

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: P85076

Luminaire Tested: **ELSG405827TBZ (25deg Beam-0 deg tilt)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P85076
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21176)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ELSG405827TBZ (25deg Beam-0 deg tilt)
Description: HALO 4 INCH RECESSED FIXTURE WITH SQUARE 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 2700K
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Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 568 (1 lamp)
Luminaire Lumens: 567.6 lumens
Efficiency: 99.9%
Efficacy: 41.7 lumens/watt
Spacing Criteria (0/90/45): 0.38 / 0.38 / 0.42
Luminous Opening: Vertical Cylinder (Dia: 0.33' x H: 0.1')
CIE Type: Direct

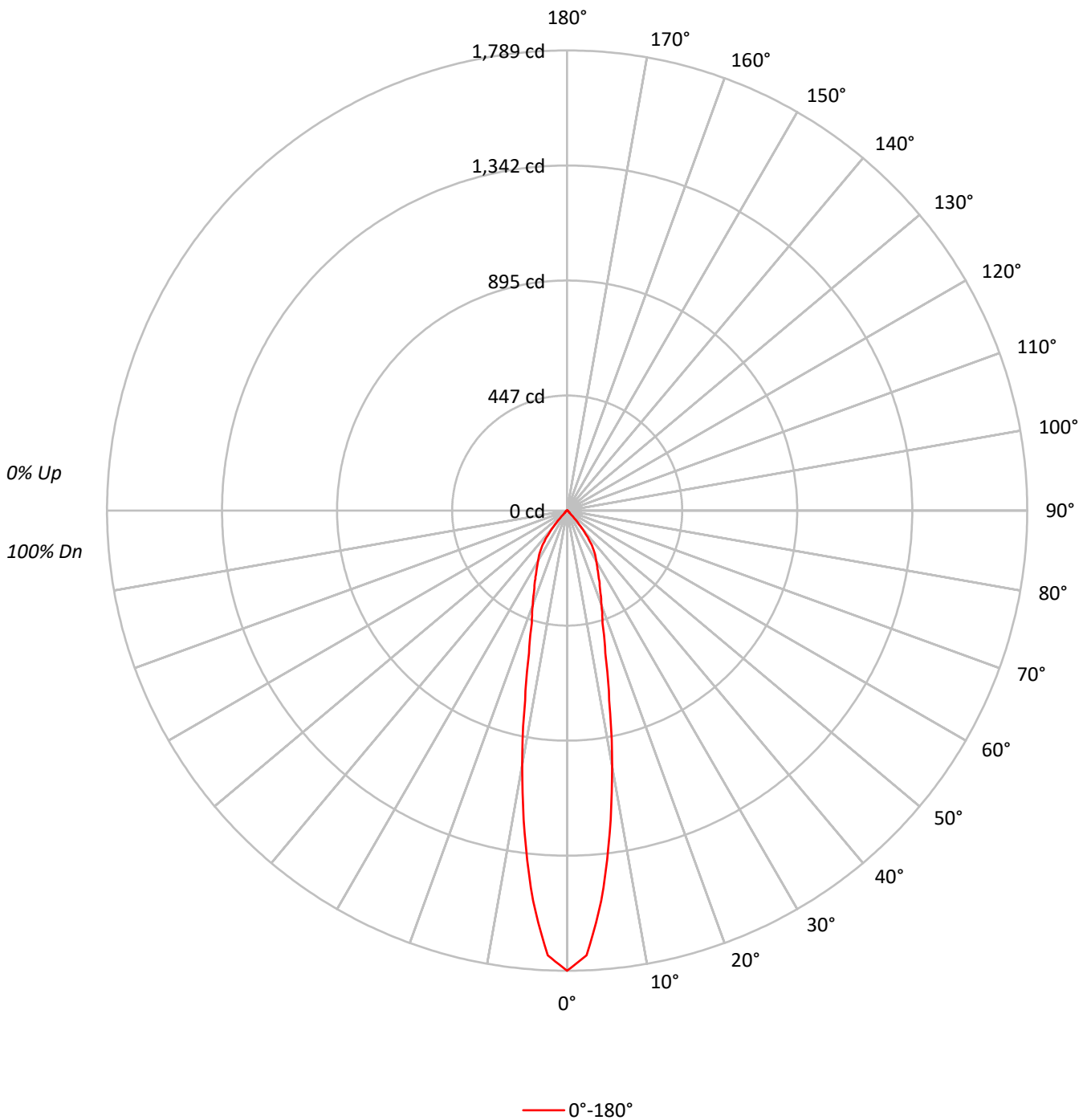
Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (Ain): 0.1191
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	102		101	100	99		98	97	96	94
2	109	104	101	98	107	103	99	97	100	97	94		97	94	92		94	92	91	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	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	83	78	74	81	77	73		80	76	73		79	75	72	71
7	88	79	74	70	86	79	74	70	77	73	70		76	72	69		75	72	69	68
8	84	76	70	67	83	75	70	67	74	69	66		73	69	66		72	68	66	64
9	81	72	67	63	80	72	67	63	71	66	63		70	66	63		69	66	63	62
10	78	69	64	61	77	69	64	61	68	64	60		67	63	60		67	63	60	59

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	220653
5°	182511
10°	118178
15°	66435
20°	44990
25°	33824
30°	26501
35°	20410
40°	10645
45°	2487
50°	1490
55°	918
60°	282
65°	305
70°	334
75°	177
80°	202
85°	237



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	128.7	22.7	22.7
10°-20°	167.4	29.5	29.5
20°-30°	135.7	23.9	23.9
30°-40°	102.2	18.0	18.0
40°-50°	24.4	4.3	4.3
50°-60°	5.8	1.0	1.0
60°-70°	1.6	0.3	0.3
70°-80°	1.1	0.2	0.2
80°-90°	0.6	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°	431.9	76.1	76.0
0°-40°	534.0	94.1	94.0
0°-60°	564.2	99.4	99.3
0°-90°	567.6	100.0	99.9
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°	567.6	100.0	99.9

CANDELA DISTRIBUTION:

	0°	Flux
0°	1789	
5°	1523	129
15°	574	167
25°	293	136
35°	172	102
45°	20	24
55°	7	6
65°	2	2
75°	1	1
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1788.9
2.5°	1730.7
5°	1523.3
7.5°	1265.2
10°	1007.1
12.5°	756.5
15°	573.5
17.5°	458.0
20°	390.4
22.5°	335.1
25°	292.8
27.5°	255.3
30°	227.1
32.5°	200.9
35°	171.8
37.5°	131.4
40°	87.3
42.5°	47.9
45°	19.7
47.5°	13.1
50°	11.3
52.5°	9.4
55°	6.6
57.5°	3.8
60°	1.9
62.5°	1.9
65°	1.9
67.5°	0.9
70°	1.9
72.5°	0.9
75°	0.9
77.5°	0.9
80°	0.9
82.5°	0.9
85°	0.9
87.5°	0.0
90°	0.0

(END OF REPORT)