

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: P20243

Luminaire Tested: **ML709827ICAT120D-494SC06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20243
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709827ICAT120D-494SC06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH SPECULAR CLEAR TRIM
REFLECTOR
Light Source: HIGHT OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 816 (1 lamp)
Luminaire Lumens: 816.2 lumens
Efficiency: 100.0%
Efficacy: 57.1 lumens/watt
Spacing Criteria (0/90/45): 1.56 / 1.56 / 1.4
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

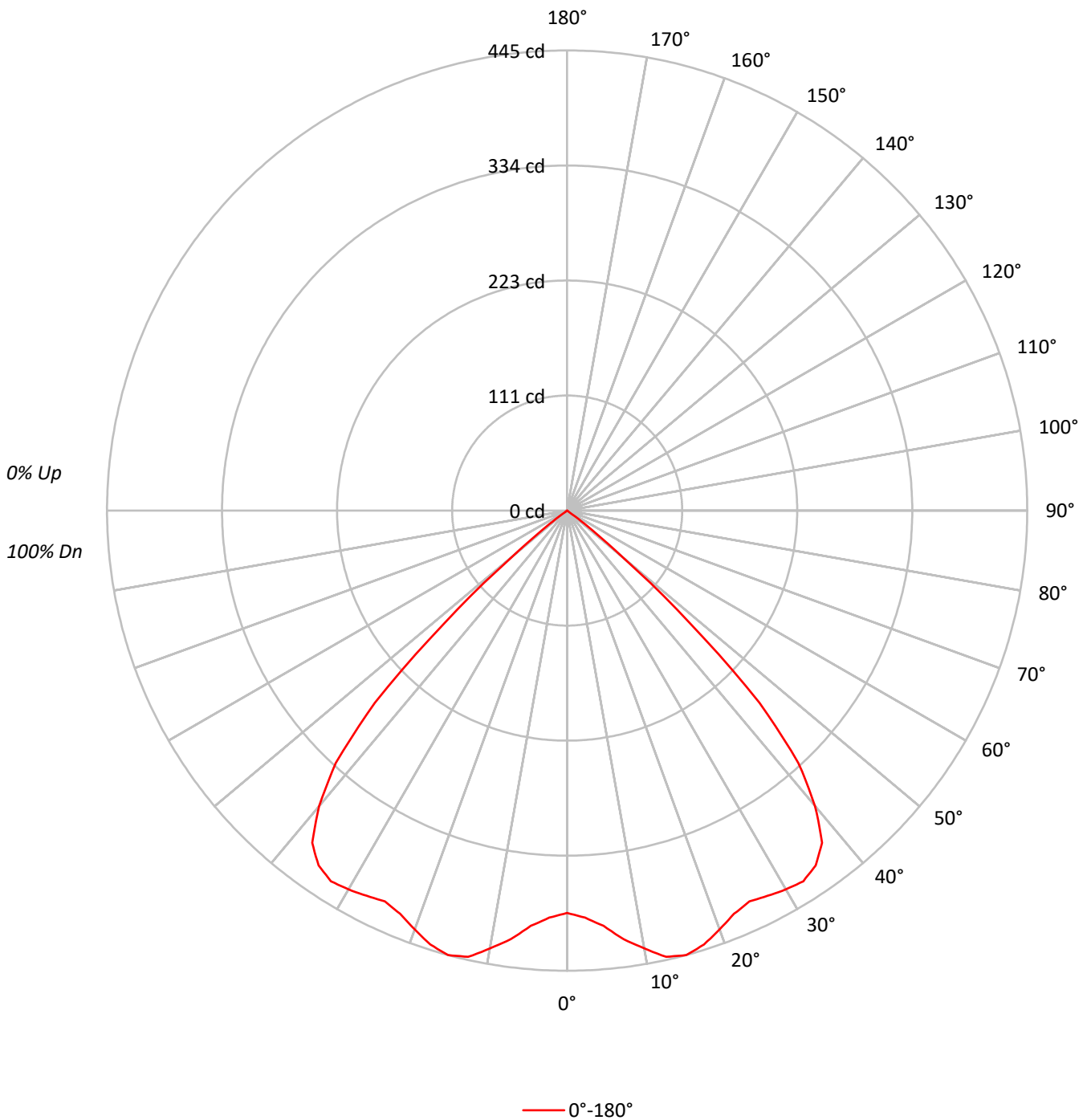
Input Watts (W): 14.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		106	106	106		102	102	102	100
1	113	109	107	104	110	107	105	102	103	101	99		99	98	96		96	95	93	92
2	106	100	95	91	103	98	94	90	95	91	88		92	89	86		89	87	85	83
3	99	91	86	81	97	90	85	80	87	83	79		85	81	78		82	79	76	75
4	93	84	77	72	91	82	76	72	80	75	71		78	74	70		76	72	69	67
5	87	77	70	65	85	76	69	64	74	68	64		72	67	63		70	66	62	61
6	81	70	63	58	79	70	63	58	68	62	57		66	61	57		65	60	57	55
7	76	65	58	53	74	64	57	52	63	56	52		61	56	52		60	55	51	50
8	71	60	53	48	70	59	52	48	58	52	47		57	51	47		56	51	47	45
9	67	55	48	43	65	55	48	43	54	47	43		53	47	43		52	47	43	41
10	63	51	44	40	61	51	44	40	50	44	40		49	43	39		48	43	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	21325
5°	22177
10°	23936
15°	25256
20°	25144
25°	25223
30°	26776
35°	28041
40°	26693
45°	20390
50°	5970
55°	191
60°	110
65°	130
70°	0
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	39.4	4.8	4.8
10°-20°	124.5	15.3	15.3
20°-30°	195.0	23.9	23.9
30°-40°	258.1	31.6	31.6
40°-50°	185.7	22.8	22.8
50°-60°	12.8	1.6	1.6
60°-70°	0.6	0.1	0.1
70°-80°	0.0	0.0	0.0
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°	359.0	44.0	44.0
0°-40°	617.1	75.6	75.6
0°-60°	815.6	99.9	100.0
0°-90°	816.2	100.0	100.0
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°	816.2	100.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	389	
5°	403	39
15°	445	125
25°	417	195
35°	419	258
45°	263	186
55°	2	13
65°	1	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	389
2.5°	394
5°	403
7.5°	418
10°	430
12.5°	442
15°	445
17.5°	440
20°	431
22.5°	422
25°	417
27.5°	420
30°	423
32.5°	425
35°	419
37.5°	405
40°	373
42.5°	331
45°	263
47.5°	161
50°	70
52.5°	21
55°	2
57.5°	1
60°	1
62.5°	1
65°	1
67.5°	0
70°	0
72.5°	0
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)