

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: P275363

Luminaire Tested: **ML4D09_940 - TIR45WFL55 - TL41RMW - TL42SMW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P275363
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-901-14)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML4D09_940 - TIR45WFL55 - TL41RMW - TL42SMW
Description: ML4 900LM 2700K, 90CRI, 55° WFL OPTIC, WITH ROUND PINHOLE MATTE WHITE FLANGE
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1145.8 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.86
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

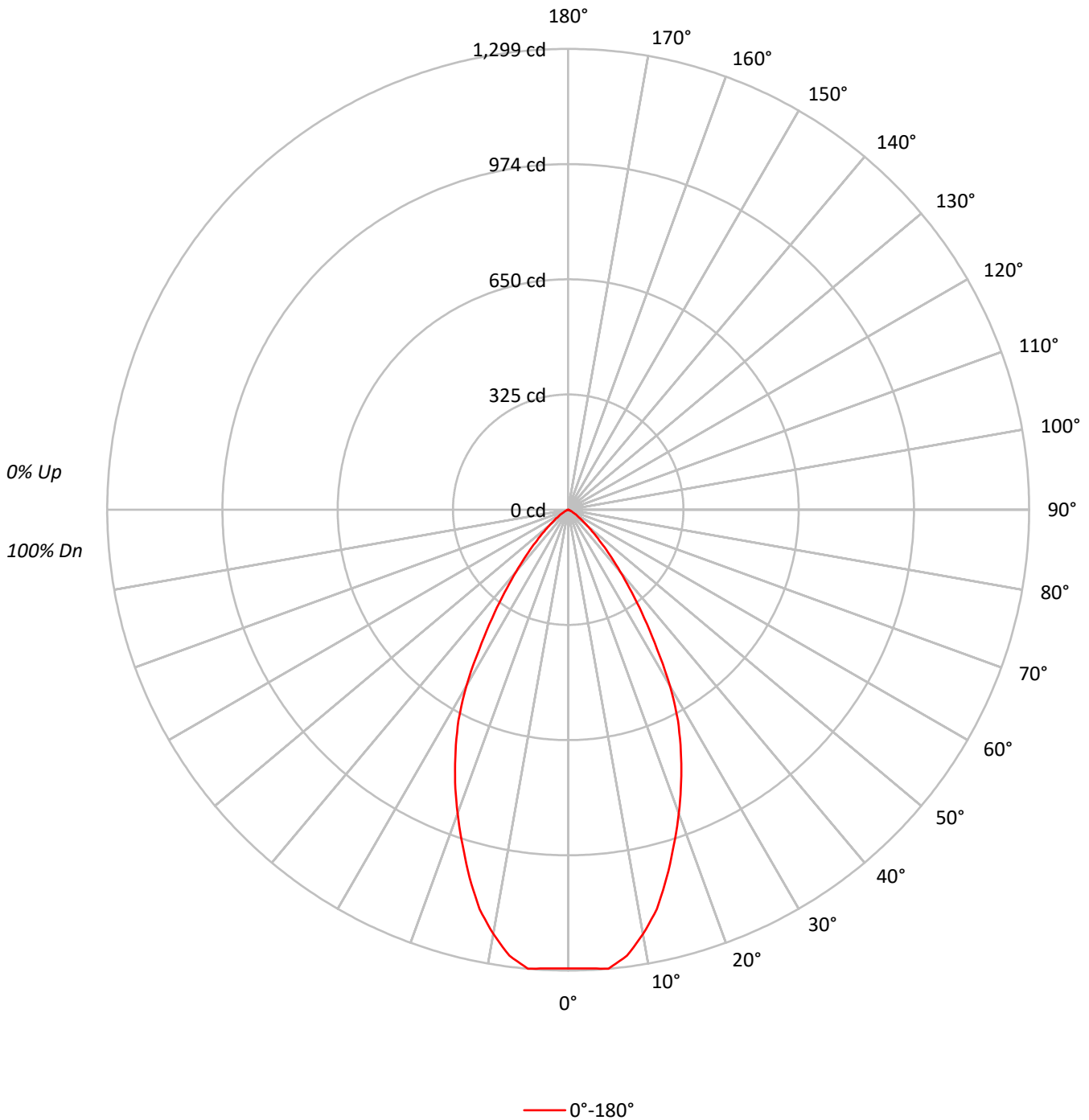
Input Watts (W): 11.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	83	81	79
4	96	88	83	78	94	87	82	78	85	81	77	83	79	76	81	78	75	74
5	91	83	76	72	90	82	76	72	80	75	71	78	74	70	76	73	70	68
6	86	77	71	67	85	76	71	66	75	70	66	73	69	65	72	68	65	63
7	82	72	66	62	81	72	66	62	70	65	61	69	64	61	68	64	61	59
8	78	68	62	58	77	67	62	57	66	61	57	65	60	57	64	60	57	55
9	74	64	58	54	73	64	58	54	63	57	54	62	57	53	61	56	53	52
10	70	61	55	51	69	60	54	50	59	54	50	58	54	50	58	53	50	49

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	637940
5°	643200
10°	608453
15°	548225
20°	478682
25°	408941
30°	326840
35°	224841
40°	146588
45°	90567
50°	54190
55°	30364
60°	16874
65°	7939
70°	3318
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	10.6
10°-20°	298.8	26.1
20°-30°	342.1	29.9
30°-40°	236.9	20.7
40°-50°	104.6	9.1
50°-60°	34.1	3.0
60°-70°	7.7	0.7
70°-80°	0.6	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°	761.9	66.5
0°-40°	998.8	87.2
0°-60°	1137.5	99.3
0°-90°	1145.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1145.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1293	
5°	1299	121
15°	1073	299
25°	751	342
35°	373	237
45°	130	105
55°	35	34
65°	7	8
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1293.0
2.5°	1294.1
5°	1298.7
7.5°	1268.0
10°	1214.5
12.5°	1153.0
15°	1073.3
17.5°	990.2
20°	911.7
22.5°	832.0
25°	751.2
27.5°	669.3
30°	573.7
32.5°	466.7
35°	373.3
37.5°	294.8
40°	227.6
42.5°	174.1
45°	129.8
47.5°	95.6
50°	70.6
52.5°	50.1
55°	35.3
57.5°	25.0
60°	17.1
62.5°	10.2
65°	6.8
67.5°	4.6
70°	2.3
72.5°	1.1
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)