

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: E395235

Luminaire Tested: **H7-1450**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395235
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H7-1450
Description: HALO RECESSED INC - LV, 8" ADJUSTABLE SLOT, 0 DEG TILT
Light Source: 50MR16FL, 900 LUMENS
Ballast/Driver: -

Summary

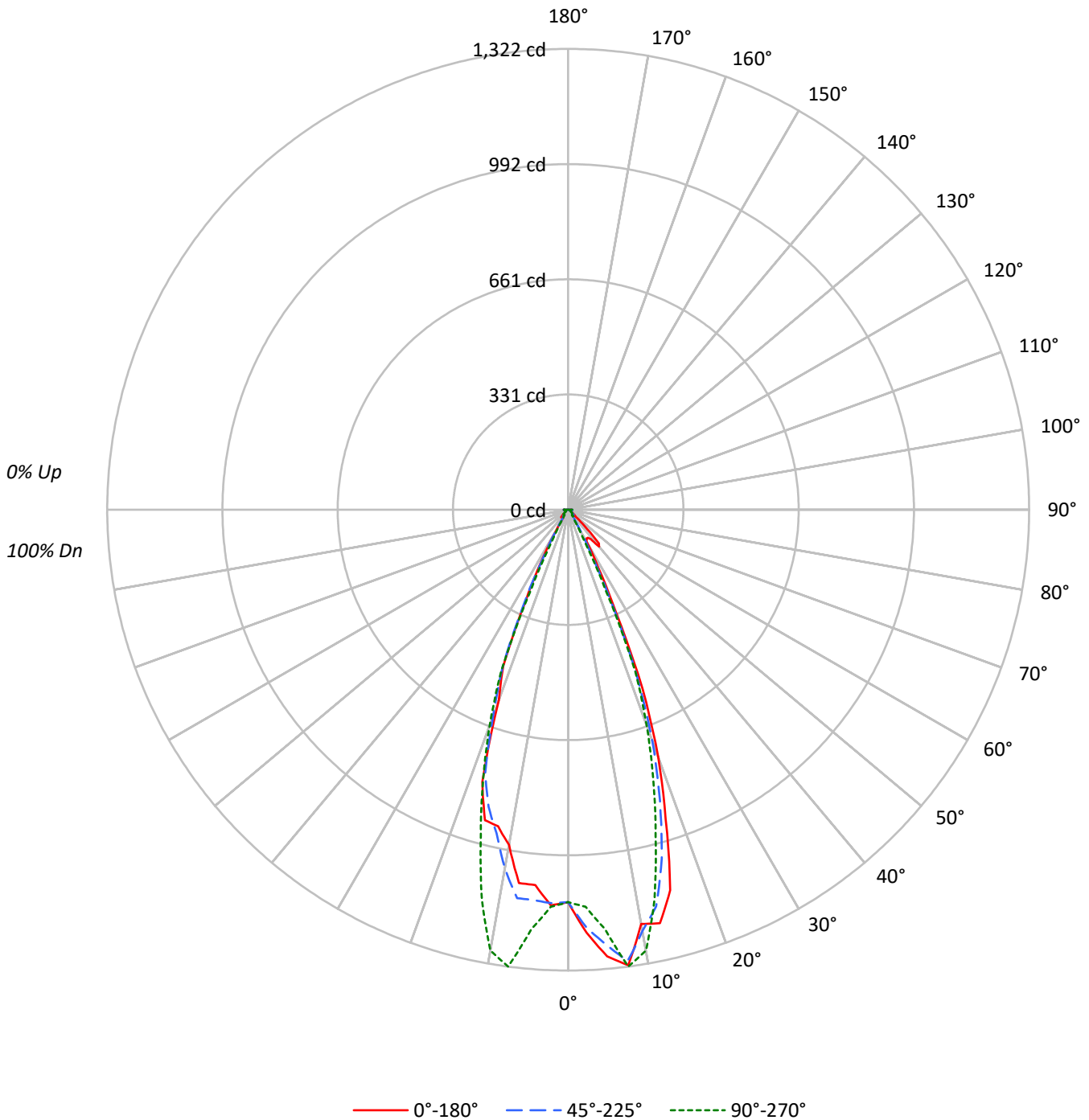
Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 600.6 lumens
Efficiency: 66.7%
Efficacy: 10.0 lumens/watt
Spacing Criteria (0/90/45): 0.72 / 0.72 / 0.63
Luminous Opening: Rectangular (W 0.23' x L: 0.12' x H: 0')
CIE Type: Direct

Input Watts (W): 60
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	79	79	79	79	78	78	78	78	74	74	74	71	71	71	68	68	68	67																			
1	76	74	72	70	74	72	71	69	69	68	67	67	66	65	65	64	63	62																			
2	72	69	66	64	71	68	65	63	66	64	62	64	62	61	62	61	59	58																			
3	69	65	62	60	68	64	61	59	62	60	58	61	59	57	59	58	56	55																			
4	66	62	58	56	65	61	58	55	60	57	55	58	56	54	57	55	54	53																			
5	64	59	55	53	63	58	55	52	57	54	52	56	53	51	55	53	51	50																			
6	61	56	52	50	60	55	52	50	54	52	49	54	51	49	53	51	49	48																			
7	59	53	50	48	58	53	50	47	52	49	47	52	49	47	51	48	47	46																			
8	57	51	48	45	56	51	48	45	50	47	45	50	47	45	49	47	45	44																			
9	55	49	46	43	54	49	46	43	48	45	43	48	45	43	47	45	43	42																			
10	53	47	44	42	52	47	44	42	47	44	42	46	43	41	46	43	41	41																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	439137	439137	439137
5°	503452	472524	423197
10°	477988	508481	386905
15°	456243	391238	372262
20°	312930	272672	241130
25°	137700	108869	123930
30°	47735	18914	31073
35°	46658	9046	8570
40°	70256	12219	13237
45°	35298	12685	14340
50°	15168	7887	7887
55°	8839	5440	5440
60°	7800	6240	6240
65°	6460	6460	6460
70°	6842	5701	5701
75°	13561	12055	10548
80°	17967	22459	20213
85°	31323	49222	49222



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	113.9	19.0	12.7
10°-20°	262.2	43.7	29.1
20°-30°	140.3	23.4	15.6
30°-40°	25.3	4.2	2.8
40°-50°	23.4	3.9	2.6
50°-60°	9.0	1.5	1.0
60°-70°	6.8	1.1	0.8
70°-80°	7.7	1.3	0.9
80°-90°	12.2	2.0	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°	516.3	86.0	57.4
0°-40°	541.6	90.2	60.2
0°-60°	573.9	95.6	63.8
0°-90°	600.6	100.0	66.7
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°	600.6	100.0	66.7

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1126	1126	1126	1126	1126	
5°	1286	1253	1207	1124	1081	121
15°	1130	1036	969	882	922	294
25°	320	285	253	310	288	163
35°	98	27	19	20	18	67
45°	64	27	23	25	26	57
55°	13	11	8	8	8	13
65°	7	7	7	7	7	7
75°	9	8	8	7	7	8
85°	7	12	11	11	11	9
90°	10	12	12	13	13	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126
2.5°	1215	1199	1219	1208	1190	1199	1171	1173	1163	1159	1140
5°	1286	1254	1251	1254	1250	1253	1247	1246	1243	1223	1207
7.5°	1318	1291	1294	1282	1302	1306	1310	1306	1334	1326	1322
10°	1207	1199	1187	1187	1204	1227	1247	1271	1303	1290	1284
12.5°	1215	1191	1175	1147	1136	1166	1163	1179	1184	1144	1144
15°	1130	1117	1096	1057	1049	1036	1046	1021	1005	989	969
17.5°	930	925	919	902	870	874	859	841	819	829	811
20°	754	736	728	736	714	705	692	671	668	676	657
22.5°	558	554	542	530	514	510	490	466	478	486	502
25°	320	312	307	308	312	285	253	237	233	244	253
27.5°	185	177	173	177	181	138	130	102	106	106	95
30°	106	101	103	102	117	74	52	45	43	42	42
32.5°	98	98	97	89	76	37	29	28	26	25	26
35°	98	87	86	88	43	27	21	19	18	18	19
37.5°	106	106	98	90	30	26	19	18	15	16	18
40°	138	131	122	101	32	32	23	24	20	22	24
42.5°	130	131	120	72	35	33	29	27	26	27	25
45°	64	86	80	38	30	27	25	23	26	24	23
47.5°	29	34	33	24	24	20	20	18	20	18	18
50°	25	25	23	17	17	15	14	14	13	13	13
52.5°	17	17	15	15	14	12	10	10	10	10	10
55°	13	13	12	11	12	11	9	8	8	9	8
57.5°	11	10	10	10	6	10	9	8	8	9	8
60°	10	10	10	10	7	9	8	8	8	9	8
65°	7	7	7	7	7	7	7	7	7	7	7
70°	6	5	5	5	5	5	5	5	5	5	5
75°	9	7	8	8	7	8	7	8	6	7	8
80°	8	10	9	11	9	10	9	10	9	9	10
85°	7	12	11	12	11	12	12	11	12	11	11
90°	10	12	12	11	13	12	13	12	14	13	12



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126
2.5°	1144	1132	1132	1136	1130	1132	1136	1136	1128	1136
5°	1187	1187	1152	1144	1124	1097	1100	1100	1084	1081
7.5°	1297	1270	1223	1167	1124	1100	1090	1068	1068	1080
10°	1282	1227	1163	1100	1045	1001	961	973	976	977
12.5°	1120	1096	1045	1013	950	919	926	922	929	930
15°	950	922	926	910	882	888	906	910	930	922
17.5°	797	767	769	787	791	811	807	815	815	819
20°	653	617	597	621	628	626	613	595	593	581
22.5°	490	474	463	474	494	498	510	478	466	486
25°	266	257	268	288	310	308	308	303	296	288
27.5°	95	118	118	134	154	158	163	173	177	169
30°	43	48	54	61	65	77	78	78	62	69
32.5°	27	25	29	30	32	32	32	29	27	26
35°	19	20	20	20	20	21	20	19	19	18
37.5°	18	20	19	21	17	17	18	19	20	19
40°	25	26	25	25	23	24	24	24	26	26
42.5°	26	26	28	27	28	28	28	29	29	30
45°	25	23	25	24	25	26	26	26	25	26
47.5°	18	18	18	18	20	20	19	20	20	19
50°	13	13	13	13	13	13	13	13	13	13
52.5°	10	10	9	10	10	10	9	9	9	9
55°	8	8	8	8	8	8	8	8	8	8
57.5°	8	8	8	8	8	8	8	8	8	8
60°	8	8	8	8	8	8	8	8	8	8
65°	7	7	7	7	7	7	7	7	7	7
70°	5	5	5	5	5	5	5	5	5	5
75°	7	8	7	8	7	7	7	7	7	7
80°	10	10	9	10	9	9	9	9	10	9
85°	12	11	12	11	11	12	11	11	11	11
90°	13	12	13	12	13	13	13	12	12	13

(END OF REPORT)