

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: P123773

Luminaire Tested: **ELSG406940WH (25° BEAM - 0° TILT)**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123773
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: ELSG406940WH (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, 4000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 930.0 lumens
Efficiency: N/A
Efficacy: 71.5 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

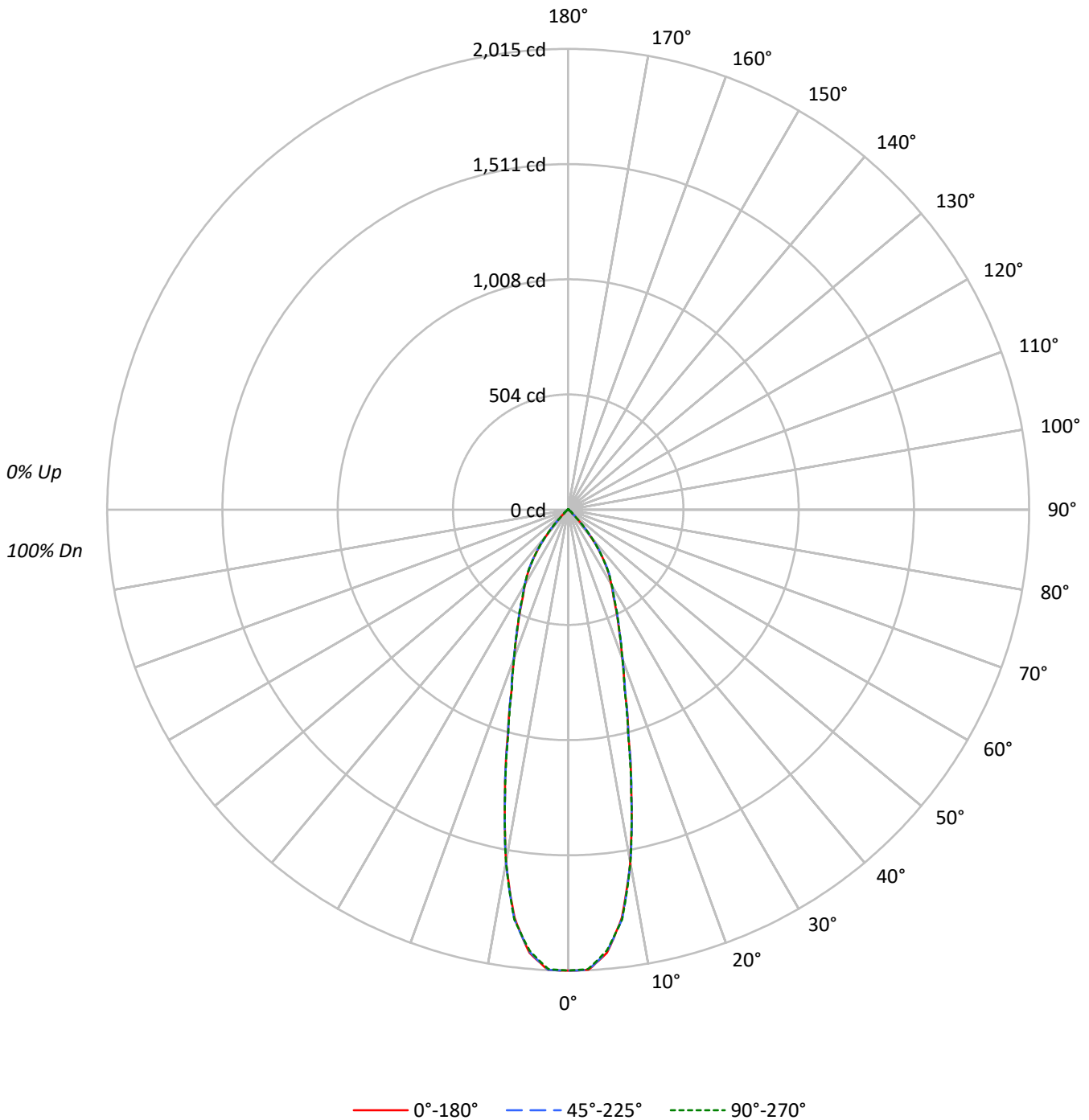
Input Watts (W): 13
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	80	78
5	95	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74
6	90	82	77	73	89	81	76	72	80	75	72	79	74	71	77	74	71	70
7	86	78	72	68	85	77	72	68	76	71	68	75	71	68	74	70	67	66
8	83	74	68	65	82	73	68	65	72	68	64	71	67	64	70	67	64	63
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	64	61	59
10	76	67	62	58	75	67	62	58	66	61	58	65	61	58	65	61	58	57

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	780928	780928	780928
5°	756643	754776	752909
10°	615162	616107	616618
15°	408109	407628	405702
20°	284988	286472	284988
25°	214378	216430	216430
30°	168687	170835	170298
35°	129190	130325	128575
40°	76383	78254	78254
45°	27126	28496	27784
50°	12358	13865	13082
55°	8985	10607	8985
60°	4650	5580	5580
65°	2201	3301	2201
70°	5438	4079	5438
75°	1797	1797	0
80°	0	0	0
85°	5335	10671	10671



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.6	18.7
10°-20°	287.9	31.0
20°-30°	234.2	25.2
30°-40°	167.9	18.1
40°-50°	49.0	5.3
50°-60°	12.4	1.3
60°-70°	2.7	0.3
70°-80°	1.4	0.1
80°-90°	0.9	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°	695.7	74.8
0°-40°	863.5	92.9
0°-60°	925.0	99.5
0°-90°	930.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	930.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2015	2015	2015	2015	2015	
5°	1945	1940	1940	1936	1936	174
15°	1017	1015	1016	1014	1011	288
25°	501	501	506	506	506	233
35°	273	273	276	276	272	167
45°	50	50	52	51	51	48
55°	13	14	16	14	13	11
65°	2	2	4	2	2	3
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°	2015.3	2015.3	2015.3	2015.3	2015.3
2.5°	2014.1	2012.9	2014.1	2011.7	2010.5
5°	1945.2	1940.4	1940.4	1935.6	1935.6
7.5°	1799.0	1800.2	1805.1	1806.3	1806.3
10°	1563.4	1563.4	1565.8	1564.6	1567.1
12.5°	1277.1	1278.3	1278.3	1275.9	1273.5
15°	1017.3	1014.9	1016.1	1013.7	1011.3
17.5°	821.6	822.8	825.2	822.8	819.2
20°	691.1	691.1	694.7	693.5	691.1
22.5°	586.0	589.6	589.6	588.4	588.4
25°	501.4	501.4	506.2	506.2	506.2
27.5°	427.7	430.1	432.5	432.5	433.7
30°	377.0	378.2	381.8	380.6	380.6
32.5°	328.6	328.6	333.5	332.3	329.8
35°	273.1	273.1	275.5	275.5	271.8
37.5°	213.9	215.1	216.3	215.1	213.9
40°	151.0	151.0	154.7	154.7	154.7
42.5°	95.4	95.4	97.9	97.9	99.1
45°	49.5	49.5	52.0	50.7	50.7
47.5°	24.2	25.4	25.4	25.4	26.6
50°	20.5	21.7	23.0	21.7	21.7
52.5°	15.7	16.9	20.5	16.9	18.1
55°	13.3	14.5	15.7	14.5	13.3
57.5°	8.5	9.7	9.7	9.7	8.5
60°	6.0	7.2	7.2	6.0	7.2
62.5°	0.0	0.0	1.2	0.0	0.0
65°	2.4	2.4	3.6	2.4	2.4
67.5°	2.4	2.4	3.6	2.4	1.2
70°	4.8	3.6	3.6	3.6	4.8
72.5°	0.0	0.0	2.4	0.0	1.2
75°	1.2	1.2	1.2	1.2	0.0
77.5°	1.2	1.2	2.4	1.2	1.2
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	1.2	1.2	1.2	1.2
85°	1.2	2.4	2.4	2.4	2.4
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)