

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: P20171

Luminaire Tested: **ML712840TUNVD010-493SCS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20171
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML712840TUNVD010-493SCS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH SPECULAR CLEAR 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

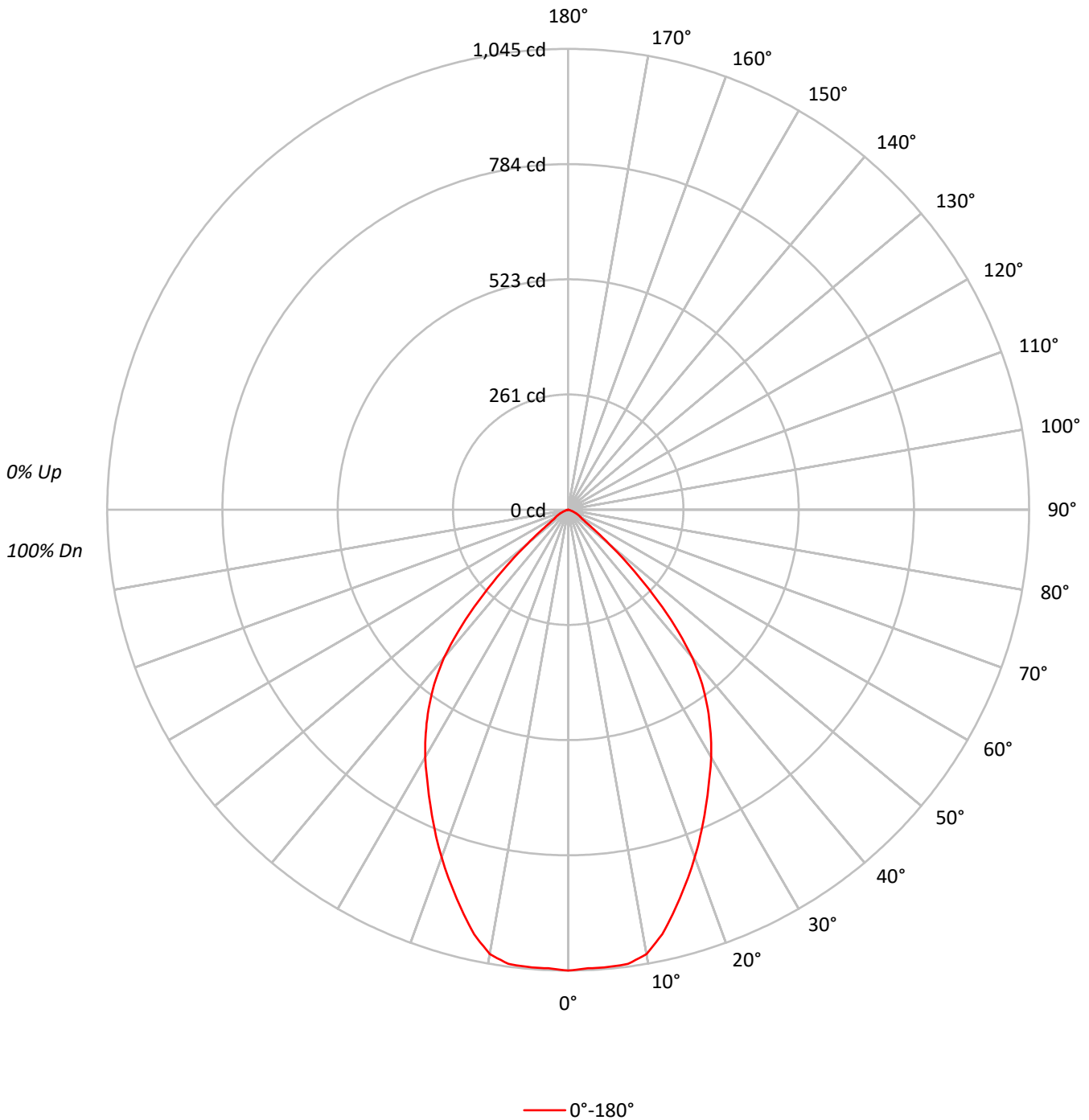
Lumens per Lamp: 1328 (1 lamp)
Luminaire Lumens: 1329.1 lumens
Efficiency: 100.1%
Efficacy: 50.7 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.98 / 1.06
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 26.2
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	99	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	78	76
4	94	85	79	74	92	84	78	73	81	76	72	79	75	71	77	74	71	69
5	88	78	72	67	86	77	71	66	75	70	66	74	69	65	72	68	65	63
6	83	72	66	61	81	72	65	60	70	64	60	69	63	60	67	63	59	58
7	78	67	60	56	76	66	60	55	65	59	55	64	59	55	63	58	54	53
8	73	63	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	57287
5°	57286
10°	56946
15°	53179
20°	48946
25°	44700
30°	41019
35°	36942
40°	31344
45°	21087
50°	10319
55°	4492
60°	3399
65°	2594
70°	1603
75°	635
80°	316
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	98.9	7.4	7.4
10°-20°	262.5	19.7	19.8
20°-30°	340.3	25.6	25.6
30°-40°	342.2	25.7	25.8
40°-50°	209.6	15.8	15.8
50°-60°	51.3	3.9	3.9
60°-70°	20.1	1.5	1.5
70°-80°	4.1	0.3	0.3
80°-90°	0.1	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°	701.7	52.8	52.8
0°-40°	1043.9	78.5	78.6
0°-60°	1304.8	98.2	98.3
0°-90°	1329.1	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°	1329.1	100.0	100.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	1045	
5°	1041	99
15°	937	262
25°	739	340
35°	552	342
45°	272	210
55°	47	51
65°	20	20
75°	3	4
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1045
2.5°	1041
5°	1041
7.5°	1039
10°	1023
12.5°	986
15°	937
17.5°	888
20°	839
22.5°	789
25°	739
27.5°	692
30°	648
32.5°	601
35°	552
37.5°	499
40°	438
42.5°	359
45°	272
47.5°	190
50°	121
52.5°	73
55°	47
57.5°	36
60°	31
62.5°	26
65°	20
67.5°	15
70°	10
72.5°	6
75°	3
77.5°	1
80°	1
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)