

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P26470

Luminaire Tested: **ORM-G-24-2-LD4-6HI-40-UNV-ASYSYMRFI-ED**

Test Date: 07/24/15

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P26470  
Test Lab: INNOVATION CENTER-P2  
Test Date: 07/24/15  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORM-G-24-2-LD4-6HI-40-UNV-ASYMMRFI-ED  
Description: FAILSAFE 2X2 LED RECESSED OPERATING ROOM FIXTURE  
Light Source: (252) ULM2.0 4000K LEDS  
2UT217042A8404A  
Ballast/Driver: (2) OSRAM ELECTRONIC DRIVER  
(1) OSRAM OTI85W (1) OSRAM OT50W

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
	AS-5443-2	Good	REFLECTOR
	AS-5443-3	Good	DRIVER
	AS-5443-4	Good	UPPER MODULE
	AS-5443-5	Good	LENS
	AS-5443-6	Good	DRIVER 2
	AS-5443-7	Good	TRIM RING

**Summary**

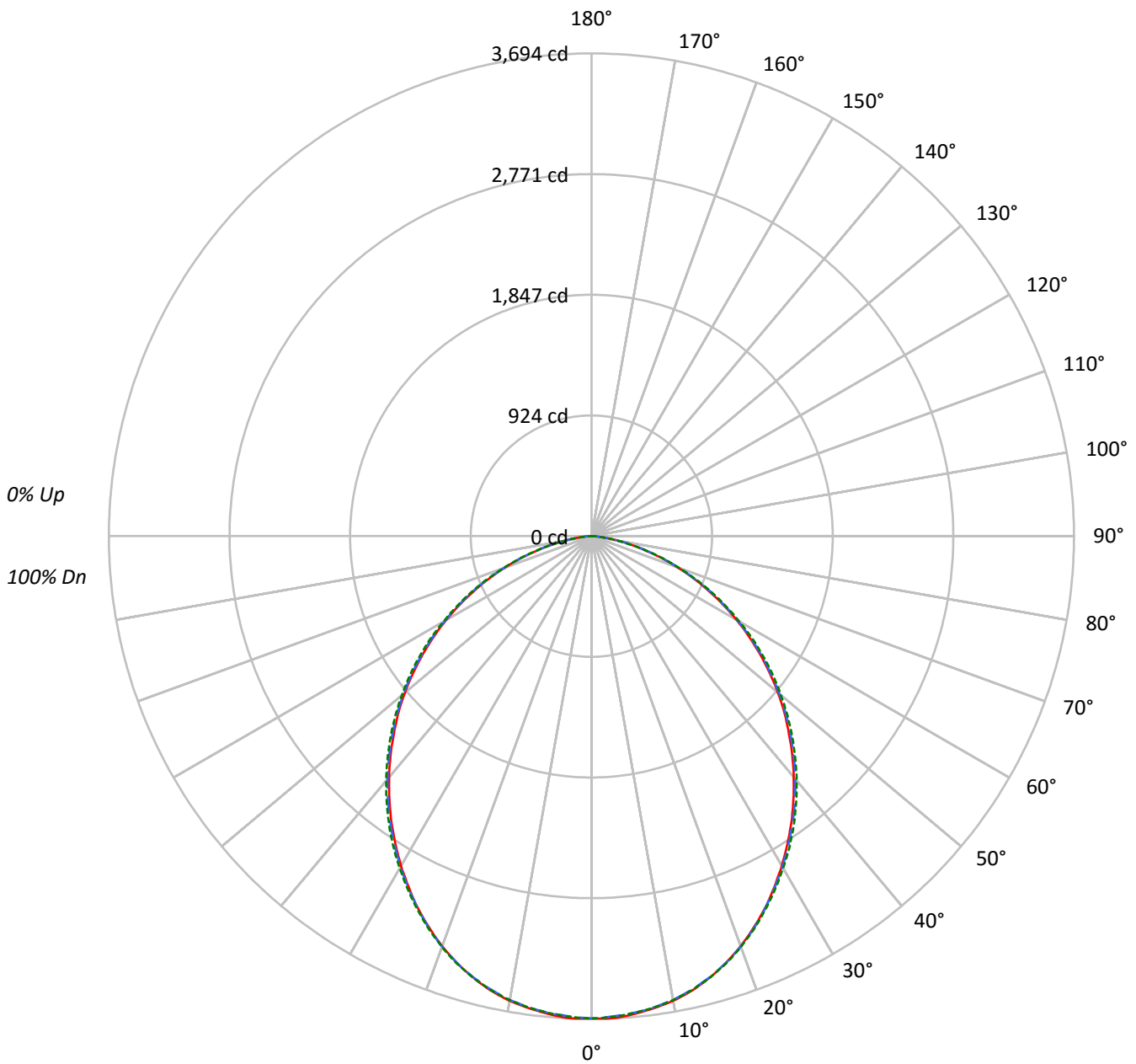
Lumens per Lamp: N/A  
Luminaire Lumens: 9101.4 lumens  
Efficiency: N/A  
Efficacy: 66.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 136.8  
Input Voltage (V): 120.04  
Input Current (Ain): 1.1412  
Voltage Rise (V): NR  
Power Factor: 0.9992  
Total Harmonic Distortion (THDi): 2.36%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: 24 HR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot



0% Up  
100% Dn

— 0°-180°    - - 45°-225°    - - - 90°-270°



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	26

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

	0°	45°	90°
0°	9932	9932	9932
5°	9922	9895	9900
10°	9867	9845	9851
15°	9745	9737	9748
20°	9565	9570	9582
25°	9332	9335	9362
30°	9055	9083	9117
35°	8768	8814	8870
40°	8462	8533	8585
45°	8136	8209	8277
50°	7799	7862	7933
55°	7389	7446	7544
60°	6916	6959	7045
65°	6316	6393	6469
70°	5555	5594	5681
75°	4564	4616	4658
80°	3332	3363	3332
85°	2038	2038	1853



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	348.2	3.8
10°-20°	985.2	10.8
20°-30°	1448.9	15.9
30°-40°	1679.2	18.5
40°-50°	1663.8	18.3
50°-60°	1420.3	15.6
60°-70°	991.1	10.9
70°-80°	475.1	5.2
80°-90°	89.7	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2782.2	30.6
0°-40°	4461.5	49.0
0°-60°	7545.5	82.9
0°-90°	9101.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9101.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3691	3691	3691	3691	3691	
5°	3673	3667	3663	3670	3665	349
15°	3498	3493	3495	3502	3499	985
25°	3143	3142	3144	3154	3153	1446
35°	2669	2679	2683	2696	2700	1669
45°	2138	2147	2157	2169	2175	1651
55°	1575	1577	1587	1602	1608	1408
65°	992	990	1004	1011	1016	982
75°	439	438	444	446	448	471
85°	66	67	66	63	60	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3691	3691	3691	3691	3691
2.5°	3694	3686	3679	3687	3683
5°	3673	3667	3663	3670	3665
7.5°	3645	3641	3639	3645	3639
10°	3611	3605	3603	3610	3605
12.5°	3562	3556	3554	3563	3558
15°	3498	3493	3495	3502	3499
17.5°	3424	3420	3424	3432	3429
20°	3340	3339	3342	3349	3346
22.5°	3244	3245	3249	3256	3254
25°	3143	3142	3144	3154	3153
27.5°	3029	3033	3036	3048	3046
30°	2914	2918	2923	2939	2934
32.5°	2793	2803	2805	2821	2822
35°	2669	2679	2683	2696	2700
37.5°	2540	2551	2559	2570	2575
40°	2409	2417	2429	2440	2444
42.5°	2276	2284	2293	2305	2311
45°	2138	2147	2157	2169	2175
47.5°	2005	2006	2019	2032	2037
50°	1863	1865	1878	1887	1895
52.5°	1720	1721	1732	1748	1753
55°	1575	1577	1587	1602	1608
57.5°	1430	1431	1444	1456	1462
60°	1285	1285	1293	1308	1309
62.5°	1137	1136	1147	1159	1162
65°	992	990	1004	1011	1016
67.5°	847	845	854	864	867
70°	706	703	711	719	722
72.5°	569	568	576	578	582
75°	439	438	444	446	448
77.5°	320	319	323	326	323
80°	215	214	217	218	215
82.5°	131	129	130	128	126
85°	66	67	66	63	60
87.5°	31	32	29	25	22
90°	0	0	0	0	0

(END OF REPORT)