

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: E395237

Luminaire Tested: **H7-1450**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: E395237  
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: -  
Ballast/Driver: -

**Summary**

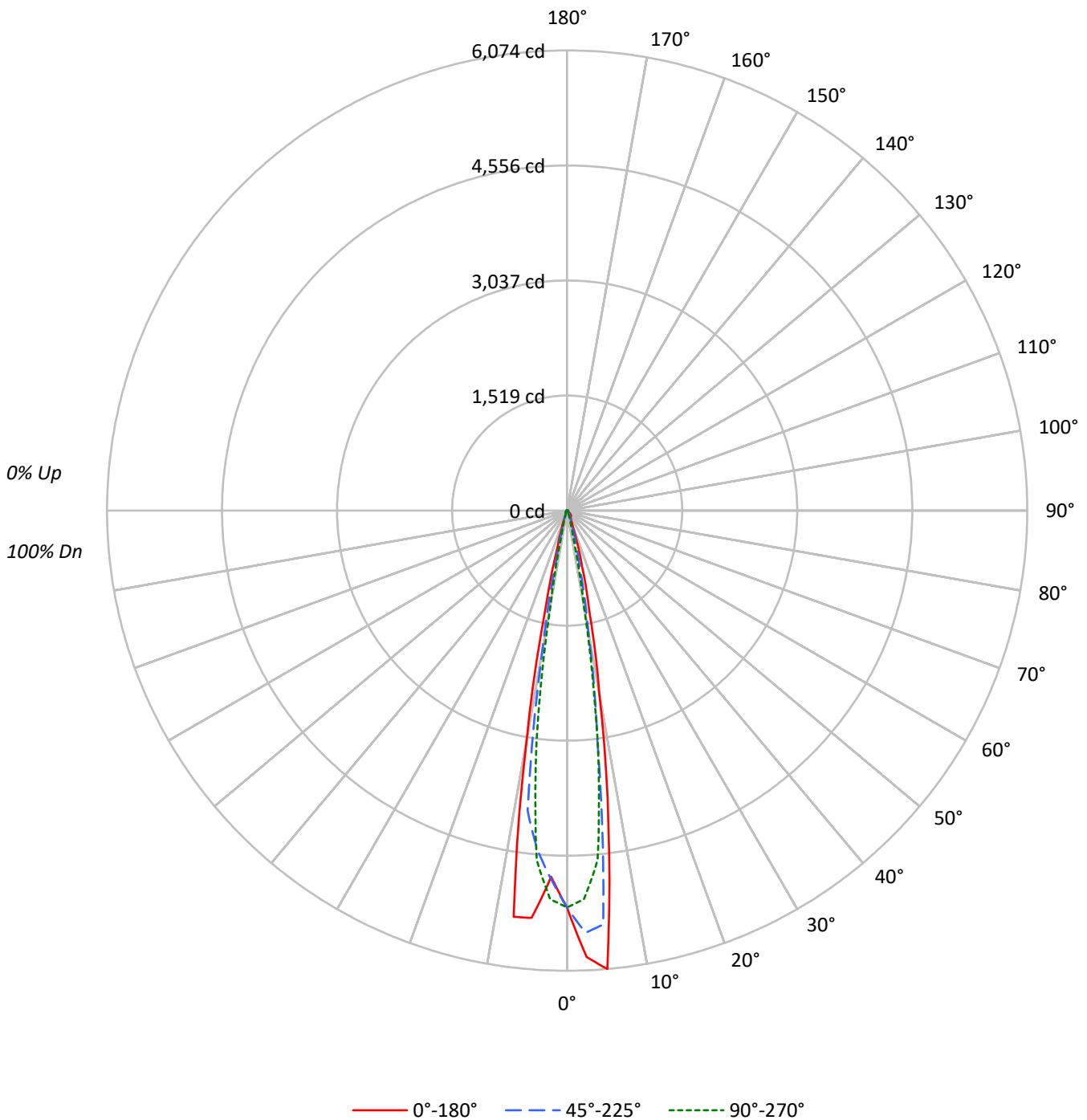
Lumens per Lamp: 900 (1 lamp)  
Luminaire Lumens: 614.8 lumens  
Efficiency: 68.3%  
Efficacy: 10.2 lumens/watt  
Spacing Criteria (0/90/45): 0.35 / 0.28 / 0.27  
Luminous Opening: Rectangular (W 0.23' x L: 0.12' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: E395237  
CATALOG NUMBER: H7-1450

### Luminous Intensity Polar Plot





TEST NUMBER: E395237  
 CATALOG NUMBER: H7-1450

**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	50	30	10	0	
RCR																						
0	81	81	81	81	79	79	79	79	76	76	76	73	73	73	70	70	70	70	70	70	68	
1	78	77	75	74	77	75	74	73	72	71	70	70	69	68	68	67	66	68	67	66	65	
2	76	73	71	69	74	72	70	68	70	68	67	68	67	66	66	65	64	66	65	64	63	
3	74	70	68	66	72	69	67	65	68	66	64	66	65	63	65	64	62	65	64	62	62	
4	72	68	65	63	71	67	65	63	66	64	62	65	63	62	64	62	61	64	62	61	60	
5	70	66	63	62	69	66	63	61	64	62	61	63	62	60	63	61	60	63	61	60	59	
6	68	64	62	60	68	64	62	60	63	61	59	62	60	59	62	60	59	62	60	59	58	
7	67	63	60	59	66	63	60	58	62	60	58	61	59	58	61	59	58	61	59	58	57	
8	66	62	59	57	65	61	59	57	61	59	57	60	58	57	60	58	57	60	58	57	56	
9	65	61	58	56	64	60	58	56	60	58	56	59	57	56	59	57	56	59	57	56	55	
10	63	60	57	56	63	59	57	56	59	57	55	58	57	55	58	56	55	58	56	55	55	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	2043194	2043194	2043194
5°	2377890	1811800	2112853
10°	964688	500957	1218533
15°	311295	75906	188957
20°	90061	27392	45238
25°	49056	14631	15922
30°	41881	7656	10358
35°	40944	4285	5237
40°	39710	10691	8146
45°	24819	12685	9376
50°	12135	6674	8494
55°	5440	4760	4760
60°	6240	5460	5460
65°	5537	5537	5537
70°	5701	4561	5701
75°	12055	9041	10548
80°	15721	20213	17967
85°	31323	49222	44747



TEST NUMBER: E395237  
 CATALOG NUMBER: H7-1450

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	374.3	60.9	41.6
10°-20°	143.7	23.4	16.0
20°-30°	27.5	4.5	3.1
30°-40°	17.8	2.9	2.0
40°-50°	19.7	3.2	2.2
50°-60°	7.3	1.2	0.8
60°-70°	5.9	1.0	0.7
70°-80°	7.0	1.1	0.8
80°-90°	11.6	1.9	1.3
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°	545.6	88.7	60.6
0°-40°	563.4	91.6	62.6
0°-60°	590.4	96.0	65.6
0°-90°	614.8	100.0	68.3
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°	614.8	100.0	68.3

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5239	5239	5239	5239	5239	
5°	6074	5483	4628	4496	5397	432
15°	771	416	188	259	468	241
25°	114	73	34	36	37	58
35°	86	14	9	12	11	54
45°	45	25	23	27	17	34
55°	8	8	7	7	7	9
65°	6	6	6	6	6	6
75°	8	6	6	6	7	7
85°	7	11	11	11	10	9
90°	11	12	12	13	12	



TEST NUMBER: E395237  
 CATALOG NUMBER: H7-1450

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5239	5239	5239	5239	5239	5239	5239	5239	5239	5239	5239
2.5°	5897	5867	5812	5768	5689	5578	5482	5355	5296	5124	5132
5°	6074	6123	5759	5889	5643	5483	5346	5073	4905	4663	4628
7.5°	4179	4188	3993	3952	3693	3054	3061	3007	3092	3083	3095
10°	2436	2350	2134	2078	1856	1595	1406	1350	1285	1265	1265
12.5°	1342	1398	1347	1144	943	770	631	524	408	370	361
15°	771	789	702	612	484	416	308	240	202	191	188
17.5°	388	384	373	310	256	190	159	133	124	108	110
20°	217	212	198	192	165	133	104	77	70	67	66
22.5°	138	142	140	136	123	108	77	69	63	55	55
25°	114	115	115	108	101	73	68	54	38	35	34
27.5°	103	103	101	95	79	61	38	27	26	24	24
30°	93	93	93	88	57	52	24	22	19	18	17
32.5°	88	89	87	85	51	18	16	14	13	12	13
35°	86	89	88	77	49	14	12	11	9	9	9
37.5°	87	95	90	54	24	15	18	15	11	11	13
40°	78	94	90	56	30	26	28	24	20	19	21
42.5°	58	74	72	49	28	27	27	25	25	25	25
45°	45	47	41	26	24	25	23	23	24	22	23
47.5°	25	25	25	20	20	22	21	20	20	22	20
50°	20	19	17	15	16	16	15	12	12	11	11
52.5°	10	9	9	9	10	9	8	7	7	7	7
55°	8	8	8	8	8	8	7	7	7	7	7
57.5°	8	8	8	8	8	7	7	7	7	7	7
60°	8	8	8	7	7	7	7	7	7	7	7
65°	6	6	6	6	6	6	6	6	6	6	6
70°	5	5	5	5	4	5	4	5	5	5	4
75°	8	7	6	7	7	6	7	7	6	7	6
80°	7	10	9	9	9	9	9	9	8	8	9
85°	7	11	11	11	11	11	11	11	11	10	11
90°	11	11	12	13	12	12	11	12	13	12	12



TEST NUMBER: E395237  
 CATALOG NUMBER: H7-1450

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5239	5239	5239	5239	5239	5239	5239	5239	5239	5239
2.5°	5019	4988	4902	4864	4869	4873	4884	4868	4862	4838
5°	4499	4405	4298	4378	4496	4755	5016	5249	5379	5397
7.5°	3110	3292	3437	3681	3996	4361	4711	5044	5291	5409
10°	1277	1237	1465	1627	1900	2256	2819	3101	3207	3077
12.5°	372	373	430	518	634	714	1036	1188	1400	1306
15°	184	198	214	234	259	282	340	417	460	468
17.5°	107	120	124	138	154	167	169	201	217	224
20°	66	67	68	68	75	85	86	98	108	109
22.5°	53	47	47	42	45	45	42	41	44	43
25°	34	34	34	35	36	35	35	34	35	37
27.5°	24	25	24	27	29	29	28	27	29	30
30°	17	17	17	18	22	21	20	21	21	23
32.5°	13	13	13	14	17	18	16	16	15	16
35°	9	10	10	11	12	13	12	12	11	11
37.5°	12	12	15	14	14	18	14	15	14	10
40°	22	17	22	22	22	28	24	24	24	16
42.5°	25	20	24	26	29	33	30	29	30	21
45°	24	20	22	23	27	28	26	26	26	17
47.5°	20	20	19	20	21	20	20	20	20	16
50°	11	13	11	11	12	12	14	13	13	14
52.5°	7	7	7	7	7	7	7	7	7	7
55°	7	7	7	7	7	7	7	7	7	7
57.5°	7	7	7	7	7	7	7	7	7	7
60°	7	7	7	7	7	7	7	7	7	7
65°	6	6	6	6	6	6	6	6	6	6
70°	4	5	5	5	5	4	5	4	4	5
75°	6	7	6	6	6	7	6	6	6	7
80°	9	8	9	8	8	10	8	8	9	8
85°	11	9	11	11	11	11	11	11	11	10
90°	12	11	12	12	13	13	13	12	12	12

(END OF REPORT)