

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: E395742

Luminaire Tested: **H7-418**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395742
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: 75R30SP, 900 LUMENS
Ballast/Driver: -

Summary

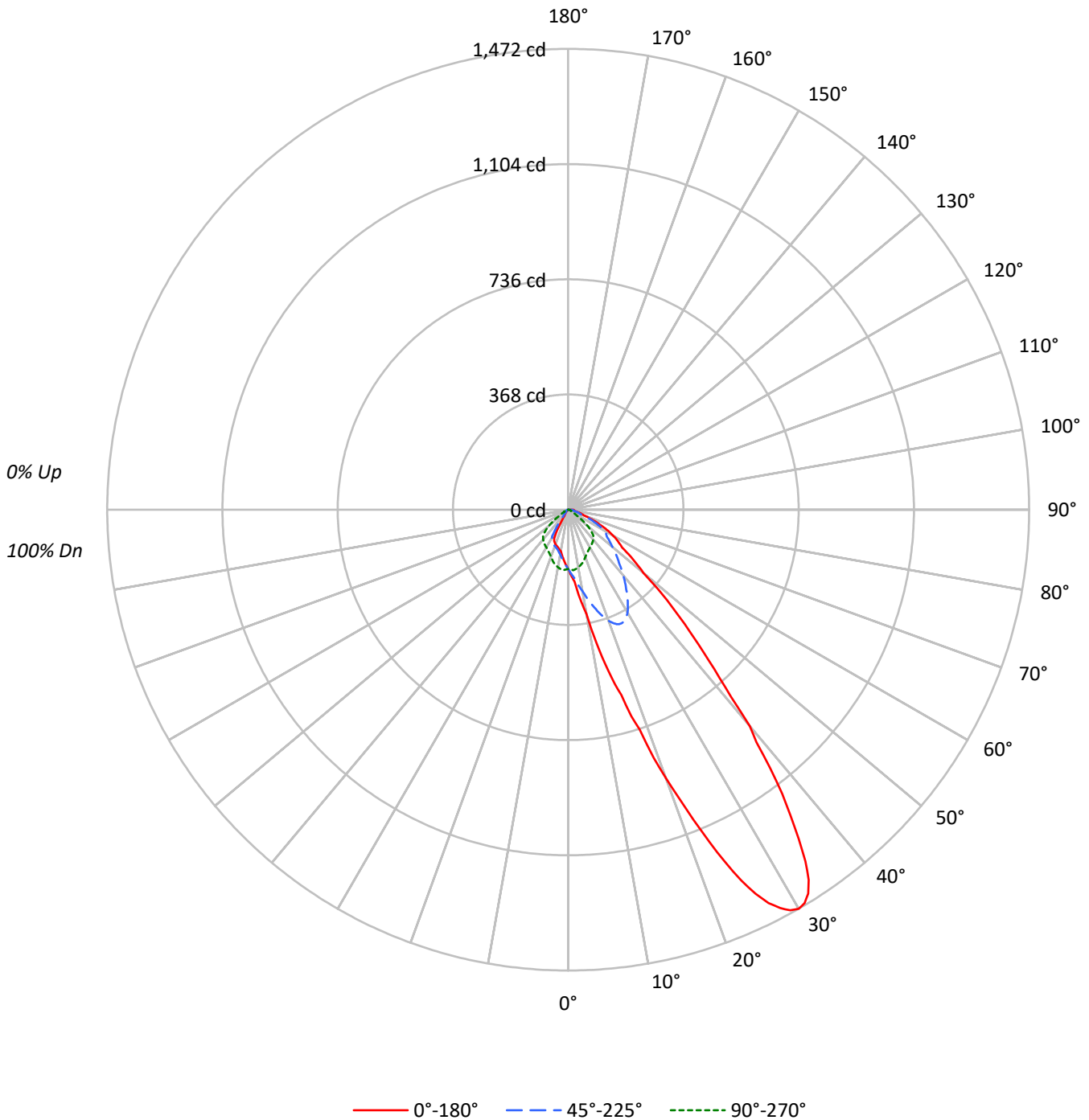
Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 692.3 lumens
Efficiency: 76.9%
Efficacy: 9.2 lumens/watt
Spacing Criteria (0/90/45): 2.02 / 1.11 / 1.36
Luminous Opening: (L: 0 ' x W: -0.33 ' x H: 0 '
CIE Type: Direct

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	92	92	92	92	89	89	89	89	85	85	85		82	82	82		78	78	78	77
1	85	82	79	77	83	80	78	76	77	75	73		74	73	71		72	70	69	68
2	79	73	69	65	77	72	68	65	69	66	63		67	64	62		65	62	60	59
3	73	66	60	56	71	65	60	56	62	58	55		60	57	54		59	55	53	51
4	67	59	53	49	66	58	53	48	56	52	48		55	51	47		53	50	47	45
5	62	53	47	43	61	53	47	43	51	46	42		50	45	42		48	44	41	40
6	58	49	42	38	56	48	42	38	47	41	37		45	41	37		44	40	37	35
7	54	44	38	34	53	44	38	34	43	37	33		41	37	33		40	36	33	32
8	50	40	34	30	49	40	34	30	39	34	30		38	33	30		37	33	30	28
9	47	37	31	27	46	37	31	27	36	31	27		35	30	27		34	30	27	26
10	44	34	29	25	43	34	28	25	33	28	25		32	28	24		32	28	24	23

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°	19.0	2.7	2.1
10°-20°	71.7	10.3	8.0
20°-30°	158.0	22.8	17.6
30°-40°	182.8	26.4	20.3
40°-50°	120.8	17.5	13.4
50°-60°	74.8	10.8	8.3
60°-70°	42.9	6.2	4.8
70°-80°	15.1	2.2	1.7
80°-90°	7.2	1.0	0.8
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°	248.7	35.9	27.6
0°-40°	431.5	62.3	47.9
0°-60°	627.1	90.6	69.7
0°-90°	692.3	100.0	76.9
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°	692.3	100.0	76.9

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	189	189	189	189	189	
5°	230	219	194	167	161	25
15°	577	323	176	131	125	175
25°	1307	401	148	118	106	593
35°	1283	329	132	48	17	777
45°	544	225	111	13	9	431
55°	210	151	39	8	6	201
65°	110	89	13	5	4	110
75°	36	30	7	2	1	39
85°	18	14	4	0	0	20
90°	17	10	2	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°	189	189	189	189	189	189	189	189	189	189	189
5°	230	235	235	232	232	233	233	233	230	230	225
10°	340	348	345	341	338	337	337	327	324	318	307
15°	577	566	561	558	545	542	531	495	479	464	430
16°	616	626	619	618	603	583	582	541	521	496	455
17°	690	686	681	678	663	647	637	587	564	544	489
18°	738	754	747	743	723	703	690	638	610	575	522
19°	839	827	823	815	784	768	748	694	659	621	558
20°	912	889	892	872	856	835	814	750	709	668	590
21°	987	984	958	949	926	905	879	807	760	712	622
22°	1068	1048	1038	1029	1005	979	939	863	808	755	653
23°	1153	1134	1124	1109	1061	1056	996	911	856	796	682
24°	1232	1220	1212	1193	1143	1114	1067	955	892	835	710
25°	1307	1298	1280	1260	1219	1183	1135	1009	936	872	731
26°	1365	1361	1350	1318	1282	1241	1190	1041	973	897	748
27°	1410	1407	1397	1367	1328	1285	1231	1078	1004	923	760
28°	1441	1436	1422	1402	1360	1318	1261	1109	1025	940	769
29°	1463	1452	1440	1418	1380	1337	1279	1121	1036	948	773
30°	1472	1462	1448	1426	1387	1340	1285	1123	1036	949	769
31°	1466	1461	1445	1421	1380	1332	1278	1114	1025	939	760
32°	1446	1444	1428	1403	1364	1308	1254	1085	1002	920	744
33°	1410	1412	1392	1363	1325	1269	1220	1046	969	887	722
34°	1354	1360	1337	1310	1284	1221	1175	1008	934	852	693
35°	1283	1286	1266	1241	1218	1174	1122	974	901	812	661
36°	1207	1202	1186	1161	1145	1111	1060	928	856	775	626
37°	1136	1124	1103	1081	1070	1036	990	871	804	740	592
38°	1047	1040	1022	1016	992	963	918	814	754	691	556
39°	956	954	949	934	921	889	848	746	705	639	526
40°	902	882	882	870	842	816	779	683	653	593	494
41°	792	802	797	789	777	742	716	637	596	555	458
42°	722	728	728	711	697	676	648	581	545	509	426
43°	658	658	657	642	642	613	585	528	504	467	396
44°	599	598	594	583	565	555	534	482	456	427	367
45°	544	538	526	529	505	499	477	428	405	384	340
50°	313	317	308	311	310	302	293	275	265	261	240
55°	210	212	212	210	209	208	205	199	198	191	183
60°	167	166	166	166	166	167	167	163	161	156	151
70°	54	55	55	53	54	55	55	55	52	50	50
80°	19	19	19	19	19	19	19	19	18	18	18
90°	17	17	17	17	17	17	17	17	17	16	15



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CANDELA DISTRIBUTION (continued):

	35°	40°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	189	189	189	189	189	189	189	189	189
5°	223	221	219	206	194	178	167	162	161
10°	292	279	265	218	187	159	145	137	135
15°	389	356	323	222	176	143	131	127	125
16°	413	369	336	221	173	139	130	125	123
17°	437	389	347	221	170	138	129	124	122
18°	461	405	358	220	167	136	127	122	120
19°	487	427	369	218	164	135	125	121	119
20°	511	442	378	217	161	133	124	120	118
21°	532	452	385	215	158	132	123	118	116
22°	554	466	392	213	155	131	122	117	114
23°	572	476	397	210	152	129	121	115	112
24°	587	484	400	207	150	128	120	113	110
25°	600	491	401	204	148	127	118	110	106
26°	606	494	400	201	146	125	116	106	102
27°	612	493	398	197	144	124	114	101	92
28°	613	489	393	194	142	123	111	92	77
29°	610	484	386	191	141	121	107	85	58
30°	602	474	379	187	139	121	103	65	40
31°	593	463	370	184	138	119	99	48	29
32°	580	451	359	180	137	117	88	31	23
33°	563	437	349	175	135	115	75	26	20
34°	542	422	338	171	134	112	60	22	19
35°	526	406	329	166	132	109	48	19	17
36°	501	394	316	162	131	104	37	18	16
37°	474	379	305	158	129	102	28	16	15
38°	449	362	295	153	128	95	23	15	14
39°	425	344	284	150	126	87	20	14	13
40°	403	332	273	147	124	80	18	13	12
41°	379	316	262	144	122	69	17	12	11
42°	354	298	252	142	120	57	16	11	10
43°	333	284	242	139	118	45	15	11	10
44°	314	271	233	137	115	35	14	10	9
45°	293	259	225	135	111	27	13	9	9
50°	222	205	184	128	83	15	9	8	7
55°	172	163	151	119	39	11	8	7	6
60°	146	141	136	104	17	8	7	6	5
70°	47	46	42	23	9	5	3	2	2
80°	17	17	17	10	5	2	1	0	0
90°	14	12	10	4	2	1	0	0	0

(END OF REPORT)