

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: P123704

Luminaire Tested: **EL406940-TL402SCS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13984)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406940-TL402SCS
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
SPECULAR CLEAR 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: 860.0 lumens
Efficiency: N/A
Efficacy: 66.2 lumens/watt
Spacing Criteria (0/90/45): 0.75 / 0.75 / 0.84
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

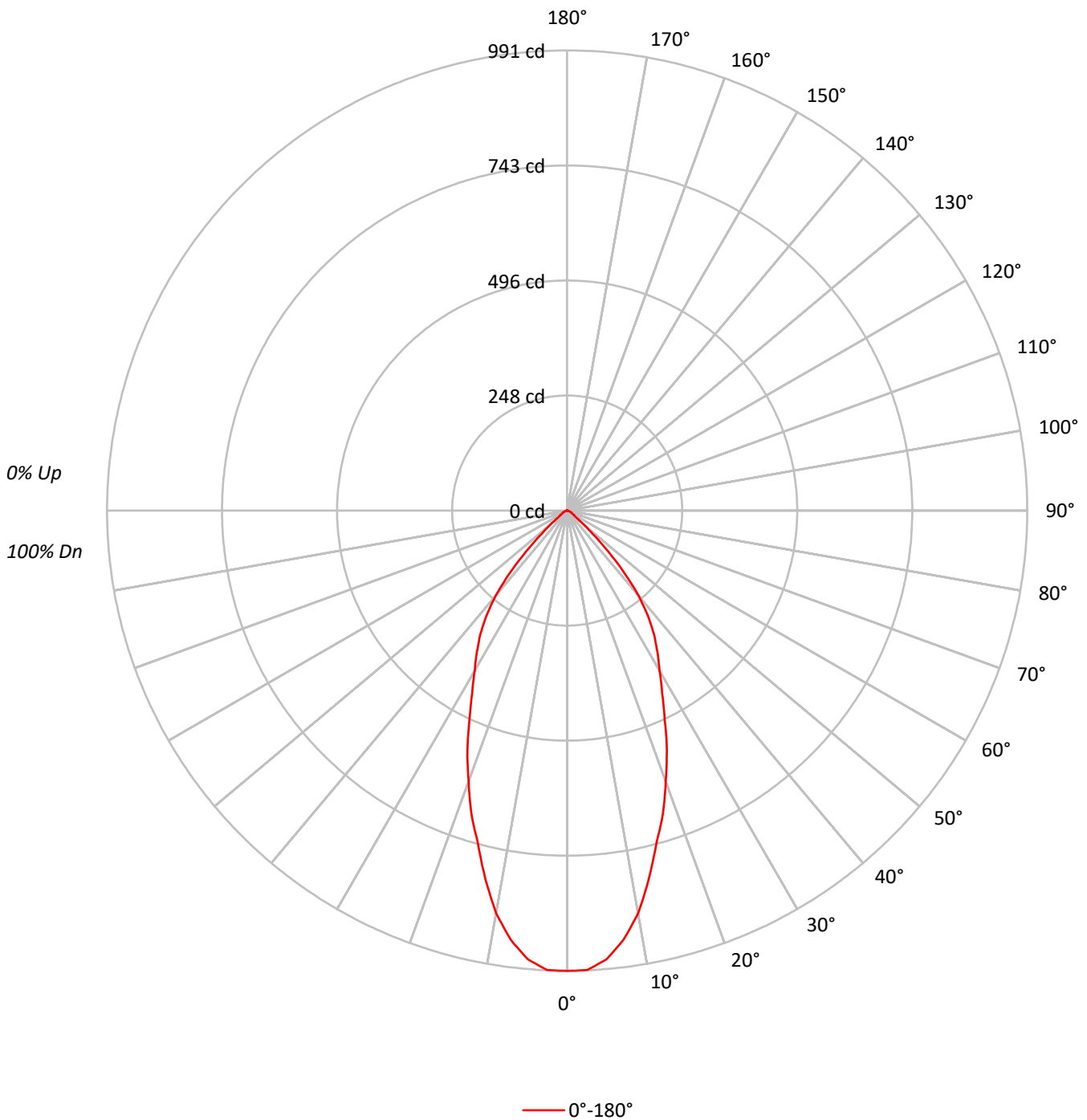
Input Watts (W): 13
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	81		85	83	80	78
4	96	87	82	77	94	86	81	77	84	79	76		82	78	75		80	77	74	72
5	90	81	75	71	89	80	75	70	79	74	70		77	72	69		75	71	68	67
6	85	76	70	65	84	75	69	65	74	68	64		72	67	64		71	67	63	62
7	81	71	65	60	79	70	64	60	69	64	60		68	63	59		67	62	59	57
8	77	67	60	56	75	66	60	56	65	59	56		64	59	55		63	58	55	54
9	73	63	56	52	72	62	56	52	61	56	52		60	55	52		59	55	51	50
10	69	59	53	49	68	59	53	49	58	52	49		57	52	48		56	52	48	47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	159718
5°	156884
10°	144007
15°	123756
20°	106346
25°	88435
30°	74076
35°	64135
40°	50200
45°	28798
50°	11855
55°	5309
60°	3802
65°	3621
70°	2214
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	10.4
10°-20°	208.2	24.2
20°-30°	229.6	26.7
30°-40°	201.0	23.4
40°-50°	100.1	11.6
50°-60°	20.1	2.3
60°-70°	9.3	1.1
70°-80°	1.5	0.2
80°-90°	0.7	0.1
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°	527.5	61.3
0°-40°	728.5	84.7
0°-60°	848.8	98.7
0°-90°	860.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	860.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	991	
5°	970	90
15°	742	208
25°	498	230
35°	326	201
45°	126	100
55°	19	20
65°	10	9
75°	0	2
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	991.4
2.5°	990.2
5°	970.1
7.5°	932.3
10°	880.3
12.5°	812.9
15°	742.0
17.5°	685.3
20°	620.3
22.5°	561.3
25°	497.5
27.5°	443.1
30°	398.2
32.5°	361.6
35°	326.1
37.5°	285.9
40°	238.7
42.5°	184.3
45°	126.4
47.5°	74.4
50°	47.3
52.5°	26.0
55°	18.9
57.5°	16.5
60°	11.8
62.5°	11.8
65°	9.5
67.5°	8.3
70°	4.7
72.5°	3.5
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	1.2
90°	0.0

(END OF REPORT)