

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

Report Number: P27420

Luminaire Tested: **5230TBZ-E5ICAT \_ H5ICAT-29WA19**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P27420  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: 5230TBZ-E5ICAT \_ H5ICAT-29WA19  
Description: H5 5" RECESSED INCANDESCENT WITH LENS, TUSCAN BRONZE METAL RING,  
SHOWERLIGHT  
Light Source: (1) PHILIPS ECOVANTAGE MEDIUM BASE INCANDESCENT  
29A19/EV  
Ballast/Driver: (1) CHROMA AC POWER SUPPLY  
IN0061

**Summary**

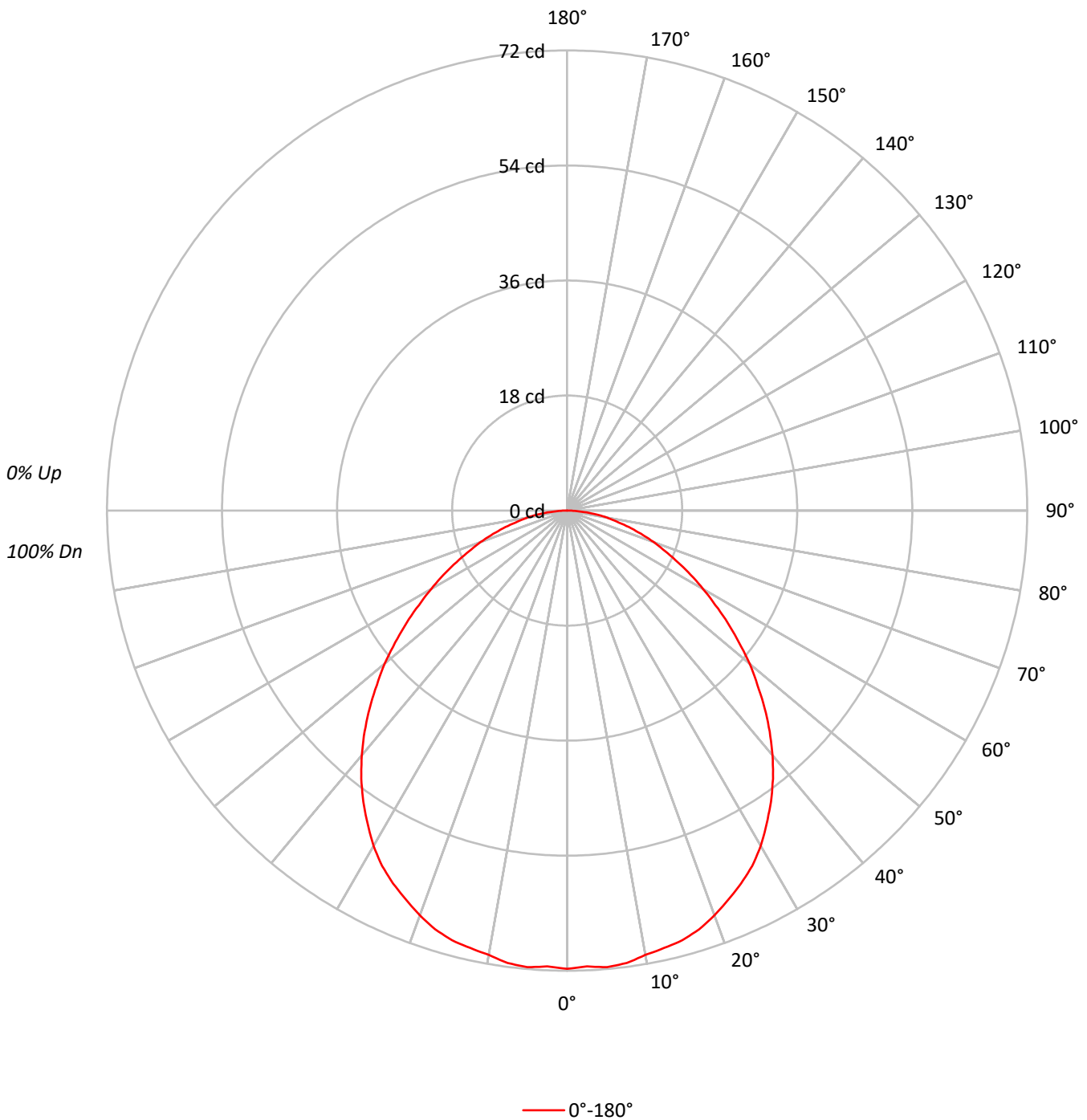
Lumens per Lamp: 380 (1 lamp)  
Luminaire Lumens: 184.8 lumens  
Efficiency: 48.6%  
Efficacy: 6.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.32  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.5  
Input Voltage (V): 120.49  
Input Current (Ain): 0.23688  
Voltage Rise (V): NR  
Power Factor: 1  
Total Harmonic Distortion (THDi): 0.96%  
Frequency (hertz): 60  
Stabilization Time: 0.25 HR  
Operation Time: 0.5 HR  
Ambient Temperature (°C): 24.8  
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	0
RCR																		
0	58	58	58	58	57	57	57	57	54	54	54	52	52	52	50	50	50	49
1	53	51	49	47	52	50	48	46	48	46	45	46	45	44	44	43	42	41
2	49	45	42	39	47	44	41	38	42	40	37	40	38	37	39	37	36	35
3	44	39	36	33	43	39	35	32	37	34	32	36	33	31	35	33	31	30
4	41	35	31	28	40	35	31	28	33	30	27	32	29	27	31	29	27	26
5	38	32	27	24	37	31	27	24	30	26	24	29	26	24	28	25	23	22
6	35	29	24	21	34	28	24	21	27	24	21	26	23	21	26	23	21	20
7	32	26	22	19	32	26	22	19	25	21	19	24	21	18	23	21	18	17
8	30	24	20	17	29	23	20	17	23	19	17	22	19	17	22	19	17	16
9	28	22	18	15	28	22	18	15	21	18	15	20	17	15	20	17	15	14
10	26	20	16	14	26	20	16	14	19	16	14	19	16	14	19	16	14	13

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

	0°
0°	5660
5°	5682
10°	5659
15°	5688
20°	5662
25°	5609
30°	5524
35°	5358
40°	5153
45°	4879
50°	4581
55°	4225
60°	3884
65°	3568
70°	3324
75°	3050
80°	2864
85°	2446



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	6.8	3.7	1.8
10°-20°	19.6	10.6	5.2
20°-30°	29.6	16.0	7.8
30°-40°	34.7	18.8	9.1
40°-50°	33.7	18.2	8.9
50°-60°	27.5	14.9	7.2
60°-70°	19.0	10.3	5.0
70°-80°	10.6	5.8	2.8
80°-90°	3.2	1.7	0.8
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	56.1	30.3	14.8
0°-40°	90.8	49.1	23.9
0°-60°	152.0	82.2	40.0
0°-90°	184.8	100.0	48.6
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	184.8	100.0	48.6

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	72	
5°	72	7
15°	70	20
25°	64	30
35°	56	35
45°	44	34
55°	31	27
65°	19	19
75°	10	11
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	71.7
2.5°	71.4
5°	71.7
7.5°	71.4
10°	70.6
12.5°	70.1
15°	69.6
17.5°	68.7
20°	67.4
22.5°	65.9
25°	64.4
27.5°	62.7
30°	60.6
32.5°	58.1
35°	55.6
37.5°	52.9
40°	50.0
42.5°	46.9
45°	43.7
47.5°	40.4
50°	37.3
52.5°	33.9
55°	30.7
57.5°	27.5
60°	24.6
62.5°	21.8
65°	19.1
67.5°	16.6
70°	14.4
72.5°	12.1
75°	10.0
77.5°	7.9
80°	6.3
82.5°	4.6
85°	2.7
87.5°	1.2
90°	0.0

(END OF REPORT)