

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: P20170

Luminaire Tested: **ML712840TUNVD010-493WBS06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20170  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML712840TUNVD010-493WBS06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE BAFFLED DESIGN  
LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND  
SOLITE GLASS LENS WITH MODULE ML712840TUNVD010  
Light Source: (1)SURFACE MOUNT LED ON HEAT SINK MODULE  
24 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 1346 (1 lamp)  
Luminaire Lumens: 1346.6 lumens  
Efficiency: 100.0%  
Efficacy: 51.2 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.99  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

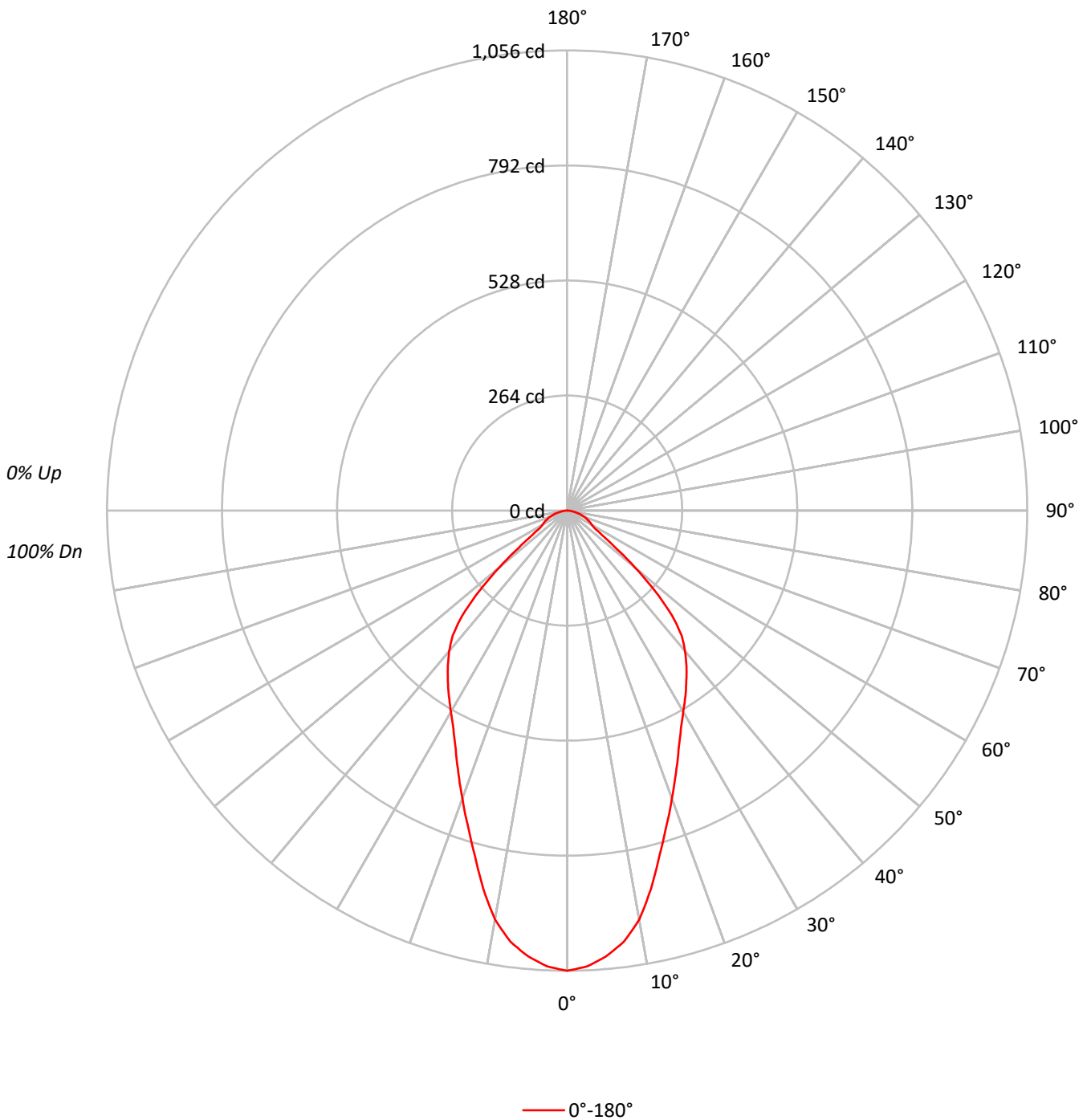
Input Watts (W): 26.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	100	102	99	97		98	96	94		94	93	91	90
2	104	98	92	88	102	96	91	87	93	89	85		89	86	83		87	84	81	80
3	97	89	82	77	95	87	81	77	84	79	75		82	78	74		79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67		75	70	66		73	69	65	64
5	85	74	67	61	83	73	66	61	71	65	60		69	64	60		68	63	59	57
6	79	68	61	55	77	67	60	55	65	59	55		64	58	54		63	58	54	52
7	74	63	55	50	73	62	55	50	61	54	50		59	54	49		58	53	49	47
8	70	58	51	46	68	58	51	46	56	50	46		55	49	45		54	49	45	43
9	66	54	47	42	64	54	47	42	52	46	42		52	46	42		51	45	42	40
10	62	50	44	39	61	50	43	39	49	43	39		48	43	39		47	42	39	37

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	57890
5°	56515
10°	53050
15°	46482
20°	41012
25°	36595
30°	33739
35°	31922
40°	30128
45°	26437
50°	17313
55°	9271
60°	7127
65°	7005
70°	6732
75°	5931
80°	5051
85°	4403



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	95.8	7.1	7.1
10°-20°	229.8	17.1	17.1
20°-30°	280.0	20.8	20.8
30°-40°	298.4	22.2	22.2
40°-50°	252.6	18.8	18.8
50°-60°	98.6	7.3	7.3
60°-70°	53.3	4.0	4.0
70°-80°	30.0	2.2	2.2
80°-90°	7.9	0.6	0.6
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°	605.6	45.0	45.0
0°-40°	904.0	67.1	67.2
0°-60°	1255.3	93.2	93.3
0°-90°	1346.6	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°	1346.6	100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1056	
5°	1027	96
15°	819	230
25°	605	280
35°	477	298
45°	341	253
55°	97	99
65°	54	53
75°	28	30
85°	7	8
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1056
2.5°	1047
5°	1027
7.5°	998
10°	953
12.5°	889
15°	819
17.5°	758
20°	703
22.5°	652
25°	605
27.5°	565
30°	533
32.5°	505
35°	477
37.5°	450
40°	421
42.5°	389
45°	341
47.5°	275
50°	203
52.5°	140
55°	97
57.5°	74
60°	65
62.5°	60
65°	54
67.5°	48
70°	42
72.5°	35
75°	28
77.5°	22
80°	16
82.5°	11
85°	7
87.5°	3
90°	0

(END OF REPORT)