

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: H35039

Luminaire Tested: **H800HP-810C**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-46-04  
Report Number: H35039  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H800HP-810C  
Description: HALO 8" DIA RECESSED DOWNLIGHT  
SPECULAR REFLECTOR  
0 DEG AXIS IS PARALLEL TO LAMPS  
Light Source: (2) F13TT 13 WATTS 900 LUMENS EACH  
TWIN TUBE COMPACT FLUORESCENT  
Ballast/Driver: -

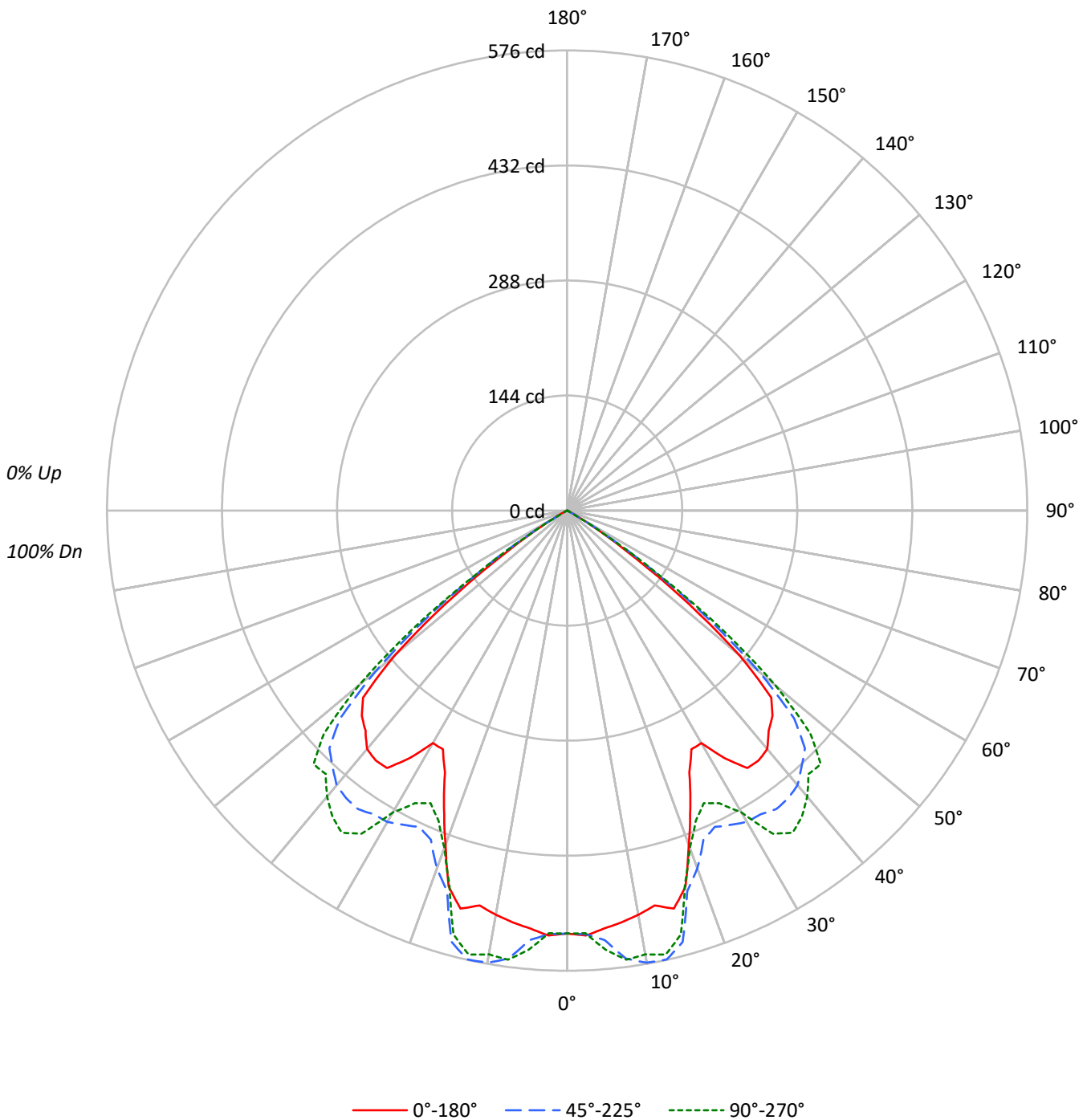
**Summary**

Lumens per Lamp: 900 (2 lamps)  
Luminaire Lumens: 1113.2 lumens  
Efficiency: 61.8%  
Efficacy: 33.7 lumens/watt  
Spacing Criteria (0/90/45): 0.95 / 1.43 / 1.48  
Luminous Opening: (L: 0 ' x W: -0.58 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 33  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: H35039  
CATALOG NUMBER: H800HP-810C

### Luminous Intensity Polar Plot





TEST NUMBER: H35039  
 CATALOG NUMBER: H800HP-810C

**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	74	74	74	74	72	72	72	72	69	69	69		66	66	66		63	63	63	62
1	69	67	65	63	68	66	64	62	63	62	61		61	60	59		59	58	57	56
2	65	61	57	55	63	60	57	54	57	55	53		56	54	52		54	52	51	50
3	60	55	51	48	59	54	50	47	52	49	46		51	48	46		49	47	45	44
4	56	50	45	42	54	49	45	41	47	44	41		46	43	40		45	42	40	39
5	52	45	40	37	50	44	40	37	43	39	36		42	38	36		41	38	35	34
6	48	41	36	33	47	40	36	32	39	35	32		38	35	32		37	34	32	31
7	45	37	32	29	44	37	32	29	36	32	29		35	31	29		34	31	28	27
8	42	34	29	26	41	34	29	26	33	29	26		32	28	26		32	28	26	25
9	39	31	27	24	38	31	27	24	30	26	23		30	26	23		29	26	23	22
10	36	29	24	21	36	29	24	21	28	24	21		28	24	21		27	24	21	20

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

	0°	45°	90°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



TEST NUMBER: H35039  
 CATALOG NUMBER: H800HP-810C

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	52.3	4.7	2.9
10°-20°	148.0	13.3	8.2
20°-30°	196.4	17.6	10.9
30°-40°	278.2	25.0	15.5
40°-50°	308.3	27.7	17.1
50°-60°	125.1	11.2	6.9
60°-70°	4.3	0.4	0.2
70°-80°	0.7	0.1	0.0
80°-90°	0.1	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°	396.6	35.6	22.0
0°-40°	674.8	60.6	37.5
0°-60°	1108.2	99.5	61.6
0°-90°	1113.2	100.0	61.8
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°	1113.2	100.0	61.8

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	525	528	540	548	552	50
15°	516	535	559	550	550	141
25°	362	426	437	408	404	171
35°	393	437	456	471	492	239
45°	364	393	421	436	449	274
55°	108	118	133	129	138	110
65°	3	2	2	2	2	5
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
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



TEST NUMBER: H35039  
 CATALOG NUMBER: H800HP-810C

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	529.3	529.3	529.3	529.3	529.3
2.5°	532.4	530.6	530.7	530.2	529.5
5°	525.3	527.7	539.7	548.5	551.7
7.5°	519.9	537.6	565.7	568.1	567.0
10°	513.7	557.9	574.6	564.1	564.1
12.5°	506.2	555.8	575.6	574.1	569.2
15°	515.9	535.4	559.0	550.2	549.5
17.5°	493.0	506.2	499.5	488.9	490.2
20°	445.1	458.1	476.5	457.0	449.3
22.5°	402.7	433.9	446.0	427.4	420.4
25°	362.1	426.4	437.0	408.2	404.2
27.5°	336.8	421.6	443.5	421.8	413.0
30°	336.2	416.3	450.0	444.4	436.2
32.5°	367.5	422.5	450.8	460.7	479.6
35°	393.4	437.4	456.3	471.4	492.1
37.5°	394.0	428.6	454.0	467.7	482.8
40°	389.7	421.1	448.8	456.7	467.4
42.5°	373.6	406.7	434.5	442.6	447.3
45°	363.5	393.2	420.9	435.7	448.9
47.5°	346.5	363.5	385.2	408.0	413.0
50°	281.2	293.9	314.0	337.9	340.4
52.5°	191.4	209.7	223.5	234.8	244.9
55°	107.7	118.4	133.1	128.6	138.3
57.5°	50.6	57.2	61.2	55.1	58.4
60°	17.4	21.7	17.8	11.8	11.3
62.5°	6.2	6.5	4.0	3.7	3.5
65°	2.6	2.5	2.4	2.4	2.4
67.5°	1.8	1.7	1.7	1.7	1.7
70°	1.2	1.2	1.2	1.2	1.2
72.5°	0.9	0.9	0.9	0.9	0.8
75°	0.6	0.6	0.6	0.6	0.6
77.5°	0.4	0.4	0.4	0.4	0.3
80°	0.3	0.3	0.2	0.2	0.2
82.5°	0.1	0.1	0.1	0.2	0.1
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: H35039  
CATALOG NUMBER: H800HP-810C

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)