

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: P20230

Luminaire Tested: **ML709830ICAT120D-493SNS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20230
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709830ICAT120D-493SNS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH SATIN NICKEL FINISH LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND SOLITE GLASS LENS
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

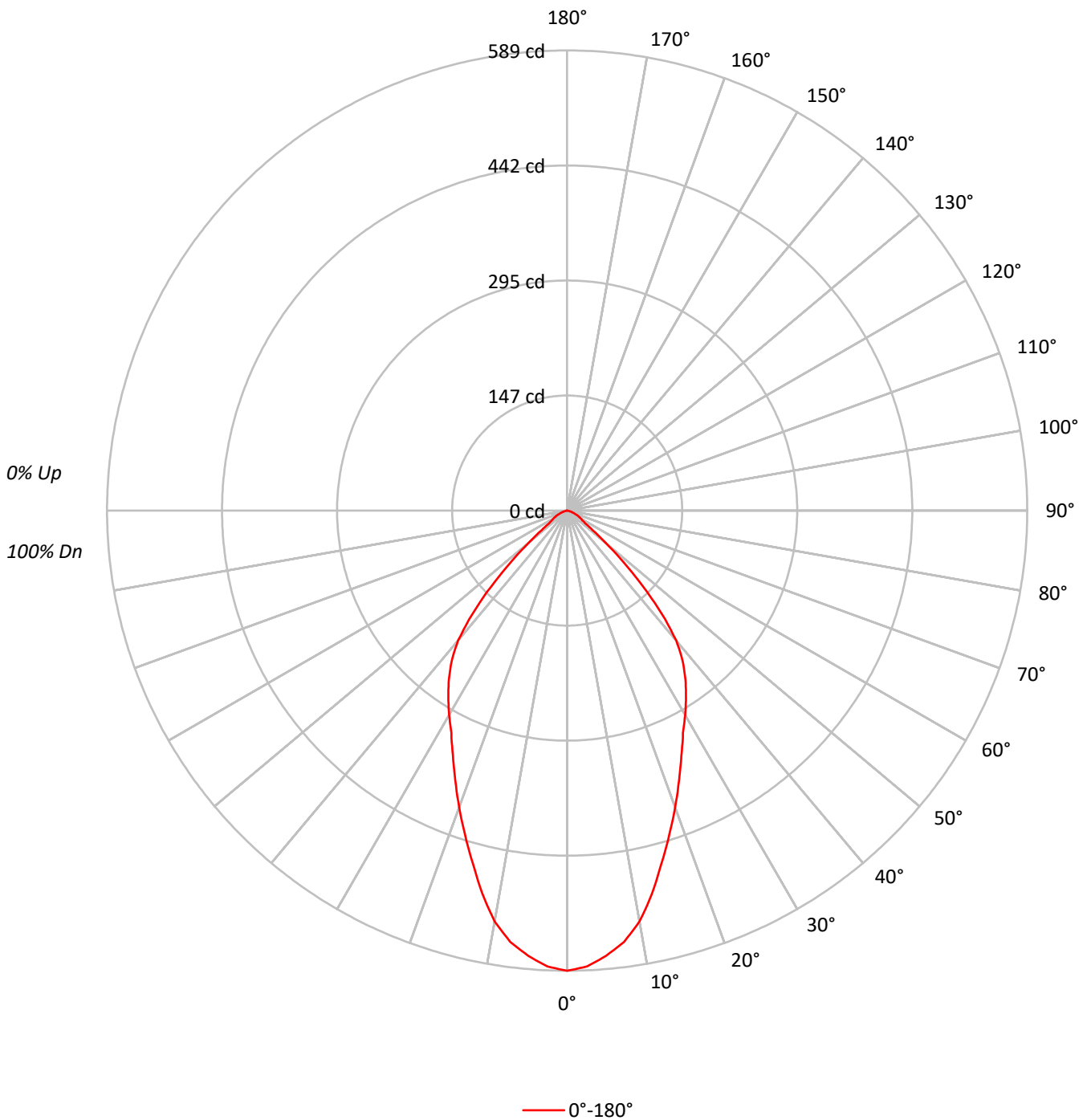
Lumens per Lamp: 661 (1 lamp)
Luminaire Lumens: 662.4 lumens
Efficiency: 100.2%
Efficacy: 0.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.83 / 0.98
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 999
Input Voltage (V): NR
Input Current (A_{in}): 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	117	117	117	117	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	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83
3	99	92	86	82	97	91	85	81	88	83	80	85	81	78	83	80	77	75
4	93	85	78	73	91	83	77	73	81	76	72	79	75	71	77	73	70	68
5	88	78	71	66	86	77	71	66	75	69	65	73	68	65	72	67	64	62
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57
7	78	67	60	55	76	66	60	55	65	59	55	64	58	54	62	58	54	52
8	73	62	55	51	72	62	55	51	60	55	50	59	54	50	58	53	50	48
9	69	58	51	47	68	58	51	47	57	51	47	56	50	46	55	50	46	45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	32289
5°	31477
10°	29726
15°	26504
20°	23569
25°	20929
30°	19117
35°	17668
40°	15529
45°	10699
50°	5458
55°	2676
60°	2193
65°	1816
70°	1282
75°	847
80°	316
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	53.5	8.1	8.1
10°-20°	130.8	19.8	19.8
20°-30°	159.9	24.1	24.2
30°-40°	163.8	24.7	24.8
40°-50°	106.1	16.0	16.0
50°-60°	29.7	4.5	4.5
60°-70°	13.8	2.1	2.1
70°-80°	4.3	0.7	0.7
80°-90°	0.4	0.1	0.1
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°	344.2	52.0	52.1
0°-40°	508.0	76.7	76.9
0°-60°	643.8	97.2	97.4
0°-90°	662.4	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°	662.4	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	589	
5°	572	53
15°	467	131
25°	346	160
35°	264	164
45°	138	106
55°	28	30
65°	14	14
75°	4	4
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	589
2.5°	584
5°	572
7.5°	557
10°	534
12.5°	502
15°	467
17.5°	435
20°	404
22.5°	374
25°	346
27.5°	321
30°	302
32.5°	283
35°	264
37.5°	243
40°	217
42.5°	180
45°	138
47.5°	98
50°	64
52.5°	41
55°	28
57.5°	23
60°	20
62.5°	17
65°	14
67.5°	11
70°	8
72.5°	6
75°	4
77.5°	2
80°	1
82.5°	1
85°	0
87.5°	0
90°	0

(END OF REPORT)