

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: H23487

Luminaire Tested: **H800E-810WW**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H23487
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H800E-810WW
Description: HALO 8 IN FLUORESCENT RECESSED DOWNLIGHT
WITH SPECULAR REFLECTOR AND WALLWASH
Light Source: TWO 4 PIN DTT COMPACT FLUORESCENT LAMPS
TWO CF13W/827 13WATTS
Ballast/Driver: -

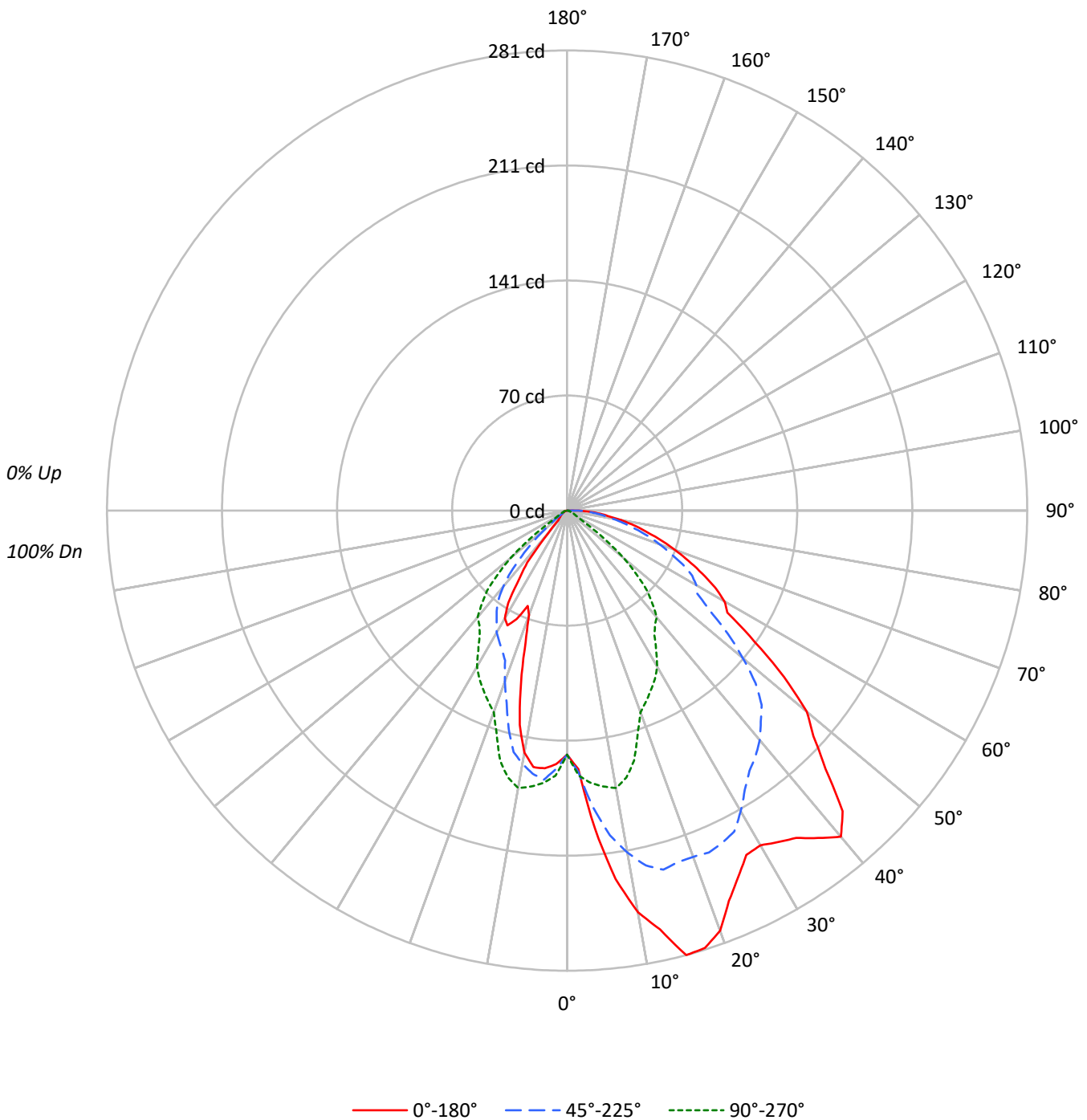
Summary

Lumens per Lamp: 900 (2 lamps)
Luminaire Lumens: 399.6 lumens
Efficiency: 22.2%
Efficacy: 14.8 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 1.12 / 1.42
Luminous Opening: Rectangular (W 0.54' x L: 0.29' x H: 0')
CIE Type: Direct

Input Watts (W): 27
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	26	26	26	26	26	26	26	26	25	25	25	24	24	24	23	23	23	22	22	22	22	22	22	22														
1	24	23	23	22	24	23	22	21	22	21	21	21	21	20	20	20	19	19	19	19	19	19	19	19														
2	22	21	19	18	22	20	19	18	20	18	18	19	18	17	18	17	17	16	16	16	16	16	16	16														
3	21	18	17	15	20	18	17	15	17	16	15	17	16	15	16	15	15	14	14	14	14	14	14	14														
4	19	17	15	13	19	16	15	13	16	14	13	15	14	13	15	14	13	12	12	12	12	12	12	12														
5	18	15	13	12	17	15	13	12	14	13	12	14	12	11	13	12	11	11	11	11	11	11	11	11														
6	16	14	12	10	16	13	12	10	13	11	10	13	11	10	12	11	10	10	10	10	10	10	10	10														
7	15	12	11	9	15	12	10	9	12	10	9	12	10	9	11	10	9	9	9	9	9	9	9	9														
8	14	11	10	8	14	11	10	8	11	9	8	11	9	8	10	9	8	8	8	8	8	8	8	8														
9	13	11	9	8	13	10	9	8	10	9	8	10	9	8	10	8	7	7	7	7	7	7	7	7														
10	13	10	8	7	12	10	8	7	9	8	7	9	8	7	9	8	7	6	6	6	6	6	6	6														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	10152	10152	10152
5°	13336	11421	10806
10°	17227	11899	10377
15°	19820	11145	7688
20°	19794	9498	4930
25°	18568	9096	5488
30°	18567	8654	5979
35°	20294	7735	4242
40°	23124	7560	1601
45°	21487	6648	674
50°	20245	4770	530
55°	16630	2019	475
60°	15125	818	409
65°	14670	645	322
70°	13944	398	398
75°	13162	526	263
80°	12948	392	392
85°	14853	782	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	16.9	4.2	0.9
10°-20°	49.9	12.5	2.8
20°-30°	70.2	17.6	3.9
30°-40°	81.4	20.4	4.5
40°-50°	74.2	18.6	4.1
50°-60°	47.0	11.8	2.6
60°-70°	32.5	8.1	1.8
70°-80°	19.6	4.9	1.1
80°-90°	7.7	1.9	0.4
90°-100°	0.4	0.1	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°	136.9	34.3	7.6
0°-40°	218.3	54.6	12.1
0°-60°	339.4	84.9	18.9
0°-90°	399.2	99.9	22.2
90°-120°	0.4	0.1	0.0
90°-150°	0.4	0.1	0.0
90°-180°	0.0	0.0	0.0
0°-180°	399.6	100.0	22.2

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	149	149	149	149	149	
5°	195	182	167	165	158	20
15°	281	227	158	138	109	77
25°	247	224	121	94	73	115
35°	244	194	93	75	51	155
45°	223	168	69	39	7	174
55°	140	106	17	6	4	128
65°	91	78	4	2	2	90
75°	50	43	2	1	1	54
85°	19	16	1	1	0	18
90°	6	6	0	0	0	3
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°	149	149	149	149	149	149	149	149	149
2.5°	158	159	160	162	162	160	158	159	155
5°	195	192	182	170	167	166	165	164	158
7.5°	227	219	200	177	170	166	162	164	158
10°	249	238	212	184	172	170	157	158	150
12.5°	262	251	222	185	167	166	151	146	134
15°	281	266	227	181	158	156	138	128	109
17.5°	280	265	225	173	143	143	123	98	84
20°	273	265	225	168	131	133	111	82	68
22.5°	258	258	226	165	126	128	99	78	63
25°	247	245	224	163	121	126	94	86	73
27.5°	237	233	221	160	116	123	90	90	79
30°	236	222	212	154	110	115	86	92	76
32.5°	240	224	202	144	101	103	80	83	67
35°	244	230	194	133	93	93	75	71	51
37.5°	252	235	189	126	88	84	69	54	40
40°	260	240	183	116	85	78	61	36	18
42.5°	249	234	175	105	77	72	51	21	8
45°	223	217	168	93	69	62	39	10	7
47.5°	204	197	156	81	57	50	28	7	6
50°	191	179	140	68	45	40	18	6	5
52.5°	167	159	124	53	30	30	11	5	5
55°	140	136	106	44	17	17	6	4	4
57.5°	116	116	94	39	8	7	4	4	4
60°	111	110	91	41	6	4	3	3	3
62.5°	102	102	86	42	5	3	3	3	3
65°	91	91	78	37	4	3	2	2	2
67.5°	80	80	68	33	3	2	2	2	2
70°	70	70	60	30	2	2	2	2	2
72.5°	60	60	52	26	2	2	2	2	2
75°	50	50	43	23	2	2	1	1	1
77.5°	42	41	35	19	1	1	1	1	1
80°	33	33	28	15	1	1	1	1	1
82.5°	25	25	22	12	1	1	1	1	0
85°	19	18	16	9	1	1	1	0	0
87.5°	13	12	11	6	1	1	0	0	0
90°	6	7	6	3	0	0	0	0	0
92.5°	0	0	1	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)