

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: P20267

Luminaire Tested: **ML709840ICAT120D-494WB06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20267
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709840ICAT120D-494WB06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE BAFFLED DESIGN TRIM REFLECTOR
Light Source: HIGH OUTPUT LED
14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

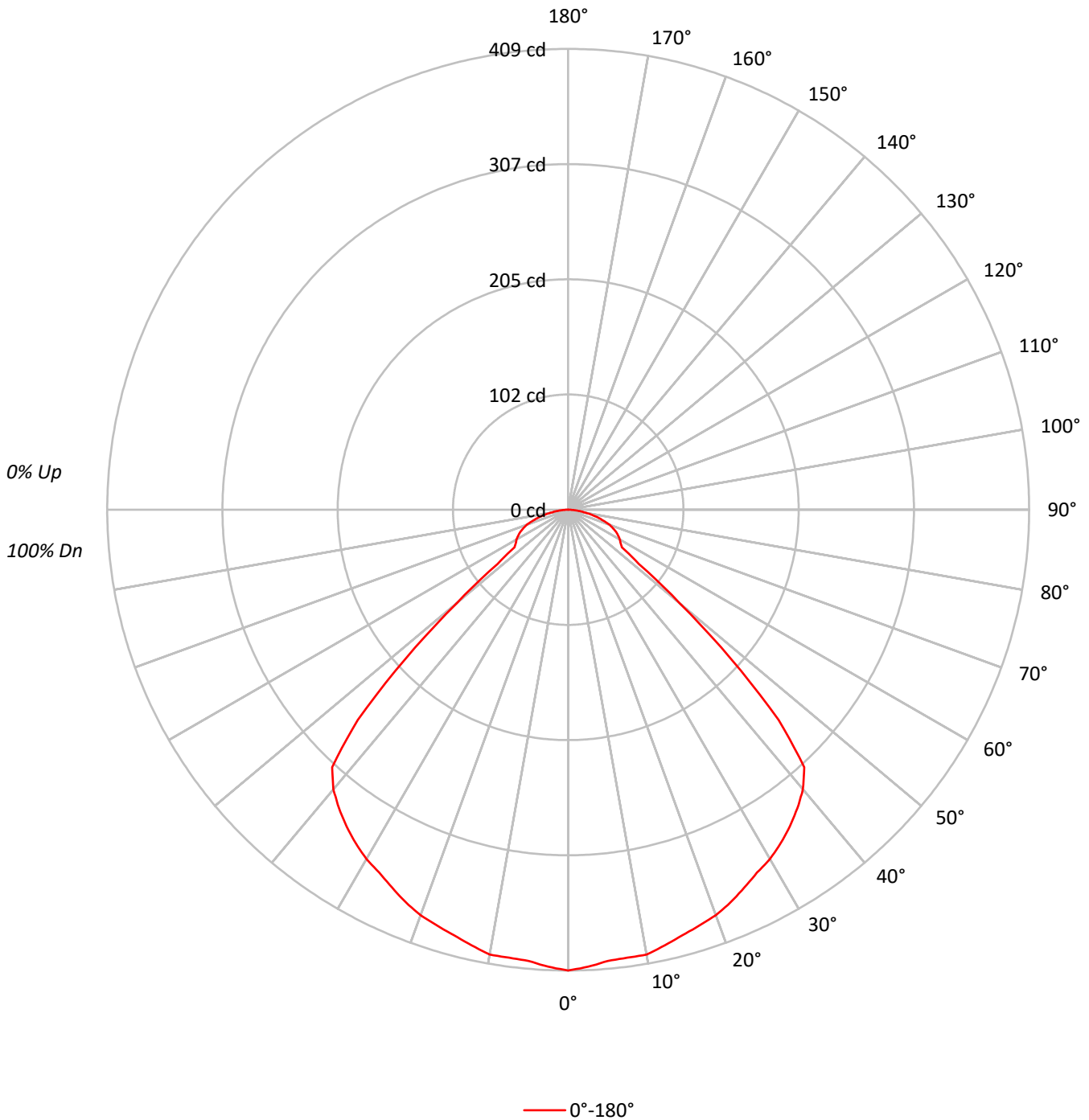
Lumens per Lamp: 871 (1 lamp)
Luminaire Lumens: 871.4 lumens
Efficiency: 100.0%
Efficacy: 62.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.31 / 1.38
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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°	22421
5°	22122
10°	22322
15°	22191
20°	22344
25°	22380
30°	22662
35°	22955
40°	23186
45°	20467
50°	11002
55°	5543
60°	5811
65°	6097
70°	6251
75°	5931
80°	5051
85°	4403



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	38.4	4.4	4.4
10°-20°	110.7	12.7	12.7
20°-30°	171.0	19.6	19.6
30°-40°	214.6	24.6	24.6
40°-50°	190.7	21.9	21.9
50°-60°	62.9	7.2	7.2
60°-70°	46.1	5.3	5.3
70°-80°	29.1	3.3	3.3
80°-90°	7.9	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°	320.1	36.7	36.7
0°-40°	534.7	61.4	61.4
0°-60°	788.3	90.5	90.5
0°-90°	871.4	100.0	100.0
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°	871.4	100.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	409	
5°	402	38
15°	391	111
25°	370	171
35°	343	215
45°	264	191
55°	58	63
65°	47	46
75°	28	29
85°	7	8
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	409
2.5°	406
5°	402
7.5°	401
10°	401
12.5°	396
15°	391
17.5°	387
20°	383
22.5°	377
25°	370
27.5°	363
30°	358
32.5°	351
35°	343
37.5°	334
40°	324
42.5°	310
45°	264
47.5°	196
50°	129
52.5°	79
55°	58
57.5°	55
60°	53
62.5°	50
65°	47
67.5°	43
70°	39
72.5°	33
75°	28
77.5°	22
80°	16
82.5°	11
85°	7
87.5°	3
90°	0

(END OF REPORT)