

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: P123668

Luminaire Tested: **EL406940-TL410SBK**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123668
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13975)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406940-TL410SBK
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
SPECULAR BLACK REFLECTOR, DIFFUSE DROP LENS AND WHITE TRIM RING
Light Source: (1)SURFACE MOUNT LED, 4000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

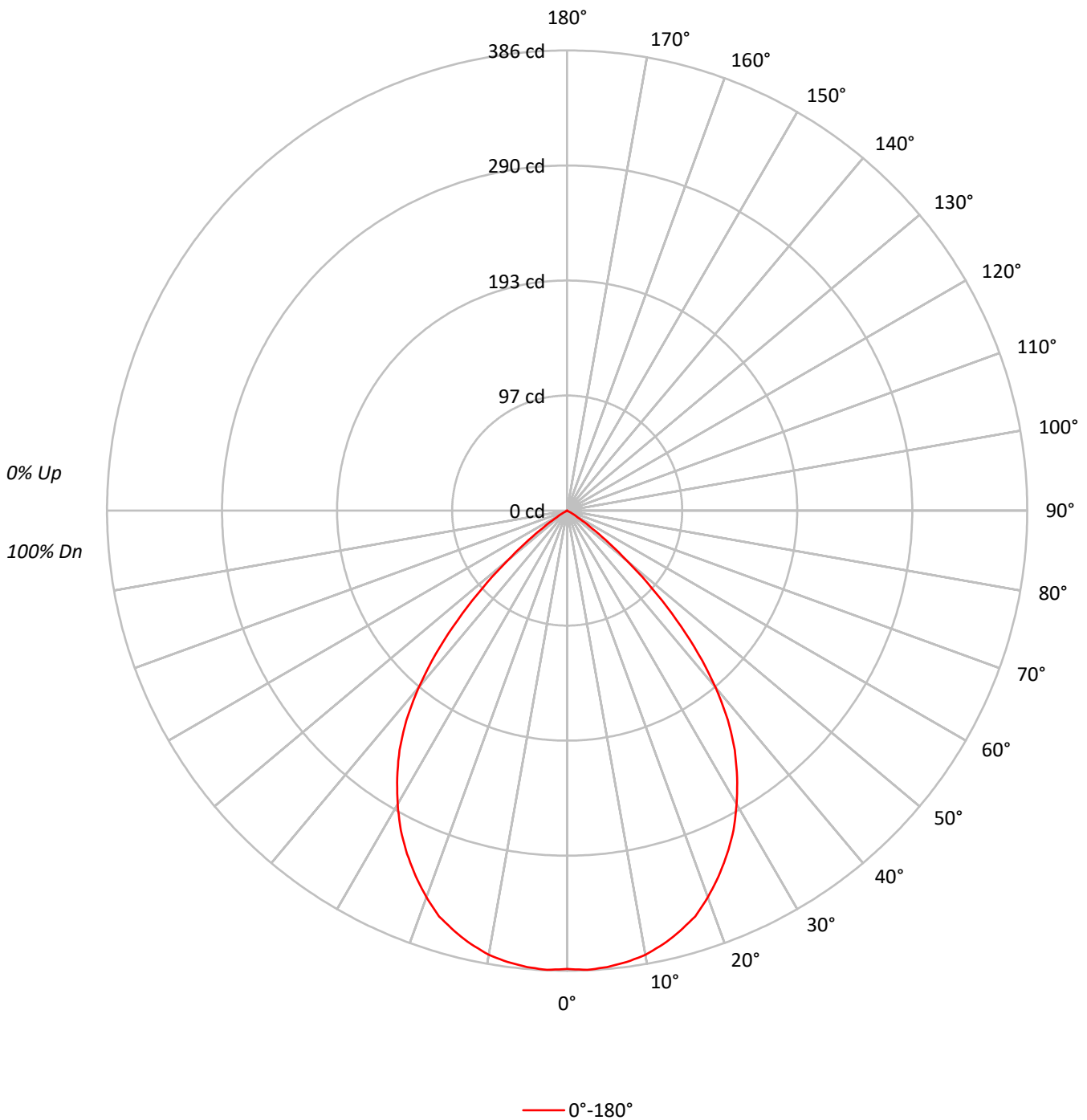
Lumens per Lamp: N/A
Luminaire Lumens: 560.0 lumens
Efficiency: N/A
Efficacy: 43.1 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.15
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

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	107	104	110	107	105	103	103	101	100		100	98	97		96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89		92	90	87		90	87	85	84
3	100	92	87	82	98	91	86	81	88	84	80		86	82	79		83	80	77	76
4	93	85	78	74	92	84	78	73	81	76	72		79	75	71		77	74	70	69
5	88	78	71	66	86	77	71	66	75	70	65		73	69	65		72	68	64	62
6	82	72	65	60	81	71	65	60	70	64	59		68	63	59		67	62	59	57
7	77	67	60	55	76	66	59	55	64	59	54		63	58	54		62	57	54	52
8	73	62	55	50	71	61	55	50	60	54	50		59	54	50		58	53	49	48
9	69	57	51	46	67	57	50	46	56	50	46		55	50	46		54	49	46	44
10	65	54	47	43	64	53	47	43	52	46	42		51	46	42		51	46	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	61928
5°	62165
10°	61902
15°	60927
20°	59165
25°	56474
30°	52906
35°	48204
40°	40799
45°	29550
50°	16416
55°	6348
60°	1160
65°	0
70°	0
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.5	6.5
10°-20°	102.8	18.3
20°-30°	145.8	26.0
30°-40°	151.4	27.0
40°-50°	99.1	17.7
50°-60°	23.8	4.2
60°-70°	0.7	0.1
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°	285.0	50.9
0°-40°	436.4	77.9
0°-60°	559.3	99.9
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°	384	
5°	384	36
15°	365	103
25°	318	146
35°	245	151
45°	130	99
55°	23	24
65°	0	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	384.4
2.5°	385.6
5°	384.4
7.5°	382.0
10°	378.4
12.5°	372.5
15°	365.3
17.5°	357.0
20°	345.1
22.5°	332.0
25°	317.7
27.5°	302.3
30°	284.4
32.5°	265.4
35°	245.1
37.5°	221.3
40°	194.0
42.5°	163.0
45°	129.7
47.5°	96.4
50°	65.5
52.5°	40.5
55°	22.6
57.5°	10.7
60°	3.6
62.5°	1.2
65°	0.0
67.5°	0.0
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)