

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: P275340

Luminaire Tested: **ML4D09_927 - TIR45FL40 - TL41RMW - TL42SMW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P275340
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-901-9)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML4D09_927 - TIR45FL40 - TL41RMW - TL42SMW
Description: ML4 900LM 2700K, 90CRI, 40° FL OPTIC, WITH ROUND PINHOLE MATTE WHITE FLANGE
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1076.0 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 0.65 / 0.62
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

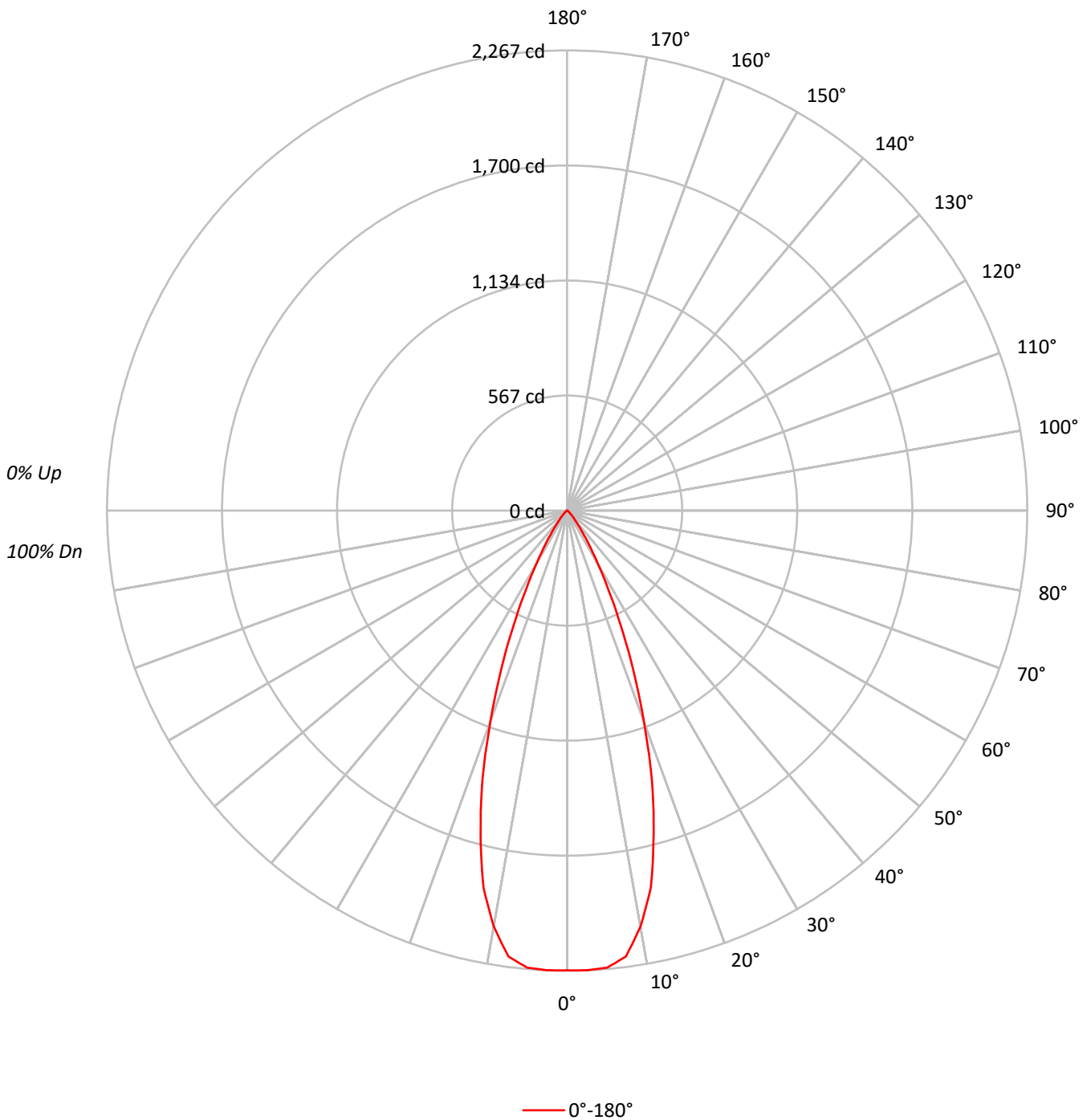
Input Watts (W): 11.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90
3	105	100	96	92	103	99	95	92	96	93	90	94	91	89	91	89	87	86
4	101	95	90	87	99	94	89	86	92	88	85	90	87	84	88	85	83	82
5	97	90	85	82	96	89	85	81	88	84	81	86	83	80	85	82	79	78
6	93	86	81	77	92	85	81	77	84	80	77	83	79	76	81	78	76	74
7	90	82	77	74	89	82	77	73	80	76	73	79	76	73	78	75	72	71
8	87	79	74	70	86	78	73	70	77	73	70	76	72	70	75	72	69	68
9	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	66	65
10	81	72	68	64	80	72	67	64	71	67	64	71	67	64	70	66	64	63

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1117406
5°	1119198
10°	1042411
15°	841568
20°	579333
25°	337627
30°	170399
35°	80107
40°	38000
45°	19537
50°	9978
55°	6021
60°	3947
65°	2335
70°	2885
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.5	19.6
10°-20°	448.3	41.7
20°-30°	291.7	27.1
30°-40°	92.0	8.5
40°-50°	23.7	2.2
50°-60°	6.8	0.6
60°-70°	2.5	0.2
70°-80°	0.5	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°	950.5	88.3
0°-40°	1042.5	96.9
0°-60°	1073.0	99.7
0°-90°	1076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1076.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2265	
5°	2260	211
15°	1648	448
25°	620	292
35°	133	92
45°	28	24
55°	7	7
65°	2	2
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2264.8
2.5°	2266.8
5°	2259.8
7.5°	2215.8
10°	2080.7
12.5°	1902.7
15°	1647.6
17.5°	1386.5
20°	1103.4
22.5°	851.3
25°	620.2
27.5°	443.2
30°	299.1
32.5°	203.1
35°	133.0
37.5°	89.0
40°	59.0
42.5°	41.0
45°	28.0
47.5°	20.0
50°	13.0
52.5°	10.0
55°	7.0
57.5°	5.0
60°	4.0
62.5°	3.0
65°	2.0
67.5°	2.0
70°	2.0
72.5°	1.0
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)