

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: H24063

Luminaire Tested: **H-2-ICF 120**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: H24063  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H-2-ICF 120  
Description: HALO 10" SQUARE RECESSED DOWNLIGHT  
WHITE REFLECTOR  
PLASTIC LENS FRAME - ALBALITE LENS  
Light Source: (2) DULUX D/E 18 WATTS 1250 LUMENS  
QUAD TUBE 4 PIN COMPACT FLUORESCENT  
Ballast/Driver: -

**Summary**

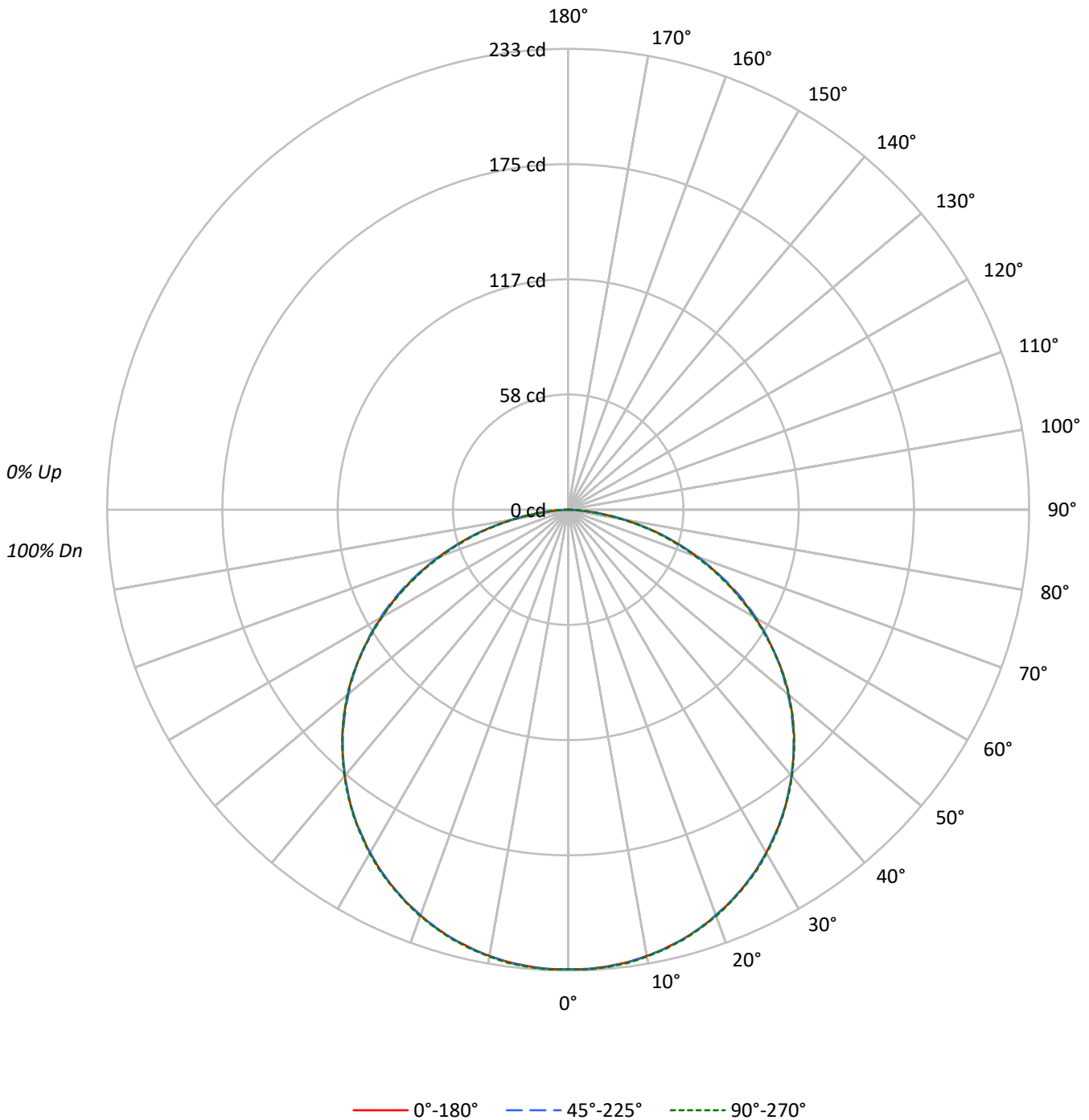
Lumens per Lamp: 1250 (2 lamps)  
Luminaire Lumens: 691.0 lumens  
Efficiency: 27.6%  
Efficacy: 18.7 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 0.8' x L: 0.8' x H: 0')  
CIE Type: Direct

Input Watts (W): 37  
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



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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	33	33	33	33	32	32	32	32	31	31	31	29	29	29	28	28	28	28	28	28	28	28	28	28														
1	30	29	27	26	29	28	27	26	27	26	25	26	25	24	25	24	24	25	24	24	25	24	24	23														
2	27	25	23	21	26	24	23	21	23	22	21	22	21	20	22	21	20	22	21	20	22	21	20	19														
3	25	22	20	18	24	21	19	18	21	19	17	20	18	17	19	18	17	19	18	17	19	18	17	16														
4	23	19	17	15	22	19	17	15	18	16	15	18	16	14	17	15	14	17	15	14	17	15	14	14														
5	21	17	15	13	20	17	15	13	16	14	13	16	14	12	15	14	12	15	14	12	15	14	12	12														
6	19	15	13	11	19	15	13	11	15	13	11	14	12	11	14	12	11	14	12	11	14	12	11	10														
7	18	14	12	10	17	14	11	10	13	11	10	13	11	10	13	11	10	13	11	10	13	11	10	9														
8	17	13	10	9	16	13	10	9	12	10	9	12	10	9	12	10	9	12	10	9	12	10	9	8														
9	15	12	9	8	15	12	9	8	11	9	8	11	9	8	11	9	8	11	9	8	11	9	8	7														
10	14	11	9	7	14	11	9	7	10	8	7	10	8	7	10	8	7	10	8	7	10	8	7	6														

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

	0°	45°	90°
0°	3909	3909	3909
5°	3912	3915	3917
10°	3913	3914	3919
15°	3912	3912	3918
20°	3907	3904	3914
25°	3901	3899	3904
30°	3890	3888	3896
35°	3880	3874	3880
40°	3855	3853	3862
45°	3841	3832	3837
50°	3807	3791	3812
55°	3753	3747	3747
60°	3670	3697	3656
65°	3562	3594	3534
70°	3418	3408	3349
75°	3184	3171	3106
80°	2760	2731	2693
85°	1756	1930	2007



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	22.0	3.2	0.9
10°-20°	63.4	9.2	2.5
20°-30°	96.9	14.0	3.9
30°-40°	118.1	17.1	4.7
40°-50°	124.2	18.0	5.0
50°-60°	114.3	16.5	4.6
60°-70°	88.5	12.8	3.5
70°-80°	51.3	7.4	2.1
80°-90°	12.3	1.8	0.5
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°	182.4	26.4	7.3
0°-40°	300.4	43.5	12.0
0°-60°	538.9	78.0	21.6
0°-90°	691.0	100.0	27.6
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°	691.0	100.0	27.6

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	232	232	232	232	232	
5°	232	232	232	232	232	22
15°	225	224	225	225	225	63
25°	210	210	210	210	210	97
35°	189	188	189	189	189	118
45°	162	161	161	161	161	124
55°	128	128	128	128	128	114
65°	90	90	90	89	89	88
75°	49	49	49	48	48	52
85°	9	10	10	10	10	12
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°	232.4	232.4	232.4	232.4	232.4
2.5°	232.4	232.0	232.4	232.6	232.6
5°	231.7	231.6	231.9	232.0	232.0
7.5°	230.7	230.6	230.8	230.9	231.2
10°	229.1	229.0	229.2	229.4	229.5
12.5°	227.1	226.9	227.2	227.4	227.4
15°	224.7	224.4	224.7	224.9	225.0
17.5°	221.8	221.5	221.7	221.8	222.0
20°	218.3	218.1	218.1	218.4	218.7
22.5°	214.5	214.1	214.4	214.6	214.7
25°	210.2	209.8	210.1	210.3	210.4
27.5°	205.5	205.2	205.4	205.5	205.9
30°	200.3	200.1	200.2	200.3	200.6
32.5°	194.6	194.4	194.5	194.7	195.0
35°	189.0	188.5	188.7	188.7	189.0
37.5°	182.4	182.2	182.3	182.5	182.7
40°	175.6	175.5	175.5	175.6	175.9
42.5°	168.6	168.4	168.4	168.5	168.8
45°	161.5	161.0	161.1	161.1	161.3
47.5°	153.6	153.1	153.0	153.4	153.7
50°	145.5	145.0	144.9	145.2	145.7
52.5°	137.1	136.9	136.6	136.8	137.2
55°	128.0	127.9	127.8	128.2	127.8
57.5°	118.7	118.6	119.1	118.7	118.3
60°	109.1	109.2	109.9	109.1	108.7
62.5°	99.3	99.4	100.4	99.2	98.8
65°	89.5	89.5	90.3	89.0	88.8
67.5°	79.5	79.5	79.9	78.9	78.6
70°	69.5	69.3	69.3	68.7	68.1
72.5°	59.0	59.3	59.1	58.5	57.9
75°	49.0	49.4	48.8	48.1	47.8
77.5°	38.5	39.0	38.2	38.0	37.7
80°	28.5	28.7	28.2	28.1	27.8
82.5°	18.4	18.7	18.5	18.6	18.5
85°	9.1	9.5	10.0	10.5	10.4
87.5°	2.5	2.6	2.8	2.9	2.9
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



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**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)