

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: E395761

Luminaire Tested: **H7-76**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: E395761  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H7-76  
Description: HALO RECESSED INC - H7 ADJ, GIMBAL RING, 30 DEG TILT  
Light Source: 150PAR38FL, 1740 LUMENS  
Ballast/Driver: -

**Summary**

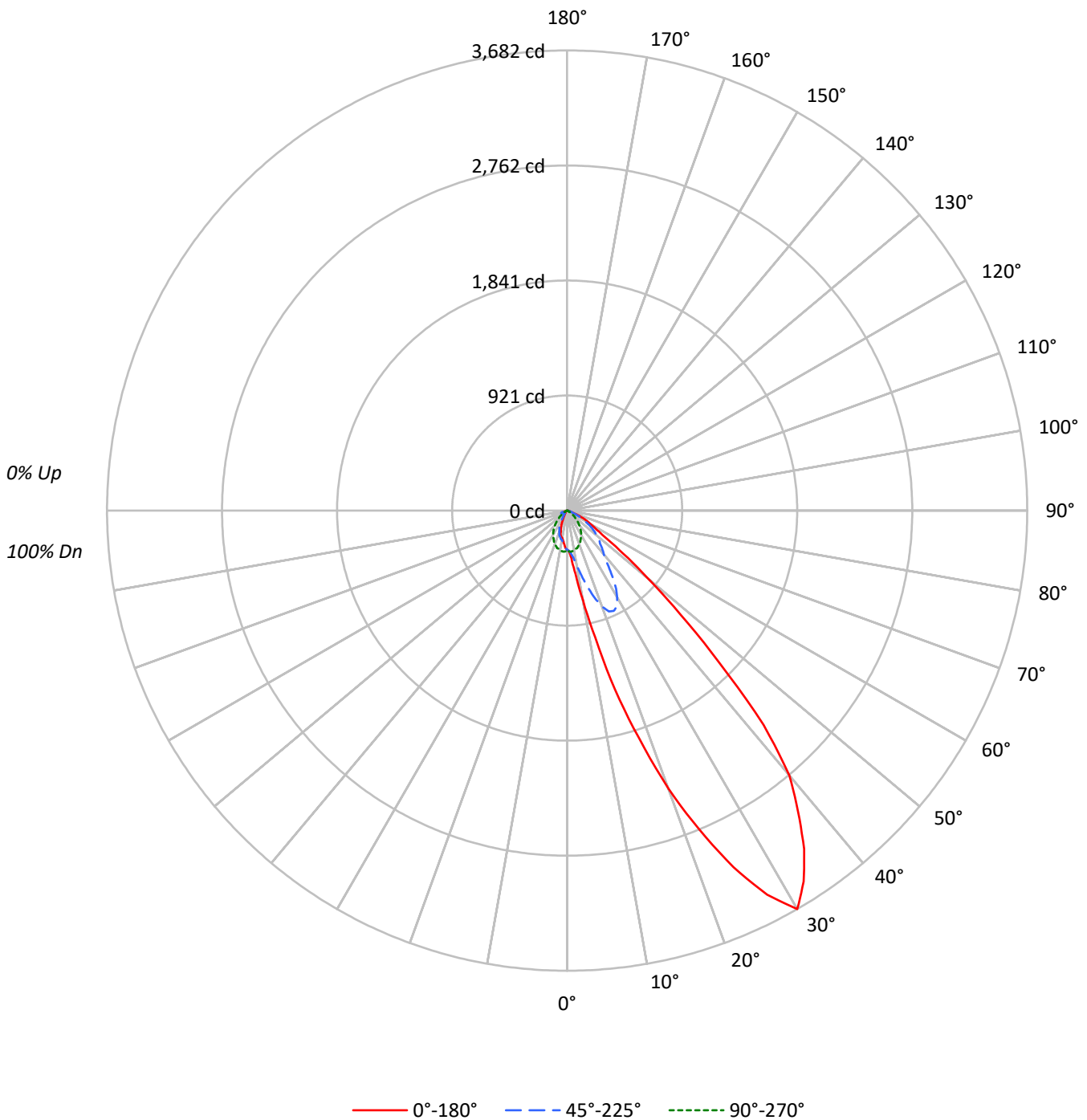
Lumens per Lamp: 1740 (1 lamp)  
Luminaire Lumens: 1397.0 lumens  
Efficiency: 80.3%  
Efficacy: 9.3 lumens/watt  
Spacing Criteria (0/90/45): 2.27 / 1.09 / 1.36  
Luminous Opening: (L: 0 ' x W: -0.37 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 150  
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	96	96	96	96	93	93	93	93	89	89	89		85	85	85		82	82	82	80
1	89	86	84	81	87	85	82	80	81	79	78		78	77	75		75	74	73	72
2	83	78	73	70	81	76	72	69	74	70	67		71	68	66		69	66	64	63
3	77	70	65	60	75	69	64	60	66	62	59		64	61	58		62	59	57	55
4	71	63	57	53	70	62	57	52	60	55	52		58	54	51		57	53	50	49
5	66	57	51	46	65	56	50	46	55	50	46		53	49	45		52	48	45	43
6	61	52	46	41	60	51	45	41	50	45	41		49	44	40		47	43	40	38
7	57	47	41	37	56	47	41	36	46	40	36		44	40	36		43	39	36	34
8	53	43	37	33	52	43	37	33	42	36	33		41	36	32		40	36	32	31
9	50	40	34	30	49	39	33	30	38	33	29		38	33	29		37	32	29	28
10	47	37	31	27	46	36	31	27	35	30	27		35	30	27		34	30	26	25

**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°	32.1	2.3	1.8
10°-20°	148.0	10.6	8.5
20°-30°	338.6	24.2	19.5
30°-40°	407.4	29.2	23.4
40°-50°	262.6	18.8	15.1
50°-60°	122.6	8.8	7.0
60°-70°	61.5	4.4	3.5
70°-80°	19.2	1.4	1.1
80°-90°	4.9	0.4	0.3
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°	518.6	37.1	29.8
0°-40°	926.0	66.3	53.2
0°-60°	1311.3	93.9	75.4
0°-90°	1397.0	100.0	80.3
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°	1397.0	100.0	80.3

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	314	314	314	314	314	
5°	379	343	330	282	269	47
15°	1484	631	311	217	203	448
25°	3149	885	255	143	82	1453
35°	3305	616	188	51	28	2043
45°	1716	372	108	24	21	1347
55°	362	238	44	35	32	381
65°	131	87	15	53	44	129
75°	21	24	6	26	3	26
85°	12	8	3	0	0	12
90°	8	5	1	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	45°	55°
0°	314	314	314	314	314	314	314	314	314	314	314
2.5°	323	322	323	322	324	322	321	320	322	322	321
5°	379	369	362	362	363	355	354	350	347	343	339
7.5°	510	505	490	475	453	450	433	422	404	381	360
10°	727	717	707	663	636	612	590	569	527	443	394
12.5°	1040	1011	1034	947	918	859	821	757	675	535	435
15°	1484	1443	1402	1340	1240	1191	1133	990	865	631	468
17.5°	1904	1908	1848	1762	1637	1582	1523	1297	1082	734	499
20°	2366	2325	2299	2208	2038	1949	1870	1570	1289	815	520
22.5°	2760	2735	2646	2543	2351	2241	2081	1750	1424	874	532
25°	3149	3096	3012	2797	2516	2368	2219	1849	1471	885	513
27.5°	3464	3411	3254	2979	2653	2502	2321	1876	1466	863	498
30°	3682	3642	3417	3069	2699	2516	2313	1853	1407	799	471
32.5°	3521	3539	3352	3055	2638	2418	2207	1770	1300	723	428
35°	3305	3330	3196	2948	2497	2246	2019	1591	1156	616	386
37.5°	3034	3083	2988	2670	2236	1998	1776	1337	981	519	359
40°	2765	2753	2610	2268	1853	1664	1449	1070	816	455	337
42.5°	2326	2223	2045	1727	1457	1296	1149	872	666	416	321
45°	1716	1692	1517	1282	1075	961	859	686	556	372	294
47.5°	1228	1207	1105	951	782	728	657	554	479	348	267
50°	833	813	736	637	538	524	494	461	413	304	247
52.5°	566	580	502	449	416	402	395	387	351	275	227
55°	362	382	345	330	311	310	302	307	292	238	201
57.5°	271	269	268	262	258	251	250	243	232	195	167
60°	217	224	218	218	212	207	211	201	185	156	137
62.5°	176	171	171	169	174	163	162	154	143	120	103
65°	131	134	132	125	122	121	114	106	101	87	80
67.5°	86	86	81	81	73	72	72	71	71	64	54
70°	47	46	51	49	48	46	43	46	45	41	44
72.5°	29	28	29	29	30	29	29	29	30	31	26
75°	21	21	22	22	23	23	23	24	24	24	19
77.5°	18	18	17	17	18	18	19	19	19	17	13
80°	15	15	15	15	15	15	15	14	14	12	9
82.5°	13	13	13	13	13	13	12	12	11	9	7
85°	12	11	11	11	11	10	10	10	9	8	6
87.5°	9	9	9	10	9	9	8	8	8	6	4
90°	8	8	8	7	7	7	7	7	6	5	3



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**CANDELA DISTRIBUTION (continued):**

	65°	67.5°	75°	85°	90°	112.5°	135°	157.5°	180°
0°	314	314	314	314	314	314	314	314	314
2.5°	330	331	328	328	327	314	301	298	300
5°	340	339	336	333	330	308	282	274	269
7.5°	350	349	344	335	328	294	263	244	243
10°	363	358	343	330	320	279	237	231	223
12.5°	379	371	346	323	312	266	234	220	216
15°	389	378	351	319	311	252	217	200	203
17.5°	399	382	353	310	297	239	207	182	165
20°	401	384	344	305	280	211	186	157	141
22.5°	393	372	335	291	273	201	165	122	112
25°	393	366	322	280	255	181	143	99	82
27.5°	374	351	312	259	238	168	113	71	60
30°	359	334	293	246	222	155	86	55	46
32.5°	350	327	273	226	207	136	62	41	34
35°	332	305	247	213	188	115	51	33	28
37.5°	302	288	236	197	174	89	42	26	23
40°	279	262	225	167	150	72	33	23	21
42.5°	251	241	213	146	128	54	28	23	21
45°	240	230	192	132	108	45	24	22	21
47.5°	229	212	171	116	91	35	25	23	23
50°	211	192	153	94	76	29	27	26	25
52.5°	184	169	134	80	59	26	30	29	28
55°	156	141	111	62	44	26	35	34	32
57.5°	127	116	83	46	33	28	41	38	35
60°	105	92	63	32	24	29	46	42	38
62.5°	81	72	48	25	19	31	50	45	41
65°	59	53	33	19	15	31	53	47	44
67.5°	42	38	25	14	11	30	52	47	42
70°	29	26	18	11	9	27	50	39	29
72.5°	19	18	13	8	8	25	42	21	13
75°	13	12	9	7	6	22	26	7	3
77.5°	9	8	7	5	5	18	11	1	0
80°	7	7	5	4	4	13	3	1	0
82.5°	5	5	4	3	3	7	1	0	0
85°	4	4	4	3	3	3	0	0	0
87.5°	4	3	3	2	2	1	0	0	0
90°	2	2	2	1	1	0	0	0	0

(END OF REPORT)