

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: P20253

Luminaire Tested: **ML709835ICAT120D-493HS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20253
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709835ICAT120D-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: 823 (1 lamp)
Luminaire Lumens: 824.3 lumens
Efficiency: 100.2%
Efficacy: 58.5 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

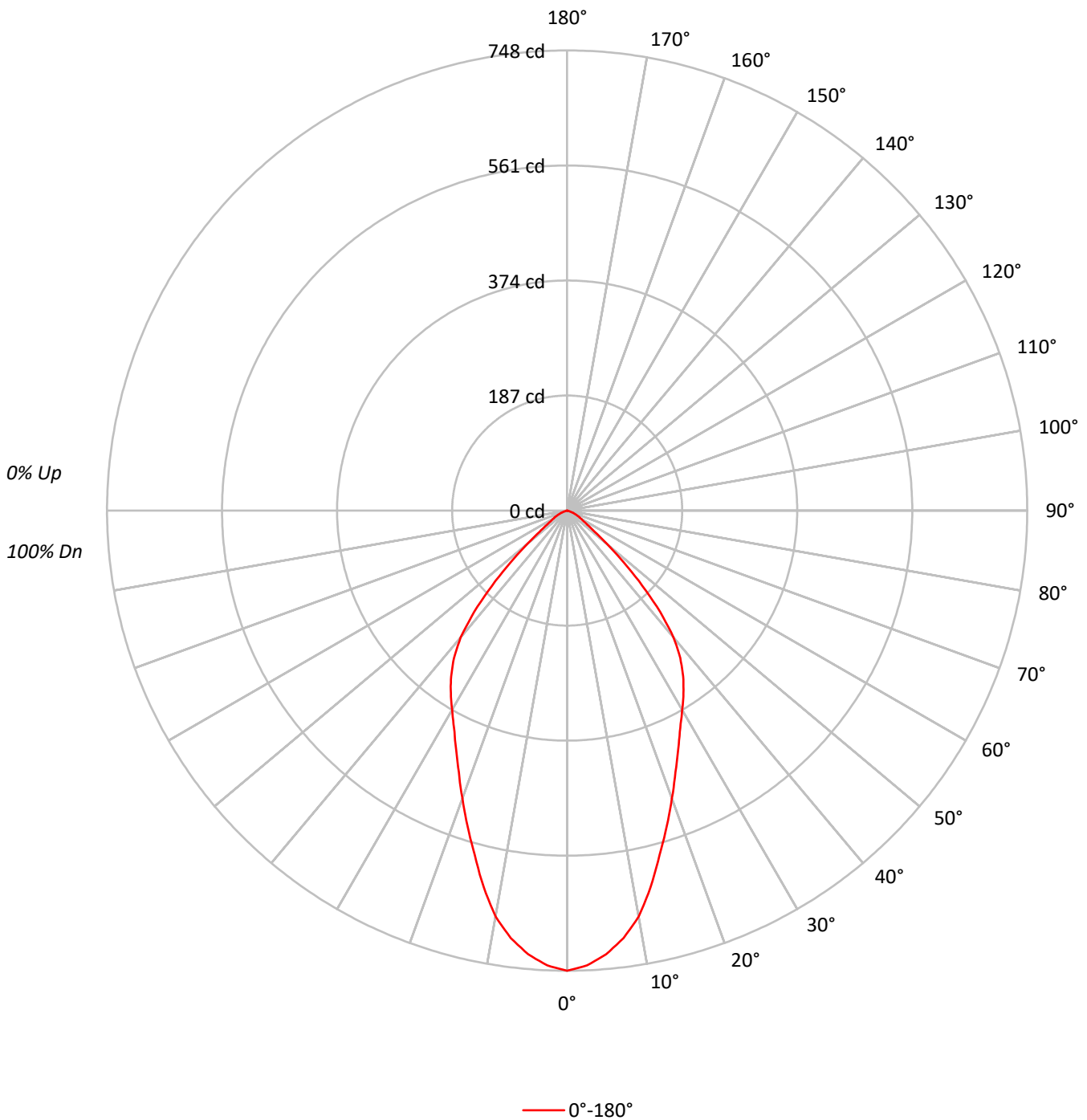
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	99	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	68
5	88	78	71	66	86	77	71	66	75	70	65		73	68	65		72	67	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	60	55	50		59	54	50		58	53	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	43	64	54	48	43	53	47	43		52	47	43		51	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	41005
5°	39841
10°	37296
15°	32917
20°	29053
25°	25828
30°	23675
35°	22018
40°	19250
45°	13412
50°	7164
55°	3823
60°	2741
65°	2075
70°	1443
75°	424
80°	316
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	67.4	8.2	8.2
10°-20°	162.5	19.7	19.7
20°-30°	197.5	24.0	24.0
30°-40°	203.6	24.7	24.7
40°-50°	133.2	16.2	16.2
50°-60°	40.2	4.9	4.9
60°-70°	16.3	2.0	2.0
70°-80°	3.4	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°	427.4	51.9	51.9
0°-40°	631.0	76.6	76.7
0°-60°	804.5	97.6	97.8
0°-90°	824.3	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°	824.3	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	748	
5°	724	67
15°	580	163
25°	427	197
35°	329	204
45°	173	133
55°	40	40
65°	16	16
75°	2	3
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	748
2.5°	740
5°	724
7.5°	701
10°	670
12.5°	627
15°	580
17.5°	538
20°	498
22.5°	460
25°	427
27.5°	398
30°	374
32.5°	352
35°	329
37.5°	302
40°	269
42.5°	224
45°	173
47.5°	125
50°	84
52.5°	56
55°	40
57.5°	31
60°	25
62.5°	21
65°	16
67.5°	12
70°	9
72.5°	5
75°	2
77.5°	1
80°	1
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)