

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: P30081

Luminaire Tested: **ML706827-493TBZSO6**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P30081
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML706827-493TBZSO6
Description: HALO RECESSED LED RETROFIT MODULE WITH TRIM THAT INCLUDES
SHOWER RATED,SOLITE LENS,TUSCAN BRONZE DESIGN REFLECTOR
Light Source: HIGH OUPUT LED PACKAGE
LED 14 WATTS
Ballast/Driver: 120V ELECTRONIC DRIVER

Summary

Lumens per Lamp: 472 (1 lamp)
Luminaire Lumens: 473.7 lumens
Efficiency: 100.4%
Efficacy: 34.3 lumens/watt
Spacing Criteria (0/90/45): 0.57 / 0.57 / 0.84
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

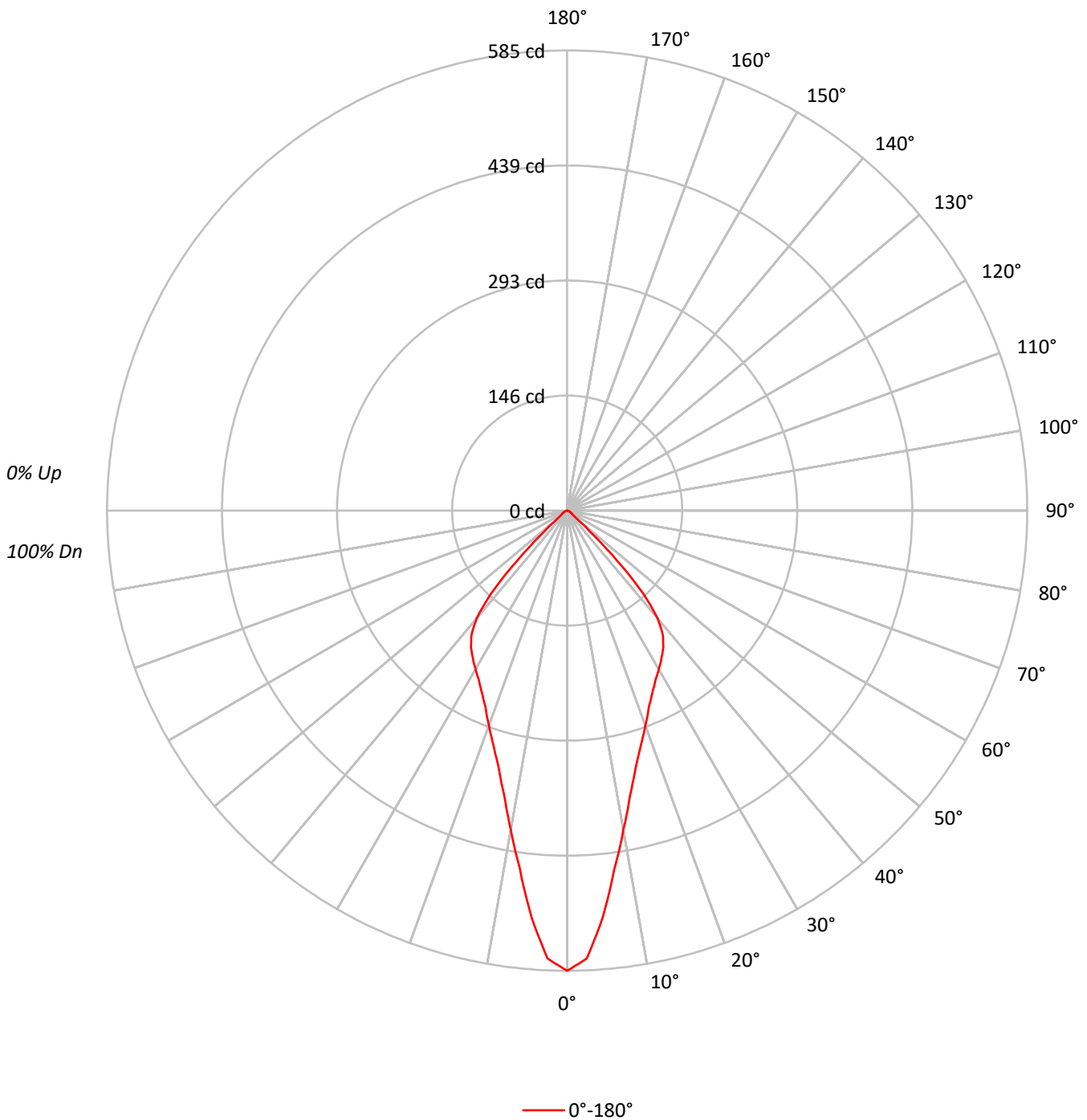
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112		107	107	107		102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	100		100	99	97		97	96	95	93
2	107	102	97	94	105	100	96	93	97	93	90		94	91	89		91	89	87	85
3	101	94	88	84	99	92	87	83	90	85	82		87	84	81		85	82	79	78
4	95	87	81	76	93	86	80	76	83	78	75		81	77	74		79	76	73	71
5	90	80	74	69	88	79	73	69	78	72	68		76	71	68		74	70	67	65
6	84	75	68	63	83	74	68	63	72	67	63		71	66	62		69	65	62	60
7	80	69	63	58	78	69	62	58	67	62	58		66	61	57		65	60	57	55
8	75	65	58	54	74	64	58	54	63	57	53		62	57	53		61	56	53	51
9	71	61	54	50	70	60	54	50	59	54	50		58	53	49		57	53	49	48
10	68	57	51	46	66	56	50	46	56	50	46		55	50	46		54	49	46	44

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	63918
5°	56923
10°	45710
15°	38120
20°	33835
25°	30862
30°	29396
35°	28411
40°	25531
45°	13752
50°	2720
55°	1714
60°	1311
65°	1034
70°	319
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	46.0	9.7	9.7
10°-20°	95.4	20.1	20.2
20°-30°	118.6	25.0	25.1
30°-40°	131.6	27.8	27.9
40°-50°	69.6	14.7	14.7
50°-60°	8.2	1.7	1.7
60°-70°	3.8	0.8	0.8
70°-80°	0.4	0.1	0.1
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°	260.1	54.9	55.1
0°-40°	391.7	82.7	83.0
0°-60°	469.5	99.1	99.5
0°-90°	473.7	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°	473.7	100.0	100.4

CANDELA DISTRIBUTION:

	0°	Flux
0°	585	
5°	519	46
15°	337	95
25°	256	119
35°	213	132
45°	89	70
55°	9	8
65°	4	4
75°	0	0
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°	585
2.5°	570
5°	519
7.5°	460
10°	412
12.5°	370
15°	337
17.5°	312
20°	291
22.5°	271
25°	256
27.5°	243
30°	233
32.5°	223
35°	213
37.5°	200
40°	179
42.5°	144
45°	89
47.5°	39
50°	16
52.5°	10
55°	9
57.5°	7
60°	6
62.5°	5
65°	4
67.5°	3
70°	1
72.5°	1
75°	0
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)