

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: E395239

Luminaire Tested: **H7-1450**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395239
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: 50MR16NFL, 900 LUMENS
Ballast/Driver: -

Summary

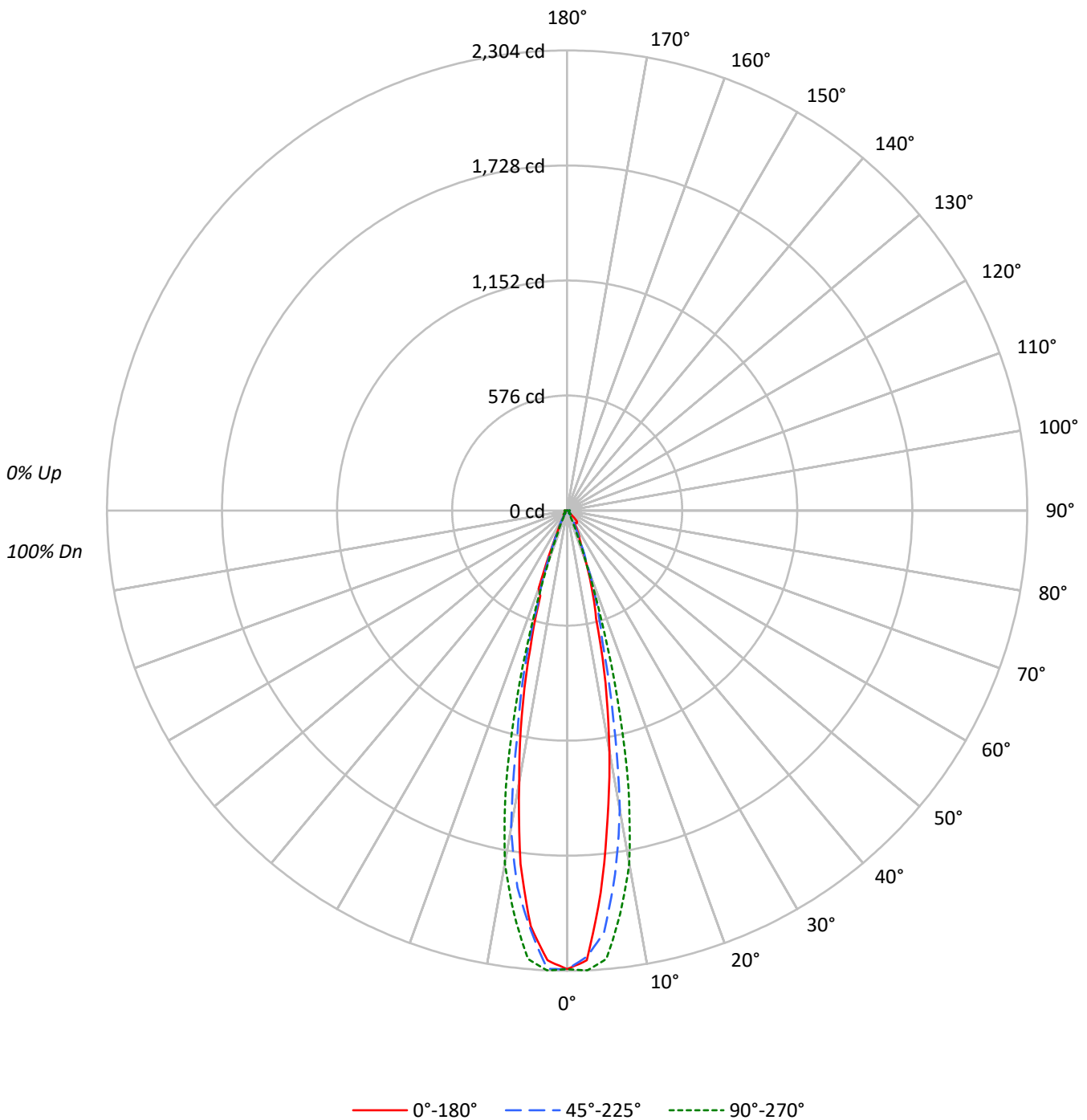
Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 529.1 lumens
Efficiency: 58.8%
Efficacy: 8.8 lumens/watt
Spacing Criteria (0/90/45): 0.38 / 0.48 / 0.41
Luminous Opening: Rectangular (W 0.23' x L: 0.12' x H: 0')
CIE Type: Direct

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									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	70	70	70	70	68	68	68	68	65	65	65	63	63	63	60	60	60	60	60	60	60	60	60	59													
1	67	65	64	63	65	64	63	62	62	61	60	59	59	58	57	57	56	56	56	56	56	56	56	55													
2	64	62	60	58	63	61	59	57	59	57	56	57	56	55	56	54	54	56	54	54	54	54	54	53													
3	62	59	56	54	61	58	56	54	56	55	53	55	54	52	54	53	51	54	53	51	51	51	51	51													
4	60	56	54	52	59	56	53	51	54	52	51	53	51	50	52	51	50	52	51	50	50	50	50	49													
5	58	54	51	49	57	53	51	49	53	50	49	52	50	48	51	49	48	51	49	48	48	48	48	47													
6	56	52	49	47	55	52	49	47	51	49	47	50	48	47	49	48	46	49	48	46	46	46	46	46													
7	54	50	48	46	54	50	47	46	49	47	45	49	47	45	48	46	45	48	46	45	45	45	45	44													
8	53	49	46	44	52	48	46	44	48	46	44	47	45	44	47	45	44	47	45	44	44	44	44	43													
9	51	47	45	43	51	47	45	43	47	44	43	46	44	43	46	44	42	46	44	42	42	42	42	42													
10	50	46	43	42	50	46	43	42	45	43	42	45	43	41	45	43	41	45	43	41	41	41	41	41													

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	895433	895433	895433
5°	751654	882411	818207
10°	481948	710052	548082
15°	225699	390027	288684
20°	114132	112887	171821
25°	60674	32704	46474
30°	33324	12609	19815
35°	37136	7141	8094
40°	39710	10691	13746
45°	16546	11582	12134
50°	8494	6674	6674
55°	6119	4760	4760
60°	5460	5460	5460
65°	6460	6460	6460
70°	5701	5701	4561
75°	15068	9041	10548
80°	22459	20213	22459
85°	40272	53697	58171



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	183.8	34.7	20.4
10°-20°	221.4	41.8	24.6
20°-30°	57.8	10.9	6.4
30°-40°	17.7	3.3	2.0
40°-50°	16.9	3.2	1.9
50°-60°	7.0	1.3	0.8
60°-70°	6.4	1.2	0.7
70°-80°	6.8	1.3	0.8
80°-90°	11.3	2.1	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°	463.0	87.5	51.4
0°-40°	480.8	90.9	53.4
0°-60°	504.7	95.4	56.1
0°-90°	529.1	100.0	58.8
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°	529.1	100.0	58.8

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2296	2296	2296	2296	2296	
5°	1920	2120	2254	2105	2090	161
15°	559	682	966	832	715	171
25°	141	116	76	106	108	67
35°	78	17	15	16	17	48
45°	30	22	21	16	22	30
55°	9	7	7	7	7	8
65°	7	7	7	7	7	6
75°	10	7	6	6	7	9
85°	9	11	12	10	13	10
90°	7	13	13	12	13	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2296	2296	2296	2296	2296	2296	2296	2296	2296	2296	2296
2.5°	2254	2237	2221	2230	2237	2237	2254	2237	2254	2304	2304
5°	1920	1920	1925	2053	2070	2120	2087	2125	2237	2254	2254
7.5°	1552	1585	1568	1718	1769	1836	1903	1986	2003	2053	2036
10°	1217	1217	1234	1308	1417	1518	1568	1669	1735	1819	1793
12.5°	886	845	883	992	999	1068	1142	1267	1403	1418	1418
15°	559	565	632	660	732	682	782	815	916	966	966
17.5°	414	414	431	475	481	496	515	498	557	548	548
20°	275	285	325	340	349	310	287	273	242	277	272
22.5°	175	175	185	183	191	181	170	150	143	130	133
25°	141	136	133	136	131	116	107	89	79	81	76
27.5°	105	105	98	101	96	83	72	49	42	51	47
30°	74	74	76	76	66	51	35	27	26	29	28
32.5°	74	71	69	69	47	28	20	17	17	17	18
35°	78	69	64	62	36	17	16	13	13	13	15
37.5°	78	71	69	56	31	17	14	11	10	12	14
40°	78	73	72	57	23	20	15	8	9	16	21
42.5°	71	79	83	53	28	24	18	12	14	21	24
45°	30	41	49	35	25	22	18	15	16	20	21
47.5°	14	22	22	20	18	18	15	15	16	15	16
50°	14	17	15	13	12	12	11	11	11	12	11
52.5°	10	10	9	8	8	8	7	7	7	7	7
55°	9	8	9	9	7	7	7	7	7	7	7
57.5°	8	9	8	8	7	7	7	7	7	7	7
60°	7	8	8	7	7	7	7	7	7	7	7
65°	7	7	7	7	7	7	7	7	7	7	7
70°	5	5	5	5	4	4	5	5	5	5	5
75°	10	6	5	5	6	7	7	8	8	7	6
80°	10	8	7	7	8	8	9	7	7	8	9
85°	9	10	11	11	11	11	10	7	8	10	12
90°	7	13	15	15	14	13	11	11	11	12	13



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2296	2296	2296	2296	2296	2296	2296	2296	2296	2296
2.5°	2304	2304	2304	2304	2296	2304	2237	2237	2246	2254
5°	2237	2254	2254	2221	2105	2103	2103	2088	2087	2090
7.5°	2003	2003	1997	1969	1903	1897	1830	1763	1769	1786
10°	1806	1819	1698	1669	1618	1565	1462	1451	1434	1384
12.5°	1401	1418	1317	1310	1150	1150	1117	1083	1033	1050
15°	933	932	899	832	832	765	765	732	698	715
17.5°	581	564	498	483	496	515	498	492	448	448
20°	234	244	236	265	325	368	395	421	414	414
22.5°	131	134	146	168	181	208	221	206	202	202
25°	82	81	88	98	106	115	118	111	107	108
27.5°	51	51	58	69	73	71	75	74	68	68
30°	30	27	38	38	45	41	44	42	44	44
32.5°	17	18	19	21	21	23	23	24	23	24
35°	13	14	15	16	16	16	16	16	16	17
37.5°	17	18	15	13	12	12	13	15	18	22
40°	25	25	23	18	13	10	13	19	25	27
42.5°	27	27	25	21	16	18	18	21	25	27
45°	23	22	21	20	16	19	19	19	21	22
47.5°	17	17	16	15	15	17	17	15	16	16
50°	11	11	11	11	11	11	11	11	11	11
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°	7	7	7	7	7	7	6	7	7	7
70°	4	4	5	5	5	5	5	5	4	4
75°	6	6	6	6	6	7	6	6	6	7
80°	9	10	9	8	7	7	7	8	9	10
85°	13	13	12	10	10	8	9	11	12	13
90°	13	13	13	12	12	13	12	12	12	13

(END OF REPORT)