

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: P20237

Luminaire Tested: **ML709827ICAT120D-493TBZS06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20237  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML709827ICAT120D-493TBZS06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH TUSCAN BRONZE TRIM AND SOLITE GLASS LENS WITH MODULE  
Light Source: HIGH OUTPUT LED  
LED 14 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

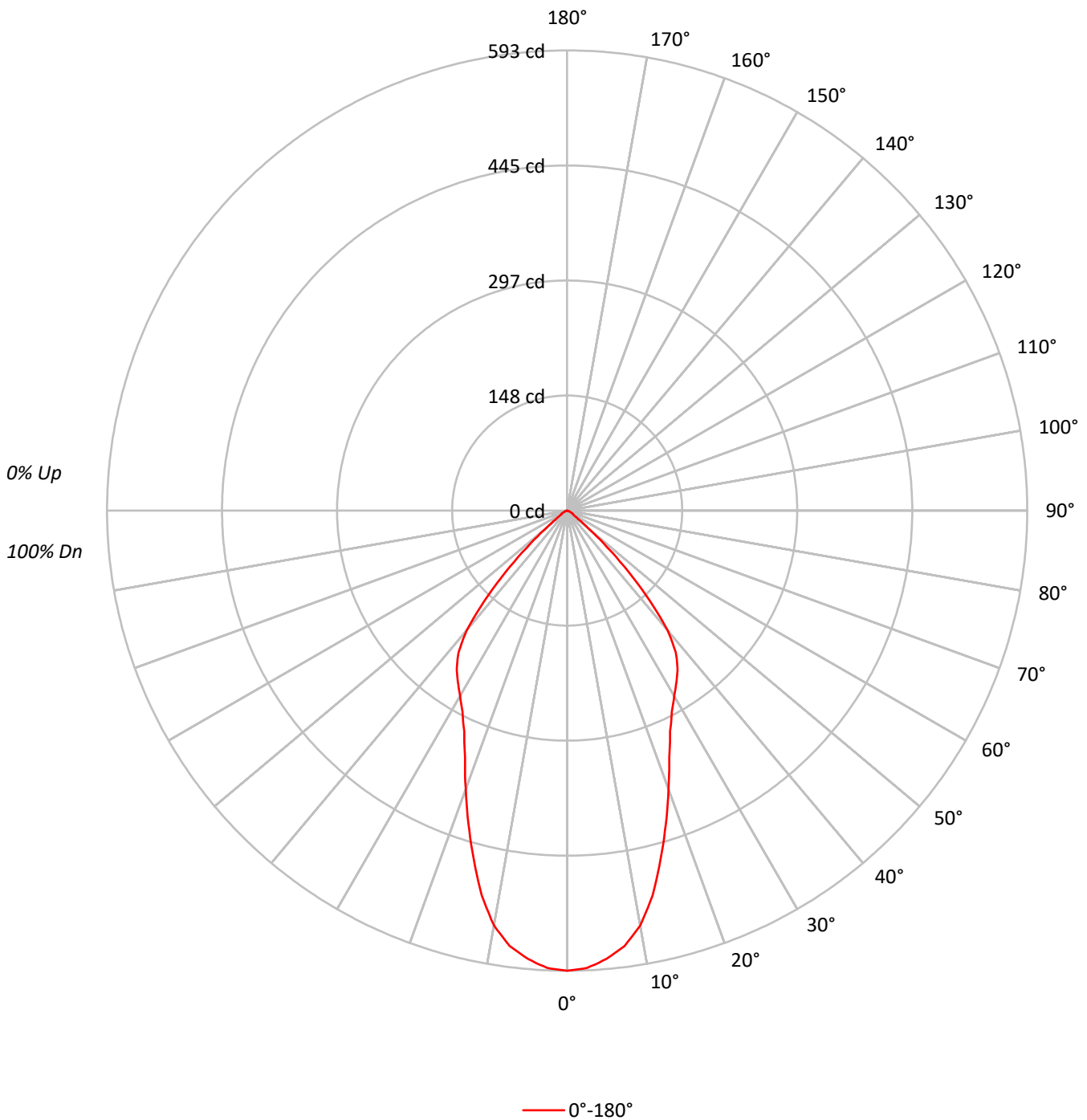
Lumens per Lamp: 588 (1 lamp)  
Luminaire Lumens: 589.3 lumens  
Efficiency: 100.2%  
Efficacy: 41.5 lumens/watt  
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.94  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.2  
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	0
RCR																		
0	119	119	119	119	117	117	117	117	111	111	111	107	107	107	102	102	102	100
1	113	110	108	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93
2	107	102	97	93	105	100	96	92	97	93	90	94	91	88	91	89	87	85
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78
4	95	87	81	76	93	85	80	75	83	78	74	81	77	74	79	76	73	71
5	89	80	74	69	88	79	73	69	77	72	68	76	71	67	74	70	67	65
6	84	75	68	63	83	74	68	63	72	67	63	71	66	62	69	65	62	60
7	80	69	63	58	78	69	62	58	67	62	58	66	61	57	65	60	57	56
8	75	65	58	54	74	64	58	54	63	57	53	62	57	53	61	56	53	51
9	71	61	54	50	70	60	54	50	59	54	50	58	53	49	57	53	49	48
10	68	57	51	46	66	57	50	46	56	50	46	55	50	46	54	49	46	45

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

	0°
0°	32508
5°	31917
10°	30227
15°	26391
20°	22285
25°	18993
30°	17471
35°	16597
40°	14384
45°	8683
50°	3241
55°	1051
60°	877
65°	649
70°	321
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	54.3	9.2	9.2
10°-20°	129.3	21.9	22.0
20°-30°	146.6	24.9	24.9
30°-40°	152.8	25.9	26.0
40°-50°	87.2	14.8	14.8
50°-60°	13.7	2.3	2.3
60°-70°	4.9	0.8	0.8
70°-80°	0.5	0.1	0.1
80°-90°	0.0	0.0	0.0
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°	330.2	56.0	56.1
0°-40°	483.0	82.0	82.1
0°-60°	583.8	99.1	99.3
0°-90°	589.3	100.0	100.2
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°	589.3	100.0	100.2

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	593	
5°	580	54
15°	465	129
25°	314	147
35°	248	153
45°	112	87
55°	11	14
65°	5	5
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	593
2.5°	590
5°	580
7.5°	566
10°	543
12.5°	508
15°	465
17.5°	423
20°	382
22.5°	344
25°	314
27.5°	292
30°	276
32.5°	262
35°	248
37.5°	230
40°	201
42.5°	158
45°	112
47.5°	70
50°	38
52.5°	19
55°	11
57.5°	9
60°	8
62.5°	7
65°	5
67.5°	3
70°	2
72.5°	1
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)