

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: P85058

Luminaire Tested: **ELG405835TBZ(25 deg Beam-0deg tilt)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P85058
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21162)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ELG405835TBZ(25 deg Beam-0deg tilt)
Description: HALO 4 INCH RECESSED FIXTURE WITH ROUND TUSCAN BRONZE TRIM,
TUSCAN BRONZE GIMBAL, NARROW 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 3500K
(1) 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 672 (1 lamp)
Luminaire Lumens: 671.9 lumens
Efficiency: 100.0%
Efficacy: 49.0 lumens/watt
Spacing Criteria (0/90/45): 0.37 / 0.37 / 0.41
Luminous Opening: Vertical Cylinder (Dia: 0.33' x H: 0.1')
CIE Type: Direct

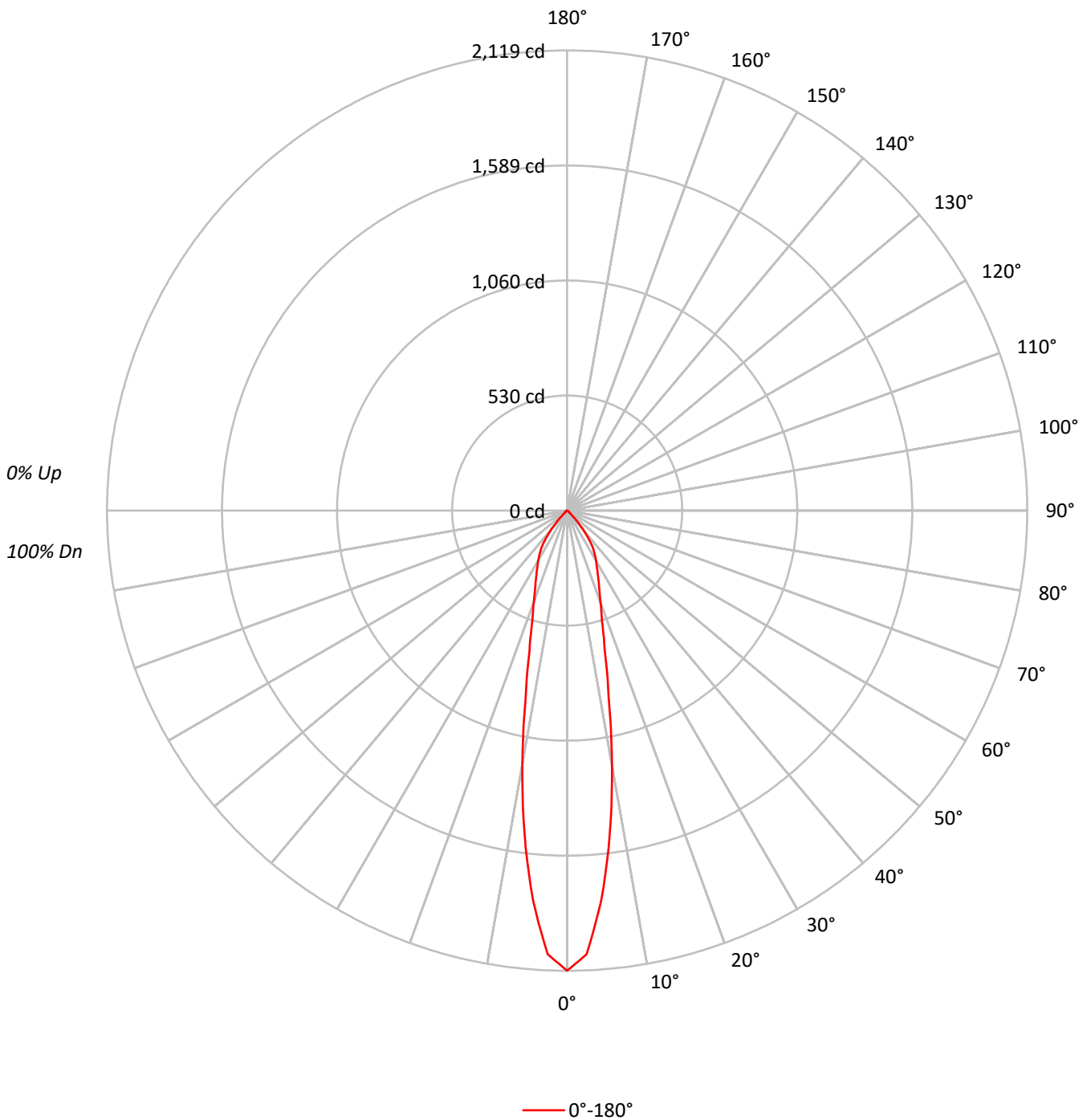
Input Watts (W): 13.7
Input Voltage (V): NR
Input Current (Ain): 0.11966
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	107	105	105	104	102	102	100	99	98	97	96	94
2	109	104	101	98	107	103	99	97	100	97	94	97	94	92	94	92	90	89
3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84
4	100	93	88	84	98	92	87	83	89	85	82	88	84	81	86	83	80	79
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75
6	91	83	78	74	90	82	77	74	81	76	73	80	76	73	78	75	72	71
7	87	79	74	70	86	78	73	70	77	73	69	76	72	69	75	71	69	67
8	84	75	70	66	83	75	70	66	74	69	66	73	69	66	72	68	65	64
9	81	72	67	63	80	71	66	63	71	66	63	70	66	63	69	65	62	61
10	78	69	64	60	77	68	64	60	68	63	60	67	63	60	66	62	60	59

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	261320
5°	215939
10°	139394
15°	77532
20°	51628
25°	38965
30°	30994
35°	24164
40°	14010
45°	4128
50°	1807
55°	1169
60°	475
65°	337
70°	194
75°	216
80°	247
85°	290



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	152.4	22.7	22.7
10°-20°	195.2	29.0	29.0
20°-30°	156.7	23.3	23.3
30°-40°	122.1	18.2	18.2
40°-50°	34.6	5.2	5.2
50°-60°	7.0	1.0	1.0
60°-70°	2.1	0.3	0.3
70°-80°	1.2	0.2	0.2
80°-90°	0.7	0.1	0.1
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°	504.3	75.0	75.0
0°-40°	626.3	93.2	93.2
0°-60°	667.9	99.4	99.4
0°-90°	671.9	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°	671.9	100.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2119	
5°	1802	152
15°	669	195
25°	337	157
35°	203	122
45°	33	35
55°	8	7
65°	2	2
75°	1	1
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2118.6
2.5°	2044.8
5°	1802.3
7.5°	1504.1
10°	1187.9
12.5°	882.2
15°	669.3
17.5°	532.3
20°	448.0
22.5°	383.7
25°	337.3
27.5°	297.2
30°	265.6
32.5°	235.0
35°	203.4
37.5°	160.2
40°	114.9
42.5°	70.6
45°	32.7
47.5°	16.9
50°	13.7
52.5°	10.5
55°	8.4
57.5°	4.2
60°	3.2
62.5°	2.1
65°	2.1
67.5°	2.1
70°	1.1
72.5°	1.1
75°	1.1
77.5°	1.1
80°	1.1
82.5°	1.1
85°	1.1
87.5°	0.0
90°	0.0

(END OF REPORT)