

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: P580501

Luminaire Tested: **HC435D010-HM43040930-41WDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580501
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-HM43040930-41WDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3001.8 lumens
Efficiency: N/A
Efficacy: 89.1 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

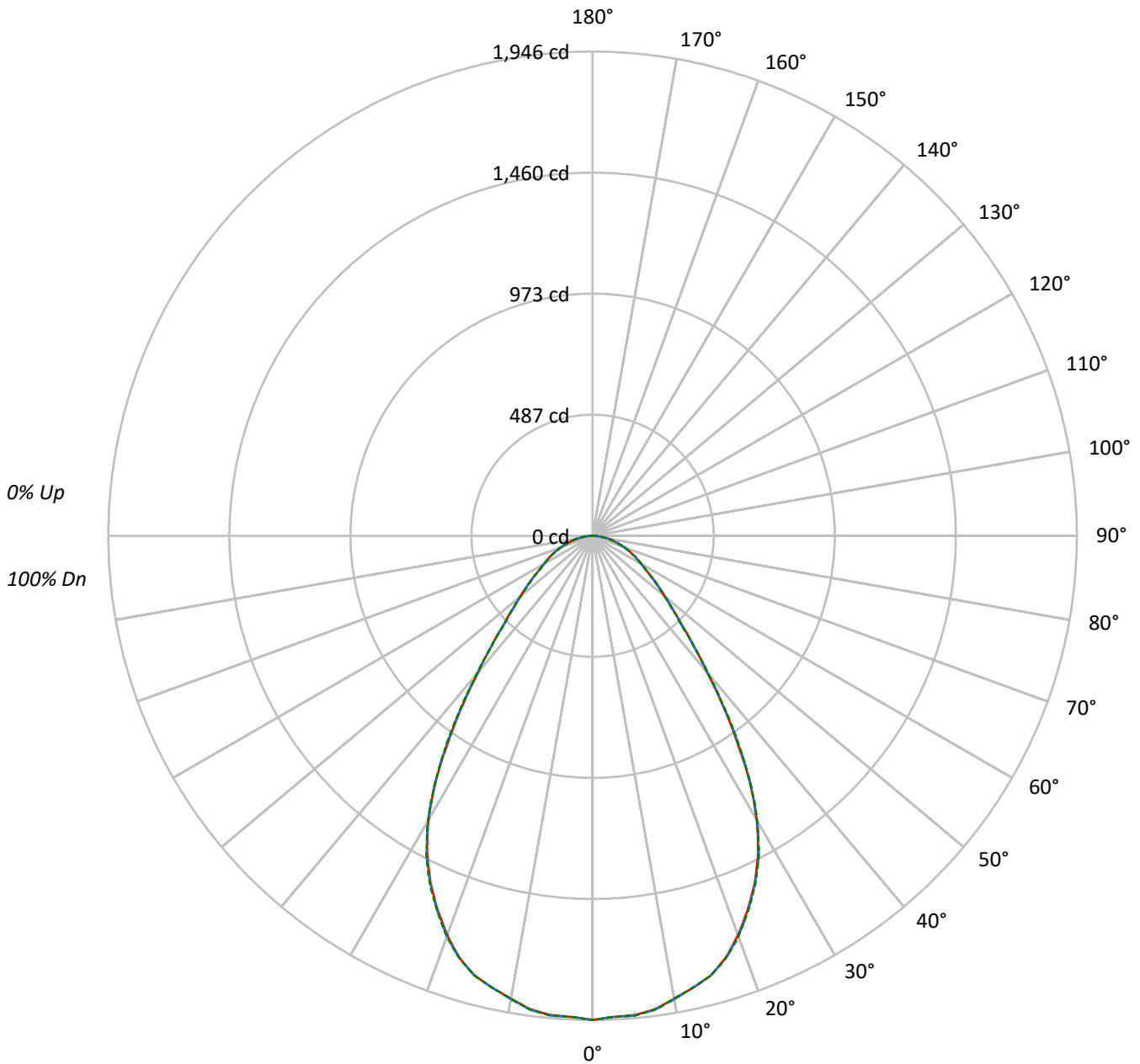
Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	239969	239969	239969
5°	239387	239635	239635
10°	236607	236857	236607
15°	233787	233787	233787
20°	224182	224707	224969
25°	209684	209957	210501
30°	187876	188460	188460
35°	152550	153769	154056
40°	115127	115771	116093
45°	88178	87847	87847
50°	72669	72286	72286
55°	62363	61933	61933
60°	55654	55160	55160
65°	52331	52331	52331
70°	48686	48686	48686
75°	44130	45084	44130
80°	41483	40062	41483
85°	34249	34249	34249



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.3	6.1
10°-20°	513.0	17.1
20°-30°	704.9	23.5
30°-40°	633.8	21.1
40°-50°	400.5	13.3
50°-60°	261.5	8.7
60°-70°	177.2	5.9
70°-80°	99.7	3.3
80°-90°	28.0	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°	1401.1	46.7
0°-40°	2034.9	67.8
0°-60°	2696.9	89.8
0°-90°	3001.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3001.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1946	1946	1946	1946	1946	
5°	1933	1933	1935	1935	1935	183
15°	1831	1831	1831	1831	1831	513
25°	1541	1543	1543	1547	1547	703
35°	1013	1017	1021	1025	1023	631
45°	506	504	504	504	504	401
55°	290	290	288	290	288	263
65°	179	179	179	179	179	178
75°	93	95	95	95	93	99
85°	24	24	24	24	24	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1945.5	1945.5	1945.5	1945.5	1945.5
2.5°	1935.4	1935.4	1935.4	1935.4	1935.4
5°	1933.4	1933.4	1935.4	1935.4	1935.4
7.5°	1919.3	1921.4	1921.4	1921.4	1921.4
10°	1889.1	1889.1	1891.1	1891.1	1889.1
12.5°	1860.9	1860.9	1860.9	1862.9	1860.9
15°	1830.8	1830.8	1830.8	1830.8	1830.8
17.5°	1778.4	1780.4	1780.4	1780.4	1780.4
20°	1707.9	1711.9	1711.9	1713.9	1713.9
22.5°	1627.3	1629.4	1631.4	1633.4	1631.4
25°	1540.7	1542.7	1542.7	1546.7	1546.7
27.5°	1440.1	1442.0	1446.0	1446.0	1446.0
30°	1319.1	1321.1	1323.2	1323.2	1323.2
32.5°	1176.2	1176.2	1180.2	1182.2	1180.2
35°	1013.1	1017.1	1021.2	1025.1	1023.1
37.5°	857.9	862.0	864.0	864.0	866.0
40°	715.0	719.0	719.0	723.1	721.0
42.5°	602.2	600.2	600.2	604.2	602.2
45°	505.5	503.6	503.6	503.6	503.6
47.5°	435.0	433.0	433.0	433.0	433.0
50°	378.7	376.7	376.7	376.7	376.7
52.5°	332.4	330.3	330.3	330.3	328.3
55°	290.0	290.0	288.0	290.0	288.0
57.5°	251.8	251.8	251.8	251.8	251.8
60°	225.6	223.6	223.6	223.6	223.6
62.5°	201.4	201.4	201.4	201.4	201.4
65°	179.3	179.3	179.3	179.3	179.3
67.5°	157.1	155.1	157.1	157.1	155.1
70°	135.0	133.0	135.0	135.0	135.0
72.5°	112.7	112.7	112.7	114.8	112.7
75°	92.6	94.6	94.6	94.6	92.6
77.5°	74.5	76.5	74.5	74.5	74.5
80°	58.4	56.4	56.4	56.4	58.4
82.5°	40.2	40.2	40.2	40.2	40.2
85°	24.2	24.2	24.2	24.2	24.2
87.5°	10.1	10.1	10.1	10.1	10.1
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)