

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: P21165

Luminaire Tested: **ELG405830TBZ(50deg Beam - 0deg tilt)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P21165
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ELG405830TBZ(50deg Beam - 0deg tilt)
Description: HALO 4 INCH RECESSED FIXTURE WITH ROUND TUSCAN BRONZE TRIM, TUSCAN BRONZE GIMBAL, WIDE UPPER REFLECTOR AND CLEAR LENS .
---ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS
CREATED USING A 500 WATT, NIST TRACEABLE, OMNI-DIRECTIONAL LAB LUMEN STANDARD IN THE GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET----
Light Source: (1) SMT LED 3000K
(1) 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 609 (1 lamp)
Luminaire Lumens: 609.8 lumens
Efficiency: 100.1%
Efficacy: 44.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.77
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

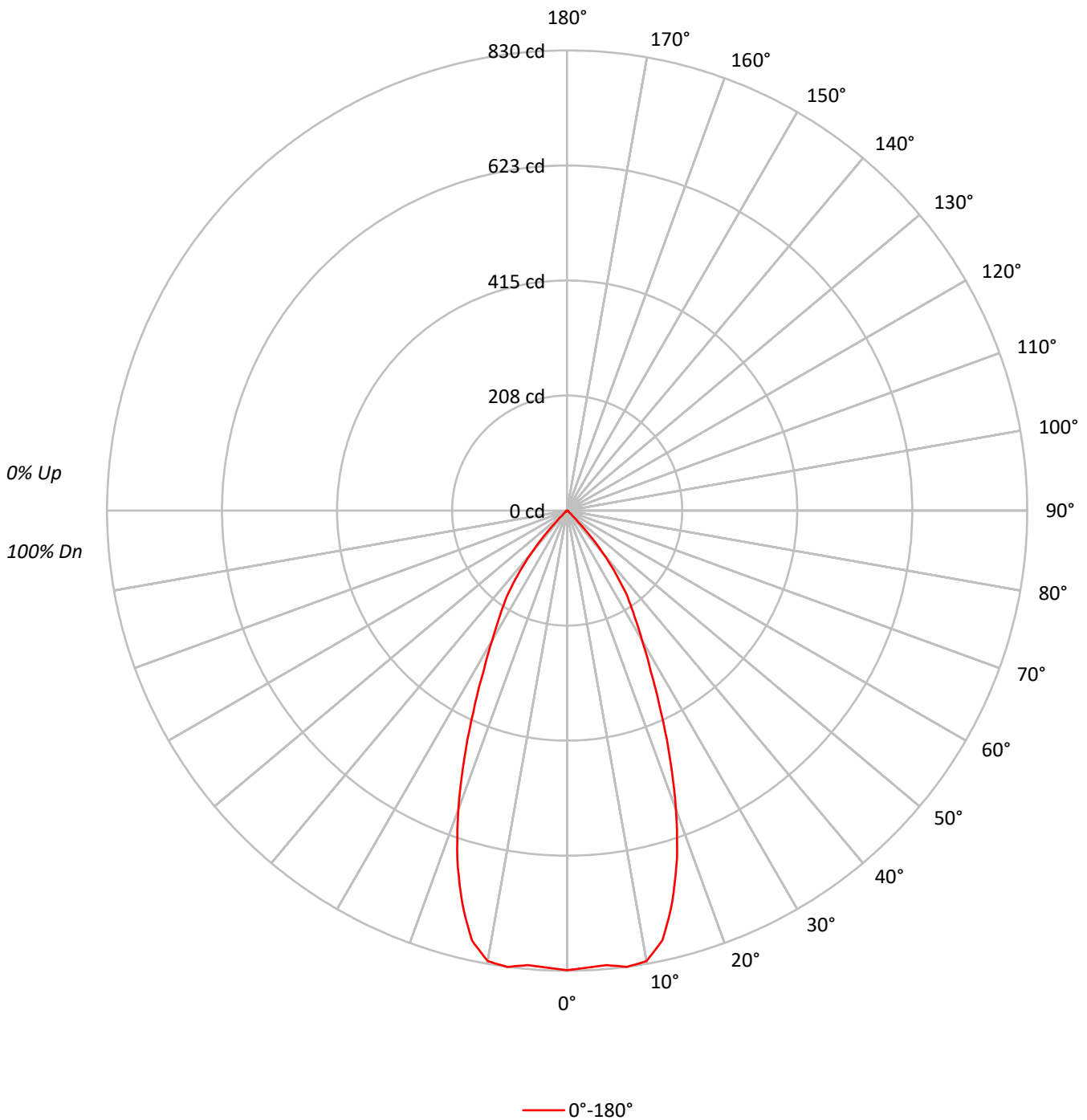
Input Watts (W): 13.7
Input Voltage (V): NR
Input Current (Ain): 0.11963
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P21165

CATALOG NUMBER: ELG405830TBZ(50deg Beam - 0deg tilt)

Luminous Intensity Polar Plot





TEST NUMBER: P21165

CATALOG NUMBER: ELG405830TBZ(50deg Beam - 0deg tilt)

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	116	116	116	116	111	111	111		107	107	107		102	102	102	100
1	114	111	109	107	112	109	107	105	105	103	102		101	100	99		98	97	96	94
2	109	104	100	97	107	102	99	96	99	96	94		96	94	92		93	92	90	88
3	104	98	93	89	102	96	92	88	94	90	87		91	88	86		89	86	84	83
4	99	92	86	82	97	91	86	82	88	84	81		86	83	80		85	82	79	78
5	94	86	81	77	93	85	80	76	84	79	76		82	78	75		80	77	74	73
6	90	81	76	72	88	81	75	71	79	74	71		78	74	70		76	73	70	69
7	86	77	71	67	84	76	71	67	75	70	67		74	70	66		73	69	66	65
8	82	73	67	63	81	72	67	63	71	66	63		70	66	63		69	65	62	61
9	78	69	64	60	77	69	63	60	68	63	59		67	62	59		66	62	59	58
10	75	66	60	57	74	65	60	56	64	60	56		64	59	56		63	59	56	55

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	102254
5°	101901
10°	103330
15°	93474
20°	75344
25°	54439
30°	38455
35°	28610
40°	16424
45°	3663
50°	768
55°	430
60°	493
65°	292
70°	361
75°	477
80°	0
85°	0



TEST NUMBER: P21165

CATALOG NUMBER: ELG405830TBZ(50deg Beam - 0deg tilt)

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	78.9	12.9	13.0
10°-20°	200.7	32.9	33.0
20°-30°	184.9	30.3	30.4
30°-40°	115.5	18.9	19.0
40°-50°	25.9	4.2	4.2
50°-60°	2.2	0.4	0.4
60°-70°	1.1	0.2	0.2
70°-80°	0.7	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°	464.5	76.2	76.3
0°-40°	579.9	95.1	95.2
0°-60°	608.0	99.7	99.8
0°-90°	609.8	100.0	100.1
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°	609.8	100.0	100.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	829	
5°	823	79
15°	732	201
25°	400	185
35°	190	115
45°	21	26
55°	2	2
65°	1	1
75°	1	1
85°	0	0
90°	0	



TEST NUMBER: P21165

CATALOG NUMBER: ELG405830TBZ(50deg Beam - 0deg tilt)

CANDELA DISTRIBUTION (FULL):

	0°
0°	829
2.5°	825
5°	823
7.5°	830
10°	825
12.5°	794
15°	732
17.5°	659
20°	574
22.5°	485
25°	400
27.5°	327
30°	270
32.5°	226
35°	190
37.5°	146
40°	102
42.5°	58
45°	21
47.5°	7
50°	4
52.5°	3
55°	2
57.5°	2
60°	2
62.5°	1
65°	1
67.5°	1
70°	1
72.5°	1
75°	1
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)