

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: P123712

Luminaire Tested: **EL406940-TL402TBZS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123712
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13986)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406940-TL402TBZS
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
TUSCAN BRONZE REFLECTOR, SOLITE® LENS AND TUSCAN BRONZE TRIM RING
Light Source: (1)SURFACE MOUNT LED, 4000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 770.0 lumens
Efficiency: N/A
Efficacy: 59.2 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.81
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

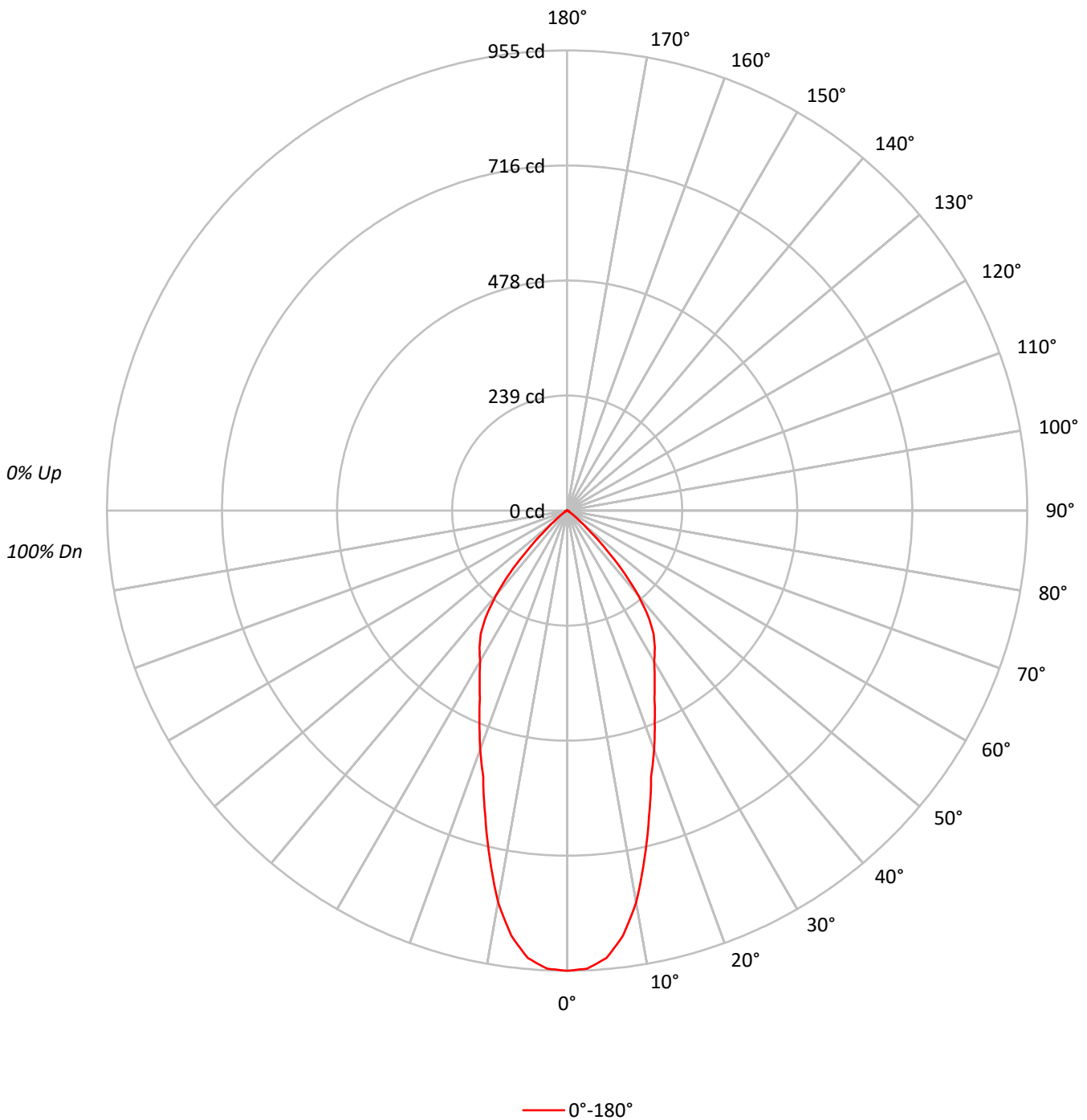
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	108	105	111	108	106	104	104	102	101		100	99	98		97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91		94	92	89		91	89	87	86
3	101	95	89	85	99	93	88	85	91	87	83		88	85	82		86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76		83	79	75		81	77	74	73
5	91	82	76	71	89	81	75	71	79	74	70		77	73	70		76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65		73	68	64		71	67	64	62
7	81	71	65	61	80	71	65	60	69	64	60		68	63	60		67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56		64	59	56		63	59	56	54
9	73	63	57	53	72	62	57	53	62	56	52		61	56	52		60	55	52	51
10	70	59	53	49	68	59	53	49	58	53	49		57	52	49		57	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	153854
5°	150787
10°	135043
15°	109546
20°	90419
25°	76223
30°	67174
35°	61440
40°	48202
45°	26793
50°	9223
55°	3679
60°	1547
65°	1830
70°	1696
75°	747
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	11.1
10°-20°	183.6	23.8
20°-30°	199.2	25.9
30°-40°	190.5	24.7
40°-50°	93.5	12.1
50°-60°	14.0	1.8
60°-70°	2.8	0.4
70°-80°	0.8	0.1
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	468.4	60.8
0°-40°	658.9	85.6
0°-60°	766.4	99.5
0°-90°	770.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	770.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	955	
5°	932	86
15°	657	184
25°	429	199
35°	312	190
45°	118	94
55°	13	14
65°	5	3
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	955.0
2.5°	951.4
5°	932.4
7.5°	889.6
10°	825.5
12.5°	741.2
15°	656.8
17.5°	579.6
20°	527.4
22.5°	475.1
25°	428.8
27.5°	393.1
30°	361.1
32.5°	338.5
35°	312.4
37.5°	276.7
40°	229.2
42.5°	175.8
45°	117.6
47.5°	67.7
50°	36.8
52.5°	21.4
55°	13.1
57.5°	8.3
60°	4.8
62.5°	0.0
65°	4.8
67.5°	2.4
70°	3.6
72.5°	0.0
75°	1.2
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)