

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: E395572

Luminaire Tested: **H42-338**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: E395572  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H42-338  
Description: HALO RECESSED INC - H42 HOUSING, BAFFLE, 0 DEG TILT  
Light Source: 300R40SP, 3650 LUMENS  
Ballast/Driver: -

**Summary**

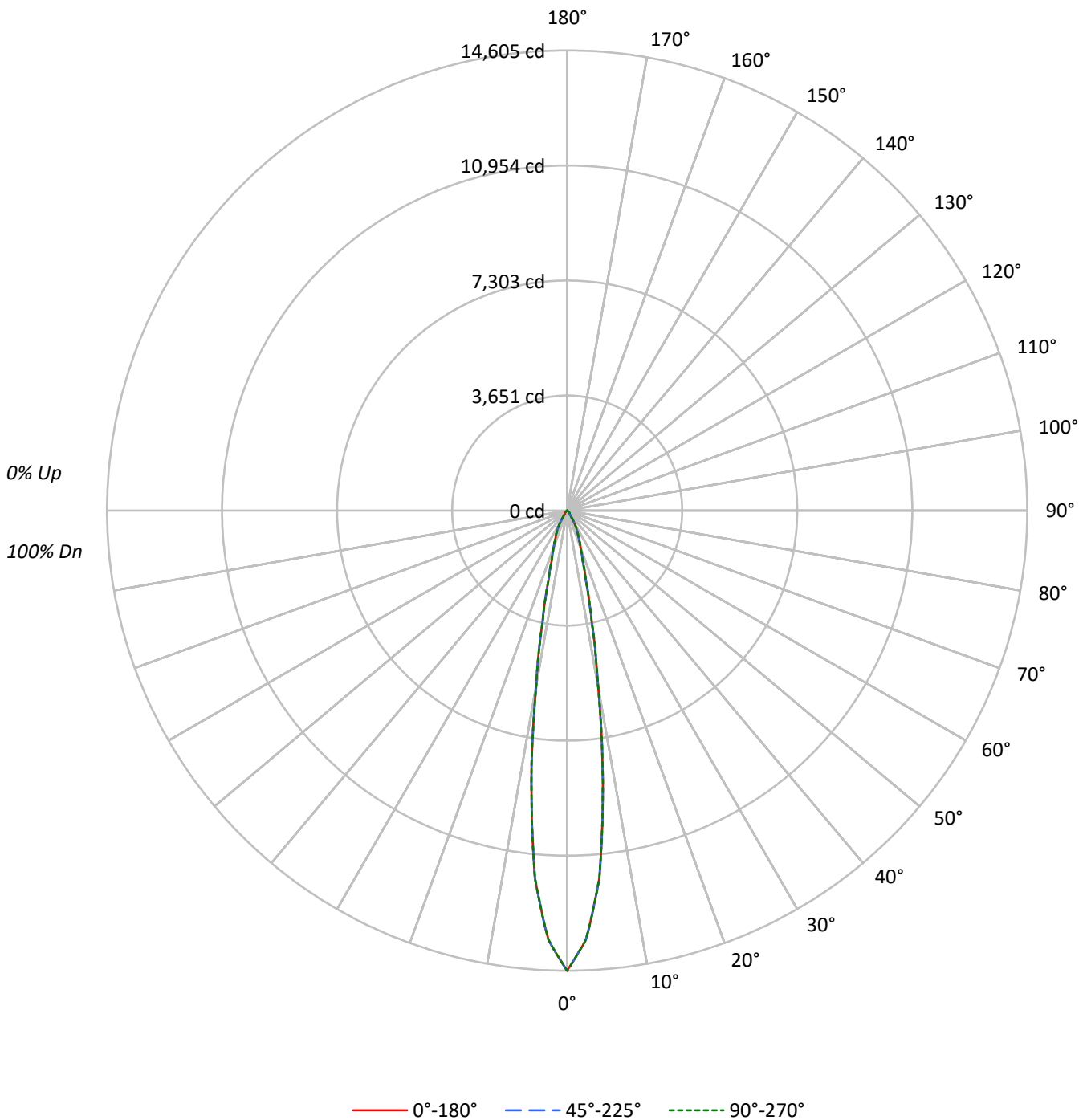
Lumens per Lamp: 3650 (1 lamp)  
Luminaire Lumens: 2196.2 lumens  
Efficiency: 60.2%  
Efficacy: 7.3 lumens/watt  
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.3  
Luminous Opening: (L: 0 ' x W: -0.6 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 300  
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



TEST NUMBER: E395572  
CATALOG NUMBER: H42-338

### Luminous Intensity Polar Plot





TEST NUMBER: E395572  
 CATALOG NUMBER: H42-338

**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	72	72	72	72	70	70	70	70	67	67	67		64	64	64		61	61	61	60
1	69	68	67	66	68	67	66	65	64	63	63		62	61	61		60	60	59	58
2	67	65	63	61	66	64	62	61	62	61	59		60	59	58		59	58	57	56
3	65	62	60	58	64	61	59	58	60	58	57		58	57	56		57	56	55	54
4	63	59	57	55	62	59	57	55	58	56	54		57	55	54		55	54	53	52
5	61	57	55	53	60	57	54	53	56	54	52		55	53	52		54	53	51	51
6	59	55	53	51	58	55	52	51	54	52	50		53	51	50		53	51	50	49
7	57	53	51	49	57	53	51	49	52	50	49		52	50	49		51	50	48	48
8	56	52	49	48	55	52	49	48	51	49	47		50	49	47		50	48	47	46
9	54	50	48	46	54	50	48	46	50	48	46		49	47	46		49	47	46	45
10	53	49	47	45	53	49	46	45	48	46	45		48	46	45		48	46	45	44

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

	0°	90°	180°
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: E395572  
 CATALOG NUMBER: H42-338

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	914.9	41.7	25.1
10°-20°	715.0	32.6	19.6
20°-30°	368.6	16.8	10.1
30°-40°	125.9	5.7	3.4
40°-50°	66.3	3.0	1.8
50°-60°	5.5	0.2	0.1
60°-70°	0.0	0.0	0.0
70°-80°	0.0	0.0	0.0
80°-90°	0.0	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°	1998.5	91.0	54.8
0°-40°	2124.4	96.7	58.2
0°-60°	2196.2	100.0	60.2
0°-90°	2196.2	100.0	60.2
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°	2196.2	100.0	60.2

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	14605	14605	14605	14605	14605	
5°	11705	11705	11705	11705	11705	915
15°	2279	2279	2279	2279	2279	715
25°	810	810	810	810	810	369
35°	155	155	155	155	155	126
45°	91	91	91	91	91	66
55°	3	3	3	3	3	5
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: E395572  
 CATALOG NUMBER: H42-338

**CANDELA DISTRIBUTION (FULL):**

	0°	30°	60°	90°	120°	150°	180°
0°	14605	14605	14605	14605	14605	14605	14605
2.5°	13637	13637	13637	13637	13637	13637	13637
5°	11705	11705	11705	11705	11705	11705	11705
7.5°	8694	8694	8694	8694	8694	8694	8694
10°	5642	5642	5642	5642	5642	5642	5642
12.5°	3606	3606	3606	3606	3606	3606	3606
15°	2279	2279	2279	2279	2279	2279	2279
17.5°	1623	1623	1623	1623	1623	1623	1623
20°	1243	1243	1243	1243	1243	1243	1243
22.5°	991	991	991	991	991	991	991
25°	810	810	810	810	810	810	810
27.5°	628	628	628	628	628	628	628
30°	450	450	450	450	450	450	450
32.5°	255	255	255	255	255	255	255
35°	155	155	155	155	155	155	155
37.5°	131	131	131	131	131	131	131
40°	118	118	118	118	118	118	118
42.5°	111	111	111	111	111	111	111
45°	91	91	91	91	91	91	91
47.5°	74	74	74	74	74	74	74
50°	24	24	24	24	24	24	24
52.5°	7	7	7	7	7	7	7
55°	3	3	3	3	3	3	3
57.5°	3	3	3	3	3	3	3
60°	0	0	0	0	0	0	0
65°	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0

(END OF REPORT)