

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: P123673

Luminaire Tested: **EL406927-TL410SN**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123673
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13977)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406927-TL410SN
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
SATIN NICKEL REFLECTOR, DIFFUSE DROP LENS AND SATIN NICKEL TRIM RING
Light Source: (1)SURFACE MOUNT LED, 2700K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

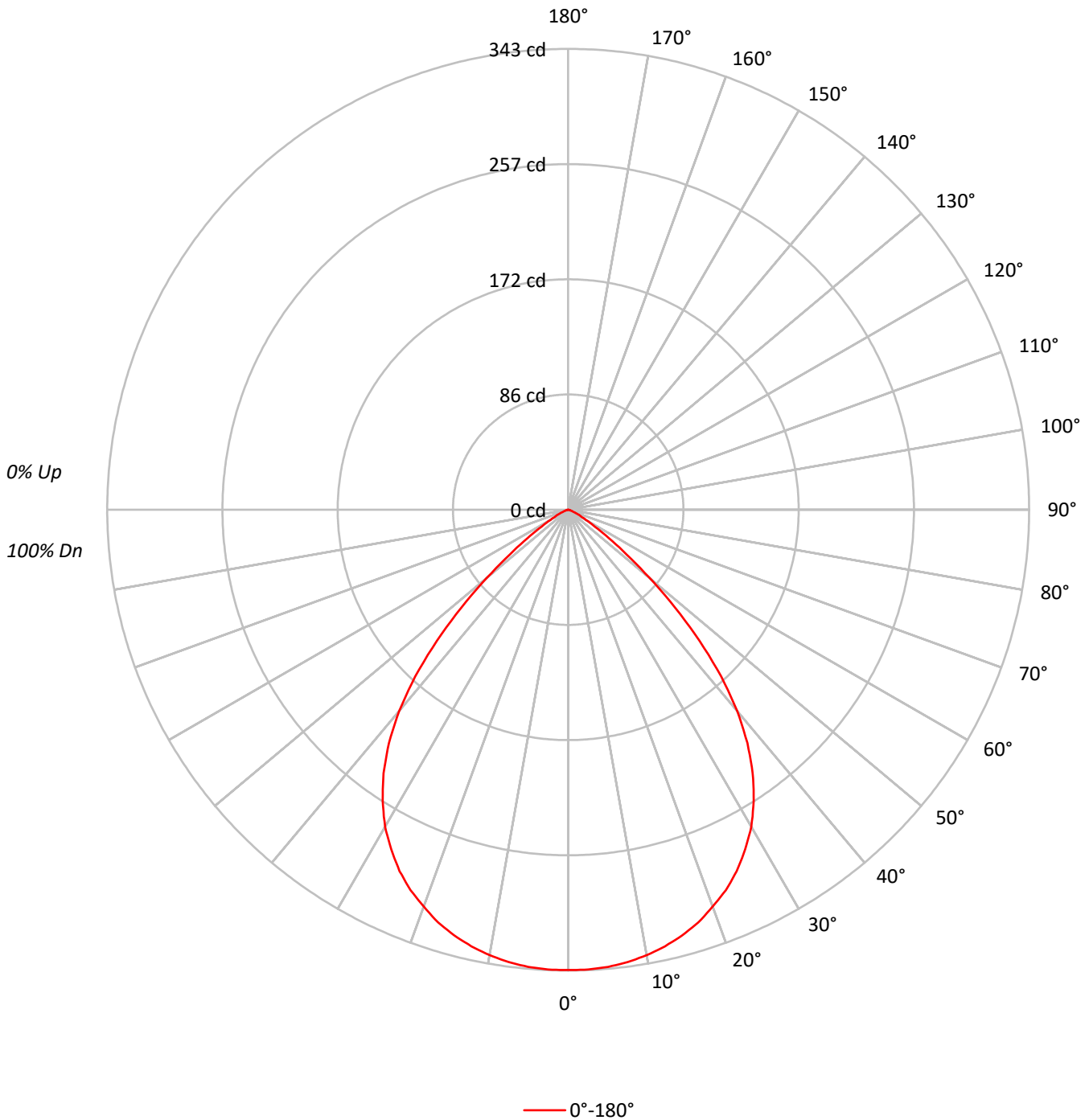
Lumens per Lamp: N/A
Luminaire Lumens: 560.0 lumens
Efficiency: N/A
Efficacy: 43.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.2
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

Input Watts (W): 13
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	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	89	86	84	82
3	98	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	59	52	47	69	59	52	47	58	51	47	57	51	47	55	50	47	45
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	47	43	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	55194
5°	55243
10°	55080
15°	54706
20°	53885
25°	52759
30°	50692
35°	47083
40°	41136
45°	31487
50°	19750
55°	10392
60°	5026
65°	2973
70°	1366
75°	622
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.4	5.8
10°-20°	92.4	16.5
20°-30°	136.2	24.3
30°-40°	148.2	26.5
40°-50°	105.6	18.9
50°-60°	35.8	6.4
60°-70°	8.0	1.4
70°-80°	1.4	0.3
80°-90°	0.0	0.0
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°	261.0	46.6
0°-40°	409.2	73.1
0°-60°	550.6	98.3
0°-90°	560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	560.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	343	
5°	342	32
15°	328	92
25°	297	136
35°	239	148
45°	138	106
55°	37	36
65°	8	8
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	342.6
2.5°	342.6
5°	341.6
7.5°	339.6
10°	336.7
12.5°	332.8
15°	328.0
17.5°	322.1
20°	314.3
22.5°	306.5
25°	296.8
27.5°	285.1
30°	272.5
32.5°	256.9
35°	239.4
37.5°	219.0
40°	195.6
42.5°	168.4
45°	138.2
47.5°	108.0
50°	78.8
52.5°	54.5
55°	37.0
57.5°	23.4
60°	15.6
62.5°	10.7
65°	7.8
67.5°	4.9
70°	2.9
72.5°	1.9
75°	1.0
77.5°	1.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)