

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: P20244

Luminaire Tested: **ML709827ICAT120D-494P06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20244  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML709827ICAT120D-494P06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE PAINTED TRIM  
REFLECTOR  
Light Source: HIGH OUTPUT LED  
LED 14 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 773 (1 lamp)  
Luminaire Lumens: 773.6 lumens  
Efficiency: 100.1%  
Efficacy: 54.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.36  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

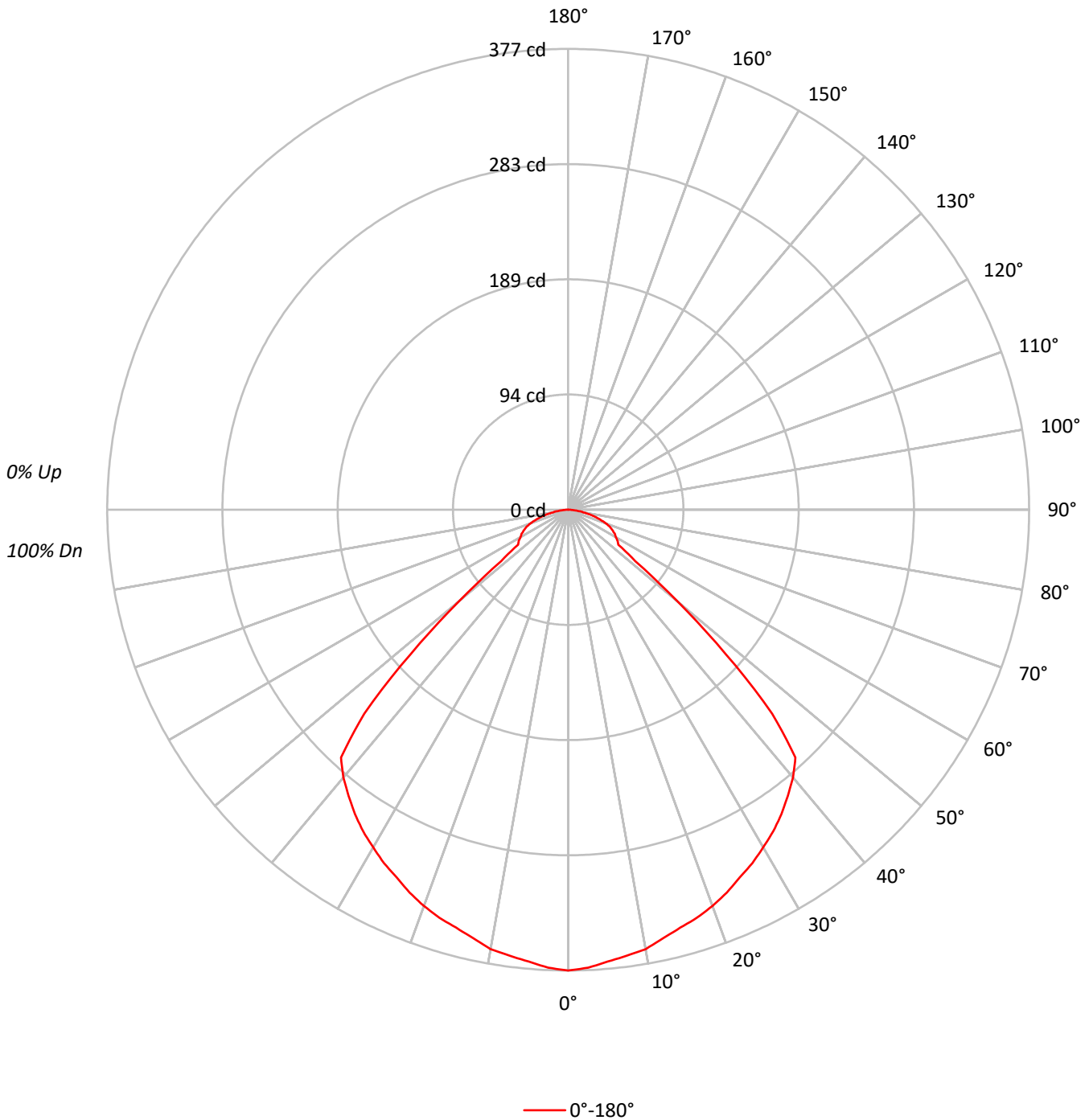
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83		88	84	81		85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	72		80	75	71		77	73	70	68
4	88	78	71	65	86	77	70	65	75	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	63	57	68	61	57		66	60	56		64	59	55	54
6	76	65	57	51	75	64	56	51	62	55	51		61	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		54	49	45	43
8	67	54	47	41	65	54	46	41	53	46	41		51	45	41		50	45	41	39
9	62	50	43	38	61	50	42	38	49	42	37		48	42	37		47	41	37	35
10	59	47	39	34	58	46	39	34	45	39	34		44	38	34		43	38	34	32

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

	0°
0°	20667
5°	20416
10°	20318
15°	20091
20°	20127
25°	20082
30°	20193
35°	20345
40°	20467
45°	18296
50°	9893
55°	4779
60°	4934
65°	5189
70°	5289
75°	4872
80°	4104
85°	3145



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	35.2	4.6	4.6
10°-20°	100.2	13.0	13.0
20°-30°	153.4	19.8	19.8
30°-40°	190.2	24.6	24.6
40°-50°	169.8	22.0	22.0
50°-60°	55.0	7.1	7.1
60°-70°	39.4	5.1	5.1
70°-80°	24.3	3.1	3.1
80°-90°	6.1	0.8	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°	288.9	37.3	37.4
0°-40°	479.1	61.9	62.0
0°-60°	703.9	91.0	91.1
0°-90°	773.6	100.0	100.1
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°	773.6	100.0	100.1

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	377	
5°	371	35
15°	354	100
25°	332	153
35°	304	190
45°	236	170
55°	50	55
65°	40	39
75°	23	24
85°	5	6
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	377
2.5°	375
5°	371
7.5°	368
10°	365
12.5°	359
15°	354
17.5°	350
20°	345
22.5°	339
25°	332
27.5°	326
30°	319
32.5°	312
35°	304
37.5°	295
40°	286
42.5°	275
45°	236
47.5°	175
50°	116
52.5°	69
55°	50
57.5°	48
60°	45
62.5°	43
65°	40
67.5°	37
70°	33
72.5°	28
75°	23
77.5°	18
80°	13
82.5°	9
85°	5
87.5°	2
90°	0

(END OF REPORT)