

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: H23485

Luminaire Tested: **H800E-810BA**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H23485
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H800E-810BA
Description: HALO 8 IN FLUORESCENT RECESSED DOWNLIGHT
WITH SPECULAR REFLECTOR AND BLACK BAFFLE
Light Source: TWO 4 PIN DTT COMPACT FLUORESCENT LAMPS
TWO CF13W/827 13WATTS
Ballast/Driver: -

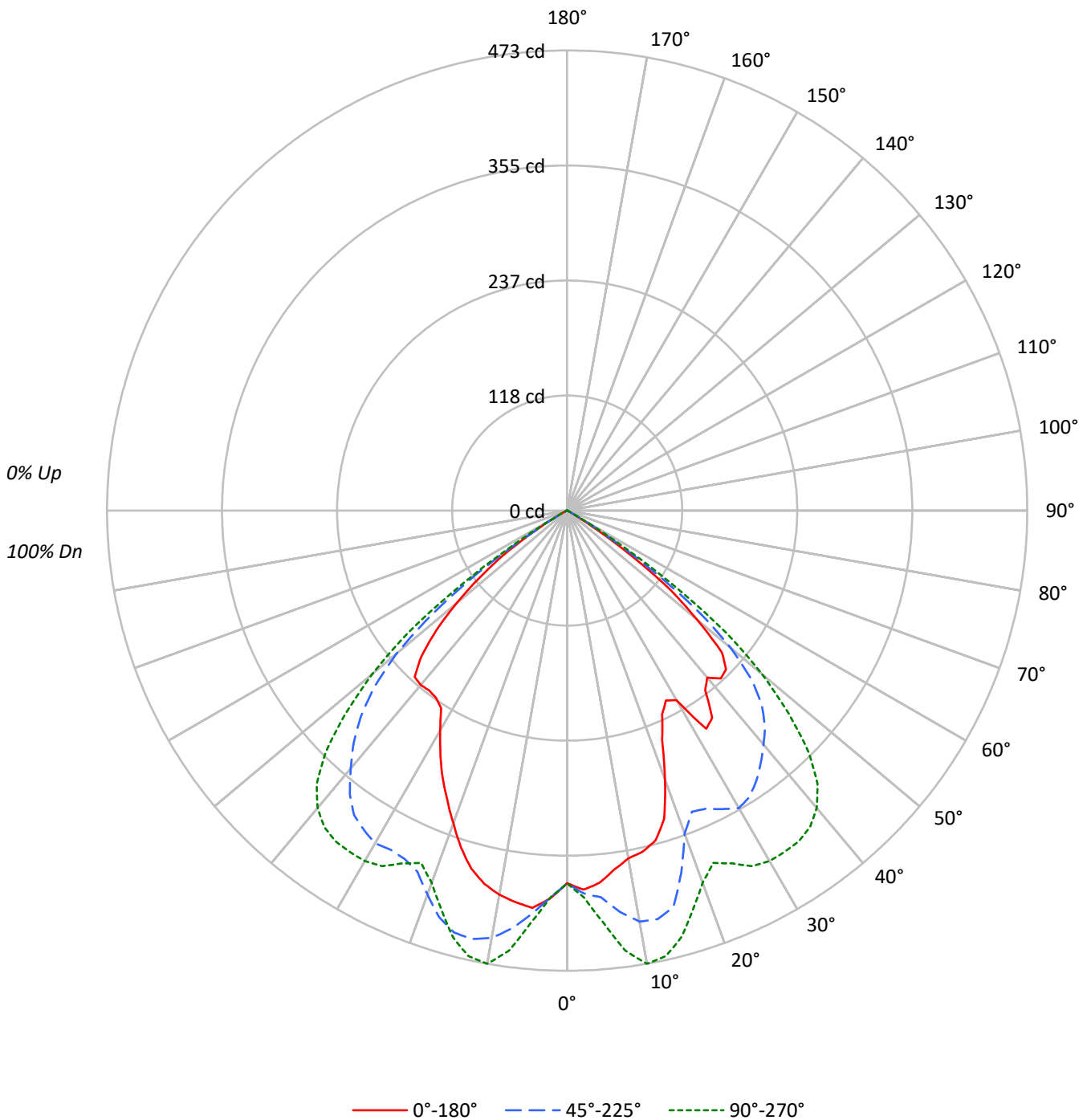
Summary

Lumens per Lamp: 900 (2 lamps)
Luminaire Lumens: 851.7 lumens
Efficiency: 47.3%
Efficacy: 30.4 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.61 / 1.46
Luminous Opening: Circular (Dia: 0.58' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	15426	15426	15426
5°	15525	17183	16576
10°	14846	19344	16400
15°	14636	18930	15887
20°	12601	17444	14658
25°	10266	17776	13465
30°	10464	19347	12138
35°	12784	20405	11554
40°	11777	20978	12303
45°	13158	19993	12075
50°	10903	16354	9336
55°	5547	9128	5688
60°	483	1369	1369
65°	191	191	286
70°	118	118	118
75°	156	156	156
80°	232	232	232
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	39.8	4.7	2.2
10°-20°	117.1	13.7	6.5
20°-30°	165.6	19.4	9.2
30°-40°	214.6	25.2	11.9
40°-50°	214.6	25.2	11.9
50°-60°	95.1	11.2	5.3
60°-70°	3.8	0.4	0.2
70°-80°	1.0	0.1	0.1
80°-90°	0.1	0.0	0.0
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°	322.4	37.9	17.9
0°-40°	537.0	63.1	29.8
0°-60°	846.7	99.4	47.0
0°-90°	851.7	100.0	47.3
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°	851.7	100.0	47.3

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	383	383	383	383	383	
5°	384	399	425	416	410	36
15°	351	422	454	449	381	96
25°	231	338	400	395	303	111
35°	260	339	415	382	235	154
45°	231	283	351	300	212	170
55°	79	103	130	113	81	73
65°	2	2	2	2	3	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	383	383	383	383	383	383	383	383	383
2.5°	390	392	394	397	398	398	398	399	399
5°	384	388	399	413	425	422	416	411	410
7.5°	372	382	416	442	456	449	433	415	406
10°	363	380	429	461	473	465	446	418	401
12.5°	359	380	430	460	469	465	451	420	393
15°	351	376	422	445	454	459	449	418	381
17.5°	332	355	390	410	430	449	438	408	363
20°	294	315	353	379	407	435	420	395	342
22.5°	255	292	335	368	392	419	402	375	322
25°	231	285	338	373	400	413	395	358	303
27.5°	220	281	346	384	412	420	393	346	282
30°	225	279	353	390	416	420	395	340	261
32.5°	266	286	349	383	416	410	389	334	241
35°	260	273	339	380	415	401	382	324	235
37.5°	233	258	327	379	410	390	367	310	233
40°	224	241	314	368	399	370	346	293	234
42.5°	234	235	301	352	381	347	325	272	232
45°	231	224	283	328	351	324	300	250	212
47.5°	216	203	257	290	309	295	269	220	183
50°	174	170	219	249	261	250	229	183	149
52.5°	134	129	169	194	206	192	174	135	114
55°	79	77	103	119	130	122	113	93	81
57.5°	29	34	50	56	63	53	46	42	40
60°	6	10	17	18	17	15	13	14	17
62.5°	2	3	4	3	3	4	4	5	7
65°	2	2	2	2	2	2	2	3	3
67.5°	1	2	2	2	2	2	2	2	2
70°	1	1	1	1	1	1	1	1	1
72.5°	1	1	1	1	1	1	1	1	1
75°	1	1	1	1	1	1	1	1	1
77.5°	1	1	1	1	1	1	1	1	1
80°	1	1	0	1	1	1	1	1	1
82.5°	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)