

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: H23490

Luminaire Tested: **H802E-804**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H23490
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H802E-804
Description: HALO 8 IN FLUORESCENT RECESSED DOWNLIGHT
WITH SPECULAR REFLECTOR AND CROSS LOUVERED TRIM
Light Source: TWO 4 PIN DTT COMPACT FLUORESCENT LAMPS
TWO CF18W/827 18WATTS
Ballast/Driver: -

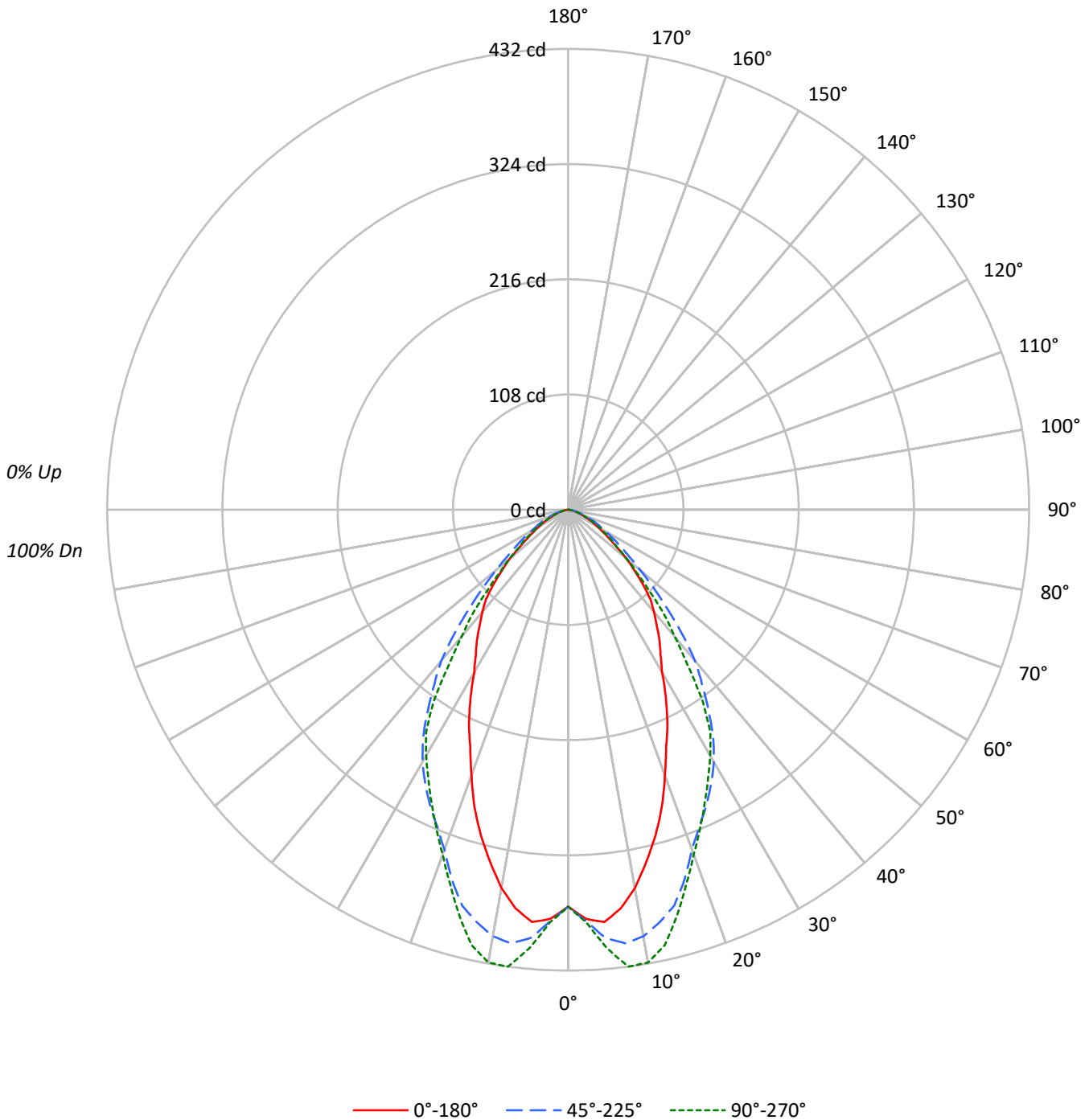
Summary

Lumens per Lamp: 1250 (2 lamps)
Luminaire Lumens: 571.7 lumens
Efficiency: 22.9%
Efficacy: 17.3 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 1.09 / 1.13
Luminous Opening: Circular (Dia: 0.56' 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	27	27	27	27	27	27	27	27	25	25	25	24	24	24	23	23	23	23
1	26	25	24	23	25	24	24	23	23	23	22	22	22	22	22	21	21	21
2	24	22	21	20	23	22	21	20	21	20	20	21	20	19	20	19	19	18
3	22	20	19	18	22	20	19	18	19	18	17	19	18	17	18	17	17	16
4	21	19	17	16	20	18	17	16	18	17	16	17	16	15	17	16	15	15
5	19	17	15	14	19	17	15	14	16	15	14	16	15	14	16	15	14	13
6	18	16	14	13	18	15	14	13	15	14	13	15	14	13	14	13	12	12
7	17	14	13	12	17	14	13	12	14	13	12	14	12	11	13	12	11	11
8	16	13	12	11	16	13	12	11	13	12	11	13	11	11	13	11	10	10
9	15	13	11	10	15	12	11	10	12	11	10	12	11	10	12	11	10	9
10	14	12	10	9	14	12	10	9	11	10	9	11	10	9	11	10	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16113	16113	16113
5°	16870	17523	17914
10°	15834	17857	18957
15°	14170	17220	17668
20°	12215	15626	15857
25°	10514	14625	14481
30°	8803	13654	13304
35°	7879	12109	11633
40°	7068	10461	8764
45°	6064	8025	6554
50°	4784	5930	4852
55°	3474	4455	3776
60°	2686	3465	2945
65°	2152	2870	2255
70°	1646	2153	1773
75°	1171	1674	1339
80°	998	1247	998
85°	497	497	497



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	38.2	6.7	1.5
10°-20°	102.3	17.9	4.1
20°-30°	130.2	22.8	5.2
30°-40°	127.8	22.4	5.1
40°-50°	89.7	15.7	3.6
50°-60°	48.6	8.5	1.9
60°-70°	24.2	4.2	1.0
70°-80°	9.3	1.6	0.4
80°-90°	1.6	0.3	0.1
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°	270.6	47.3	10.8
0°-40°	398.4	69.7	15.9
0°-60°	536.7	93.9	21.5
0°-90°	571.7	100.0	22.9
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°	571.7	100.0	22.9

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	388	390	403	410	412	36
15°	316	337	384	395	394	88
25°	220	256	306	308	303	100
35°	149	188	229	226	220	93
45°	99	112	131	115	107	76
55°	46	50	59	54	50	43
65°	21	23	28	24	22	21
75°	7	8	10	8	8	8
85°	1	1	1	1	1	1
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°
0°	372	372	372	372	372
2.5°	384	383	386	387	387
5°	388	390	403	410	412
7.5°	377	386	410	425	432
10°	360	373	406	427	431
12.5°	338	355	396	416	418
15°	316	337	384	395	394
17.5°	292	317	363	370	368
20°	265	296	339	344	344
22.5°	240	275	321	325	323
25°	220	256	306	308	303
27.5°	198	238	290	294	284
30°	176	221	273	274	266
32.5°	161	204	253	254	248
35°	149	188	229	226	220
37.5°	136	169	206	192	184
40°	125	149	185	162	155
42.5°	114	131	158	139	133
45°	99	112	131	115	107
47.5°	84	92	108	96	87
50°	71	76	88	81	72
52.5°	57	62	72	67	58
55°	46	50	59	54	50
57.5°	38	41	49	45	41
60°	31	34	40	36	34
62.5°	26	28	33	30	28
65°	21	23	28	24	22
67.5°	16	18	22	19	18
70°	13	14	17	15	14
72.5°	10	11	13	11	10
75°	7	8	10	8	8
77.5°	5	6	7	6	5
80°	4	4	5	4	4
82.5°	2	3	3	3	2
85°	1	1	1	1	1
87.5°	0	0	0	0	0
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)