

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: P85060

Luminaire Tested: **ELG405827TBZ(35deg Beam-0deg tilt)**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P85060  
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: ELG405827TBZ(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 2700K  
(1) 221 14 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 571 (1 lamp)  
Luminaire Lumens: 570.6 lumens  
Efficiency: 99.9%  
Efficacy: 42.0 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

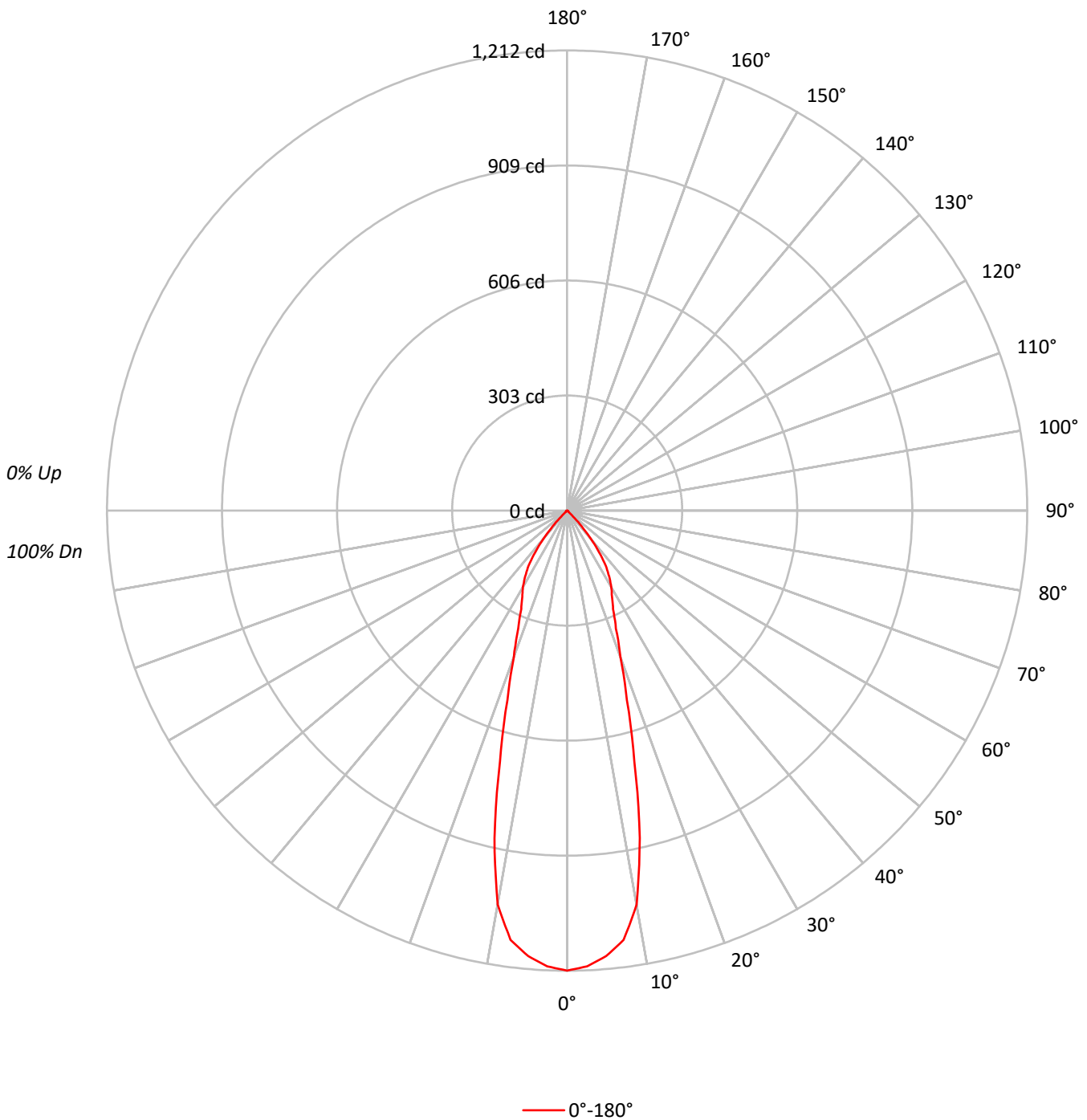
Input Watts (W): 13.6  
Input Voltage (V): NR  
Input Current (Ain): 0.11948  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	109	107	112	109	107	105	105	104	102		102	100	99		98	97	96	95
2	109	105	101	98	107	103	99	97	100	97	95		97	94	93		94	92	91	89
3	104	98	94	90	102	97	93	90	94	91	88		92	89	87		90	87	85	84
4	100	93	88	84	98	92	87	83	90	86	82		88	84	82		86	83	81	79
5	95	88	82	79	94	87	82	78	85	81	78		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	69	66	74	69	66		73	68	65		72	68	65	64
9	80	72	66	63	79	71	66	63	70	66	62		69	65	62		69	65	62	61
10	77	68	63	60	76	68	63	60	67	63	60		67	62	59		66	62	59	58

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	149458
5°	141128
10°	123576
15°	79258
20°	47375
25°	33074
30°	27166
35°	21076
40°	11901
45°	2726
50°	501
55°	390
60°	134
65°	144
70°	158
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	108.9	19.1	19.1
10°-20°	190.4	33.4	33.3
20°-30°	136.5	23.9	23.9
30°-40°	106.2	18.6	18.6
40°-50°	25.2	4.4	4.4
50°-60°	2.2	0.4	0.4
60°-70°	0.9	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°	435.8	76.4	76.3
0°-40°	542.0	95.0	94.9
0°-60°	569.4	99.8	99.7
0°-90°	570.6	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°	570.6	100.0	99.9

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1212	
5°	1178	109
15°	684	190
25°	286	136
35°	177	106
45°	22	25
55°	3	2
65°	1	1
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1211.7
2.5°	1201.4
5°	1177.9
7.5°	1140.4
10°	1053.1
12.5°	884.1
15°	684.2
17.5°	523.7
20°	411.1
22.5°	336.0
25°	286.3
27.5°	255.3
30°	232.8
32.5°	205.5
35°	177.4
37.5°	138.9
40°	97.6
42.5°	56.3
45°	21.6
47.5°	6.6
50°	3.8
52.5°	2.8
55°	2.8
57.5°	1.9
60°	0.9
62.5°	0.9
65°	0.9
67.5°	0.9
70°	0.9
72.5°	0.9
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)