

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: P275361

Luminaire Tested: **ML4D09_930 - TIR45WFL55 - TL41RMW - TL42SMW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P275361
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_930 - TIR45WFL55 - TL41RMW - TL42SMW
Description: ML4 900LM 2700K, 90CRI, 55° WFL OPTIC, WITH ROUND PINHOLE MATTE WHITE FLANGE
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1079.6 lumens
Efficiency: N/A
Efficacy: 95.5 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

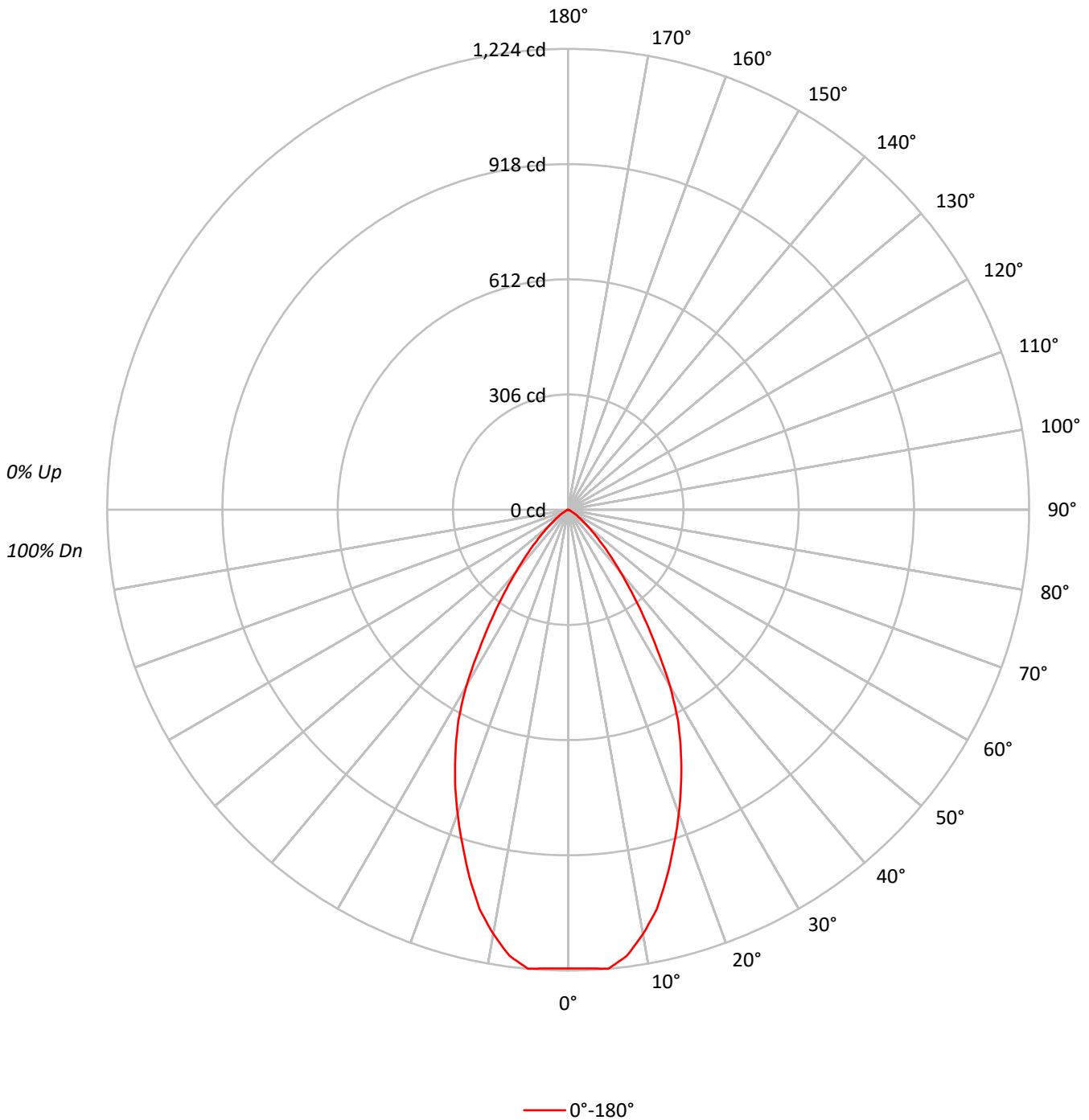
Input Watts (W): 11.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	601084
5°	606055
10°	573284
15°	516556
20°	451065
25°	385315
30°	307926
35°	211891
40°	138151
45°	85334
50°	51043
55°	28558
60°	15887
65°	7472
70°	3029
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.0	10.6
10°-20°	281.5	26.1
20°-30°	322.3	29.9
30°-40°	223.2	20.7
40°-50°	98.5	9.1
50°-60°	32.2	3.0
60°-70°	7.2	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°	717.9	66.5
0°-40°	941.1	87.2
0°-60°	1071.8	99.3
0°-90°	1079.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1079.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1218	
5°	1224	114
15°	1011	282
25°	708	322
35°	352	223
45°	122	99
55°	33	32
65°	6	7
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1218.3
2.5°	1219.4
5°	1223.7
7.5°	1194.7
10°	1144.3
12.5°	1086.4
15°	1011.3
17.5°	933.1
20°	859.1
22.5°	784.0
25°	707.8
27.5°	630.6
30°	540.5
32.5°	439.7
35°	351.8
37.5°	277.8
40°	214.5
42.5°	164.1
45°	122.3
47.5°	90.1
50°	66.5
52.5°	47.2
55°	33.2
57.5°	23.6
60°	16.1
62.5°	9.7
65°	6.4
67.5°	4.3
70°	2.1
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)