

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: P580269

Luminaire Tested: **HC430D010-HM43040827-41RWWH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580269
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: HC430D010-HM43040827-41RWWH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2782.1 lumens
Efficiency: N/A
Efficacy: 99.4 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

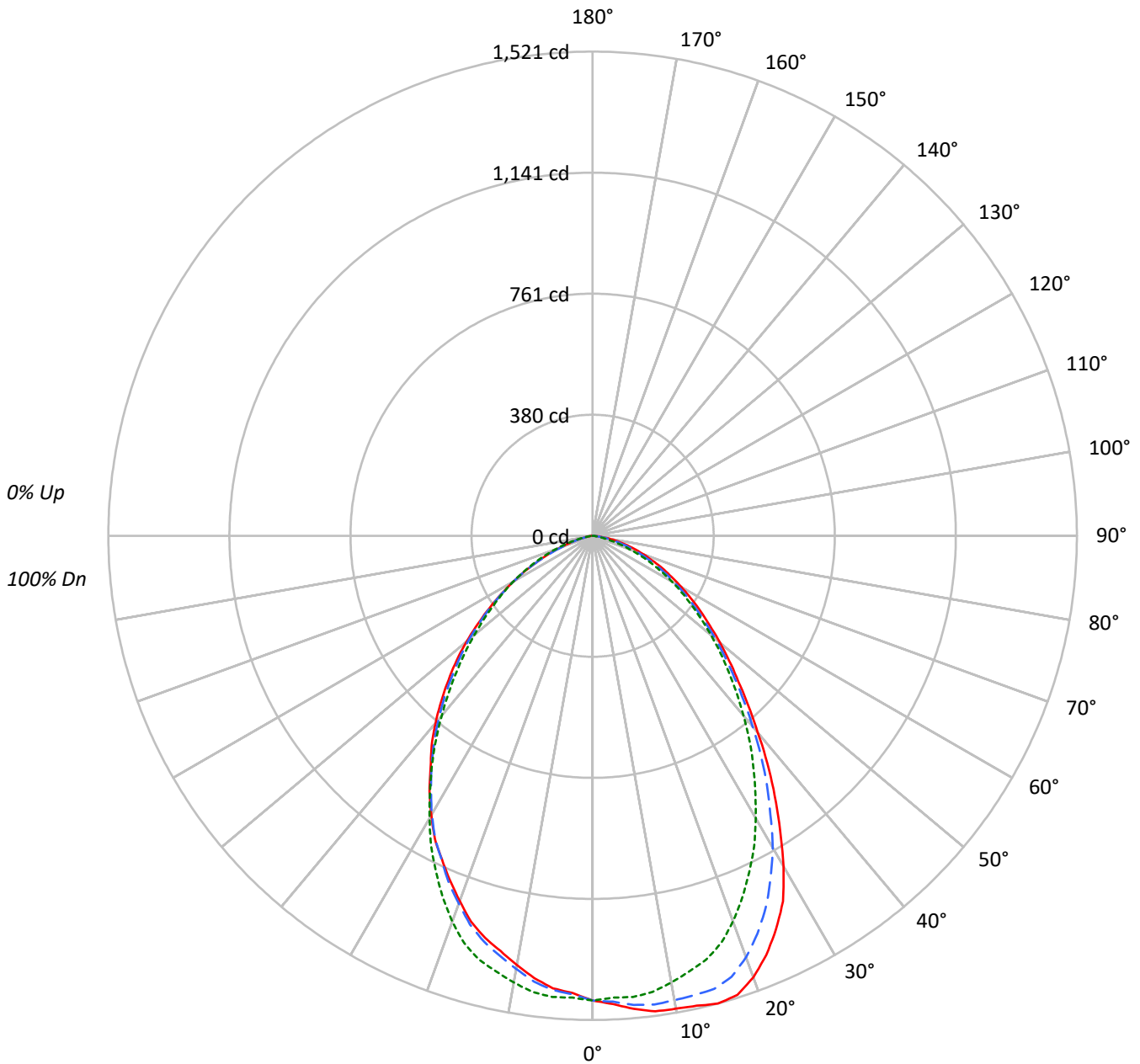
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88	88	88	88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77	77	77	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67	67	67	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59	59	59	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52	52	52	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47	47	47	47
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42	42	42	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38	38	38	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35	35	35	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32	32	32	32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	180035	180035	180035
5°	184759	180054	176687
10°	188950	178504	171453
15°	194265	175979	166951
20°	193742	169223	160179
25°	185568	158430	152510
30°	170699	145902	144364
35°	150171	132418	133517
40°	129924	118524	123499
45°	112931	105325	111640
50°	100225	92895	99150
55°	88900	81503	85008
60°	79163	70677	70677
65°	70397	58722	55045
70°	60804	44467	39201
75°	50945	29404	24210
80°	38641	14206	12928
85°	20662	5095	5095



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.2	5.0
10°-20°	391.9	14.1
20°-30°	552.7	19.9
30°-40°	570.9	20.5
40°-50°	484.0	17.4
50°-60°	352.1	12.7
60°-70°	205.8	7.4
70°-80°	76.5	2.7
80°-90°	10.0	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°	1082.8	38.9
0°-40°	1653.7	59.4
0°-60°	2489.9	89.5
0°-90°	2782.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2782.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1460	1460	1460	1460	1460	
5°	1492	1480	1454	1432	1427	143
15°	1521	1474	1378	1320	1307	428
25°	1364	1287	1164	1122	1121	624
35°	997	954	879	881	887	623
45°	647	629	604	626	640	504
55°	413	393	379	392	395	372
65°	241	221	201	189	189	239
75°	107	89	62	49	51	115
85°	15	9	4	4	4	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1459.6	1459.6	1459.6	1459.6	1459.6	1459.6	1459.6	1459.6	1459.6
2.5°	1472.4	1468.8	1465.0	1459.6	1452.4	1447.0	1441.5	1437.9	1437.9
5°	1492.2	1486.8	1479.6	1466.9	1454.2	1443.3	1432.4	1427.0	1427.0
7.5°	1506.8	1499.6	1485.0	1466.9	1445.2	1428.8	1412.5	1405.3	1401.7
10°	1508.6	1501.4	1481.4	1454.2	1425.2	1399.8	1381.7	1370.7	1368.9
12.5°	1512.2	1503.2	1477.8	1439.7	1401.7	1370.7	1350.9	1340.0	1336.3
15°	1521.3	1508.6	1474.2	1425.2	1378.1	1341.8	1320.0	1311.0	1307.4
17.5°	1512.2	1494.1	1452.4	1394.3	1341.8	1301.9	1280.2	1271.0	1271.0
20°	1476.0	1457.8	1408.9	1345.4	1289.2	1251.2	1229.4	1223.9	1220.3
22.5°	1425.2	1405.3	1352.7	1285.6	1229.4	1194.9	1180.5	1173.1	1171.3
25°	1363.5	1343.6	1287.4	1218.5	1164.1	1135.1	1122.4	1122.4	1120.6
27.5°	1294.6	1269.2	1211.2	1151.3	1098.8	1077.0	1071.6	1071.6	1073.4
30°	1198.5	1180.5	1131.5	1073.4	1024.4	1010.0	1010.0	1013.6	1013.6
32.5°	1095.2	1082.5	1039.0	988.2	950.1	941.1	944.7	951.9	953.7
35°	997.3	982.7	953.7	908.4	879.4	875.8	881.2	886.7	886.7
37.5°	901.2	886.7	866.8	830.4	808.7	810.5	817.8	825.0	830.4
40°	806.9	796.0	781.5	752.5	736.1	743.5	752.5	759.7	767.0
42.5°	723.5	712.6	701.7	680.0	669.1	678.2	689.0	696.3	703.5
45°	647.4	640.0	629.2	611.0	603.8	612.8	625.6	632.8	640.0
47.5°	582.0	578.4	563.9	547.6	543.9	553.1	563.9	573.0	578.4
50°	522.3	516.7	504.1	487.7	484.1	498.7	505.9	511.3	516.7
52.5°	464.2	458.8	444.2	429.8	429.8	440.6	446.0	447.8	453.3
55°	413.4	408.0	393.4	382.6	379.0	388.0	391.6	391.6	395.3
57.5°	366.3	360.8	346.3	333.7	331.9	337.3	337.3	337.3	339.1
60°	320.9	315.5	301.0	290.1	286.5	288.3	286.5	284.7	286.5
62.5°	279.3	273.8	259.3	246.6	243.0	243.0	237.6	235.8	237.6
65°	241.2	232.1	221.2	208.6	201.2	195.8	188.6	188.6	188.6
67.5°	203.0	195.8	183.2	170.4	161.4	152.3	141.5	145.1	146.9
70°	168.6	163.2	148.7	136.0	123.3	112.5	103.3	106.9	108.7
72.5°	137.8	130.5	117.9	103.3	92.5	77.9	72.5	76.1	76.1
75°	106.9	99.7	88.9	74.3	61.7	49.0	49.0	50.8	50.8
77.5°	79.7	72.5	61.7	49.0	38.1	29.0	30.8	30.8	30.8
80°	54.4	49.0	39.9	29.0	20.0	16.4	16.4	16.4	18.2
82.5°	30.8	27.2	21.8	14.6	9.0	9.0	9.0	9.0	9.0
85°	14.6	10.8	9.0	5.4	3.6	3.6	3.6	3.6	3.6
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)