

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: P20255

Luminaire Tested: **ML709835ICAT120D-494P06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20255
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709835ICAT120D-494P06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE PAINTED TRIM
REFLECTOR
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

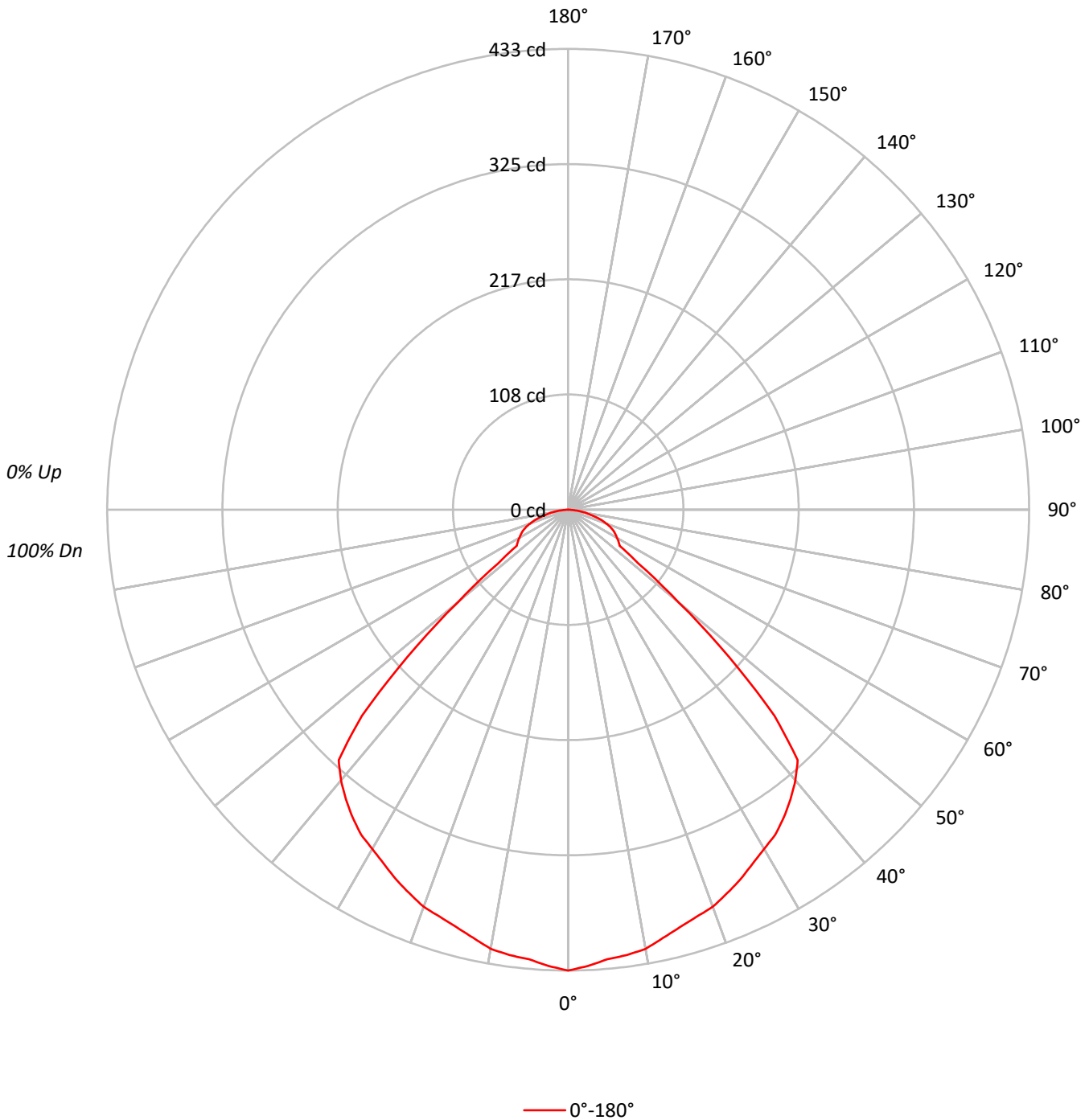
Lumens per Lamp: 896 (1 lamp)
Luminaire Lumens: 897.1 lumens
Efficiency: 100.1%
Efficacy: 63.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.37
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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		107	107	107		102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85	82	79	77
3	95	86	80	74	93	85	79	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50		60	54	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	49	45		54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41		51	45	41		50	45	41	39
9	62	50	43	37	61	50	42	37	48	42	37		47	41	37		46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34		44	38	34		43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	23737
5°	23333
10°	23324
15°	23042
20°	23160
25°	23167
30°	23295
35°	23624
40°	23759
45°	21243
50°	11599
55°	5639
60°	5811
65°	6097
70°	6091
75°	5719
80°	5051
85°	3774



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	40.4	4.5	4.5
10°-20°	115.0	12.8	12.8
20°-30°	176.7	19.7	19.7
30°-40°	220.7	24.6	24.6
40°-50°	197.6	22.0	22.1
50°-60°	65.0	7.2	7.3
60°-70°	45.9	5.1	5.1
70°-80°	28.5	3.2	3.2
80°-90°	7.3	0.8	0.8
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°	332.1	37.0	37.1
0°-40°	552.7	61.6	61.7
0°-60°	815.3	90.9	91.0
0°-90°	897.1	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°	897.1	100.0	100.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	433	
5°	424	40
15°	406	115
25°	383	177
35°	353	221
45°	274	198
55°	59	65
65°	47	46
75°	27	28
85°	6	7
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	433
2.5°	429
5°	424
7.5°	422
10°	419
12.5°	412
15°	406
17.5°	401
20°	397
22.5°	390
25°	383
27.5°	375
30°	368
32.5°	362
35°	353
37.5°	343
40°	332
42.5°	319
45°	274
47.5°	205
50°	136
52.5°	83
55°	59
57.5°	56
60°	53
62.5°	50
65°	47
67.5°	43
70°	38
72.5°	33
75°	27
77.5°	21
80°	16
82.5°	11
85°	6
87.5°	2
90°	0

(END OF REPORT)