

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: P256522

Luminaire Tested: **RSQ4089351EMWWB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P256522
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: RSQ4089351EMWWB
Description: HALO RSQ 4 INCH LED FIXTURE WITH MATT WHITE BAFFLE, 800LM, 90CRI, 3500K
Light Source: (15) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 824.0 lumens
Efficiency: N/A
Efficacy: 89.0 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

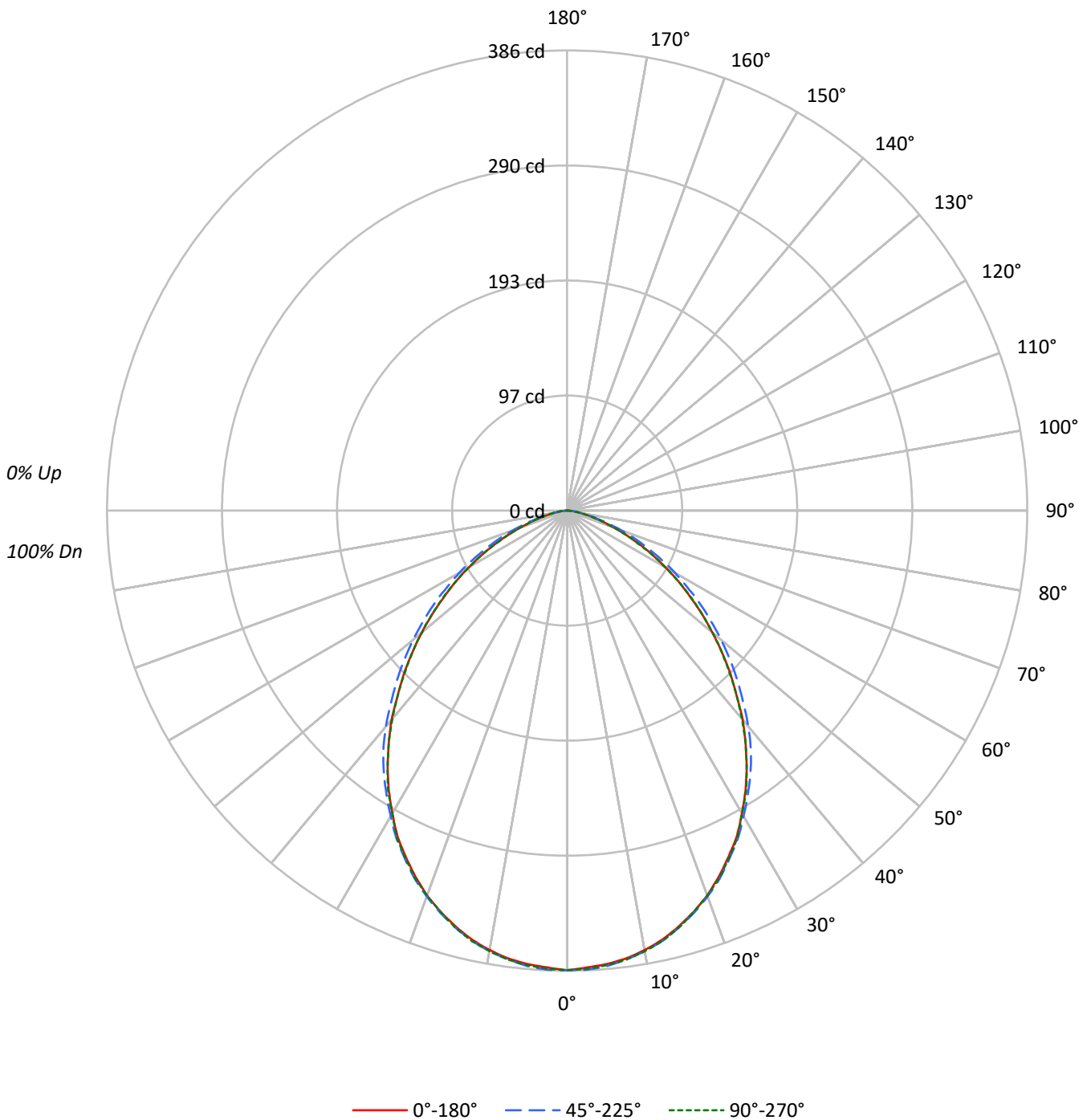
Input Watts (W): 9.26
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	95605	95605	95605
5°	95049	95497	95273
10°	94259	94511	94511
15°	92764	92995	92995
20°	90682	90920	90682
25°	87647	88167	87920
30°	83992	84793	83992
35°	79503	81199	79503
40°	74169	76565	73846
45°	67936	70882	67620
50°	61423	65011	61423
55°	54350	58803	54739
60°	47120	51733	47120
65°	39317	43718	38789
70°	30382	35095	30382
75°	22326	25009	22326
80°	15996	15996	15996
85°	10528	10528	13374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	4.4
10°-20°	101.8	12.4
20°-30°	147.8	17.9
30°-40°	165.4	20.1
40°-50°	152.3	18.5
50°-60°	117.3	14.2
60°-70°	70.7	8.6
70°-80°	27.2	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°	285.9	34.7
0°-40°	451.3	54.8
0°-60°	720.9	87.5
0°-90°	824.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	824.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	386	386	386	386	386	
5°	382	383	384	382	383	36
15°	361	362	362	361	362	102
25°	320	321	322	320	321	147
35°	263	265	268	264	263	164
45°	194	197	202	197	193	149
55°	126	132	136	130	127	113
65°	67	72	74	71	66	67
75°	23	24	26	24	23	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°	385.5	385.5	385.5	385.5	385.5
2.5°	383.6	384.6	385.5	383.6	384.6
5°	381.8	382.7	383.6	381.8	382.7
7.5°	379.0	379.9	379.9	378.1	379.9
10°	374.3	375.3	375.3	374.3	375.3
12.5°	368.7	368.7	369.7	367.8	369.7
15°	361.3	362.2	362.2	361.3	362.2
17.5°	352.9	353.8	353.8	352.9	352.9
20°	343.6	344.5	344.5	342.7	343.6
22.5°	332.4	333.4	334.3	332.4	333.4
25°	320.3	321.3	322.2	320.3	321.3
27.5°	308.2	309.2	310.1	308.2	309.2
30°	293.3	296.1	296.1	294.3	293.3
32.5°	278.4	281.2	282.1	280.3	279.4
35°	262.6	265.4	268.2	263.5	262.6
37.5°	245.8	248.6	253.3	247.7	245.8
40°	229.1	231.9	236.5	230.9	228.1
42.5°	210.4	215.1	218.8	214.2	210.4
45°	193.7	197.4	202.1	197.4	192.8
47.5°	176.0	180.6	185.3	179.7	176.0
50°	159.2	163.9	168.5	163.9	159.2
52.5°	142.5	148.1	151.8	147.1	142.5
55°	125.7	132.2	136.0	130.4	126.6
57.5°	110.8	115.5	119.2	115.5	110.8
60°	95.0	99.6	104.3	99.6	95.0
62.5°	81.0	85.7	89.4	85.7	81.0
65°	67.0	71.7	74.5	70.8	66.1
67.5°	54.0	57.7	61.5	57.7	54.0
70°	41.9	44.7	48.4	44.7	41.9
72.5°	31.7	33.5	36.3	33.5	31.7
75°	23.3	24.2	26.1	24.2	23.3
77.5°	15.8	16.8	17.7	16.8	15.8
80°	11.2	12.1	11.2	12.1	11.2
82.5°	6.5	7.4	7.4	7.4	7.4
85°	3.7	3.7	3.7	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)