

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: P123770

Luminaire Tested: **ELSG406927WH (25° BEAM - 0° TILT)**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P123770  
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: ELSG406927WH (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, 2700K CCT, 90CRI  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 750.0 lumens  
Efficiency: N/A  
Efficacy: 57.7 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

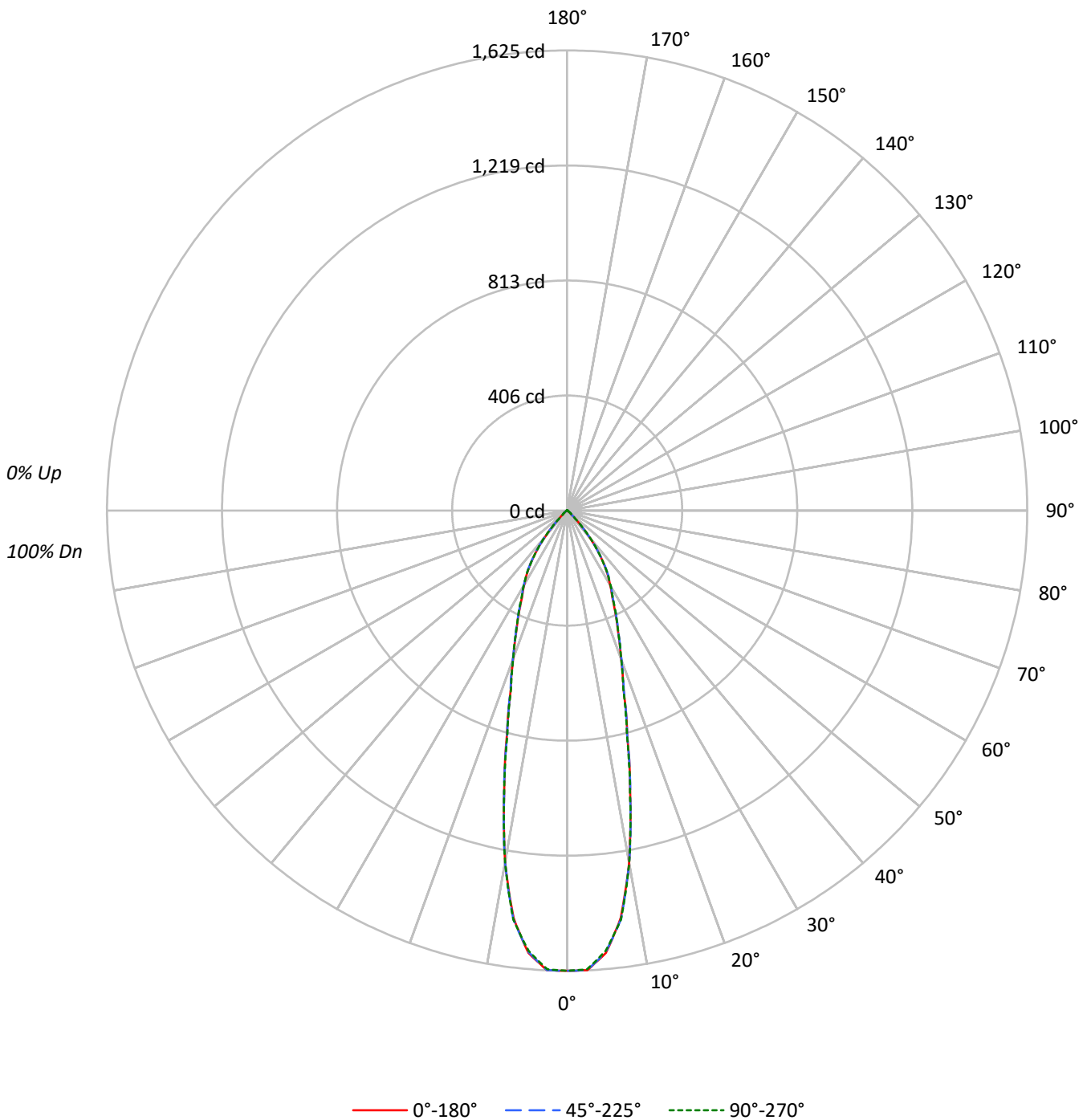
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				
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°	629764	629764	629764
5°	610192	608675	607158
10°	496096	496883	497276
15°	329119	328718	327153
20°	229813	231050	229813
25°	172905	174572	174572
30°	136024	137769	137321
35°	104165	105112	103692
40°	61612	63079	63079
45°	21865	22961	22413
50°	10007	11153	10550
55°	7229	8580	7229
60°	3797	4495	4495
65°	1742	2659	1742
70°	4419	3286	4419
75°	1497	1497	0
80°	0	0	0
85°	4446	8448	8448



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.0	18.7
10°-20°	232.2	31.0
20°-30°	188.9	25.2
30°-40°	135.4	18.0
40°-50°	39.5	5.3
50°-60°	10.0	1.3
60°-70°	2.2	0.3
70°-80°	1.1	0.2
80°-90°	0.7	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°	561.0	74.8
0°-40°	696.4	92.9
0°-60°	745.9	99.5
0°-90°	750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	750.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1625	1625	1625	1625	1625	
5°	1569	1565	1565	1561	1561	140
15°	820	818	819	818	816	232
25°	404	404	408	408	408	188
35°	220	220	222	222	219	134
45°	40	40	42	41	41	39
55°	11	12	13	12	11	9
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°	1625.2	1625.2	1625.2	1625.2	1625.2
2.5°	1624.3	1623.3	1624.3	1622.3	1621.3
5°	1568.7	1564.8	1564.8	1560.9	1560.9
7.5°	1450.8	1451.8	1455.7	1456.7	1456.7
10°	1260.8	1260.8	1262.8	1261.8	1263.8
12.5°	1029.9	1030.9	1030.9	1028.9	1027.0
15°	820.4	818.5	819.4	817.5	815.5
17.5°	662.6	663.5	665.5	663.5	660.6
20°	557.3	557.3	560.3	559.3	557.3
22.5°	472.6	475.5	475.5	474.5	474.5
25°	404.4	404.4	408.3	408.3	408.3
27.5°	344.9	346.9	348.8	348.8	349.8
30°	304.0	305.0	307.9	306.9	306.9
32.5°	265.0	265.0	268.9	268.0	266.0
35°	220.2	220.2	222.2	222.2	219.2
37.5°	172.5	173.4	174.4	173.4	172.5
40°	121.8	121.8	124.7	124.7	124.7
42.5°	77.0	77.0	78.9	78.9	79.9
45°	39.9	39.9	41.9	40.9	40.9
47.5°	19.5	20.5	20.5	20.5	21.4
50°	16.6	17.5	18.5	17.5	17.5
52.5°	12.7	13.6	16.6	13.6	14.6
55°	10.7	11.7	12.7	11.7	10.7
57.5°	6.8	7.8	7.8	7.8	6.8
60°	4.9	5.8	5.8	4.9	5.8
62.5°	0.0	0.0	1.0	0.0	0.0
65°	1.9	1.9	2.9	1.9	1.9
67.5°	1.9	1.9	2.9	1.9	1.0
70°	3.9	2.9	2.9	2.9	3.9
72.5°	0.0	0.0	1.9	0.0	1.0
75°	1.0	1.0	1.0	1.0	0.0
77.5°	1.0	1.0	1.9	1.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	1.0	1.0	1.0	1.0
85°	1.0	1.9	1.9	1.9	1.9
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)