

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: P584050

Luminaire Tested: **HC820D010-HM80520930-81MDW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584050
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC820D010-HM80520930-81MDW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1938.7 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 0.95
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

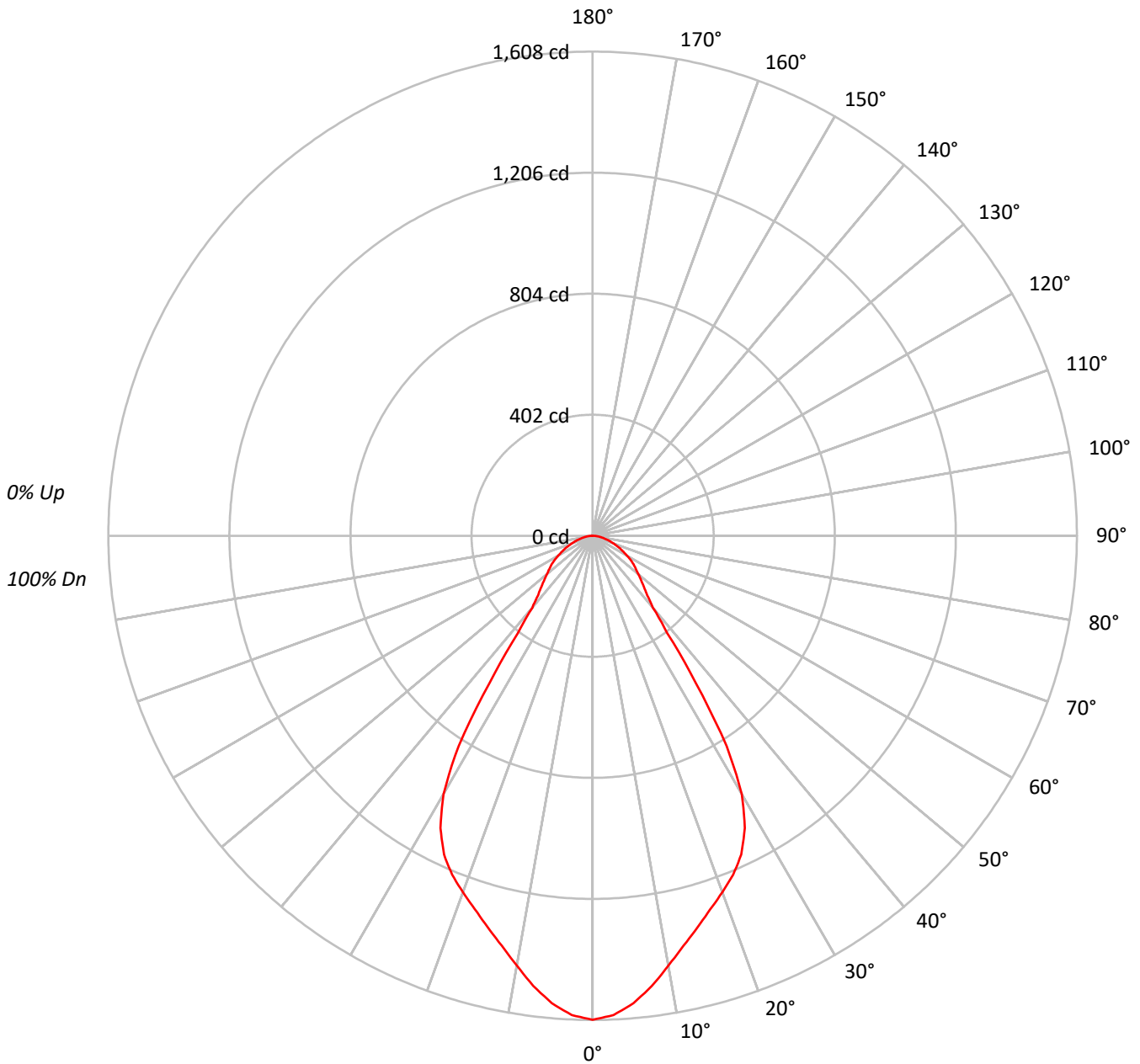
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80			80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			72
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65			65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59			59
6	81	70	63	58	79	69	62	57	67	61	57	66	61	56	64	60	56	54			54
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50			50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46			46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43			43
10	64	53	46	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40			40

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	49572
5°	48223
10°	45374
15°	42963
20°	41328
25°	39730
30°	35286
35°	22470
40°	12543
45°	10505
50°	9479
55°	8941
60°	8159
65°	7355
70°	6491
75°	5778
80°	5114
85°	4635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.2	7.5
10°-20°	379.5	19.6
20°-30°	529.5	27.3
30°-40°	381.0	19.7
40°-50°	188.8	9.7
50°-60°	147.7	7.6
60°-70°	100.0	5.2
70°-80°	51.9	2.7
80°-90°	14.9	0.8
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°	1054.2	54.4
0°-40°	1435.2	74.0
0°-60°	1771.8	91.4
0°-90°	1938.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1938.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1608	
5°	1558	145
15°	1346	380
25°	1168	529
35°	597	381
45°	241	189
55°	166	148
65°	101	100
75°	48	52
85°	13	15
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1607.6
2.5°	1593.2
5°	1557.9
7.5°	1508.1
10°	1449.1
12.5°	1394.2
15°	1345.8
17.5°	1300.0
20°	1259.4
22.5°	1218.8
25°	1167.7
27.5°	1094.4
30°	991.0
32.5°	828.7
35°	596.9
37.5°	407.1
40°	311.6
42.5°	268.3
45°	240.9
47.5°	217.4
50°	197.6
52.5°	180.6
55°	166.3
57.5°	149.3
60°	132.3
62.5°	115.2
65°	100.8
67.5°	86.4
70°	72.0
72.5°	60.2
75°	48.5
77.5°	37.9
80°	28.8
82.5°	20.9
85°	13.1
87.5°	6.5
90°	0.0



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— 0°-180°







(END OF REPORT)