

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: P20329

Luminaire Tested: **EL405835-TL402SNS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20329
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL405835-TL402SNS
Description: HALO 4 INCH RECESSED LED DOWNLIGHT WITH SATIN NICKEL FINISH
REFLECTOR AND PRISMATIC LENS IN TRIM EL405835-TL402SNS
Light Source: (1)SURFACE MOUNT LED
14 WATTS
Ballast/Driver: 120 VOLT ELECTRONIC DRIVER

Summary

Lumens per Lamp: 572 (1 lamp)
Luminaire Lumens: 574.2 lumens
Efficiency: 100.4%
Efficacy: 41.3 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.51 / 0.68
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

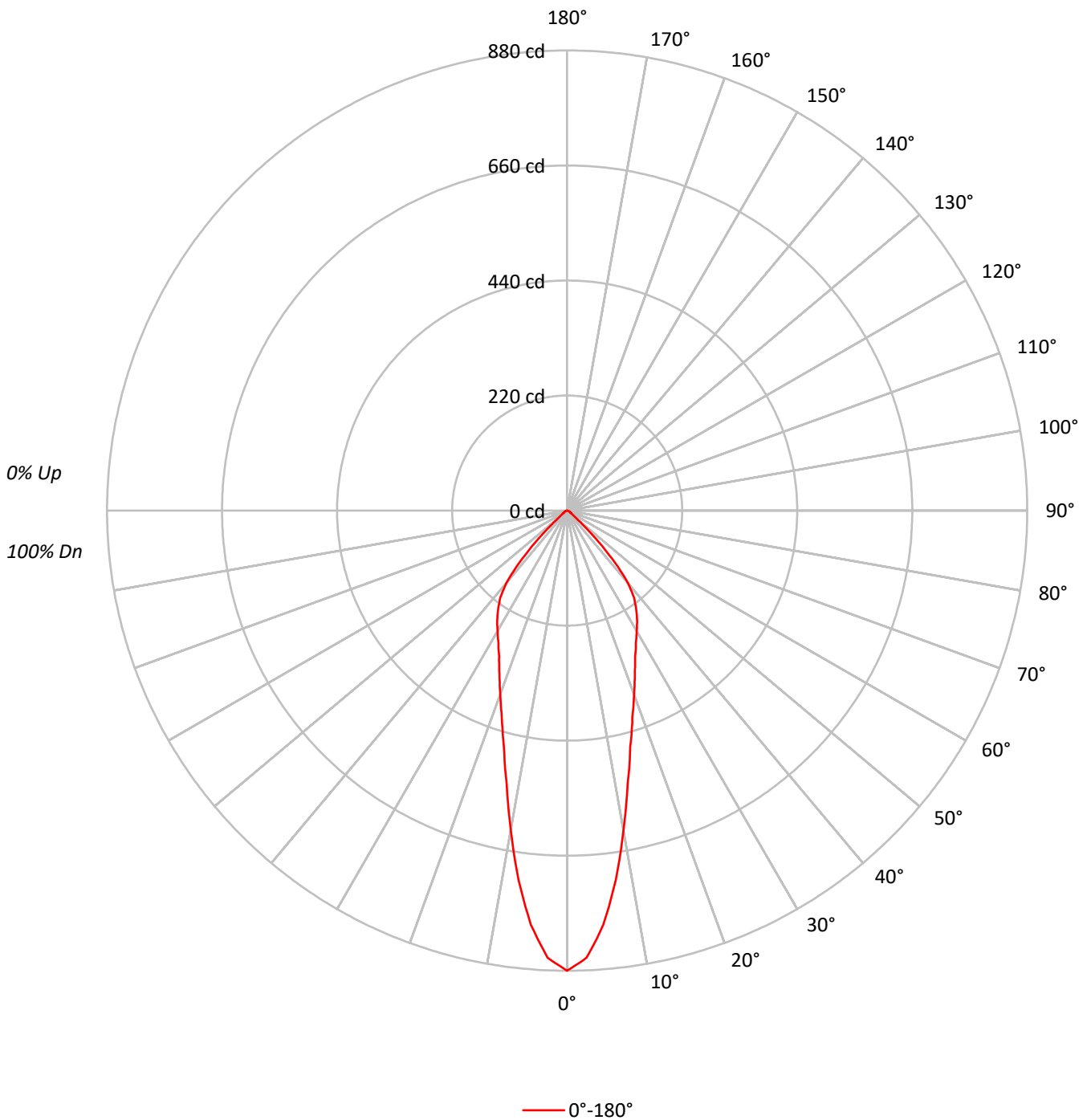
Input Watts (W): 13.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	120	120	120	120	117	117	117	117	112	112	112		107	107	107		102	102	102	100
1	114	111	108	106	111	108	106	104	104	103	101		101	99	98		97	96	95	93
2	108	102	98	94	105	101	97	93	97	94	91		94	92	89		92	89	88	86
3	102	95	90	85	100	93	89	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	75	73
5	91	82	76	71	89	81	75	71	79	74	70		78	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	56	66	60	56		64	60	56		63	59	56	54
9	73	63	57	53	72	63	57	53	62	56	53		61	56	52		60	56	52	51
10	70	60	54	50	69	59	53	50	58	53	49		58	53	49		57	52	49	48

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	85250
5°	77310
10°	60989
15°	46837
20°	38557
25°	32922
30°	29755
35°	27201
40°	22890
45°	11645
50°	3165
55°	1689
60°	1356
65°	1146
70°	1133
75°	374
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	70.3	12.2	12.3
10°-20°	132.1	23.0	23.1
20°-30°	143.3	25.0	25.1
30°-40°	142.3	24.8	24.9
40°-50°	69.0	12.0	12.1
50°-60°	10.0	1.7	1.7
60°-70°	5.3	0.9	0.9
70°-80°	1.8	0.3	0.3
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°	345.7	60.2	60.4
0°-40°	488.0	85.0	85.3
0°-60°	567.0	98.8	99.1
0°-90°	574.2	100.0	100.4
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°	574.2	100.0	100.4

CANDELA DISTRIBUTION:

	0°	Flux
0°	880	
5°	795	70
15°	467	132
25°	308	143
35°	230	142
45°	85	69
55°	10	10
65°	5	5
75°	1	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	880
2.5°	856
5°	795
7.5°	712
10°	620
12.5°	535
15°	467
17.5°	415
20°	374
22.5°	338
25°	308
27.5°	285
30°	266
32.5°	249
35°	230
37.5°	210
40°	181
42.5°	137
45°	85
47.5°	43
50°	21
52.5°	13
55°	10
57.5°	8
60°	7
62.5°	6
65°	5
67.5°	5
70°	4
72.5°	3
75°	1
77.5°	1
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)