

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: E395773

Luminaire Tested: **H42-480**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: E395773  
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: 300R40FL, 3650 LUMENS  
Ballast/Driver: -

**Summary**

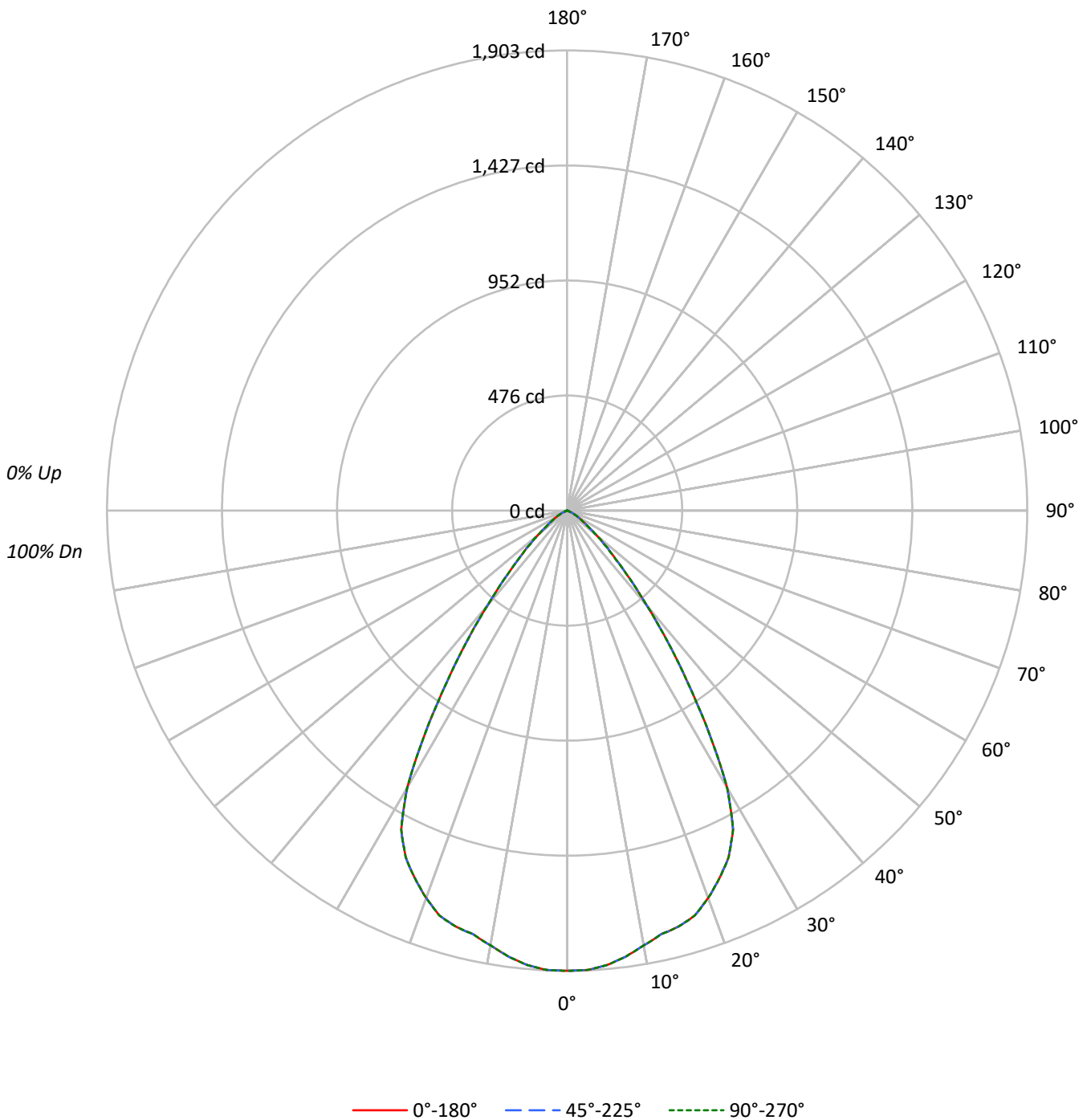
Lumens per Lamp: 3650 (1 lamp)  
Luminaire Lumens: 2282.8 lumens  
Efficiency: 62.5%  
Efficacy: 7.6 lumens/watt  
Spacing Criteria (0/90/45): 1.09 / 1.09 / 0.99  
Luminous Opening: (L: 0 ' x W: -0.6 ' x H: 0 '  
CIE Type: Direct

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



TEST NUMBER: E395773  
CATALOG NUMBER: H42-480

### Luminous Intensity Polar Plot





TEST NUMBER: E395773  
 CATALOG NUMBER: H42-480

**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	73	73	73	73	69	69	69		67	67	67		64	64	64	63
1	71	69	67	66	69	67	66	65	65	64	63		63	62	61		60	60	59	58
2	67	63	61	58	65	62	60	58	60	58	56		58	57	55		57	55	54	53
3	63	59	55	53	62	58	55	52	56	53	51		54	52	50		53	51	50	49
4	59	54	50	48	58	53	50	47	52	49	47		51	48	46		50	47	46	45
5	56	50	46	43	55	50	46	43	49	45	43		47	45	42		46	44	42	41
6	53	47	43	40	52	46	42	40	45	42	39		44	41	39		44	41	39	38
7	50	44	39	37	49	43	39	37	42	39	36		42	38	36		41	38	36	35
8	47	41	37	34	46	40	36	34	40	36	34		39	36	33		38	35	33	32
9	45	38	34	31	44	38	34	31	37	34	31		37	33	31		36	33	31	30
10	42	36	32	29	42	36	32	29	35	32	29		34	31	29		34	31	29	28

**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: E395773  
 CATALOG NUMBER: H42-480

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	178.1	7.8	4.9
10°-20°	501.5	22.0	13.7
20°-30°	715.7	31.4	19.6
30°-40°	549.7	24.1	15.1
40°-50°	232.3	10.2	6.4
50°-60°	80.1	3.5	2.2
60°-70°	21.9	1.0	0.6
70°-80°	3.3	0.1	0.1
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°	1395.3	61.1	38.2
0°-40°	1945.1	85.2	53.3
0°-60°	2257.4	98.9	61.8
0°-90°	2282.8	100.0	62.5
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°	2282.8	100.0	62.5

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1903	1903	1903	1903	1903	
5°	1887	1887	1887	1887	1887	178
15°	1781	1781	1781	1781	1781	501
25°	1581	1581	1581	1581	1581	716
35°	869	869	869	869	869	550
45°	284	284	284	284	284	232
55°	83	83	83	83	83	80
65°	20	20	20	20	20	22
75°	3	3	3	3	3	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: E395773  
 CATALOG NUMBER: H42-480

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1903	1903	1903	1903	1903	1903	1903	1903	1903
2.5°	1902	1902	1902	1902	1902	1902	1902	1902	1902
5°	1887	1887	1887	1887	1887	1887	1887	1887	1887
7.5°	1860	1860	1860	1860	1860	1860	1860	1860	1860
10°	1826	1826	1826	1826	1826	1826	1826	1826	1826
12.5°	1795	1795	1795	1795	1795	1795	1795	1795	1795
15°	1781	1781	1781	1781	1781	1781	1781	1781	1781
17.5°	1756	1756	1756	1756	1756	1756	1756	1756	1756
20°	1705	1705	1705	1705	1705	1705	1705	1705	1705
22.5°	1646	1646	1646	1646	1646	1646	1646	1646	1646
25°	1581	1581	1581	1581	1581	1581	1581	1581	1581
27.5°	1486	1486	1486	1486	1486	1486	1486	1486	1486
30°	1323	1323	1323	1323	1323	1323	1323	1323	1323
32.5°	1095	1095	1095	1095	1095	1095	1095	1095	1095
35°	869	869	869	869	869	869	869	869	869
37.5°	682	682	682	682	682	682	682	682	682
40°	513	513	513	513	513	513	513	513	513
42.5°	384	384	384	384	384	384	384	384	384
45°	284	284	284	284	284	284	284	284	284
47.5°	216	216	216	216	216	216	216	216	216
50°	157	157	157	157	157	157	157	157	157
52.5°	112	112	112	112	112	112	112	112	112
55°	83	83	83	83	83	83	83	83	83
57.5°	64	64	64	64	64	64	64	64	64
60°	47	47	47	47	47	47	47	47	47
62.5°	33	33	33	33	33	33	33	33	33
65°	20	20	20	20	20	20	20	20	20
67.5°	10	10	10	10	10	10	10	10	10
70°	6	6	6	6	6	6	6	6	6
72.5°	4	4	4	4	4	4	4	4	4
75°	3	3	3	3	3	3	3	3	3
77.5°	2	2	2	2	2	2	2	2	2
80°	1	1	1	1	1	1	1	1	1
82.5°	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)