

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: P284398

Luminaire Tested: **RSQ4089FS1EMWWB-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P284398
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-3500K
Description: HALO RSQ 4 INCH LED FIXTURE WITH MATT WHITE BAFFLE, SELECTABLE CCT, 90CRI, 3500K
Light Source: (30) 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 870.0 lumens
Efficiency: N/A
Efficacy: 90.2 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

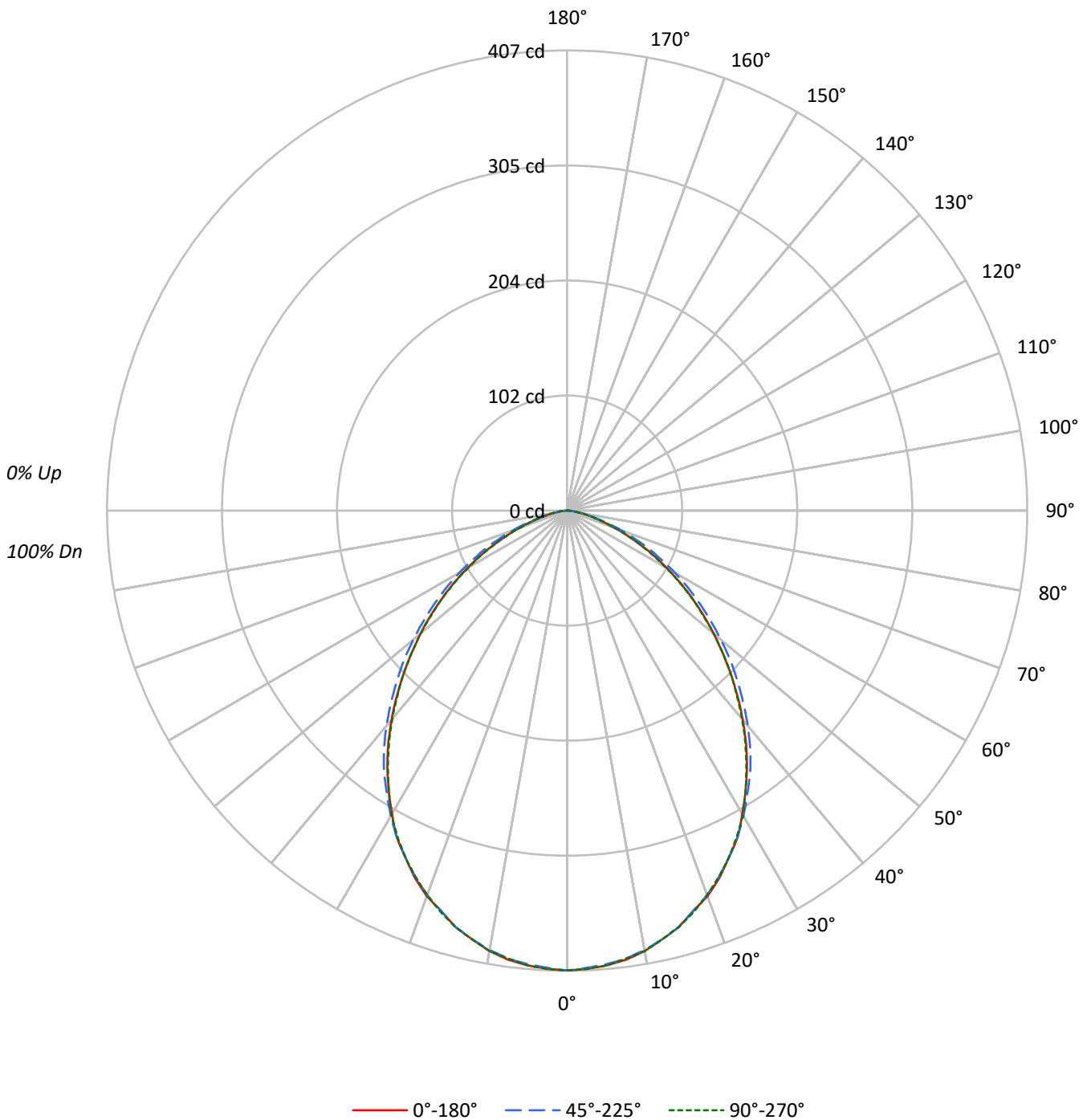
Input Watts (W): 9.64
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P284398

CATALOG NUMBER: RSQ4089FS1EMWWB-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P284398

CATALOG NUMBER: RSQ4089FS1EMWWB-3500K

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	36					36			
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°	100862	100862	100862
5°	100501	100252	100501
10°	99598	99346	99598
15°	97899	97899	97899
20°	95776	95512	95512
25°	92600	92600	92600
30°	88745	89318	89032
35°	83954	85498	83651
40°	78216	80515	77893
45°	71864	74740	71864
50°	65281	68445	65281
55°	58198	61700	58198
60°	50543	54610	50047
65°	41899	46652	41899
70°	32557	36980	32557
75°	23476	26351	23476
80°	15996	17424	17424
85°	11667	11667	11667



TEST NUMBER: P284398

CATALOG NUMBER: RSQ4089FS1EMWWB-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.3	4.4
10°-20°	107.3	12.3
20°-30°	155.9	17.9
30°-40°	174.4	20.0
40°-50°	161.0	18.5
50°-60°	124.2	14.3
60°-70°	75.0	8.6
70°-80°	28.7	3.3
80°-90°	5.2	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°	301.5	34.7
0°-40°	475.9	54.7
0°-60°	761.1	87.5
0°-90°	870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	407	407	407	407	407	
5°	404	405	403	404	404	38
15°	381	382	381	382	381	107
25°	338	340	338	340	338	156
35°	277	279	282	279	276	173
45°	205	208	213	209	205	158
55°	135	139	143	140	135	121
65°	71	75	80	75	71	71
75°	24	26	28	26	24	27
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



TEST NUMBER: P284398

CATALOG NUMBER: RSQ4089FS1EMWWB-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	406.7	406.7	406.7	406.7	406.7
2.5°	405.7	406.7	404.7	405.7	405.7
5°	403.7	404.7	402.7	403.7	403.7
7.5°	400.6	400.6	399.6	400.6	399.6
10°	395.5	395.5	394.5	395.5	395.5
12.5°	388.4	389.4	388.4	389.4	388.4
15°	381.3	382.3	381.3	382.3	381.3
17.5°	371.1	372.1	371.1	372.1	372.1
20°	362.9	362.9	361.9	362.9	361.9
22.5°	351.7	350.7	350.7	351.7	350.7
25°	338.4	339.5	338.4	339.5	338.4
27.5°	326.2	326.2	326.2	326.2	325.2
30°	309.9	311.9	311.9	310.9	310.9
32.5°	293.6	296.6	296.6	296.6	293.6
35°	277.3	279.3	282.4	279.3	276.3
37.5°	259.9	262.0	266.1	262.0	258.9
40°	241.6	244.7	248.7	244.7	240.6
42.5°	223.2	226.3	230.4	227.3	222.2
45°	204.9	208.0	213.1	209.0	204.9
47.5°	186.5	190.6	195.7	190.6	186.5
50°	169.2	173.3	177.4	173.3	169.2
52.5°	151.9	156.0	160.0	156.0	150.9
55°	134.6	138.6	142.7	139.7	134.6
57.5°	118.2	122.3	126.4	122.3	117.2
60°	101.9	106.0	110.1	106.0	100.9
62.5°	86.6	90.7	93.8	90.7	85.6
65°	71.4	75.4	79.5	75.4	71.4
67.5°	57.1	61.2	64.2	61.2	57.1
70°	44.9	47.9	51.0	47.9	44.9
72.5°	33.6	35.7	38.7	35.7	33.6
75°	24.5	25.5	27.5	25.5	24.5
77.5°	17.3	17.3	18.3	17.3	17.3
80°	11.2	12.2	12.2	12.2	12.2
82.5°	7.1	7.1	7.1	7.1	7.1
85°	4.1	4.1	4.1	4.1	4.1
87.5°	2.0	2.0	1.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)