

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: P123700

Luminaire Tested: **EL406940-TL402SBKS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123700
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13983)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406940-TL402SBKS
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
SPECULAR BLACK 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: 800.1 lumens
Efficiency: N/A
Efficacy: 61.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 0.71 / 0.86
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

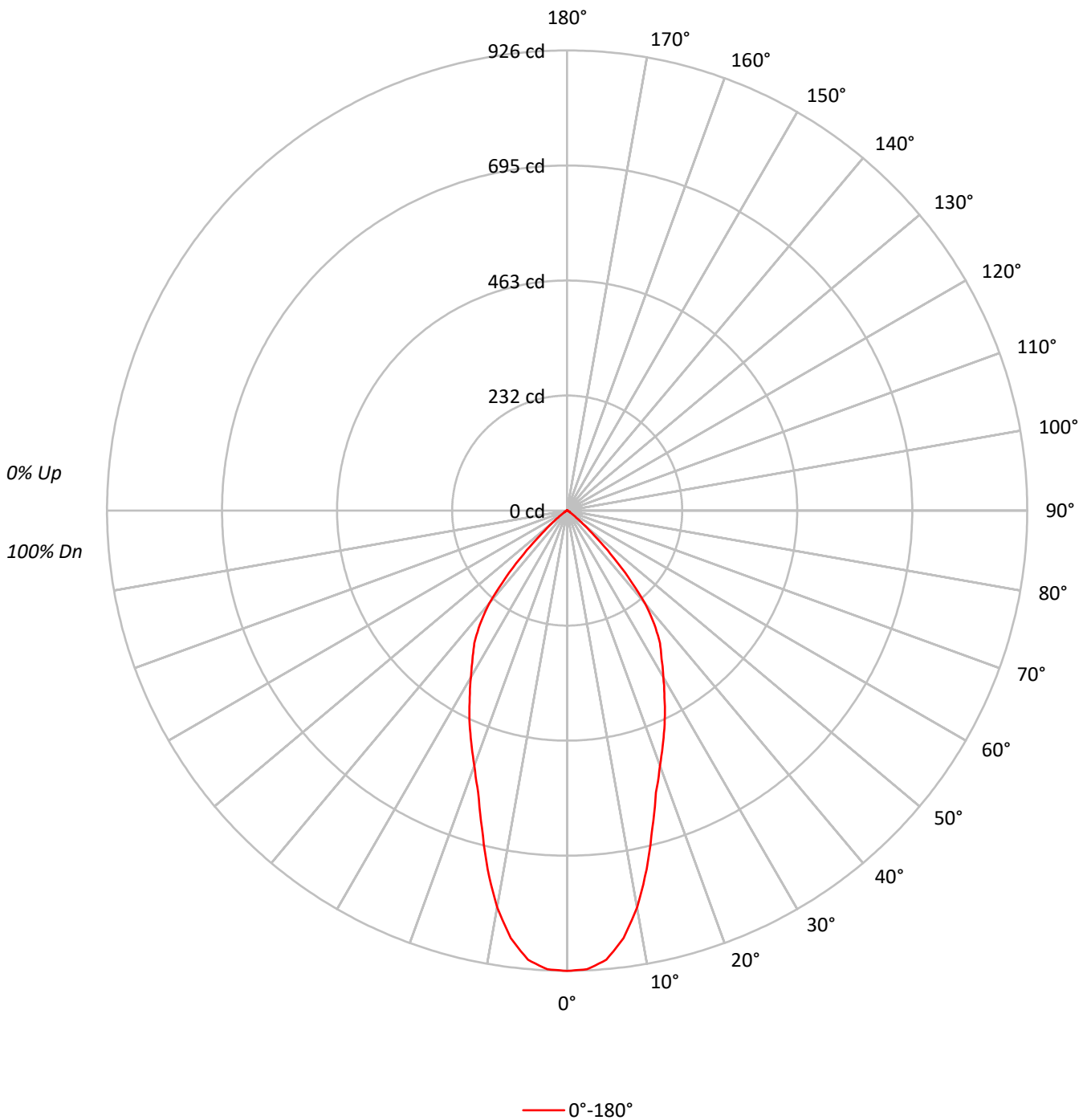
Input Watts (W): 13
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	81	75	71	89	81	75	70	79	74	70		77	73	69		75	72	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	66	60	56	75	66	60	56	65	59	55		64	59	55		63	58	55	53
9	73	62	56	52	72	62	56	52	61	56	52		60	55	52		59	55	51	50
10	69	59	53	49	68	58	52	49	58	52	48		57	52	48		56	51	48	47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	149230
5°	146712
10°	132622
15°	110346
20°	93608
25°	82640
30°	72067
35°	64017
40°	51146
45°	28252
50°	10151
55°	3679
60°	1933
65°	1830
70°	565
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	10.4
10°-20°	185.5	23.2
20°-30°	213.1	26.6
30°-40°	199.9	25.0
40°-50°	98.9	12.4
50°-60°	14.3	1.8
60°-70°	4.1	0.5
70°-80°	0.5	0.1
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°	482.1	60.3
0°-40°	681.9	85.2
0°-60°	795.1	99.4
0°-90°	800.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	926	
5°	907	83
15°	662	186
25°	465	213
35°	326	200
45°	124	99
55°	13	14
65°	5	4
75°	0	0
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	926.3
2.5°	923.9
5°	907.2
7.5°	867.9
10°	810.7
12.5°	739.1
15°	661.6
17.5°	594.9
20°	546.0
22.5°	504.3
25°	464.9
27.5°	424.4
30°	387.4
32.5°	354.1
35°	325.5
37.5°	288.5
40°	243.2
42.5°	182.4
45°	124.0
47.5°	73.9
50°	40.5
52.5°	22.7
55°	13.1
57.5°	6.0
60°	6.0
62.5°	6.0
65°	4.8
67.5°	2.4
70°	1.2
72.5°	1.2
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)