

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: P300527

Luminaire Tested: **ML4D09_27D2WE - TIR50WFL55 - TL43R2GBCUBB - TL44S2GBCUBB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P300527
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1902-156-41)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML4D09_27D2WE - TIR50WFL55 - TL43R2GBCUBB - TL44S2GBCUBB
Description: ML4 2700K, 900LM DIM-TO-WARM, 55 DEG WFL OPTIC, WITH ROUND/SQUARE
DIFFUSED CLEAR LENS, BRUSHED COPPER FLANGE, BLACK LENS FRAME
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 502.0 lumens
Efficiency: N/A
Efficacy: 44.8 lumens/watt
Spacing Criteria (0/90/45): 0.72 / 0.72 / 0.73
Luminous Opening: Circular (Dia: 0.19' x H: 0')
CIE Type: Direct

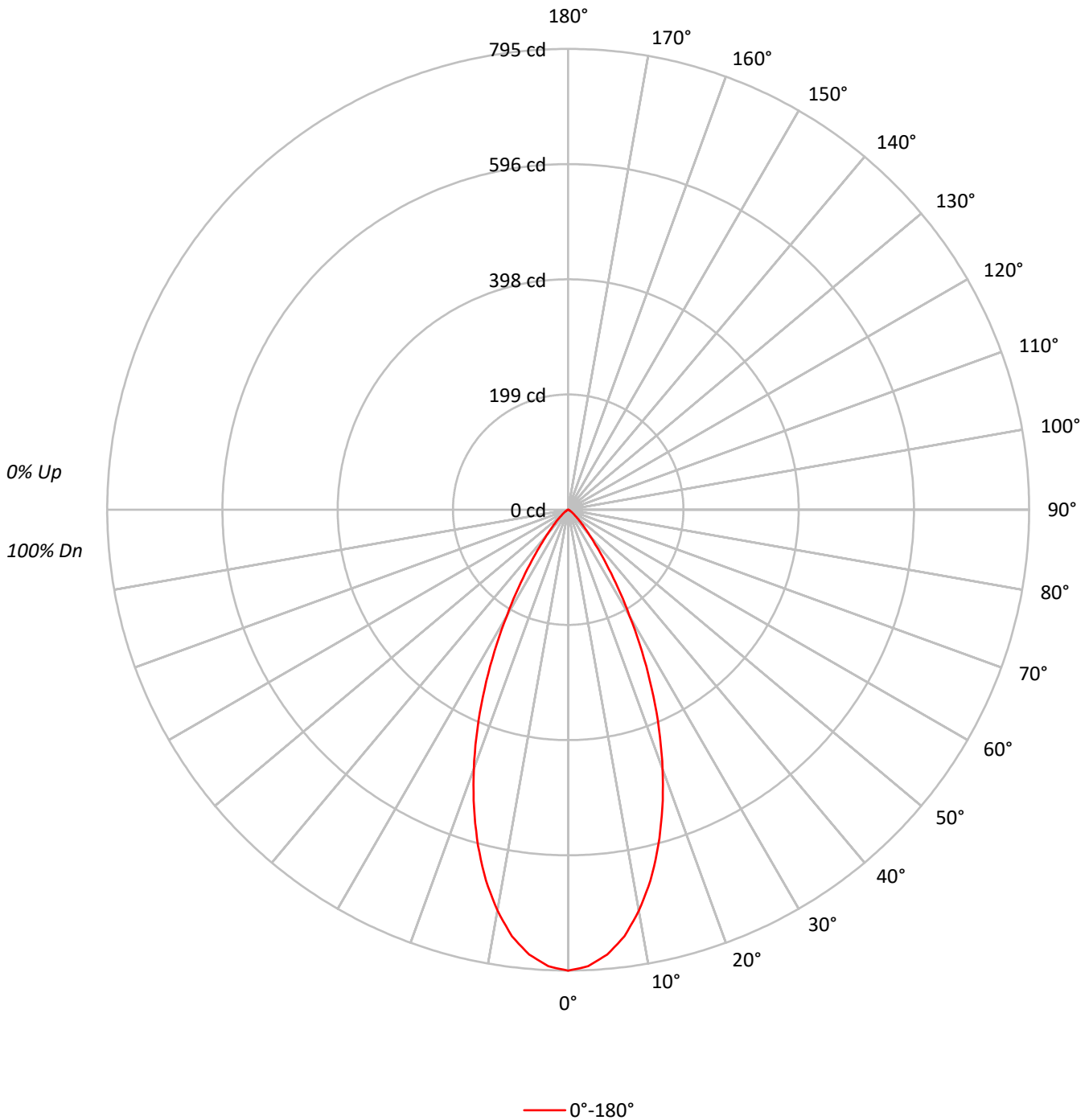
Input Watts (W): 11.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	102	96	92	88	93	90	87	91	88	85	89	86	84	83
4	99	92	86	82	97	90	86	82	88	84	81	86	83	80	85	82	79	78
5	94	86	81	77	93	85	80	76	84	79	76	82	78	75	80	77	74	73
6	90	81	76	72	88	81	75	72	79	75	71	78	74	71	77	73	70	69
7	86	77	71	67	85	76	71	67	75	70	67	74	70	67	73	69	66	65
8	82	73	67	64	81	73	67	64	71	67	63	70	66	63	70	66	63	61
9	79	69	64	60	77	69	64	60	68	63	60	67	63	60	66	62	60	58
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	63	59	57	55

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	310034
5°	301435
10°	278003
15°	242231
20°	197552
25°	146718
30°	95475
35°	54728
40°	29516
45°	15988
50°	9097
55°	5437
60°	3119
65°	1845
70°	1140
75°	1506
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.4	14.2
10°-20°	165.7	33.0
20°-30°	154.9	30.9
30°-40°	75.1	15.0
40°-50°	24.2	4.8
50°-60°	7.6	1.5
60°-70°	2.3	0.5
70°-80°	0.7	0.1
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°	392.0	78.1
0°-40°	467.1	93.1
0°-60°	499.0	99.4
0°-90°	502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	502.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	795	
5°	770	71
15°	600	166
25°	341	155
35°	115	75
45°	29	24
55°	8	8
65°	2	2
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	795.3
2.5°	788.3
5°	770.3
7.5°	742.3
10°	702.3
12.5°	655.3
15°	600.2
17.5°	540.2
20°	476.2
22.5°	409.2
25°	341.1
27.5°	275.1
30°	212.1
32.5°	159.1
35°	115.0
37.5°	81.0
40°	58.0
42.5°	41.0
45°	29.0
47.5°	21.0
50°	15.0
52.5°	11.0
55°	8.0
57.5°	6.0
60°	4.0
62.5°	3.0
65°	2.0
67.5°	2.0
70°	1.0
72.5°	1.0
75°	1.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)