

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: P284400

Luminaire Tested: **RSQ4089FS1EMWWB-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P284400  
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-5000K  
Description: HALO RSQ 4 INCH LED FIXTURE WITH MATT WHITE BAFFLE, SELECTABLE CCT, 90CRI, 5000K  
Light Source: (30) 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

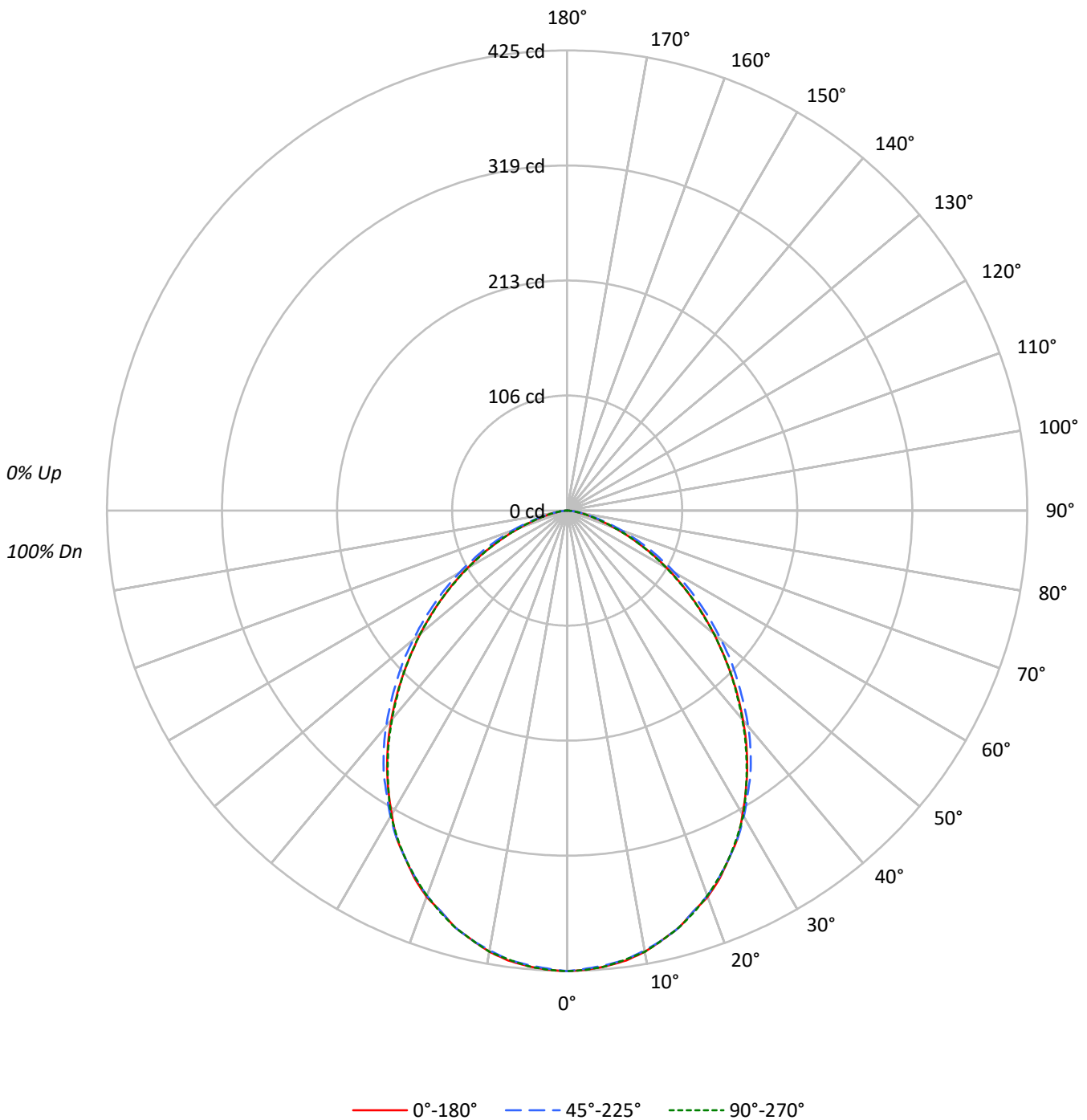
Lumens per Lamp: N/A  
Luminaire Lumens: 910.0 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.24  
Luminous Opening: Rectangular (W 0.21' x L: 0.21' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.54  
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					87			
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75					75			
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65					65			
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56					56			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	35					35			
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	31	55	44	36	31	43	36	31	42	36	31	41	35	31	29					29			

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

	0°	45°	90°
0°	105500	105500	105500
5°	105106	104857	105106
10°	104181	103904	104181
15°	102392	102392	102392
20°	100183	99893	99893
25°	96868	96868	96868
30°	92812	93442	93127
35°	87799	89433	87496
40°	81810	84238	81454
45°	75161	78142	75161
50°	68290	71570	68290
55°	60835	64554	60835
60°	52874	57140	52378
65°	43777	48824	43777
70°	34008	38648	34008
75°	24530	27596	24530
80°	16710	18281	18281
85°	12236	12236	12236



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.0	4.4
10°-20°	112.3	12.3
20°-30°	163.0	17.9
30°-40°	182.4	20.0
40°-50°	168.4	18.5
50°-60°	130.0	14.3
60°-70°	78.4	8.6
70°-80°	30.1	3.3
80°-90°	5.4	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°	315.3	34.7
0°-40°	497.8	54.7
0°-60°	796.1	87.5
0°-90°	910.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	910.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	422	423	421	422	422	40
15°	399	400	399	400	399	112
25°	354	355	354	355	354	163
35°	290	292	295	292	289	181
45°	214	218	223	219	214	165
55°	141	145	149	146	141	126
65°	75	79	83	79	75	74
75°	26	27	29	27	26	28
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°	425.4	425.4	425.4	425.4	425.4
2.5°	424.4	425.4	423.3	424.4	424.4
5°	422.2	423.3	421.2	422.2	422.2
7.5°	419.0	419.0	418.0	419.0	418.0
10°	413.7	413.7	412.6	413.7	413.7
12.5°	406.2	407.3	406.2	407.3	406.2
15°	398.8	399.8	398.8	399.8	398.8
17.5°	388.1	389.2	388.1	389.2	389.2
20°	379.6	379.6	378.5	379.6	378.5
22.5°	367.9	366.8	366.8	367.9	366.8
25°	354.0	355.1	354.0	355.1	354.0
27.5°	341.2	341.2	341.2	341.2	340.1
30°	324.1	326.3	326.3	325.2	325.2
32.5°	307.1	310.3	310.3	310.3	307.1
35°	290.0	292.2	295.4	292.2	289.0
37.5°	271.9	274.0	278.3	274.0	270.8
40°	252.7	255.9	260.2	255.9	251.6
42.5°	233.5	236.7	241.0	237.8	232.4
45°	214.3	217.5	222.8	218.6	214.3
47.5°	195.1	199.4	204.7	199.4	195.1
50°	177.0	181.3	185.5	181.3	177.0
52.5°	158.9	163.1	167.4	163.1	157.8
55°	140.7	145.0	149.3	146.1	140.7
57.5°	123.7	128.0	132.2	128.0	122.6
60°	106.6	110.9	115.2	110.9	105.6
62.5°	90.6	94.9	98.1	94.9	89.6
65°	74.6	78.9	83.2	78.9	74.6
67.5°	59.7	64.0	67.2	64.0	59.7
70°	46.9	50.1	53.3	50.1	46.9
72.5°	35.2	37.3	40.5	37.3	35.2
75°	25.6	26.7	28.8	26.7	25.6
77.5°	18.1	18.1	19.2	18.1	18.1
80°	11.7	12.8	12.8	12.8	12.8
82.5°	7.5	7.5	7.5	7.5	7.5
85°	4.3	4.3	4.3	4.3	4.3
87.5°	2.1	2.1	1.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)