

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: P20176

Luminaire Tested: **ML712840TUNVD010-494WB06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20176
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML712840TUNVD010-494WB06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE BAFFLED DESIGN TRIM
REFLECTOR WITH MODULE ML712840TUNVD010
Light Source: (1)SURFACE MOUNT LED ON HEAT SINK MODULE
24 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

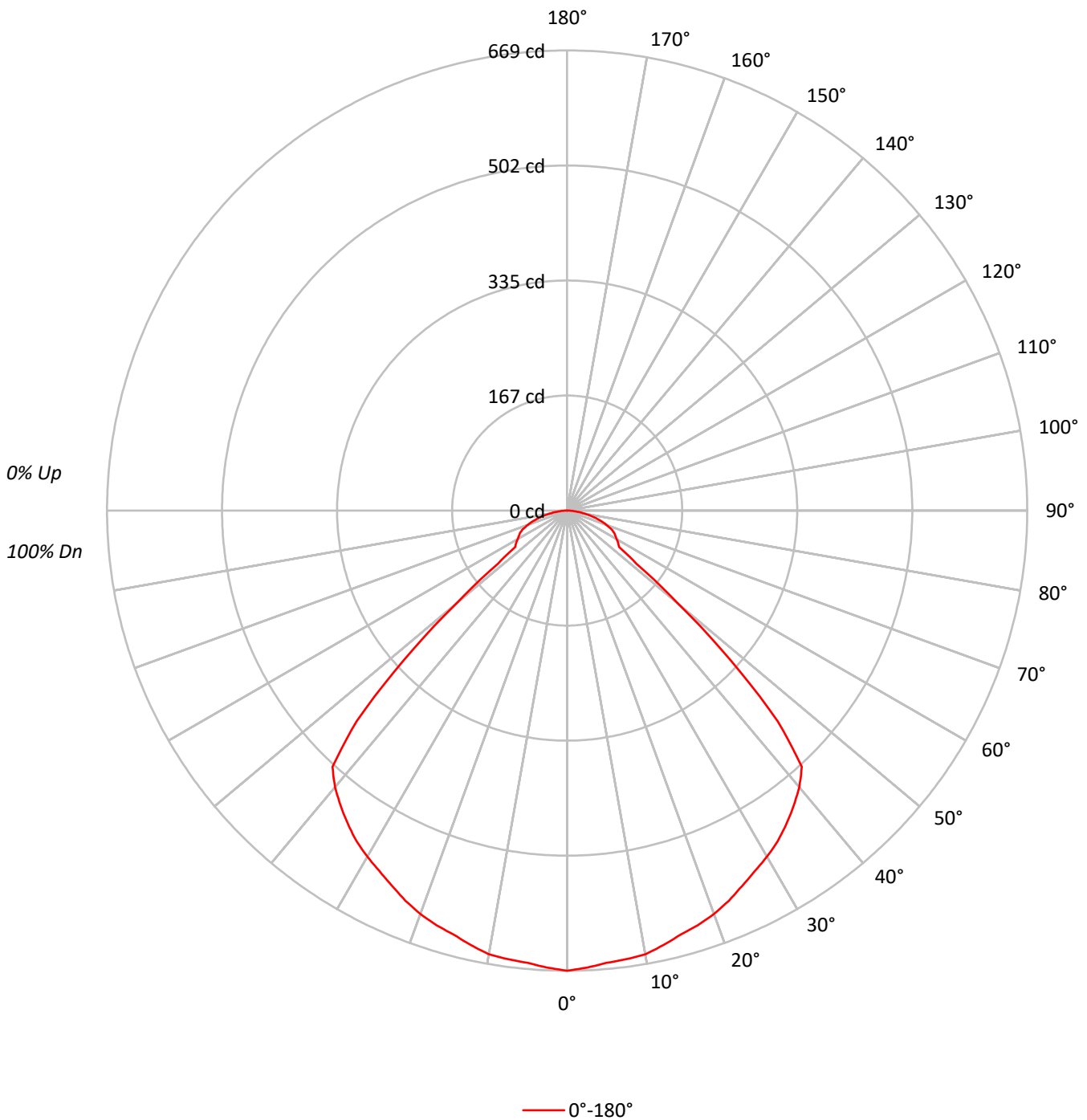
Lumens per Lamp: 1414 (1 lamp)
Luminaire Lumens: 1414.7 lumens
Efficiency: 100.0%
Efficacy: 54.2 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.3 / 1.38
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 26.1
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	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72		79	75	71		77	73	70	68
4	88	78	70	65	86	77	70	64	74	68	63		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	64	57	51	74	64	56	51	62	55	50		60	54	50		59	54	49	48
7	71	59	51	46	70	58	51	45	57	50	45		55	49	45		54	49	45	43
8	66	54	46	41	65	54	46	41	52	46	41		51	45	41		50	44	40	39
9	62	50	42	37	61	49	42	37	48	42	37		47	41	37		46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34		44	38	34		43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	36675
5°	36320
10°	36461
15°	36209
20°	36403
25°	36413
30°	36778
35°	37209
40°	37570
45°	33569
50°	18080
55°	8793
60°	9100
65°	9729
70°	9777
75°	9320
80°	8208
85°	6919



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	62.9	4.4	4.4
10°-20°	180.7	12.8	12.8
20°-30°	278.2	19.7	19.7
30°-40°	348.0	24.6	24.6
40°-50°	312.0	22.1	22.1
50°-60°	101.0	7.1	7.1
60°-70°	73.1	5.2	5.2
70°-80°	46.3	3.3	3.3
80°-90°	12.5	0.9	0.9
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°	521.9	36.9	36.9
0°-40°	869.8	61.5	61.5
0°-60°	1282.8	90.7	90.7
0°-90°	1414.7	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°	1414.7	100.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	669	
5°	660	63
15°	638	181
25°	602	278
35°	556	348
45°	433	312
55°	92	101
65°	75	73
75°	44	46
85°	11	13
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	669
2.5°	665
5°	660
7.5°	658
10°	655
12.5°	647
15°	638
17.5°	632
20°	624
22.5°	614
25°	602
27.5°	591
30°	581
32.5°	570
35°	556
37.5°	541
40°	525
42.5°	505
45°	433
47.5°	323
50°	212
52.5°	127
55°	92
57.5°	88
60°	83
62.5°	79
65°	75
67.5°	69
70°	61
72.5°	53
75°	44
77.5°	35
80°	26
82.5°	18
85°	11
87.5°	4
90°	0

(END OF REPORT)