

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: P584078

Luminaire Tested: **HC820D010-HM80520935-81WDWB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584078  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC820D010-HM80520935-81WDWB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, WHITE BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2276.9 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.32 / 1.14  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

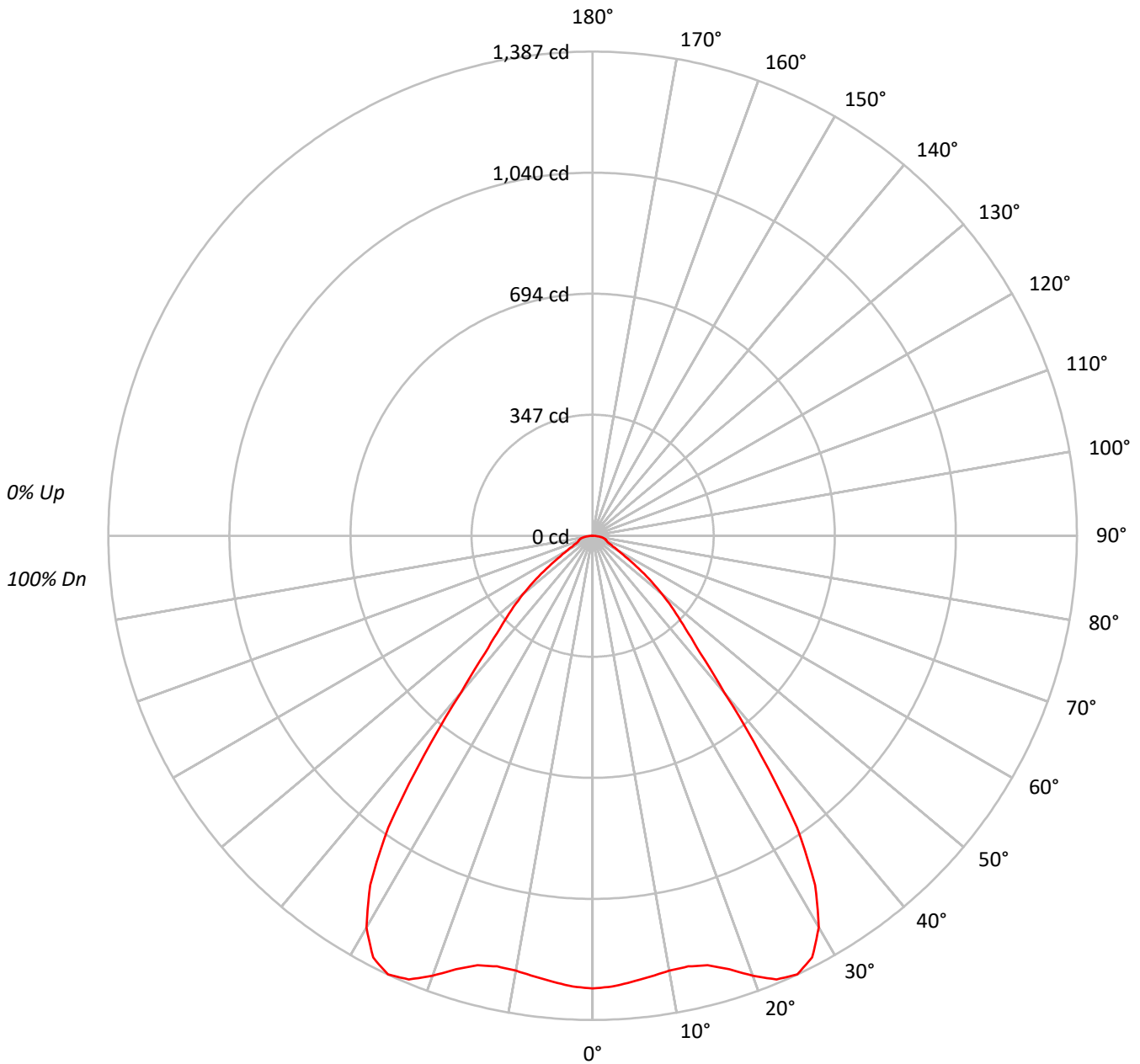
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	108	105	103	109	106	103	101	102	100	98	98	97	95	95	93	92	90		
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	88	85	83	81		
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73		
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65		
5	86	75	68	63	84	74	68	63	73	67	62	71	66	62	69	65	61	59		
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	56	54		
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	59	55	51	49		
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45		
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	47	43	41		
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38		

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

	0°
0°	39989
5°	39711
10°	39610
15°	40649
20°	44005
25°	47178
30°	46125
35°	38408
40°	23597
45°	16340
50°	12468
55°	8177
60°	5119
65°	3831
70°	3868
75°	4456
80°	4919
85°	4387



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.9	5.4
10°-20°	365.5	16.1
20°-30°	629.2	27.6
30°-40°	609.6	26.8
40°-50°	300.3	13.2
50°-60°	141.7	6.2
60°-70°	55.8	2.5
70°-80°	38.6	1.7
80°-90°	14.3	0.6
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°	1116.6	49.0
0°-40°	1726.3	75.8
0°-60°	2168.2	95.2
0°-90°	2276.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2276.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1297	
5°	1283	122
15°	1273	366
25°	1387	629
35°	1020	610
45°	375	300
55°	152	142
65°	52	56
75°	37	39
85°	12	14
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1296.8
2.5°	1292.6
5°	1282.9
7.5°	1273.3
10°	1265.0
12.5°	1263.6
15°	1273.3
17.5°	1302.3
20°	1341.0
22.5°	1375.5
25°	1386.6
27.5°	1361.7
30°	1295.4
32.5°	1186.1
35°	1020.3
37.5°	792.2
40°	586.2
42.5°	454.8
45°	374.7
47.5°	315.2
50°	259.9
52.5°	204.6
55°	152.1
57.5°	110.6
60°	83.0
62.5°	65.0
65°	52.5
67.5°	45.6
70°	42.9
72.5°	40.1
75°	37.4
77.5°	33.2
80°	27.7
82.5°	20.7
85°	12.4
87.5°	5.6
90°	0.0



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— 0°-180°







(END OF REPORT)