

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: E395440

Luminaire Tested: **H242-14**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: E395440
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H242-14
Description: HALO RECESSED FLUOR - SQUARE FLUSH OPAQUE LENS
Light Source: 2-PL13, 1800 LUMENS
Ballast/Driver: -

Summary

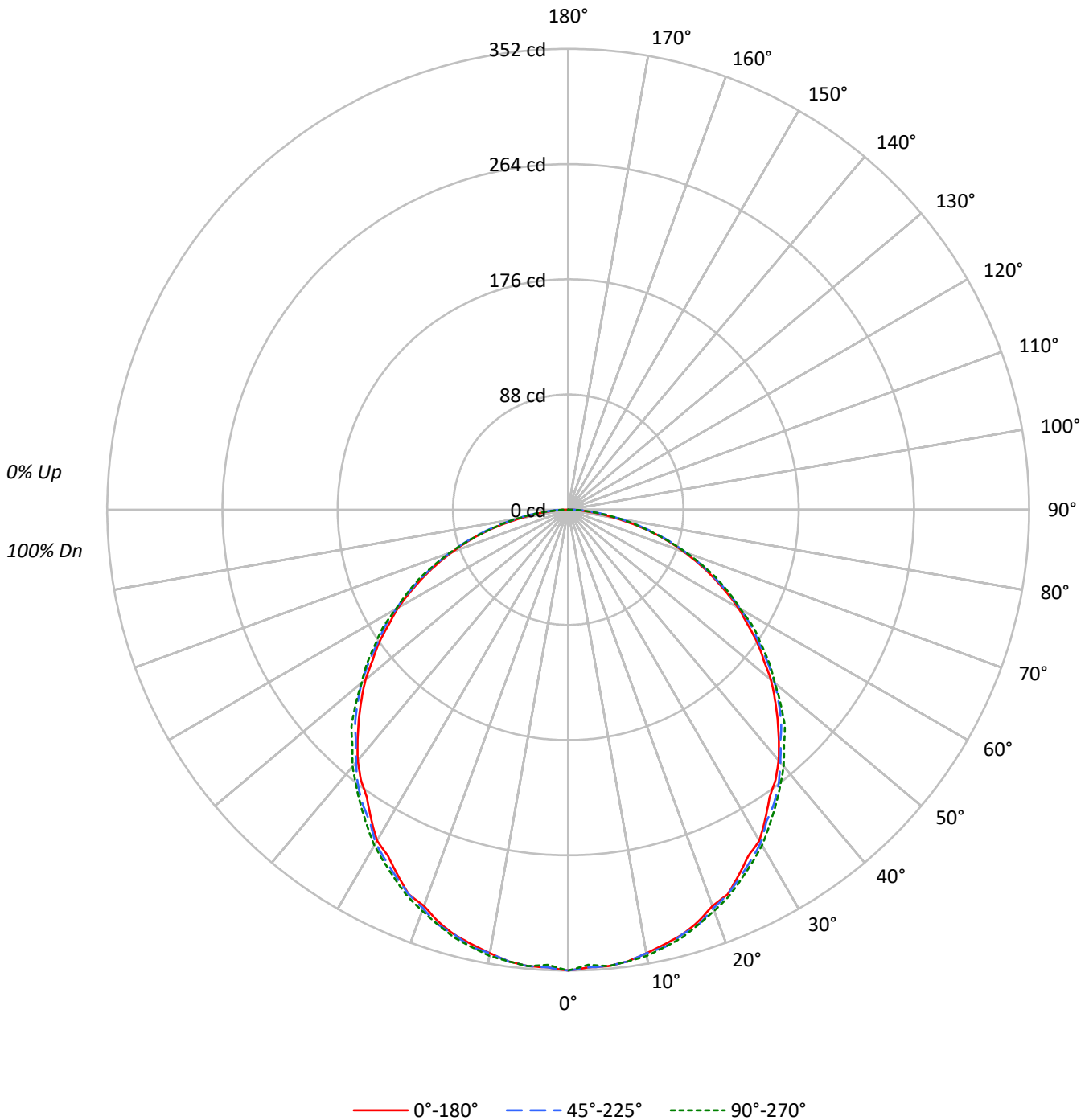
Lumens per Lamp: 900 (2 lamps)
Luminaire Lumens: 992.1 lumens
Efficiency: 55.1%
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.36
Luminous Opening: Rectangular (W 0.61' x L: 0.61' x H: 0')
CIE Type: Direct

Input Watts (W): 32
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				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	0
RCR																		
0	66	66	66	66	64	64	64	64	61	61	61	59	59	59	56	56	56	55
1	60	57	55	53	58	56	54	52	54	52	50	51	50	49	49	48	47	46
2	54	50	46	43	53	49	45	42	47	44	41	45	43	40	43	41	39	38
3	50	44	39	36	48	43	39	35	41	38	35	40	37	34	38	36	33	32
4	45	39	34	30	44	38	33	30	37	33	29	35	32	29	34	31	29	27
5	42	35	30	26	41	34	29	26	33	29	25	32	28	25	31	27	25	24
6	39	31	26	23	37	31	26	22	30	25	22	29	25	22	28	24	22	21
7	36	28	23	20	35	28	23	20	27	23	20	26	22	20	25	22	19	18
8	33	26	21	18	32	25	21	18	25	21	18	24	20	17	23	20	17	16
9	31	24	19	16	30	23	19	16	23	19	16	22	18	16	21	18	16	15
10	29	22	17	14	28	22	17	14	21	17	14	20	17	14	20	17	14	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	10182	10182	10182
5°	10163	10163	10163
10°	10105	10163	10105
15°	10063	10122	10063
20°	9912	10036	9912
25°	9831	9958	9831
30°	9754	9887	9754
35°	9464	9747	9464
40°	9441	9667	9441
45°	9246	9573	9246
50°	9091	9271	9091
55°	8876	9078	8876
60°	8678	8794	8678
65°	8351	8624	8351
70°	7950	8120	7950
75°	7377	7377	7377
80°	5997	6663	5997
85°	4647	5310	4647



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	33.2	3.4	1.8
10°-20°	95.0	9.6	5.3
20°-30°	143.2	14.4	8.0
30°-40°	171.4	17.3	9.5
40°-50°	177.0	17.8	9.8
50°-60°	159.7	16.1	8.9
60°-70°	122.3	12.3	6.8
70°-80°	70.4	7.1	3.9
80°-90°	19.9	2.0	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°	271.4	27.4	15.1
0°-40°	442.8	44.6	24.6
0°-60°	779.4	78.6	43.3
0°-90°	992.1	100.0	55.1
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°	992.1	100.0	55.1

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	352	352	352	352	352	
5°	350	350	350	350	350	33
15°	336	336	338	336	336	95
25°	308	310	312	310	308	142
35°	268	274	276	274	268	169
45°	226	230	234	230	226	175
55°	176	178	180	178	176	157
65°	122	124	126	124	122	121
75°	66	68	66	68	66	69
85°	14	18	16	18	14	18
90°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	352	352	352	352	352	352	352	352	352	352	352
2.5°	350	350	350	350	350	350	350	350	352	350	348
5°	350	350	350	350	350	350	350	350	350	350	350
7.5°	348	348	348	348	348	348	348	348	348	348	348
10°	344	344	344	344	346	344	346	344	346	344	346
12.5°	340	340	340	340	342	342	342	342	342	340	342
15°	336	336	336	336	336	336	338	336	338	338	338
17.5°	330	330	330	330	332	332	332	332	332	332	332
20°	322	324	324	324	326	324	324	326	326	326	326
22.5°	318	318	318	318	318	318	318	320	320	318	320
25°	308	308	310	310	310	310	312	312	312	312	312
27.5°	298	300	300	302	302	302	302	304	304	306	304
30°	292	292	292	292	294	294	294	296	296	296	296
32.5°	280	282	282	282	284	282	284	286	286	286	286
35°	268	272	272	272	274	274	274	276	276	276	276
37.5°	260	262	262	262	262	264	264	264	266	266	266
40°	250	250	250	252	252	252	254	254	256	256	256
42.5°	238	238	238	240	240	240	242	242	244	244	244
45°	226	226	228	228	228	230	230	230	232	232	234
47.5°	214	216	214	216	216	218	218	220	220	220	220
50°	202	202	202	202	204	206	206	206	208	208	206
52.5°	188	188	190	190	192	192	194	194	194	194	194
55°	176	176	176	176	178	178	180	180	180	182	180
57.5°	162	164	164	164	164	166	166	166	168	168	168
60°	150	150	150	150	152	152	152	152	154	152	152
65°	122	122	122	124	124	124	124	124	124	124	126
70°	94	94	94	94	96	96	96	96	96	96	96
75°	66	64	66	66	66	68	66	66	66	66	66
80°	36	38	38	40	40	40	40	40	38	40	40
85°	14	14	16	16	16	18	16	16	16	16	16
90°	2	2	2	2	2	2	2	2	2	2	2



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	352	352	352	352	352	352	352	352	352	352
2.5°	350	352	350	350	350	350	350	350	350	350
5°	350	350	350	350	350	350	350	350	350	350
7.5°	348	348	348	348	348	348	348	348	348	348
10°	344	346	344	346	344	346	344	344	344	344
12.5°	340	342	342	342	342	342	340	340	340	340
15°	338	338	336	338	336	336	336	336	336	336
17.5°	332	332	332	332	332	332	330	330	330	330
20°	326	326	326	324	324	326	324	324	324	322
22.5°	318	320	320	318	318	318	318	318	318	318
25°	312	312	312	312	310	310	310	310	308	308
27.5°	306	304	304	302	302	302	302	300	300	298
30°	296	296	296	294	294	294	292	292	292	292
32.5°	286	286	286	284	282	284	282	282	282	280
35°	276	276	276	274	274	274	272	272	272	268
37.5°	266	266	264	264	264	262	262	262	262	260
40°	256	256	254	254	252	252	252	250	250	250
42.5°	244	244	242	242	240	240	240	238	238	238
45°	232	232	230	230	230	228	228	228	226	226
47.5°	220	220	220	218	218	216	216	214	216	214
50°	208	208	206	206	206	204	202	202	202	202
52.5°	194	194	194	194	192	192	190	190	188	188
55°	182	180	180	180	178	178	176	176	176	176
57.5°	168	168	166	166	166	164	164	164	164	162
60°	152	154	152	152	152	152	150	150	150	150
65°	124	124	124	124	124	124	124	122	122	122
70°	96	96	96	96	96	96	94	94	94	94
75°	66	66	66	66	68	66	66	66	64	66
80°	40	38	40	40	40	40	40	38	38	36
85°	16	16	16	16	18	16	16	16	14	14
90°	2	2	2	2	2	2	2	2	2	2

(END OF REPORT)