

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: E395764

Luminaire Tested: **H7-76**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395764
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: 150PAR38SP, 1740 LUMENS
Ballast/Driver: -

Summary

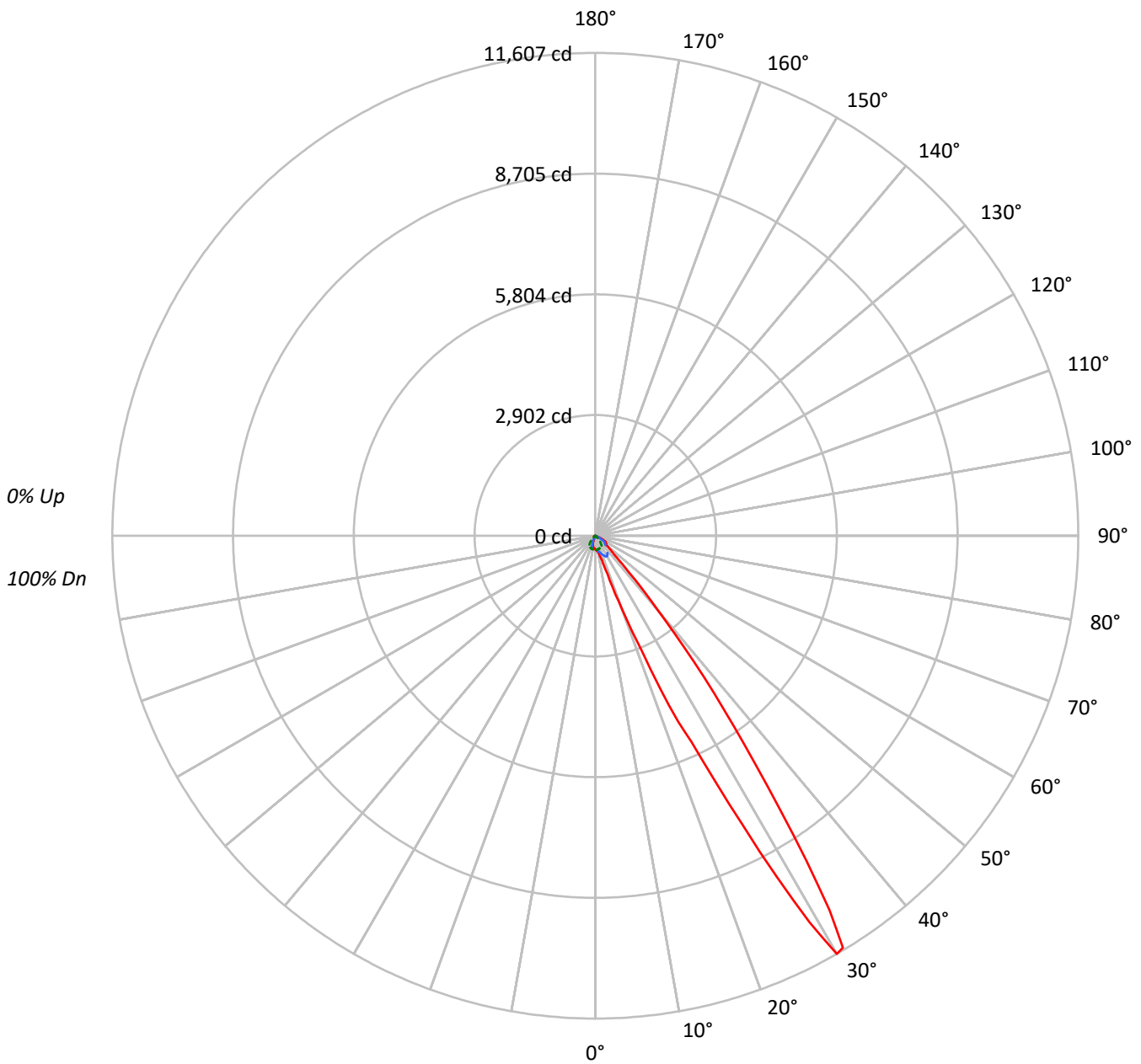
Lumens per Lamp: 1740 (1 lamp)
Luminaire Lumens: 1378.6 lumens
Efficiency: 79.2%
Efficacy: 9.2 lumens/watt
Spacing Criteria (0/90/45): 1.93 / 1.29 / 1.31
Luminous Opening: (L: 0 ' x W: -0.37 ' x H: 0 '
CIE Type: Direct

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



— 0°-180° - - 45°-225° - - - 90°-270°



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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	94	94	94	94	92	92	92	92	88	88	88		84	84	84		81	81	81	79
1	88	86	83	81	86	84	82	79	81	79	77		78	76	75		75	74	73	71
2	82	77	73	70	80	76	72	69	73	70	67		71	68	66		68	66	64	63
3	76	70	65	60	75	69	64	60	66	62	59		64	61	58		62	59	57	56
4	71	63	57	53	69	62	57	53	60	56	52		59	55	51		57	53	51	49
5	66	57	51	47	64	56	51	47	55	50	46		53	49	46		52	48	45	44
6	61	52	46	42	60	51	46	41	50	45	41		49	44	41		48	44	40	39
7	57	48	41	37	56	47	41	37	46	41	37		45	40	37		44	39	36	35
8	53	43	37	33	52	43	37	33	42	37	33		41	36	33		40	36	33	31
9	50	40	34	30	49	39	34	30	39	33	30		38	33	30		37	33	30	28
10	46	37	31	27	45	36	31	27	36	30	27		35	30	27		34	30	27	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°	31.9	2.3	1.8
10°-20°	108.4	7.9	6.2
20°-30°	384.9	27.9	22.1
30°-40°	502.5	36.5	28.9
40°-50°	173.9	12.6	10.0
50°-60°	102.5	7.4	5.9
60°-70°	55.5	4.0	3.2
70°-80°	15.3	1.1	0.9
80°-90°	3.5	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°	525.3	38.1	30.2
0°-40°	1027.8	74.6	59.1
0°-60°	1304.2	94.6	75.0
0°-90°	1378.6	100.0	79.2
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°	1378.6	100.0	79.2

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	322	322	322	322	322	
5°	362	349	338	311	303	35
15°	607	414	327	317	239	242
25°	5457	537	300	104	10	2959
35°	6679	507	232	10	10	4283
45°	628	364	58	13	15	689
55°	316	276	10	28	25	281
65°	155	81	6	48	36	154
75°	23	8	4	26	16	24
85°	8	4	2	1	0	9
90°	6	3	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°	322	322	322	322	322	322	322	322	322	322	322
5°	362	361	358	359	364	360	357	358	353	357	349
10°	392	397	395	396	398	397	397	393	390	388	385
15°	607	602	606	593	567	570	554	518	509	481	464
17.5°	950	944	894	863	833	788	724	666	629	603	543
20°	1853	1682	1678	1645	1472	1364	1268	974	861	781	663
21°	2451	2290	2175	2048	1961	1710	1524	1142	990	879	725
22°	2972	3054	2888	2678	2441	2230	2048	1325	1181	1005	790
23°	4003	3916	3759	3522	3157	2985	2595	1735	1341	1176	861
24°	4896	4621	4595	4366	3969	3649	3272	2262	1686	1390	940
25°	5457	5372	5368	5079	4651	4191	3761	2655	1986	1574	995
26°	6570	6271	6079	5736	5213	4615	4290	2916	2362	1805	1072
27°	7828	7392	6945	6485	5740	5018	4537	3235	2571	2024	1155
28°	9294	8795	7907	7236	6255	5340	4813	3427	2722	2183	1231
29°	10625	10090	9052	7939	6766	5550	4970	3478	2813	2258	1304
30°	11607	11029	10007	8780	7202	5784	5049	3482	2868	2373	1361
31°	11552	11120	10244	9052	7210	5895	5079	3490	2943	2389	1359
32°	10617	10145	9432	8474	6643	5598	4837	3454	2955	2330	1315
33°	9325	9115	8188	7372	6050	5059	4495	3328	2809	2187	1240
34°	7931	7860	6960	6251	5308	4639	4218	3086	2543	1987	1119
35°	6679	6592	5942	5348	4694	4342	3977	2682	2207	1727	995
36°	5673	5598	5098	4710	4298	4033	3569	2258	1854	1493	875
37°	4741	4833	4451	4179	3954	3744	2971	1919	1574	1260	803
38°	3843	4084	3752	3601	3391	3028	2383	1621	1351	1099	759
39°	3019	3256	3169	2832	2626	2240	1791	1415	1169	967	729
40°	2314	2436	2396	2163	1977	1772	1471	1211	1026	891	704
42.5°	1204	1196	1169	1097	935	935	891	800	751	713	632
45°	628	654	617	606	570	571	552	544	523	522	485
50°	349	357	357	359	366	364	365	360	361	350	344
55°	316	319	322	325	320	322	323	322	326	319	305
60°	274	276	269	273	265	264	265	253	235	222	218
70°	36	38	33	36	34	33	32	30	28	25	22
80°	10	10	10	10	10	10	10	10	10	9	9
90°	6	6	6	6	6	6	6	6	6	5	5



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CANDELA DISTRIBUTION (continued):

	35°	40°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	322	322	322	322	322	322	322	322	322
5°	349	349	349	375	338	323	311	304	303
10°	377	376	377	384	337	302	285	280	280
15°	453	432	414	413	327	299	317	311	239
17.5°	512	475	444	399	319	297	295	143	174
20°	577	529	483	381	315	307	177	118	87
21°	610	541	493	375	311	314	168	97	99
22°	653	568	497	372	309	315	159	101	81
23°	696	588	509	369	305	292	147	68	27
24°	738	627	524	371	303	258	127	35	13
25°	794	649	537	366	300	235	104	18	10
26°	819	672	555	360	302	204	90	12	10
27°	854	682	565	357	303	177	52	10	9
28°	872	681	566	356	305	170	26	9	9
29°	859	673	572	352	303	160	16	9	9
30°	834	664	559	345	299	135	13	9	9
31°	818	647	556	347	292	113	12	9	9
32°	794	626	551	344	283	105	11	9	9
33°	753	608	540	335	271	82	10	10	10
34°	723	602	515	326	251	62	10	10	10
35°	687	583	507	321	232	38	10	10	10
36°	653	564	505	317	223	25	11	10	10
37°	631	541	505	311	213	18	11	11	11
38°	612	523	496	307	199	15	11	11	12
39°	597	505	477	308	179	13	11	12	12
40°	566	486	457	309	155	13	11	12	13
42.5°	526	440	396	291	109	13	12	13	13
45°	456	403	364	269	58	13	13	14	15
50°	331	324	296	194	12	15	17	18	19
55°	286	277	276	81	10	20	28	26	25
60°	197	158	151	25	8	27	44	40	40
70°	17	14	11	6	5	21	51	41	32
80°	8	7	6	3	2	6	2	0	0
90°	4	4	3	2	2	1	0	0	0

(END OF REPORT)