

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: P20247

Luminaire Tested: **ML709835ICAT120D-492PS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20247
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709835ICAT120D-492PS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH ALUMINUM SHOWER TRIM AND
GLASS LENS
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 594 (1 lamp)
Luminaire Lumens: 593.8 lumens
Efficiency: 100.0%
Efficacy: 42.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.25
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

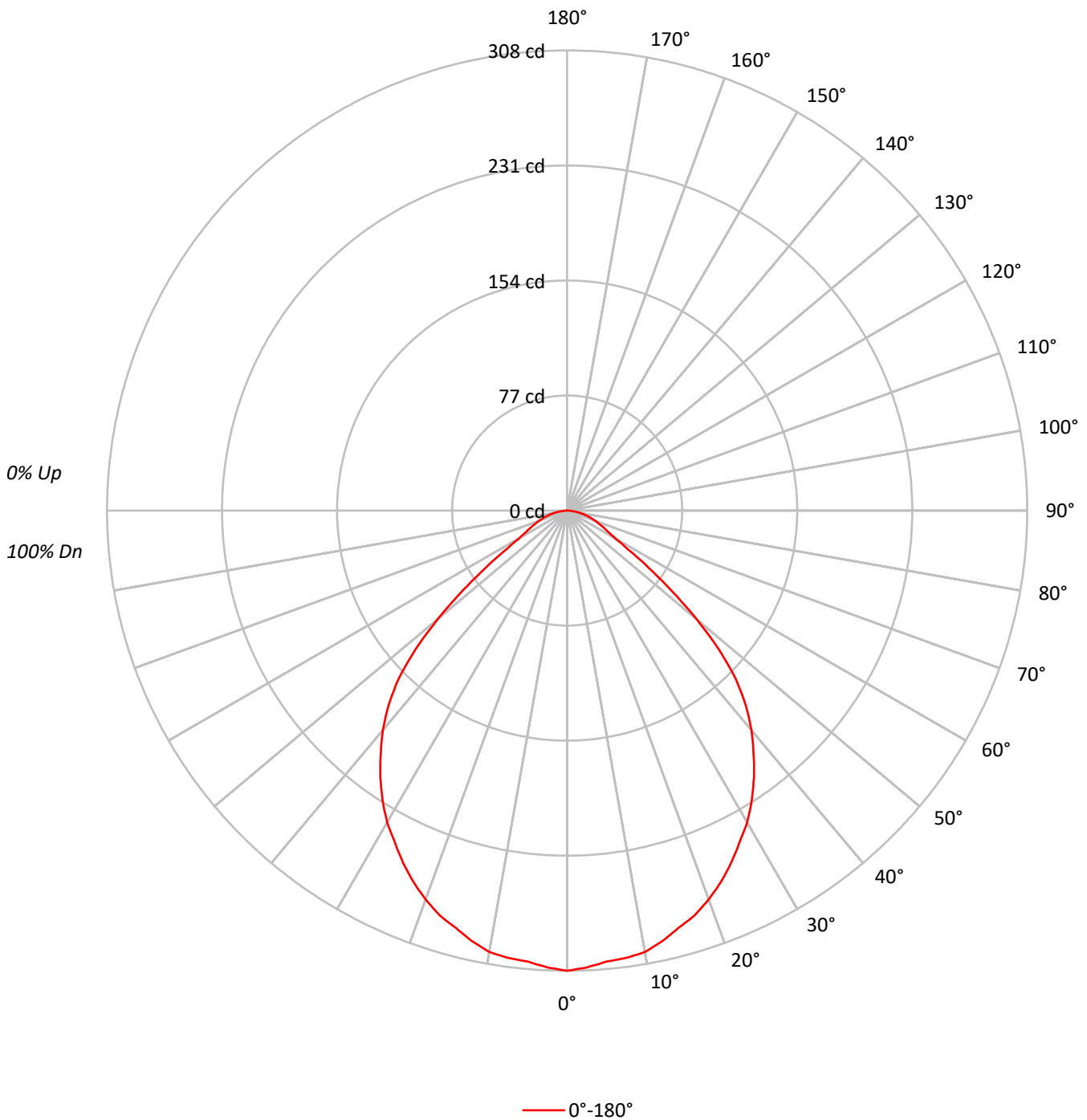
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		106	106	106		102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96		97	95	93		94	92	90	89
2	103	96	91	86	101	95	89	85	91	87	83		88	84	81		85	82	80	78
3	95	87	80	75	93	85	79	74	82	77	73		80	75	71		77	74	70	68
4	89	78	71	65	86	77	70	65	75	69	64		73	67	63		70	66	62	60
5	82	71	63	58	80	70	63	57	68	62	57		66	61	56		64	60	56	54
6	77	65	57	51	75	64	57	51	62	56	51		61	55	50		59	54	50	48
7	71	59	52	46	70	59	51	46	57	51	46		56	50	45		55	49	45	43
8	67	55	47	42	65	54	47	42	53	46	41		52	46	41		50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38		48	42	38		47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35		44	39	34		44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	16885
5°	16674
10°	16700
15°	16402
20°	16160
25°	15727
30°	15256
35°	14589
40°	13740
45°	12404
50°	9637
55°	6308
60°	4057
65°	3502
70°	3206
75°	2965
80°	2526
85°	1887



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	28.9	4.9	4.9
10°-20°	81.6	13.7	13.7
20°-30°	119.6	20.1	20.1
30°-40°	136.0	22.9	22.9
40°-50°	120.7	20.3	20.3
50°-60°	61.5	10.3	10.3
60°-70°	27.1	4.6	4.6
70°-80°	14.8	2.5	2.5
80°-90°	3.8	0.6	0.6
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°	230.1	38.8	38.7
0°-40°	366.1	61.6	61.6
0°-60°	548.2	92.3	92.3
0°-90°	593.8	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°	593.8	100.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	308	
5°	303	29
15°	289	82
25°	260	120
35°	218	136
45°	160	121
55°	66	61
65°	27	27
75°	14	15
85°	3	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	308
2.5°	306
5°	303
7.5°	302
10°	300
12.5°	295
15°	289
17.5°	284
20°	277
22.5°	269
25°	260
27.5°	250
30°	241
32.5°	230
35°	218
37.5°	205
40°	192
42.5°	177
45°	160
47.5°	138
50°	113
52.5°	88
55°	66
57.5°	48
60°	37
62.5°	31
65°	27
67.5°	23
70°	20
72.5°	17
75°	14
77.5°	11
80°	8
82.5°	6
85°	3
87.5°	1
90°	0

(END OF REPORT)