

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: P20357

Luminaire Tested: **EL405827-TL402SNS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20357
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL405827-TL402SNS
Description: HALO 4 INCH RECESSED LED DOWNLIGHT WITH SATIN NICKEL FINISH
REFLECTOR AND PRISMATIC LENS IN TRIM EL405827-TL402SNS
Light Source: (1)SURFACE MOUNT LED
14 WATTS
Ballast/Driver: 120 VOLT ELECTRONIC DRIVER

Summary

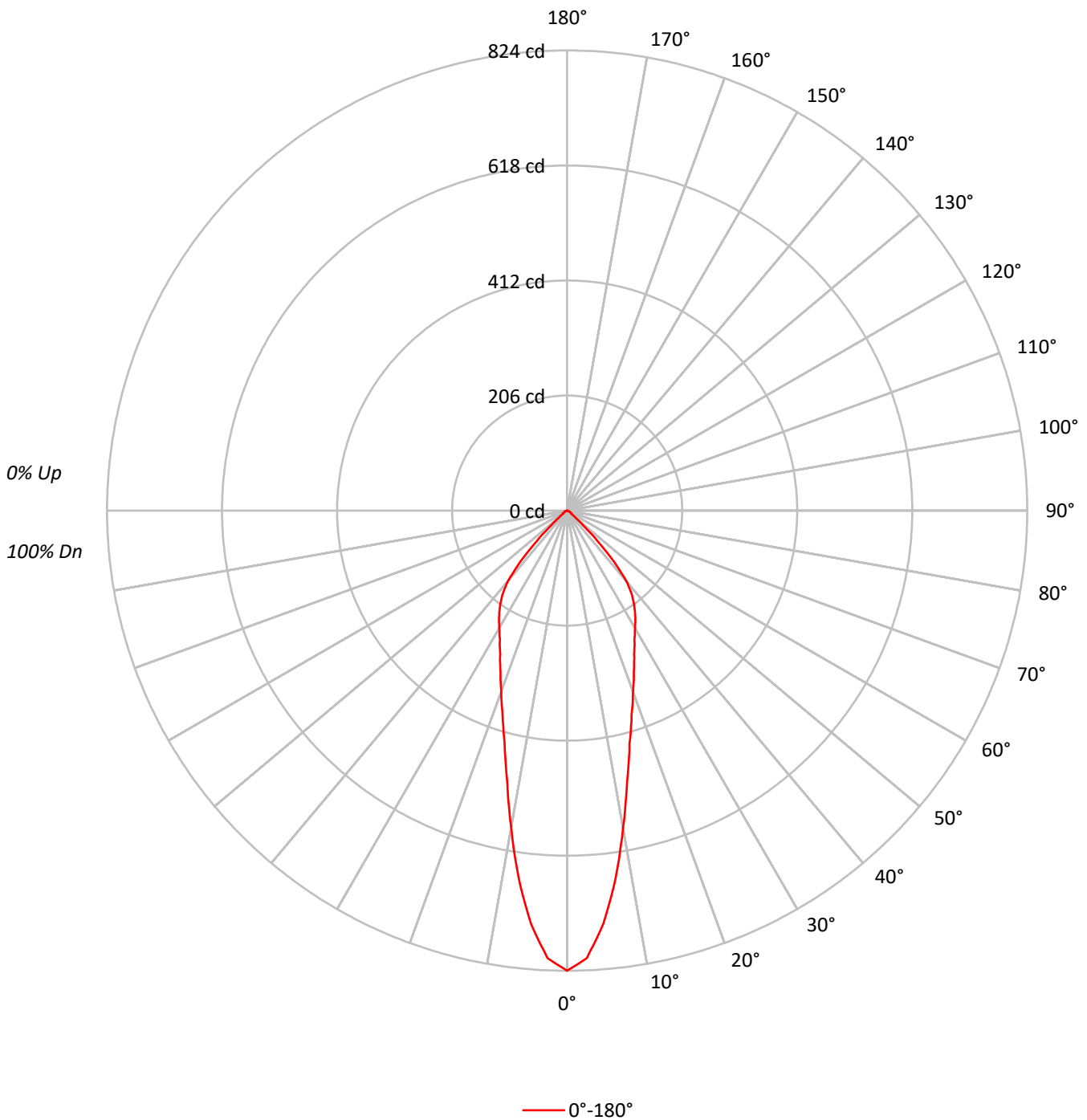
Lumens per Lamp: 527 (1 lamp)
Luminaire Lumens: 527.7 lumens
Efficiency: 100.1%
Efficacy: 38.2 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.51 / 0.67
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 13.8
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		107	107	107		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	84	91	86	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	77	70	66	84	76	70	65	74	69	65		73	68	65		71	67	64	63
7	81	72	65	61	80	71	65	61	70	64	60		68	64	60		67	63	60	58
8	77	67	61	57	76	67	61	57	66	60	56		65	60	56		64	59	56	54
9	73	63	57	53	72	63	57	53	62	56	53		61	56	53		60	56	52	51
10	70	60	54	50	69	59	54	50	59	53	49		58	53	49		57	52	49	48

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	79825
5°	72253
10°	56759
15°	43327
20°	35567
25°	30357
30°	27182
35°	24835
40°	20866
45°	10412
50°	2864
55°	1520
60°	1356
65°	1146
70°	850
75°	374
80°	558
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	65.6	12.4	12.4
10°-20°	122.3	23.2	23.2
20°-30°	131.8	25.0	25.0
30°-40°	129.7	24.6	24.6
40°-50°	62.2	11.8	11.8
50°-60°	9.1	1.7	1.7
60°-70°	4.9	0.9	0.9
70°-80°	1.8	0.3	0.3
80°-90°	0.1	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°	319.7	60.6	60.7
0°-40°	449.5	85.2	85.3
0°-60°	520.8	98.7	98.8
0°-90°	527.7	100.0	100.1
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°	527.7	100.0	100.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	824	
5°	743	66
15°	432	122
25°	284	132
35°	210	130
45°	76	62
55°	9	9
65°	5	5
75°	1	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	824
2.5°	802
5°	743
7.5°	664
10°	577
12.5°	496
15°	432
17.5°	384
20°	345
22.5°	312
25°	284
27.5°	261
30°	243
32.5°	227
35°	210
37.5°	191
40°	165
42.5°	124
45°	76
47.5°	38
50°	19
52.5°	11
55°	9
57.5°	8
60°	7
62.5°	6
65°	5
67.5°	4
70°	3
72.5°	3
75°	1
77.5°	1
80°	1
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)