

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: P20227

Luminaire Tested: **ML709830ICAT120D-493BBS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20227
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709830ICAT120D-493BBS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH BLACK BAFFLED DESIGN
LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND
SOLITE GLASS LENS
Light Source: (1)HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

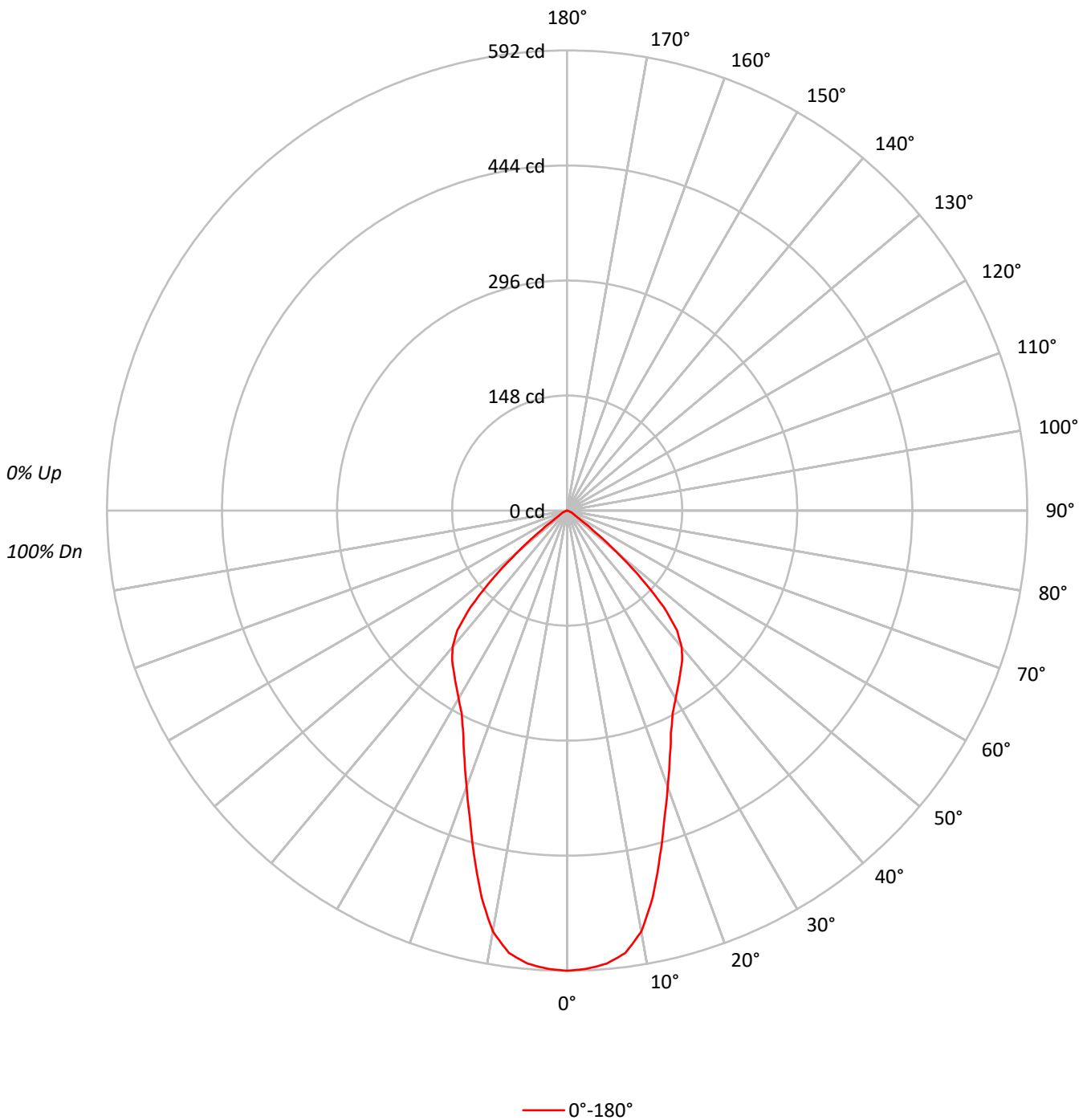
Lumens per Lamp: 625 (1 lamp)
Luminaire Lumens: 652.9 lumens
Efficiency: 104.5%
Efficacy: 46.6 lumens/watt
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.95
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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	124	124	124	124	121	121	121	121	116	116	116	111	111	111	107	107	107	104
1	118	114	112	109	115	112	110	107	108	106	104	104	102	101	100	99	98	96
2	111	105	100	96	108	103	99	95	100	96	93	96	93	91	94	91	89	87
3	104	96	90	85	102	95	89	85	92	87	83	89	85	82	87	84	81	79
4	98	88	82	77	96	87	81	76	85	80	75	83	78	74	81	77	73	72
5	92	82	74	69	90	80	74	69	79	73	68	77	72	68	75	71	67	65
6	86	75	68	63	84	74	68	63	73	67	62	71	66	62	70	65	61	60
7	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55
8	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50
9	72	61	54	49	71	60	53	49	59	53	49	58	52	48	57	52	48	47
10	68	57	50	45	67	56	50	45	55	49	45	54	49	45	54	48	45	43

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3186
5°	3160
10°	3006
15°	2569
20°	2165
25°	1877
30°	1734
35°	1669
40°	1609
45°	1340
50°	695
55°	206
60°	108
65°	89
70°	47
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	54.8	8.4	8.8
10°-20°	128.5	19.7	20.6
20°-30°	147.2	22.5	23.5
30°-40°	159.1	24.4	25.5
40°-50°	128.3	19.7	20.5
50°-60°	27.8	4.3	4.4
60°-70°	6.5	1.0	1.0
70°-80°	0.7	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°	330.5	50.6	52.9
0°-40°	489.6	75.0	78.3
0°-60°	645.7	98.9	103.3
0°-90°	652.9	100.0	104.5
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°	652.9	100.0	104.5

CANDELA DISTRIBUTION:

	0°	Flux
0°	592	
5°	585	55
15°	461	129
25°	316	147
35°	254	159
45°	176	128
55°	22	28
65°	7	7
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	592
2.5°	590
5°	585
7.5°	574
10°	550
12.5°	509
15°	461
17.5°	416
20°	378
22.5°	345
25°	316
27.5°	294
30°	279
32.5°	266
35°	254
37.5°	243
40°	229
42.5°	209
45°	176
47.5°	130
50°	83
52.5°	45
55°	22
57.5°	13
60°	10
62.5°	8
65°	7
67.5°	5
70°	3
72.5°	1
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)