

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: H23476

Luminaire Tested: **H802E-810C**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-46-04  
Report Number: H23476  
Test Lab: PEACHTREE CITY  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H802E-810C  
Description: HALO 8 IN FLUORESCENT RECESSED DOWNLIGHT  
WITH SPECULAR REFLECTOR  
Light Source: TWO 4 PIN DTT COMPACT FLUORESCENT LAMPS  
TWO CF18W/827 18WATTS  
Ballast/Driver: -

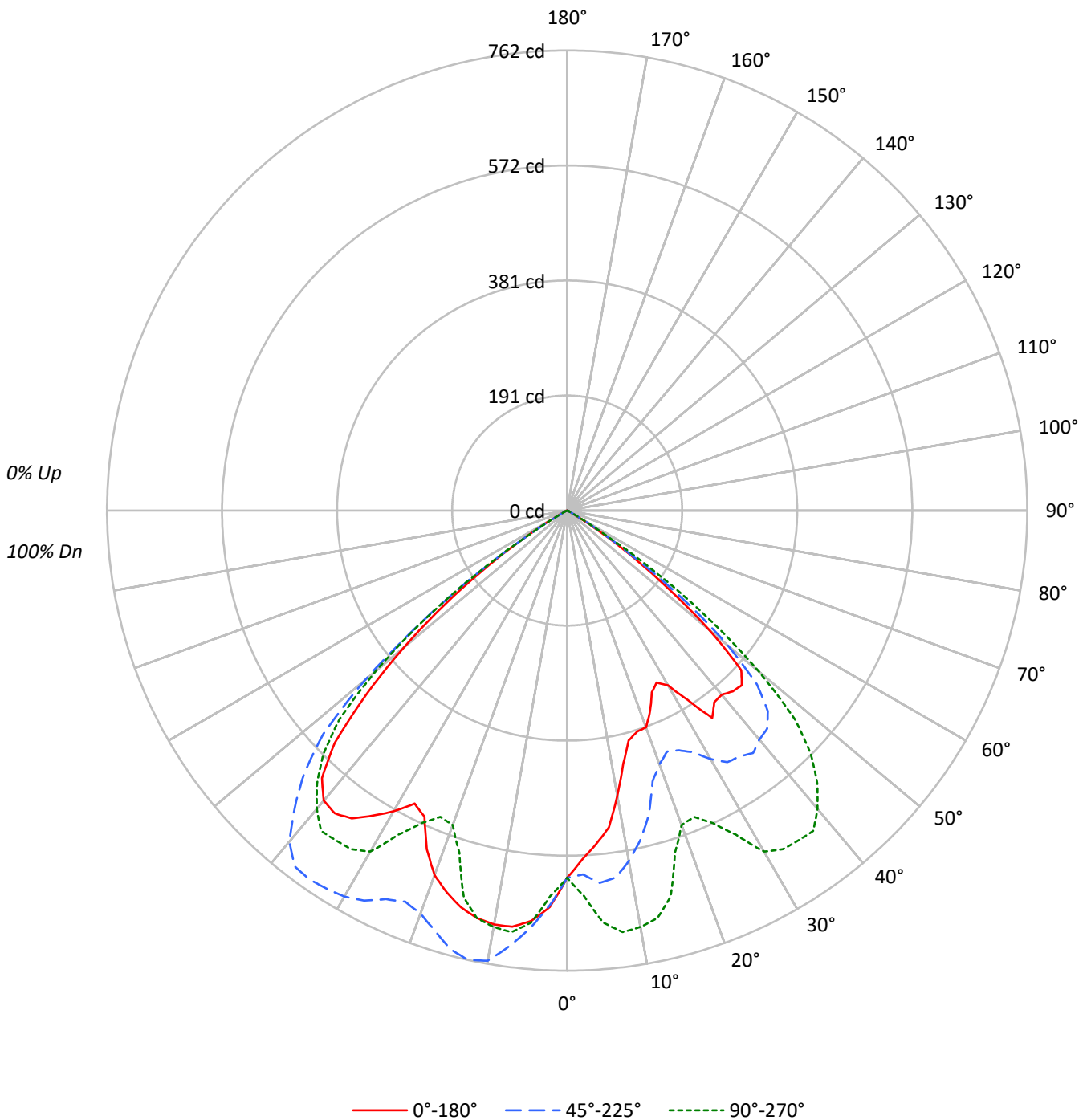
**Summary**

Lumens per Lamp: 1250 (2 lamps)  
Luminaire Lumens: 1435.8 lumens  
Efficiency: 57.4%  
Efficacy: 43.5 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.63 / 1.54  
Luminous Opening: Circular (Dia: 0.62' x H: 0')  
CIE Type: Direct

Input Watts (W): 33  
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	68	68	68	68	67	67	67	67	64	64	64	61	61	61	59	59	59	57
1	64	62	61	59	63	61	59	58	59	57	56	56	55	54	54	54	53	52
2	60	56	53	51	58	55	53	50	53	51	49	52	50	48	50	48	47	46
3	56	51	47	44	54	50	46	44	48	45	43	47	44	42	45	43	42	41
4	51	46	42	39	50	45	41	38	44	40	38	43	40	37	41	39	37	36
5	48	41	37	34	47	41	37	34	40	36	33	39	36	33	38	35	33	32
6	44	38	33	30	43	37	33	30	36	32	30	35	32	29	34	31	29	28
7	41	34	30	27	40	34	30	27	33	29	26	32	29	26	32	28	26	25
8	38	31	27	24	38	31	27	24	30	26	24	30	26	24	29	26	24	23
9	36	29	25	22	35	28	24	22	28	24	21	27	24	21	27	24	21	20
10	34	27	22	20	33	26	22	20	26	22	19	25	22	19	25	22	19	18

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	21332	21332	21332
5°	19511	24125	24019
10°	17065	24938	24796
15°	14311	24046	24699
20°	14263	20684	23970
25°	12852	22105	21640
30°	13531	26414	23295
35°	17946	28568	26641
40°	18228	29541	28717
45°	20294	28332	26992
50°	16757	22597	19322
55°	7768	11194	9726
60°	982	1403	1684
65°	332	332	415
70°	308	205	308
75°	136	136	271
80°	202	202	202
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	62.4	4.3	2.5
10°-20°	173.0	12.0	6.9
20°-30°	257.0	17.9	10.3
30°-40°	380.6	26.5	15.2
40°-50°	399.8	27.8	16.0
50°-60°	155.3	10.8	6.2
60°-70°	5.9	0.4	0.2
70°-80°	1.6	0.1	0.1
80°-90°	0.2	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°	492.4	34.3	19.7
0°-40°	873.0	60.8	34.9
0°-60°	1428.1	99.5	57.1
0°-90°	1435.8	100.0	57.4
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°	1435.8	100.0	57.4

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	608	608	608	608	608	
5°	554	619	685	693	682	51
15°	394	522	662	751	680	115
25°	332	438	571	710	559	158
35°	419	497	667	745	622	245
45°	409	470	571	616	544	301
55°	127	138	183	184	159	120
65°	4	4	4	5	5	5
75°	1	1	1	2	2	2
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°	608	608	608	608	608	608	608	608	608
2.5°	578	583	603	624	639	648	654	658	657
5°	554	567	619	661	685	696	693	689	682
7.5°	529	551	613	672	704	724	727	704	695
10°	479	505	589	671	700	739	757	731	696
12.5°	429	464	559	645	691	744	762	755	691
15°	394	439	522	587	662	727	751	757	680
17.5°	384	419	470	528	594	677	729	738	663
20°	382	402	447	501	554	630	710	706	642
22.5°	359	381	432	490	549	615	701	688	607
25°	332	355	438	501	571	640	710	692	559
27.5°	321	349	451	528	605	680	728	700	547
30°	334	374	475	561	652	713	738	711	575
32.5°	372	423	494	570	665	723	742	727	599
35°	419	467	497	568	667	719	745	732	622
37.5°	400	476	506	565	669	717	742	716	632
40°	398	479	495	544	645	694	715	687	627
42.5°	406	479	490	520	613	650	668	647	601
45°	409	465	470	495	571	607	616	590	544
47.5°	391	434	426	439	511	539	548	508	452
50°	307	346	348	363	414	422	438	408	354
52.5°	205	239	248	255	303	301	305	289	254
55°	127	141	138	147	183	187	184	186	159
57.5°	52	63	65	59	79	76	74	83	80
60°	14	18	23	19	20	17	17	22	24
62.5°	5	5	5	6	6	6	5	6	7
65°	4	4	4	4	4	4	5	5	5
67.5°	3	3	3	3	3	3	4	4	4
70°	3	2	2	2	2	2	3	3	3
72.5°	2	2	2	2	2	2	2	2	2
75°	1	1	1	1	1	1	2	2	2
77.5°	1	1	1	1	1	1	1	1	1
80°	1	1	1	1	1	1	1	1	1
82.5°	0	0	0	0	0	0	0	1	1
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)