

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: P26476

Luminaire Tested: **ORM-G-12-4-LD4-3HI-40-UNV-ASYSYMRFI-ED**

Issue Date: 3/3/2020

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: P26476  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORM-G-12-4-LD4-3HI-40-UNV-ASYMMRFI-ED  
Description: FAILSAFE RECESSED OPERATING ROOM FIXTURE  
Light Source: (252) ULM2.0 4000K LEDS  
2UT217042A8404A  
Ballast/Driver: (2) OSRAM ELECTRONIC DRIVER  
(1) OTI85W (1) 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**

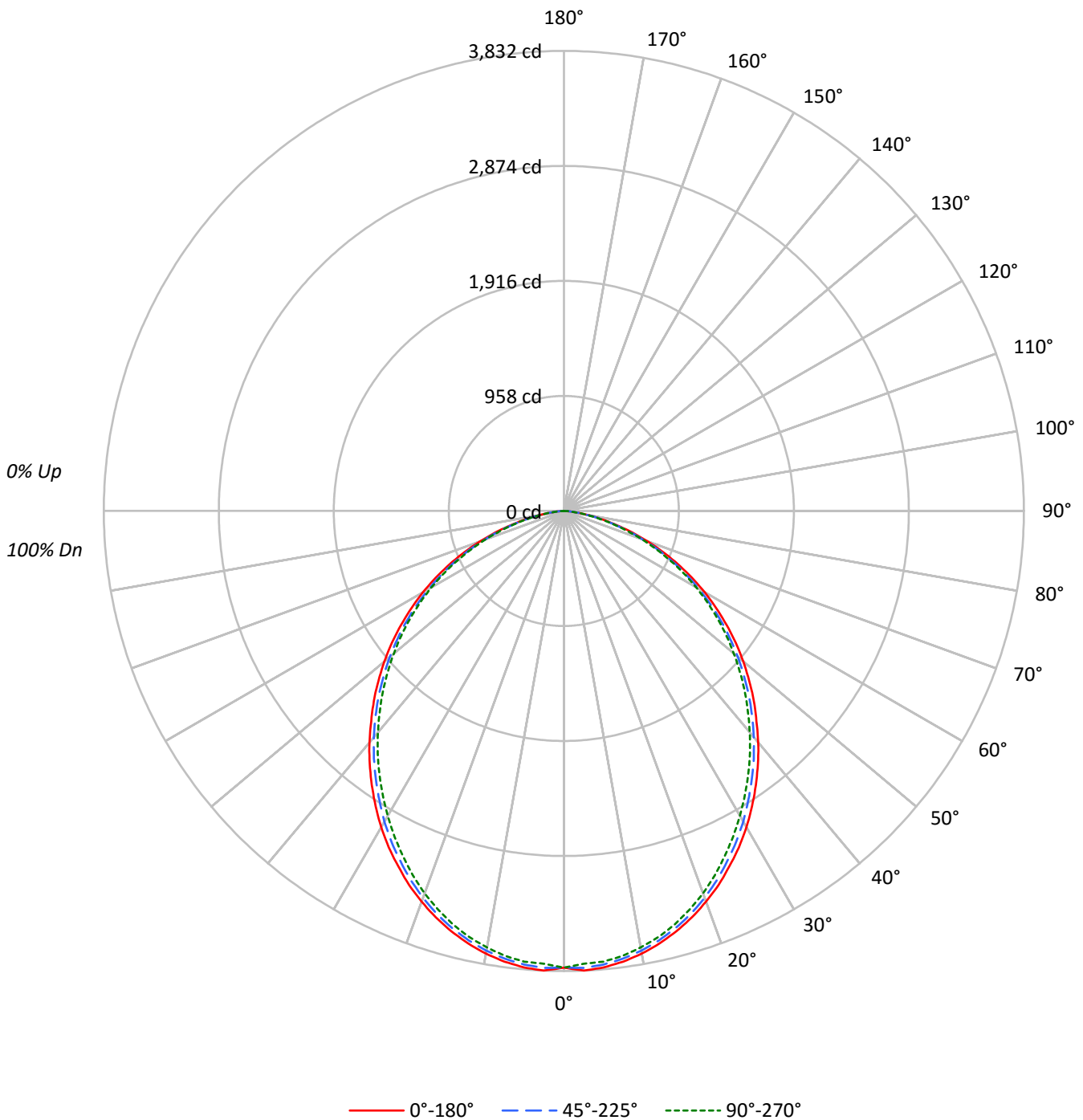
Lumens per Lamp: N/A  
Luminaire Lumens: 9224.9 lumens  
Efficiency: N/A  
Efficacy: 67.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.28  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 136.6  
Input Voltage (V): 120.04  
Input Current (A<sub>in</sub>): 1.1393  
Voltage Rise (V): NR  
Power Factor: 0.9991  
Total Harmonic Distortion (THDi): 2.39%  
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





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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	88	86
2	100	92	86	81	98	91	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	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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

	0°	45°	90°
0°	10234	10234	10234
5°	10308	10243	10178
10°	10230	10162	10086
15°	10096	10018	9932
20°	9917	9820	9708
25°	9691	9561	9415
30°	9452	9285	9114
35°	9159	8965	8797
40°	8852	8649	8462
45°	8517	8296	8114
50°	8164	7921	7741
55°	7765	7497	7328
60°	7293	6991	6851
65°	6667	6387	6234
70°	5854	5570	5452
75°	4762	4564	4429
80°	3425	3301	3177
85°	1883	2007	1945



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	358.7	3.9
10°-20°	1010.1	11.0
20°-30°	1478.8	16.0
30°-40°	1704.5	18.5
40°-50°	1681.0	18.2
50°-60°	1432.0	15.5
60°-70°	997.0	10.8
70°-80°	473.8	5.1
80°-90°	88.8	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°	2847.6	30.9
0°-40°	4552.1	49.3
0°-60°	7665.2	83.1
0°-90°	9224.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9224.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3803	3803	3803	3803	3803	
5°	3816	3765	3792	3779	3768	362
15°	3624	3578	3596	3579	3565	1021
25°	3264	3222	3220	3188	3171	1504
35°	2788	2747	2729	2694	2678	1743
45°	2238	2209	2180	2147	2132	1725
55°	1655	1632	1598	1573	1562	1479
65°	1047	1028	1003	987	979	1037
75°	458	450	439	432	426	492
85°	61	66	65	66	63	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3803	3803	3803	3803	3803
2.5°	3832	3782	3809	3797	3775
5°	3816	3765	3792	3779	3768
7.5°	3786	3737	3762	3748	3738
10°	3744	3695	3719	3701	3691
12.5°	3689	3642	3663	3644	3636
15°	3624	3578	3596	3579	3565
17.5°	3549	3504	3519	3499	3481
20°	3463	3419	3429	3403	3390
22.5°	3371	3326	3329	3297	3286
25°	3264	3222	3220	3188	3171
27.5°	3159	3111	3108	3071	3055
30°	3042	2996	2988	2950	2933
32.5°	2917	2874	2859	2824	2807
35°	2788	2747	2729	2694	2678
37.5°	2656	2618	2598	2561	2546
40°	2520	2482	2462	2422	2409
42.5°	2375	2347	2322	2285	2271
45°	2238	2209	2180	2147	2132
47.5°	2095	2068	2037	2005	1991
50°	1950	1922	1892	1860	1849
52.5°	1805	1779	1745	1719	1707
55°	1655	1632	1598	1573	1562
57.5°	1504	1483	1450	1428	1417
60°	1355	1326	1299	1281	1273
62.5°	1202	1178	1150	1134	1127
65°	1047	1028	1003	987	979
67.5°	894	877	855	842	834
70°	744	726	708	700	693
72.5°	597	586	571	562	555
75°	458	450	439	432	426
77.5°	332	330	319	314	308
80°	221	221	213	210	205
82.5°	127	132	127	126	122
85°	61	66	65	66	63
87.5°	22	26	28	30	29
90°	0	0	0	0	0

(END OF REPORT)