

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: P20226

Luminaire Tested: **ML709830TUNVD010-493TBZS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20226
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709830TUNVD010-493TBZS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH TUSCAN BRONZE TRIM AND SOLITE GLASS LENS
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 617 (1 lamp)
Luminaire Lumens: 618.4 lumens
Efficiency: 100.2%
Efficacy: 44.2 lumens/watt
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.94
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

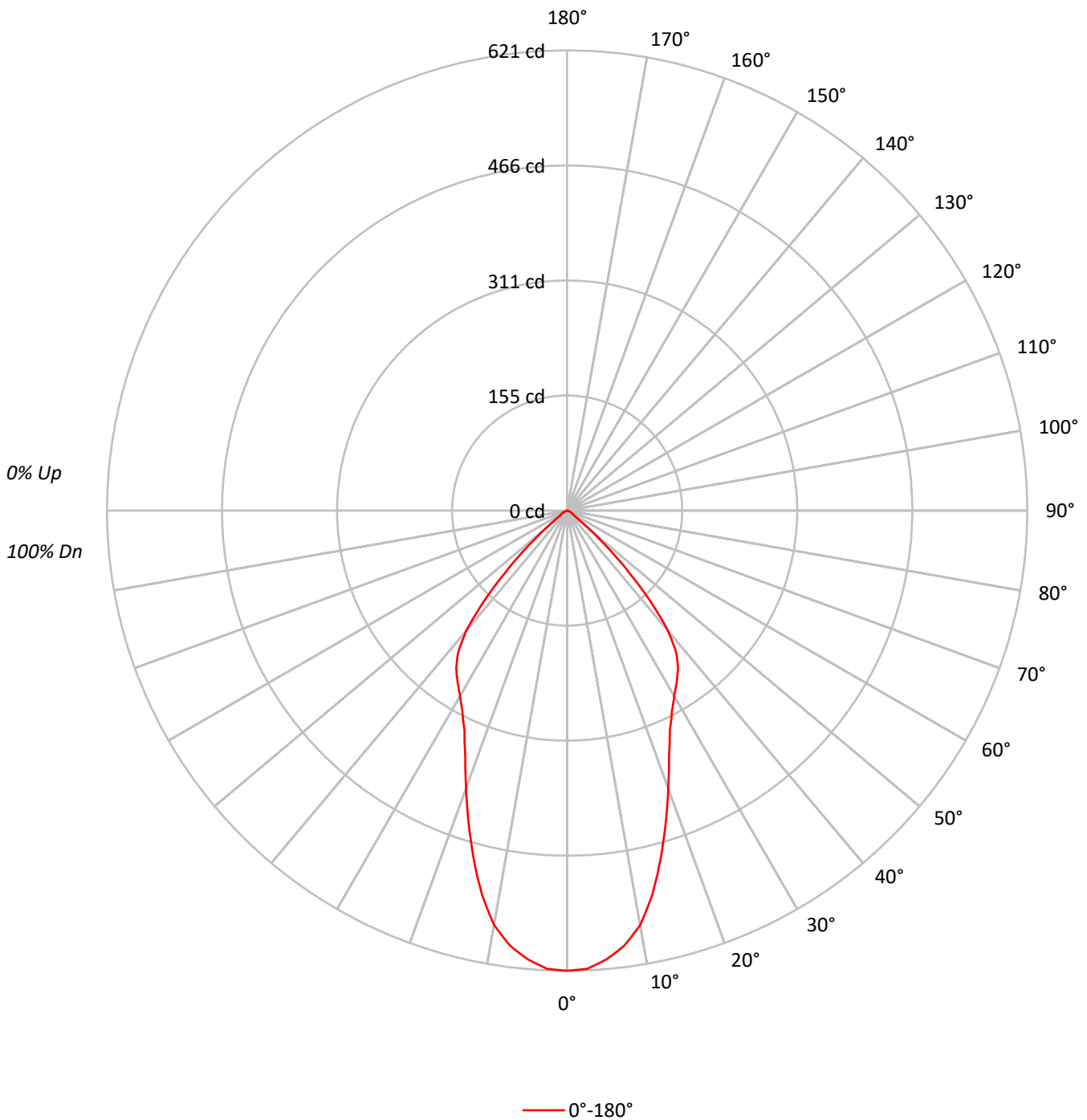
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	117	117	117	117	111	111	111		107	107	107		102	102	102	100
1	113	110	108	105	111	108	106	103	104	102	100		100	99	97		97	96	94	93
2	107	102	97	93	105	100	96	92	97	93	90		94	91	88		91	89	87	85
3	101	94	88	84	99	92	87	83	90	85	82		87	84	81		85	82	79	78
4	95	87	80	76	93	85	80	75	83	78	74		81	77	74		79	76	73	71
5	89	80	74	69	88	79	73	69	77	72	68		76	71	67		74	70	67	65
6	84	74	68	63	83	74	67	63	72	67	62		71	66	62		69	65	62	60
7	80	69	63	58	78	69	62	58	67	62	58		66	61	57		65	60	57	55
8	75	65	58	54	74	64	58	54	63	57	53		62	57	53		61	56	53	51
9	71	61	54	50	70	60	54	50	59	53	50		58	53	49		57	53	49	48
10	68	57	51	46	66	56	50	46	56	50	46		55	50	46		54	49	46	44

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	34043
5°	33458
10°	31618
15°	27639
20°	23277
25°	19840
30°	18294
35°	17467
40°	15171
45°	9148
50°	3411
55°	1147
60°	877
65°	649
70°	321
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	56.8	9.2	9.2
10°-20°	135.2	21.9	21.9
20°-30°	153.2	24.8	24.8
30°-40°	160.6	26.0	26.0
40°-50°	92.2	14.9	14.9
50°-60°	14.6	2.4	2.4
60°-70°	5.2	0.8	0.8
70°-80°	0.5	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°	345.3	55.8	56.0
0°-40°	505.9	81.8	82.0
0°-60°	612.7	99.1	99.3
0°-90°	618.4	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°	618.4	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	621	
5°	608	57
15°	487	135
25°	328	153
35°	261	161
45°	118	92
55°	12	15
65°	5	5
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	621
2.5°	619
5°	608
7.5°	592
10°	568
12.5°	531
15°	487
17.5°	442
20°	399
22.5°	359
25°	328
27.5°	306
30°	289
32.5°	275
35°	261
37.5°	242
40°	212
42.5°	167
45°	118
47.5°	75
50°	40
52.5°	20
55°	12
57.5°	10
60°	8
62.5°	7
65°	5
67.5°	4
70°	2
72.5°	1
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)