

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: H23439

Luminaire Tested: **H803E-803P**

Issue Date: 3/3/2020



**Test Information**

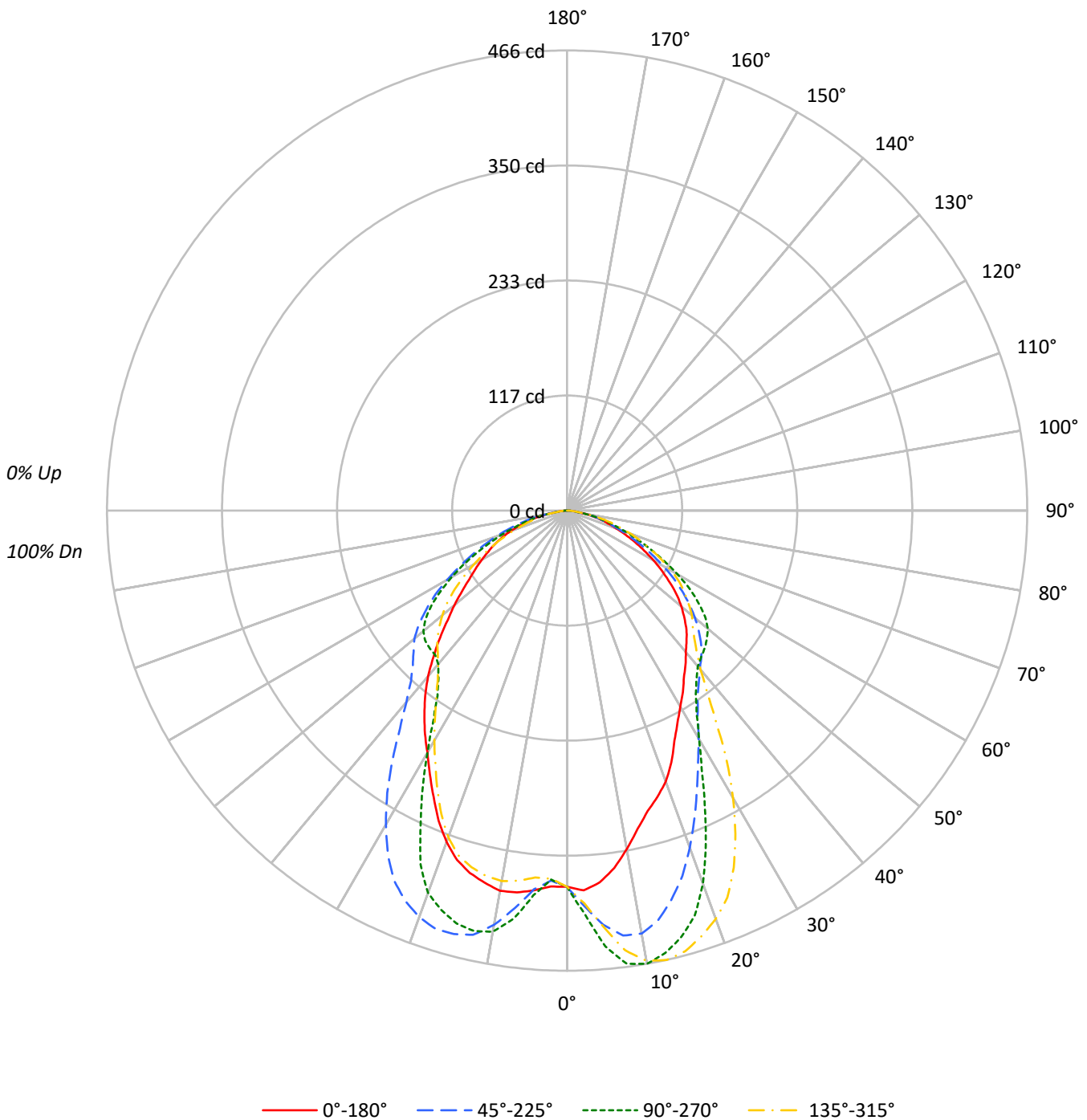
Test Method: LM-46-04  
Report Number: H23439  
Test Lab: Peachtree City  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H803E-803P  
Description: HALO 8 IN FLUORESCENT RECESSED DOWNLIGHT  
WITH SPECULAR REFLECTOR AND PAINTED TRIM WITH FRESNEL LENS  
Light Source: TWO 4 PIN DTT COMPACT FLUORESCENT LAMPS  
TWO CFQ26WG24D/827 26WATTS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 1800 (2 lamps)  
Luminaire Lumens: 896.5 lumens  
Efficiency: 24.9%  
Efficacy: 18.7 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.11 / 1.19  
Luminous Opening: Circular (Dia: 0.54' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 48  
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	50	30	10	0	
RCR																						
0	30	30	30	30	29	29	29	29	28	28	28	26	26	26	25	25	25	25	25	25	25	
1	27	26	25	24	27	26	25	24	25	24	23	24	23	23	23	22	22	22	22	21	21	
2	25	23	22	20	24	23	21	20	22	21	20	21	20	19	20	20	19	20	19	18	18	
3	23	21	19	17	22	20	18	17	19	18	17	19	18	16	18	17	16	18	17	16	16	
4	21	18	16	15	21	18	16	15	17	16	15	17	15	14	16	15	14	16	15	14	14	
5	20	17	14	13	19	16	14	13	16	14	13	15	14	13	15	14	12	15	14	12	12	
6	18	15	13	11	18	15	13	11	14	13	11	14	12	11	14	12	11	14	12	11	11	
7	17	14	12	10	17	14	12	10	13	11	10	13	11	10	12	11	10	12	11	10	9	
8	16	13	11	9	15	12	11	9	12	10	9	12	10	9	12	10	9	12	10	9	9	
9	15	12	10	8	14	11	10	8	11	9	8	11	9	8	11	9	8	11	9	8	8	
10	14	11	9	8	14	11	9	8	10	9	8	10	9	8	10	9	8	10	9	8	7	

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

	0°	90°	180°	270°
0°	17797	17797	17797	17797
5°	17724	20772	18099	18334
10°	16506	22103	18546	20538
15°	15233	21616	18376	20939
20°	14515	19983	17746	20480
25°	13246	17008	16493	18090
30°	12352	14401	15264	15264
35°	11747	12944	14370	13058
40°	11403	12561	13354	12378
45°	11296	13014	12023	13014
50°	10973	13516	10828	13807
55°	10343	13193	9854	13681
60°	9436	12051	9342	12612
65°	8400	10390	8953	11053
70°	7238	8741	8331	9424
75°	6317	7039	7219	7760
80°	4573	4573	5380	5111
85°	3216	3216	3216	3216



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	38.8	4.3	1.1
10°-20°	114.8	12.8	3.2
20°-30°	155.9	17.4	4.3
30°-40°	157.2	17.5	4.4
40°-50°	153.8	17.1	4.3
50°-60°	135.0	15.1	3.7
60°-70°	90.4	10.1	2.5
70°-80°	43.2	4.8	1.2
80°-90°	7.6	0.8	0.2
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°	309.5	34.5	8.6
0°-40°	466.7	52.1	13.0
0°-60°	755.4	84.3	21.0
0°-90°	896.5	100.0	24.9
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°	896.5	100.0	24.9

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	381	381	381	381	381	
5°	378	443	386	391	378	35
15°	315	447	380	433	315	89
25°	257	330	320	351	257	119
35°	206	227	252	229	206	130
45°	171	197	182	197	171	131
55°	127	162	121	168	127	113
65°	76	94	81	100	76	75
75°	35	39	40	43	35	37
85°	6	6	6	6	6	7
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°	202.5°	225°
0°	381	381	381	381	381	381	381	381	381	381	381
2.5°	385	393	401	408	409	405	398	388	381	376	375
5°	378	399	421	438	443	438	423	403	386	380	385
7.5°	365	398	434	455	463	462	449	421	390	389	406
10°	348	393	435	456	466	470	463	432	391	399	426
12.5°	330	384	425	446	459	467	466	437	386	405	440
15°	315	373	408	433	447	458	462	437	380	410	444
17.5°	304	358	388	416	430	445	452	435	371	411	444
20°	292	337	363	390	402	424	440	428	357	409	438
22.5°	276	312	337	357	367	393	424	417	340	403	428
25°	257	288	311	321	330	353	399	404	320	394	414
27.5°	242	265	287	292	295	313	369	388	301	384	393
30°	229	247	266	268	267	278	336	370	283	373	367
32.5°	218	231	246	246	244	252	301	351	268	359	339
35°	206	218	230	231	227	233	264	330	252	343	308
37.5°	197	207	219	220	215	218	233	309	236	325	278
40°	187	198	209	212	206	211	210	287	219	305	253
42.5°	179	190	201	206	201	205	194	263	200	283	234
45°	171	183	192	200	197	200	182	239	182	261	221
47.5°	161	173	181	193	192	195	172	214	164	237	211
50°	151	163	169	183	186	188	165	191	149	214	202
52.5°	140	151	156	171	176	178	155	169	134	190	189
55°	127	137	142	156	162	165	145	149	121	169	174
57.5°	114	124	128	141	147	150	135	131	110	149	158
60°	101	109	112	124	129	132	122	116	100	130	140
62.5°	88	95	97	107	111	115	108	103	90	114	123
65°	76	80	83	89	94	98	94	90	81	100	106
67.5°	64	67	69	75	78	83	81	78	71	86	91
70°	53	55	57	61	64	68	68	66	61	73	76
72.5°	43	45	45	48	51	55	55	55	50	60	62
75°	35	36	36	38	39	43	44	45	40	48	49
77.5°	26	28	27	28	29	31	32	33	31	35	36
80°	17	17	17	17	17	18	19	21	20	22	21
82.5°	9	9	9	9	9	10	10	10	10	10	10
85°	6	6	6	6	6	6	6	6	6	6	6
87.5°	3	3	3	3	3	3	3	3	3	3	3
90°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	381	381	381	381	381	381
2.5°	374	374	373	373	375	385
5°	391	391	384	373	367	378
7.5°	418	417	403	378	356	365
10°	437	433	415	381	344	348
12.5°	445	436	417	379	332	330
15°	445	433	412	374	321	315
17.5°	439	424	400	366	312	304
20°	428	412	385	352	304	292
22.5°	409	388	365	333	288	276
25°	378	351	340	311	271	257
27.5°	341	317	313	289	252	242
30°	305	283	285	269	236	229
32.5°	269	252	259	249	221	218
35°	242	229	237	231	209	206
37.5°	221	214	221	215	199	197
40°	209	203	209	203	192	187
42.5°	204	198	202	194	185	179
45°	203	197	198	186	177	171
47.5°	202	195	193	176	169	161
50°	197	190	185	165	159	151
52.5°	188	181	175	153	148	140
55°	175	168	161	139	135	127
57.5°	159	152	145	124	121	114
60°	142	135	128	109	106	101
62.5°	124	118	111	95	92	88
65°	107	100	94	81	78	76
67.5°	91	84	79	68	66	64
70°	75	69	64	55	54	53
72.5°	60	55	52	44	44	43
75°	48	43	40	35	35	35
77.5°	34	32	30	27	26	26
80°	20	19	19	17	17	17
82.5°	10	10	10	9	9	9
85°	6	6	6	6	6	6
87.5°	3	3	3	3	3	3
90°	0	0	0	0	0	0

(END OF REPORT)