

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: H23488

Luminaire Tested: **H802E-810WB**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H23488
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H802E-810WB
Description: HALO 8 IN FLUORESCENT RECESSED DOWNLIGHT
WITH SPECULAR REFLECTOR AND WHITE COILEX BAFFLE
Light Source: TWO 4 PIN DTT COMPACT FLUORESCENT LAMPS
TWO CF18W/827 18WATTS
Ballast/Driver: -

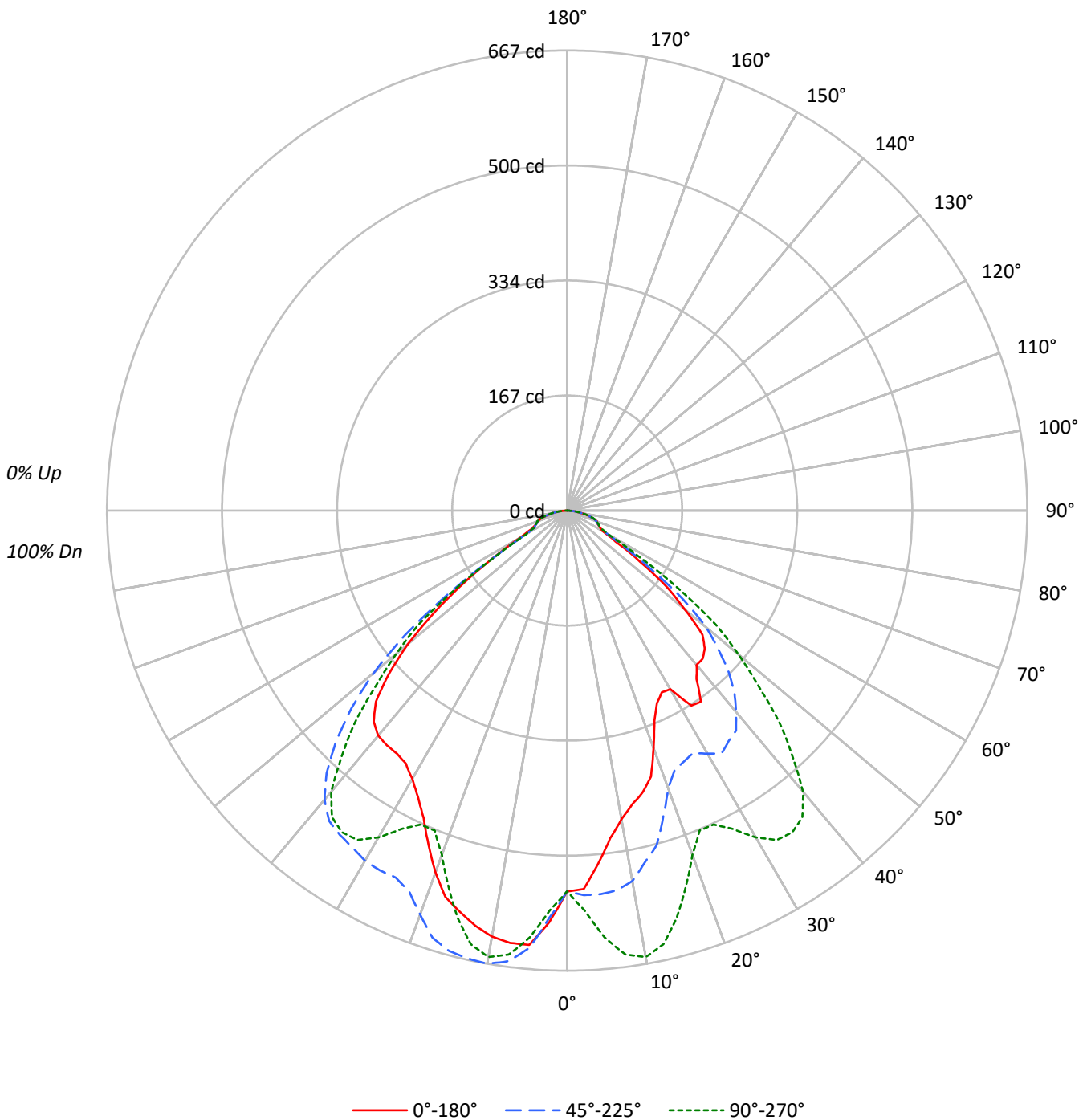
Summary

Lumens per Lamp: 1250 (2 lamps)
Luminaire Lumens: 1300.9 lumens
Efficiency: 52.0%
Efficacy: 39.4 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.55 / 1.43
Luminous Opening: Circular (Dia: 0.59' 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										
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	62	62	62	62	61	61	61	61	58	58	58	55	55	55	53	53	53	52						52														
1	58	56	54	52	56	54	53	51	52	51	50	50	49	48	48	48	47	46						46														
2	53	50	47	44	52	49	46	44	47	45	43	45	43	42	44	42	41	40						40														
3	49	45	41	38	48	44	40	38	42	39	37	41	38	36	40	38	36	35						35														
4	46	40	36	33	44	39	36	33	38	35	32	37	34	32	36	34	32	31						31														
5	42	36	32	29	41	36	32	29	35	31	29	34	31	28	33	30	28	27						27														
6	39	33	29	26	38	32	28	26	32	28	25	31	28	25	30	27	25	24						24														
7	36	30	26	23	36	30	26	23	29	25	23	28	25	23	27	25	22	21						21														
8	34	27	23	21	33	27	23	21	26	23	20	26	23	20	25	22	20	19						19														
9	32	25	21	19	31	25	21	19	24	21	18	24	21	18	23	20	18	17						17														
10	30	23	20	17	29	23	19	17	23	19	17	22	19	17	22	19	17	16						16														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	21459	21459	21459
5°	20058	24234	24663
10°	17922	25935	24751
15°	17024	24631	24228
20°	15141	21968	23085
25°	13211	21533	21104
30°	13422	24554	20155
35°	16041	27004	20407
40°	14818	26998	21619
45°	15504	23970	21551
50°	13426	19595	18204
55°	8743	13284	12403
60°	4587	5365	6142
65°	4599	4691	4783
70°	5229	5229	5115
75°	5107	5407	5107
80°	4701	4925	4477
85°	3568	4014	3568



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	57.1	4.4	2.3
10°-20°	159.8	12.3	6.4
20°-30°	223.7	17.2	8.9
30°-40°	303.1	23.3	12.1
40°-50°	300.0	23.1	12.0
50°-60°	159.2	12.2	6.4
60°-70°	51.7	4.0	2.1
70°-80°	36.3	2.8	1.5
80°-90°	10.0	0.8	0.4
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°	440.6	33.9	17.6
0°-40°	743.7	57.2	29.7
0°-60°	1203.0	92.5	48.1
0°-90°	1300.9	100.0	52.0
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°	1300.9	100.0	52.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	552	552	552	552	552	
5°	514	558	621	637	632	47
15°	423	502	612	661	602	117
25°	308	401	502	587	492	146
35°	338	408	569	574	430	200
45°	282	331	436	474	392	212
55°	129	149	196	210	183	119
65°	50	51	51	51	52	50
75°	34	35	36	35	34	36
85°	8	8	9	9	8	9
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	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°	552	552	552	552	552	552	552	552	552
2.5°	549	550	558	570	580	585	591	599	597
5°	514	523	558	593	621	636	637	641	632
7.5°	479	500	555	612	649	667	659	658	632
10°	454	478	545	617	657	674	667	664	627
12.5°	436	457	522	600	644	666	665	663	616
15°	423	444	502	558	612	643	661	660	602
17.5°	404	416	464	518	572	621	649	644	587
20°	366	378	428	482	531	589	623	615	558
22.5°	330	351	407	455	502	567	598	585	525
25°	308	333	401	446	502	568	587	565	492
27.5°	297	324	396	452	520	585	588	556	468
30°	299	333	407	472	547	605	586	549	449
32.5°	335	369	417	480	566	608	579	544	435
35°	338	377	408	475	569	601	574	533	430
37.5°	308	360	402	460	560	588	567	518	429
40°	292	345	381	430	532	561	547	499	426
42.5°	291	340	359	392	484	517	516	474	415
45°	282	323	331	352	436	468	474	441	392
47.5°	266	300	297	310	376	411	424	396	351
50°	222	260	263	271	324	350	366	337	301
52.5°	183	206	213	219	272	288	296	271	243
55°	129	146	149	151	196	207	210	200	183
57.5°	83	94	100	98	121	118	122	123	125
60°	59	62	65	65	69	68	67	71	79
62.5°	54	54	54	54	54	53	53	55	58
65°	50	50	51	51	51	51	51	52	52
67.5°	47	47	47	48	48	48	47	47	47
70°	46	45	45	46	46	46	46	45	45
72.5°	41	40	41	41	42	42	41	41	41
75°	34	34	35	35	36	36	35	34	34
77.5°	28	28	28	28	29	29	28	27	27
80°	21	21	21	22	22	22	21	20	20
82.5°	14	14	15	15	16	15	15	14	14
85°	8	8	8	9	9	9	9	8	8
87.5°	3	3	3	3	3	3	3	3	3
90°	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)