

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: P575618

Luminaire Tested: **HC820D010-HM80520835-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P575618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC820D010-HM80520835-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2236.8 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

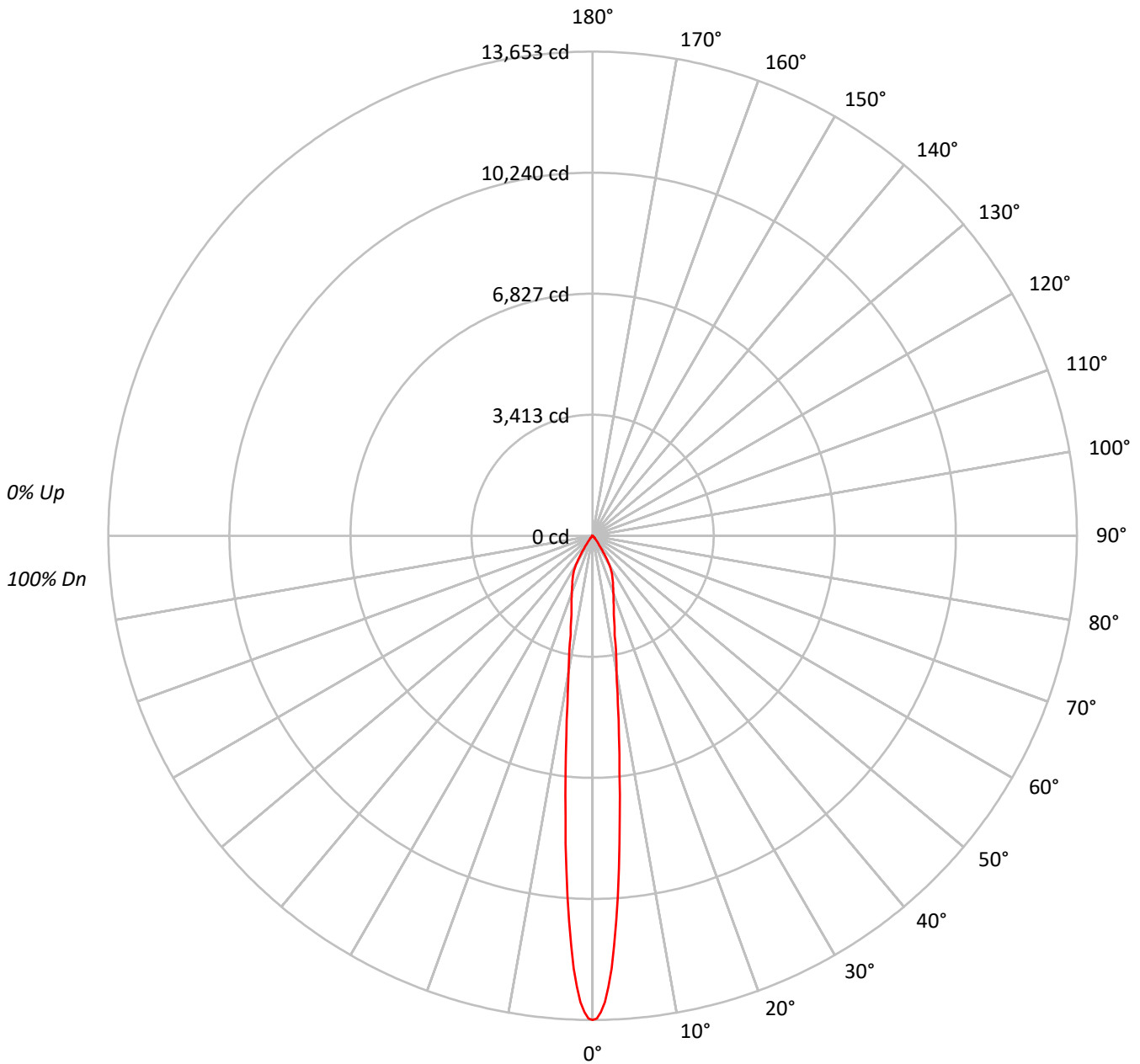
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96			96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91			91
3	106	101	97	93	104	99	96	93	97	94	91	95	92	90	92	90	89	87			87
4	102	96	91	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83			83
5	98	92	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80			80
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	76			76
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73			73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71			71
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	72	69	68			68
10	83	75	70	67	82	75	70	67	74	70	67	73	69	67	73	69	67	66			66

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	421021
5°	270050
10°	121992
15°	73607
20°	56091
25°	45296
30°	33193
35°	12020
40°	4488
45°	2037
50°	652
55°	161
60°	93
65°	109
70°	0
75°	0
80°	266
85°	531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	665.4	29.7
10°-20°	675.8	30.2
20°-30°	605.0	27.0
30°-40°	243.7	10.9
40°-50°	40.0	1.8
50°-60°	3.6	0.2
60°-70°	1.3	0.1
70°-80°	1.0	0.0
80°-90°	1.4	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°	1946.2	87.0
0°-40°	2189.9	97.9
0°-60°	2233.5	99.9
0°-90°	2237.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2236.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	13653	
5°	8724	665
15°	2306	676
25°	1331	605
35°	319	244
45°	47	40
55°	3	4
65°	2	1
75°	0	1
85°	2	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	13653.4
0.5°	13611.2
1°	13435.1
1.5°	13151.9
2°	12722.7
2.5°	12215.1
3°	11579.7
3.5°	10882.3
4°	10192.6
4.5°	9420.1
5°	8724.2
5.5°	7966.8
6°	7352.3
6.5°	6712.2
7°	6209.3
7.5°	5677.6
8°	5250.0
8.5°	4820.7
9°	4498.5
9.5°	4143.0
10°	3896.0
12.5°	2873.4
15°	2305.7
17.5°	1969.8
20°	1709.3
22.5°	1501.5
25°	1331.3
27.5°	1161.1
30°	932.2
32.5°	599.4
35°	319.3
37.5°	176.2
40°	111.5
42.5°	73.8
45°	46.7
47.5°	28.6
50°	13.6
52.5°	4.5
55°	3.0
57.5°	1.5
60°	1.5
62.5°	1.5
65°	1.5



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CANDELA DISTRIBUTION (continued):

	0°
72.5°	0.0
75°	0.0
77.5°	1.5
80°	1.5
82.5°	1.5
85°	1.5
87.5°	1.5
90°	0.0



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— 0°-180°







67.5°		1.5
70°		0.0



(END OF REPORT)