

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: P20240

Luminaire Tested: **ML709827ICAT120D-493SCS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20240
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709827ICAT120D-493SCS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH SPECULAR CLEAR LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND SOLITE GLASS LENS
Light Source: (1) CITIZEN HIGHT OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 725 (1 lamp)
Luminaire Lumens: 726.8 lumens
Efficiency: 100.3%
Efficacy: 51.2 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.92 / 1.02
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

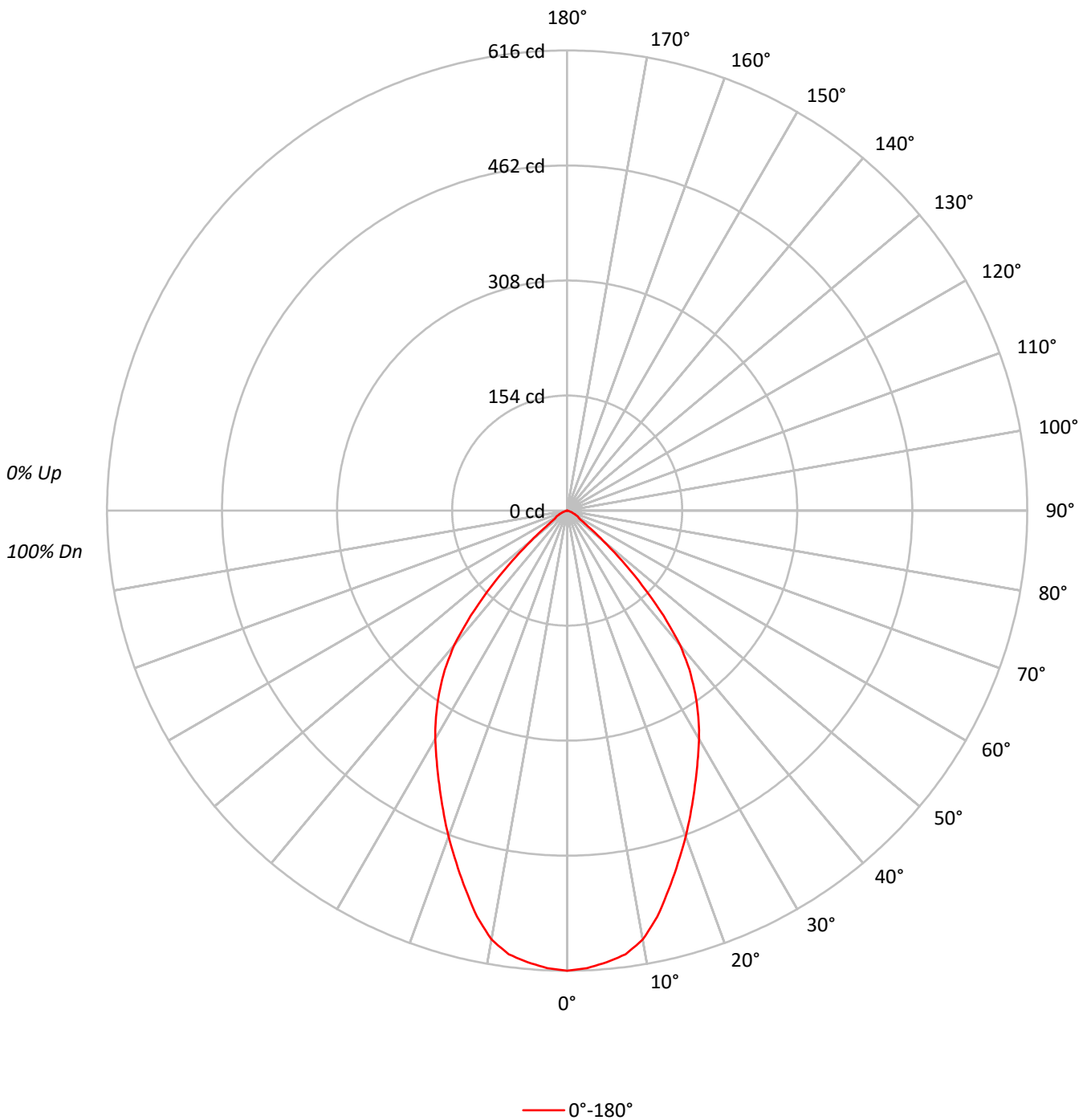
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	107	105	111	108	105	103	104	102	100		100	98	97		96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89		93	90	87		90	88	86	84
3	100	93	87	82	98	91	86	82	89	84	80		86	82	79		84	81	78	76
4	94	85	79	74	92	84	78	74	82	77	73		80	76	72		78	74	71	69
5	88	79	72	67	87	78	72	67	76	70	66		74	69	66		73	68	65	63
6	83	73	66	61	82	72	66	61	71	65	61		69	64	60		68	63	60	58
7	78	68	61	56	77	67	61	56	66	60	56		64	59	55		63	59	55	53
8	74	63	56	52	73	63	56	52	61	56	51		60	55	51		59	54	51	49
9	70	59	52	48	69	58	52	48	57	52	48		56	51	47		56	51	47	46
10	66	55	49	44	65	55	49	44	54	48	44		53	48	44		52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	33769
5°	33403
10°	32453
15°	29796
20°	27069
25°	24497
30°	22345
35°	20010
40°	16817
45°	11086
50°	5373
55°	2294
60°	1864
65°	1427
70°	962
75°	212
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	57.3	7.9	7.9
10°-20°	147.0	20.2	20.3
20°-30°	186.6	25.7	25.7
30°-40°	185.3	25.5	25.6
40°-50°	110.8	15.2	15.3
50°-60°	26.8	3.7	3.7
60°-70°	11.0	1.5	1.5
70°-80°	2.1	0.3	0.3
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°	390.9	53.8	53.9
0°-40°	576.2	79.3	79.5
0°-60°	713.7	98.2	98.4
0°-90°	726.8	100.0	100.3
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°	726.8	100.0	100.3

CANDELA DISTRIBUTION:

	0°	Flux
0°	616	
5°	607	57
15°	525	147
25°	405	187
35°	299	185
45°	143	111
55°	24	27
65°	11	11
75°	1	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	616
2.5°	613
5°	607
7.5°	599
10°	583
12.5°	557
15°	525
17.5°	494
20°	464
22.5°	434
25°	405
27.5°	378
30°	353
32.5°	327
35°	299
37.5°	269
40°	235
42.5°	191
45°	143
47.5°	99
50°	63
52.5°	38
55°	24
57.5°	19
60°	17
62.5°	14
65°	11
67.5°	8
70°	6
72.5°	3
75°	1
77.5°	1
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)