

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: P123771

Luminaire Tested: **ELSG406930WH (25° BEAM - 0° TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123771
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13997)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ELSG406930WH (25° 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, 3000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 840.0 lumens
Efficiency: N/A
Efficacy: 64.6 lumens/watt
Spacing Criteria (0/90/45): 0.5 / 0.5 / 0.56
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

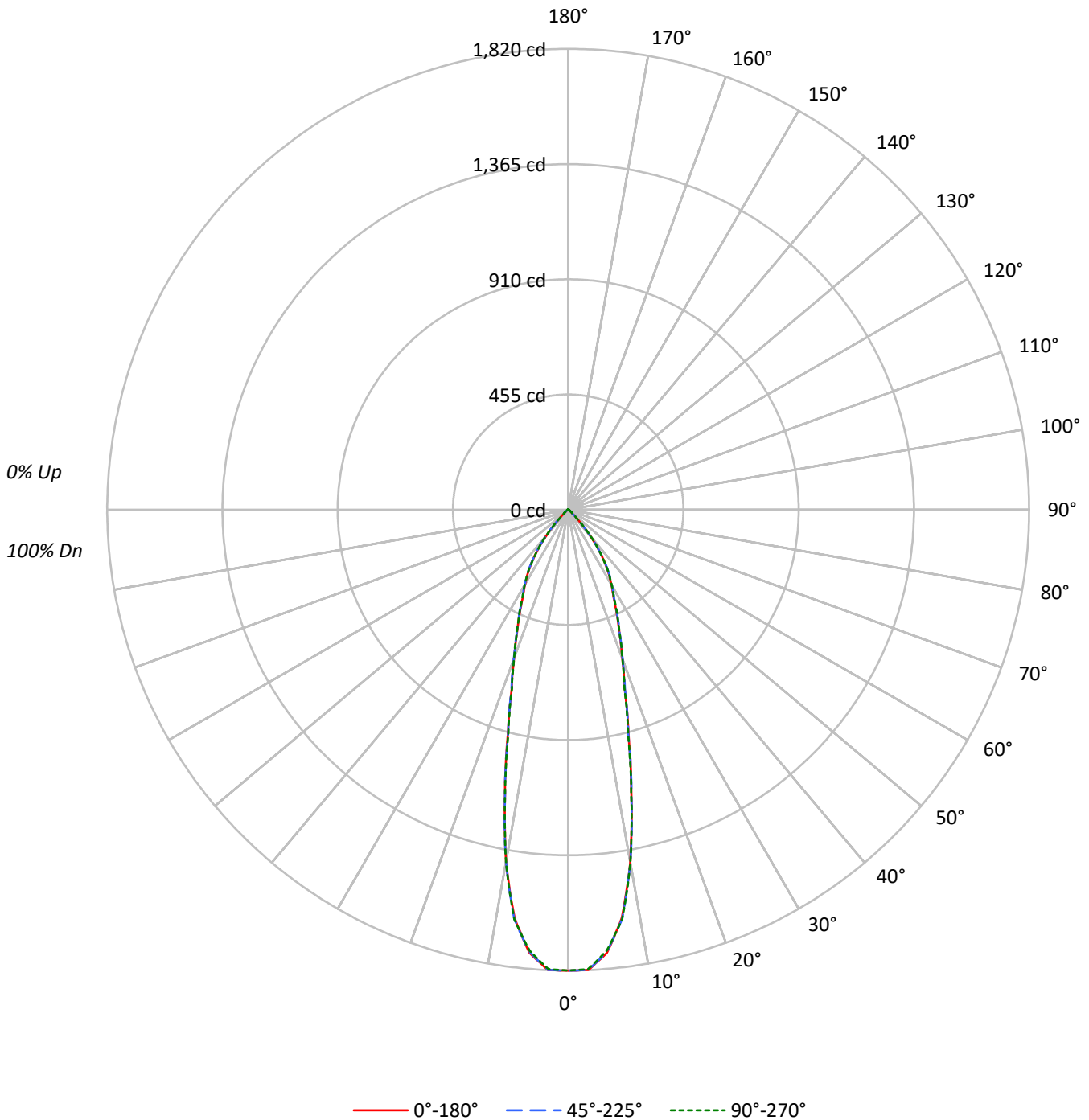
Input Watts (W): 13
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94				94
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88				88
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83				83
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	80	78				78
5	95	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74				74
6	90	82	77	73	89	81	76	72	80	75	72	79	74	71	77	74	71	70				70
7	86	78	72	68	85	77	72	68	76	71	68	75	71	68	74	70	67	66				66
8	83	74	68	65	82	73	68	65	72	68	64	71	67	64	70	67	64	63				63
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	64	61	59				59
10	76	67	62	58	75	67	62	58	66	61	58	65	61	58	65	61	58	57				57

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	705365	705365	705365
5°	683437	681726	680014
10°	555629	556495	556928
15°	368634	368193	366428
20°	257400	258761	257400
25°	193641	195480	195480
30°	152355	154279	153832
35°	116654	117695	116134
40°	68997	70666	70666
45°	24496	25702	25099
50°	11213	12479	11816
55°	8107	9593	8107
60°	4262	5037	5037
65°	2017	3026	2017
70°	4985	3739	4985
75°	1647	1647	0
80°	0	0	0
85°	4891	9781	9781



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.8	18.7
10°-20°	260.0	31.0
20°-30°	211.6	25.2
30°-40°	151.6	18.0
40°-50°	44.3	5.3
50°-60°	11.2	1.3
60°-70°	2.5	0.3
70°-80°	1.3	0.2
80°-90°	0.8	0.1
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°	628.3	74.8
0°-40°	780.0	92.9
0°-60°	835.4	99.5
0°-90°	840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1820	1820	1820	1820	1820	
5°	1757	1753	1753	1748	1748	157
15°	919	917	918	916	913	260
25°	453	453	457	457	457	210
35°	247	247	249	249	246	151
45°	45	45	47	46	46	43
55°	12	13	14	13	12	10
65°	2	2	3	2	2	2
75°	1	1	1	1	0	1
85°	1	2	2	2	2	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1820.3	1820.3	1820.3	1820.3	1820.3
2.5°	1819.2	1818.1	1819.2	1817.0	1815.9
5°	1757.0	1752.6	1752.6	1748.2	1748.2
7.5°	1624.9	1626.0	1630.4	1631.5	1631.5
10°	1412.1	1412.1	1414.3	1413.2	1415.4
12.5°	1153.5	1154.6	1154.6	1152.4	1150.2
15°	918.9	916.7	917.8	915.6	913.4
17.5°	742.1	743.2	745.3	743.2	739.9
20°	624.2	624.2	627.5	626.4	624.2
22.5°	529.3	532.5	532.5	531.5	531.5
25°	452.9	452.9	457.2	457.2	457.2
27.5°	386.3	388.5	390.7	390.7	391.8
30°	340.5	341.6	344.8	343.8	343.8
32.5°	296.8	296.8	301.2	300.1	297.9
35°	246.6	246.6	248.8	248.8	245.5
37.5°	193.2	194.2	195.3	194.2	193.2
40°	136.4	136.4	139.7	139.7	139.7
42.5°	86.2	86.2	88.4	88.4	89.5
45°	44.7	44.7	46.9	45.8	45.8
47.5°	21.8	22.9	22.9	22.9	24.0
50°	18.6	19.6	20.7	19.6	19.6
52.5°	14.2	15.3	18.6	15.3	16.4
55°	12.0	13.1	14.2	13.1	12.0
57.5°	7.6	8.7	8.7	8.7	7.6
60°	5.5	6.5	6.5	5.5	6.5
62.5°	0.0	0.0	1.1	0.0	0.0
65°	2.2	2.2	3.3	2.2	2.2
67.5°	2.2	2.2	3.3	2.2	1.1
70°	4.4	3.3	3.3	3.3	4.4
72.5°	0.0	0.0	2.2	0.0	1.1
75°	1.1	1.1	1.1	1.1	0.0
77.5°	1.1	1.1	2.2	1.1	1.1
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	1.1	1.1	1.1	1.1
85°	1.1	2.2	2.2	2.2	2.2
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)