

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: P20249

Luminaire Tested: **ML709835ICAT120D-493BBS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20249
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709835ICAT120D-493BBS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH BLACK BAFFLED DESIGN
LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND
SOLITE GLASS LENS WITH MODULE
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

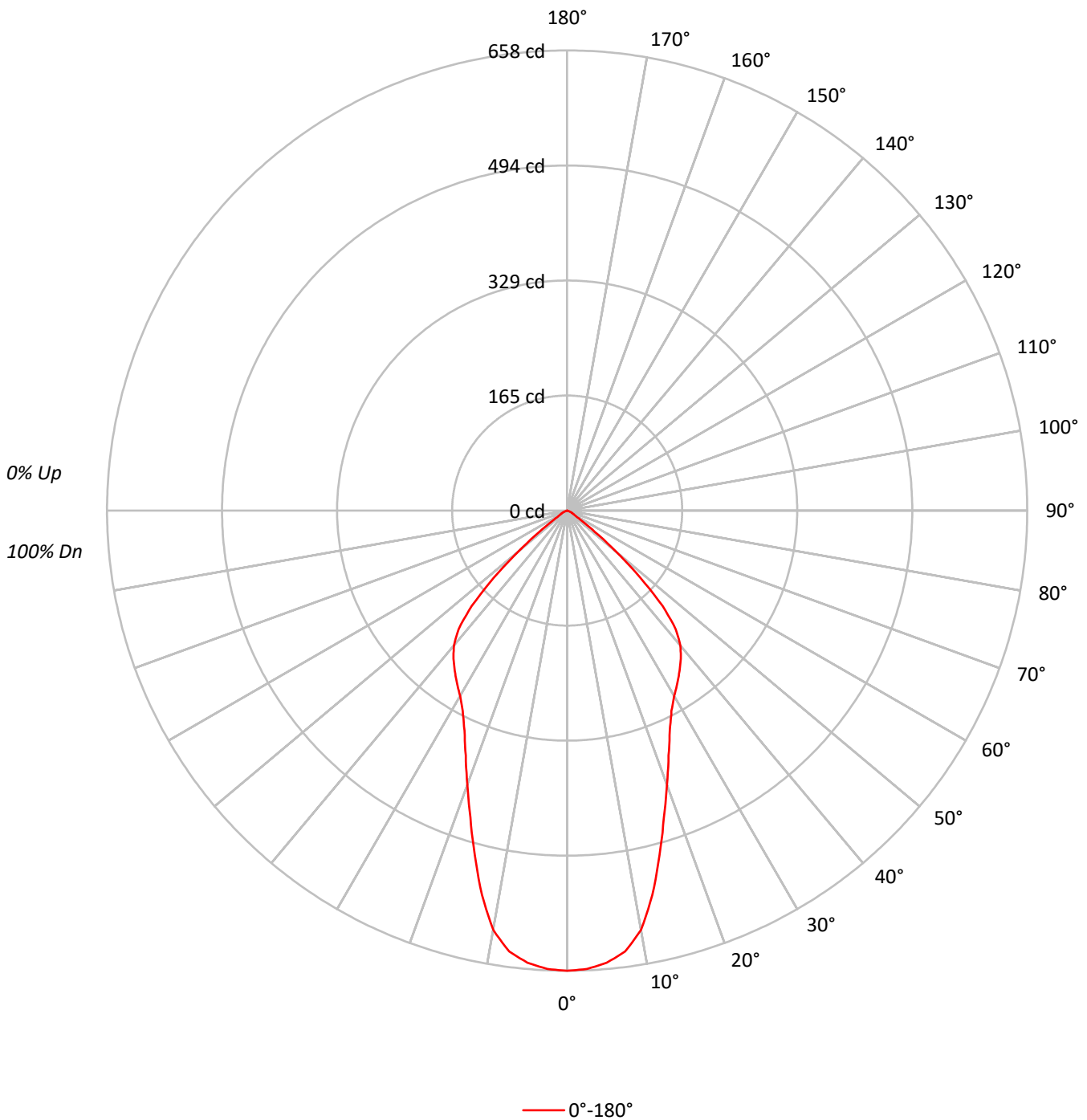
Lumens per Lamp: 718 (1 lamp)
Luminaire Lumens: 718.6 lumens
Efficiency: 100.1%
Efficacy: 51.0 lumens/watt
Spacing Criteria (0/90/45): 0.76 / 0.76 / 0.95
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	95	92	89	92	90	87	90	87	85	83
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	77	76
4	94	85	78	74	92	84	78	73	81	76	72	79	75	71	77	74	70	69
5	88	78	71	66	86	77	71	66	75	70	66	74	69	65	72	68	64	63
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	53
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	43	64	54	48	43	53	47	43	52	47	43	51	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	36072
5°	35714
10°	33901
15°	28945
20°	24327
25°	20989
30°	19370
35°	18738
40°	18034
45°	14963
50°	7761
55°	2294
60°	1206
65°	908
70°	481
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	60.8	8.5	8.5
10°-20°	142.1	19.8	19.8
20°-30°	161.7	22.5	22.5
30°-40°	175.1	24.4	24.4
40°-50°	140.8	19.6	19.6
50°-60°	30.5	4.2	4.2
60°-70°	6.9	1.0	1.0
70°-80°	0.7	0.1	0.1
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°	364.6	50.7	50.8
0°-40°	539.7	75.1	75.2
0°-60°	711.0	98.9	99.0
0°-90°	718.6	100.0	100.1
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°	718.6	100.0	100.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	658	
5°	649	61
15°	510	142
25°	347	162
35°	280	175
45°	193	141
55°	24	31
65°	7	7
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	658
2.5°	656
5°	649
7.5°	636
10°	609
12.5°	563
15°	510
17.5°	460
20°	417
22.5°	379
25°	347
27.5°	323
30°	306
32.5°	293
35°	280
37.5°	267
40°	252
42.5°	230
45°	193
47.5°	142
50°	91
52.5°	50
55°	24
57.5°	14
60°	11
62.5°	9
65°	7
67.5°	5
70°	3
72.5°	1
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)