

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: P20239

Luminaire Tested: **ML709827ICAT120D-493WBS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20239
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709827ICAT120D-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: 734 (1 lamp)
Luminaire Lumens: 735.4 lumens
Efficiency: 100.2%
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.96
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

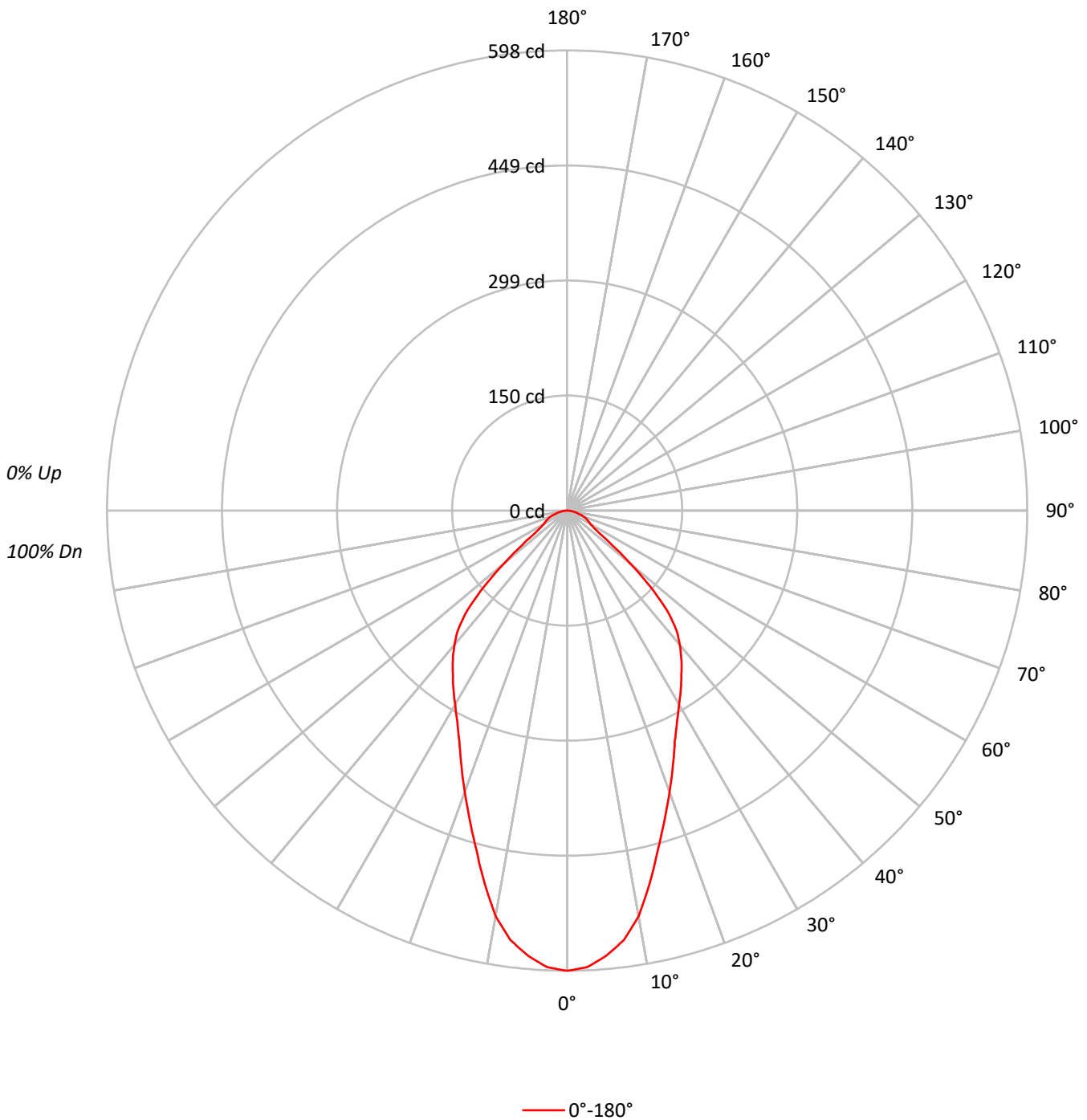
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	97		98	96	94		95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85		90	86	84		87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76		82	78	74		80	76	73	71
4	91	81	74	69	89	80	73	68	78	72	68		75	71	67		73	69	66	64
5	85	74	67	62	83	73	66	61	71	65	61		70	64	60		68	63	60	58
6	79	68	61	56	78	68	61	55	66	60	55		64	59	55		63	58	54	52
7	75	63	56	51	73	62	55	51	61	55	50		60	54	50		58	53	50	48
8	70	59	51	46	69	58	51	46	57	50	46		56	50	46		55	49	46	44
9	66	55	47	43	65	54	47	43	53	47	42		52	46	42		51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39		49	43	39		48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	32782
5°	31972
10°	29781
15°	25880
20°	22694
25°	20021
30°	18421
35°	17333
40°	16316
45°	14265
50°	9211
55°	4874
60°	3837
65°	3762
70°	3687
75°	3177
80°	2841
85°	2516



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	54.1	7.4	7.4
10°-20°	127.9	17.4	17.4
20°-30°	153.6	20.9	20.9
30°-40°	162.2	22.1	22.1
40°-50°	136.0	18.5	18.5
50°-60°	52.4	7.1	7.1
60°-70°	28.7	3.9	3.9
70°-80°	16.3	2.2	2.2
80°-90°	4.2	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°	335.6	45.6	45.7
0°-40°	497.8	67.7	67.8
0°-60°	686.2	93.3	93.5
0°-90°	735.4	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°	735.4	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	598	
5°	581	54
15°	456	128
25°	331	154
35°	259	162
45°	184	136
55°	51	52
65°	29	29
75°	15	16
85°	4	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	598
2.5°	594
5°	581
7.5°	563
10°	535
12.5°	496
15°	456
17.5°	421
20°	389
22.5°	359
25°	331
27.5°	309
30°	291
32.5°	275
35°	259
37.5°	244
40°	228
42.5°	210
45°	184
47.5°	147
50°	108
52.5°	74
55°	51
57.5°	40
60°	35
62.5°	32
65°	29
67.5°	26
70°	23
72.5°	19
75°	15
77.5°	12
80°	9
82.5°	6
85°	4
87.5°	1
90°	0

(END OF REPORT)