

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: P256520

Luminaire Tested: **RSQ4089271EMWWB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P256520  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1806-815-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: RSQ4089271EMWWB  
Description: HALO RSQ 4 INCH LED FIXTURE WITH MATT WHITE BAFFLE, 800LM, 90CRI, 2700K  
Light Source: (15) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 807.0 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.14 / 1.24  
Luminous Opening: Rectangular (W 0.21' x L: 0.21' x H: 0')  
CIE Type: Direct

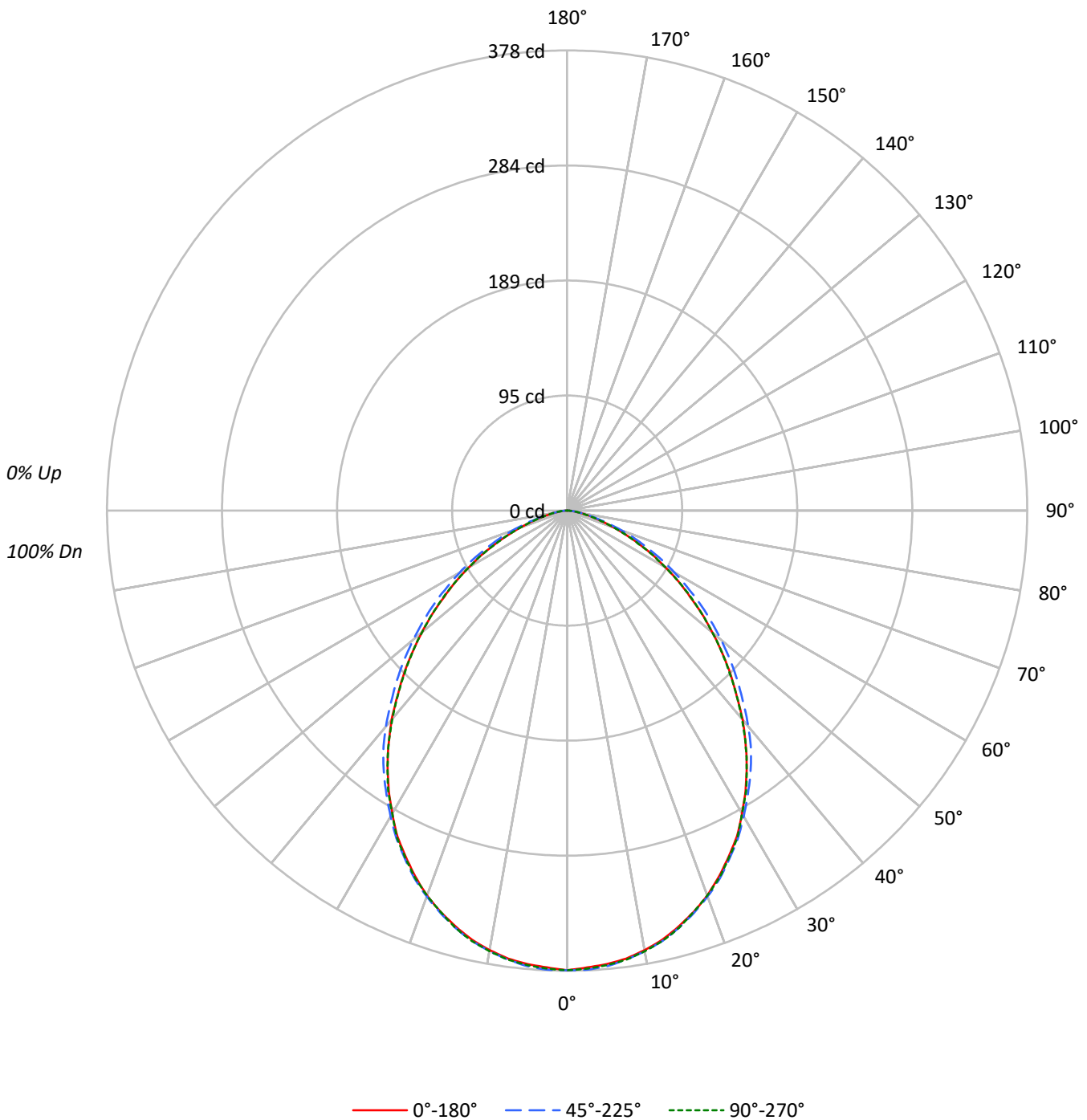
Input Watts (W): 9.17  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					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	59					57				
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					36				
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34					32				
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31					29				

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

	0°	45°	90°
0°	93645	93645	93645
5°	93082	93530	93306
10°	92320	92547	92547
15°	90838	91095	91095
20°	88808	89046	88808
25°	85841	86333	86087
30°	82273	83047	82273
35°	77868	79503	77868
40°	72616	74979	72324
45°	66533	69409	66217
50°	60150	63699	60150
55°	53226	57549	53615
60°	46128	50642	46128
65°	38554	42838	37967
70°	29729	34370	29729
75°	21847	24434	21847
80°	15567	15567	15567
85°	10244	10244	13089



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.5	4.4
10°-20°	99.7	12.4
20°-30°	144.7	17.9
30°-40°	162.0	20.1
40°-50°	149.2	18.5
50°-60°	114.9	14.2
60°-70°	69.2	8.6
70°-80°	26.6	3.3
80°-90°	5.1	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°	280.0	34.7
0°-40°	442.0	54.8
0°-60°	706.0	87.5
0°-90°	807.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	807.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	378	378	378	378	378	
5°	374	375	376	374	375	35
15°	354	355	355	354	355	100
25°	314	315	316	314	315	144
35°	257	260	263	258	257	160
45°	190	193	198	193	189	146
55°	123	130	133	128	124	111
65°	66	70	73	69	65	65
75°	23	24	26	24	23	25
85°	4	4	4	5	5	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	377.6	377.6	377.6	377.6	377.6
2.5°	375.7	376.6	377.6	375.7	376.6
5°	373.9	374.8	375.7	373.9	374.8
7.5°	371.2	372.1	372.1	370.3	372.1
10°	366.6	367.5	367.5	366.6	367.5
12.5°	361.1	361.1	362.1	360.2	362.1
15°	353.8	354.8	354.8	353.8	354.8
17.5°	345.6	346.5	346.5	345.6	345.6
20°	336.5	337.4	337.4	335.6	336.5
22.5°	325.6	326.5	327.4	325.6	326.5
25°	313.7	314.6	315.5	313.7	314.6
27.5°	301.9	302.8	303.7	301.9	302.8
30°	287.3	290.0	290.0	288.2	287.3
32.5°	272.7	275.4	276.3	274.5	273.6
35°	257.2	259.9	262.6	258.1	257.2
37.5°	240.8	243.5	248.1	242.6	240.8
40°	224.3	227.1	231.6	226.2	223.4
42.5°	206.1	210.7	214.3	209.8	206.1
45°	189.7	193.3	197.9	193.3	188.8
47.5°	172.4	176.9	181.5	176.0	172.4
50°	155.9	160.5	165.1	160.5	155.9
52.5°	139.5	145.0	148.7	144.1	139.5
55°	123.1	129.5	133.1	127.7	124.0
57.5°	108.5	113.1	116.7	113.1	108.5
60°	93.0	97.6	102.1	97.6	93.0
62.5°	79.3	83.9	87.5	83.9	79.3
65°	65.7	70.2	73.0	69.3	64.7
67.5°	52.9	56.5	60.2	56.5	52.9
70°	41.0	43.8	47.4	43.8	41.0
72.5°	31.0	32.8	35.6	32.8	31.0
75°	22.8	23.7	25.5	23.7	22.8
77.5°	15.5	16.4	17.3	16.4	15.5
80°	10.9	11.9	10.9	11.9	10.9
82.5°	6.4	7.3	7.3	7.3	7.3
85°	3.6	3.6	3.6	4.6	4.6
87.5°	1.8	1.8	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)