

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P30045

Luminaire Tested: **ML706835-494H06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P30045
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML706835-494H06
Description: HALO RECESSED LED RETROFIT MODULE WITH HAZE TRIM
Light Source: -
LED 14 WATTS
Ballast/Driver: 120V ELECTRONIC DRIVER

Summary

Lumens per Lamp: 672 (1 lamp)
Luminaire Lumens: 673.6 lumens
Efficiency: 100.2%
Efficacy: 48.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.23 / 1.32
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

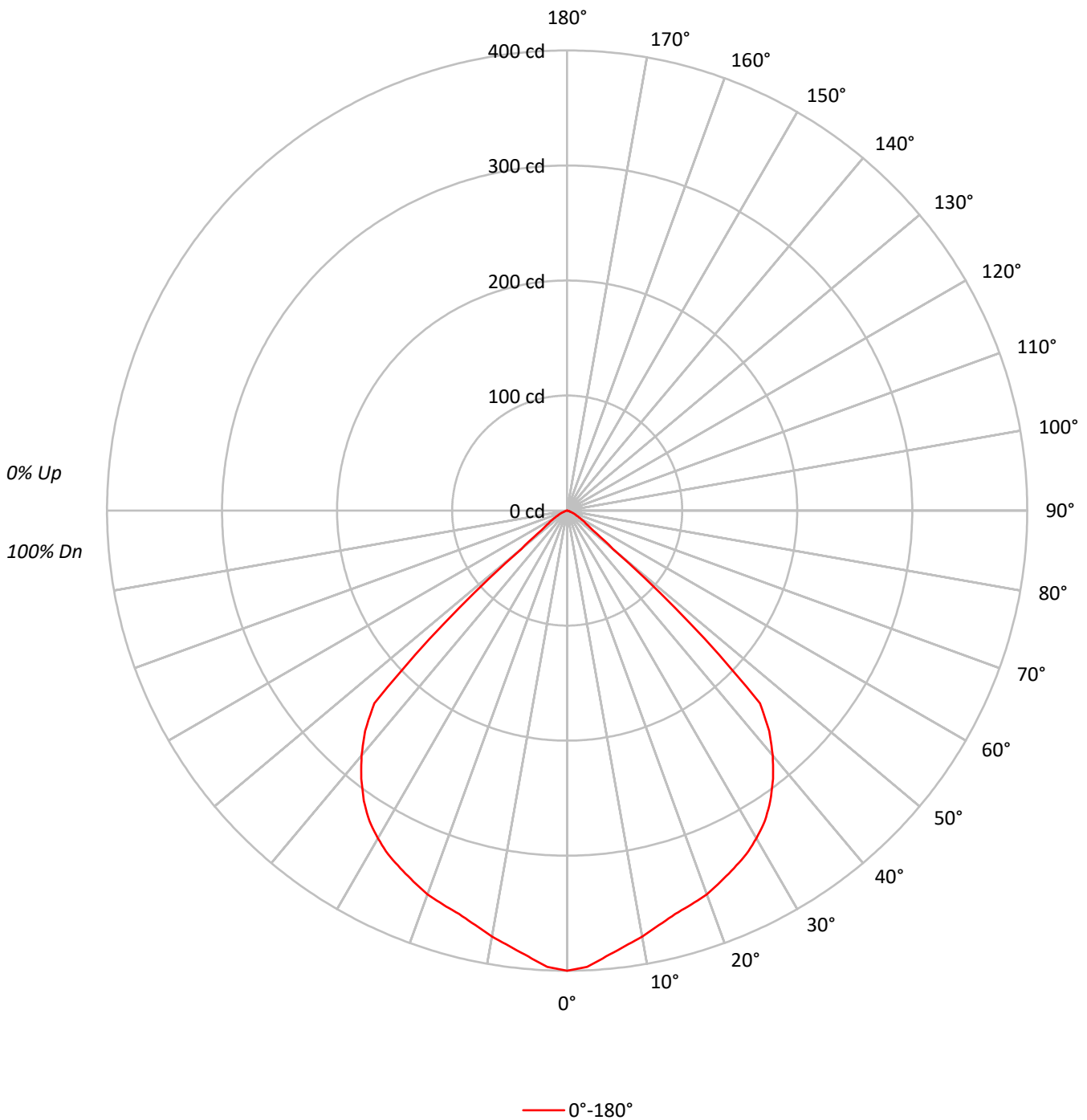
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	117	117	117	117	111	111	111	107	107	107	102	102	102	100
1	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82
3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82	79	76	74
4	92	83	77	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	56	64	60	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41
10	63	51	44	40	61	51	44	39	50	44	39	49	43	39	48	43	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	31576
5°	30825
10°	30140
15°	29666
20°	29823
25°	29876
30°	29989
35°	29682
40°	28648
45°	26459
50°	6386
55°	2890
60°	1895
65°	1308
70°	692
75°	305
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	36.7	5.5	5.5
10°-20°	102.9	15.3	15.3
20°-30°	158.3	23.5	23.6
30°-40°	191.8	28.5	28.5
40°-50°	153.9	22.8	22.9
50°-60°	21.5	3.2	3.2
60°-70°	7.0	1.0	1.0
70°-80°	1.4	0.2	0.2
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°	298.0	44.2	44.3
0°-40°	489.8	72.7	72.9
0°-60°	665.1	98.7	99.0
0°-90°	673.6	100.0	100.2
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°	673.6	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	400	
5°	389	37
15°	363	103
25°	343	158
35°	308	192
45°	237	154
55°	21	21
65°	7	7
75°	1	1
85°	0	0
90°	0	0
95°	0	0
105°	0	0
115°	0	0
125°	0	0
135°	0	0
145°	0	0
155°	0	0
165°	0	0
175°	0	0
180°	0	0



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CANDELA DISTRIBUTION (FULL):

0°	
0°	400
2.5°	397
5°	389
7.5°	382
10°	376
12.5°	369
15°	363
17.5°	359
20°	355
22.5°	349
25°	343
27.5°	337
30°	329
32.5°	320
35°	308
37.5°	294
40°	278
42.5°	260
45°	237
47.5°	145
50°	52
52.5°	28
55°	21
57.5°	16
60°	12
62.5°	9
65°	7
67.5°	5
70°	3
72.5°	2
75°	1
77.5°	1
80°	0
82.5°	0
85°	0
87.5°	0
90°	0
92.5°	0
95°	0
97.5°	0
100°	0
102.5°	0
105°	0
107.5°	0
110°	0



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	0
115°	0
117.5°	0
120°	0
122.5°	0
125°	0
127.5°	0
130°	0
132.5°	0
135°	0
137.5°	0
140°	0
142.5°	0
145°	0
147.5°	0
150°	0
152.5°	0
155°	0
157.5°	0
160°	0
162.5°	0
165°	0
167.5°	0
170°	0
172.5°	0
175°	0
177.5°	0
180°	0

(END OF REPORT)