

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: P30072

Luminaire Tested: **ML706840-493SCS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P30072
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML706840-493SCS06
Description: HALO RECESSED LED RETROFIT MODULE WITH TRIM THAT INCLUDES
SHOWER RATED,SOLITE LENS, SPECULAR DESIGN REFLECTOR IN TRIM
Light Source: HIGH OUPUT LED PACKAGE
LED 14 WATTS
Ballast/Driver: 120V ELECTRONIC DRIVER

Summary

Lumens per Lamp: 706 (1 lamp)
Luminaire Lumens: 707.8 lumens
Efficiency: 100.3%
Efficacy: 51.3 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 1.01
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

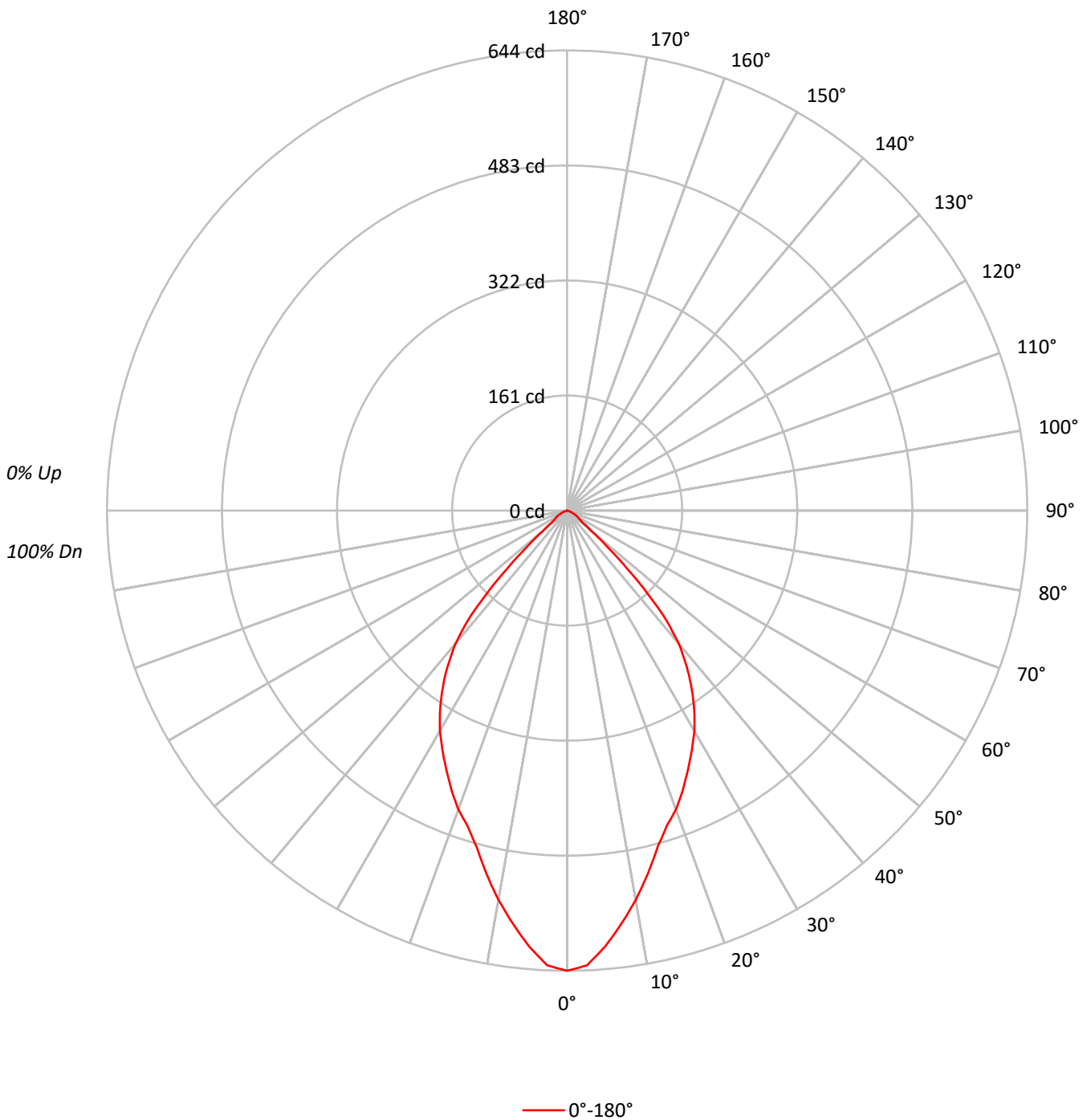
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	107	105	111	108	105	103	104	102	100		100	98	97		96	95	94	92
2	106	101	96	93	104	99	95	92	96	92	89		93	90	88		90	88	86	84
3	100	93	87	83	98	91	86	82	89	84	81		86	82	79		84	81	78	76
4	94	86	79	74	92	84	78	74	82	77	73		80	76	72		78	74	71	70
5	88	79	72	67	87	78	72	67	76	71	66		74	70	66		73	69	65	64
6	83	73	66	61	82	72	66	61	71	65	61		69	64	60		68	63	60	58
7	78	68	61	56	77	67	61	56	66	60	56		65	59	55		63	59	55	54
8	74	63	56	52	73	63	56	52	61	56	51		60	55	51		59	55	51	49
9	70	59	52	48	69	58	52	48	57	52	48		57	51	47		56	51	47	46
10	66	55	49	44	65	55	49	44	54	48	44		53	48	44		52	47	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	70364
5°	67123
10°	61353
15°	55200
20°	51741
25°	48222
30°	44914
35°	40548
40°	34659
45°	21633
50°	7479
55°	4000
60°	3496
65°	2585
70°	1597
75°	422
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	56.5	8.0	8.0
10°-20°	138.1	19.5	19.6
20°-30°	184.1	26.0	26.1
30°-40°	188.6	26.6	26.7
40°-50°	107.2	15.1	15.2
50°-60°	21.3	3.0	3.0
60°-70°	10.0	1.4	1.4
70°-80°	2.0	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°	378.7	53.5	53.6
0°-40°	567.3	80.2	80.4
0°-60°	695.9	98.3	98.6
0°-90°	707.8	100.0	100.3
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°	707.8	100.0	100.3

CANDELA DISTRIBUTION:

	0°	Flux
0°	644	
5°	612	57
15°	488	138
25°	400	184
35°	304	189
45°	140	107
55°	21	21
65°	10	10
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°	644
2.5°	637
5°	612
7.5°	583
10°	553
12.5°	521
15°	488
17.5°	463
20°	445
22.5°	423
25°	400
27.5°	378
30°	356
32.5°	331
35°	304
37.5°	275
40°	243
42.5°	200
45°	140
47.5°	82
50°	44
52.5°	27
55°	21
57.5°	18
60°	16
62.5°	13
65°	10
67.5°	7
70°	5
72.5°	3
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)