

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: P593601

Luminaire Tested: **HC820D010-HM80520950-81WDBB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593601  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC820D010-HM80520950-81WDBB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2132.2 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.32 / 1.13  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

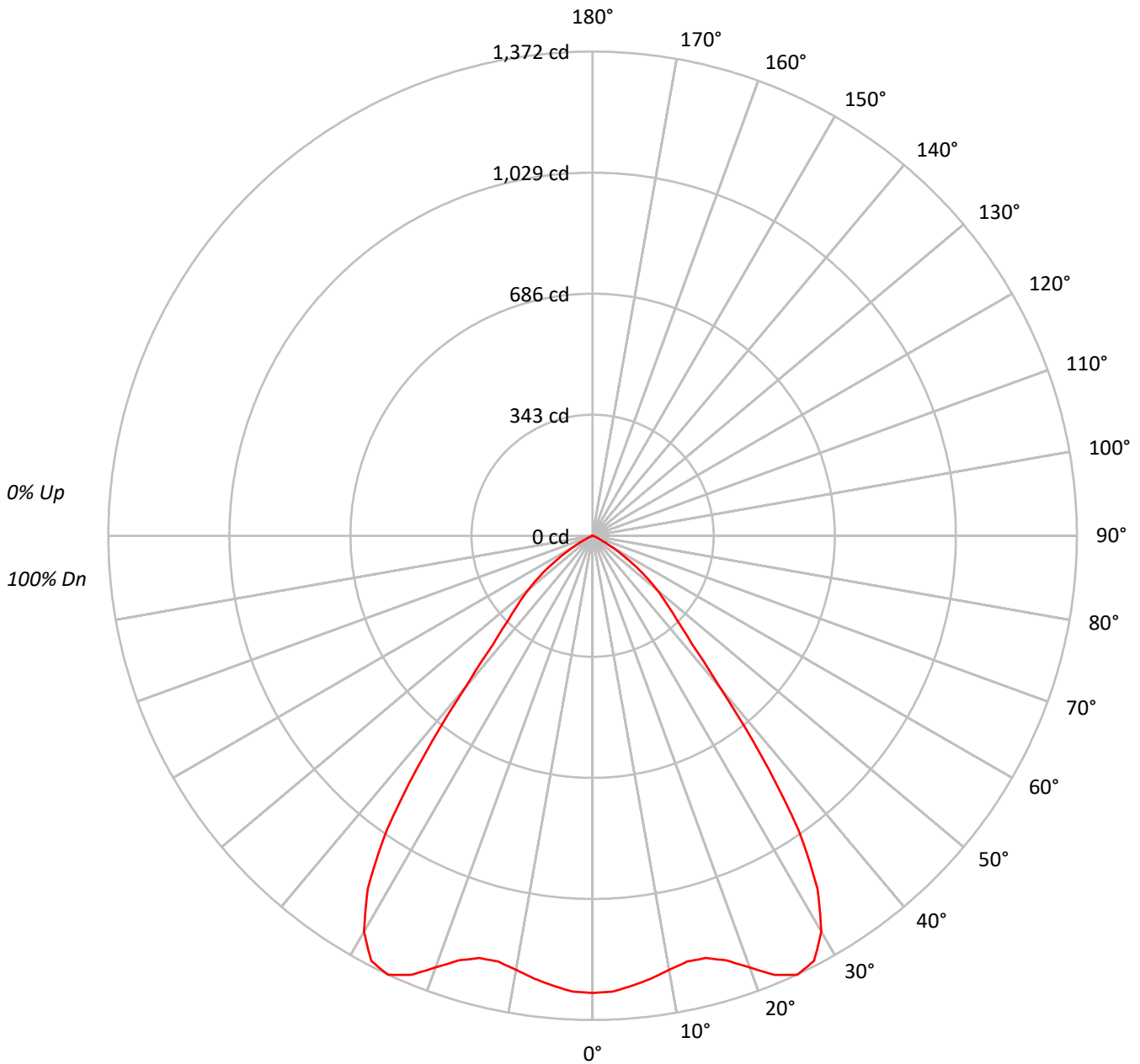
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P593601

CATALOG NUMBER: HC820D010-HM80520950-81WDBB

### Luminous Intensity Polar Plot





TEST NUMBER: P593601

CATALOG NUMBER: HC820D010-HM80520950-81WDBB

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92
2	106	100	95	92	104	98	94	91	95	92	89	92	89	87	89	87	85	83
3	99	92	86	81	97	90	85	81	88	83	79	85	81	78	83	80	77	75
4	93	84	78	73	91	83	77	72	81	76	71	79	74	71	77	73	70	68
5	87	77	71	66	85	76	70	65	74	69	65	73	68	64	71	67	63	62
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

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

	0°
0°	39952
5°	39621
10°	39099
15°	39541
20°	42703
25°	46698
30°	46132
35°	38265
40°	22526
45°	14718
50°	11408
55°	7575
60°	3688
65°	1138
70°	388
75°	334
80°	249
85°	495



TEST NUMBER: P593601

CATALOG NUMBER: HC820D010-HM80520950-81WDBB

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.2	5.7
10°-20°	355.8	16.7
20°-30°	622.2	29.2
30°-40°	605.2	28.4
40°-50°	275.2	12.9
50°-60°	127.6	6.0
60°-70°	21.4	1.0
70°-80°	2.6	0.1
80°-90°	1.0	0.0
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°	1099.2	51.6
0°-40°	1704.5	79.9
0°-60°	2107.3	98.8
0°-90°	2132.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2132.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1296	
5°	1280	121
15°	1239	356
25°	1372	622
35°	1016	605
45°	338	275
55°	141	128
65°	16	21
75°	3	3
85°	1	1
90°	0	



TEST NUMBER: P593601

CATALOG NUMBER: HC820D010-HM80520950-81WDBB

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1295.6
2.5°	1292.8
5°	1280.0
7.5°	1265.7
10°	1248.7
12.5°	1235.8
15°	1238.6
17.5°	1261.4
20°	1301.3
22.5°	1346.9
25°	1372.5
27.5°	1358.2
30°	1295.6
32.5°	1186.0
35°	1016.5
37.5°	783.1
40°	559.6
42.5°	417.1
45°	337.5
47.5°	284.7
50°	237.8
52.5°	189.4
55°	140.9
57.5°	96.8
60°	59.8
62.5°	32.7
65°	15.6
67.5°	7.1
70°	4.3
72.5°	2.8
75°	2.8
77.5°	1.4
80°	1.4
82.5°	1.4
85°	1.4
87.5°	0.0
90°	0.0



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)