

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: P364408

Luminaire Tested: **HLA305FL9301EMW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P364408  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1909-486-13)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HLA305FL9301EMW  
Description: 3IN HLA LED WITH 3000K LEDS

Light Source: -  
Ballast/Driver: -

**Summary**

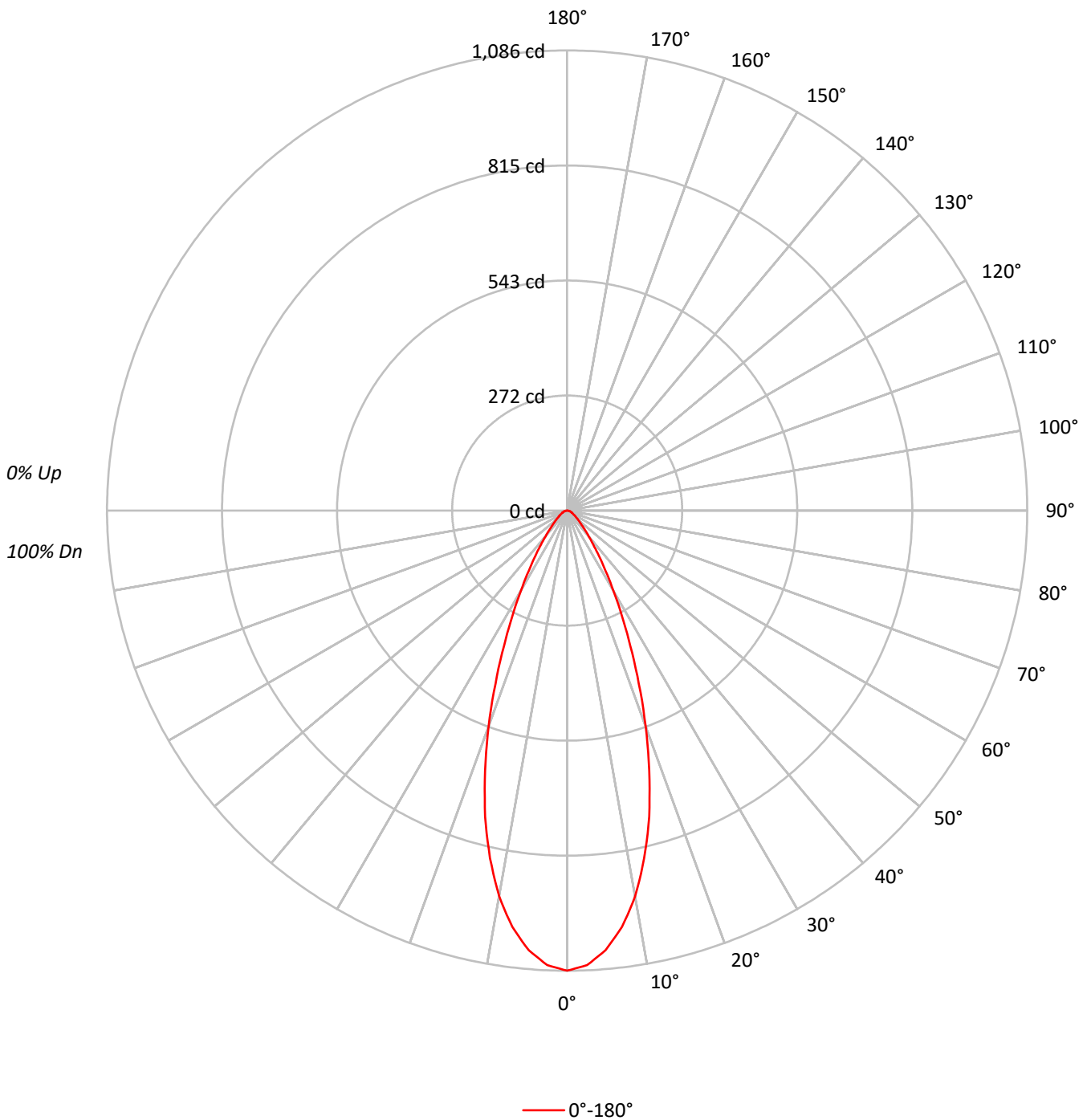
Lumens per Lamp: N/A  
Luminaire Lumens: 631.7 lumens  
Efficiency: N/A  
Efficacy: 73.5 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.65  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 8.6  
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	105	111	108	106	104	104	102	101		100	99	98		97	96	95	93
2	108	103	98	95	105	101	97	94	98	94	92		95	92	90		92	90	88	86
3	102	96	91	87	100	94	90	86	92	88	84		89	86	83		87	84	82	80
4	97	90	84	80	95	88	83	79	86	82	78		84	80	77		82	79	77	75
5	92	84	78	74	91	83	78	74	81	77	73		80	76	72		78	75	72	70
6	88	79	73	69	87	79	73	69	77	72	69		76	71	68		74	71	68	66
7	84	75	69	65	83	74	69	65	73	68	65		72	68	64		71	67	64	63
8	80	71	65	61	79	71	65	61	70	65	61		69	64	61		68	64	60	59
9	77	68	62	58	76	67	62	58	66	61	58		65	61	58		65	60	57	56
10	74	65	59	55	73	64	59	55	63	58	55		63	58	55		62	58	55	53

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	535643
5°	515650
10°	463149
15°	381797
20°	283986
25°	191616
30°	123907
35°	78598
40°	50943
45°	34467
50°	25789
55°	20386
60°	16577
65°	15059
70°	12838
75°	13153
80°	11365
85°	11321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.7	15.1
10°-20°	204.5	32.4
20°-30°	163.6	25.9
30°-40°	84.5	13.4
40°-50°	39.9	6.3
50°-60°	21.7	3.4
60°-70°	12.7	2.0
70°-80°	7.2	1.1
80°-90°	1.9	0.3
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°	463.8	73.4
0°-40°	548.3	86.8
0°-60°	609.9	96.6
0°-90°	631.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	631.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1086	
5°	1041	96
15°	748	204
25°	352	164
35°	130	85
45°	49	40
55°	24	22
65°	13	13
75°	7	7
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1085.7
2.5°	1073.9
5°	1041.2
7.5°	990.8
10°	924.5
12.5°	840.5
15°	747.5
17.5°	643.7
20°	540.9
22.5°	442.0
25°	352.0
27.5°	278.8
30°	217.5
32.5°	169.1
35°	130.5
37.5°	100.9
40°	79.1
42.5°	62.3
45°	49.4
47.5°	40.5
50°	33.6
52.5°	27.7
55°	23.7
57.5°	20.8
60°	16.8
62.5°	14.8
65°	12.9
67.5°	10.9
70°	8.9
72.5°	7.9
75°	6.9
77.5°	5.9
80°	4.0
82.5°	3.0
85°	2.0
87.5°	0.0
90°	0.0

(END OF REPORT)