

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: 265p103

Luminaire Tested: **AIEA MAE-24-S-T5HO-EB51**

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: 265p103
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: AIEA MAE-24-S-T5HO-EB51
Description: 2'X2' AMBIENT/EXAM RECESSED LUMINAIRE, 2 LAMP T5 HO, WITH RIBBED ACRYLIC CENTER LAMP SHIELD, CENTER LAMPS ON ONLY, LAMPS PARALLEL TO 0 DEGREES
Light Source: TWO - PHILIPS - F24T5/841/HO - 2000 LUMENS - 24 WATTS
Ballast/Driver: QUICKTRONIC QTP2X39 24T5HO UNV/PSN

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

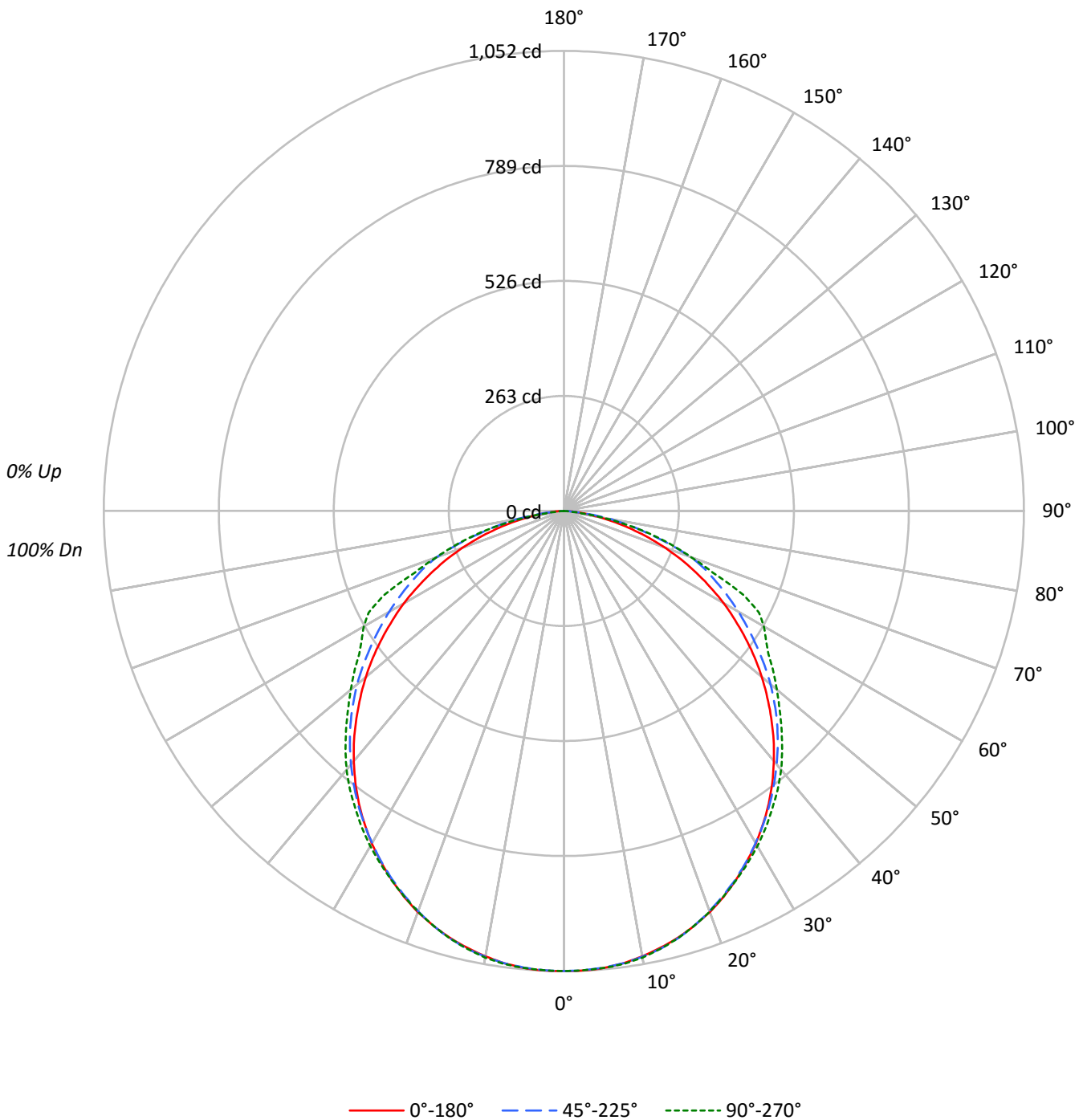
Summary

Lumens per Lamp: 2000 (2 lamps)
Luminaire Lumens: 2965.6 lumens
Efficiency: 74.1%
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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	50	30	10	0	
RCR																						
0	88	88	88	88	86	86	86	86	82	82	82	79	79	79	76	76	76	74				74
1	81	77	74	71	79	76	73	70	72	70	68	70	68	66	67	65	64				62	
2	73	67	62	58	71	66	61	57	63	59	56	61	58	55	59	56	53				52	
3	67	59	53	48	65	58	52	48	56	51	47	54	49	46	52	48	45				44	
4	61	52	46	41	59	51	45	40	49	44	40	48	43	39	46	42	39				37	
5	56	47	40	35	55	46	39	35	44	39	34	43	38	34	41	37	34				32	
6	52	42	35	31	50	41	35	30	40	34	30	39	34	30	37	33	30				28	
7	48	38	31	27	47	37	31	27	36	31	27	35	30	26	34	30	26				25	
8	45	35	28	24	44	34	28	24	33	28	24	32	27	24	31	27	23				22	
9	42	32	26	22	41	31	26	22	31	25	21	30	25	21	29	24	21				20	
10	39	29	23	20	38	29	23	20	28	23	19	28	23	19	27	22	19				18	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3082	3082	3082
5°	3085	3082	3085
10°	3076	3079	3085
15°	3064	3067	3067
20°	3043	3037	3040
25°	3010	3003	3013
30°	2971	2967	2994
35°	2922	2933	2972
40°	2857	2895	2957
45°	2780	2859	2917
50°	2694	2813	2899
55°	2590	2748	2917
60°	2473	2702	3094
65°	2316	2669	3134
70°	2116	2664	2664
75°	1823	2264	2332
80°	1417	1822	1603
85°	908	807	437



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	99.7	3.4	2.5	0°	1052	1052	1052	1052	1052	
10°-20°	285.0	9.6	7.1	5°	1049	1049	1048	1048	1049	100
20°-30°	428.9	14.5	10.7	15°	1010	1010	1011	1010	1011	285
30°-40°	514.0	17.3	12.9	25°	931	932	929	930	932	429
40°-50°	530.9	17.9	13.3	35°	817	816	820	827	831	510
50°-60°	483.0	16.3	12.1	45°	671	675	690	701	704	517
60°-70°	383.1	12.9	9.6	55°	507	519	538	560	571	453
70°-80°	204.0	6.9	5.1	65°	334	351	385	445	452	331
80°-90°	36.9	1.2	0.9	75°	161	178	200	208	206	171
90°-100°	0.0	0.0	0.0	85°	27	30	24	15	13	36
100°-110°	0.0	0.0	0.0	90°	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°	813.6	27.4	20.3							
0°-40°	1327.6	44.8	33.2							
0°-60°	2341.6	79.0	58.5							
0°-90°	2965.6	100.0	74.1							
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°	2965.6	100.0	74.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1052	1052	1052	1052	1052
2.5°	1052	1052	1051	1051	1051
5°	1049	1049	1048	1048	1049
7.5°	1043	1043	1043	1044	1045
10°	1034	1034	1035	1036	1037
12.5°	1023	1024	1025	1025	1025
15°	1010	1010	1011	1010	1011
17.5°	994	995	994	993	994
20°	976	977	974	974	975
22.5°	955	956	952	952	954
25°	931	932	929	930	932
27.5°	905	907	904	906	909
30°	878	878	877	881	885
32.5°	848	848	849	855	859
35°	817	816	820	827	831
37.5°	783	782	789	798	803
40°	747	748	757	769	773
42.5°	710	712	724	736	739
45°	671	675	690	701	704
47.5°	631	637	654	664	669
50°	591	598	617	629	636
52.5°	550	559	578	594	604
55°	507	519	538	560	571
57.5°	464	478	499	525	548
60°	422	436	461	501	528
62.5°	378	394	423	476	503
65°	334	351	385	445	452
67.5°	290	307	350	382	369
70°	247	263	311	308	311
72.5°	203	221	254	260	260
75°	161	178	200	208	206
77.5°	121	136	155	155	150
80°	84	97	108	102	95
82.5°	53	62	62	51	42
85°	27	30	24	15	13
87.5°	12	11	8	6	5
90°	0	0	0	0	0

(END OF REPORT)