

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: P584409

Luminaire Tested: **HC835D010-HM82555835-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584409  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC835D010-HM82555835-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3742.3 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

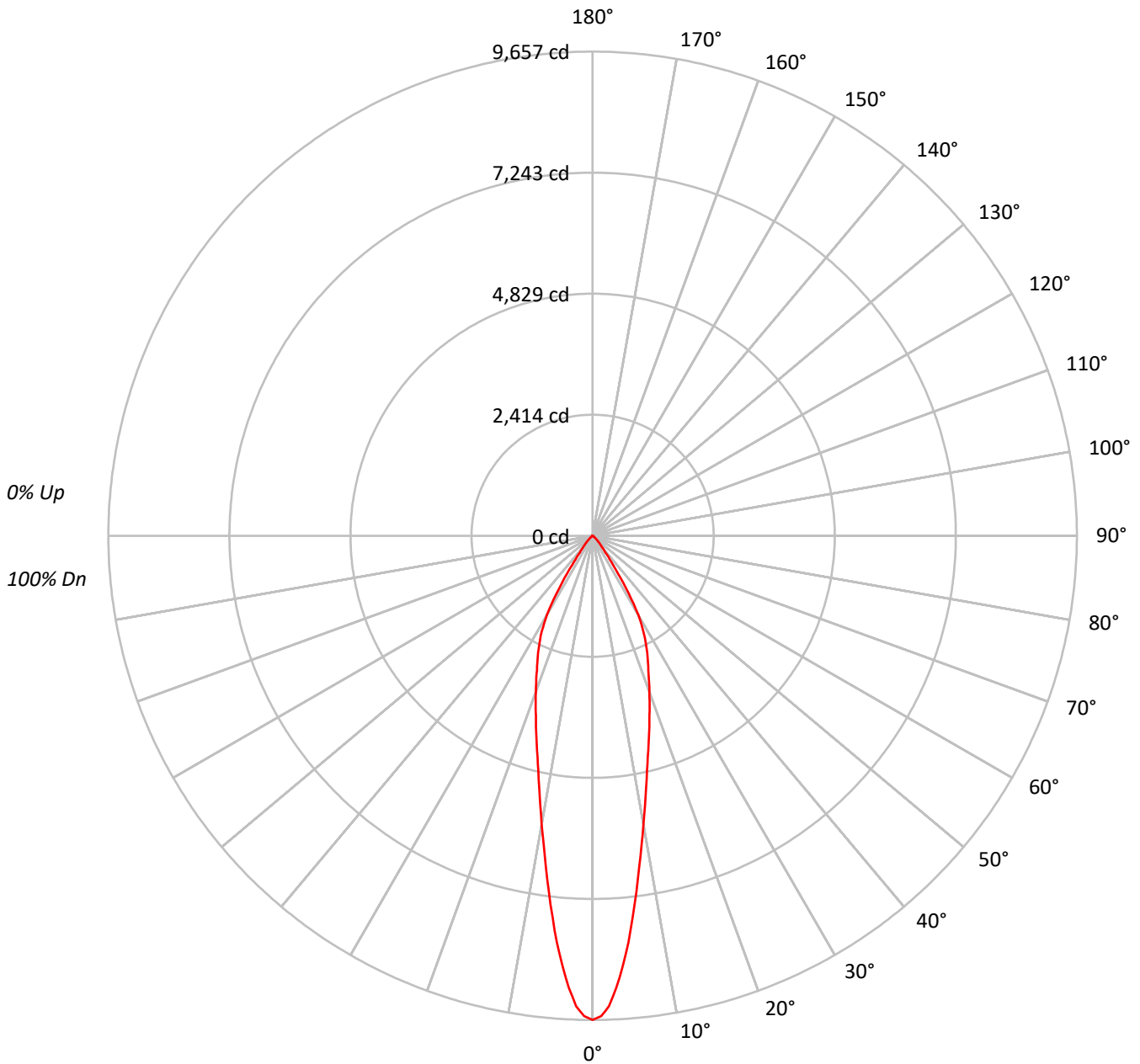
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95	95	95	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89	89	89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84	84	84	84
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80	80	80	80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75	75	75	75
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72	72	72	72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68	68	68	68
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65	65	65	65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62	62	62	62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59	59	59	59

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

	0°
0°	297774
5°	252276
10°	183038
15°	137456
20°	108455
25°	87479
30°	64829
35°	26264
40°	11078
45°	5940
50°	2667
55°	1344
60°	857
65°	613
70°	496
75°	334
80°	497
85°	991



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	699.8	18.7
10°-20°	1209.3	32.3
20°-30°	1169.2	31.2
30°-40°	513.5	13.7
40°-50°	111.0	3.0
50°-60°	24.9	0.7
60°-70°	8.6	0.2
70°-80°	3.3	0.1
80°-90°	2.7	0.1
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°	3078.3	82.3
0°-40°	3591.8	96.0
0°-60°	3727.7	99.6
0°-90°	3742.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3742.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	9657	
5°	8150	700
15°	4306	1209
25°	2571	1169
35°	698	514
45°	136	111
55°	25	25
65°	8	9
75°	3	3
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	9656.6
1°	9584.4
2°	9386.9
3°	9031.1
4°	8605.8
5°	8150.0
6°	7652.5
7°	7152.1
8°	6682.3
9°	6245.9
10°	5845.6
11°	5467.7
12°	5128.5
13°	4819.9
14°	4547.6
15°	4305.7
17.5°	3763.6
20°	3305.0
22.5°	2902.0
25°	2571.1
27.5°	2234.9
30°	1820.7
32.5°	1236.9
35°	697.7
37.5°	411.4
40°	275.2
42.5°	194.6
45°	136.2
47.5°	88.9
50°	55.6
52.5°	33.3
55°	25.0
57.5°	19.4
60°	13.9
62.5°	11.1
65°	8.4
67.5°	5.5
70°	5.5
72.5°	2.8
75°	2.8
77.5°	2.8
80°	2.8
82.5°	2.8



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	2.8
87.5°	2.8



(END OF REPORT)