

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: P123685

Luminaire Tested: **EL406927-TL411BB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123685
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: EL406927-TL411BB
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
BLACK BAFFLE, DIFFUSE DROP LENS AND WHITE TRIM RING
Light Source: (1)SURFACE MOUNT LED, 2700K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

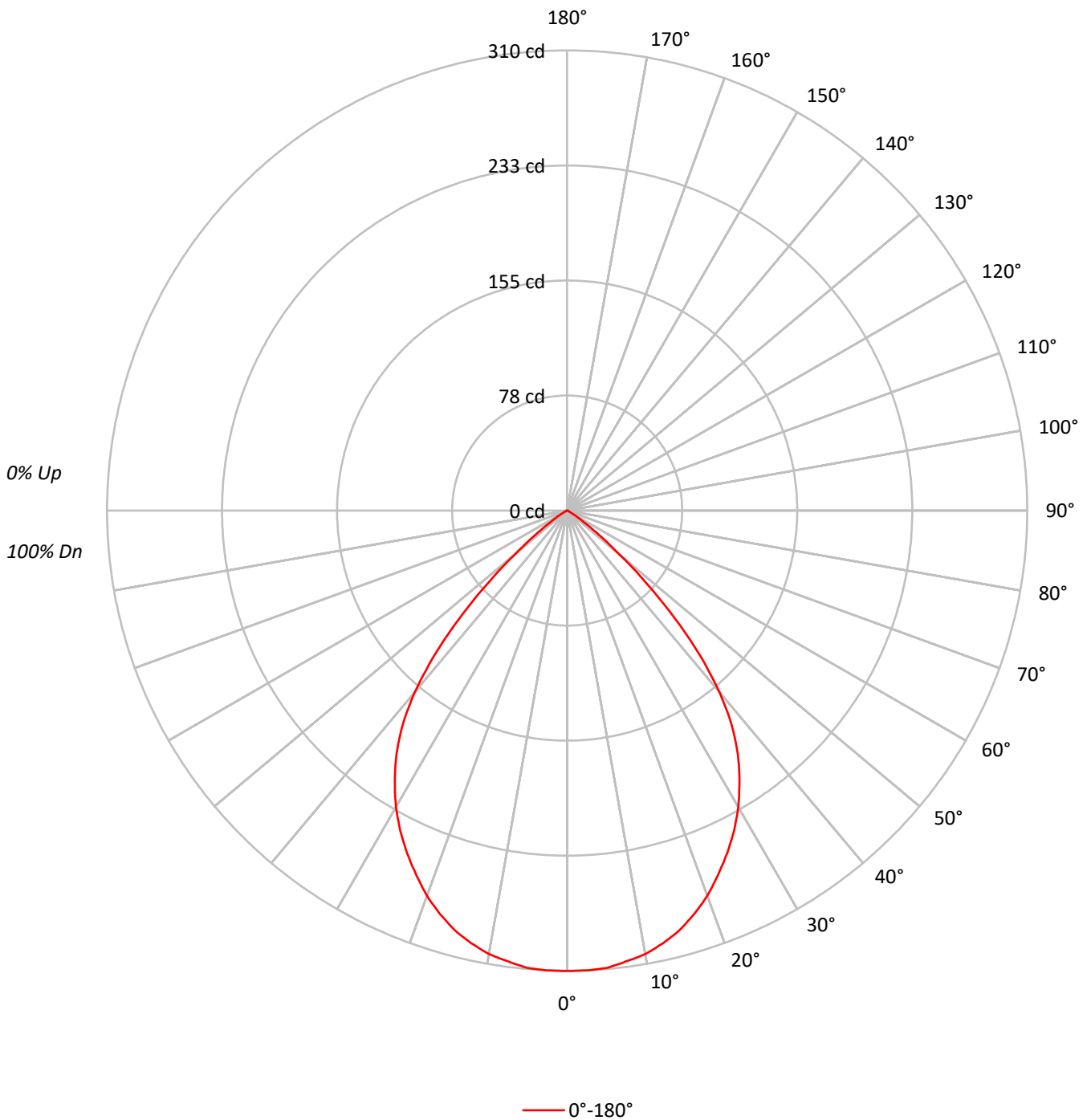
Lumens per Lamp: N/A
Luminaire Lumens: 450.0 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.15
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	67999
5°	68061
10°	67556
15°	66448
20°	64452
25°	61673
30°	58414
35°	53699
40°	45771
45°	31848
50°	15863
55°	5543
60°	1710
65°	986
70°	641
75°	847
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.3	6.5
10°-20°	82.2	18.3
20°-30°	117.1	26.0
30°-40°	123.9	27.5
40°-50°	78.4	17.4
50°-60°	16.4	3.6
60°-70°	1.8	0.4
70°-80°	0.9	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°	228.6	50.8
0°-40°	352.5	78.3
0°-60°	447.3	99.4
0°-90°	450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	450.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	310	
5°	309	29
15°	293	82
25°	255	117
35°	201	124
45°	103	78
55°	14	16
65°	2	2
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	310.1
2.5°	310.1
5°	309.2
7.5°	306.3
10°	303.4
12.5°	298.5
15°	292.7
17.5°	284.9
20°	276.2
22.5°	265.6
25°	254.9
27.5°	243.3
30°	230.7
32.5°	216.1
35°	200.6
37.5°	182.2
40°	159.9
42.5°	132.8
45°	102.7
47.5°	72.7
50°	46.5
52.5°	27.1
55°	14.5
57.5°	7.8
60°	3.9
62.5°	1.9
65°	1.9
67.5°	1.0
70°	1.0
72.5°	1.0
75°	1.0
77.5°	1.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)