

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: E395254

Luminaire Tested: **H1499-1420**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395254
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: 50MR16FL, 900 LUMENS
Ballast/Driver: -

Summary

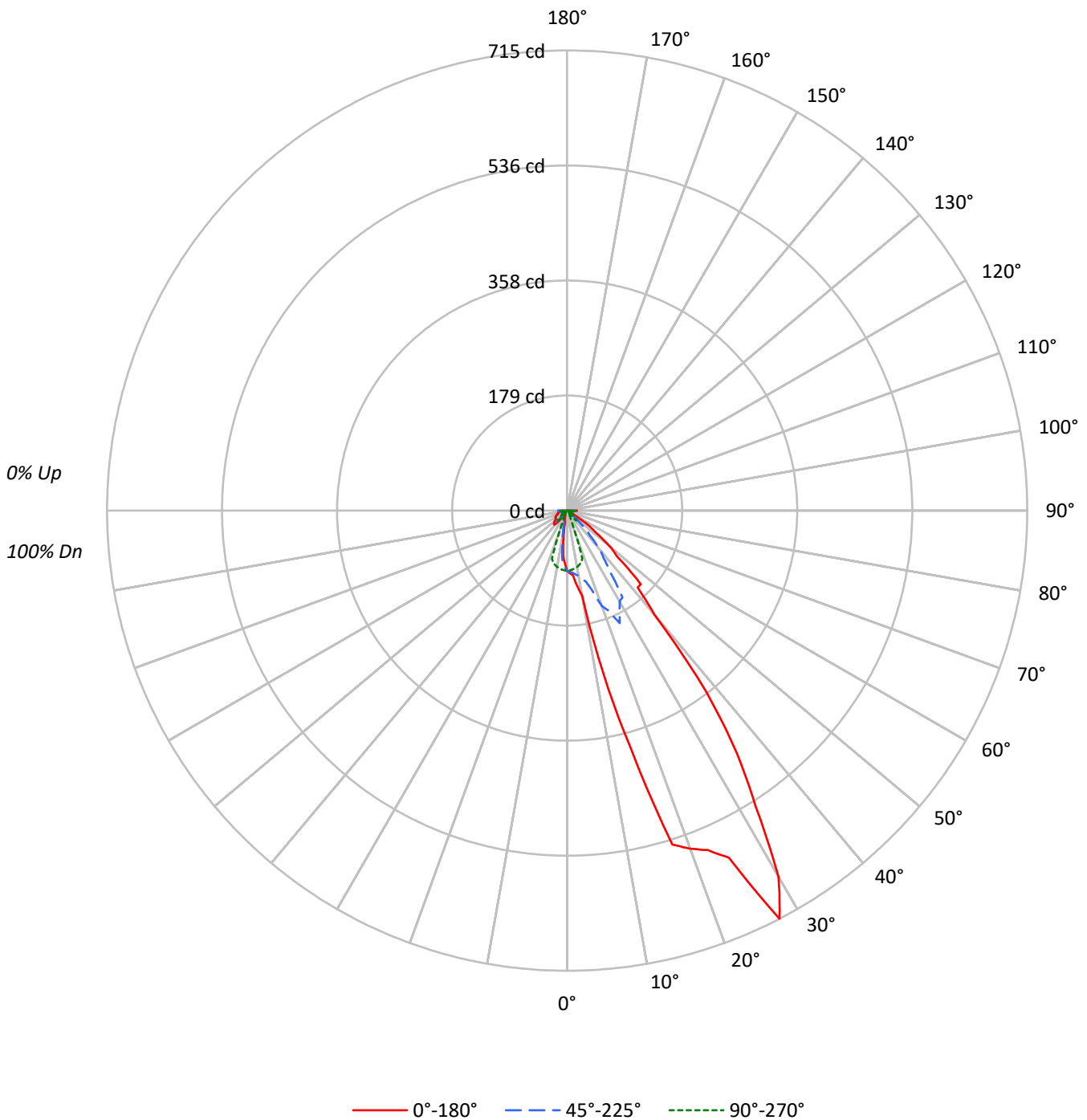
Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 256.2 lumens
Efficiency: 28.5%
Efficacy: 4.3 lumens/watt
Spacing Criteria (0/90/45): 1.74 / 0.68 / 1.11
Luminous Opening: Rectangular (W 0.19' x L: 0.12' x H: 0')
CIE Type: Direct

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





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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	34	34	34	34	33	33	33	33	32	32	32	30	30	30	29	29	29	28	28	28	28	28	28	28														
1	31	30	29	28	31	29	28	28	28	27	27	27	26	26	26	26	26	25	25	25	25	25	25	25														
2	29	27	25	24	28	27	25	24	26	24	23	25	24	23	24	23	22	22	22	22	21	21	20	19														
3	27	24	23	21	26	24	22	21	23	22	20	22	21	20	22	21	20	20	20	20	20	20	20	19														
4	25	22	20	18	25	22	20	18	21	19	18	21	19	18	20	19	18	18	18	18	18	18	18	17														
5	23	20	18	16	23	20	18	16	19	18	16	19	17	16	18	17	16	16	16	16	16	16	16	15														
6	22	19	16	15	21	18	16	15	18	16	15	17	16	14	17	15	14	14	14	14	14	14	14	14														
7	20	17	15	13	20	17	15	13	16	15	13	16	14	13	16	14	13	13	13	13	13	13	13	12														
8	19	16	14	12	19	15	13	12	15	13	12	15	13	12	14	13	12	12	12	12	12	12	12	11														
9	18	14	12	11	18	14	12	11	14	12	11	14	12	11	13	12	11	11	11	11	11	11	11	10														
10	17	13	11	10	17	13	11	10	13	11	10	13	11	10	13	11	10	10	10	10	10	10	10	9														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	44378	44378	44378
5°	47864	43599	33173
10°	64238	42665	9108
15°	187193	41055	6843
20°	280842	16077	4019
25°	309939	5730	3646
30°	358154	3271	4361
35°	265112	1729	5763
40°	130036	9861	16023
45°	108160	12018	19362
50°	63898	8079	18361
55°	35393	5762	18108
60°	7554	6609	19828
65°	7820	6703	21225
70°	6902	5521	20705
75°	10944	10944	27361
80°	16312	24469	35343
85°	54168	59584	65001



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	8.1	3.2	0.9
10°-20°	30.9	12.1	3.4
20°-30°	68.2	26.6	7.6
30°-40°	68.2	26.6	7.6
40°-50°	40.6	15.8	4.5
50°-60°	13.1	5.1	1.5
60°-70°	8.1	3.2	0.9
70°-80°	7.7	3.0	0.9
80°-90°	11.3	4.4	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°	107.2	41.8	11.9
0°-40°	175.4	68.5	19.5
0°-60°	229.1	89.4	25.5
0°-90°	256.2	100.0	28.5
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°	256.2	100.0	28.5

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	94	94	94	94	94	
5°	101	97	92	82	70	11
15°	383	115	84	15	14	115
25°	595	193	11	6	7	290
35°	460	116	3	4	10	277
45°	162	38	18	23	29	111
55°	43	10	7	10	22	37
65°	7	7	6	8	19	7
75°	6	6	6	6	15	6
85°	10	11	11	10	12	11
90°	15	13	12	14	12	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	94	94	94	94	94	94	94	94	94	94	94
5°	101	102	99	98	99	97	97	96	95	94	92
10°	134	135	123	115	110	103	100	95	93	92	89
15°	383	368	305	227	156	115	101	94	91	89	84
17.5°	544	530	480	355	211	130	103	93	90	86	78
20°	559	551	569	501	309	158	104	88	58	34	32
22.5°	571	556	575	583	425	168	90	32	22	17	16
25°	595	608	605	594	492	193	49	23	16	13	11
27.5°	715	693	644	618	515	176	35	17	12	9	8
30°	657	662	643	624	478	163	26	12	9	7	6
32.5°	545	557	589	565	410	160	21	10	7	4	4
35°	460	471	487	450	337	116	15	8	5	3	3
37.5°	356	365	407	372	251	93	15	6	4	3	8
40°	211	272	361	312	191	79	14	6	5	10	16
42.5°	162	217	302	228	154	53	19	13	13	16	21
45°	162	194	208	177	90	38	18	16	17	18	18
47.5°	105	125	133	117	57	22	15	16	16	15	14
50°	87	94	87	61	26	12	11	11	12	11	11
52.5°	57	65	54	30	9	8	7	7	7	7	8
55°	43	49	35	13	7	10	7	7	7	7	7
57.5°	22	16	10	8	7	7	7	7	7	7	7
60°	8	8	8	8	7	7	7	7	7	7	7
65°	7	7	7	7	7	7	6	7	7	7	6
70°	5	5	5	5	4	4	5	5	5	5	4
75°	6	5	6	5	6	6	7	7	7	7	6
80°	6	8	7	6	7	8	8	7	7	8	9
85°	10	11	10	10	11	11	9	8	8	9	11
90°	15	14	13	14	14	13	11	11	12	12	12



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	94	94	94	94	94	94	94	94	94	94
5°	91	90	86	82	82	76	71	69	70	70
10°	86	76	64	51	39	32	26	22	19	19
15°	75	55	35	21	15	13	13	12	13	14
17.5°	67	42	22	16	13	13	12	9	10	11
20°	23	18	14	13	11	11	9	7	8	8
22.5°	13	12	11	12	8	8	7	7	7	7
25°	9	7	7	9	6	6	7	7	7	7
27.5°	7	6	5	6	5	6	6	7	7	7
30°	6	5	4	4	4	5	6	7	8	8
32.5°	4	2	3	3	4	6	7	8	8	8
35°	3	3	2	3	4	6	8	9	10	10
37.5°	11	10	6	4	5	7	9	14	17	18
40°	20	18	15	14	10	13	16	22	25	26
42.5°	22	22	21	21	22	25	26	28	30	30
45°	19	19	20	21	23	27	28	29	29	29
47.5°	15	15	16	17	19	22	25	27	28	27
50°	11	11	12	13	14	16	19	23	25	25
52.5°	8	8	8	9	10	12	16	19	21	22
55°	7	7	8	9	10	12	15	19	21	22
57.5°	7	8	8	9	10	12	15	19	21	21
60°	7	8	8	9	10	12	15	18	21	21
65°	6	7	7	7	8	10	13	16	18	19
70°	4	4	5	5	6	7	9	12	14	15
75°	7	7	7	7	6	7	9	12	14	15
80°	10	10	9	8	7	7	8	11	13	13
85°	12	12	11	11	10	10	10	11	12	12
90°	11	12	12	13	14	13	14	12	11	12

(END OF REPORT)