

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: P123711

Luminaire Tested: **EL406935-TL402TBZS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P123711  
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: EL406935-TL402TBZS  
Description: HALO 4-INCH RECESSED LED DOWNLIGHT  
TUSCAN BRONZE REFLECTOR, SOLITE® LENS AND TUSCAN BRONZE TRIM RING  
Light Source: (1)SURFACE MOUNT LED, 3500K CCT, 90CRI  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 700.0 lumens  
Efficiency: N/A  
Efficacy: 53.8 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

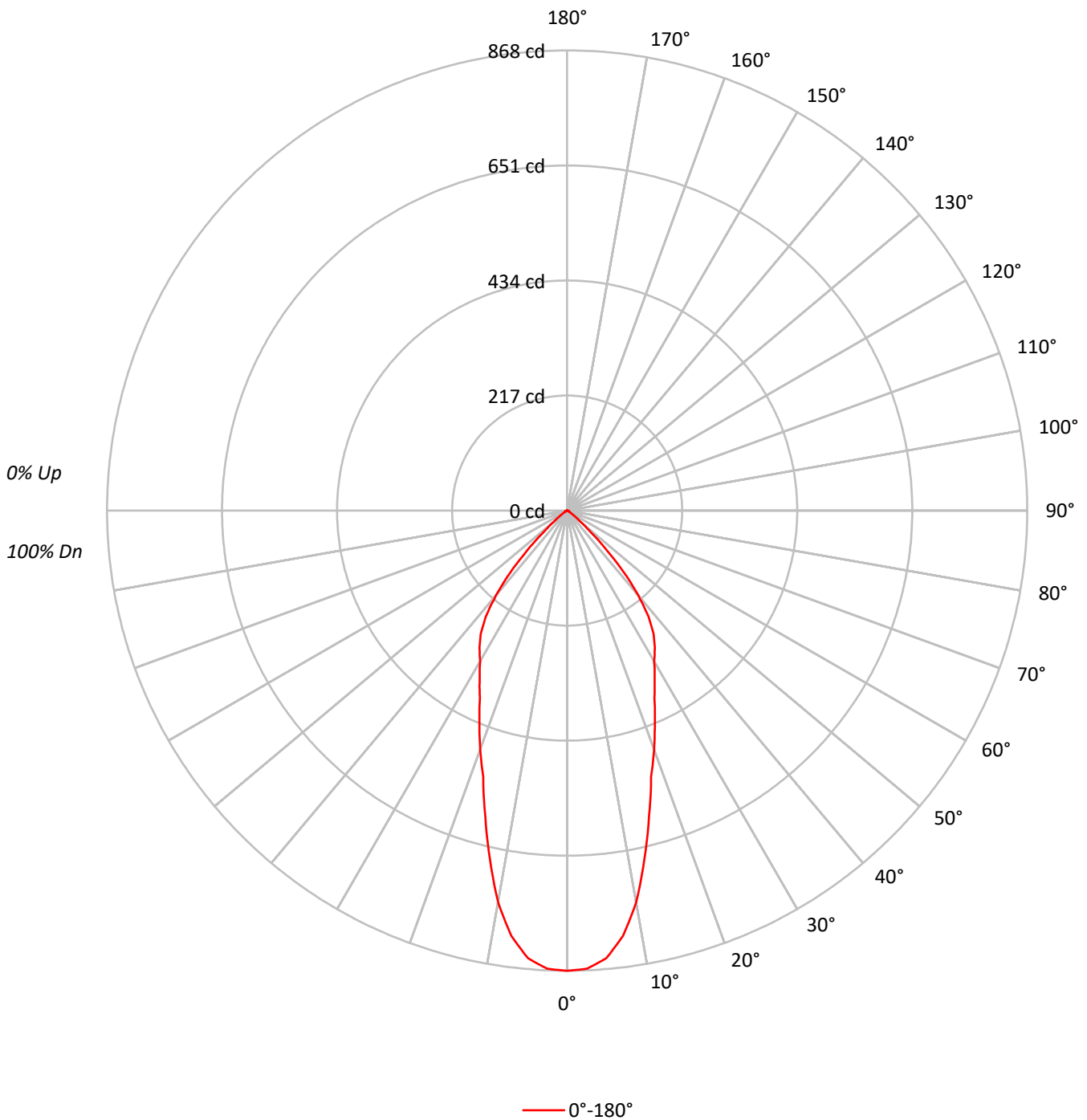
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P123711

CATALOG NUMBER: EL406935-TL402TBZS

### Luminous Intensity Polar Plot





TEST NUMBER: P123711

CATALOG NUMBER: EL406935-TL402TBZS

**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°	139854
5°	137073
10°	122757
15°	99588
20°	82190
25°	69290
30°	61073
35°	55855
40°	43828
45°	24356
50°	8396
55°	3342
60°	1385
65°	1639
70°	1507
75°	685
80°	0
85°	0



TEST NUMBER: P123711

CATALOG NUMBER: EL406935-TL402TBZS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.8	11.1
10°-20°	166.9	23.8
20°-30°	181.1	25.9
30°-40°	173.2	24.7
40°-50°	85.0	12.1
50°-60°	12.7	1.8
60°-70°	2.6	0.4
70°-80°	0.7	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°	425.8	60.8
0°-40°	599.0	85.6
0°-60°	696.7	99.5
0°-90°	700.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	700.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	868	
5°	848	78
15°	597	167
25°	390	181
35°	284	173
45°	107	85
55°	12	13
65°	4	3
75°	1	1
85°	0	0
90°	0	



TEST NUMBER: P123711

CATALOG NUMBER: EL406935-TL402TBZS

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	868.1
2.5°	864.9
5°	847.6
7.5°	808.8
10°	750.4
12.5°	673.8
15°	597.1
17.5°	526.9
20°	479.4
22.5°	431.9
25°	389.8
27.5°	357.4
30°	328.3
32.5°	307.7
35°	284.0
37.5°	251.6
40°	208.4
42.5°	159.8
45°	106.9
47.5°	61.5
50°	33.5
52.5°	19.4
55°	11.9
57.5°	7.6
60°	4.3
62.5°	0.0
65°	4.3
67.5°	2.2
70°	3.2
72.5°	0.0
75°	1.1
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)