

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: P300522

Luminaire Tested: **ML4D09_27D2WE - TIR50WFL55 - TL43R2GMWWB - TL44S2GMWWB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P300522
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1902-156-36)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML4D09_27D2WE - TIR50WFL55 - TL43R2GMWWB - TL44S2GMWWB
Description: ML4 2700K, 900LM DIM-TO-WARM, 55 DEG WFL OPTIC, WITH ROUND/SQUARE
DIFFUSED CLEAR LENS, MATTE WHITE FLANGE, WHITE LENS FRAME
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 512.0 lumens
Efficiency: N/A
Efficacy: 45.7 lumens/watt
Spacing Criteria (0/90/45): 0.73 / 0.73 / 0.73
Luminous Opening: Circular (Dia: 0.19' x H: 0')
CIE Type: Direct

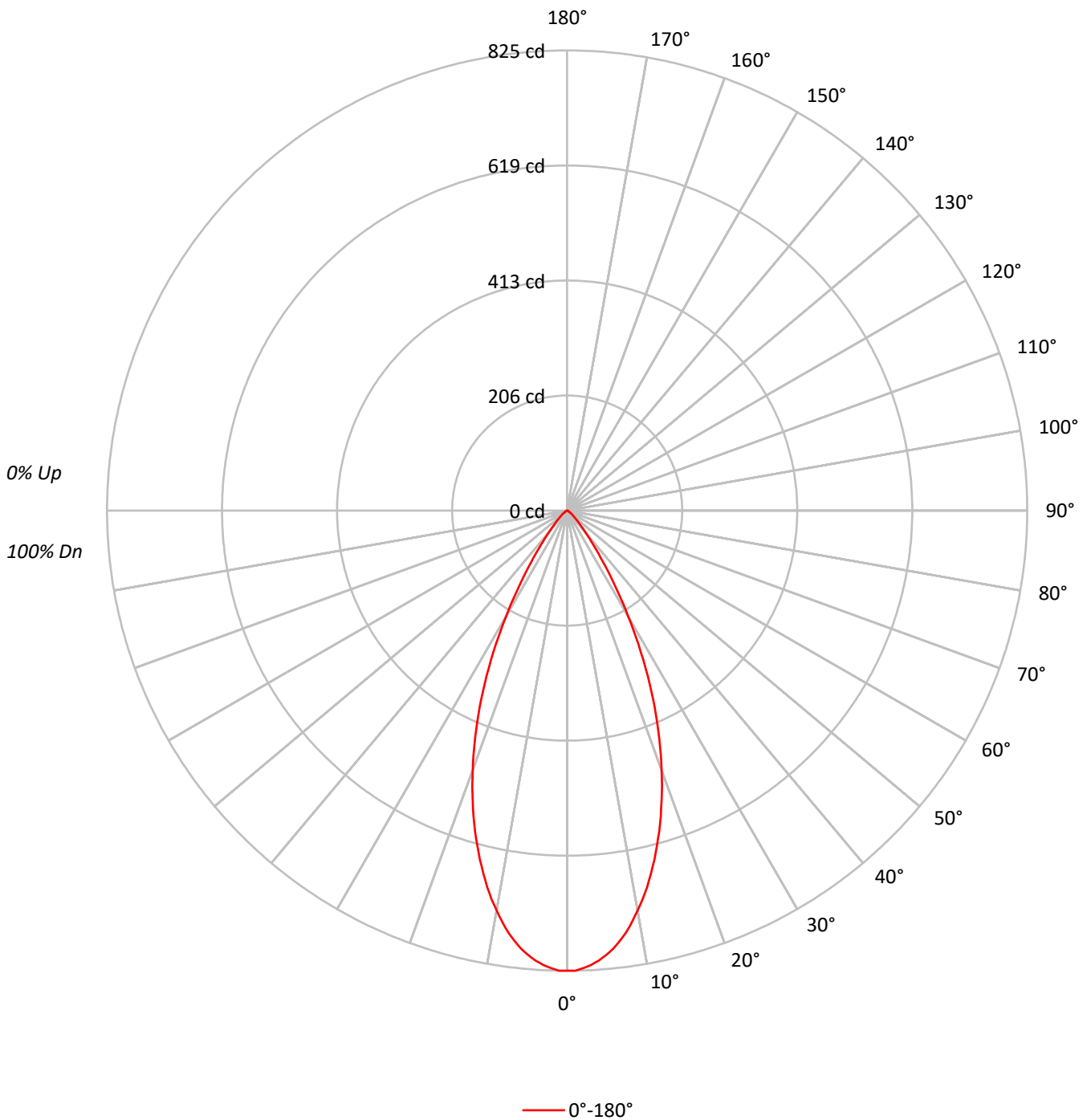
Input Watts (W): 11.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90	88
3	104	98	93	89	102	96	92	89	94	90	87		91	88	86		89	87	84	83
4	99	92	87	83	97	91	86	82	89	85	81		87	83	80		85	82	79	78
5	94	87	81	77	93	86	81	77	84	80	76		82	78	75		81	77	75	73
6	90	82	76	72	89	81	76	72	80	75	72		78	74	71		77	73	71	69
7	86	78	72	68	85	77	72	68	76	71	68		75	70	67		73	70	67	66
8	82	74	68	64	81	73	68	64	72	67	64		71	67	64		70	66	63	62
9	79	70	65	61	78	70	64	61	69	64	61		68	63	60		67	63	60	59
10	76	67	61	58	75	66	61	58	66	61	58		65	60	57		64	60	57	56

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	321573
5°	313018
10°	288097
15°	250908
20°	205559
25°	153729
30°	98671
35°	52872
40°	26004
45°	13783
50°	7884
55°	4758
60°	3119
65°	1845
70°	1140
75°	1506
80°	2245
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	14.5
10°-20°	171.9	33.6
20°-30°	161.4	31.5
30°-40°	73.4	14.3
40°-50°	20.9	4.1
50°-60°	6.8	1.3
60°-70°	2.3	0.5
70°-80°	1.1	0.2
80°-90°	0.1	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°	407.4	79.6
0°-40°	480.8	93.9
0°-60°	508.4	99.3
0°-90°	512.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	512.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	825	
5°	800	74
15°	622	172
25°	357	161
35°	111	73
45°	25	21
55°	7	7
65°	2	2
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	824.9
1°	824.9
2°	820.9
3°	815.9
4°	808.9
5°	799.9
6°	789.9
7°	776.9
8°	762.8
9°	745.8
10°	727.8
11°	709.8
12°	689.8
13°	667.7
14°	645.7
15°	621.7
16°	598.7
17°	573.6
18°	547.6
19°	522.6
20°	495.5
21°	468.5
22°	440.5
23°	413.5
24°	385.4
25°	357.4
27.5°	286.3
30°	219.2
32.5°	159.2
35°	111.1
37.5°	75.1
40°	51.1
42.5°	35.0
45°	25.0
47.5°	18.0
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°	1.0
72.5°	1.0



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CANDELA DISTRIBUTION (continued):

	0°
75°	1.0
77.5°	1.0
80°	1.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)