

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: P123794

Luminaire Tested: **ELSG406927WH (35° BEAM - 0° TILT)**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P123794  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13999)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ELSG406927WH (35° 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: 730.0 lumens  
Efficiency: N/A  
Efficacy: 56.2 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.62  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

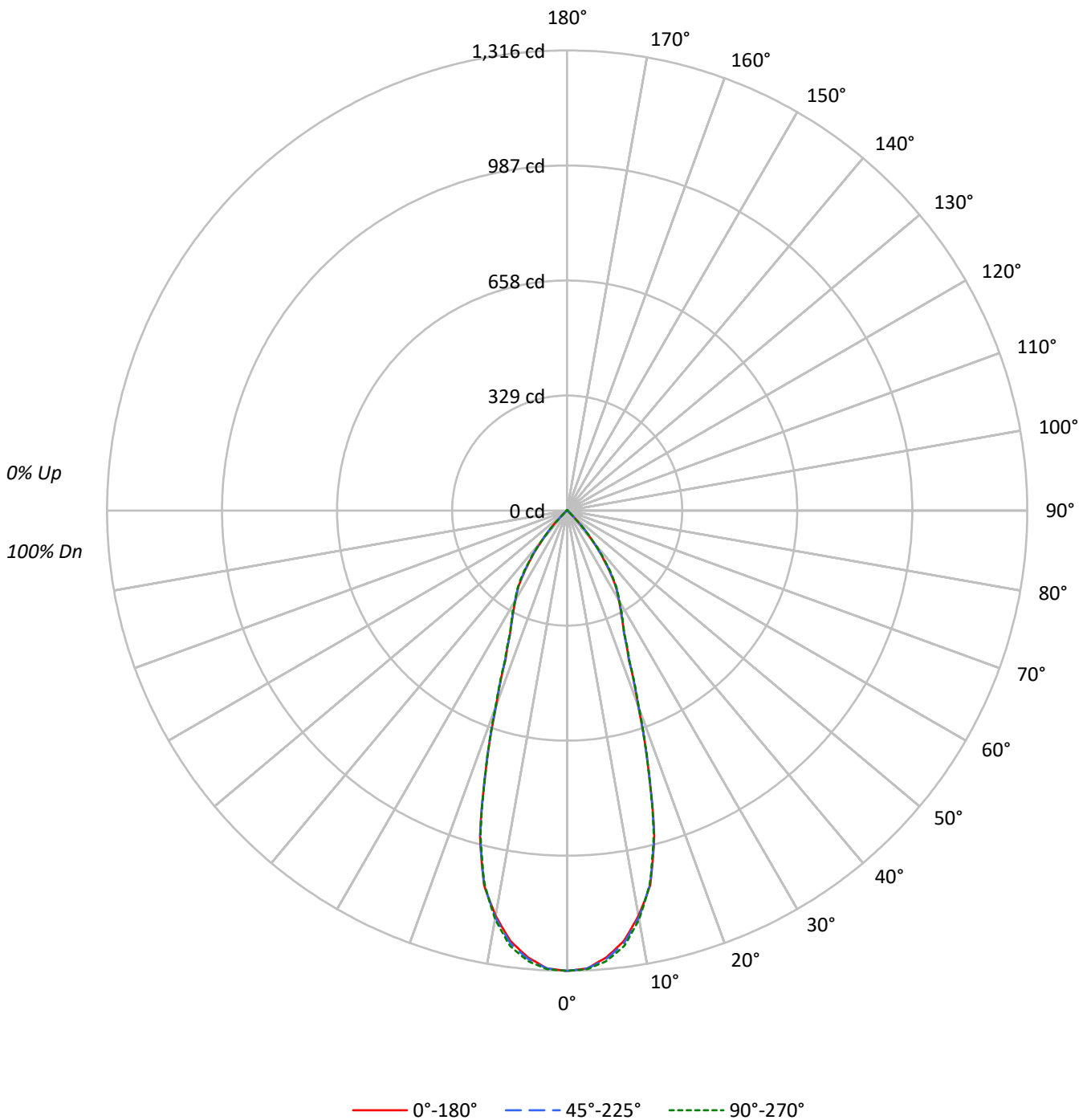
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				100
1	114	111	109	107	111	109	107	105	105	104	102	101	100	99	98	97	96	94				94
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89				89
3	104	98	93	90	102	97	92	89	94	91	88	92	89	86	89	87	85	84				84
4	99	92	87	83	98	91	87	83	89	85	82	87	84	81	85	82	80	79				79
5	95	87	82	78	93	86	81	78	85	80	77	83	79	76	81	78	76	74				74
6	91	83	77	73	89	82	77	73	80	76	72	79	75	72	78	74	71	70				70
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66				66
8	83	74	69	65	82	74	69	65	73	68	65	72	68	64	71	67	64	63				63
9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60				60
10	76	68	62	59	75	67	62	59	66	62	58	66	61	58	65	61	58	57				57

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	510104	510104	510104
5°	498827	500733	502989
10°	462847	464775	466703
15°	386045	385644	383678
20°	244741	245565	247545
25°	164738	163926	164738
30°	132354	132802	133205
35°	99435	101280	104024
40°	57565	58071	58577
45°	19728	18687	18139
50°	5848	5305	5305
55°	3310	3310	2635
60°	1472	1472	1472
65°	1742	1742	1742
70°	3286	2153	2153
75°	0	0	0
80°	0	0	0
85°	4446	0	4446



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.7	16.4
10°-20°	254.7	34.9
20°-30°	184.9	25.3
30°-40°	130.9	17.9
40°-50°	34.0	4.7
50°-60°	3.4	0.5
60°-70°	1.5	0.2
70°-80°	0.6	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°	559.3	76.6
0°-40°	690.1	94.5
0°-60°	727.6	99.7
0°-90°	730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	730.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1282	1286	1287	1291	1293	119
15°	962	963	961	959	956	254
25°	385	382	383	384	385	184
35°	210	212	214	218	220	129
45°	36	36	34	35	33	35
55°	5	6	5	5	4	4
65°	2	1	2	1	2	2
75°	0	0	0	0	0	1
85°	1	1	0	0	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1316.4	1316.4	1316.4	1316.4	1316.4
2.5°	1310.6	1311.6	1310.6	1311.6	1312.5
5°	1282.4	1286.3	1287.3	1291.1	1293.1
7.5°	1241.5	1244.4	1247.4	1254.2	1255.1
10°	1176.3	1178.3	1181.2	1185.1	1186.1
12.5°	1097.5	1096.5	1095.6	1093.6	1092.7
15°	962.3	963.2	961.3	959.4	956.4
17.5°	770.6	773.5	772.5	775.5	771.6
20°	593.5	593.5	595.5	597.4	600.3
22.5°	460.2	462.2	463.1	464.1	466.1
25°	385.3	382.4	383.4	384.3	385.3
27.5°	335.7	335.7	337.6	338.6	340.5
30°	295.8	294.8	296.8	297.7	297.7
32.5°	259.8	259.8	260.8	263.7	264.7
35°	210.2	212.1	214.1	217.9	219.9
37.5°	162.5	163.5	165.4	169.3	168.3
40°	113.8	112.9	114.8	115.8	115.8
42.5°	73.0	72.0	72.0	72.0	72.0
45°	36.0	36.0	34.1	35.0	33.1
47.5°	13.6	12.6	12.6	12.6	14.6
50°	9.7	9.7	8.8	8.8	8.8
52.5°	4.9	3.9	3.9	4.9	4.9
55°	4.9	5.8	4.9	4.9	3.9
57.5°	1.0	1.9	0.0	0.0	0.0
60°	1.9	1.9	1.9	1.9	1.9
62.5°	1.9	1.9	1.9	1.9	1.9
65°	1.9	1.0	1.9	1.0	1.9
67.5°	0.0	1.0	1.0	1.0	0.0
70°	2.9	1.9	1.9	1.9	1.9
72.5°	1.0	0.0	1.0	1.0	1.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	1.0	1.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	1.0	1.0	0.0	1.0	0.0
85°	1.0	1.0	0.0	0.0	1.0
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)