

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: E395236

Luminaire Tested: **H7-1450**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395236
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, 45 DEG TILT
Light Source: 50MR16FL, 900 LUMENS
Ballast/Driver: -

Summary

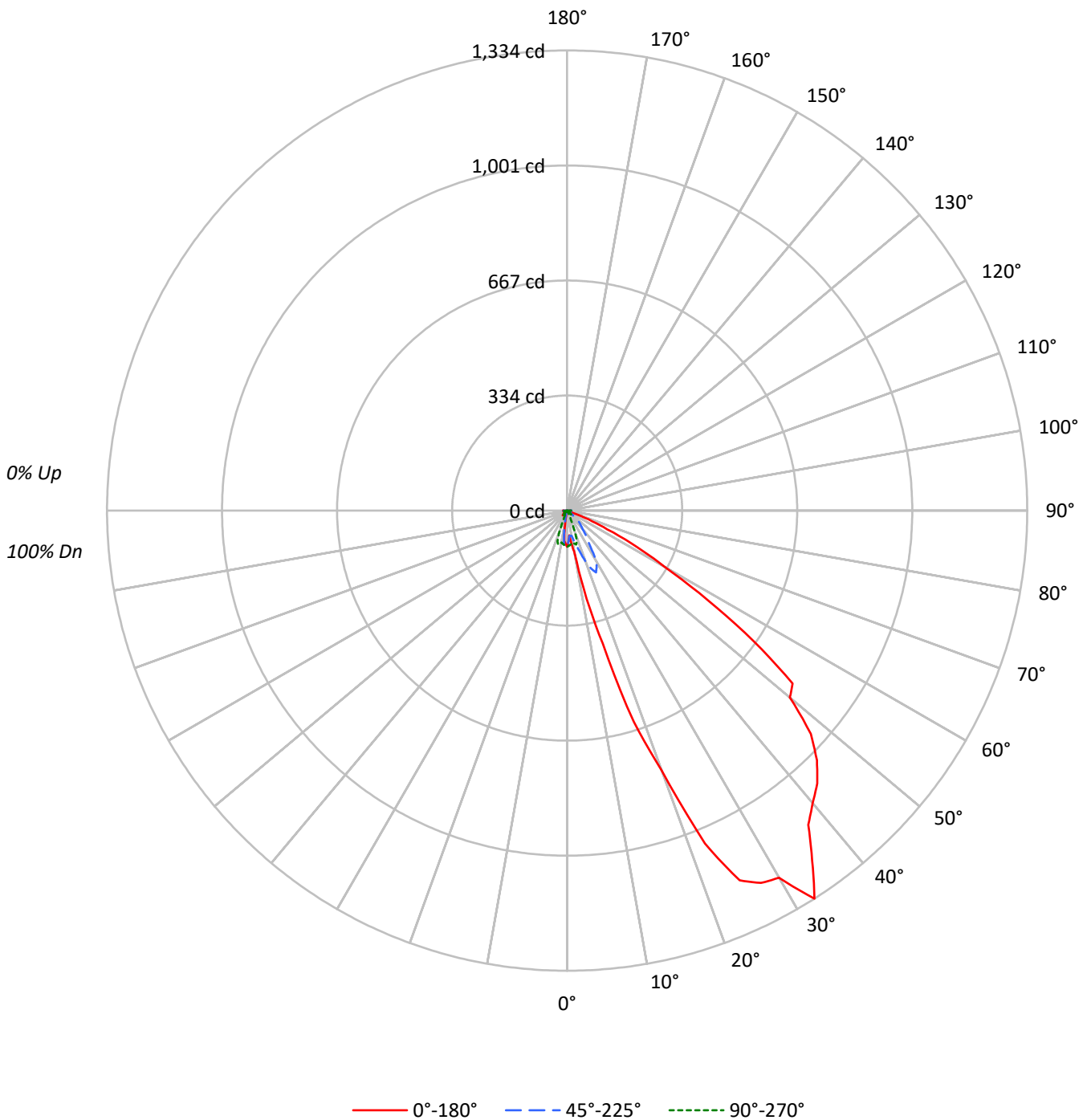
Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 538.3 lumens
Efficiency: 59.8%
Efficacy: 9.0 lumens/watt
Spacing Criteria (0/90/45): 2.96 / 0.74 / 1.03
Luminous Opening: Rectangular (W 0.23' x L: 0.12' x H: 0')
CIE Type: Direct

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									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	50	30	10	0														
RCR																																						
0	71	71	71	71	70	70	70	70	66	66	66	64	64	64	61	61	61	60																				
1	66	63	61	59	64	62	60	58	60	58	56	57	56	55	55	54	53	52																				
2	61	56	53	50	59	55	52	49	53	50	48	51	49	47	49	48	46	45																				
3	56	50	46	42	54	49	45	42	47	44	41	46	43	40	44	42	40	38																				
4	51	45	40	36	50	44	39	36	42	38	35	41	38	35	40	37	34	33																				
5	47	40	35	31	46	39	35	31	38	34	31	37	33	30	36	33	30	29																				
6	43	36	31	27	42	35	30	27	34	30	27	33	29	26	32	29	26	25																				
7	40	32	27	24	39	32	27	24	31	27	23	30	26	23	29	26	23	22																				
8	37	29	24	21	36	29	24	21	28	24	21	27	23	20	27	23	20	19																				
9	34	27	22	18	34	26	22	18	26	21	18	25	21	18	24	21	18	17																				
10	32	24	20	16	31	24	19	16	23	19	16	23	19	16	22	19	16	15																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	40950	40950	40950
5°	28187	39149	34842
10°	49106	37225	5940
15°	161098	41183	4845
20°	332436	27807	2075
25°	509061	5594	1291
30°	553455	3152	901
35°	589410	1904	952
40°	563579	6618	7127
45°	564776	9376	9376
50°	511471	6674	7281
55°	448760	4760	5440
60°	254278	5460	7020
65°	118120	5537	6460
70°	6842	5701	6842
75°	13561	10548	13561
80°	17967	20213	22459
85°	31323	44747	49222



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	8.1	1.5	0.9
10°-20°	33.0	6.1	3.7
20°-30°	97.7	18.2	10.9
30°-40°	146.1	27.1	16.2
40°-50°	136.9	25.4	15.2
50°-60°	77.5	14.4	8.6
60°-70°	19.8	3.7	2.2
70°-80°	7.6	1.4	0.8
80°-90°	11.8	2.2	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°	138.8	25.8	15.4
0°-40°	284.8	52.9	31.6
0°-60°	499.2	92.7	55.5
0°-90°	538.3	100.0	59.8
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°	538.3	100.0	59.8

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	105	105	105	105	105	
5°	72	74	100	105	89	9
15°	399	103	102	13	12	135
25°	1183	198	13	5	3	521
35°	1238	101	4	2	2	765
45°	1024	51	17	17	17	778
55°	660	12	7	8	8	567
65°	128	6	6	7	7	144
75°	9	7	7	8	9	8
85°	7	10	10	10	11	9
90°	10	12	12	11	12	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	105	105	105	105	105	105	105	105	105	105	105
5°	72	71	71	72	73	74	79	86	93	97	100
10°	124	121	116	99	85	74	74	78	86	93	94
15°	399	368	327	253	163	103	79	78	86	100	102
17.5°	642	634	540	389	242	128	84	79	87	97	93
20°	801	806	718	558	336	159	88	78	74	75	67
22.5°	1045	1009	861	708	434	182	83	51	38	35	29
25°	1183	1147	1028	801	506	198	70	32	19	15	13
27.5°	1217	1202	1109	881	558	185	49	24	14	11	10
30°	1229	1217	1170	946	586	169	40	18	12	9	7
32.5°	1334	1304	1250	984	573	128	32	15	10	6	5
35°	1238	1260	1320	985	533	101	25	13	9	4	4
37.5°	1148	1211	1300	924	486	87	23	13	13	9	6
40°	1107	1174	1212	840	459	69	29	19	20	19	13
42.5°	1073	1100	1100	745	393	59	31	24	22	23	17
45°	1024	1026	959	661	278	51	27	21	19	21	17
47.5°	958	917	812	593	188	37	22	17	15	16	15
50°	843	832	761	486	110	25	14	11	10	11	11
52.5°	824	814	661	374	71	16	9	7	7	7	7
55°	660	632	496	253	48	12	8	7	7	7	7
57.5°	483	475	373	156	23	10	7	7	7	7	7
60°	326	308	256	78	15	8	7	7	7	7	7
65°	128	119	60	15	6	6	6	6	6	6	6
70°	6	5	6	6	5	5	5	5	5	5	5
75°	9	7	7	7	6	7	6	6	7	6	7
80°	8	10	10	10	9	9	9	9	10	10	9
85°	7	12	11	11	11	10	11	10	11	12	10
90°	10	11	13	11	13	12	12	12	11	12	12



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	105	105	105	105	105	105	105	105	105	105
5°	102	103	101	101	105	102	98	95	93	89
10°	97	98	83	63	35	21	17	15	15	15
15°	99	70	30	17	13	12	11	11	11	12
17.5°	80	43	20	13	12	12	10	8	8	9
20°	55	27	13	13	10	8	6	5	5	5
22.5°	23	15	12	11	6	5	4	4	3	3
25°	11	10	10	8	5	4	3	3	3	3
27.5°	7	7	7	4	3	2	2	2	2	2
30°	6	7	5	2	2	2	2	2	2	2
32.5°	5	6	2	2	2	2	2	2	2	2
35°	4	2	2	2	2	2	2	2	2	2
37.5°	5	5	6	6	6	5	3	4	6	7
40°	12	12	13	16	13	15	12	13	15	14
42.5°	19	20	18	21	18	21	20	19	20	19
45°	19	20	17	19	17	19	20	19	19	17
47.5°	16	16	15	15	15	16	17	17	16	14
50°	11	11	11	11	11	10	11	11	11	12
52.5°	7	7	8	8	8	7	8	8	8	8
55°	7	7	7	10	8	7	8	8	8	8
57.5°	7	7	8	8	8	7	8	8	8	8
60°	7	7	8	8	8	7	8	8	8	9
65°	6	6	6	7	7	6	7	7	7	7
70°	5	5	6	6	6	4	6	6	6	6
75°	6	6	7	7	8	6	7	8	8	9
80°	9	9	10	10	10	8	9	9	10	10
85°	11	11	11	12	10	10	12	11	12	11
90°	13	12	11	12	11	9	13	13	13	12

(END OF REPORT)