

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: P123708

Luminaire Tested: **EL406940-TL402SNS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123708
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13985)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406940-TL402SNS
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
SATIN NICKEL REFLECTOR, SOLITE® LENS AND SATIN NICKEL TRIM RING
Light Source: (1)SURFACE MOUNT LED, 4000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 800.0 lumens
Efficiency: N/A
Efficacy: 61.5 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.78
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

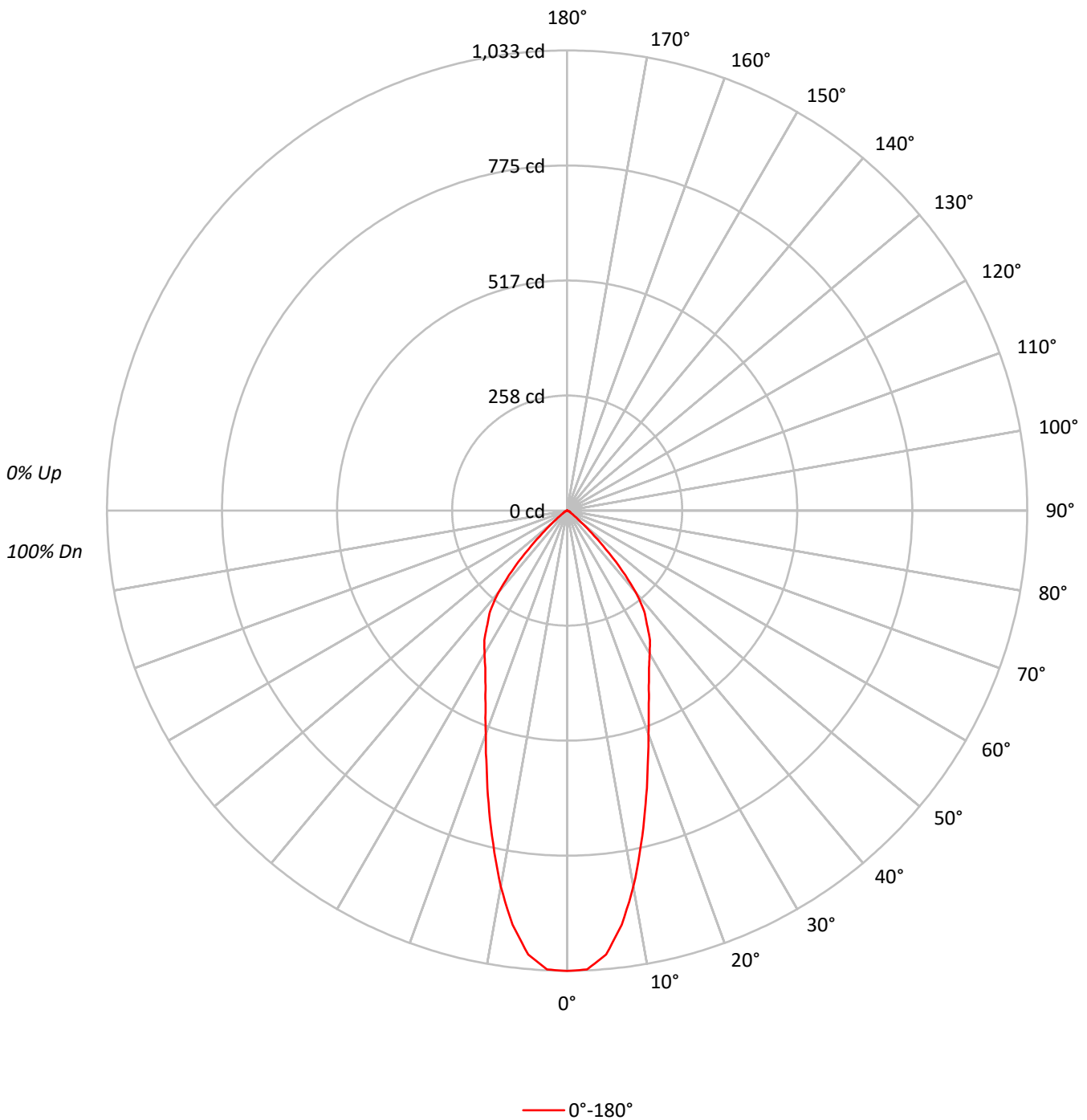
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	108	105	111	108	106	104	104	102	100		100	99	97		97	96	95	93
2	107	102	98	94	105	100	96	93	97	94	91		94	91	89		91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83		88	84	82		86	83	80	79
4	96	88	82	77	94	86	81	77	84	80	76		82	78	75		80	77	74	72
5	90	82	75	71	89	81	75	70	79	74	70		77	73	69		75	72	69	67
6	86	76	70	65	84	75	69	65	74	68	64		72	68	64		71	67	64	62
7	81	71	65	60	80	70	64	60	69	64	60		68	63	59		67	62	59	58
8	77	67	60	56	76	66	60	56	65	60	56		64	59	55		63	59	55	54
9	73	63	57	52	72	62	56	52	61	56	52		60	55	52		60	55	52	50
10	69	59	53	49	68	59	53	49	58	53	49		57	52	49		56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	166485
5°	161768
10°	140196
15°	113515
20°	91533
25°	77005
30°	68923
35°	61460
40°	50537
45°	28047
50°	10376
55°	3988
60°	2674
65°	2249
70°	2779
75°	2241
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	11.3
10°-20°	189.8	23.7
20°-30°	201.6	25.2
30°-40°	194.4	24.3
40°-50°	98.9	12.4
50°-60°	16.5	2.1
60°-70°	6.4	0.8
70°-80°	1.7	0.2
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°	482.1	60.3
0°-40°	676.5	84.6
0°-60°	791.9	99.0
0°-90°	800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1033	
5°	1000	91
15°	681	190
25°	433	202
35°	312	194
45°	123	99
55°	14	16
65°	6	6
75°	4	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1033.4
2.5°	1031.0
5°	1000.3
7.5°	937.5
10°	857.0
12.5°	767.1
15°	680.6
17.5°	601.3
20°	533.9
22.5°	478.2
25°	433.2
27.5°	397.7
30°	370.5
32.5°	345.7
35°	312.5
37.5°	284.1
40°	240.3
42.5°	183.5
45°	123.1
47.5°	74.6
50°	41.4
52.5°	24.9
55°	14.2
57.5°	10.7
60°	8.3
62.5°	7.1
65°	5.9
67.5°	5.9
70°	5.9
72.5°	0.0
75°	3.6
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)