

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: P20231

Luminaire Tested: **ML709830ICAT120D-493HS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20231
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709830ICAT120D-493HS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH HAZE LOWER TRIM
REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND SOLITE GLASS
LENS WITH MODULE
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 749 (1 lamp)
Luminaire Lumens: 750.5 lumens
Efficiency: 100.2%
Efficacy: 53.6 lumens/watt
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.97
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

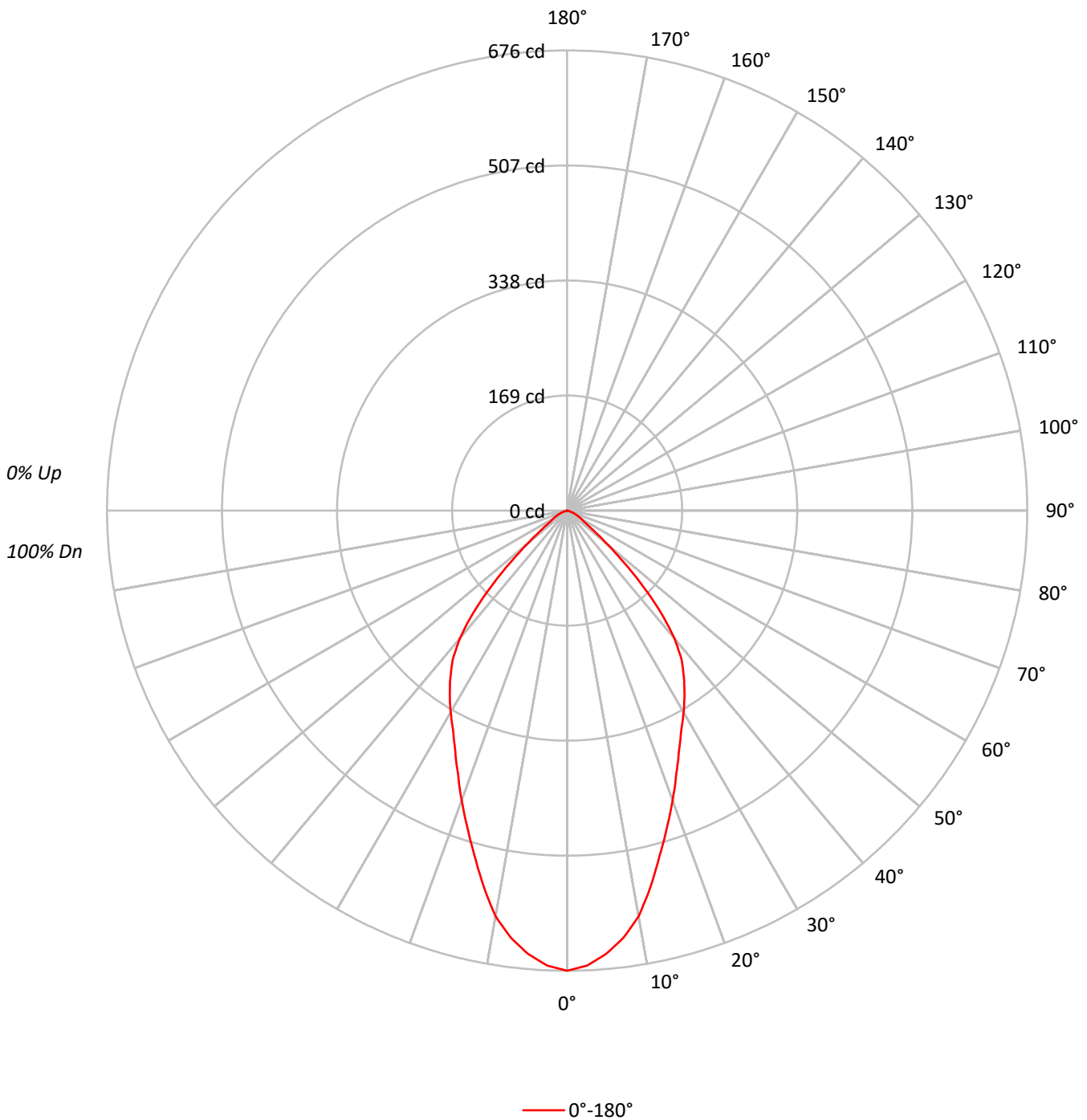
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	117	117	117	117	111	111	111		107	107	107		102	102	102	100
1	113	110	107	104	110	107	105	103	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	59		68	63	59		67	62	59	57
7	78	67	60	55	76	66	60	55	65	59	55		63	58	54		62	58	54	52
8	73	62	55	51	72	62	55	51	60	54	50		59	54	50		58	53	50	48
9	69	58	51	47	68	58	51	47	56	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	46	43	41

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	37058
5°	35989
10°	33678
15°	29796
20°	26427
25°	23530
30°	21649
35°	20010
40°	17533
45°	12327
50°	6567
55°	3441
60°	2522
65°	1946
70°	1282
75°	424
80°	316
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	60.9	8.1	8.1
10°-20°	147.2	19.6	19.6
20°-30°	180.0	24.0	24.0
30°-40°	185.7	24.7	24.8
40°-50°	121.9	16.2	16.3
50°-60°	36.6	4.9	4.9
60°-70°	14.9	2.0	2.0
70°-80°	3.3	0.4	0.4
80°-90°	0.1	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°	388.1	51.7	51.8
0°-40°	573.7	76.4	76.6
0°-60°	732.2	97.6	97.8
0°-90°	750.5	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°	750.5	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	676	
5°	654	61
15°	525	147
25°	389	180
35°	299	186
45°	159	122
55°	36	37
65°	15	15
75°	2	3
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	676
2.5°	669
5°	654
7.5°	633
10°	605
12.5°	566
15°	525
17.5°	488
20°	453
22.5°	419
25°	389
27.5°	363
30°	342
32.5°	321
35°	299
37.5°	276
40°	245
42.5°	205
45°	159
47.5°	114
50°	77
52.5°	51
55°	36
57.5°	28
60°	23
62.5°	19
65°	15
67.5°	11
70°	8
72.5°	5
75°	2
77.5°	1
80°	1
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)