

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: P30069

Luminaire Tested: **ML706840-493TBZSO6**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P30069
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML706840-493TBZSO6
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: 561 (1 lamp)
Luminaire Lumens: 562.7 lumens
Efficiency: 100.3%
Efficacy: 40.8 lumens/watt
Spacing Criteria (0/90/45): 0.54 / 0.54 / 0.81
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

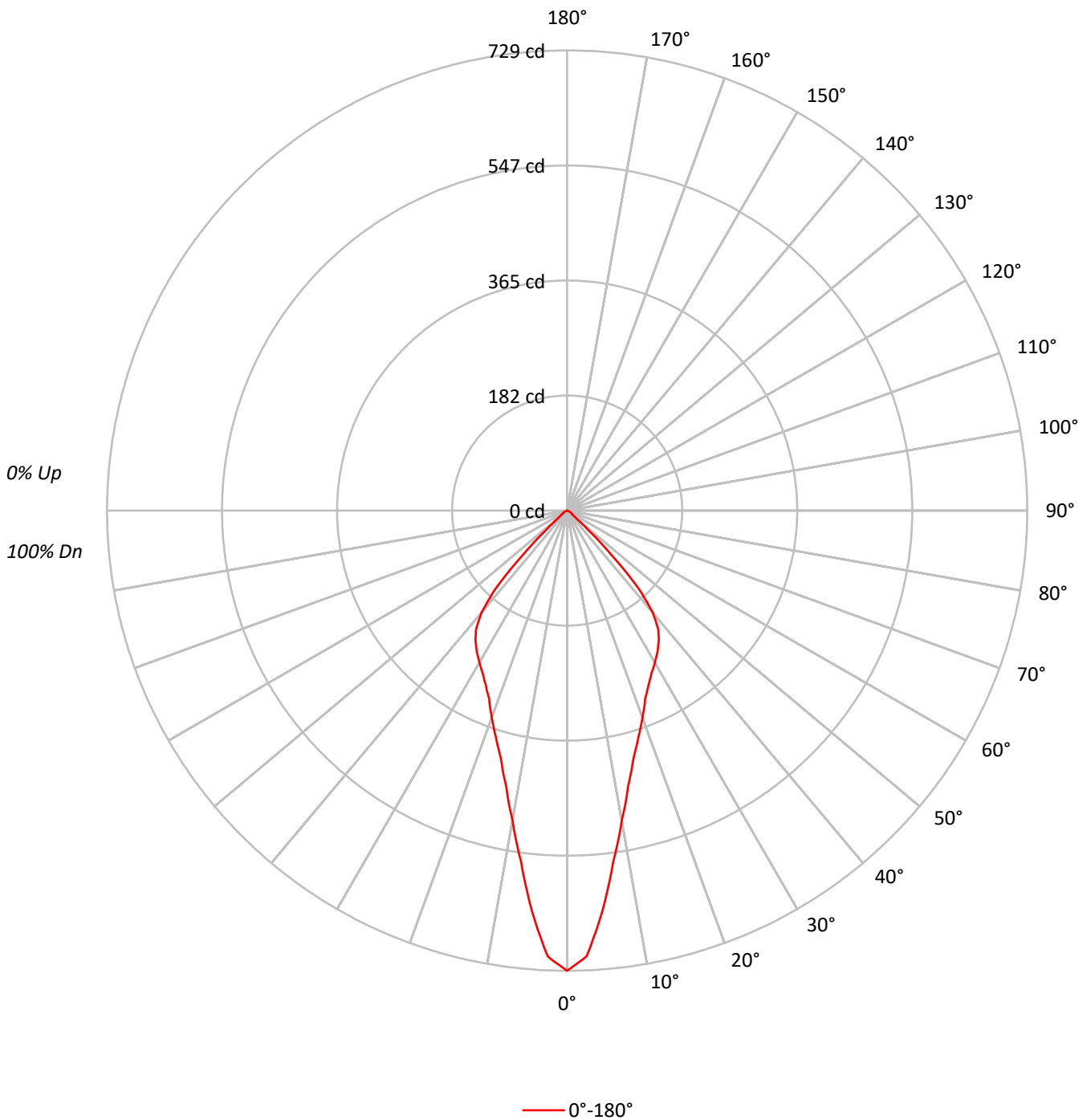
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	94	91		94	91	89		91	89	87	85
3	101	94	89	84	99	93	88	84	90	86	82		87	84	81		85	82	80	78
4	95	87	81	76	93	86	80	76	84	79	75		82	77	74		80	76	73	72
5	90	81	74	69	88	80	74	69	78	73	69		76	71	68		74	70	67	66
6	85	75	68	64	83	74	68	63	73	67	63		71	66	63		70	65	62	61
7	80	70	63	59	79	69	63	58	68	62	58		66	61	58		65	61	57	56
8	76	65	59	54	74	65	58	54	63	58	54		62	57	54		61	57	53	52
9	72	61	55	50	70	61	54	50	60	54	50		59	53	50		58	53	50	48
10	68	57	51	47	67	57	51	47	56	50	47		55	50	46		54	50	46	45

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	79651
5°	69975
10°	55362
15°	45925
20°	40579
25°	36770
30°	35073
35°	33746
40°	30095
45°	15452
50°	3060
55°	1714
60°	1530
65°	1034
70°	319
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	56.3	10.0	10.0
10°-20°	115.0	20.4	20.5
20°-30°	141.6	25.2	25.2
30°-40°	156.4	27.8	27.9
40°-50°	80.1	14.2	14.3
50°-60°	9.0	1.6	1.6
60°-70°	4.2	0.7	0.7
70°-80°	0.1	0.0	0.0
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°	312.9	55.6	55.8
0°-40°	469.3	83.4	83.7
0°-60°	558.4	99.2	99.5
0°-90°	562.7	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°	562.7	100.0	100.3

CANDELA DISTRIBUTION:

	0°	Flux
0°	729	
5°	638	56
15°	406	115
25°	305	142
35°	253	156
45°	100	80
55°	9	9
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°	729
2.5°	707
5°	638
7.5°	561
10°	499
12.5°	447
15°	406
17.5°	376
20°	349
22.5°	323
25°	305
27.5°	290
30°	278
32.5°	266
35°	253
37.5°	237
40°	211
42.5°	168
45°	100
47.5°	43
50°	18
52.5°	11
55°	9
57.5°	8
60°	7
62.5°	6
65°	4
67.5°	3
70°	1
72.5°	0
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)