

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: P20259

Luminaire Tested: **ML709840ICAT120D-493TBZS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20259
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709840ICAT120D-493TBZS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH TUSCAN BRONZE TRIM AND SOLITE GLASS LENS
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

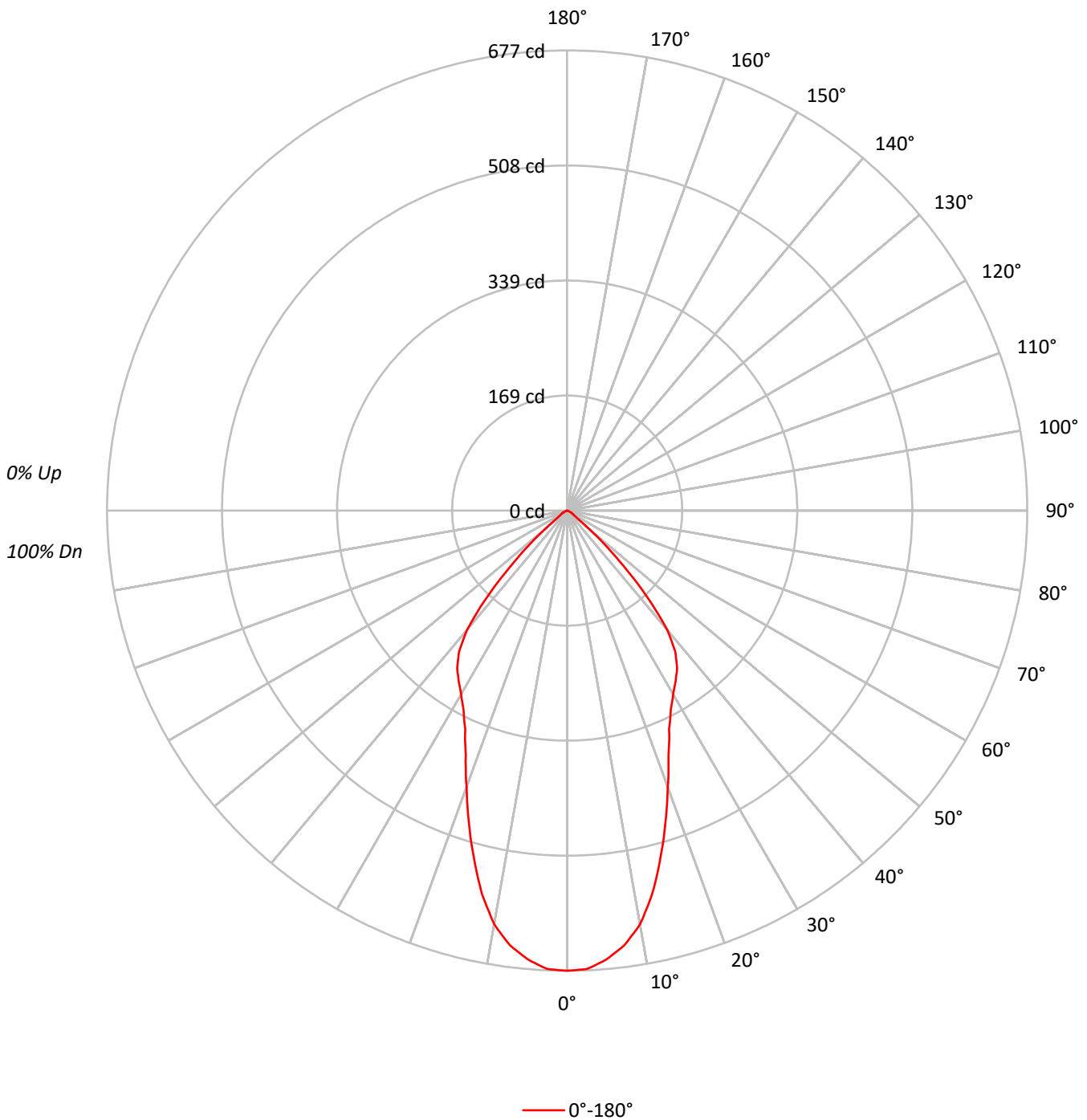
Lumens per Lamp: 668 (1 lamp)
Luminaire Lumens: 669.3 lumens
Efficiency: 100.2%
Efficacy: 47.8 lumens/watt
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.93
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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	117	117	117	117	111	111	111		107	107	107		102	102	102	100
1	113	110	108	105	111	108	106	103	104	102	100		100	99	97		97	96	94	93
2	107	102	97	93	105	100	96	92	97	93	90		94	91	88		91	89	87	85
3	101	94	88	84	99	92	87	83	90	85	82		87	84	81		85	82	79	78
4	95	87	81	76	93	85	80	75	83	78	74		81	77	74		79	76	73	71
5	89	80	74	69	88	79	73	69	77	72	68		76	71	67		74	70	67	65
6	84	75	68	63	83	74	68	63	72	67	63		71	66	62		69	65	62	60
7	80	69	63	58	78	69	62	58	67	62	58		66	61	57		65	60	57	56
8	75	65	58	54	74	64	58	54	63	57	53		62	57	53		61	56	53	51
9	71	61	54	50	70	60	54	50	59	54	50		58	53	49		57	53	49	48
10	68	57	51	46	66	57	51	46	56	50	46		55	50	46		54	49	46	45

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	37113
5°	36485
10°	34402
15°	30080
20°	25261
25°	21473
30°	19750
35°	18872
40°	16388
45°	9846
50°	3667
55°	1242
60°	987
65°	778
70°	321
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	61.9	9.2	9.3
10°-20°	147.1	22.0	22.0
20°-30°	165.9	24.8	24.8
30°-40°	173.4	25.9	26.0
40°-50°	99.2	14.8	14.9
50°-60°	15.7	2.3	2.3
60°-70°	5.5	0.8	0.8
70°-80°	0.5	0.1	0.1
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°	374.9	56.0	56.1
0°-40°	548.3	81.9	82.1
0°-60°	663.2	99.1	99.3
0°-90°	669.3	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°	669.3	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	677	
5°	663	62
15°	530	147
25°	355	166
35°	282	173
45°	127	99
55°	13	16
65°	6	6
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	677
2.5°	675
5°	663
7.5°	645
10°	618
12.5°	578
15°	530
17.5°	481
20°	433
22.5°	390
25°	355
27.5°	330
30°	312
32.5°	297
35°	282
37.5°	261
40°	229
42.5°	180
45°	127
47.5°	80
50°	43
52.5°	21
55°	13
57.5°	11
60°	9
62.5°	7
65°	6
67.5°	4
70°	2
72.5°	1
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)