

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: P26478

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

Test Date: 08/04/15

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: P26478
Test Lab: INNOVATION CENTER-P2
Test Date: 08/04/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORM-G-12-4-LD4-3LO-40-UNV-ASYSYMRFI-ED
Description: FAILSAFE RECESSED OPERATING ROOM FIXTURE
Light Source: (252) ULM2.0 4000K LEDS
2UT217042A8404A
Ballast/Driver: (2) OSRAM ELECTRONIC DRIVER
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

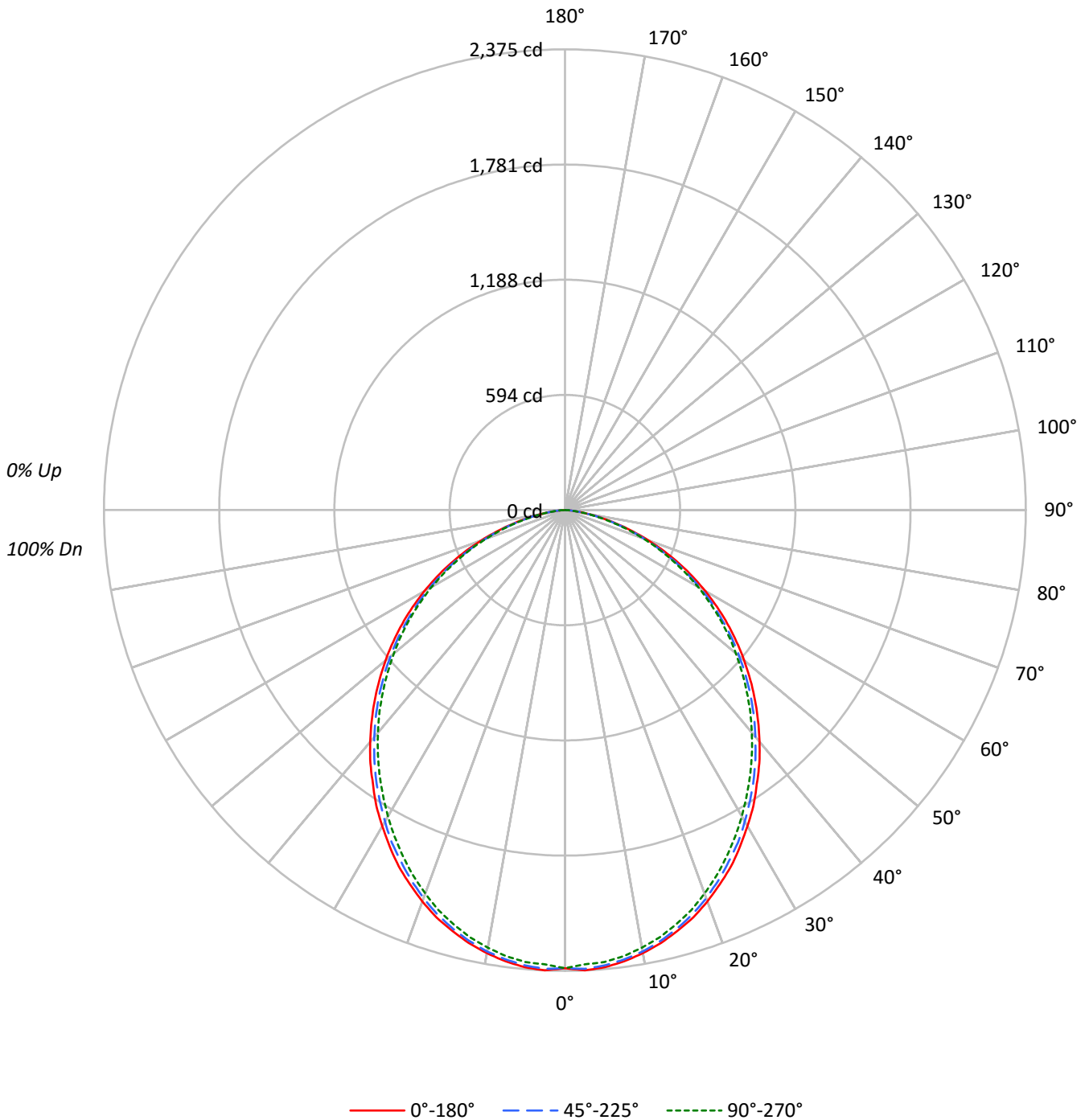
Lumens per Lamp: N/A
Luminaire Lumens: 5727.1 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.28
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 74.8
Input Voltage (V): 120.05
Input Current (A_{in}): 0.62791
Voltage Rise (V): NR
Power Factor: 0.9955
Total Harmonic Distortion (THDi): 7.95%
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°	6353	6353	6353
5°	6388	6364	6316
10°	6337	6312	6257
15°	6254	6221	6160
20°	6148	6097	6022
25°	6016	5935	5852
30°	5845	5761	5665
35°	5663	5571	5470
40°	5484	5364	5266
45°	5275	5149	5046
50°	5049	4911	4819
55°	4799	4645	4565
60°	4505	4343	4263
65°	4120	3954	3878
70°	3611	3462	3399
75°	2942	2838	2776
80°	2108	2061	1999
85°	1173	1266	1235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.7	3.9
10°-20°	627.1	10.9
20°-30°	918.0	16.0
30°-40°	1058.1	18.5
40°-50°	1043.6	18.2
50°-60°	888.9	15.5
60°-70°	619.0	10.8
70°-80°	294.6	5.1
80°-90°	55.1	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°	1767.7	30.9
0°-40°	2825.8	49.3
0°-60°	4758.3	83.1
0°-90°	5727.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5727.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2361	2361	2361	2361	2361	
5°	2365	2339	2356	2346	2338	224
15°	2245	2222	2233	2223	2211	633
25°	2026	2001	1999	1979	1971	932
35°	1724	1705	1696	1671	1665	1080
45°	1386	1371	1353	1332	1326	1069
55°	1023	1014	990	976	973	914
65°	647	639	621	612	609	640
75°	283	281	273	269	267	304
85°	38	41	41	40	40	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2361	2361	2361	2361	2361
2.5°	2375	2349	2367	2358	2344
5°	2365	2339	2356	2346	2338
7.5°	2346	2321	2336	2329	2319
10°	2319	2295	2310	2298	2290
12.5°	2286	2261	2275	2263	2256
15°	2245	2222	2233	2223	2211
17.5°	2201	2175	2185	2174	2163
20°	2147	2123	2129	2111	2103
22.5°	2087	2065	2066	2045	2041
25°	2026	2001	1999	1979	1971
27.5°	1955	1933	1932	1907	1899
30°	1881	1860	1854	1831	1823
32.5°	1808	1786	1776	1752	1744
35°	1724	1705	1696	1671	1665
37.5°	1646	1625	1613	1590	1583
40°	1561	1543	1527	1505	1499
42.5°	1474	1458	1442	1419	1414
45°	1386	1371	1353	1332	1326
47.5°	1297	1283	1264	1244	1238
50°	1206	1196	1173	1155	1151
52.5°	1115	1105	1084	1066	1063
55°	1023	1014	990	976	973
57.5°	930	921	901	886	882
60°	837	826	807	795	792
62.5°	742	734	714	704	700
65°	647	639	621	612	609
67.5°	553	546	529	522	520
70°	459	454	440	435	432
72.5°	369	365	353	350	347
75°	283	281	273	269	267
77.5°	205	205	199	195	193
80°	136	136	133	129	129
82.5°	80	81	80	79	77
85°	38	41	41	40	40
87.5°	13	16	17	18	18
90°	0	0	0	0	0

(END OF REPORT)