

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: P284396

Luminaire Tested: **RSQ4089FS1EMWWB-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P284396  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1811-010-20)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: RSQ4089FS1EMWWB-2700K  
Description: HALO RSQ 4 INCH LED FIXTURE WITH MATT WHITE BAFFLE, SELECTABLE CCT, 90CRI, 2700K  
Light Source: (30) 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 830.0 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.24  
Luminous Opening: Rectangular (W 0.21' x L: 0.21' x H: 0')  
CIE Type: Direct

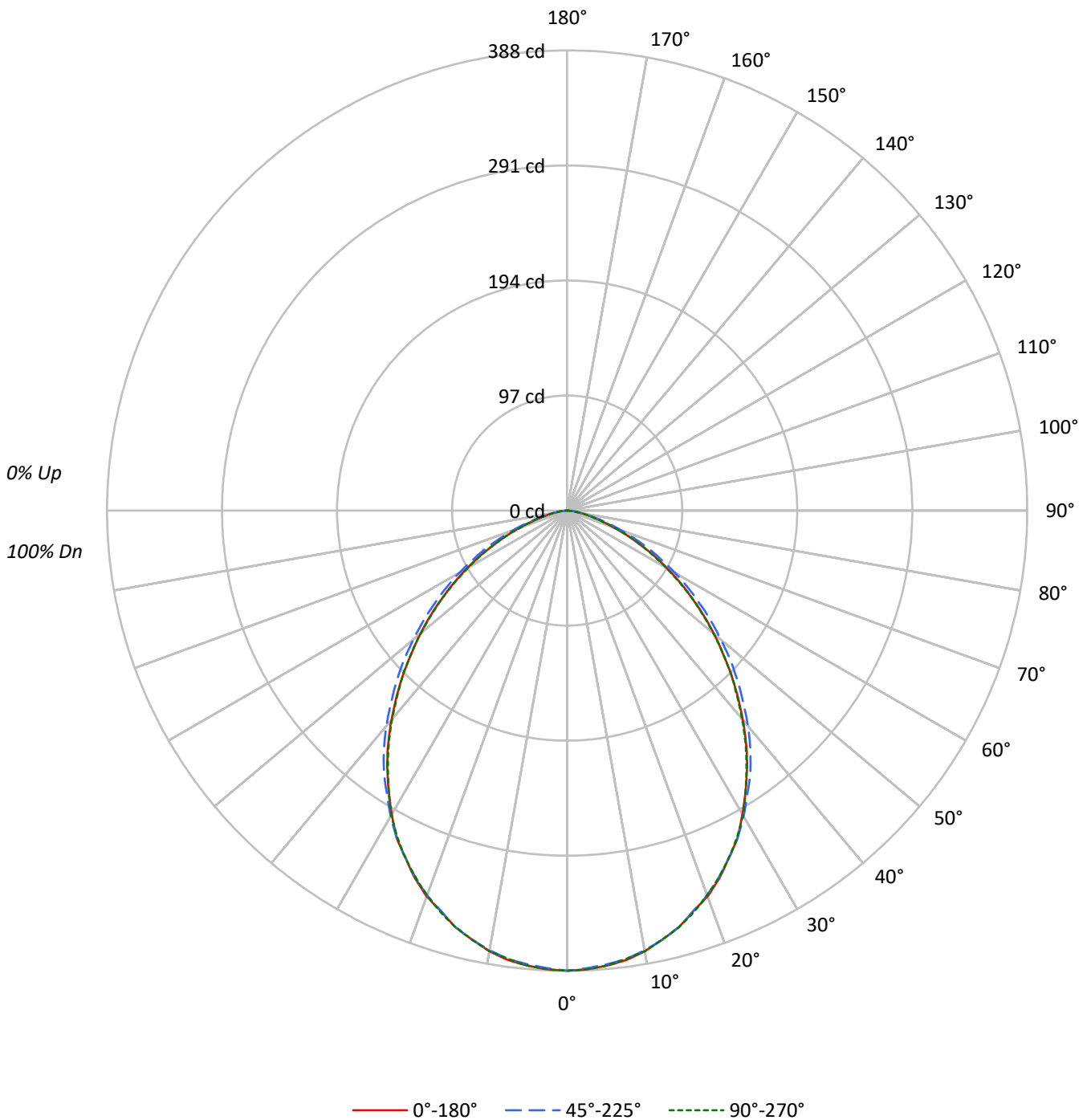
Input Watts (W): 9.55  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	35
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32
10	57	44	37	31	55	44	36	31	43	36	31	42	36	31	41	35	31	29

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

	0°	45°	90°
0°	96225	96225	96225
5°	95870	95621	95870
10°	95014	94788	95014
15°	93380	93380	93380
20°	91368	91104	91104
25°	88358	88358	88358
30°	84650	85223	84937
35°	80078	81562	79806
40°	74623	76824	74299
45°	68567	71303	68567
50°	62272	65281	62272
55°	55517	58890	55517
60°	48261	52080	47765
65°	39963	44540	39963
70°	31035	35240	31035
75°	22326	25201	22326
80°	15282	16710	16710
85°	11097	11097	11097



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.5	4.4
10°-20°	102.4	12.3
20°-30°	148.7	17.9
30°-40°	166.4	20.0
40°-50°	153.6	18.5
50°-60°	118.5	14.3
60°-70°	71.5	8.6
70°-80°	27.4	3.3
80°-90°	4.9	0.6
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°	287.6	34.6
0°-40°	454.0	54.7
0°-60°	726.1	87.5
0°-90°	830.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	830.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	388	388	388	388	388	
5°	385	386	384	385	385	37
15°	364	365	364	365	364	102
25°	323	324	323	324	323	149
35°	264	266	269	266	264	165
45°	196	198	203	199	196	151
55°	128	132	136	133	128	115
65°	68	72	76	72	68	68
75°	23	24	26	24	23	26
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	388.0	388.0	388.0	388.0	388.0
2.5°	387.1	388.0	386.1	387.1	387.1
5°	385.1	386.1	384.1	385.1	385.1
7.5°	382.2	382.2	381.2	382.2	381.2
10°	377.3	377.3	376.4	377.3	377.3
12.5°	370.5	371.5	370.5	371.5	370.5
15°	363.7	364.7	363.7	364.7	363.7
17.5°	354.0	355.0	354.0	355.0	355.0
20°	346.2	346.2	345.2	346.2	345.2
22.5°	335.5	334.5	334.5	335.5	334.5
25°	322.9	323.8	322.9	323.8	322.9
27.5°	311.2	311.2	311.2	311.2	310.2
30°	295.6	297.6	297.6	296.6	296.6
32.5°	280.1	283.0	283.0	283.0	280.1
35°	264.5	266.5	269.4	266.5	263.6
37.5°	248.0	249.9	253.8	249.9	247.0
40°	230.5	233.4	237.3	233.4	229.5
42.5°	213.0	215.9	219.8	216.9	212.0
45°	195.5	198.4	203.3	199.4	195.5
47.5°	178.0	181.9	186.7	181.9	178.0
50°	161.4	165.3	169.2	165.3	161.4
52.5°	144.9	148.8	152.7	148.8	143.9
55°	128.4	132.3	136.2	133.2	128.4
57.5°	112.8	116.7	120.6	116.7	111.8
60°	97.3	101.1	105.0	101.1	96.3
62.5°	82.7	86.6	89.5	86.6	81.7
65°	68.1	72.0	75.9	72.0	68.1
67.5°	54.5	58.4	61.3	58.4	54.5
70°	42.8	45.7	48.6	45.7	42.8
72.5°	32.1	34.0	37.0	34.0	32.1
75°	23.3	24.3	26.3	24.3	23.3
77.5°	16.5	16.5	17.5	16.5	16.5
80°	10.7	11.7	11.7	11.7	11.7
82.5°	6.8	6.8	6.8	6.8	6.8
85°	3.9	3.9	3.9	3.9	3.9
87.5°	1.9	1.9	1.0	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)