

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: P20236

Luminaire Tested: **ML709827ICAT120D-492PS06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20236  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML709827ICAT120D-492PS06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH ALUMINUM SHOWER TRIM AND  
GLASS LENS WITH MODULE  
Light Source: HIGH OUTPUT LED  
LED 14 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 510 (1 lamp)  
Luminaire Lumens: 511.0 lumens  
Efficiency: 100.2%  
Efficacy: 36.0 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.25  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

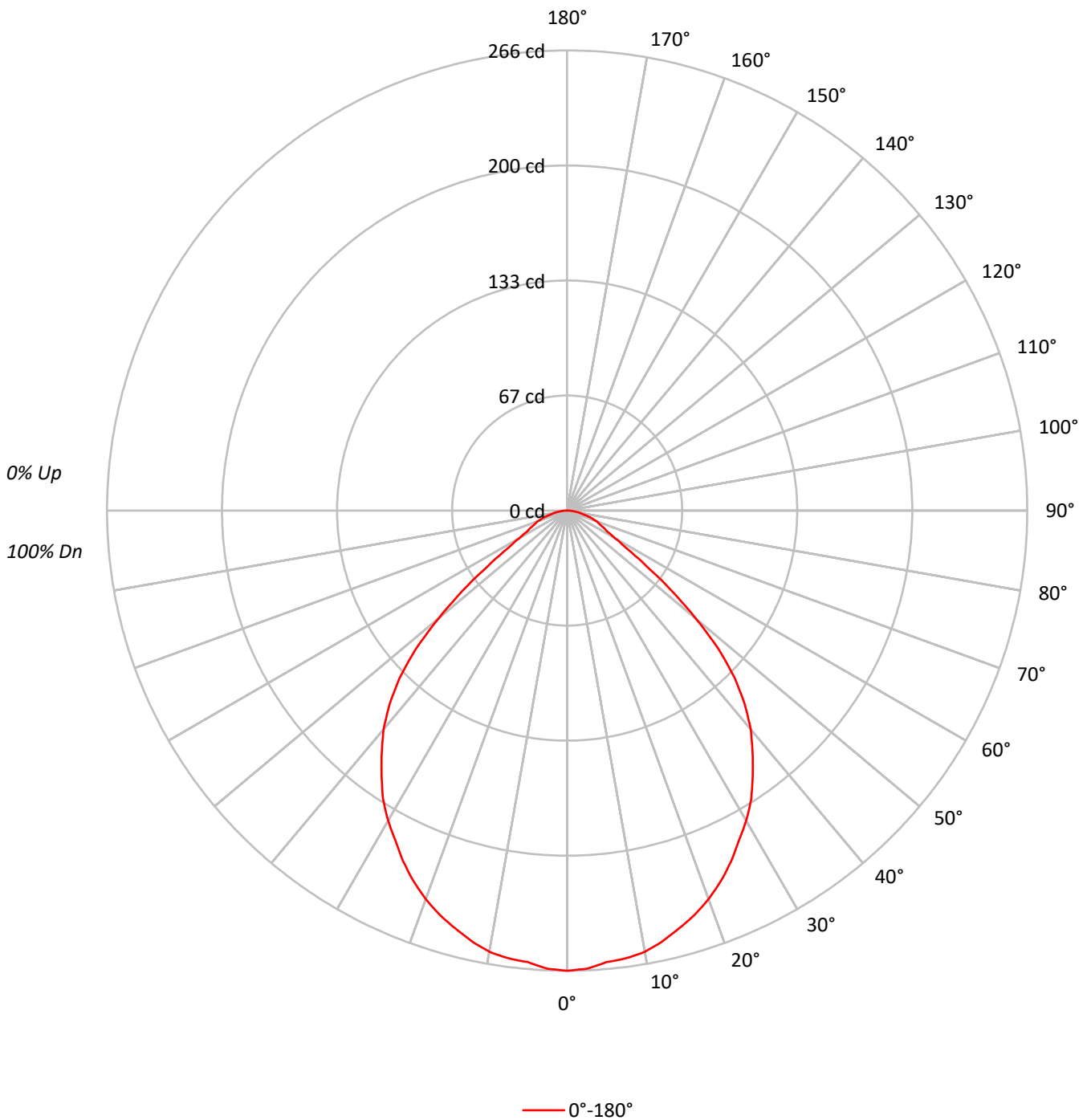
Input Watts (W): 14.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	108	104	101	109	105	102	99	101	99	96		97	95	93		94	92	91	89
2	103	97	91	86	101	95	90	85	91	87	83		88	85	82		85	82	80	78
3	96	87	80	75	93	85	79	74	83	77	73		80	75	72		78	74	70	68
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71	66	62	61
5	82	71	64	58	81	70	63	57	68	62	57		66	61	56		65	60	56	54
6	77	65	57	52	75	64	57	51	62	56	51		61	55	51		59	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46		56	50	46		55	49	45	43
8	67	55	47	42	66	54	47	42	53	46	42		52	46	41		51	45	41	39
9	63	51	43	38	62	50	43	38	49	42	38		48	42	38		47	42	38	36
10	59	47	40	35	58	46	39	35	46	39	35		45	39	35		44	38	34	33

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	14582
5°	14418
10°	14417
15°	14189
20°	13943
25°	13549
30°	13103
35°	12515
40°	11808
45°	10621
50°	8273
55°	5352
60°	3508
65°	2983
70°	2885
75°	2542
80°	2210
85°	1887



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	25.0	4.9	4.9
10°-20°	70.5	13.8	13.8
20°-30°	103.0	20.2	20.2
30°-40°	116.8	22.9	22.9
40°-50°	103.6	20.3	20.3
50°-60°	52.7	10.3	10.3
60°-70°	23.2	4.5	4.6
70°-80°	12.8	2.5	2.5
80°-90°	3.4	0.7	0.7
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°	198.5	38.8	38.9
0°-40°	315.3	61.7	61.8
0°-60°	471.6	92.3	92.5
0°-90°	511.0	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°	511.0	100.0	100.2

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	266	
5°	262	25
15°	250	71
25°	224	103
35°	187	117
45°	137	104
55°	56	53
65°	23	23
75°	12	13
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	266
2.5°	265
5°	262
7.5°	261
10°	259
12.5°	255
15°	250
17.5°	245
20°	239
22.5°	232
25°	224
27.5°	215
30°	207
32.5°	198
35°	187
37.5°	176
40°	165
42.5°	152
45°	137
47.5°	119
50°	97
52.5°	76
55°	56
57.5°	41
60°	32
62.5°	26
65°	23
67.5°	20
70°	18
72.5°	15
75°	12
77.5°	9
80°	7
82.5°	5
85°	3
87.5°	1
90°	0

(END OF REPORT)