

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: P20257

Luminaire Tested: **ML709835ICAT120D-494H06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20257  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML709835ICAT120D-494H06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH HAZE FINISH TRIM  
REFLECTOR  
Light Source: HIGH OUTPUT LED  
LED 14 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

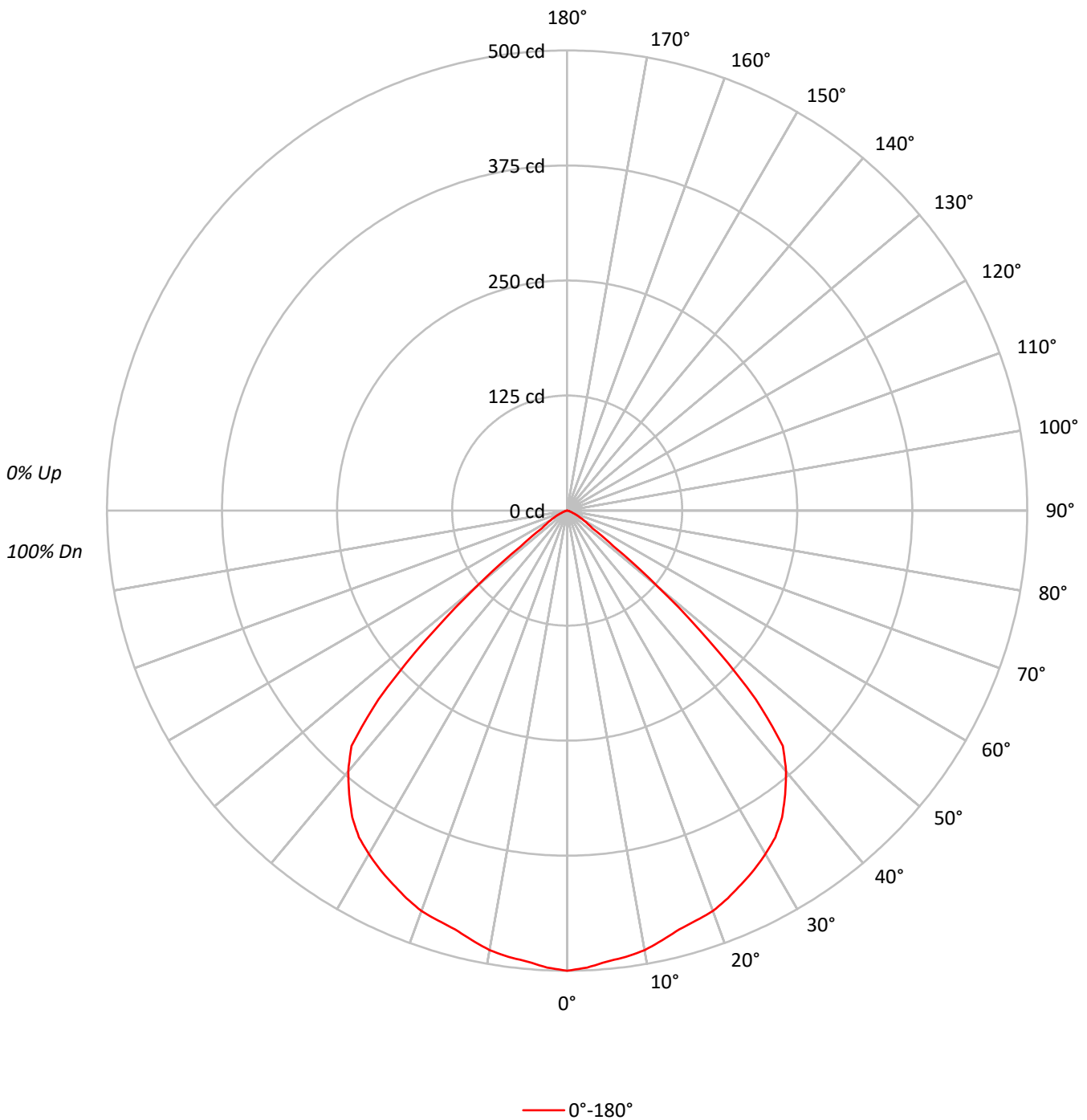
Lumens per Lamp: 906 (1 lamp)  
Luminaire Lumens: 907.3 lumens  
Efficiency: 100.1%  
Efficacy: 64.3 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.34  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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		107	107	107		102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99		99	97	96		96	94	93	91
2	105	99	94	90	103	98	93	89	94	91	87		91	88	85		88	86	84	82
3	98	90	84	79	96	89	83	79	86	81	78		84	80	76		81	78	75	73
4	92	82	76	70	90	81	75	70	79	73	69		77	72	68		75	71	67	66
5	86	75	68	63	84	74	68	63	72	66	62		71	65	61		69	64	61	59
6	80	69	62	56	78	68	61	56	66	60	56		65	59	55		63	59	55	53
7	75	63	56	51	73	63	56	51	61	55	50		60	54	50		59	54	50	48
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54	49	45	44
9	66	54	47	42	64	53	47	42	52	46	42		51	46	42		50	45	41	40
10	62	50	43	38	61	50	43	38	49	42	38		48	42	38		47	42	38	36

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

	0°
0°	27410
5°	27075
10°	26998
15°	26731
20°	27011
25°	27098
30°	27283
35°	27238
40°	26478
45°	22483
50°	11002
55°	3250
60°	2193
65°	1427
70°	801
75°	424
80°	316
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	46.8	5.2	5.2
10°-20°	133.6	14.7	14.7
20°-30°	206.8	22.8	22.8
30°-40°	253.3	27.9	28.0
40°-50°	209.4	23.1	23.1
50°-60°	43.7	4.8	4.8
60°-70°	11.2	1.2	1.2
70°-80°	2.4	0.3	0.3
80°-90°	0.1	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°	387.2	42.7	42.7
0°-40°	640.5	70.6	70.7
0°-60°	893.6	98.5	98.6
0°-90°	907.3	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°	907.3	100.0	100.1

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	500	
5°	492	47
15°	471	134
25°	448	207
35°	407	253
45°	290	209
55°	34	44
65°	11	11
75°	2	2
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	500
2.5°	497
5°	492
7.5°	489
10°	485
12.5°	478
15°	471
17.5°	467
20°	463
22.5°	456
25°	448
27.5°	440
30°	431
32.5°	421
35°	407
37.5°	389
40°	370
42.5°	347
45°	290
47.5°	209
50°	129
52.5°	64
55°	34
57.5°	26
60°	20
62.5°	15
65°	11
67.5°	7
70°	5
72.5°	3
75°	2
77.5°	1
80°	1
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)