

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: E395258

Luminaire Tested: **H1499-1420**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395258
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H1499-1420
Description: HALO RECESSED INC - LV, 4" ADJUSTABLE SLOT, 45 DEG TILT
Light Source: 50MR16NFL, 900 LUMENS
Ballast/Driver: -

Summary

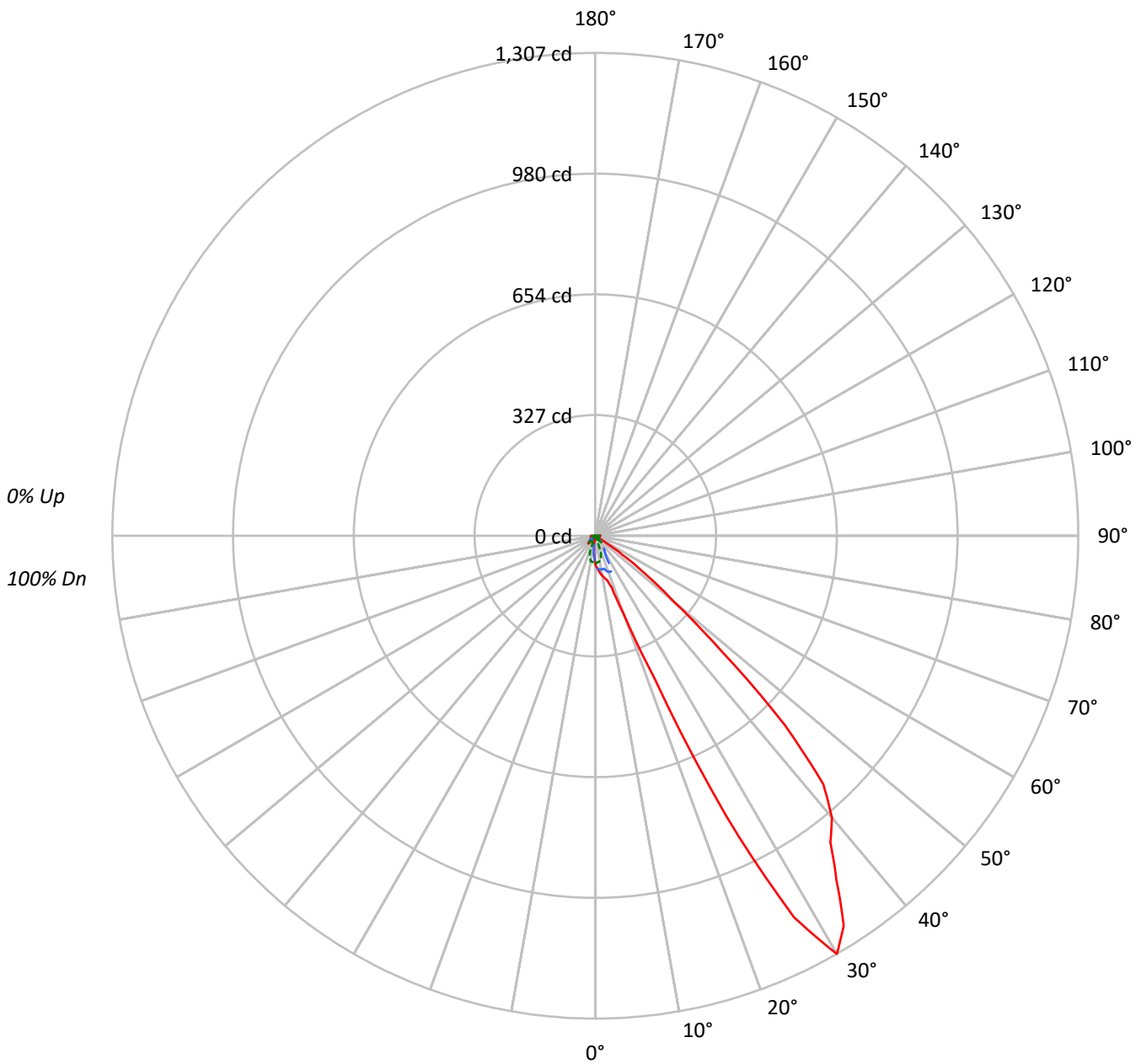
Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 250.8 lumens
Efficiency: 27.9%
Efficacy: 4.2 lumens/watt
Spacing Criteria (0/90/45): 2.39 / 0.64 / 0.79
Luminous Opening: Rectangular (W 0.19' x L: 0.12' x H: 0')
CIE Type: Direct

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



0% Up
100% Dn

— 0°-180° - - 45°-225° - - - 90°-270°



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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	33	33	33	33	32	32	32	32	31	31	31	30	30	30	28	28	28	28	28	28	28	28	28	28													
1	31	29	28	27	30	29	28	27	27	27	26	26	26	25	25	25	24	24	24	24	24	24	24	24													
2	28	26	24	23	27	26	24	23	25	23	22	24	23	22	23	22	21	21	21	21	21	21	21	21													
3	26	23	21	20	25	23	21	20	22	21	19	21	20	19	21	20	19	19	19	19	19	19	19	18													
4	24	21	19	17	23	21	19	17	20	18	17	19	18	17	19	17	16	16	16	16	16	16	16	16													
5	22	19	17	15	22	19	16	15	18	16	15	18	16	15	17	16	14	14	14	14	14	14	14	14													
6	21	17	15	13	20	17	15	13	16	14	13	16	14	13	15	14	13	13	13	13	13	13	13	12													
7	19	16	13	12	19	15	13	12	15	13	11	14	13	11	14	13	11	11	11	11	11	11	11	11													
8	18	14	12	10	17	14	12	10	14	12	10	13	11	10	13	11	10	10	10	10	10	10	10	10													
9	16	13	11	9	16	13	11	9	12	10	9	12	10	9	12	10	9	9	9	9	9	9	9	9													
10	15	12	10	8	15	12	10	8	11	9	8	11	9	8	11	9	8	8	8	8	8	8	8	8													

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	36352	36352	36352
5°	44547	34121	17061
10°	52732	33557	4314
15°	61094	28837	1955
20°	115552	6531	2010
25°	435478	1563	2605
30°	712493	1635	3816
35°	655287	576	6340
40°	613820	12942	16640
45°	484048	14688	17359
50°	203445	7345	13955
55°	74078	5762	13169
60°	6609	6609	14163
65°	6703	6703	13405
70°	5521	5521	12423
75°	9120	10944	20065
80°	27187	24469	35343
85°	43334	65001	70418



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	6.3	2.5	0.7
10°-20°	16.3	6.5	1.8
20°-30°	47.3	18.9	5.3
30°-40°	77.3	30.8	8.6
40°-50°	61.2	24.4	6.8
50°-60°	17.3	6.9	1.9
60°-70°	7.2	2.9	0.8
70°-80°	7.3	2.9	0.8
80°-90°	10.3	4.1	1.1
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°	70.0	27.9	7.8
0°-40°	147.3	58.8	16.4
0°-60°	225.9	90.1	25.1
0°-90°	250.8	100.0	27.9
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°	250.8	100.0	27.9

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	77	77	77	77	77	
5°	94	91	72	46	36	9
15°	125	92	59	7	4	41
25°	836	105	3	4	5	385
35°	1137	37	1	5	11	716
45°	725	21	22	24	26	523
55°	90	7	7	11	16	93
65°	6	6	6	8	12	6
75°	5	7	6	7	11	6
85°	8	7	12	8	13	11
90°	14	10	13	12	11	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	77	77	77	77	77	77	77	77	77	77	77
5°	94	95	96	95	94	91	90	86	82	75	72
10°	110	106	97	94	95	93	95	92	88	76	70
15°	125	121	116	118	104	92	90	92	87	71	59
17.5°	146	143	134	121	114	100	88	92	89	67	50
20°	230	218	185	148	131	104	87	77	41	18	13
22.5°	415	419	293	195	131	106	65	21	12	7	5
25°	836	736	450	239	141	105	28	16	9	5	3
27.5°	1164	1073	643	271	144	62	23	15	7	4	3
30°	1307	1220	721	279	142	52	17	11	5	3	3
32.5°	1251	1159	721	286	112	46	14	8	3	2	2
35°	1137	1068	696	278	112	37	10	5	2	1	1
37.5°	1045	963	593	238	97	27	8	4	5	5	10
40°	996	896	495	212	76	21	7	8	15	19	21
42.5°	913	806	430	174	63	18	13	16	21	24	25
45°	725	653	350	152	45	21	16	17	19	22	22
47.5°	468	454	260	120	33	18	15	15	15	17	16
50°	277	286	174	86	19	11	11	11	11	11	10
52.5°	177	174	104	45	9	7	7	7	7	7	7
55°	90	79	47	21	7	7	7	7	7	7	7
57.5°	17	25	15	8	7	7	7	7	7	7	7
60°	7	8	7	7	7	7	7	7	7	7	7
65°	6	6	6	6	6	6	6	6	6	6	6
70°	4	4	5	5	5	5	5	5	4	4	4
75°	5	7	7	8	8	7	7	6	6	5	6
80°	10	7	8	8	7	6	7	7	8	8	9
85°	8	10	10	8	7	7	7	9	11	12	12
90°	14	14	12	10	10	10	11	11	13	14	13



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	77	77	77	77	77	77	77	77	77	77
5°	69	64	56	53	46	42	40	38	37	36
10°	63	49	35	23	15	10	10	9	9	9
15°	47	27	12	8	7	6	5	5	4	4
17.5°	39	16	8	7	5	4	4	4	4	4
20°	10	7	6	5	4	4	4	4	4	4
22.5°	5	4	3	4	4	4	5	4	4	4
25°	4	4	3	3	4	5	5	5	5	5
27.5°	2	2	3	3	4	5	6	6	7	6
30°	2	2	3	3	4	5	6	6	6	7
32.5°	2	2	2	3	5	6	7	7	7	7
35°	3	3	2	3	5	6	7	8	9	11
37.5°	8	4	2	3	5	7	8	10	16	20
40°	19	12	9	7	8	10	15	18	24	27
42.5°	23	17	15	17	19	22	24	25	27	29
45°	19	17	17	20	24	26	28	26	25	26
47.5°	14	14	16	19	22	24	26	24	22	22
50°	10	11	12	14	16	18	20	20	19	19
52.5°	7	7	8	10	11	15	16	17	16	16
55°	7	7	8	9	11	13	15	16	15	16
57.5°	7	7	8	9	11	13	15	15	15	15
60°	7	7	8	9	10	12	14	14	15	15
65°	6	6	7	7	8	10	11	12	12	12
70°	4	5	5	6	6	7	8	9	9	9
75°	6	7	6	7	7	8	8	9	10	11
80°	9	8	7	6	6	6	7	9	12	13
85°	11	10	9	8	8	8	9	10	12	13
90°	12	11	12	12	12	13	13	11	11	11

(END OF REPORT)