

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: P123720

Luminaire Tested: **EL406940-TL402WHS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123720
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13988)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406940-TL402WHS
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
WHITE REFLECTOR, SOLITE® LENS AND WHITE TRIM RING
Light Source: (1)SURFACE MOUNT LED, 4000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 870.0 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.82
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

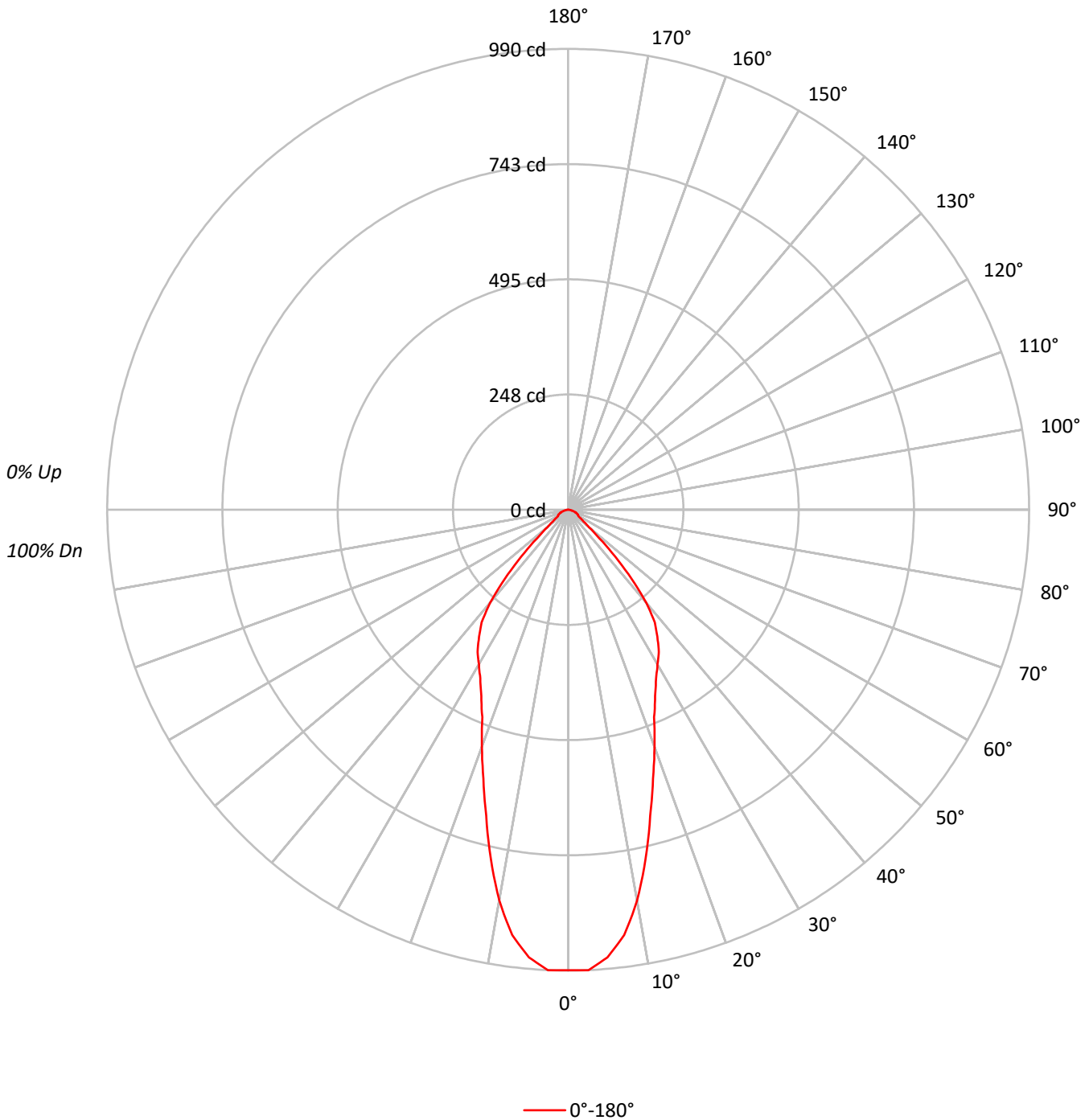
Input Watts (W): 13
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	102	102	102	100
1	113	109	106	104	110	107	105	102	103	101	99	99	98	96	96	95	93	91
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	73	66	62	71	65	61	70	65	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	61	57	65	60	56	64	59	56	54
8	75	64	57	53	73	63	57	53	62	57	53	61	56	52	60	56	52	51
9	71	60	54	49	69	60	53	49	59	53	49	58	52	49	57	52	49	47
10	67	57	50	46	66	56	50	46	55	50	46	54	49	46	54	49	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	159364
5°	156124
10°	139476
15°	113482
20°	92836
25°	78516
30°	71341
35°	65629
40°	54932
45°	32467
50°	14587
55°	9325
60°	8023
65°	8158
70°	8384
75°	5913
80°	4360
85°	4436



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	10.2
10°-20°	190.4	21.9
20°-30°	205.6	23.6
30°-40°	206.4	23.7
40°-50°	113.1	13.0
50°-60°	31.7	3.6
60°-70°	20.5	2.4
70°-80°	11.1	1.3
80°-90°	2.6	0.3
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°	484.6	55.7
0°-40°	691.0	79.4
0°-60°	835.7	96.1
0°-90°	870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	870.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	989	
5°	965	89
15°	680	190
25°	442	206
35°	334	206
45°	142	113
55°	33	32
65°	21	21
75°	10	11
85°	2	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	989.2
2.5°	990.3
5°	965.4
7.5°	921.5
10°	852.6
12.5°	768.3
15°	680.4
17.5°	605.6
20°	541.5
22.5°	482.1
25°	441.7
27.5°	408.5
30°	383.5
32.5°	362.2
35°	333.7
37.5°	305.2
40°	261.2
42.5°	201.9
45°	142.5
47.5°	91.4
50°	58.2
52.5°	41.6
55°	33.2
57.5°	26.1
60°	24.9
62.5°	23.7
65°	21.4
67.5°	16.6
70°	17.8
72.5°	14.2
75°	9.5
77.5°	7.1
80°	4.7
82.5°	3.6
85°	2.4
87.5°	1.2
90°	0.0

(END OF REPORT)