

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: P30052

Luminaire Tested: **ML706835-493WBS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P30052
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML706835-493WBS06
Description: HALO RECESSED LED RETROFIT MODULE WITH TRIM THAT INCLUDES
SHOWER RATED,SOLITE LENS,WHITE BAFFLED DESIGN REFLECTOR IN
TRIM
Light Source: HIGH OUPUT LED PACKAGE
14 WATTS
Ballast/Driver: 120V ELECTRONIC DRIVER

Summary

Lumens per Lamp: 651 (1 lamp)
Luminaire Lumens: 653.1 lumens
Efficiency: 100.3%
Efficacy: 20.5 lumens/watt
Spacing Criteria (0/90/45): 0.63 / 0.63 / 0.9
Luminous Opening: Circular (Dia: 0.4' x H: 0')
CIE Type: Direct

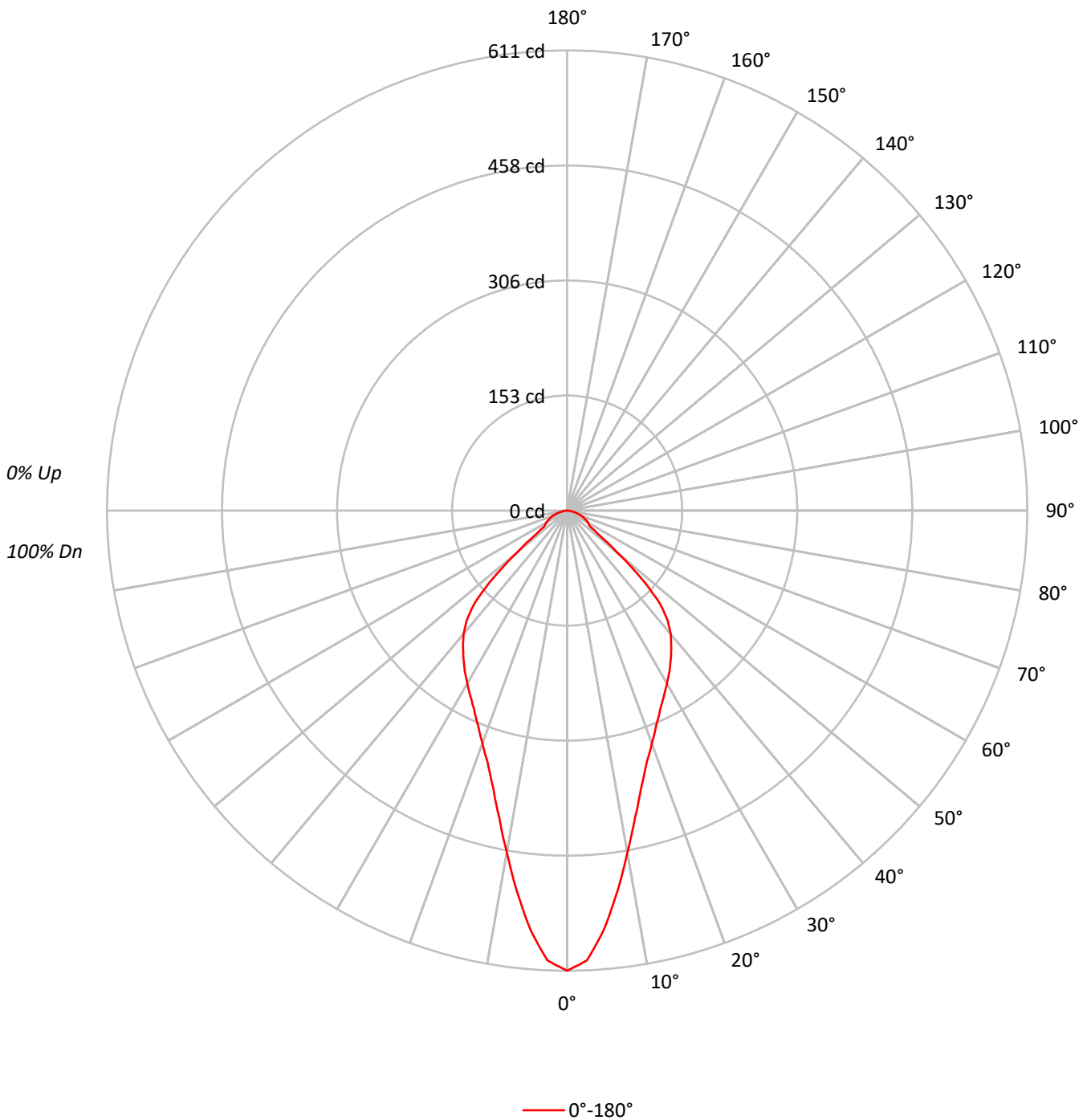
Input Watts (W): 31.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P30052

CATALOG NUMBER: ML706835-493WBS06

Luminous Intensity Polar Plot





TEST NUMBER: P30052

CATALOG NUMBER: ML706835-493WBS06

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	112	108	105	102	109	106	103	101	102	100	98		98	96	95		95	93	92	90
2	105	98	93	89	102	96	92	88	93	89	86		90	87	84		87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76		82	78	75		80	76	73	72
4	91	81	74	69	89	80	74	69	78	72	68		76	71	67		74	69	66	64
5	85	75	67	62	83	74	67	62	72	66	61		70	64	60		68	63	60	58
6	80	69	61	56	78	68	61	56	66	60	55		64	59	55		63	58	54	53
7	75	63	56	51	73	63	56	51	61	55	50		60	54	50		59	54	50	48
8	70	59	51	46	69	58	51	46	57	51	46		56	50	46		55	49	46	44
9	66	55	47	43	65	54	47	43	53	47	42		52	46	42		51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39		49	43	39		48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	53444
5°	49082
10°	40945
15°	34411
20°	30624
25°	28181
30°	26765
35°	25627
40°	24435
45°	21524
50°	11975
55°	5795
60°	5598
65°	5381
70°	5115
75°	4393
80°	3526
85°	3011



TEST NUMBER: P30052

CATALOG NUMBER: ML706835-493WBS06

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	50.2	7.7	7.7
10°-20°	107.4	16.5	16.5
20°-30°	135.2	20.7	20.8
30°-40°	150.1	23.0	23.1
40°-50°	125.9	19.3	19.3
50°-60°	41.3	6.3	6.3
60°-70°	25.7	3.9	4.0
70°-80°	13.8	2.1	2.1
80°-90°	3.4	0.5	0.5
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°	292.9	44.8	45.0
0°-40°	442.9	67.8	68.0
0°-60°	610.1	93.4	93.7
0°-90°	653.1	100.0	100.3
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°	653.1	100.0	100.3

CANDELA DISTRIBUTION:

	0°	Flux
0°	611	
5°	559	50
15°	380	107
25°	292	135
35°	240	150
45°	174	126
55°	38	41
65°	26	26
75°	13	14
85°	3	3
90°	0	0
95°	0	0
105°	0	0
115°	0	0
125°	0	0
135°	0	0
145°	0	0
155°	0	0
165°	0	0
175°	0	0
180°	0	0



TEST NUMBER: P30052

CATALOG NUMBER: ML706835-493WBS06

CANDELA DISTRIBUTION (FULL):

	0°
0°	611
2.5°	598
5°	559
7.5°	510
10°	461
12.5°	417
15°	380
17.5°	351
20°	329
22.5°	309
25°	292
27.5°	278
30°	265
32.5°	253
35°	240
37.5°	227
40°	214
42.5°	197
45°	174
47.5°	135
50°	88
52.5°	54
55°	38
57.5°	34
60°	32
62.5°	29
65°	26
67.5°	23
70°	20
72.5°	16
75°	13
77.5°	10
80°	7
82.5°	5
85°	3
87.5°	1
90°	0
92.5°	0
95°	0
97.5°	0
100°	0
102.5°	0
105°	0
107.5°	0
110°	0



TEST NUMBER: P30052

CATALOG NUMBER: ML706835-493WBS06

CANDELA DISTRIBUTION (continued):

	0°
112.5°	0
115°	0
117.5°	0
120°	0
122.5°	0
125°	0
127.5°	0
130°	0
132.5°	0
135°	0
137.5°	0
140°	0
142.5°	0
145°	0
147.5°	0
150°	0
152.5°	0
155°	0
157.5°	0
160°	0
162.5°	0
165°	0
167.5°	0
170°	0
172.5°	0
175°	0
177.5°	0
180°	0

(END OF REPORT)