

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: P20228

Luminaire Tested: **ML709830ICAT120D-493WBS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20228
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709830ICAT120D-493WBS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE BAFFLED DESIGN
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: 772 (1 lamp)
Luminaire Lumens: 773.3 lumens
Efficiency: 100.2%
Efficacy: 55.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.97
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

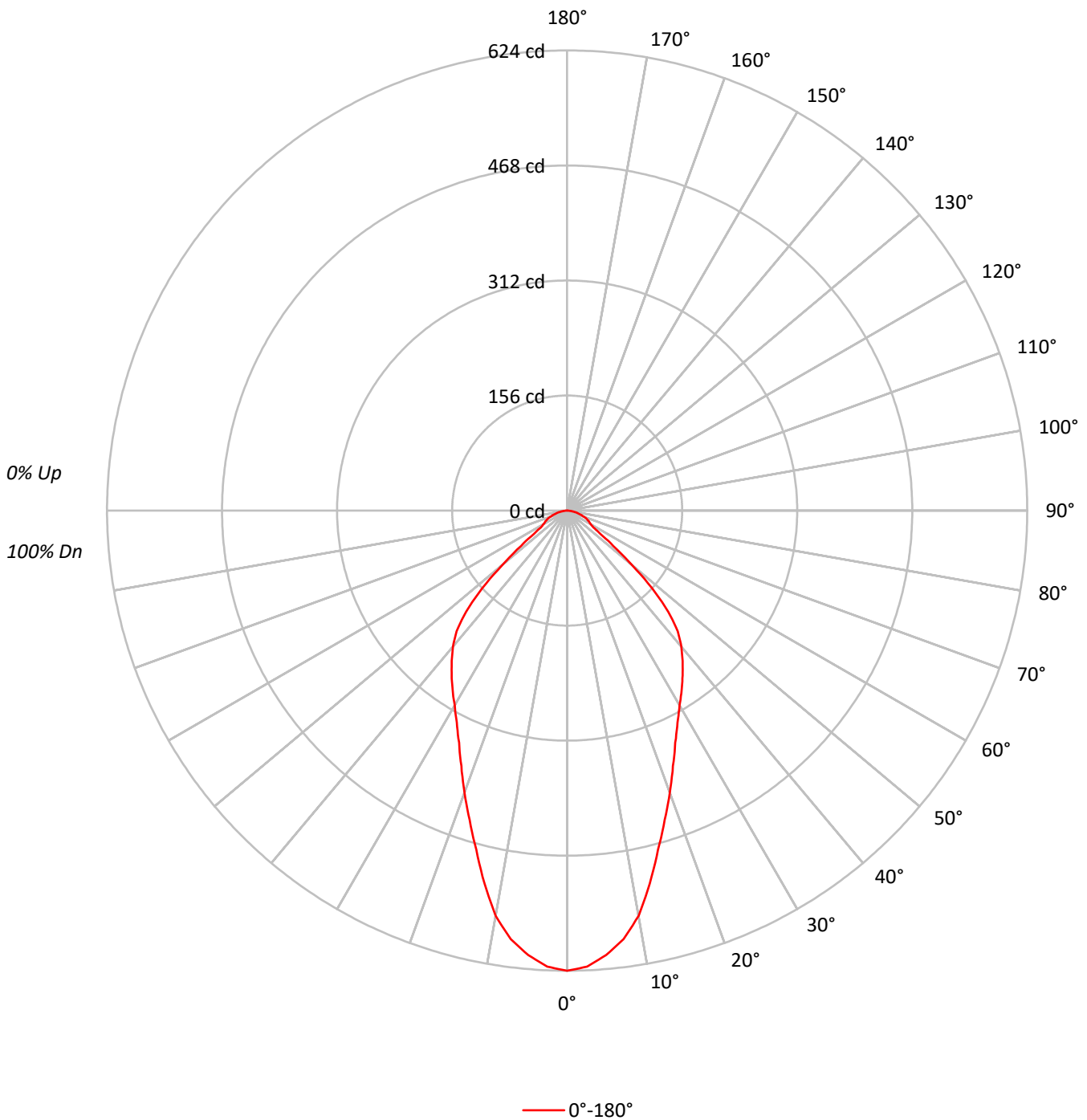
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	116	116	116	116	111	111	111		107	107	107		102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97		98	96	94		95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85		90	86	83		87	84	82	80
3	97	89	83	77	95	87	82	77	85	80	76		82	78	74		80	76	73	71
4	91	81	74	69	89	80	73	68	78	72	67		75	71	67		73	69	66	64
5	85	74	67	62	83	73	66	61	71	65	61		69	64	60		68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55		64	59	54		63	58	54	52
7	74	63	56	50	73	62	55	50	61	55	50		60	54	50		58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54	49	45	44
9	66	54	47	42	65	54	47	42	53	47	42		52	46	42		51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39		49	43	39		48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	34208
5°	33293
10°	31062
15°	27015
20°	23744
25°	20989
30°	19307
35°	18270
40°	17247
45°	15040
50°	9808
55°	5257
60°	4057
65°	4021
70°	3847
75°	3389
80°	2841
85°	2516



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	56.3	7.3	7.3
10°-20°	133.6	17.3	17.3
20°-30°	160.9	20.8	20.8
30°-40°	170.7	22.1	22.1
40°-50°	143.9	18.6	18.6
50°-60°	55.9	7.2	7.2
60°-70°	30.6	4.0	4.0
70°-80°	17.3	2.2	2.2
80°-90°	4.2	0.5	0.5
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°	350.8	45.4	45.4
0°-40°	521.5	67.4	67.6
0°-60°	721.2	93.3	93.4
0°-90°	773.3	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°	773.3	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	624	
5°	605	56
15°	476	134
25°	347	161
35°	273	171
45°	194	144
55°	55	56
65°	31	31
75°	16	17
85°	4	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	624
2.5°	619
5°	605
7.5°	586
10°	558
12.5°	518
15°	476
17.5°	440
20°	407
22.5°	375
25°	347
27.5°	324
30°	305
32.5°	289
35°	273
37.5°	257
40°	241
42.5°	222
45°	194
47.5°	156
50°	115
52.5°	79
55°	55
57.5°	42
60°	37
62.5°	34
65°	31
67.5°	28
70°	24
72.5°	20
75°	16
77.5°	13
80°	9
82.5°	6
85°	4
87.5°	1
90°	0

(END OF REPORT)