

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: P580485

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580485
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC435D010-HM43040927-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2879.4 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.08 / 1.16
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

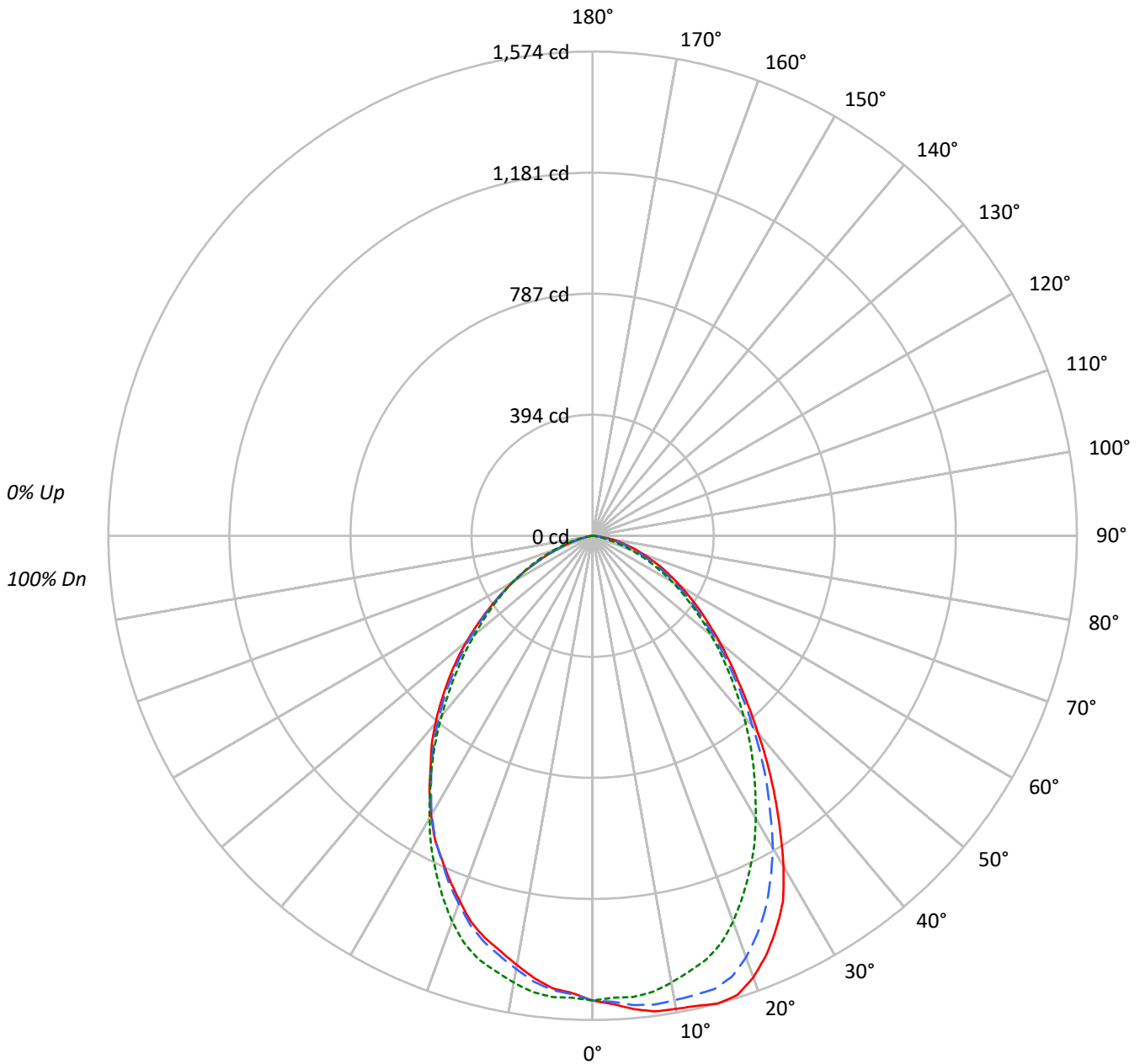
Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P580485

CATALOG NUMBER: HC435D010-HM43040927-41RWWH

Luminous Intensity Polar Plot





TEST NUMBER: P580485

CATALOG NUMBER: HC435D010-HM43040927-41RWWH

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	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67			67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59			59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52			52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47			47
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42			42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38			38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35			35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32			32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	186351	186351	186351
5°	191235	186344	182865
10°	195550	184741	177465
15°	201059	182121	172787
20°	200515	175142	165783
25°	192073	163969	157832
30°	176667	151016	149406
35°	155426	137055	138185
40°	134465	122694	127831
45°	116873	109006	115565
50°	103717	96157	102624
55°	92018	84363	87976
60°	81926	73144	73144
65°	72848	60795	56942
70°	62967	46017	40608
75°	52756	30405	25020
80°	39991	14704	13354
85°	21370	5236	5236



TEST NUMBER: P580485

CATALOG NUMBER: HC435D010-HM43040927-41RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.1	5.0
10°-20°	405.6	14.1
20°-30°	572.0	19.9
30°-40°	590.9	20.5
40°-50°	500.9	17.4
50°-60°	364.5	12.7
60°-70°	212.9	7.4
70°-80°	79.2	2.7
80°-90°	10.3	0.4
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°	1120.7	38.9
0°-40°	1711.6	59.4
0°-60°	2577.0	89.5
0°-90°	2879.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2879.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1511	1511	1511	1511	1511	
5°	1544	1531	1505	1483	1477	148
15°	1574	1526	1426	1366	1353	443
25°	1411	1332	1205	1162	1160	645
35°	1032	987	910	912	918	645
45°	670	651	625	647	662	521
55°	428	407	392	405	409	385
65°	250	229	208	195	195	248
75°	111	92	64	51	52	119
85°	15	9	4	4	4	21
90°	0	0	0	0	0	



TEST NUMBER: P580485

CATALOG NUMBER: HC435D010-HM43040927-41RWWH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8
2.5°	1523.8	1520.1	1516.4	1510.8	1503.2	1497.6	1492.0	1488.2	1488.2
5°	1544.5	1538.9	1531.3	1518.2	1505.0	1493.8	1482.6	1476.9	1476.9
7.5°	1559.6	1552.0	1537.0	1518.2	1495.7	1478.8	1461.9	1454.5	1450.6
10°	1561.3	1553.9	1533.2	1505.0	1475.0	1448.8	1430.1	1418.7	1416.9
12.5°	1565.2	1555.7	1529.5	1490.1	1450.6	1418.7	1398.1	1386.9	1383.1
15°	1574.5	1561.3	1525.7	1475.0	1426.2	1388.7	1366.2	1356.8	1353.1
17.5°	1565.2	1546.4	1503.2	1443.1	1388.7	1347.5	1325.0	1315.5	1315.5
20°	1527.6	1508.9	1458.2	1392.5	1334.3	1294.8	1272.4	1266.7	1263.0
22.5°	1475.0	1454.5	1399.9	1330.6	1272.4	1236.7	1221.7	1214.3	1212.3
25°	1411.3	1390.6	1332.4	1261.1	1204.8	1174.8	1161.7	1161.7	1159.7
27.5°	1339.9	1313.6	1253.6	1191.7	1137.3	1114.8	1109.2	1109.2	1111.0
30°	1240.4	1221.7	1171.1	1111.0	1060.3	1045.3	1045.3	1049.0	1049.0
32.5°	1133.6	1120.4	1075.3	1022.7	983.4	973.9	977.8	985.3	987.1
35°	1032.2	1017.1	987.1	940.2	910.2	906.4	912.0	917.7	917.7
37.5°	932.7	917.7	897.1	859.5	837.0	838.8	846.4	853.9	859.5
40°	835.1	823.9	808.8	778.8	762.0	769.4	778.8	786.4	793.9
42.5°	748.8	737.6	726.2	703.7	692.5	701.8	713.2	720.6	728.1
45°	670.0	662.5	651.2	632.5	624.9	634.3	647.4	655.0	662.5
47.5°	602.5	598.6	583.7	566.7	563.0	572.3	583.7	593.0	598.6
50°	540.5	534.8	521.8	504.8	501.1	516.0	523.6	529.2	534.8
52.5°	480.4	474.8	459.8	444.8	444.8	456.0	461.6	463.5	469.2
55°	427.9	422.3	407.2	396.0	392.3	401.6	405.3	405.3	409.1
57.5°	379.1	373.5	358.4	345.3	343.4	349.1	349.1	349.1	350.9
60°	332.1	326.5	311.6	300.2	296.5	298.4	296.5	294.6	296.5
62.5°	289.0	283.4	268.4	255.3	251.4	251.4	245.8	244.0	245.8
65°	249.6	240.2	229.0	215.8	208.3	202.7	195.1	195.1	195.1
67.5°	210.2	202.7	189.5	176.4	167.0	157.6	146.3	150.2	152.0
70°	174.6	168.9	153.9	140.7	127.6	116.3	107.0	110.7	112.6
72.5°	142.6	135.1	122.0	107.0	95.8	80.7	75.1	78.8	78.8
75°	110.7	103.2	91.9	77.0	63.8	50.7	50.7	52.5	52.5
77.5°	82.6	75.1	63.8	50.7	39.5	30.0	31.9	31.9	31.9
80°	56.3	50.7	41.3	30.0	20.7	16.9	16.9	16.9	18.8
82.5°	31.9	28.1	22.5	15.1	9.3	9.3	9.3	9.3	9.3
85°	15.1	11.2	9.3	5.6	3.7	3.7	3.7	3.7	3.7
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P





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







(END OF REPORT)