

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: P123806

Luminaire Tested: **ELG406927TBZ (50° BEAM - 0° TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123806
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14001)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ELG406927TBZ (50° BEAM - 0° TILT)
Description: HALO 4 INCH RECESSED FIXTURE WITH ROUND TUSCAN BRONZE TRIM,
TUSCAN BRONZE GIMBAL, NARROW UPPER REFLECTOR AND CLEAR LENS.
Light Source: (1)SURFACE MOUNT LED, 2700K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 670.0 lumens
Efficiency: N/A
Efficacy: 51.5 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.89 / 0.82
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

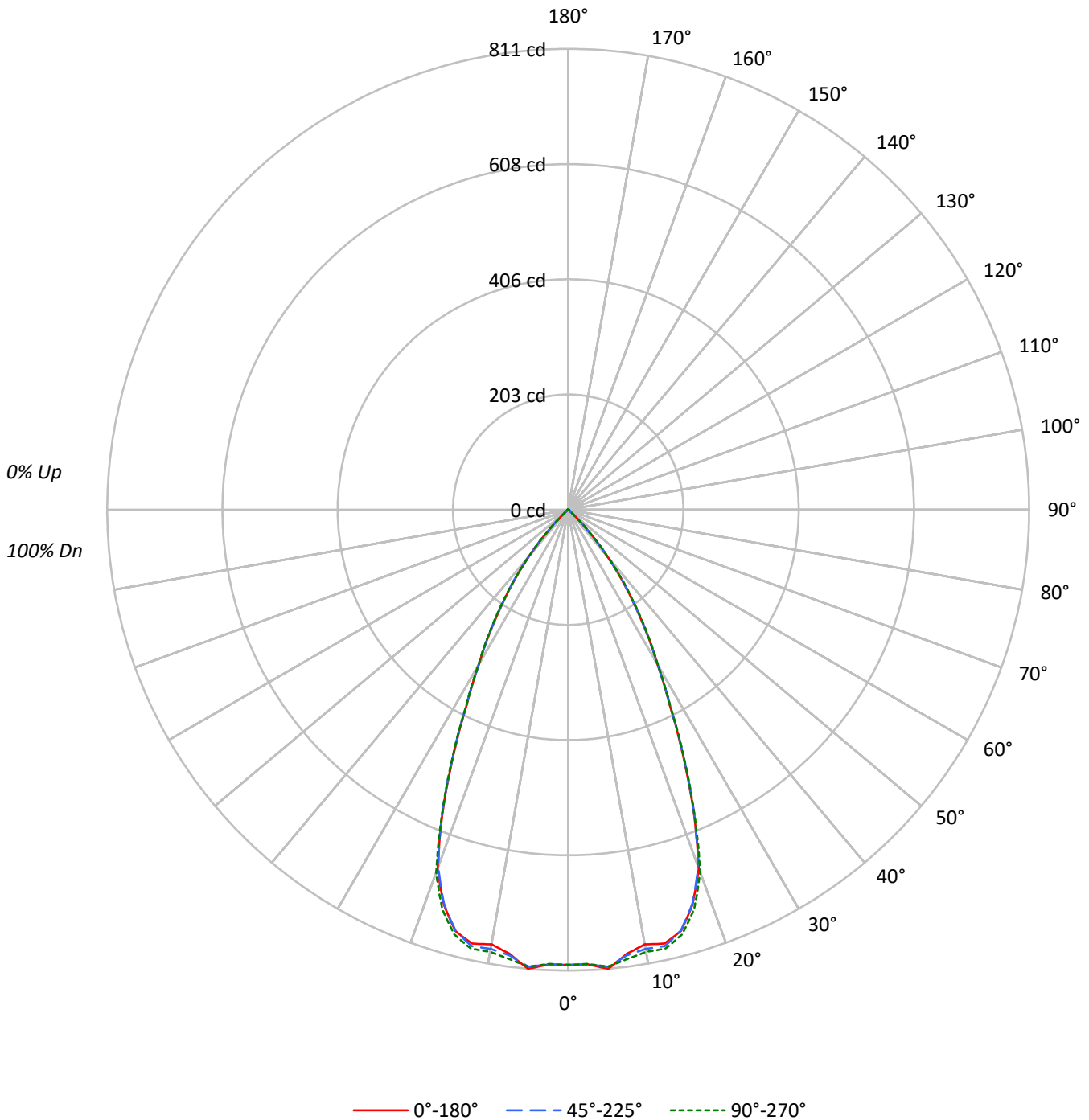
Input Watts (W): 13
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94				94
2	108	104	100	97	106	102	98	95	99	96	93	96	93	91	93	91	90	88				88
3	103	97	92	88	101	96	91	88	93	89	86	91	88	85	88	86	84	82				82
4	98	91	86	82	96	90	85	81	88	84	80	86	82	79	84	81	78	77				77
5	94	86	80	76	92	85	79	75	83	78	75	81	77	74	80	76	74	72				72
6	89	81	75	71	88	80	74	70	78	74	70	77	73	69	76	72	69	68				68
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64				64
8	81	72	66	62	80	71	66	62	70	65	62	69	65	61	68	64	61	60				60
9	77	68	62	58	76	68	62	58	67	62	58	66	61	58	65	61	58	56				56
10	74	64	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	53				53

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	395197	395197	395197
5°	401610	399827	399827
10°	389069	393127	395833
15°	392027	391567	395296
20°	352672	351254	356452
25°	260869	261849	262339
30°	179229	179229	180255
35°	120883	121967	124135
40°	69881	69881	69881
45°	20793	20793	20165
50°	4836	4836	4836
55°	2322	1548	2322
60°	2664	2664	1776
65°	2101	2101	1051
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	5095	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.0	11.3
10°-20°	212.0	31.7
20°-30°	219.4	32.7
30°-40°	127.4	19.0
40°-50°	30.2	4.5
50°-60°	3.1	0.5
60°-70°	1.2	0.2
70°-80°	0.4	0.1
80°-90°	0.2	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	507.4	75.7
0°-40°	634.9	94.8
0°-60°	668.2	99.7
0°-90°	670.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	670.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	811	811	807	807	807	76
15°	768	768	767	774	774	211
25°	479	478	481	479	482	219
35°	201	202	202	205	206	127
45°	30	30	30	30	29	30
55°	3	3	2	3	3	3
65°	2	2	2	2	1	1
75°	0	0	0	0	0	1
85°	0	0	1	1	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	801.0	801.0	801.0	801.0	801.0
2.5°	801.0	801.9	801.0	801.0	800.1
5°	810.9	810.9	807.3	807.3	807.3
7.5°	788.3	789.2	791.0	795.6	797.4
10°	776.6	779.3	784.7	791.0	790.1
12.5°	782.0	782.9	786.5	793.8	791.0
15°	767.5	767.5	766.6	773.9	773.9
17.5°	727.8	727.8	726.9	733.2	736.8
20°	671.7	670.8	669.0	671.7	678.9
22.5°	577.7	579.5	579.5	579.5	580.4
25°	479.2	478.2	481.0	479.2	481.9
27.5°	386.0	385.1	386.9	387.8	387.8
30°	314.6	314.6	314.6	315.5	316.4
32.5°	256.8	255.8	256.8	258.6	259.5
35°	200.7	201.6	202.5	205.2	206.1
37.5°	153.7	153.7	155.5	156.4	156.4
40°	108.5	107.6	108.5	108.5	108.5
42.5°	65.1	65.1	65.1	65.1	66.0
45°	29.8	29.8	29.8	29.8	28.9
47.5°	9.9	9.9	9.9	9.0	9.9
50°	6.3	5.4	6.3	6.3	6.3
52.5°	4.5	4.5	4.5	4.5	4.5
55°	2.7	2.7	1.8	2.7	2.7
57.5°	2.7	3.6	2.7	2.7	2.7
60°	2.7	2.7	2.7	1.8	1.8
62.5°	0.9	0.9	1.8	0.9	0.9
65°	1.8	1.8	1.8	1.8	0.9
67.5°	0.9	0.9	0.9	0.9	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	1.8	0.9	1.8	0.9	0.9
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.9	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.9	0.9	0.0
87.5°	0.9	0.0	0.9	0.0	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)