

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: P189770

Luminaire Tested: **ML5609D2W- 592SC**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P189770  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27307)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML5609D2W- 592SC  
Description: 5" D2W DIMMED TO 3000K, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 970.1 lumens  
Efficiency: N/A  
Efficacy: 76.4 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.08  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

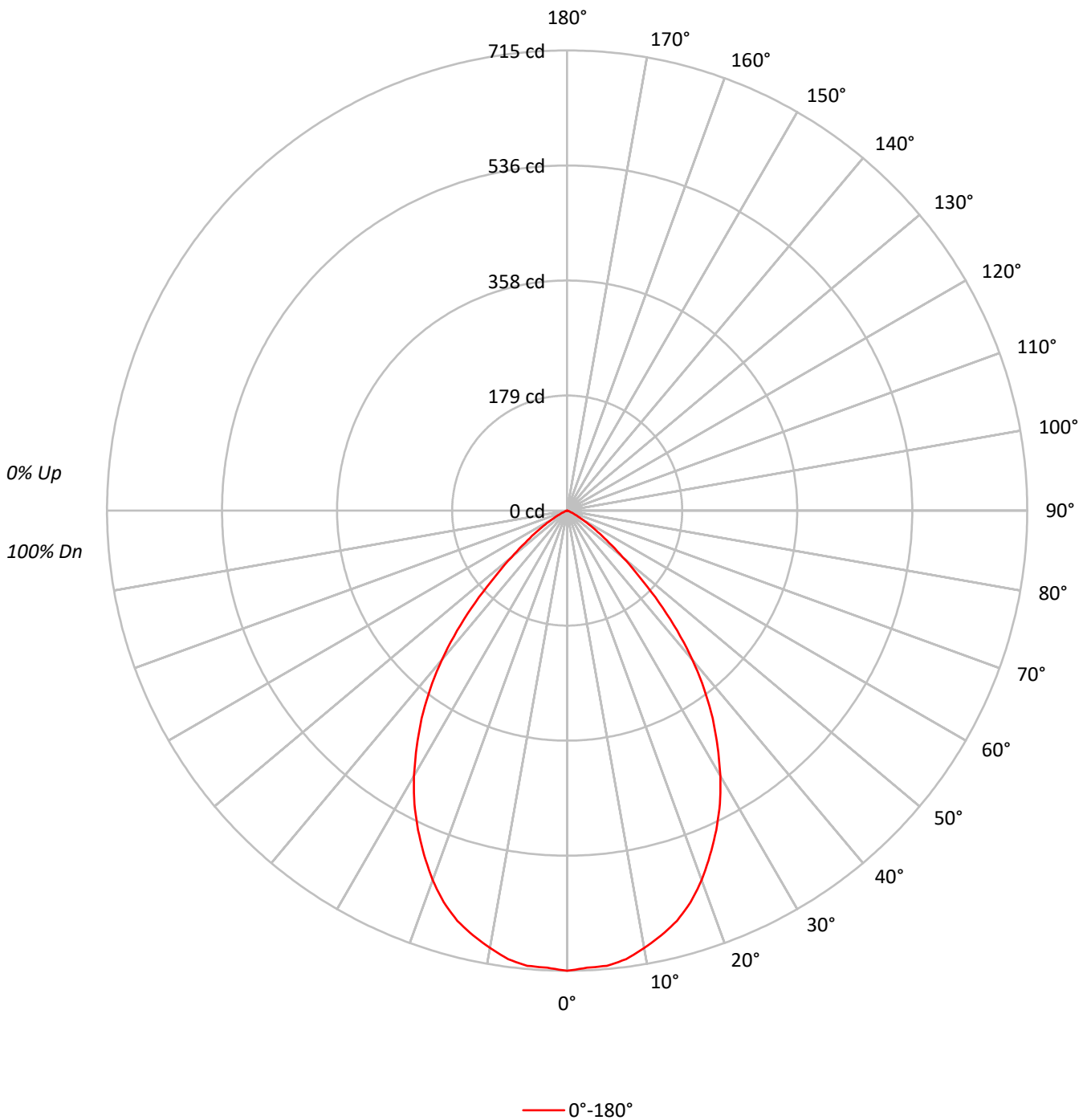
Input Watts (W): 12.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	107	104	110	107	105	102	103	101	99		99	98	96		96	95	94	92
2	106	100	96	92	104	99	94	91	95	92	89		92	89	87		89	87	85	83
3	99	92	86	82	97	90	85	81	88	83	80		85	81	78		83	80	77	75
4	93	84	78	73	91	83	77	73	81	76	72		79	74	71		77	73	70	68
5	87	78	71	66	86	77	70	66	75	69	65		73	68	64		71	67	64	62
6	82	72	65	60	80	71	64	60	69	64	59		68	63	59		66	62	58	57
7	77	66	60	55	76	66	59	54	64	58	54		63	58	54		62	57	54	52
8	73	62	55	50	71	61	55	50	60	54	50		59	53	50		58	53	49	48
9	69	58	51	46	67	57	51	46	56	50	46		55	50	46		54	49	46	44
10	65	54	47	43	64	53	47	43	52	47	43		52	46	42		51	46	42	41

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

	0°
0°	56443
5°	56262
10°	55310
15°	53939
20°	51328
25°	47732
30°	43389
35°	37969
40°	31224
45°	22551
50°	13878
55°	7982
60°	4105
65°	1681
70°	462
75°	305
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.1	6.9
10°-20°	184.9	19.1
20°-30°	251.1	25.9
30°-40°	244.2	25.2
40°-50°	155.7	16.1
50°-60°	55.2	5.7
60°-70°	10.8	1.1
70°-80°	1.1	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°	503.1	51.9
0°-40°	747.3	77.0
0°-60°	958.3	98.8
0°-90°	970.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	970.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	715	
5°	710	67
15°	660	185
25°	548	251
35°	394	244
45°	202	156
55°	58	55
65°	9	11
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	715
2.5°	711
5°	710
7.5°	703
10°	690
12.5°	676
15°	660
17.5°	638
20°	611
22.5°	580
25°	548
27.5°	514
30°	476
32.5°	435
35°	394
37.5°	350
40°	303
42.5°	253
45°	202
47.5°	152
50°	113
52.5°	82
55°	58
57.5°	40
60°	26
62.5°	16
65°	9
67.5°	5
70°	2
72.5°	1
75°	1
77.5°	1
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)