

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: P30046

Luminaire Tested: **ML706835-493HS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P30046
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML706835-493HS06
Description: HALO RECESSED LED RETROFIT MODULE WITH TRIM THAT INCLUDES SPECULAR UPPER REFLECTOR, HAZE LOWER REFLECTOR, AND SOFT FOCUS LENS BETWEEN THE TWO
Light Source: HIGH OUPUT LED PACKAGE
14 WATTS
Ballast/Driver: 120V ELECTRONIC DRIVER

Summary

Lumens per Lamp: 625 (1 lamp)
Luminaire Lumens: 627.4 lumens
Efficiency: 100.4%
Efficacy: 45.5 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.82
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

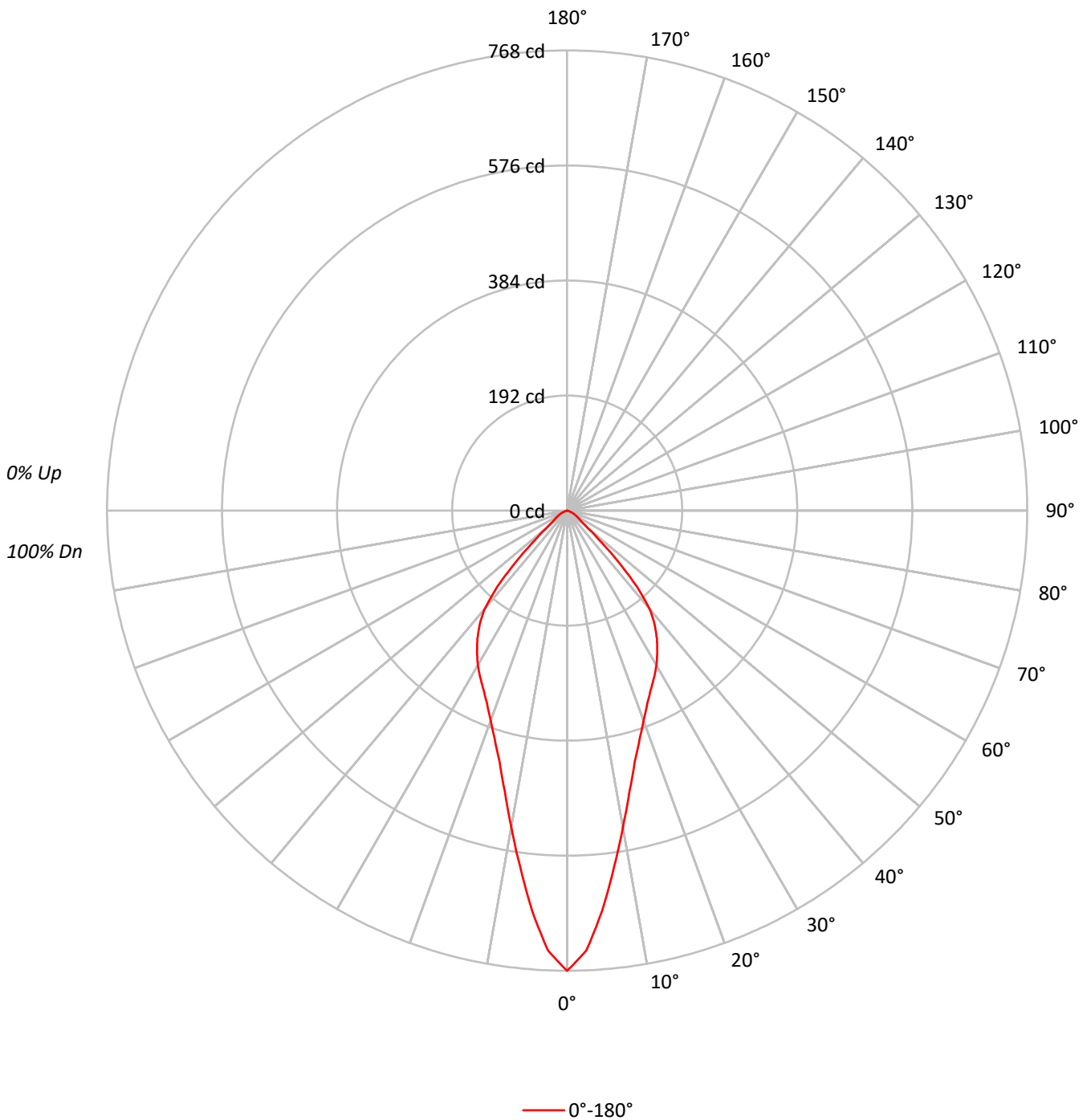
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	120	120	120	120	117	117	117	117	112	112	112	107	107	107	102	102	102	100
1	113	110	107	105	111	108	105	103	104	102	100	100	98	97	97	95	94	92
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84
3	100	93	87	83	98	92	86	82	89	84	81	86	83	79	84	81	78	77
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	71	70
5	89	79	73	68	87	78	72	67	76	71	67	75	70	66	73	69	65	64
6	83	73	67	62	82	73	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	61	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	52	73	63	57	52	62	56	52	61	56	52	60	55	51	50
9	70	60	53	48	69	59	53	48	58	52	48	57	52	48	56	51	48	46
10	67	56	49	45	66	55	49	45	55	49	45	54	48	45	53	48	45	43

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	83912
5°	73484
10°	59467
15°	49205
20°	43370
25°	39783
30°	37597
35°	34813
40°	30523
45°	18388
50°	7479
55°	4762
60°	3715
65°	2844
70°	1597
75°	422
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	59.7	9.5	9.6
10°-20°	123.1	19.6	19.7
20°-30°	152.7	24.3	24.4
30°-40°	161.9	25.8	25.9
40°-50°	93.5	14.9	15.0
50°-60°	23.9	3.8	3.8
60°-70°	10.8	1.7	1.7
70°-80°	1.7	0.3	0.3
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°	335.6	53.5	53.7
0°-40°	497.5	79.3	79.6
0°-60°	614.9	98.0	98.4
0°-90°	627.4	100.0	100.4
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°	627.4	100.0	100.4

CANDELA DISTRIBUTION:

	0°	Flux
0°	768	
5°	670	60
15°	435	123
25°	330	153
35°	261	162
45°	119	94
55°	25	24
65°	11	11
75°	1	2
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°	768
2.5°	735
5°	670
7.5°	600
10°	536
12.5°	480
15°	435
17.5°	401
20°	373
22.5°	349
25°	330
27.5°	314
30°	298
32.5°	280
35°	261
37.5°	240
40°	214
42.5°	173
45°	119
47.5°	72
50°	44
52.5°	31
55°	25
57.5°	21
60°	17
62.5°	14
65°	11
67.5°	8
70°	5
72.5°	3
75°	1
77.5°	0
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)