

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: P20065

Luminaire Tested: **EL405827-TL402WBS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20065
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL405827-TL402WBS
Description: HALO 4 INCH RECESSED LED DOWNLIGHT WITH WHITE PAINTED BAFFLE
DESIGN REFLECTOR IN TRIM WITH PRISMATIC LENS IN UNIT 1 LED
MODULE EL405827
Light Source: (1)SURFACE MOUNT LED
14 WATTS
Ballast/Driver: 120 VOLT ELECTRONIC DRIVER

Summary

Lumens per Lamp: 534 (1 lamp)
Luminaire Lumens: 535.5 lumens
Efficiency: 100.3%
Efficacy: 5355.3 lumens/watt
Spacing Criteria (0/90/45): 0.62 / 0.62 / 0.81
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

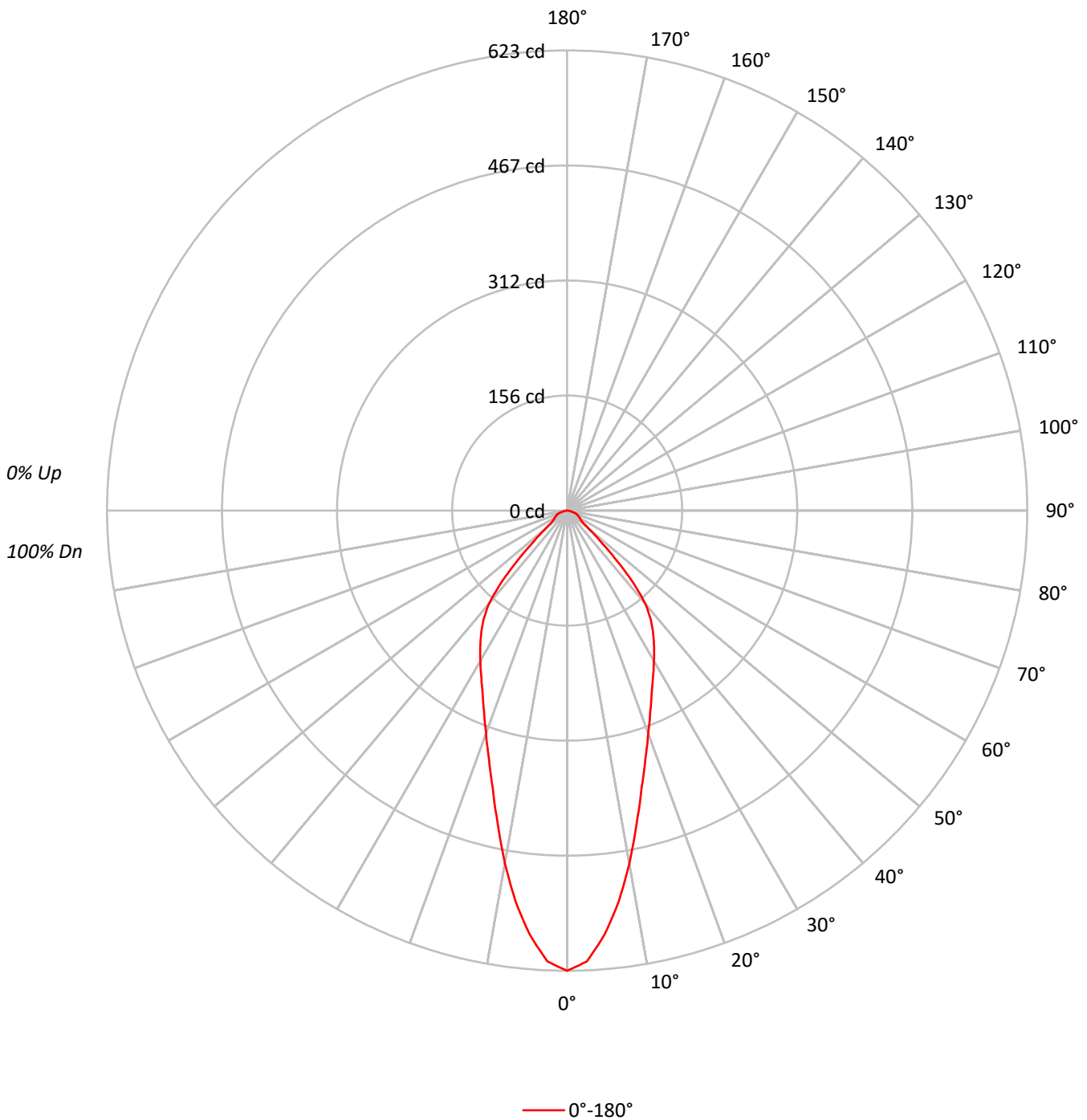
Input Watts (W): 0.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	117	117	117	117	111	111	111	107	107	107	102	102	102	100
1	113	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83
3	99	92	86	81	97	90	85	80	88	83	79	85	81	78	83	79	77	75
4	93	84	78	73	91	83	77	73	81	76	72	79	74	71	77	73	70	68
5	88	78	71	66	86	77	71	66	75	70	65	73	69	65	72	68	64	63
6	83	72	66	61	81	72	65	60	70	64	60	69	63	60	67	63	59	57
7	78	67	61	56	77	67	60	56	65	60	55	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	69	58	52	48	57	52	48	57	51	47	56	51	47	46
10	66	55	49	45	65	55	49	45	54	48	44	53	48	44	53	48	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	76844
5°	71442
10°	60745
15°	49674
20°	42135
25°	36882
30°	33470
35°	30567
40°	26568
45°	16048
50°	7292
55°	4946
60°	4687
65°	4670
70°	4688
75°	3813
80°	2841
85°	2830



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	52.2	9.7	9.8
10°-20°	109.5	20.4	20.5
20°-30°	125.6	23.4	23.5
30°-40°	126.1	23.5	23.6
40°-50°	73.0	13.6	13.7
50°-60°	22.2	4.1	4.2
60°-70°	16.1	3.0	3.0
70°-80°	8.8	1.6	1.7
80°-90°	2.2	0.4	0.4
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°	287.2	53.6	53.8
0°-40°	413.2	77.2	77.4
0°-60°	508.4	94.9	95.2
0°-90°	535.5	100.0	100.3
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°	535.5	100.0	100.3

CANDELA DISTRIBUTION:

	0°	Flux
0°	623	
5°	577	52
15°	389	109
25°	271	126
35°	203	126
45°	92	73
55°	23	22
65°	16	16
75°	8	9
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	623
2.5°	611
5°	577
7.5°	534
10°	485
12.5°	434
15°	389
17.5°	352
20°	321
22.5°	294
25°	271
27.5°	252
30°	235
32.5°	219
35°	203
37.5°	186
40°	165
42.5°	132
45°	92
47.5°	59
50°	38
52.5°	27
55°	23
57.5°	21
60°	19
62.5°	18
65°	16
67.5°	15
70°	13
72.5°	11
75°	8
77.5°	6
80°	4
82.5°	3
85°	2
87.5°	1
90°	0

(END OF REPORT)