

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: P123818

Luminaire Tested: **ELSG406927WH (50° BEAM - 0° TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123818
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14001)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ELSG406927WH (50° BEAM - 0° TILT)
Description: HALO 4 INCH RECESSED FIXTURE WITH SQUARE WHITE TRIM,
WHITE GIMBAL, NARROW UPPER REFLECTOR AND CLEAR LENS.
Light Source: (1)SURFACE MOUNT LED, 2700K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 720.0 lumens
Efficiency: N/A
Efficacy: 55.4 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.89 / 0.82
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

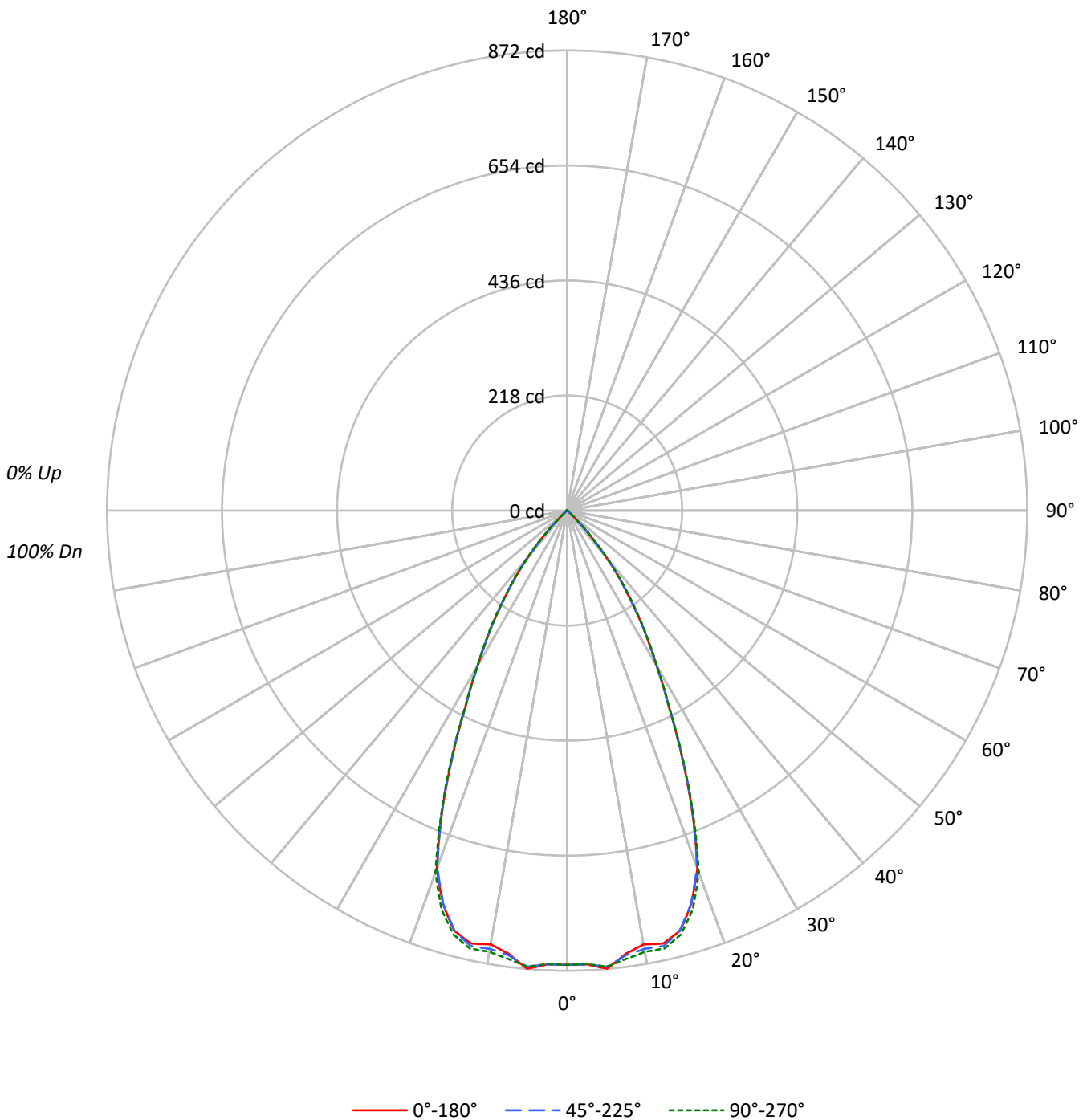
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	
1	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	94	
2	108	104	100	97	106	102	98	95	99	96	93	96	93	91	93	91	90	88	88	88	88	
3	103	97	92	88	101	96	91	88	93	89	86	91	88	85	88	86	84	82	82	82	82	
4	98	91	86	82	96	90	85	81	88	84	80	86	82	79	84	81	78	77	77	77	77	
5	94	86	80	76	92	85	79	75	83	78	75	81	77	74	80	76	73	72	72	72	72	
6	89	81	75	71	88	80	74	70	78	74	70	77	73	69	76	72	69	68	68	68	68	
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64	64	64	64	
8	81	72	66	62	80	71	66	62	70	65	62	69	65	61	68	64	61	60	60	60	60	
9	77	68	62	58	76	68	62	58	67	62	58	66	61	58	65	61	58	56	56	56	56	
10	74	64	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	53	53	53	53	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	424701	424701	424701
5°	431623	429691	429691
10°	418077	422485	425391
15°	421295	420835	424768
20°	378976	377454	383072
25°	280303	281392	281882
30°	192617	192617	193700
35°	129917	131062	133411
40°	75098	75098	75098
45°	22398	22398	21700
50°	5219	5219	5219
55°	2495	1634	2495
60°	2862	2862	1875
65°	2218	2218	1167
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	5661	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	11.3
10°-20°	227.9	31.6
20°-30°	235.8	32.7
30°-40°	136.9	19.0
40°-50°	32.5	4.5
50°-60°	3.4	0.5
60°-70°	1.3	0.2
70°-80°	0.4	0.1
80°-90°	0.3	0.0
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°	545.3	75.7
0°-40°	682.2	94.8
0°-60°	718.1	99.7
0°-90°	720.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	720.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	861	861	861	861	861	
5°	872	872	868	868	868	81
15°	825	825	824	832	832	227
25°	515	514	517	515	518	235
35°	216	217	218	220	222	136
45°	32	32	32	32	31	33
55°	3	3	2	3	3	3
65°	2	2	2	2	1	1
75°	0	0	0	0	0	1
85°	0	0	1	1	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	860.8	860.8	860.8	860.8	860.8
2.5°	860.8	861.7	860.8	860.8	859.8
5°	871.5	871.5	867.6	867.6	867.6
7.5°	847.2	848.1	850.1	854.9	856.9
10°	834.5	837.5	843.3	850.1	849.1
12.5°	840.4	841.3	845.2	853.0	850.1
15°	824.8	824.8	823.9	831.6	831.6
17.5°	782.1	782.1	781.1	787.9	791.8
20°	721.8	720.9	718.9	721.8	729.6
22.5°	620.8	622.7	622.7	622.7	623.7
25°	514.9	513.9	516.9	514.9	517.8
27.5°	414.8	413.9	415.8	416.8	416.8
30°	338.1	338.1	338.1	339.1	340.0
32.5°	275.9	274.9	275.9	277.9	278.8
35°	215.7	216.6	217.6	220.5	221.5
37.5°	165.2	165.2	167.1	168.1	168.1
40°	116.6	115.6	116.6	116.6	116.6
42.5°	69.9	69.9	69.9	69.9	70.9
45°	32.1	32.1	32.1	32.1	31.1
47.5°	10.7	10.7	10.7	9.7	10.7
50°	6.8	5.8	6.8	6.8	6.8
52.5°	4.9	4.9	4.9	4.9	4.9
55°	2.9	2.9	1.9	2.9	2.9
57.5°	2.9	3.9	2.9	2.9	2.9
60°	2.9	2.9	2.9	1.9	1.9
62.5°	1.0	1.0	1.9	1.0	1.0
65°	1.9	1.9	1.9	1.9	1.0
67.5°	1.0	1.0	1.0	1.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	1.9	1.0	1.9	1.0	1.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	1.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	1.0	1.0	0.0
87.5°	1.0	0.0	1.0	0.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)