

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: P123705

Luminaire Tested: **EL406927-TL402SNS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P123705  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13985)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: EL406927-TL402SNS  
Description: HALO 4-INCH RECESSED LED DOWNLIGHT  
SATIN NICKEL REFLECTOR, SOLITE® LENS AND SATIN NICKEL TRIM RING  
Light Source: (1)SURFACE MOUNT LED, 2700K CCT, 90CRI  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 660.0 lumens  
Efficiency: N/A  
Efficacy: 50.8 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.78  
Luminous Opening: Circular (Dia: 0.29' x H: 0')  
CIE Type: Direct

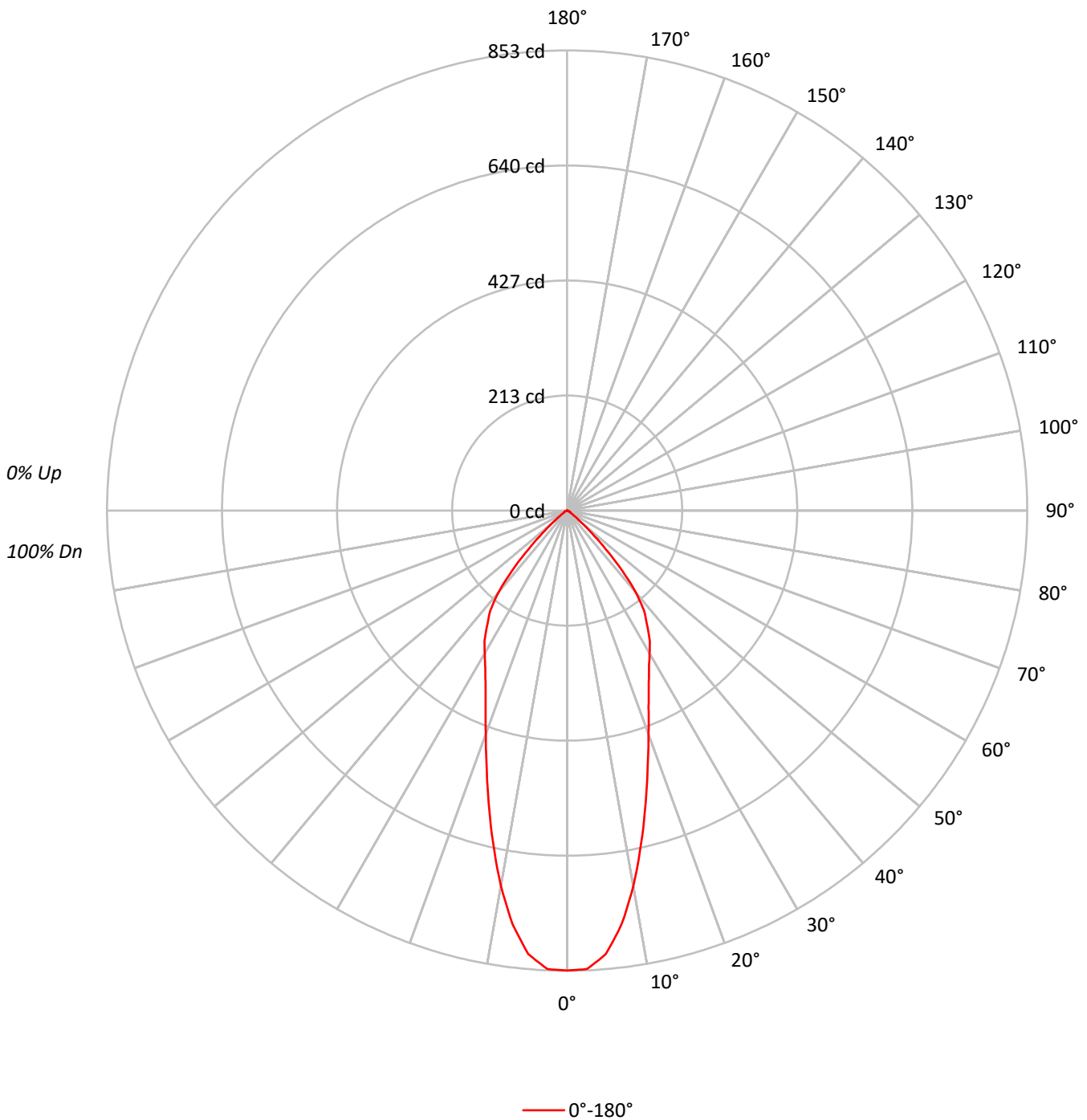
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100		100	99	97		97	96	95	93
2	107	102	98	94	105	100	96	93	97	94	91		94	91	89		91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83		88	84	82		86	83	80	79
4	96	88	82	77	94	86	81	77	84	80	76		82	78	75		80	77	74	72
5	90	82	75	71	89	81	75	70	79	74	70		77	73	69		75	72	69	67
6	86	76	70	65	84	75	69	65	74	68	64		72	68	64		71	67	64	62
7	81	71	65	60	80	70	64	60	69	64	60		68	63	59		67	62	59	58
8	77	67	60	56	76	66	60	56	65	60	56		64	59	55		63	59	55	54
9	73	63	57	52	72	62	56	52	61	56	52		60	55	52		60	55	52	50
10	69	59	53	49	68	59	53	49	58	53	49		57	52	49		56	52	49	47

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

	0°
0°	137357
5°	133451
10°	115657
15°	93651
20°	75504
25°	63531
30°	56868
35°	50702
40°	41683
45°	23148
50°	8572
55°	3286
60°	2191
65°	1868
70°	2308
75°	1805
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.8	11.3
10°-20°	156.6	23.7
20°-30°	166.3	25.2
30°-40°	160.4	24.3
40°-50°	81.6	12.4
50°-60°	13.6	2.1
60°-70°	5.3	0.8
70°-80°	1.4	0.2
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°	397.7	60.3
0°-40°	558.1	84.6
0°-60°	653.3	99.0
0°-90°	660.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	660.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	853	
5°	825	75
15°	562	157
25°	357	166
35°	258	160
45°	102	82
55°	12	14
65°	5	5
75°	3	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	852.6
2.5°	850.6
5°	825.2
7.5°	773.5
10°	707.0
12.5°	632.8
15°	561.5
17.5°	496.1
20°	440.4
22.5°	394.5
25°	357.4
27.5°	328.1
30°	305.7
32.5°	285.2
35°	257.8
37.5°	234.4
40°	198.2
42.5°	151.4
45°	101.6
47.5°	61.5
50°	34.2
52.5°	20.5
55°	11.7
57.5°	8.8
60°	6.8
62.5°	5.9
65°	4.9
67.5°	4.9
70°	4.9
72.5°	0.0
75°	2.9
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)