

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: P20160

Luminaire Tested: **ML712827TUNVD010-493SNS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20160
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML712827TUNVD010-493SNS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH SATIN NICKEL FINISH LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND SOLITE GLASS LENS WITH MODULE ML712827TUNVD010
Light Source: (1)SURFACE MOUNT LED ON HEAT SINK MODULE (1)24 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

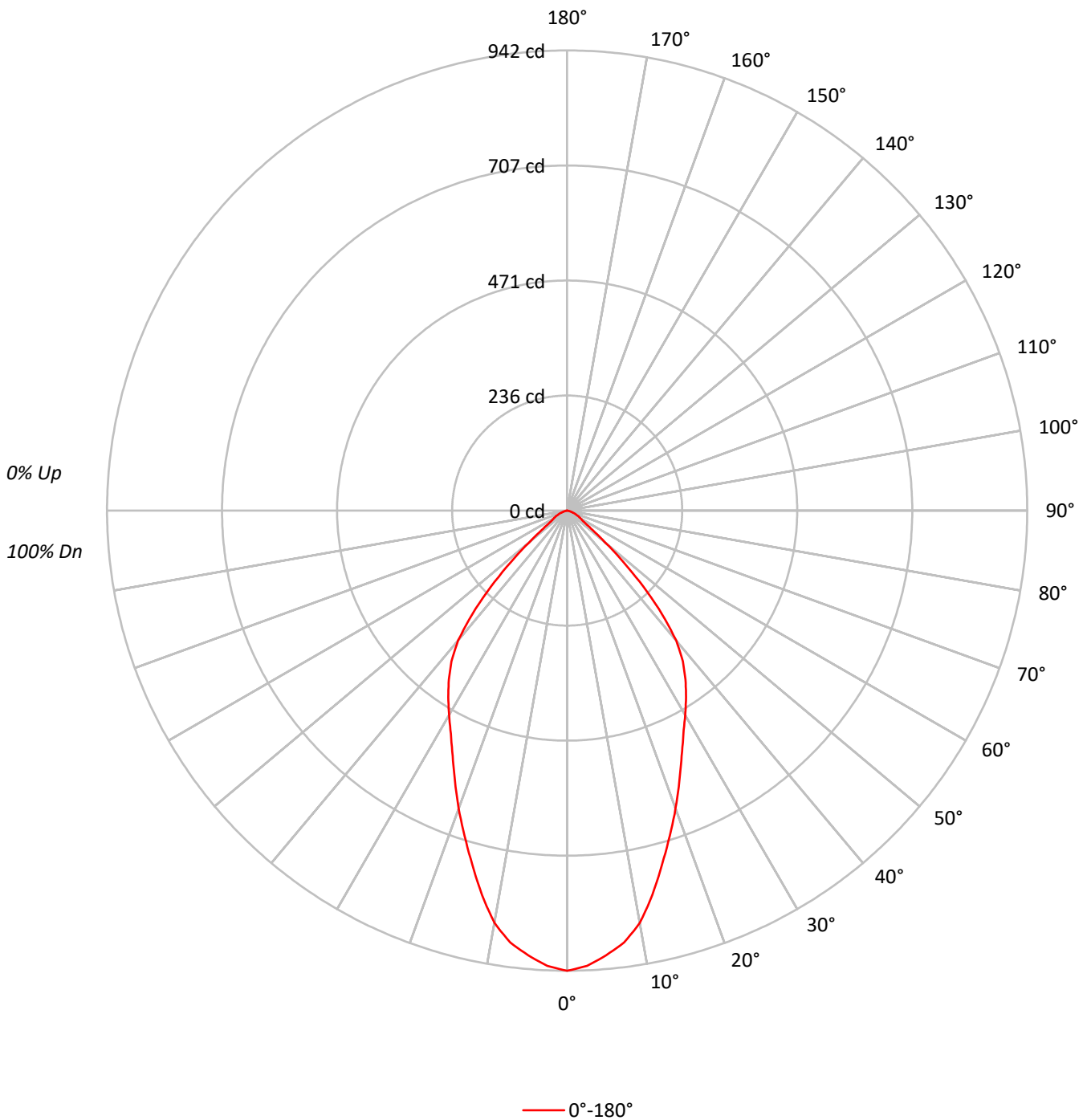
Lumens per Lamp: 1060 (1 lamp)
Luminaire Lumens: 1060.4 lumens
Efficiency: 100.0%
Efficacy: 39.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.83 / 0.98
Luminous Opening: Circular (Dia: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 26.6
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	109	107	104	110	107	105	102	103	101	99		99	98	96		96	95	93	92
2	106	100	95	91	104	98	94	90	95	92	88		92	89	87		89	87	85	83
3	99	92	86	81	97	90	85	81	88	83	79		85	81	78		83	80	77	75
4	93	84	78	73	91	83	77	73	81	76	72		79	74	71		77	73	70	68
5	88	78	71	66	86	77	70	66	75	69	65		73	68	65		72	67	64	62
6	82	72	65	60	81	71	65	60	70	64	59		68	63	59		67	62	59	57
7	77	67	60	55	76	66	60	55	65	59	55		63	58	54		62	58	54	52
8	73	62	55	51	72	62	55	51	60	54	50		59	54	50		58	53	50	48
9	69	58	51	47	68	58	51	47	57	51	47		56	50	46		55	50	46	45
10	65	54	48	43	64	54	48	43	53	47	43		52	47	43		51	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3228
5°	3144
10°	2982
15°	2660
20°	2366
25°	2094
30°	1911
35°	1765
40°	1552
45°	1071
50°	544
55°	269
60°	212
65°	178
70°	130
75°	79
80°	39
85°	39



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	85.6	8.1	8.1
10°-20°	210.0	19.8	19.8
20°-30°	256.4	24.2	24.2
30°-40°	262.1	24.7	24.7
40°-50°	169.5	16.0	16.0
50°-60°	47.1	4.4	4.4
60°-70°	22.0	2.1	2.1
70°-80°	7.0	0.7	0.7
80°-90°	0.8	0.1	0.1
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°	552.0	52.1	52.1
0°-40°	814.0	76.8	76.8
0°-60°	1030.7	97.2	97.2
0°-90°	1060.4	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°	1060.4	100.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	942	
5°	914	86
15°	750	210
25°	554	256
35°	422	262
45°	221	170
55°	45	47
65°	22	22
75°	6	7
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	942
2.5°	933
5°	914
7.5°	892
10°	857
12.5°	806
15°	750
17.5°	698
20°	649
22.5°	600
25°	554
27.5°	515
30°	483
32.5°	453
35°	422
37.5°	389
40°	347
42.5°	288
45°	221
47.5°	156
50°	102
52.5°	65
55°	45
57.5°	36
60°	31
62.5°	27
65°	22
67.5°	18
70°	13
72.5°	9
75°	6
77.5°	4
80°	2
82.5°	1
85°	1
87.5°	0
90°	0

(END OF REPORT)