

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 COMMERCIAL

Report Number: P580483

Luminaire Tested: **HC435D010-HM43040927-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC435D010-HM43040927-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2796.9 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

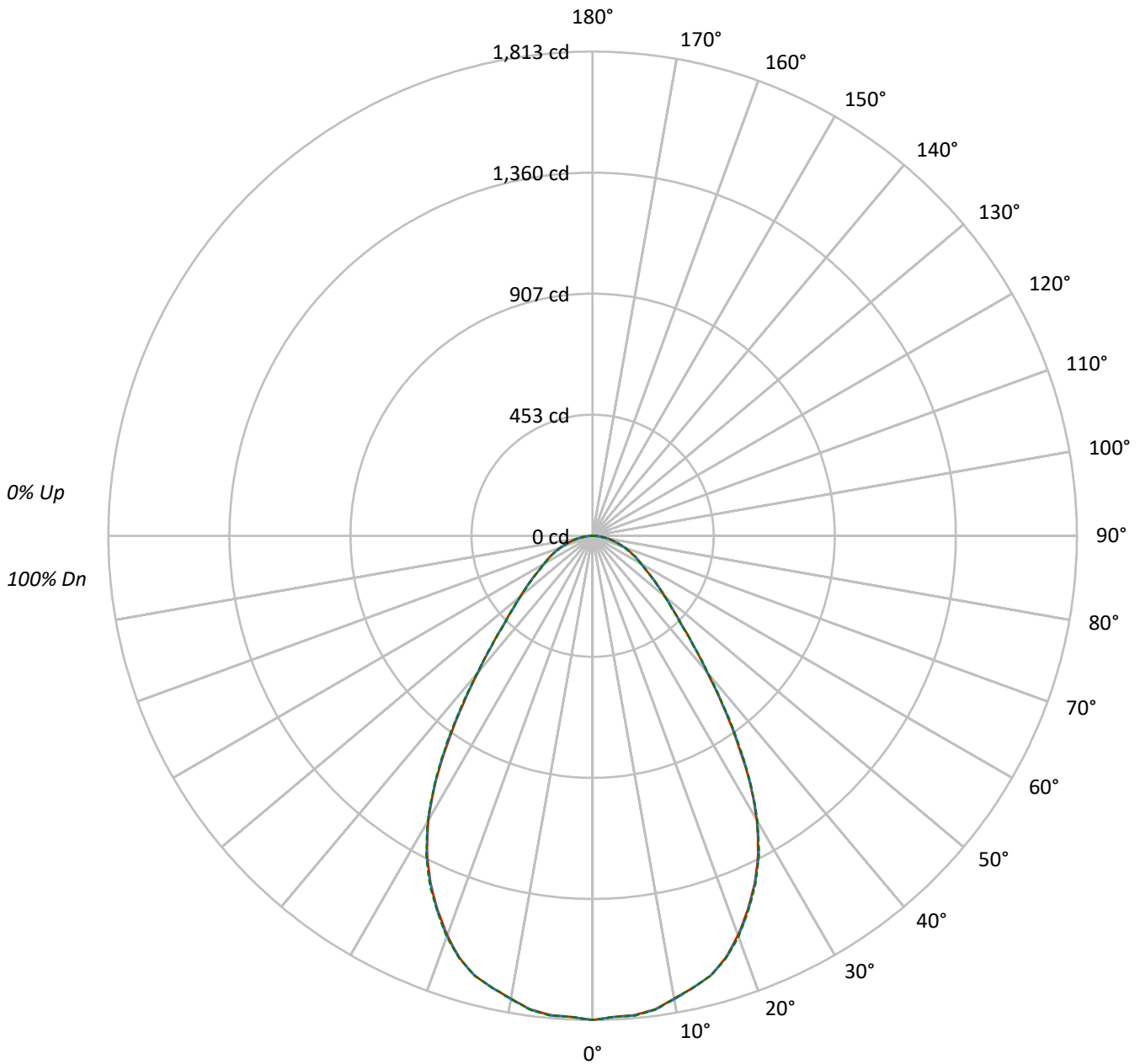
Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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								
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89								
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78								
3	96	87	81	76	94	86	80	75	83	78	74	81	76	72	78	74	71	69								
4	90	80	72	67	87	78	72	66	76	70	66	74	69	65	72	68	64	62								
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56								
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51								
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46								
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42								
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39								
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	223601	223601	223601
5°	223044	223279	223279
10°	220462	220700	220462
15°	217825	217825	217825
20°	208890	209375	209625
25°	195381	195639	196143
30°	175057	175599	175599
35°	142130	143274	143545
40°	107269	107865	108171
45°	82177	81846	81846
50°	67699	67335	67335
55°	58106	57697	57697
60°	51855	51386	51386
65°	48741	48741	48741
70°	45368	45368	45368
75°	41128	42034	41128
80°	38641	37292	38641
85°	31843	31843	31843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.8	6.1
10°-20°	478.0	17.1
20°-30°	656.8	23.5
30°-40°	590.5	21.1
40°-50°	373.1	13.3
50°-60°	243.6	8.7
60°-70°	165.1	5.9
70°-80°	92.9	3.3
80°-90°	26.1	0.9
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°	1305.5	46.7
0°-40°	1896.1	67.8
0°-60°	2512.8	89.8
0°-90°	2796.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2796.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1813	1813	1813	1813	1813	
5°	1801	1801	1803	1803	1803	171
15°	1706	1706	1706	1706	1706	478
25°	1436	1438	1438	1441	1441	655
35°	944	948	952	955	953	588
45°	471	469	469	469	469	374
55°	270	270	268	270	268	245
65°	167	167	167	167	167	165
75°	86	88	88	88	86	93
85°	22	22	22	22	22	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1812.8	1812.8	1812.8	1812.8	1812.8
2.5°	1803.3	1803.3	1803.3	1803.3	1803.3
5°	1801.4	1801.4	1803.3	1803.3	1803.3
7.5°	1788.4	1790.2	1790.2	1790.2	1790.2
10°	1760.2	1760.2	1762.1	1762.1	1760.2
12.5°	1733.9	1733.9	1733.9	1735.8	1733.9
15°	1705.8	1705.8	1705.8	1705.8	1705.8
17.5°	1657.0	1658.9	1658.9	1658.9	1658.9
20°	1591.4	1595.1	1595.1	1597.0	1597.0
22.5°	1516.3	1518.1	1520.0	1521.9	1520.0
25°	1435.6	1437.5	1437.5	1441.2	1441.2
27.5°	1341.7	1343.6	1347.3	1347.3	1347.3
30°	1229.1	1231.0	1232.9	1232.9	1232.9
32.5°	1095.9	1095.9	1099.6	1101.5	1099.6
35°	943.9	947.6	951.5	955.2	953.3
37.5°	799.4	803.2	805.0	805.0	806.9
40°	666.2	669.9	669.9	673.7	671.8
42.5°	561.1	559.2	559.2	563.0	561.1
45°	471.1	469.2	469.2	469.2	469.2
47.5°	405.3	403.4	403.4	403.4	403.4
50°	352.8	350.9	350.9	350.9	350.9
52.5°	309.7	307.8	307.8	307.8	305.8
55°	270.2	270.2	268.3	270.2	268.3
57.5°	234.6	234.6	234.6	234.6	234.6
60°	210.2	208.3	208.3	208.3	208.3
62.5°	187.7	187.7	187.7	187.7	187.7
65°	167.0	167.0	167.0	167.0	167.0
67.5°	146.3	144.5	146.3	146.3	144.5
70°	125.8	123.9	125.8	125.8	125.8
72.5°	105.1	105.1	105.1	107.0	105.1
75°	86.3	88.2	88.2	88.2	86.3
77.5°	69.5	71.3	69.5	69.5	69.5
80°	54.4	52.5	52.5	52.5	54.4
82.5°	37.5	37.5	37.5	37.5	37.5
85°	22.5	22.5	22.5	22.5	22.5
87.5°	9.3	9.3	9.3	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)