

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: P123680

Luminaire Tested: **EL406940-TL410TBZ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13978)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406940-TL410TBZ
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
TUSCAN BRONZE REFLECTOR, DIFFUSE DROP LENS AND TUSCAN BRONZE TRIM RING
Light Source: (1)SURFACE MOUNT LED, 4000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

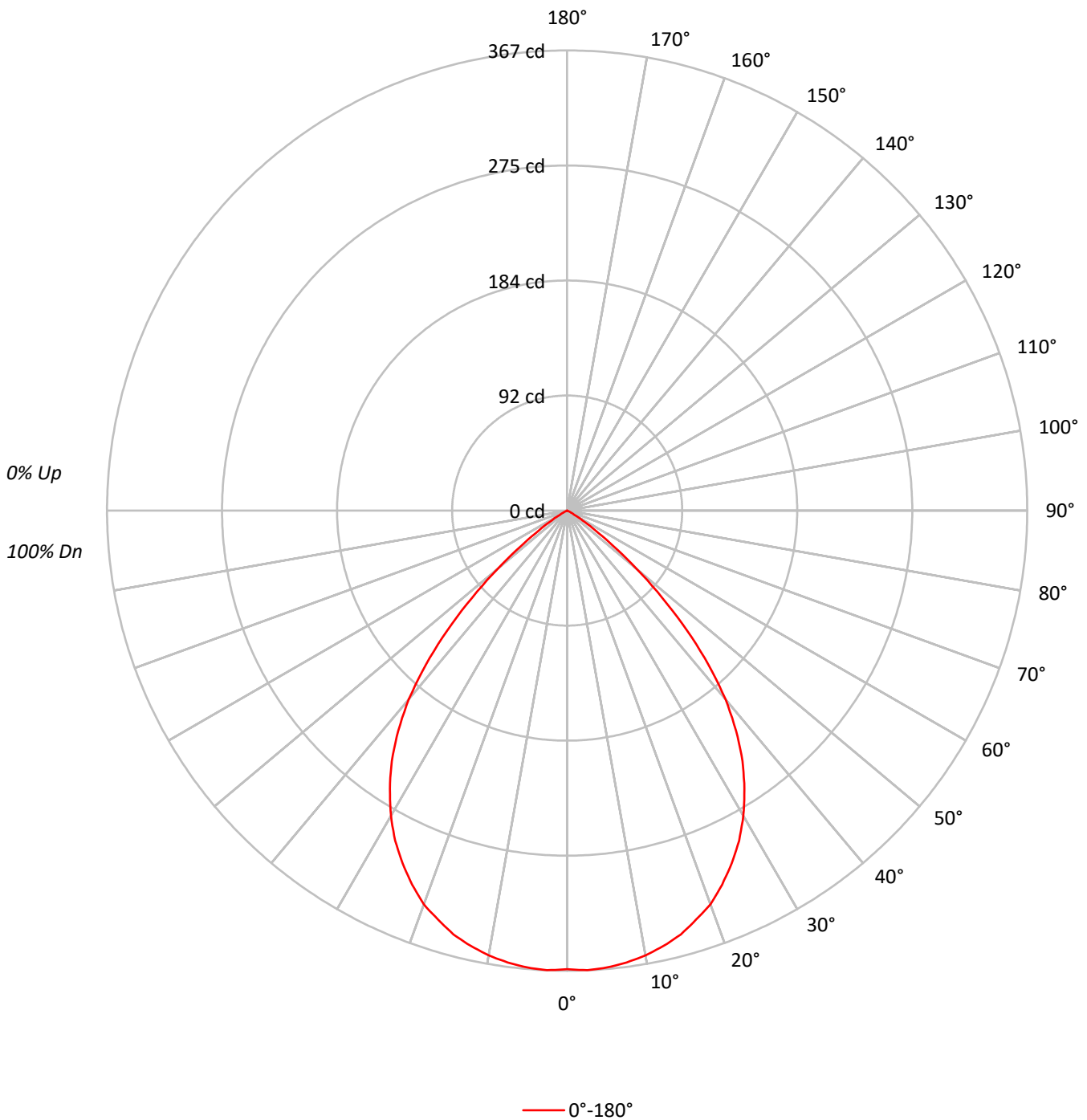
Lumens per Lamp: N/A
Luminaire Lumens: 560.0 lumens
Efficiency: N/A
Efficacy: 43.1 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.17
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

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	109	107	104	110	107	105	102	103	101	99		99	98	96		96	95	94	92
2	106	100	96	92	104	98	94	91	95	92	89		92	89	87		89	87	85	83
3	99	92	86	81	97	90	85	81	88	83	79		85	81	78		83	80	77	75
4	93	84	78	73	91	83	77	72	81	75	71		79	74	71		77	73	70	68
5	87	77	70	65	85	76	70	65	74	69	64		73	68	64		71	67	63	62
6	82	71	64	59	80	70	64	59	69	63	59		67	62	58		66	61	58	56
7	77	66	59	54	75	65	58	54	64	58	53		62	57	53		61	56	53	51
8	72	61	54	49	71	60	54	49	59	53	49		58	53	49		57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45		54	49	45		53	48	45	43
10	64	53	46	42	63	52	46	42	51	45	41		51	45	41		50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	58932
5°	59157
10°	58925
15°	58375
20°	57296
25°	55194
30°	52292
35°	47968
40°	41304
45°	30872
50°	18121
55°	7612
60°	2191
65°	419
70°	0
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.7	6.2
10°-20°	98.5	17.6
20°-30°	142.5	25.5
30°-40°	150.8	26.9
40°-50°	103.2	18.4
50°-60°	28.1	5.0
60°-70°	2.2	0.4
70°-80°	0.0	0.0
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°	275.7	49.2
0°-40°	426.6	76.2
0°-60°	557.8	99.6
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°	366	
5°	366	35
15°	350	98
25°	310	143
35°	244	151
45°	136	103
55°	27	28
65°	1	2
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	365.8
2.5°	366.9
5°	365.8
7.5°	363.5
10°	360.2
12.5°	355.6
15°	350.0
17.5°	342.1
20°	334.2
22.5°	322.9
25°	310.5
27.5°	296.9
30°	281.1
32.5°	263.1
35°	243.9
37.5°	221.3
40°	196.4
42.5°	167.1
45°	135.5
47.5°	102.7
50°	72.3
52.5°	46.3
55°	27.1
57.5°	14.7
60°	6.8
62.5°	3.4
65°	1.1
67.5°	1.1
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)