

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: P20254

Luminaire Tested: **ML709835ICAT120D-494SC06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20254  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML709835ICAT120D-494SC06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH SPECULAR CLEAR TRIM  
Light Source: HIGH OUTPUT LED  
LED 14 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 944 (1 lamp)  
Luminaire Lumens: 945.0 lumens  
Efficiency: 100.1%  
Efficacy: 67.0 lumens/watt  
Spacing Criteria (0/90/45): 1.58 / 1.58 / 1.41  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

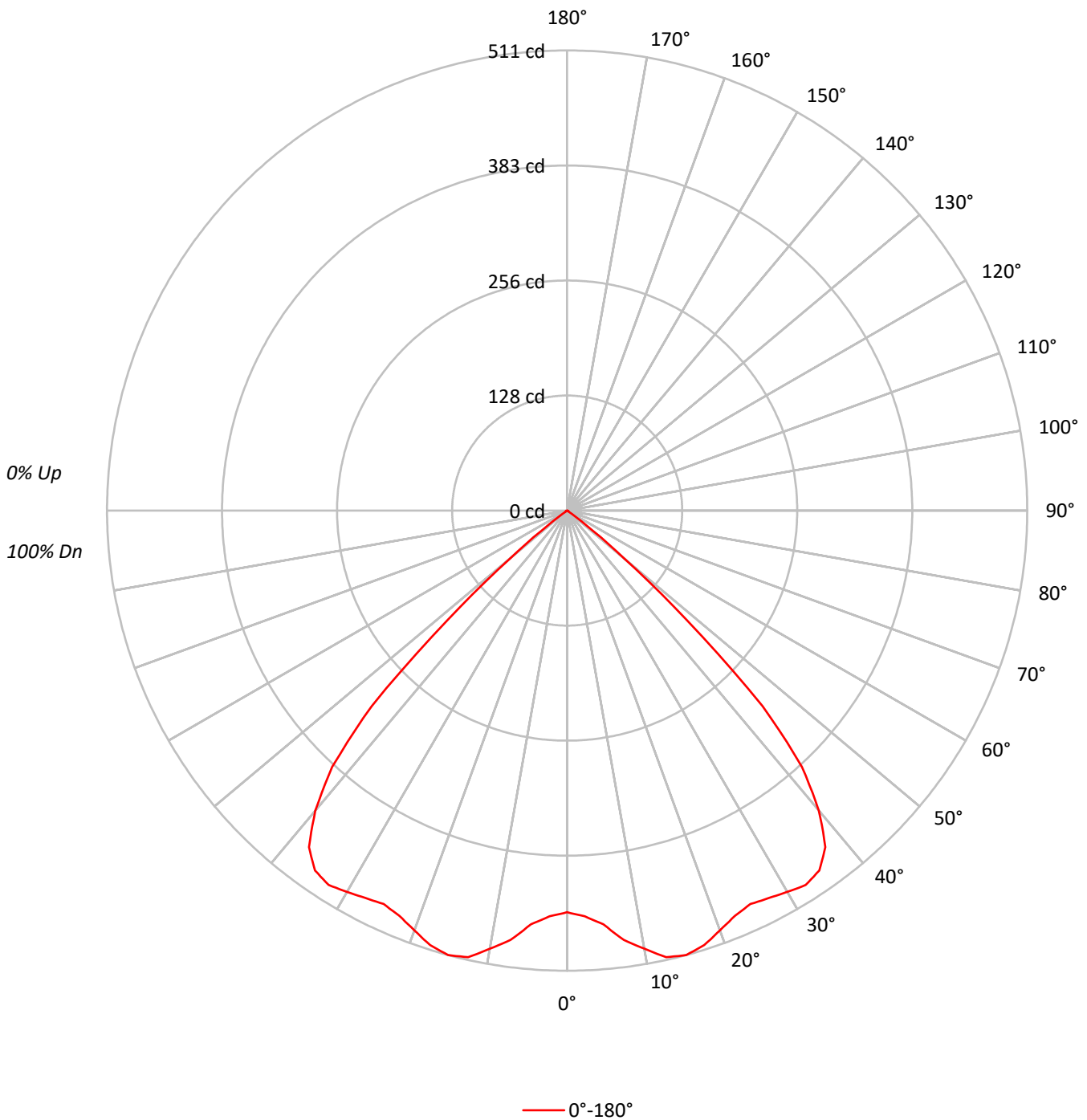
Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	110	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92
2	106	100	95	91	104	98	94	90	95	91	88	92	89	86	89	87	85	83
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75
4	93	84	77	72	91	82	76	72	80	75	71	78	74	70	76	72	69	67
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	62	61
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	57	52	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	52	47	58	52	47	57	51	47	56	51	47	45
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	47	43	41
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38

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

	0°
0°	24450
5°	25369
10°	27499
15°	29001
20°	28936
25°	29155
30°	30954
35°	32658
40°	31130
45°	23801
50°	6993
55°	191
60°	110
65°	130
70°	160
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	45.2	4.8	4.8
10°-20°	143.1	15.1	15.2
20°-30°	225.2	23.8	23.9
30°-40°	300.0	31.7	31.8
40°-50°	215.1	22.8	22.8
50°-60°	15.2	1.6	1.6
60°-70°	1.0	0.1	0.1
70°-80°	0.1	0.0	0.0
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°	413.6	43.8	43.8
0°-40°	713.5	75.5	75.6
0°-60°	943.9	99.9	100.0
0°-90°	945.0	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°	945.0	100.0	100.1

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	446	
5°	461	45
15°	511	143
25°	482	225
35°	488	300
45°	307	215
55°	2	15
65°	1	1
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	446
2.5°	451
5°	461
7.5°	481
10°	494
12.5°	508
15°	511
17.5°	506
20°	496
22.5°	487
25°	482
27.5°	485
30°	489
32.5°	493
35°	488
37.5°	471
40°	435
42.5°	386
45°	307
47.5°	180
50°	82
52.5°	25
55°	2
57.5°	2
60°	1
62.5°	1
65°	1
67.5°	1
70°	1
72.5°	0
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)