

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: H23478

Luminaire Tested: **H800E-810C**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H23478
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H800E-810C
Description: HALO 8 IN FLUORESCENT RECESSED DOWNLIGHT
WITH SPECULAR REFLECTOR
Light Source: TWO 4 PIN DTT COMPACT FLUORESCENT LAMPS
TWO CF13W/827 13WATTS
Ballast/Driver: -

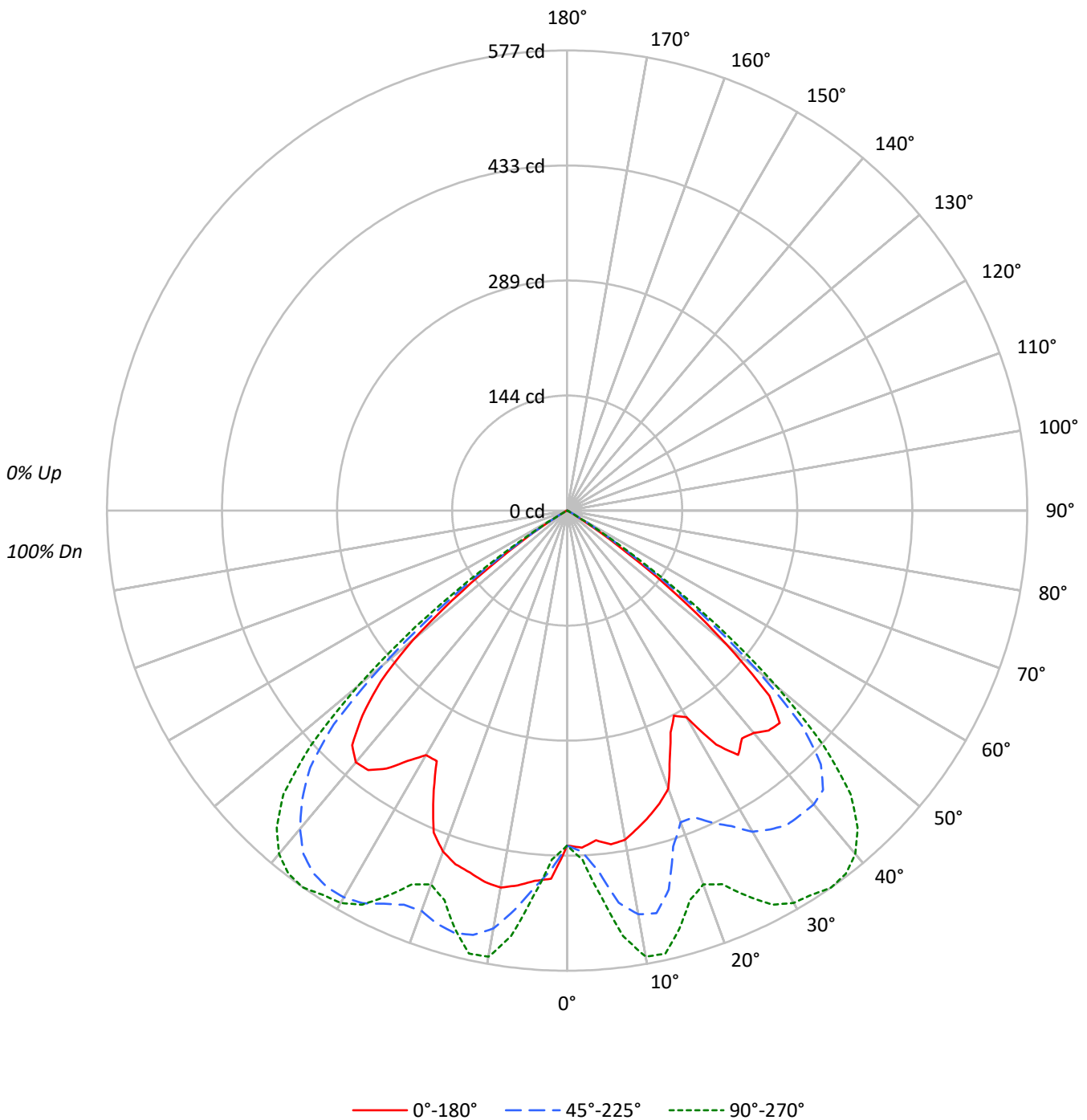
Summary

Lumens per Lamp: 900 (2 lamps)
Luminaire Lumens: 1149.9 lumens
Efficiency: 63.9%
Efficacy: 41.1 lumens/watt
Spacing Criteria (0/90/45): 1.41 / 1.86 / 1.6
Luminous Opening: Circular (Dia: 0.62' 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				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	76	76	76	76	74	74	74	74	71	71	71	68	68	68	65	65	65	64
1	72	69	67	66	70	68	66	65	65	64	63	63	62	61	61	60	59	58
2	67	63	59	57	65	62	59	56	59	57	55	57	55	54	56	54	52	51
3	62	57	53	49	61	56	52	49	54	51	48	52	50	47	51	48	46	45
4	57	51	47	43	56	50	46	43	49	45	42	48	44	42	46	44	41	40
5	53	46	42	38	52	46	41	38	44	40	37	43	40	37	42	39	37	36
6	49	42	37	34	48	42	37	34	40	36	33	39	36	33	39	35	33	32
7	46	38	33	30	45	38	33	30	37	33	30	36	32	30	35	32	29	28
8	43	35	30	27	42	35	30	27	34	30	27	33	29	27	32	29	26	25
9	40	32	27	24	39	32	27	24	31	27	24	31	27	24	30	26	24	23
10	38	30	25	22	37	29	25	22	29	25	22	28	24	22	28	24	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	14736	14736	14736
5°	14616	17081	16412
10°	14927	20236	17101
15°	14420	19723	17072
20°	13852	18631	16988
25°	11885	20633	15369
30°	12113	23011	14341
35°	16019	24713	16918
40°	16671	25740	18870
45°	18706	24958	18011
50°	14191	18667	13755
55°	5383	8013	5444
60°	421	772	491
65°	166	166	166
70°	103	103	103
75°	136	0	136
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	46.0	4.0	2.6
10°-20°	141.0	12.3	7.8
20°-30°	216.5	18.8	12.0
30°-40°	307.3	26.7	17.1
40°-50°	324.4	28.2	18.0
50°-60°	111.3	9.7	6.2
60°-70°	2.8	0.2	0.2
70°-80°	0.5	0.0	0.0
80°-90°	0.0	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°	403.6	35.1	22.4
0°-40°	710.9	61.8	39.5
0°-60°	1146.6	99.7	63.7
0°-90°	1149.9	100.0	63.9
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°	1149.9	100.0	63.9

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	420	420	420	420	420	
5°	415	454	485	475	466	40
15°	397	492	543	548	470	112
25°	307	432	533	544	397	146
35°	374	481	577	555	395	223
45°	377	450	503	456	363	272
55°	88	112	131	108	89	92
65°	2	2	2	2	2	2
75°	1	0	0	0	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°	420	420	420	420	420	420	420	420	420
2.5°	423	424	428	433	438	443	450	459	462
5°	415	429	454	478	485	480	475	467	466
7.5°	422	443	496	535	538	527	505	472	474
10°	419	446	514	566	568	558	532	486	480
12.5°	408	441	517	562	569	565	545	512	477
15°	397	433	492	516	543	553	548	530	470
17.5°	385	413	442	473	512	539	543	529	465
20°	371	379	416	465	499	534	534	509	455
22.5°	336	366	416	475	507	533	535	479	437
25°	307	362	432	499	533	544	544	452	397
27.5°	290	362	446	516	557	565	555	431	354
30°	299	372	465	530	568	575	560	433	354
32.5°	348	395	474	527	571	569	560	446	372
35°	374	401	481	533	577	569	555	462	395
37.5°	360	395	481	533	574	561	543	464	410
40°	364	390	481	528	562	543	521	454	412
42.5°	374	382	475	513	539	513	492	433	399
45°	377	371	450	488	503	479	456	400	363
47.5°	344	334	400	428	436	424	397	345	317
50°	260	249	309	343	342	327	304	273	252
52.5°	172	165	212	237	240	218	199	185	166
55°	88	84	112	122	131	118	108	101	89
57.5°	28	33	50	50	53	44	36	36	36
60°	6	9	16	14	11	9	7	6	7
62.5°	3	3	3	3	3	3	3	3	3
65°	2	2	2	2	2	2	2	2	2
67.5°	1	1	1	1	1	1	1	1	1
70°	1	1	1	1	1	1	1	1	1
72.5°	1	1	1	1	1	1	1	1	1
75°	1	1	0	0	0	0	0	1	1
77.5°	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0
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)