

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: P123688

Luminaire Tested: **EL406940-TL411BB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13980)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406940-TL411BB
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
BLACK BAFFLE, DIFFUSE DROP LENS AND WHITE TRIM RING
Light Source: (1)SURFACE MOUNT LED, 4000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

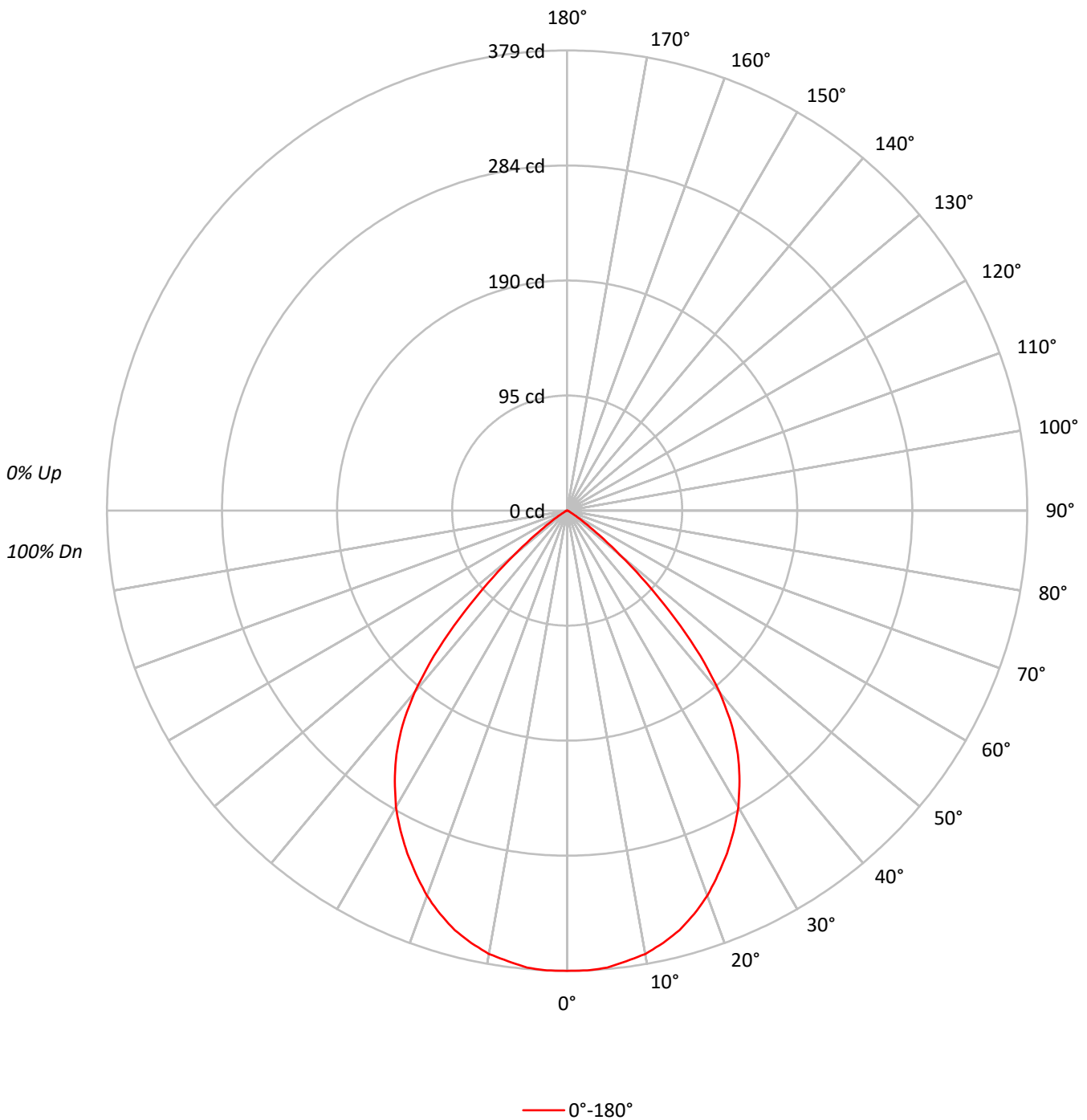
Lumens per Lamp: N/A
Luminaire Lumens: 550.1 lumens
Efficiency: N/A
Efficacy: 42.3 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.15
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	99	100	98	96	96	95	94	92
2	106	100	96	92	104	99	95	91	95	92	89	92	90	87	90	87	85	83
3	100	92	86	82	97	91	85	81	88	84	80	86	82	79	83	80	77	76
4	93	85	78	73	91	84	78	73	81	76	72	79	75	71	77	73	70	69
5	88	78	71	66	86	77	71	66	75	70	65	73	69	65	72	67	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°	83129
5°	83183
10°	82564
15°	81204
20°	78780
25°	75367
30°	71378
35°	65638
40°	55933
45°	38950
50°	19411
55°	6805
60°	2061
65°	1245
70°	769
75°	1017
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.8	6.5
10°-20°	100.5	18.3
20°-30°	143.1	26.0
30°-40°	151.4	27.5
40°-50°	95.9	17.4
50°-60°	20.0	3.6
60°-70°	2.2	0.4
70°-80°	1.1	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°	279.4	50.8
0°-40°	430.8	78.3
0°-60°	546.7	99.4
0°-90°	550.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	550.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	379	
5°	378	36
15°	358	101
25°	312	143
35°	245	151
45°	126	96
55°	18	20
65°	2	2
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	379.1
2.5°	379.1
5°	377.9
7.5°	374.3
10°	370.8
12.5°	364.8
15°	357.7
17.5°	348.3
20°	337.6
22.5°	324.6
25°	311.5
27.5°	297.3
30°	281.9
32.5°	264.2
35°	245.2
37.5°	222.7
40°	195.4
42.5°	162.3
45°	125.6
47.5°	88.8
50°	56.9
52.5°	33.2
55°	17.8
57.5°	9.5
60°	4.7
62.5°	2.4
65°	2.4
67.5°	1.2
70°	1.2
72.5°	1.2
75°	1.2
77.5°	1.2
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)