

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: P20256

Luminaire Tested: **ML709835ICAT120D-494WB06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20256  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML709835ICAT120D-494WB06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE BAFFLED DESIGN TRIM REFLECTOR  
Light Source: HIGH OUTPUT LED  
LED 14 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 891 (1 lamp)  
Luminaire Lumens: 891.7 lumens  
Efficiency: 100.1%  
Efficacy: 63.2 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.31 / 1.38  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

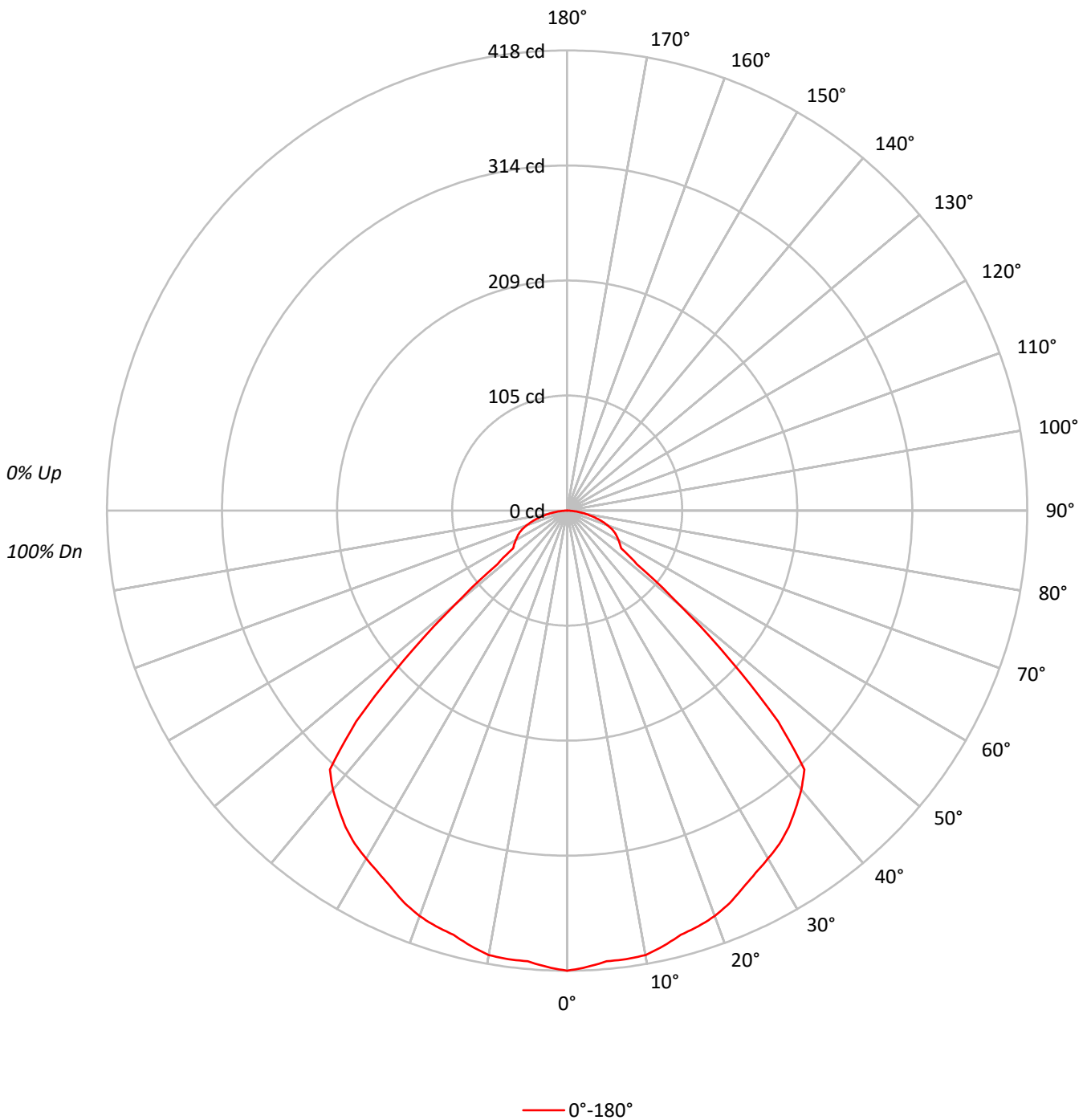
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82		87	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72		79	75	71		77	73	70	68
4	88	78	70	64	86	77	70	64	74	68	63		72	67	62		70	65	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	64	56	51	74	63	56	50	62	55	50		60	54	50		59	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45		55	49	45		54	49	44	43
8	66	54	46	41	65	53	46	41	52	45	41		51	45	40		50	44	40	38
9	62	50	42	37	61	49	42	37	48	42	37		47	41	37		46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34		44	38	34		43	37	33	32

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

	0°
0°	22915
5°	22617
10°	22823
15°	22645
20°	22869
25°	22864
30°	23105
35°	23490
40°	23687
45°	21010
50°	11343
55°	5735
60°	5921
65°	6226
70°	6251
75°	5931
80°	5367
85°	4403



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	39.3	4.4	4.4
10°-20°	113.2	12.7	12.7
20°-30°	174.8	19.6	19.6
30°-40°	219.3	24.6	24.6
40°-50°	195.8	22.0	22.0
50°-60°	64.6	7.2	7.2
60°-70°	46.9	5.3	5.3
70°-80°	29.5	3.3	3.3
80°-90°	8.3	0.9	0.9
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°	327.2	36.7	36.7
0°-40°	546.5	61.3	61.3
0°-60°	806.9	90.5	90.6
0°-90°	891.7	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°	891.7	100.0	100.1

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	418	
5°	411	39
15°	399	113
25°	378	175
35°	351	219
45°	271	196
55°	60	65
65°	48	47
75°	28	30
85°	7	8
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	418
2.5°	415
5°	411
7.5°	411
10°	410
12.5°	405
15°	399
17.5°	396
20°	392
22.5°	386
25°	378
27.5°	371
30°	365
32.5°	359
35°	351
37.5°	341
40°	331
42.5°	319
45°	271
47.5°	201
50°	133
52.5°	80
55°	60
57.5°	57
60°	54
62.5°	51
65°	48
67.5°	44
70°	39
72.5°	34
75°	28
77.5°	22
80°	17
82.5°	12
85°	7
87.5°	3
90°	0

(END OF REPORT)