

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: P20232

Luminaire Tested: **ML709830ICAT120D-494SC06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20232  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML709830ICAT120D-494SC06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH SPECULAR CLEAR TRIM  
Light Source: HIGHT OUTPUT LED  
LED 14 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 858 (1 lamp)  
Luminaire Lumens: 859.3 lumens  
Efficiency: 100.2%  
Efficacy: 61.4 lumens/watt  
Spacing Criteria (0/90/45): 1.57 / 1.57 / 1.4  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

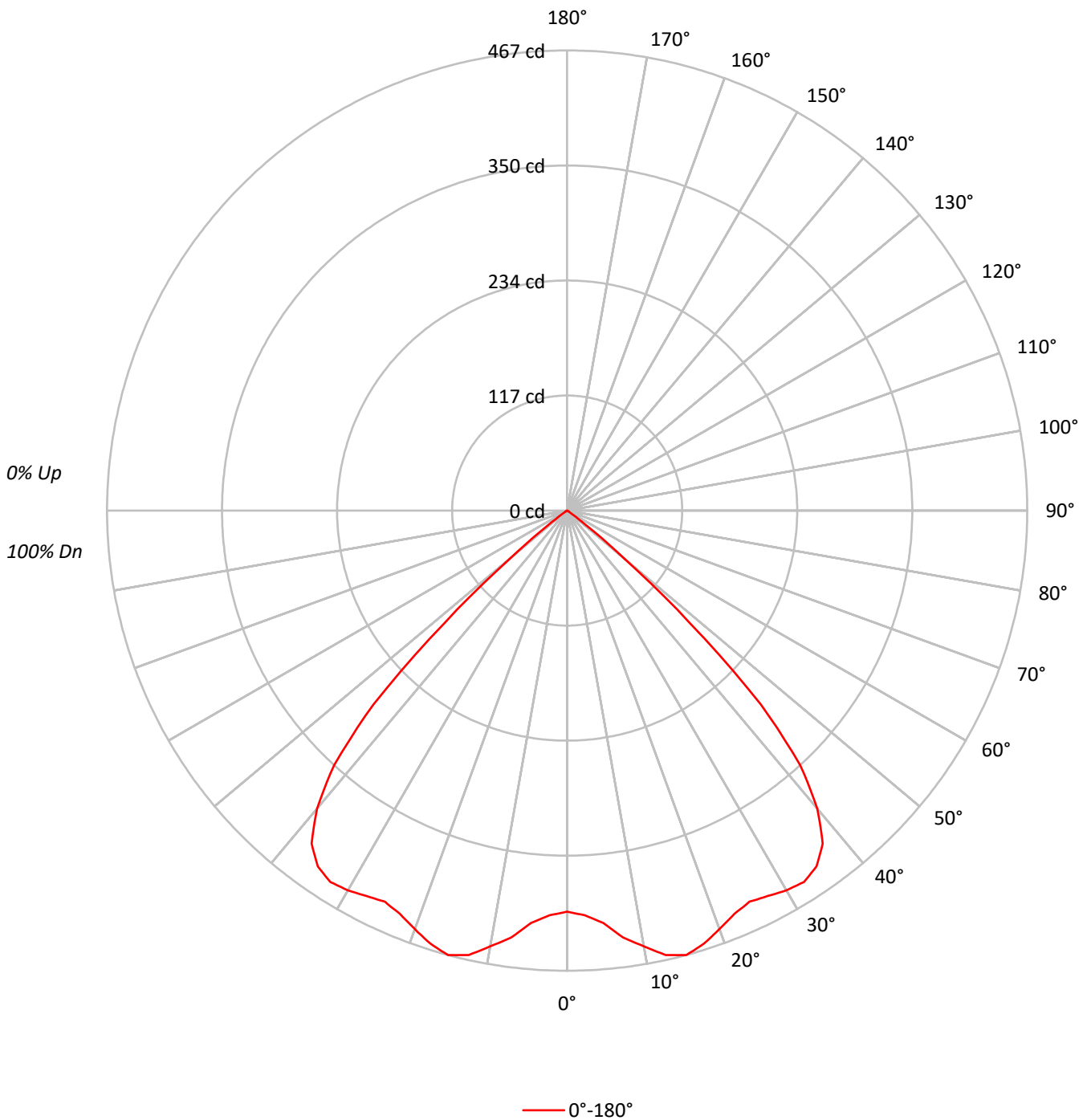
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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		107	107	107		102	102	102	100
1	113	110	107	104	110	107	105	102	103	101	99		100	98	96		96	95	94	92
2	106	100	95	91	104	98	94	90	95	92	88		92	89	87		89	87	85	83
3	99	92	86	81	97	90	85	80	87	83	79		85	81	78		83	79	77	75
4	93	84	77	72	91	83	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	70	63	58	68	62	57		66	61	57		65	60	57	55
7	76	65	58	52	74	64	57	52	63	56	52		61	56	52		60	55	51	50
8	71	60	53	48	70	59	52	48	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°	22312
5°	23112
10°	24994
15°	26504
20°	26369
25°	26493
30°	28169
35°	29513
40°	28267
45°	21553
50°	6396
55°	191
60°	110
65°	130
70°	0
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	41.2	4.8	4.8
10°-20°	130.4	15.2	15.2
20°-30°	204.8	23.8	23.9
30°-40°	271.8	31.6	31.7
40°-50°	196.3	22.8	22.9
50°-60°	14.0	1.6	1.6
60°-70°	0.9	0.1	0.1
70°-80°	0.0	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°	376.4	43.8	43.9
0°-40°	648.2	75.4	75.5
0°-60°	858.4	99.9	100.1
0°-90°	859.3	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°	859.3	100.0	100.2

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	407	
5°	420	41
15°	467	130
25°	438	205
35°	441	272
45°	278	196
55°	2	14
65°	1	1
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	407
2.5°	411
5°	420
7.5°	437
10°	449
12.5°	462
15°	467
17.5°	461
20°	452
22.5°	443
25°	438
27.5°	441
30°	445
32.5°	447
35°	441
37.5°	426
40°	395
42.5°	350
45°	278
47.5°	169
50°	75
52.5°	24
55°	2
57.5°	1
60°	1
62.5°	1
65°	1
67.5°	1
70°	0
72.5°	0
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)