

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: P256523

Luminaire Tested: **RSQ4089401EMWWB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P256523
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: RSQ4089401EMWWB
Description: HALO RSQ 4 INCH LED FIXTURE WITH MATT WHITE BAFFLE, 800LM, 90CRI, 4000K
Light Source: (15) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 835.0 lumens
Efficiency: N/A
Efficacy: 91.8 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

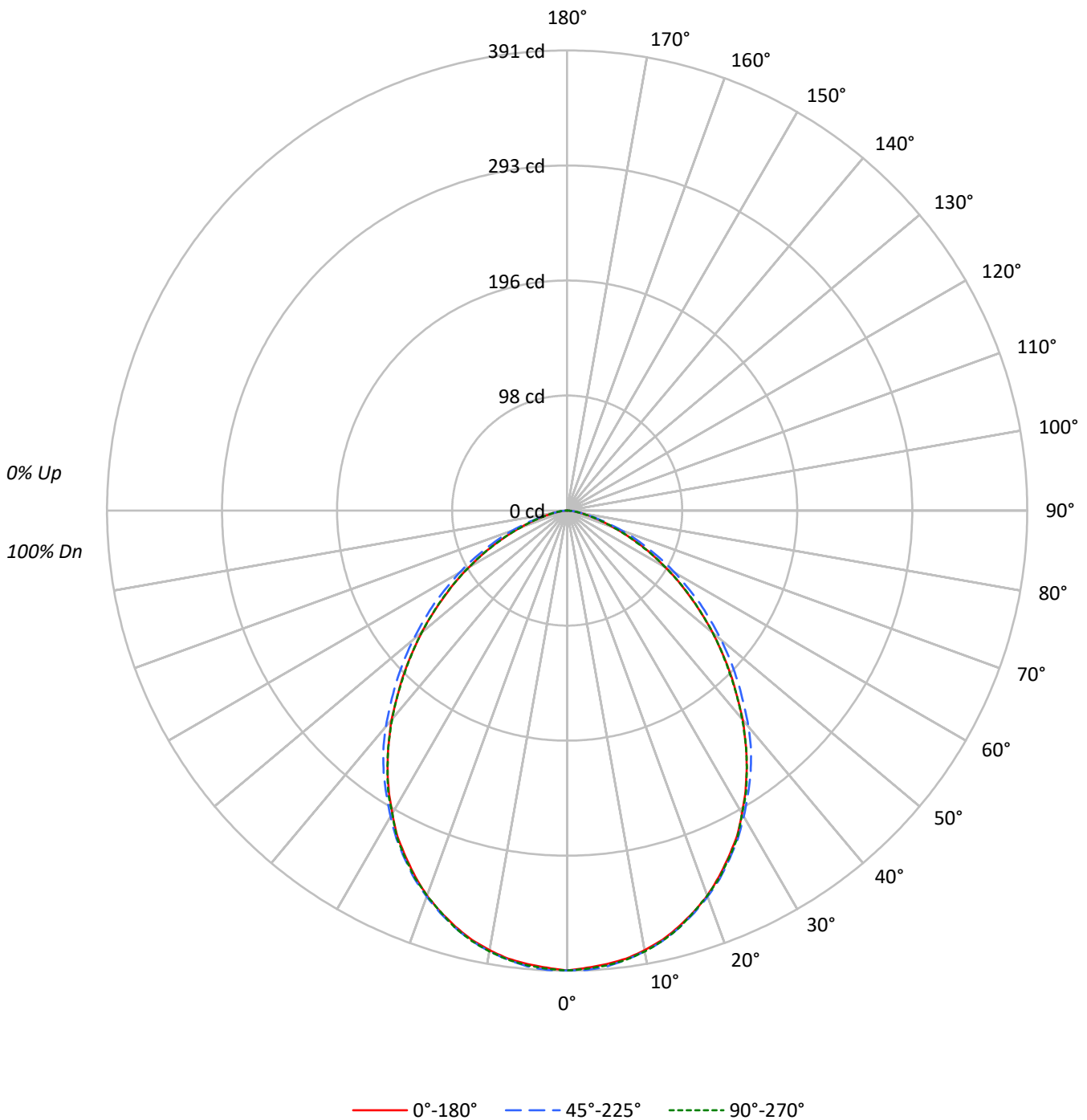
Input Watts (W): 9.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	59	57					57			
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	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	96894	96894	96894
5°	96318	96791	96542
10°	95518	95770	95770
15°	93996	94253	94253
20°	91896	92134	91896
25°	88823	89343	89070
30°	85108	85939	85108
35°	80563	82288	80563
40°	75141	77601	74849
45°	68848	71829	68497
50°	62272	65898	62272
55°	55085	59582	55474
60°	47715	52427	47715
65°	39845	44305	39317
70°	30817	35603	30817
75°	22614	25297	22614
80°	16138	16138	16138
85°	10813	10813	13374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	4.4
10°-20°	103.2	12.4
20°-30°	149.8	17.9
30°-40°	167.6	20.1
40°-50°	154.4	18.5
50°-60°	118.9	14.2
60°-70°	71.7	8.6
70°-80°	27.5	3.3
80°-90°	5.3	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°	289.7	34.7
0°-40°	457.3	54.8
0°-60°	730.6	87.5
0°-90°	835.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	835.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	387	388	389	387	388	37
15°	366	367	367	366	367	103
25°	325	326	326	325	326	149
35°	266	269	272	267	266	166
45°	196	200	205	200	195	151
55°	127	134	138	132	128	114
65°	68	73	76	72	67	68
75°	24	24	26	24	24	26
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°	390.7	390.7	390.7	390.7	390.7
2.5°	388.8	389.7	390.7	388.8	389.7
5°	386.9	387.8	388.8	386.9	387.8
7.5°	384.0	385.0	385.0	383.1	385.0
10°	379.3	380.3	380.3	379.3	380.3
12.5°	373.7	373.7	374.6	372.7	374.6
15°	366.1	367.1	367.1	366.1	367.1
17.5°	357.6	358.6	358.6	357.6	357.6
20°	348.2	349.1	349.1	347.2	348.2
22.5°	336.9	337.8	338.8	336.9	337.8
25°	324.6	325.5	326.5	324.6	325.5
27.5°	312.3	313.3	314.2	312.3	313.3
30°	297.2	300.1	300.1	298.2	297.2
32.5°	282.1	285.0	285.9	284.0	283.1
35°	266.1	268.9	271.8	267.0	266.1
37.5°	249.1	251.9	256.7	251.0	249.1
40°	232.1	235.0	239.7	234.0	231.2
42.5°	213.3	218.0	221.7	217.0	213.3
45°	196.3	200.0	204.8	200.0	195.3
47.5°	178.3	183.1	187.8	182.1	178.3
50°	161.4	166.1	170.8	166.1	161.4
52.5°	144.4	150.0	153.8	149.1	144.4
55°	127.4	134.0	137.8	132.1	128.3
57.5°	112.3	117.0	120.8	117.0	112.3
60°	96.2	101.0	105.7	101.0	96.2
62.5°	82.1	86.8	90.6	86.8	82.1
65°	67.9	72.7	75.5	71.7	67.0
67.5°	54.7	58.5	62.3	58.5	54.7
70°	42.5	45.3	49.1	45.3	42.5
72.5°	32.1	34.0	36.8	34.0	32.1
75°	23.6	24.5	26.4	24.5	23.6
77.5°	16.0	17.0	17.9	17.0	16.0
80°	11.3	12.3	11.3	12.3	11.3
82.5°	6.6	7.5	7.5	7.5	7.5
85°	3.8	3.8	3.8	4.7	4.7
87.5°	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)