

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: P593523

Luminaire Tested: **HC810D010-HM80520850-81WDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593523  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC810D010-HM80520850-81WDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1454.3 lumens  
Efficiency: N/A  
Efficacy: 146.9 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.05  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

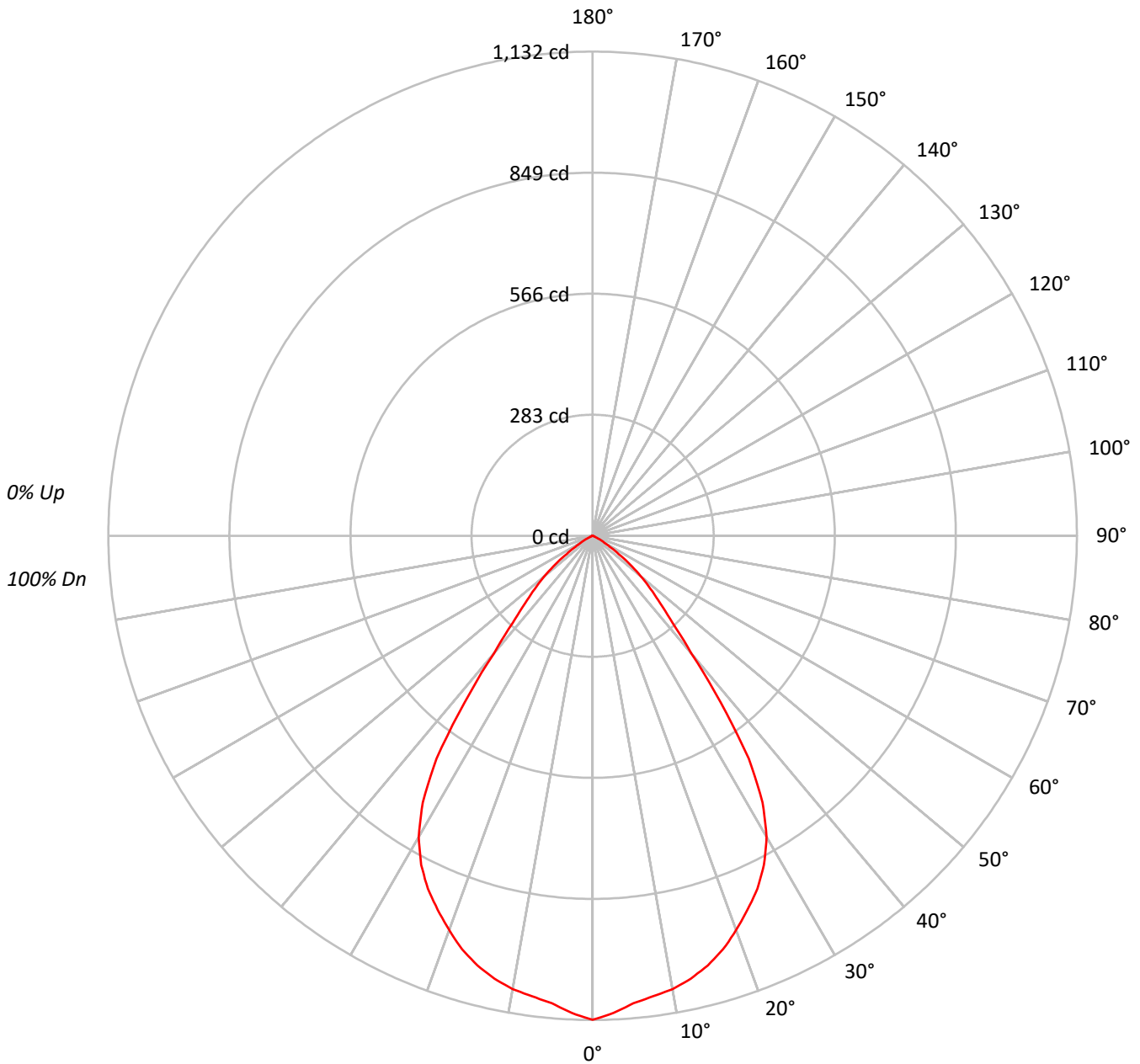
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84	84	84	84
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	77	77	77	77
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	71	70	70	70	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	64
6	83	73	66	62	82	72	66	61	71	65	61	69	64	61	68	64	60	59	59	59	59
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	63	59	55	54	54	54	54
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50	50	50	50
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46	46	46	46
10	66	55	49	45	65	55	49	45	54	48	44	53	48	44	52	48	44	43	43	43	43

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

	0°
0°	34894
5°	33954
10°	33698
15°	33198
20°	32192
25°	30989
30°	28948
35°	23953
40°	14463
45°	9738
50°	7018
55°	4000
60°	1764
65°	635
70°	234
75°	95
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	7.2
10°-20°	292.2	20.1
20°-30°	416.9	28.7
30°-40°	379.6	26.1
40°-50°	179.0	12.3
50°-60°	70.4	4.8
60°-70°	11.2	0.8
70°-80°	0.8	0.1
80°-90°	0.0	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°	813.3	55.9
0°-40°	1192.9	82.0
0°-60°	1442.4	99.2
0°-90°	1454.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1454.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1132	
5°	1097	104
15°	1040	292
25°	911	417
35°	636	380
45°	223	179
55°	74	70
65°	9	11
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1131.6
2.5°	1116.9
5°	1096.9
7.5°	1085.6
10°	1076.2
12.5°	1060.6
15°	1039.9
17.5°	1013.9
20°	981.0
22.5°	946.3
25°	910.8
27.5°	867.5
30°	813.0
32.5°	739.4
35°	636.3
37.5°	491.7
40°	359.3
42.5°	276.2
45°	223.3
47.5°	183.5
50°	146.3
52.5°	110.0
55°	74.4
57.5°	46.8
60°	28.6
62.5°	17.3
65°	8.7
67.5°	4.3
70°	2.6
72.5°	0.8
75°	0.8
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)