

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: P85063

Luminaire Tested: **ELG405827TBZ(50deg Beam-0 deg tilt)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P85063
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ELG405827TBZ(50deg Beam-0 deg 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 2700K
(1) 221 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 572 (1 lamp)
Luminaire Lumens: 572.2 lumens
Efficiency: 100.0%
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.77
Luminous Opening: Vertical Cylinder (Dia: 0.33' x H: 0.1')
CIE Type: Direct

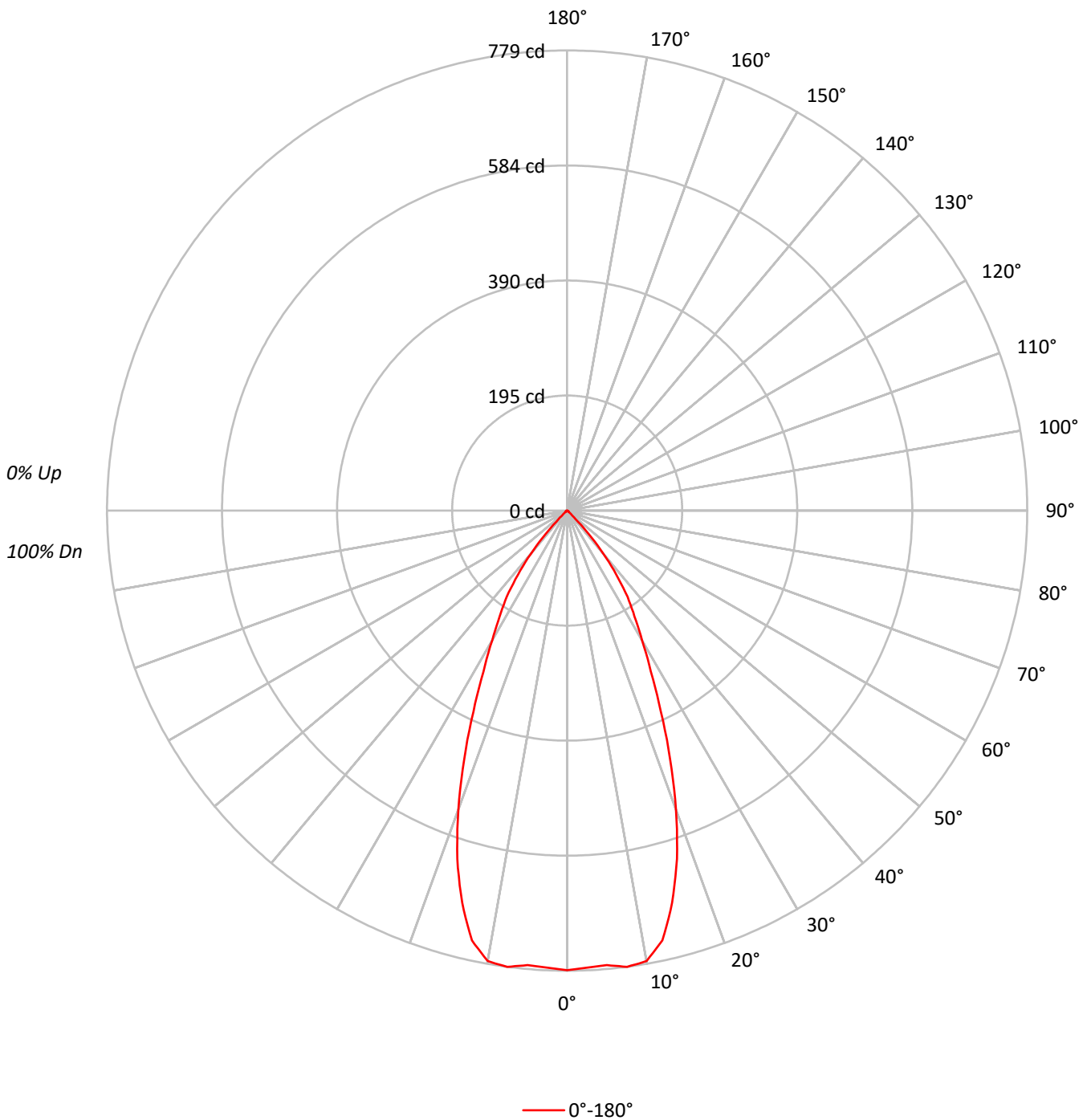
Input Watts (W): 13.7
Input Voltage (V): NR
Input Current (Ain): 0.11963
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88
3	104	97	93	89	102	96	92	88	94	90	87	91	88	86	89	86	84	83
4	99	92	86	82	97	90	86	82	88	84	81	86	83	80	85	82	79	78
5	94	86	81	77	92	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	63	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58
10	75	66	60	56	74	65	60	56	64	60	56	64	59	56	63	59	56	55

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	95975
5°	92543
10°	90860
15°	79582
20°	62080
25°	43366
30°	29570
35°	21182
40°	11669
45°	2487
50°	501
55°	264
60°	282
65°	144
70°	158
75°	177
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	74.0	12.9	12.9
10°-20°	188.3	32.9	32.9
20°-30°	173.5	30.3	30.3
30°-40°	108.3	18.9	18.9
40°-50°	24.3	4.2	4.2
50°-60°	2.1	0.4	0.4
60°-70°	1.0	0.2	0.2
70°-80°	0.6	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°	435.9	76.2	76.2
0°-40°	544.3	95.1	95.2
0°-60°	570.6	99.7	99.8
0°-90°	572.2	100.0	100.0
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°	572.2	100.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	778	
5°	772	74
15°	687	188
25°	375	174
35°	178	108
45°	20	24
55°	2	2
65°	1	1
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	778.1
2.5°	774.3
5°	772.4
7.5°	779.0
10°	774.3
12.5°	745.2
15°	687.0
17.5°	618.5
20°	538.7
22.5°	455.2
25°	375.4
27.5°	306.9
30°	253.4
32.5°	212.1
35°	178.3
37.5°	137.0
40°	95.7
42.5°	54.4
45°	19.7
47.5°	6.6
50°	3.8
52.5°	2.8
55°	1.9
57.5°	1.9
60°	1.9
62.5°	0.9
65°	0.9
67.5°	0.9
70°	0.9
72.5°	0.9
75°	0.9
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)