

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: P20076

Luminaire Tested: **EL405835-TL400WH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20076
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL405835-TL400WH
Description: HALO 4 INCH RECESSED LED DOWNLIGHT WITH WHITE PAINTED REFLECTOR IN TRIM UNIT 1 LED MODULE EL405835
Light Source: (1)SURFACE MOUNT LED
14 WATTS
Ballast/Driver: 120 VOLT ELECTRONIC DRIVER

Summary

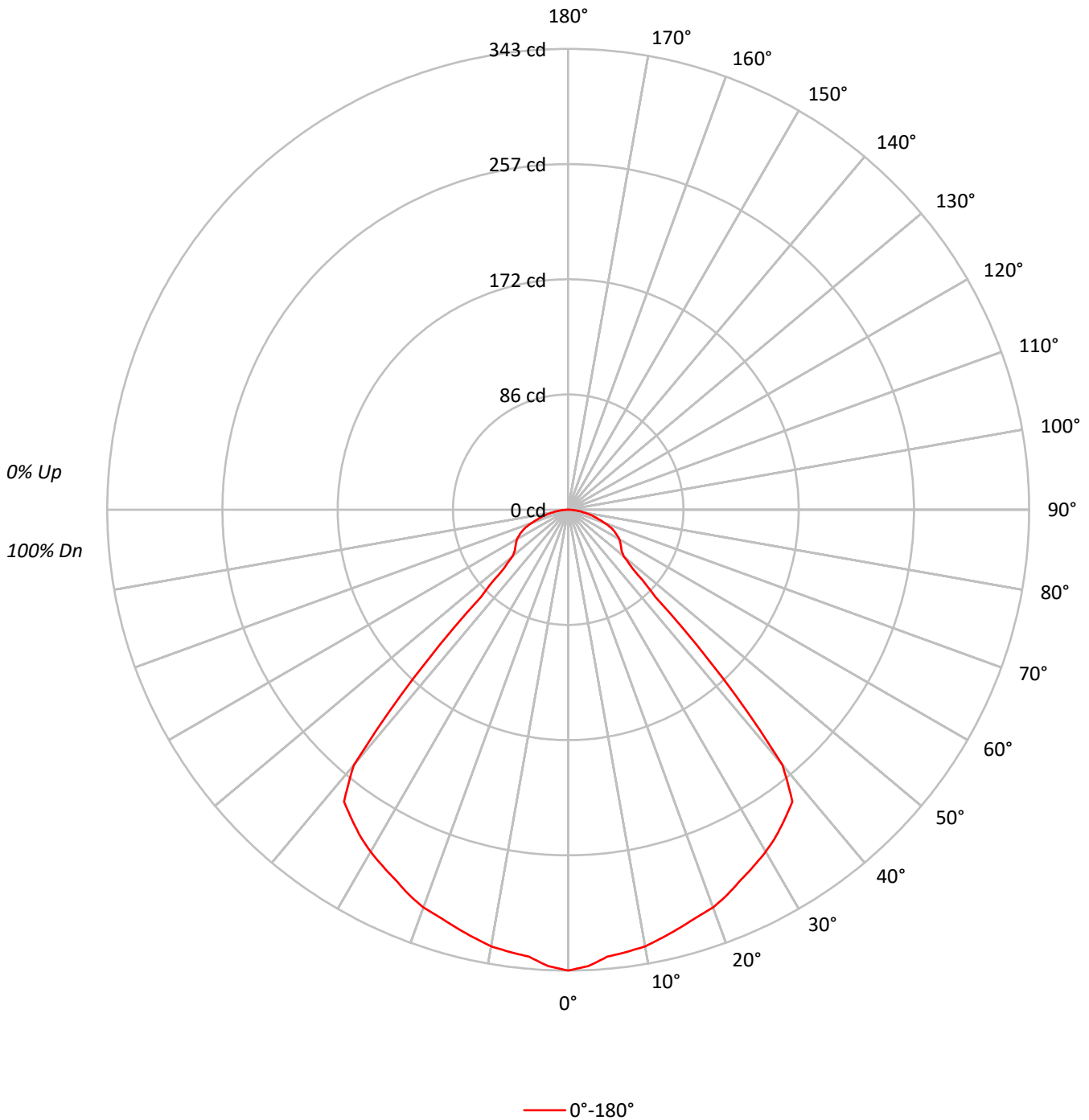
Lumens per Lamp: 635 (1 lamp)
Luminaire Lumens: 635.7 lumens
Efficiency: 100.1%
Efficacy: 45.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.25
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (A_{in}): 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	111	107	104	101	109	105	102	99	101	98	96		97	95	93		94	92	90	88
2	103	97	91	86	101	95	90	85	91	87	83		88	85	82		85	82	80	78
3	96	87	80	75	94	86	79	74	83	78	73		80	76	72		78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65		73	68	64		71	67	63	61
5	83	72	65	59	81	71	64	59	69	63	58		67	62	57		66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52		62	56	52		61	55	51	50
7	73	61	53	48	71	60	53	48	59	52	47		57	51	47		56	51	47	45
8	68	56	49	43	67	55	48	43	54	48	43		53	47	43		52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39		49	43	39		48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36		46	40	36		45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	42308
5°	41355
10°	41332
15°	41118
20°	41347
25°	41373
30°	41874
35°	42312
40°	39932
45°	16048
50°	10362
55°	10322
60°	10854
65°	11091
70°	10459
75°	9531
80°	8524
85°	7076



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	31.8	5.0	5.0
10°-20°	91.1	14.3	14.3
20°-30°	140.6	22.1	22.1
30°-40°	174.5	27.4	27.5
40°-50°	90.6	14.3	14.3
50°-60°	43.2	6.8	6.8
60°-70°	37.0	5.8	5.8
70°-80°	21.2	3.3	3.3
80°-90°	5.7	0.9	0.9
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°	263.5	41.4	41.5
0°-40°	438.0	68.9	69.0
0°-60°	571.8	89.9	90.0
0°-90°	635.7	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°	635.7	100.0	100.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	343	
5°	334	32
15°	322	91
25°	304	141
35°	281	174
45°	92	91
55°	48	43
65°	38	37
75°	20	21
85°	5	6
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	343
2.5°	340
5°	334
7.5°	332
10°	330
12.5°	326
15°	322
17.5°	318
20°	315
22.5°	310
25°	304
27.5°	299
30°	294
32.5°	288
35°	281
37.5°	274
40°	248
42.5°	171
45°	92
47.5°	65
50°	54
52.5°	50
55°	48
57.5°	46
60°	44
62.5°	41
65°	38
67.5°	34
70°	29
72.5°	24
75°	20
77.5°	16
80°	12
82.5°	8
85°	5
87.5°	2
90°	0

(END OF REPORT)