

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: E395584

Luminaire Tested: **H46-466**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: E395584  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H46-466  
Description: HALO RECESSED INC - H46 HOUSING, CLEAR SPECULAR REFL  
Light Source: 300R40FL, 3650 LUMENS  
Ballast/Driver: -

**Summary**

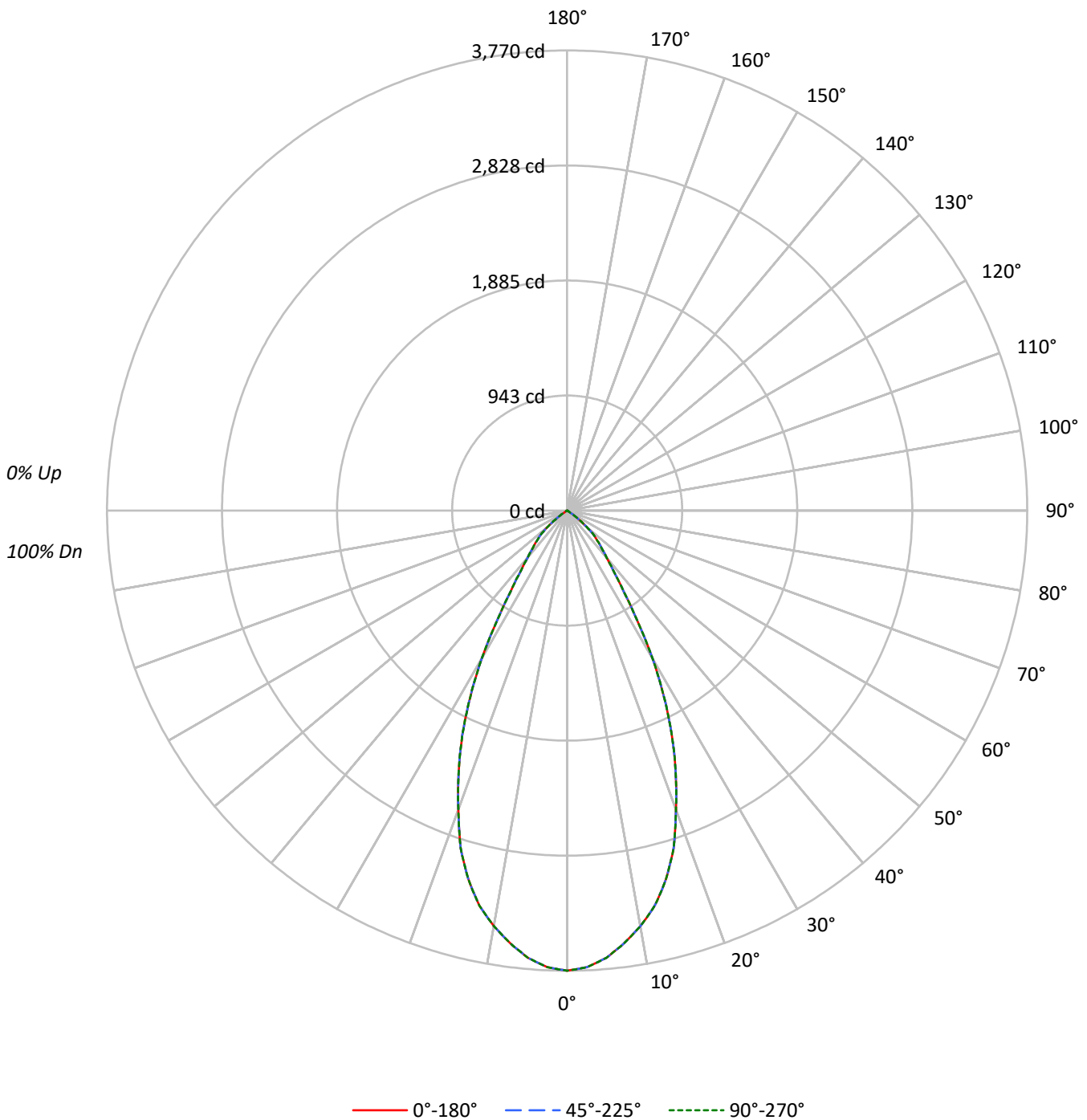
Lumens per Lamp: 3650 (1 lamp)  
Luminaire Lumens: 3005.2 lumens  
Efficiency: 82.3%  
Efficacy: 10.0 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.81  
Luminous Opening: (L: 0 ' x W: -0.62 ' x H: 0 '  
CIE Type: Direct

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



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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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	98	98	98	98	96	96	96	96	91	91	91	88	88	88	84	84	84	82			
1	93	91	89	87	91	89	88	86	86	85	83	83	82	81	80	79	78	77			
2	89	85	81	79	87	83	80	78	81	78	76	78	76	74	76	74	73	72			
3	84	79	75	72	83	78	74	71	76	73	70	74	71	69	72	70	68	66			
4	80	74	69	66	79	73	69	65	71	67	65	69	66	64	68	65	63	62			
5	76	69	64	61	75	68	64	60	67	63	60	65	62	59	64	61	59	58			
6	72	65	60	56	71	64	59	56	63	59	56	62	58	55	61	57	55	54			
7	69	61	56	52	67	60	56	52	59	55	52	58	55	52	57	54	51	50			
8	65	57	52	49	64	57	52	49	56	52	49	55	51	49	54	51	48	47			
9	62	54	49	46	61	54	49	46	53	49	46	52	48	46	52	48	46	44			
10	59	51	47	43	58	51	46	43	50	46	43	50	46	43	49	46	43	42			

**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°	343.9	11.4	9.4
10°-20°	865.0	28.8	23.7
20°-30°	918.6	30.6	25.2
30°-40°	530.2	17.6	14.5
40°-50°	273.0	9.1	7.5
50°-60°	70.9	2.4	1.9
60°-70°	3.6	0.1	0.1
70°-80°	0.1	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°	2127.5	70.8	58.3
0°-40°	2657.7	88.4	72.8
0°-60°	3001.5	99.9	82.2
0°-90°	3005.2	100.0	82.3
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°	3005.2	100.0	82.3

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3770	3770	3770	3770	3770	
5°	3678	3678	3678	3678	3678	344
15°	3128	3128	3128	3128	3128	865
25°	2032	2032	2032	2032	2032	919
35°	807	807	807	807	807	530
45°	354	354	354	354	354	273
55°	62	62	62	62	62	71
65°	3	3	3	3	3	4
75°	0	0	0	0	0	0
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°	3770	3770	3770	3770	3770	3770	3770
2.5°	3744	3744	3744	3744	3744	3744	3744
5°	3678	3678	3678	3678	3678	3678	3678
7.5°	3576	3576	3576	3576	3576	3576	3576
10°	3457	3457	3457	3457	3457	3457	3457
12.5°	3316	3316	3316	3316	3316	3316	3316
15°	3128	3128	3128	3128	3128	3128	3128
17.5°	2901	2901	2901	2901	2901	2901	2901
20°	2607	2607	2607	2607	2607	2607	2607
22.5°	2326	2326	2326	2326	2326	2326	2326
25°	2032	2032	2032	2032	2032	2032	2032
27.5°	1718	1718	1718	1718	1718	1718	1718
30°	1401	1401	1401	1401	1401	1401	1401
32.5°	1062	1062	1062	1062	1062	1062	1062
35°	807	807	807	807	807	807	807
37.5°	624	624	624	624	624	624	624
40°	504	504	504	504	504	504	504
42.5°	419	419	419	419	419	419	419
45°	354	354	354	354	354	354	354
47.5°	295	295	295	295	295	295	295
50°	210	210	210	210	210	210	210
52.5°	132	132	132	132	132	132	132
55°	62	62	62	62	62	62	62
57.5°	21	21	21	21	21	21	21
60°	8	8	8	8	8	8	8
62.5°	5	5	5	5	5	5	5
65°	3	3	3	3	3	3	3
67.5°	2	2	2	2	2	2	2
70°	1	1	1	1	1	1	1
72.5°	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)