

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: P26423

Luminaire Tested: **ORM-G-24-4-LD4-4STD-40-UNV-ASYSYMRFI-ED**

Test Date: 07/06/15

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: P26423
Test Lab: INNOVATION CENTER-P2
Test Date: 07/06/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORM-G-24-4-LD4-4STD-40-UNV-ASYMMRFI-ED
Description: FAILSAFE RECESSED OPERATING ROOM FIXTURE
Light Source: (336) ULM2.0 4000K LEDS
2UT217042A8404A
Ballast/Driver: (2) OSRAM ELECTRONIC DRIVER
OSRAM OTI85W

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

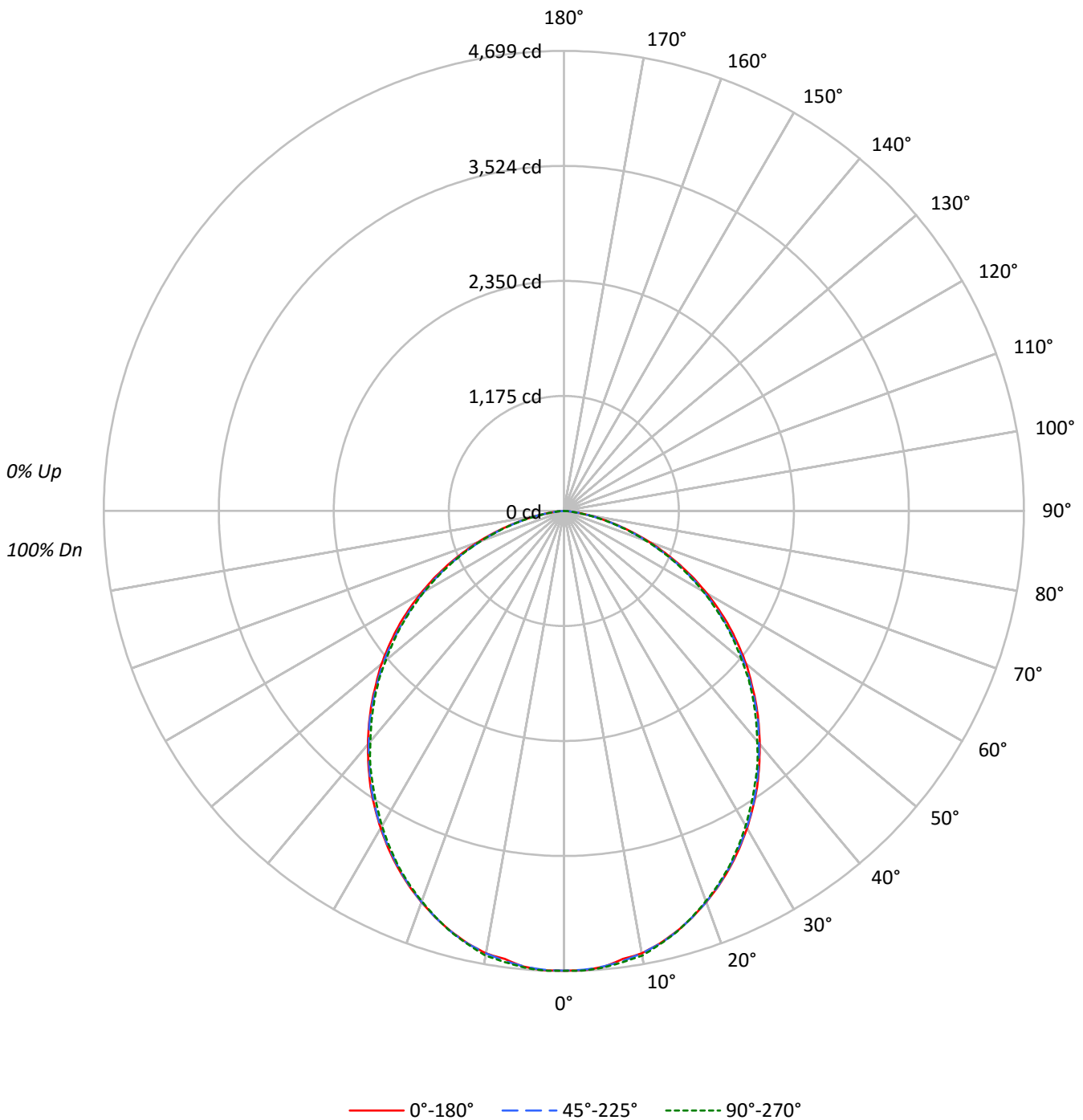
Lumens per Lamp: N/A
Luminaire Lumens: 11597.9 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 146.7
Input Voltage (V): 120.02
Input Current (A_{in}): 1.2260
Voltage Rise (V): NR
Power Factor: 0.9972
Total Harmonic Distortion (THDi): 2.88%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P26423

CATALOG NUMBER: ORM-G-24-4-LD4-4STD-40-UNV-ASYMMRFI-ED

Luminous Intensity Polar Plot





TEST NUMBER: P26423

CATALOG NUMBER: ORM-G-24-4-LD4-4STD-40-UNV-ASYMMRFI-ED

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	85
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	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	38	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	54	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°	6317	6317	6317
5°	6311	6307	6322
10°	6268	6268	6300
15°	6194	6199	6200
20°	6088	6085	6074
25°	5964	5953	5938
30°	5814	5801	5770
35°	5652	5636	5590
40°	5466	5443	5396
45°	5280	5250	5206
50°	5089	5032	4967
55°	4846	4755	4727
60°	4545	4451	4421
65°	4171	4066	4040
70°	3686	3552	3541
75°	3000	2911	2875
80°	2123	2084	2046
85°	1112	1112	1127



TEST NUMBER: P26423

CATALOG NUMBER: ORM-G-24-4-LD4-4STD-40-UNV-ASYMMRFI-ED

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.0	3.8
10°-20°	1251.8	10.8
20°-30°	1843.9	15.9
30°-40°	2139.9	18.5
40°-50°	2124.7	18.3
50°-60°	1816.7	15.7
60°-70°	1269.3	10.9
70°-80°	603.5	5.2
80°-90°	105.1	0.9
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°	3538.6	30.5
0°-40°	5678.6	49.0
0°-60°	9620.0	82.9
0°-90°	11597.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11597.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4695	4695	4695	4695	4695	
5°	4673	4660	4670	4673	4681	443
15°	4447	4431	4450	4446	4451	1253
25°	4017	4010	4010	3998	4000	1849
35°	3441	3431	3431	3409	3403	2150
45°	2775	2770	2759	2739	2736	2140
55°	2066	2052	2027	2016	2015	1845
65°	1310	1294	1277	1273	1269	1296
75°	577	568	560	554	553	618
85°	72	74	72	72	73	105
90°	0	0	0	0	0	



TEST NUMBER: P26423

CATALOG NUMBER: ORM-G-24-4-LD4-4STD-40-UNV-ASYMMRFI-ED

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4695	4695	4695	4695	4695
2.5°	4696	4678	4691	4705	4699
5°	4673	4660	4670	4673	4681
7.5°	4616	4614	4635	4638	4646
10°	4588	4575	4588	4589	4611
12.5°	4526	4512	4528	4526	4534
15°	4447	4431	4450	4446	4451
17.5°	4355	4340	4354	4350	4351
20°	4252	4242	4250	4245	4242
22.5°	4140	4130	4135	4129	4127
25°	4017	4010	4010	3998	4000
27.5°	3884	3875	3874	3860	3859
30°	3742	3734	3734	3715	3714
32.5°	3594	3584	3588	3566	3559
35°	3441	3431	3431	3409	3403
37.5°	3277	3274	3266	3245	3250
40°	3112	3103	3099	3084	3072
42.5°	2947	2946	2937	2913	2907
45°	2775	2770	2759	2739	2736
47.5°	2598	2593	2578	2560	2563
50°	2431	2416	2404	2381	2373
52.5°	2246	2235	2212	2199	2194
55°	2066	2052	2027	2016	2015
57.5°	1881	1863	1841	1831	1824
60°	1689	1680	1654	1644	1643
62.5°	1500	1488	1467	1455	1451
65°	1310	1294	1277	1273	1269
67.5°	1117	1103	1088	1084	1083
70°	937	919	903	900	900
72.5°	749	740	729	727	722
75°	577	568	560	554	553
77.5°	415	410	407	403	401
80°	274	271	269	268	264
82.5°	156	158	157	157	152
85°	72	74	72	72	73
87.5°	22	24	23	22	23
90°	0	0	0	0	0

(END OF REPORT)