

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: E395570

Luminaire Tested: **H42-480**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: E395570  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H42-480  
Description: HALO RECESSED INC - H42 HOUSING, CLEAR SPEC REFL, 0 DEG TILT  
Light Source: 300R40SP, 3650 LUMENS  
Ballast/Driver: -

**Summary**

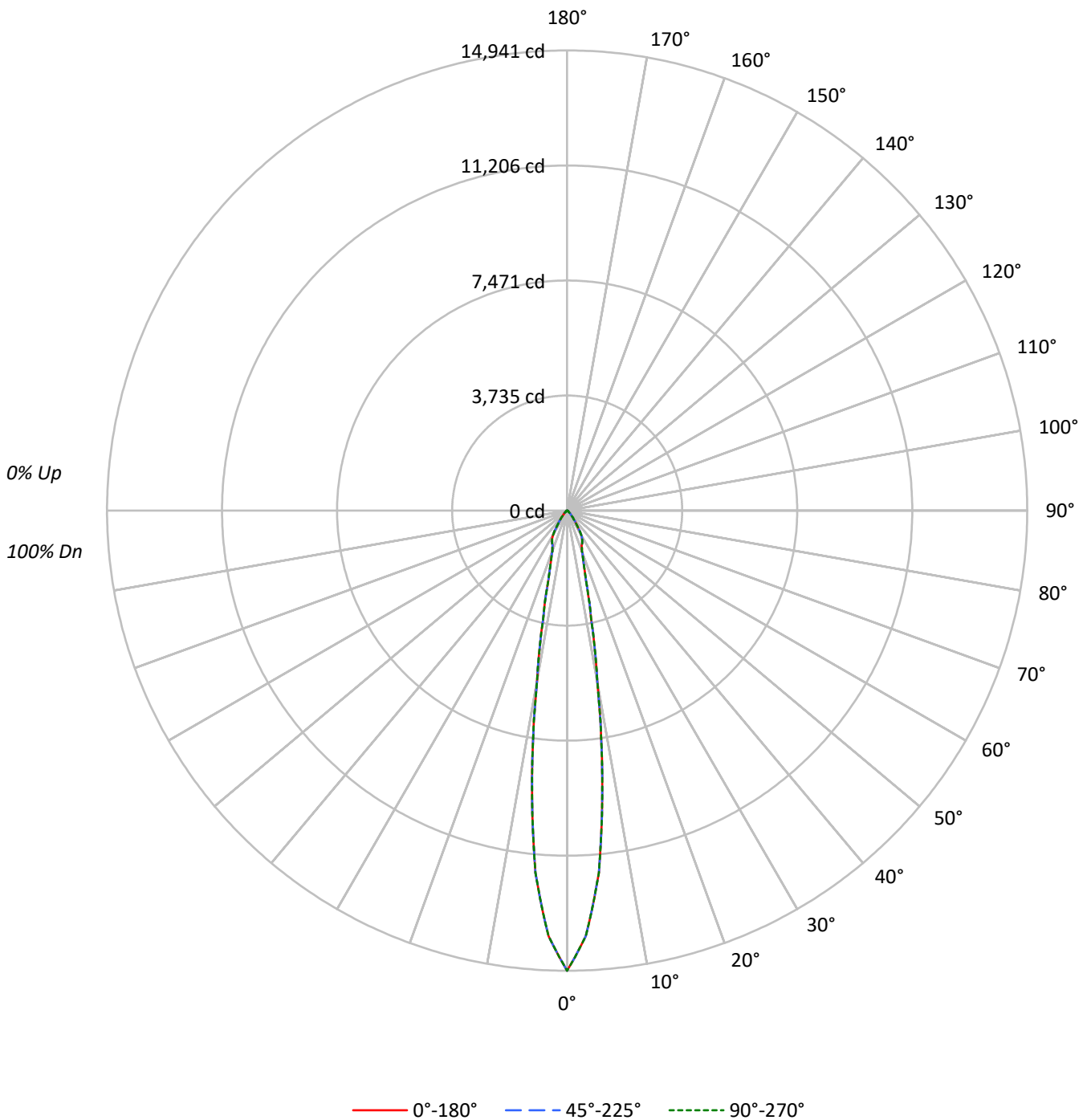
Lumens per Lamp: 3650 (1 lamp)  
Luminaire Lumens: 2678.3 lumens  
Efficiency: 73.4%  
Efficacy: 8.9 lumens/watt  
Spacing Criteria (0/90/45): 0.29 / 0.29 / 0.3  
Luminous Opening: (L: 0 ' x W: -0.6 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 300  
Input Voltage (V): NR  
Input Current (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				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	87	87	87	87	85	85	85	85	82	82	82	78	78	78	75	75	75	73	73	73	70	70		
1	84	82	81	79	82	81	79	78	78	77	76	75	74	73	73	72	71	70	70	70	70	70		
2	81	78	75	73	79	76	74	72	74	72	71	72	71	69	70	69	68	67	67	67	67	67		
3	78	74	71	68	76	73	70	68	71	68	67	69	67	66	67	66	65	64	64	64	64	64		
4	75	70	67	64	73	69	66	64	68	65	63	66	64	62	65	63	62	61	61	61	61	61		
5	72	67	63	61	71	66	63	61	65	62	60	64	61	60	63	61	59	58	58	58	58	58		
6	69	64	61	58	68	64	60	58	62	60	57	62	59	57	61	58	57	56	56	56	56	56		
7	67	61	58	55	66	61	58	55	60	57	55	59	57	55	59	56	55	54	54	54	54	54		
8	65	59	56	53	64	59	55	53	58	55	53	57	55	53	57	54	53	52	52	52	52	52		
9	63	57	54	51	62	57	53	51	56	53	51	56	53	51	55	53	51	50	50	50	50	50		
10	61	55	52	50	60	55	52	49	54	51	49	54	51	49	53	51	49	48	48	48	48	48		

**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°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	922.2	34.4	25.3
10°-20°	739.4	27.6	20.3
20°-30°	527.4	19.7	14.4
30°-40°	321.4	12.0	8.8
40°-50°	114.7	4.3	3.1
50°-60°	36.4	1.4	1.0
60°-70°	12.5	0.5	0.3
70°-80°	4.3	0.2	0.1
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°	2188.9	81.7	60.0
0°-40°	2510.3	93.7	68.8
0°-60°	2661.4	99.4	72.9
0°-90°	2678.3	100.0	73.4
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°	2678.3	100.0	73.4

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	14941	14941	14941	14941	14941	
5°	11806	11806	11806	11806	11806	922
15°	2356	2356	2356	2356	2356	739
25°	1156	1156	1156	1156	1156	527
35°	487	487	487	487	487	321
45°	141	141	141	141	141	115
55°	40	40	40	40	40	36
65°	7	7	7	7	7	13
75°	3	3	3	3	3	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	30°	60°	90°	120°	150°	180°
0°	14941	14941	14941	14941	14941	14941	14941
2.5°	13832	13832	13832	13832	13832	13832	13832
5°	11806	11806	11806	11806	11806	11806	11806
7.5°	8731	8731	8731	8731	8731	8731	8731
10°	5649	5649	5649	5649	5649	5649	5649
12.5°	3619	3619	3619	3619	3619	3619	3619
15°	2356	2356	2356	2356	2356	2356	2356
17.5°	1751	1751	1751	1751	1751	1751	1751
20°	1412	1412	1412	1412	1412	1412	1412
22.5°	1233	1233	1233	1233	1233	1233	1233
25°	1156	1156	1156	1156	1156	1156	1156
27.5°	1062	1062	1062	1062	1062	1062	1062
30°	904	904	904	904	904	904	904
32.5°	676	676	676	676	676	676	676
35°	487	487	487	487	487	487	487
37.5°	356	356	356	356	356	356	356
40°	252	252	252	252	252	252	252
42.5°	178	178	178	178	178	178	178
45°	141	141	141	141	141	141	141
47.5°	124	124	124	124	124	124	124
50°	64	64	64	64	64	64	64
52.5°	44	44	44	44	44	44	44
55°	40	40	40	40	40	40	40
57.5°	34	34	34	34	34	34	34
60°	27	27	27	27	27	27	27
62.5°	20	20	20	20	20	20	20
65°	7	7	7	7	7	7	7
67.5°	7	7	7	7	7	7	7
70°	7	7	7	7	7	7	7
72.5°	7	7	7	7	7	7	7
75°	3	3	3	3	3	3	3
77.5°	3	3	3	3	3	3	3
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)