

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: E395256

Luminaire Tested: **H1499-1420**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395256
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: 50MR16NSP, 900 LUMENS
Ballast/Driver: -

Summary

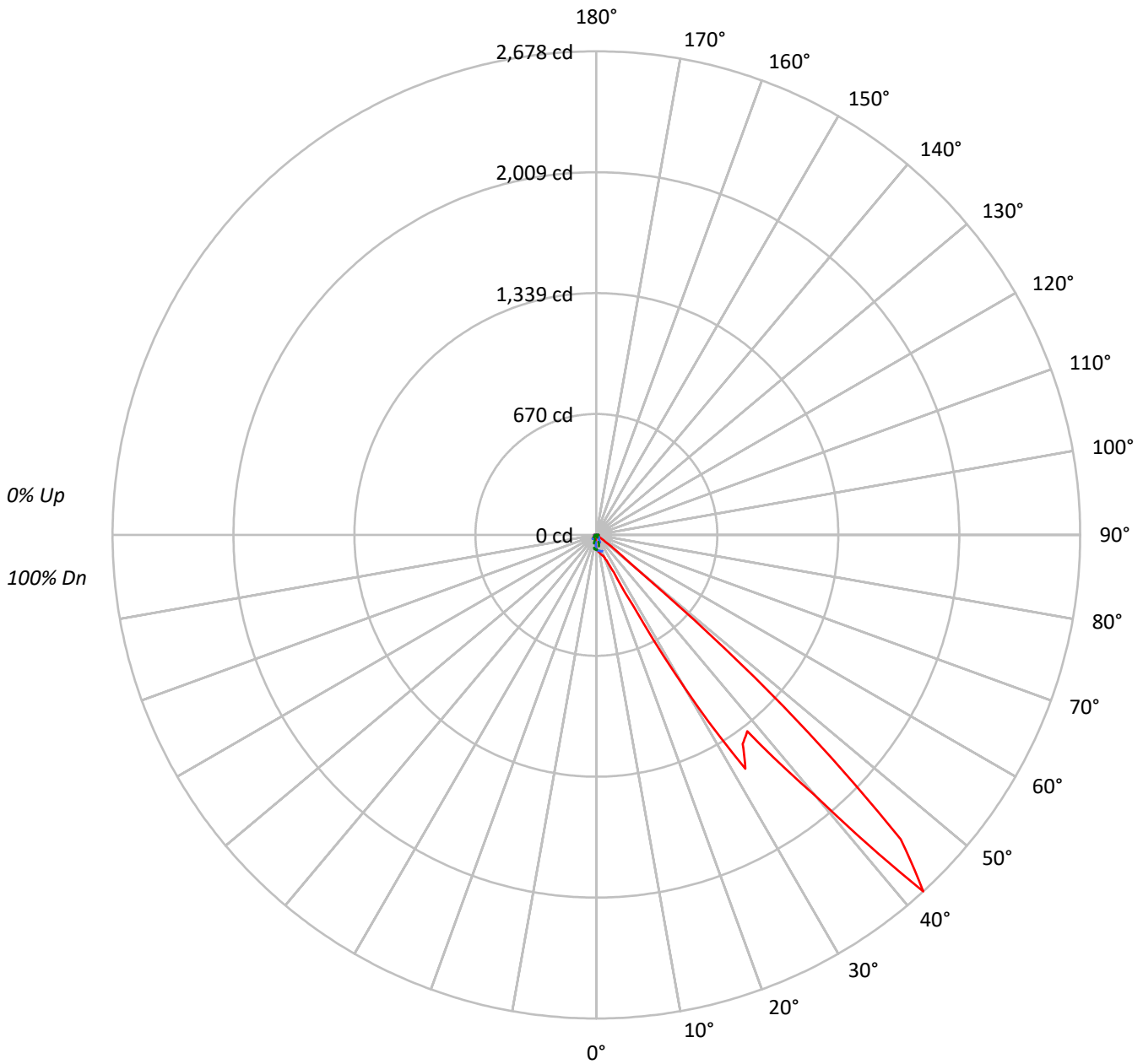
Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 291.9 lumens
Efficiency: 32.4%
Efficacy: 4.9 lumens/watt
Spacing Criteria (0/90/45): 2.38 / 0.57 / 0.69
Luminous Opening: Rectangular (W 0.19' x L: 0.12' x H: 0')
CIE Type: Direct

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°-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	50	30	10	0	
RCR																						
0	39	39	39	39	38	38	38	38	36	36	36	35	35	35	33	33	33	32	32	32	32	
1	36	34	33	32	35	33	32	31	32	31	30	31	30	29	30	29	28	28	28	28	28	
2	33	30	28	27	32	30	28	26	29	27	26	28	26	25	27	26	25	24	24	24	24	
3	30	27	25	23	29	27	24	23	26	24	22	25	23	22	24	23	21	21	21	21	21	
4	28	24	22	20	27	24	21	19	23	21	19	22	20	19	22	20	19	18	18	18	18	
5	26	22	19	17	25	21	19	17	21	18	17	20	18	16	19	18	16	16	16	16	16	
6	24	19	17	15	23	19	17	15	19	16	14	18	16	14	18	16	14	14	14	14	14	
7	22	17	15	13	21	17	15	13	17	14	13	16	14	13	16	14	12	12	12	12	12	
8	20	16	13	11	20	16	13	11	15	13	11	15	13	11	14	12	11	10	10	10	10	
9	19	14	12	10	18	14	12	10	14	11	10	13	11	10	13	11	10	9	9	9	9	
10	17	13	10	9	17	13	10	9	13	10	9	12	10	9	12	10	9	8	8	8	8	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	38712	38712	38712
5°	41704	38386	10900
10°	47459	35474	5753
15°	56696	27370	2444
20°	67322	5024	2512
25°	118767	4167	3125
30°	536414	3271	3816
35°	814354	1153	4611
40°	1160464	3081	11093
45°	1591016	11350	19362
50°	190959	9548	14689
55°	18931	5762	11523
60°	6609	6609	12275
65°	6703	6703	11171
70°	5521	5521	11043
75°	10944	10944	14592
80°	27187	19031	21750
85°	70418	43334	54168



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	6.1	2.1	0.7
10°-20°	14.9	5.1	1.7
20°-30°	32.6	11.2	3.6
30°-40°	98.1	33.6	10.9
40°-50°	103.9	35.6	11.5
50°-60°	11.9	4.1	1.3
60°-70°	6.8	2.3	0.8
70°-80°	6.7	2.3	0.7
80°-90°	11.0	3.8	1.2
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°	53.6	18.4	6.0
0°-40°	151.7	52.0	16.9
0°-60°	267.4	91.6	29.7
0°-90°	291.9	100.0	32.4
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°	291.9	100.0	32.4

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	82	82	82	82	82	
5°	88	87	81	39	23	9
15°	116	94	56	10	5	33
25°	228	64	8	4	6	171
35°	1413	17	2	6	8	909
45°	2383	21	17	28	29	1439
55°	23	7	7	11	14	50
65°	6	6	6	8	10	6
75°	6	6	6	5	8	7
85°	13	10	8	12	10	14
90°	15	12	11	13	13	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	82	82	82	82	82	82	82	82	82	82	82
5°	88	87	86	86	85	87	89	89	86	84	81
10°	99	98	97	95	91	88	87	89	92	84	74
15°	116	114	114	108	100	94	86	86	92	76	56
17.5°	120	118	119	115	104	95	86	82	72	48	29
20°	134	133	127	124	110	95	77	52	41	20	10
22.5°	163	167	173	153	116	91	48	25	14	10	9
25°	228	245	294	208	119	64	24	14	13	7	8
27.5°	440	487	513	266	124	35	18	12	10	6	7
30°	984	943	766	312	96	27	14	10	8	6	6
32.5°	1536	1419	899	324	47	23	11	7	5	6	4
35°	1413	1456	1027	254	21	17	8	5	4	5	2
37.5°	1371	1457	1132	170	23	17	9	7	8	5	2
40°	1883	1625	1042	69	27	18	19	20	18	12	5
42.5°	2678	2153	761	49	29	22	26	26	24	19	16
45°	2383	2110	366	40	25	21	23	23	21	19	17
47.5°	1407	1065	137	29	19	17	17	17	16	15	15
50°	260	283	76	18	13	11	11	11	11	10	13
52.5°	61	67	37	11	7	7	7	7	7	7	7
55°	23	23	15	9	7	7	7	7	7	7	7
57.5°	14	13	8	7	7	7	7	7	7	7	7
60°	7	7	7	7	7	7	7	7	7	7	7
65°	6	6	6	6	6	6	6	6	6	6	6
70°	4	5	5	4	4	4	4	4	3	4	4
75°	6	7	6	7	7	6	4	4	5	6	6
80°	10	8	8	9	9	7	7	7	8	8	7
85°	13	9	9	10	10	10	11	12	11	10	8
90°	15	10	11	11	10	12	14	14	13	12	11



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	82	82	82	82	82	82	82	82	82	82
5°	76	66	57	49	39	30	27	23	21	23
10°	62	38	22	13	11	10	11	11	12	12
15°	36	18	12	11	10	8	7	6	5	5
17.5°	18	12	11	9	7	5	4	4	4	5
20°	10	10	8	5	4	4	4	4	5	5
22.5°	9	9	5	3	4	4	5	5	5	6
25°	8	7	3	3	4	5	5	5	6	6
27.5°	7	4	3	4	5	5	6	6	7	7
30°	4	3	3	4	5	6	7	7	7	7
32.5°	2	2	3	4	6	7	7	8	8	8
35°	1	2	3	5	6	8	9	8	8	8
37.5°	1	2	5	10	13	17	16	10	9	9
40°	5	7	12	21	25	27	26	19	18	18
42.5°	16	16	19	24	30	31	30	27	26	28
45°	19	18	19	23	28	29	28	28	28	29
47.5°	17	16	16	18	22	23	23	24	25	26
50°	11	11	12	12	15	17	19	19	18	20
52.5°	7	7	8	9	11	13	15	15	14	15
55°	7	7	7	9	11	13	14	14	13	14
57.5°	7	7	8	9	10	12	13	13	13	13
60°	7	7	7	8	12	11	12	13	12	13
65°	6	6	6	7	8	9	10	10	10	10
70°	5	5	5	5	5	6	6	7	8	8
75°	6	6	6	6	5	7	8	8	8	8
80°	6	7	8	8	8	9	9	8	8	8
85°	8	9	9	11	12	12	11	10	10	10
90°	12	11	11	12	13	12	12	12	13	13

(END OF REPORT)