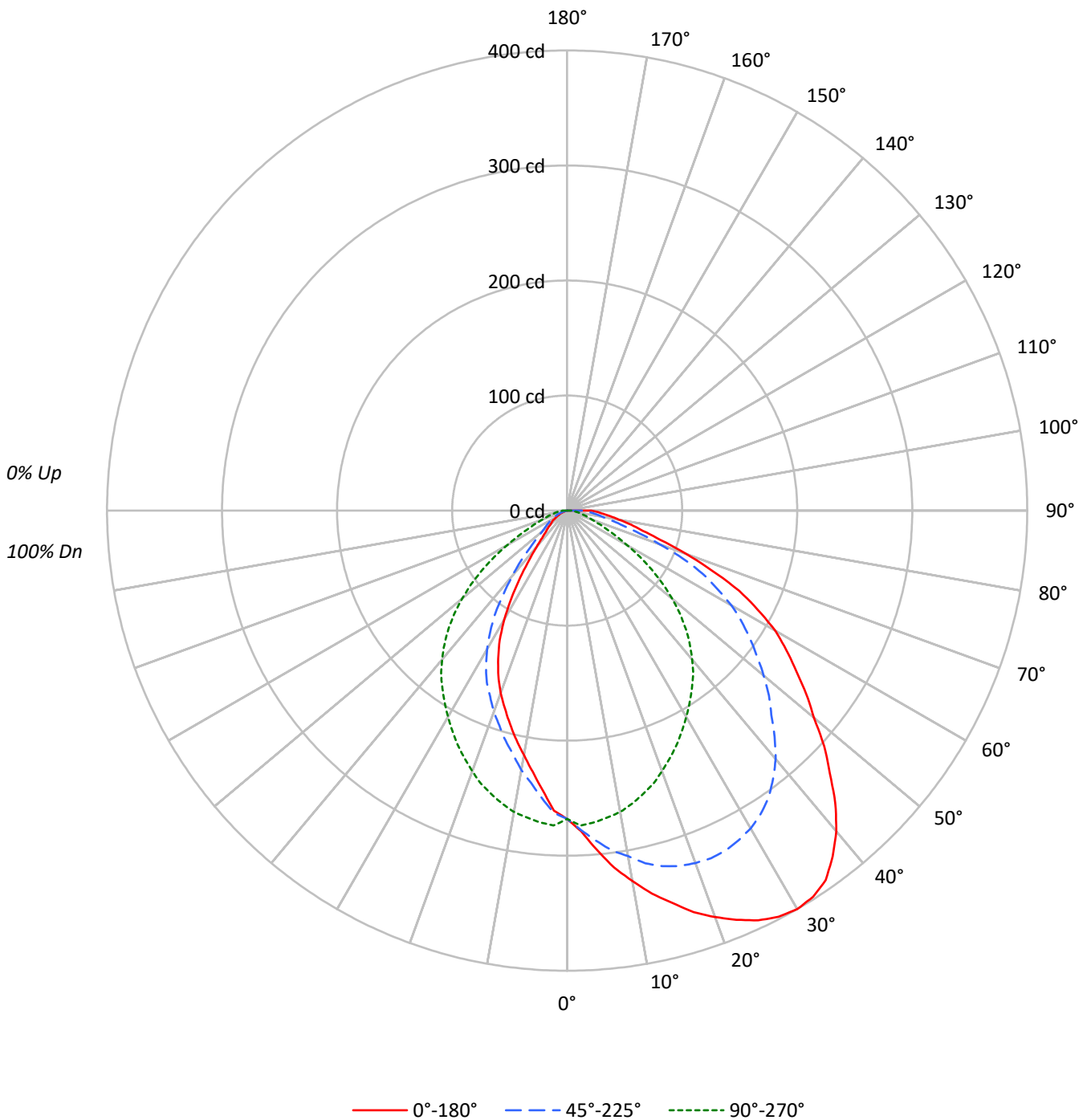
Lumens per Lamp: 900 (1 lamp)  
Luminaire Lumens: 670.1 lumens  
Efficiency: 74.5%  
Efficacy: 8.9 lumens/watt  
Spacing Criteria (0/90/45): 1.35 / 1.16 / 1.3  
Luminous Opening: (L: 0 ' x W: -0.33 ' x H: 0 '  
CIE Type: Direct

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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	89	89	89	89	87	87	87	87	83	83	83		79	79	79		76	76	76	74
1	82	78	75	73	80	77	74	71	73	71	69		71	69	67		68	66	65	64
2	75	69	64	60	73	68	63	60	65	61	58		63	60	57		60	58	56	54
3	69	61	55	51	67	60	55	50	58	53	50		56	52	49		54	51	48	46
4	63	55	48	44	61	54	48	43	52	47	43		50	46	42		49	45	42	40
5	58	49	43	38	57	48	42	38	47	41	37		45	41	37		44	40	37	35
6	54	44	38	33	53	44	38	33	42	37	33		41	36	33		40	36	32	31
7	50	40	34	30	49	40	34	30	39	33	29		38	33	29		37	32	29	28
8	47	37	31	27	46	36	31	27	36	30	26		35	30	26		34	29	26	25
9	44	34	28	24	43	34	28	24	33	28	24		32	27	24		31	27	24	22
10	41	31	26	22	40	31	26	22	30	25	22		30	25	22		29	25	22	20

**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°	25.8	3.8	2.9
10°-20°	74.6	11.1	8.3
20°-30°	113.4	16.9	12.6
30°-40°	130.3	19.4	14.5
40°-50°	120.4	18.0	13.4
50°-60°	97.8	14.6	10.9
60°-70°	66.3	9.9	7.4
70°-80°	29.5	4.4	3.3
80°-90°	12.2	1.8	1.4
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°	213.7	31.9	23.7
0°-40°	344.0	51.3	38.2
0°-60°	562.1	83.9	62.5
0°-90°	670.1	100.0	74.5
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°	670.1	100.0	74.5

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	268	268	268	268	268	
5°	296	288	272	251	244	29
15°	353	320	255	207	192	101
25°	393	326	225	165	142	181
35°	392	305	189	109	71	243
45°	323	251	146	45	26	249
55°	243	194	90	21	15	218
65°	165	130	37	11	7	160
75°	68	50	15	4	1	76
85°	31	21	6	0	0	35
90°	21	12	3	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	20°	22.5°	25°	30°
0°	268	268	268	268	268	268	268	268	268	268	268
2.5°	279	280	280	280	280	279	281	282	281	281	280
5°	296	294	296	296	296	294	298	297	296	295	295
7.5°	313	312	312	312	312	311	313	311	311	309	308
10°	327	328	327	327	326	325	327	326	324	323	320
12.5°	341	342	341	341	342	339	342	339	336	335	332
15°	353	355	355	354	354	353	353	350	347	344	341
17.5°	366	367	367	366	365	363	364	361	357	354	349
20°	376	378	377	376	375	373	374	370	365	362	356
22.5°	385	386	386	385	384	381	382	376	371	368	361
25°	393	394	394	392	390	389	387	382	376	371	364
27.5°	398	400	399	397	395	392	392	384	379	374	364
30°	400	402	401	399	397	394	392	385	379	374	363
32.5°	398	400	399	397	394	391	390	382	375	370	358
35°	392	393	392	390	388	385	382	375	368	363	351
37.5°	379	381	380	378	377	373	370	364	357	351	339
40°	364	366	364	363	362	358	355	349	342	337	325
42.5°	345	347	347	345	343	339	336	331	327	321	310
45°	323	324	325	321	321	319	316	310	308	303	292
47.5°	303	304	303	303	301	300	296	292	288	283	275
50°	280	284	282	282	280	278	277	272	269	265	258
52.5°	262	263	262	260	261	258	257	254	250	246	239
55°	243	246	245	243	242	241	239	236	233	229	222
57.5°	226	228	227	227	225	223	221	219	218	214	207
60°	209	209	209	209	208	206	203	201	198	197	191
62.5°	187	190	189	189	187	187	183	183	179	177	171
65°	165	166	165	165	163	162	160	160	155	154	149
67.5°	136	138	139	136	137	138	136	134	130	129	124
70°	110	110	112	110	109	110	108	107	104	104	100
72.5°	85	87	87	87	86	84	84	84	80	82	77
75°	68	70	69	69	69	66	66	65	64	64	61
77.5°	57	56	56	56	55	54	54	53	52	51	49
80°	46	47	46	46	46	46	45	43	43	42	40
82.5°	38	39	38	38	38	38	37	36	35	34	33
85°	31	32	32	32	31	31	30	30	29	28	27
87.5°	26	27	27	26	26	26	25	24	24	24	22
90°	21	21	21	21	21	20	20	20	19	19	17



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**CANDELA DISTRIBUTION (continued):**

	35°	40°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	268	268	268	268	268	268	268	268	268
2.5°	278	278	278	277	274	266	263	261	261
5°	291	289	288	282	272	259	251	247	244
7.5°	304	301	298	286	269	251	239	232	229
10°	314	310	305	288	266	243	229	220	216
12.5°	324	319	314	288	261	234	217	207	204
15°	333	326	320	288	255	225	207	197	192
17.5°	339	332	324	286	249	216	196	184	180
20°	345	336	326	283	241	207	186	173	169
22.5°	348	338	327	278	233	198	175	161	156
25°	350	338	326	272	225	188	165	148	142
27.5°	349	336	323	265	216	179	153	133	127
30°	347	333	319	257	207	170	139	116	109
32.5°	342	327	313	248	198	158	124	98	90
35°	334	319	305	238	189	147	109	82	71
37.5°	323	308	294	229	180	133	90	64	54
40°	310	295	282	219	169	119	74	49	41
42.5°	295	281	267	207	158	104	60	37	32
45°	278	265	251	196	146	89	45	29	26
47.5°	262	250	238	185	133	73	36	25	23
50°	245	233	223	172	119	59	28	21	19
52.5°	229	219	208	162	105	46	24	18	17
55°	213	204	194	150	90	36	21	16	15
57.5°	198	189	180	137	75	29	18	14	12
60°	182	173	165	123	60	24	15	12	10
62.5°	164	156	147	108	48	20	13	9	8
65°	142	136	130	92	37	17	11	8	7
67.5°	119	113	109	75	29	14	9	6	5
70°	96	91	86	59	23	12	7	4	4
72.5°	73	70	66	43	19	10	5	3	2
75°	57	54	50	33	15	8	4	2	1
77.5°	46	42	39	25	12	6	2	1	1
80°	37	34	31	19	10	4	1	0	0
82.5°	31	28	26	15	8	3	1	0	0
85°	25	24	21	12	6	2	0	0	0
87.5°	21	19	17	9	5	1	0	0	0
90°	16	14	12	7	3	1	0	0	0

(END OF REPORT)