

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: P20234

Luminaire Tested: **ML709830ICAT120D-494WB06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20234
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709830ICAT120D-494WB06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE BAFFLED DESIGN TRIM REFLECTOR
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 806 (1 lamp)
Luminaire Lumens: 806.4 lumens
Efficiency: 100.1%
Efficacy: 57.6 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.3 / 1.38
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

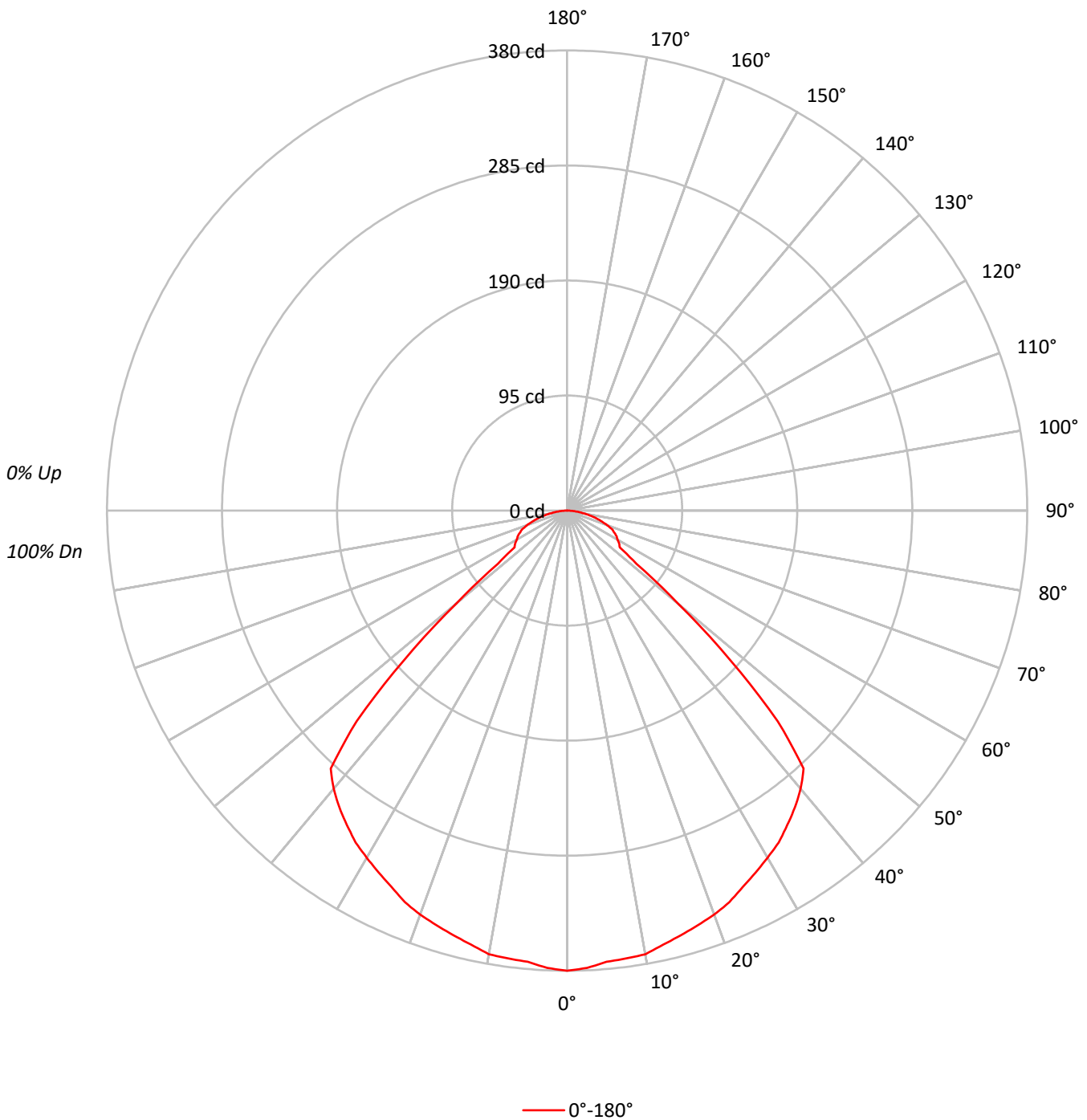
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	85	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72		79	75	71		77	73	70	68
4	88	78	70	65	86	77	70	64	74	68	63		72	67	63		70	65	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	64	56	51	74	64	56	51	62	55	50		60	54	50		59	53	49	48
7	71	59	51	46	69	58	51	45	57	50	45		55	49	45		54	49	45	43
8	66	54	46	41	65	53	46	41	52	46	41		51	45	41		50	44	40	39
9	62	50	42	37	61	49	42	37	48	42	37		47	41	37		46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34		44	38	34		43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	20832
5°	20581
10°	20708
15°	20602
20°	20710
25°	20747
30°	20953
35°	21215
40°	21469
45°	19072
50°	10234
55°	5066
60°	5263
65°	5578
70°	5610
75°	5295
80°	4735
85°	3774



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	35.7	4.4	4.4
10°-20°	102.7	12.7	12.7
20°-30°	158.5	19.7	19.7
30°-40°	198.5	24.6	24.6
40°-50°	177.6	22.0	22.0
50°-60°	57.8	7.2	7.2
60°-70°	42.2	5.2	5.2
70°-80°	26.4	3.3	3.3
80°-90°	6.9	0.9	0.9
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°	296.9	36.8	36.8
0°-40°	495.4	61.4	61.5
0°-60°	730.9	90.6	90.7
0°-90°	806.4	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°	806.4	100.0	100.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	380	
5°	374	36
15°	363	103
25°	343	159
35°	317	199
45°	246	178
55°	53	58
65°	43	42
75°	25	26
85°	6	7
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	380
2.5°	378
5°	374
7.5°	373
10°	372
12.5°	367
15°	363
17.5°	359
20°	355
22.5°	350
25°	343
27.5°	337
30°	331
32.5°	325
35°	317
37.5°	309
40°	300
42.5°	289
45°	246
47.5°	183
50°	120
52.5°	72
55°	53
57.5°	51
60°	48
62.5°	46
65°	43
67.5°	40
70°	35
72.5°	30
75°	25
77.5°	20
80°	15
82.5°	10
85°	6
87.5°	2
90°	0

(END OF REPORT)