

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: P85062

Luminaire Tested: **ELG405840TBZ(35deg Beam-0deg tilt)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P85062
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21163)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ELG405840TBZ(35deg Beam-0deg tilt)
Description: HALO 4 INCH RECESSED FIXTURE WITH ROUND TUSCAN BRONZE TRIM,
TUSCAN BRONZE GIMBAL, MEDIUM 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 4000K
(1) 221 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 671 (1 lamp)
Luminaire Lumens: 671.3 lumens
Efficiency: 100.0%
Efficacy: 49.4 lumens/watt
Spacing Criteria (0/90/45): 0.54 / 0.54 / 0.55
Luminous Opening: Vertical Cylinder (Dia: 0.33' x H: 0.1')
CIE Type: Direct

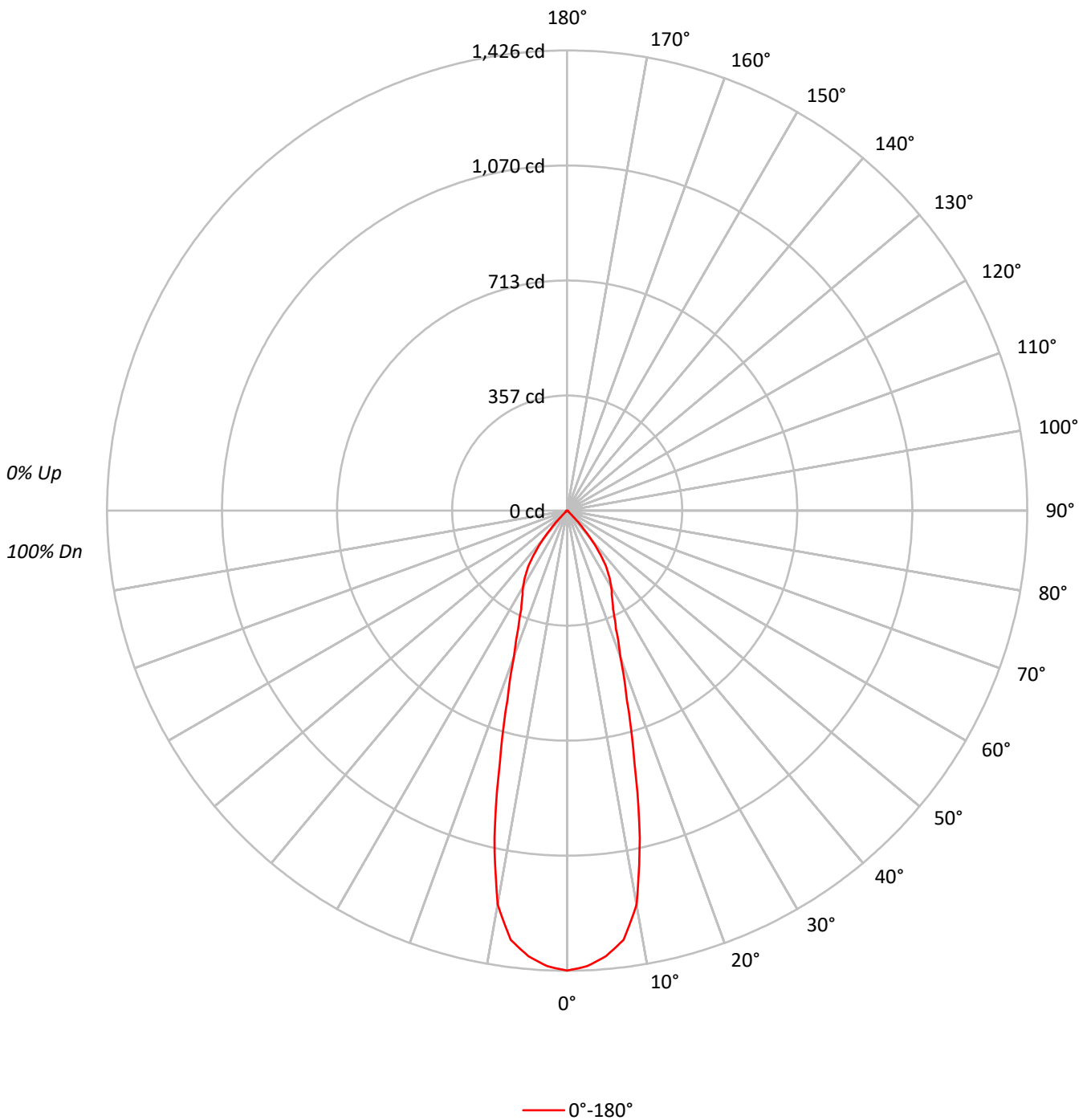
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (Ain): 0.11948
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	107	112	109	107	105	105	104	102		102	100	99		98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95		97	95	93		94	92	91	89
3	104	98	94	90	102	97	93	90	94	91	88		92	89	87		90	88	86	84
4	100	93	88	84	98	92	87	84	90	86	83		88	84	82		86	83	81	79
5	95	88	83	79	94	87	82	78	85	81	78		84	80	77		82	79	76	75
6	91	83	78	74	90	82	77	74	81	77	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	65		72	68	65	64
9	80	72	66	63	79	71	66	63	70	66	63		70	65	62		69	65	62	61
10	77	69	63	60	76	68	63	60	67	63	60		67	62	60		66	62	59	58

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	175829
5°	166037
10°	145379
15°	93252
20°	55730
25°	38907
30°	31950
35°	24794
40°	13998
45°	3206
50°	580
55°	459
60°	163
65°	176
70°	194
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	128.1	19.1	19.1
10°-20°	224.0	33.4	33.4
20°-30°	160.5	23.9	23.9
30°-40°	125.0	18.6	18.6
40°-50°	29.6	4.4	4.4
50°-60°	2.6	0.4	0.4
60°-70°	1.1	0.2	0.2
70°-80°	0.4	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°	512.7	76.4	76.4
0°-40°	637.6	95.0	95.0
0°-60°	669.8	99.8	99.8
0°-90°	671.3	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°	671.3	100.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1426	
5°	1386	128
15°	805	224
25°	337	161
35°	209	125
45°	25	30
55°	3	3
65°	1	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1425.5
2.5°	1413.4
5°	1385.8
7.5°	1341.6
10°	1238.9
12.5°	1040.2
15°	805.0
17.5°	616.1
20°	483.6
22.5°	395.3
25°	336.8
27.5°	300.3
30°	273.8
32.5°	241.8
35°	208.7
37.5°	163.4
40°	114.8
42.5°	66.3
45°	25.4
47.5°	7.7
50°	4.4
52.5°	3.3
55°	3.3
57.5°	2.2
60°	1.1
62.5°	1.1
65°	1.1
67.5°	1.1
70°	1.1
72.5°	1.1
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)