

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: P20242

Luminaire Tested: **ML709827ICAT120D-493HS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20242
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709827ICAT120D-493HS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH HAZE LOWER TRIM
REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND SOLITE GLASS
LENS
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 711 (1 lamp)
Luminaire Lumens: 712.3 lumens
Efficiency: 100.2%
Efficacy: 50.2 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

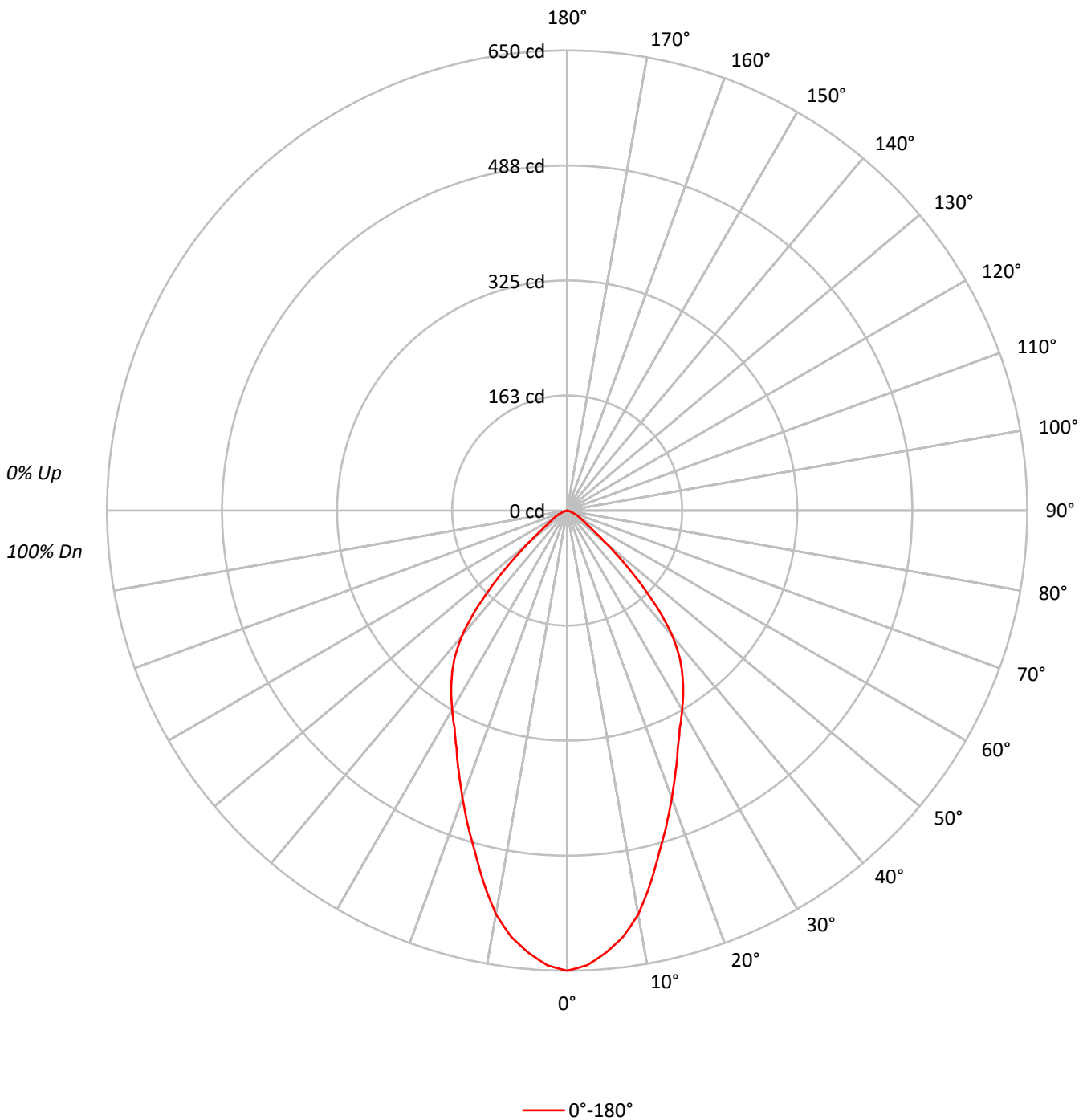
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P20242

CATALOG NUMBER: ML709827ICAT120D-493HS06

Luminous Intensity Polar Plot





TEST NUMBER: P20242

CATALOG NUMBER: ML709827ICAT120D-493HS06

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	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	100	92	86	82	97	91	85	81	88	83	80		85	82	78		83	80	77	75
4	93	85	78	73	91	83	77	73	81	76	72		79	75	71		77	73	70	69
5	88	78	71	66	86	77	71	66	75	70	65		73	69	65		72	68	64	62
6	82	72	65	60	81	71	65	60	70	64	60		68	63	59		67	62	59	57
7	78	67	60	55	76	66	60	55	65	59	55		64	58	54		62	58	54	52
8	73	62	55	51	72	62	55	51	61	55	50		59	54	50		58	54	50	48
9	69	58	51	47	68	58	51	47	57	51	47		56	50	46		55	50	46	45
10	65	54	48	44	64	54	48	44	53	47	43		52	47	43		52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	35633
5°	34504
10°	32231
15°	28434
20°	25202
25°	22380
30°	20573
35°	19006
40°	16603
45°	11552
50°	6141
55°	3250
60°	2412
65°	1816
70°	1122
75°	424
80°	316
85°	0



TEST NUMBER: P20242

CATALOG NUMBER: ML709827ICAT120D-493HS06

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	58.4	8.2	8.2
10°-20°	140.6	19.7	19.8
20°-30°	171.4	24.1	24.1
30°-40°	176.1	24.7	24.8
40°-50°	114.6	16.1	16.1
50°-60°	34.4	4.8	4.8
60°-70°	13.9	2.0	2.0
70°-80°	2.9	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°	370.3	52.0	52.1
0°-40°	546.4	76.7	76.9
0°-60°	695.4	97.6	97.8
0°-90°	712.3	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°	712.3	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	650	
5°	627	58
15°	501	141
25°	370	171
35°	284	176
45°	149	115
55°	34	34
65°	14	14
75°	2	3
85°	0	0
90°	0	



TEST NUMBER: P20242

CATALOG NUMBER: ML709827ICAT120D-493HS06

CANDELA DISTRIBUTION (FULL):

	0°
0°	650
2.5°	643
5°	627
7.5°	607
10°	579
12.5°	541
15°	501
17.5°	466
20°	432
22.5°	400
25°	370
27.5°	345
30°	325
32.5°	305
35°	284
37.5°	261
40°	232
42.5°	193
45°	149
47.5°	107
50°	72
52.5°	48
55°	34
57.5°	26
60°	22
62.5°	18
65°	14
67.5°	10
70°	7
72.5°	4
75°	2
77.5°	1
80°	1
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)