

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: P593230

Luminaire Tested: **HC630D010-HM63040950-61WWW**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593230  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC630D010-HM63040950-61WWW  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2890.2 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.06 / 1.14  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

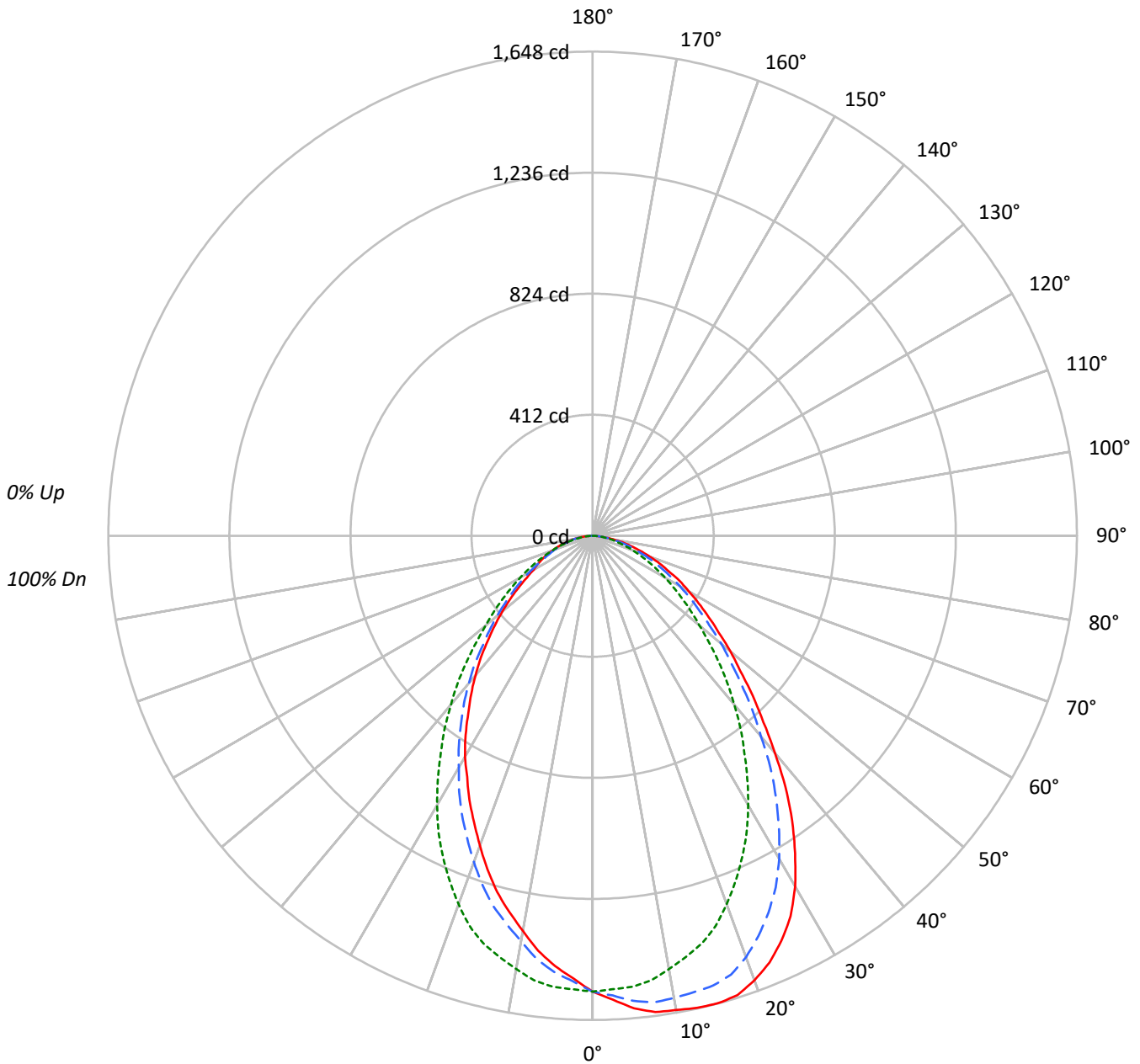
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76																			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	69	63	85	75	68	62	73	67	62	71	65	61	69	64	60	58																			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51																			
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46																			
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42																			
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38																			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34																			
10	58	46	39	34	57	45	38	34	44	38	33	44	38	33	43	37	33	32																			

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

	0°	90°	180°
0°	85053	85053	85053
5°	88829	84806	80899
10°	91253	83343	76023
15°	93508	81538	71226
20°	93925	77847	65415
25°	91959	72881	59997
30°	87241	67017	54989
35°	79237	60231	49336
40°	69044	53651	44383
45°	59743	46951	39020
50°	52186	40434	34191
55°	46106	35526	29342
60°	41444	31149	25404
65°	37112	27085	24646
70°	33147	23097	23097
75°	28764	19465	21689
80°	23077	16479	19794
85°	15788	14404	17046



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.8	5.0
10°-20°	405.3	14.0
20°-30°	564.9	19.5
30°-40°	582.0	20.1
40°-50°	482.4	16.7
50°-60°	346.7	12.0
60°-70°	220.8	7.6
70°-80°	113.4	3.9
80°-90°	28.8	1.0
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°	1116.1	38.6
0°-40°	1698.1	58.8
0°-60°	2527.2	87.4
0°-90°	2890.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2890.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1552	1552	1552	1552	1552	
5°	1614	1589	1541	1491	1470	155
15°	1648	1585	1437	1305	1255	464
25°	1520	1416	1205	1050	992	697
35°	1184	1088	900	781	737	735
45°	771	716	606	528	503	596
55°	482	443	372	330	307	435
65°	286	255	209	182	190	287
75°	136	117	92	96	102	145
85°	25	23	23	25	27	32
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°	1551.5	1551.5	1551.5	1551.5	1551.5	1551.5	1551.5	1551.5	1551.5
2.5°	1580.8	1574.5	1566.2	1557.8	1545.2	1530.6	1518.1	1514.0	1507.7
5°	1614.2	1605.9	1589.1	1568.3	1541.1	1514.0	1491.0	1476.4	1470.1
7.5°	1635.1	1624.6	1601.7	1566.2	1526.4	1486.8	1453.4	1432.5	1424.2
10°	1639.3	1628.8	1597.4	1549.4	1497.2	1443.0	1401.2	1376.1	1365.7
12.5°	1645.5	1630.8	1591.2	1534.9	1468.1	1405.4	1353.2	1321.8	1311.3
15°	1647.6	1630.8	1584.9	1516.0	1436.7	1361.5	1305.2	1267.6	1255.0
17.5°	1639.3	1620.5	1566.2	1482.6	1392.8	1313.5	1246.7	1207.0	1190.3
20°	1610.0	1589.1	1526.4	1432.5	1334.4	1250.8	1181.9	1140.1	1121.3
22.5°	1572.5	1545.2	1474.2	1374.0	1271.8	1184.0	1115.0	1073.3	1054.5
25°	1520.3	1495.2	1415.7	1309.3	1204.9	1113.0	1050.4	1006.5	991.9
27.5°	1459.6	1430.4	1348.9	1242.5	1136.0	1044.1	983.5	943.8	925.0
30°	1378.2	1351.1	1269.6	1163.1	1058.7	973.1	910.4	877.0	868.7
32.5°	1282.1	1259.2	1179.8	1079.6	979.4	900.0	847.8	812.3	804.0
35°	1184.0	1156.9	1087.9	994.0	900.0	829.0	780.9	749.7	737.2
37.5°	1077.5	1052.5	994.0	910.4	826.9	760.1	718.4	691.2	678.7
40°	964.8	946.0	891.6	824.8	749.7	691.2	655.7	632.7	620.2
42.5°	860.4	841.6	804.0	741.3	678.7	626.5	595.1	574.3	563.8
45°	770.6	753.8	716.3	661.9	605.6	561.7	528.3	513.6	503.3
47.5°	680.7	672.4	639.0	588.9	536.7	499.0	476.1	459.4	451.1
50°	611.9	601.4	570.1	517.9	474.1	444.8	423.9	409.3	400.9
52.5°	540.9	530.4	501.2	457.3	421.9	394.6	373.8	361.2	352.9
55°	482.4	474.1	442.7	403.1	371.7	348.7	329.9	315.3	307.0
57.5°	428.0	419.7	390.5	352.9	325.8	304.9	288.2	275.6	265.1
60°	378.0	371.7	342.4	307.0	284.1	263.1	248.5	238.0	231.7
62.5°	334.1	321.6	296.5	265.1	244.3	227.6	212.9	206.8	210.9
65°	286.1	279.8	254.8	227.6	208.8	192.1	181.7	185.8	190.0
67.5°	246.4	238.0	217.2	192.1	175.4	162.9	156.6	164.9	167.1
70°	206.8	198.3	179.5	158.7	144.1	135.8	135.8	142.0	144.1
72.5°	169.2	162.9	146.1	129.5	119.0	112.7	117.0	121.2	123.2
75°	135.8	129.5	117.0	102.4	91.9	91.9	96.1	100.2	102.4
77.5°	104.4	100.2	87.7	77.3	73.1	73.1	77.3	79.3	81.4
80°	73.1	69.0	62.7	56.4	52.2	56.4	60.5	60.5	62.7
82.5°	48.0	45.9	41.7	37.6	37.6	39.7	41.7	43.9	43.9
85°	25.1	25.1	22.9	20.9	22.9	25.1	25.1	27.1	27.1
87.5°	8.3	8.3	8.3	8.3	10.5	10.5	10.5	10.5	10.5
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)