

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: P593536

Luminaire Tested: **HC810D010-HM80520950-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593536  
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: HC810D010-HM80520950-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1030.8 lumens  
Efficiency: N/A  
Efficacy: 104.1 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

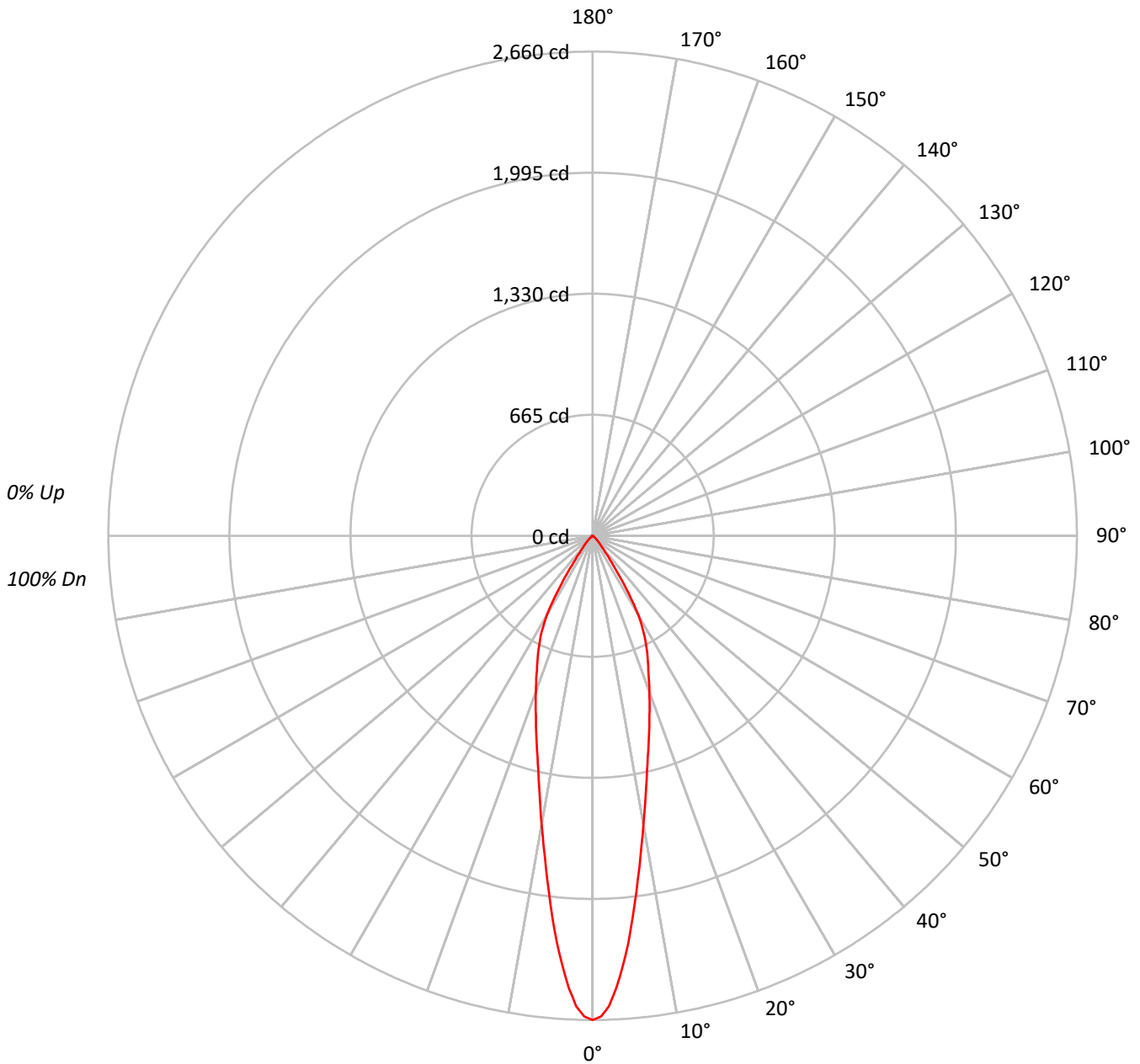
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P593536

CATALOG NUMBER: HC810D010-HM80520950-81NDH

### 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
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95			95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			89
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84			84
4	100	93	88	84	98	92	88	84	90	86	83	88	85	82	86	83	81	80			80
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75			75
6	92	84	78	75	90	83	78	74	82	77	74	80	76	73	79	76	73	72			72
7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68			68
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65			65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62			62
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59			59

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

	0°
0°	82037
5°	69501
10°	50425
15°	37872
20°	29878
25°	24099
30°	17860
35°	7235
40°	3051
45°	1635
50°	734
55°	371
60°	234
65°	168
70°	144
75°	83
80°	124
85°	248



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.8	18.7
10°-20°	333.2	32.3
20°-30°	322.1	31.2
30°-40°	141.5	13.7
40°-50°	30.6	3.0
50°-60°	6.9	0.7
60°-70°	2.4	0.2
70°-80°	0.9	0.1
80°-90°	0.7	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°	848.1	82.3
0°-40°	989.5	96.0
0°-60°	1027.0	99.6
0°-90°	1030.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1030.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2660	
5°	2245	193
15°	1186	333
25°	708	322
35°	192	141
45°	38	31
55°	7	7
65°	2	2
75°	1	1
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2660.4
1°	2640.6
2°	2586.1
3°	2488.1
4°	2370.9
5°	2245.3
6°	2108.3
7°	1970.4
8°	1841.0
9°	1720.8
10°	1610.4
11°	1506.3
12°	1413.0
13°	1327.8
14°	1252.8
15°	1186.3
17.5°	1036.8
20°	910.5
22.5°	799.5
25°	708.3
27.5°	615.7
30°	501.6
32.5°	340.8
35°	192.2
37.5°	113.3
40°	75.8
42.5°	53.6
45°	37.5
47.5°	24.5
50°	15.3
52.5°	9.1
55°	6.9
57.5°	5.4
60°	3.8
62.5°	3.0
65°	2.3
67.5°	1.6
70°	1.6
72.5°	0.7
75°	0.7
77.5°	0.7
80°	0.7
82.5°	0.7



TEST NUMBER: P593536

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CANDELA DISTRIBUTION (continued):

0°  
90° | 0.0



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— 0°-180°







85°		0.7
87.5°		0.7



(END OF REPORT)