

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: Fail-Safe

Report Number: CRT2007161432-007

Luminaire Tested: **24GTR-4-GUV4-R1**

Test Date: 7/31/20

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-41-14
Report Number: CRT2007161432-007
The data set was measured in RADIOMETRIC UNITS. The following applies
Test Lab: Intertek Cortland
Test Date: 7/31/20
Issue Date: 7/31/20
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: Fail-Safe
Catalog Number: 24GTR-4-GUV4-R1
Description: GTR Recessed Luminaire
Light Source: 4 Philips TUV 36W/G36 T8
Ballast/Driver: -

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

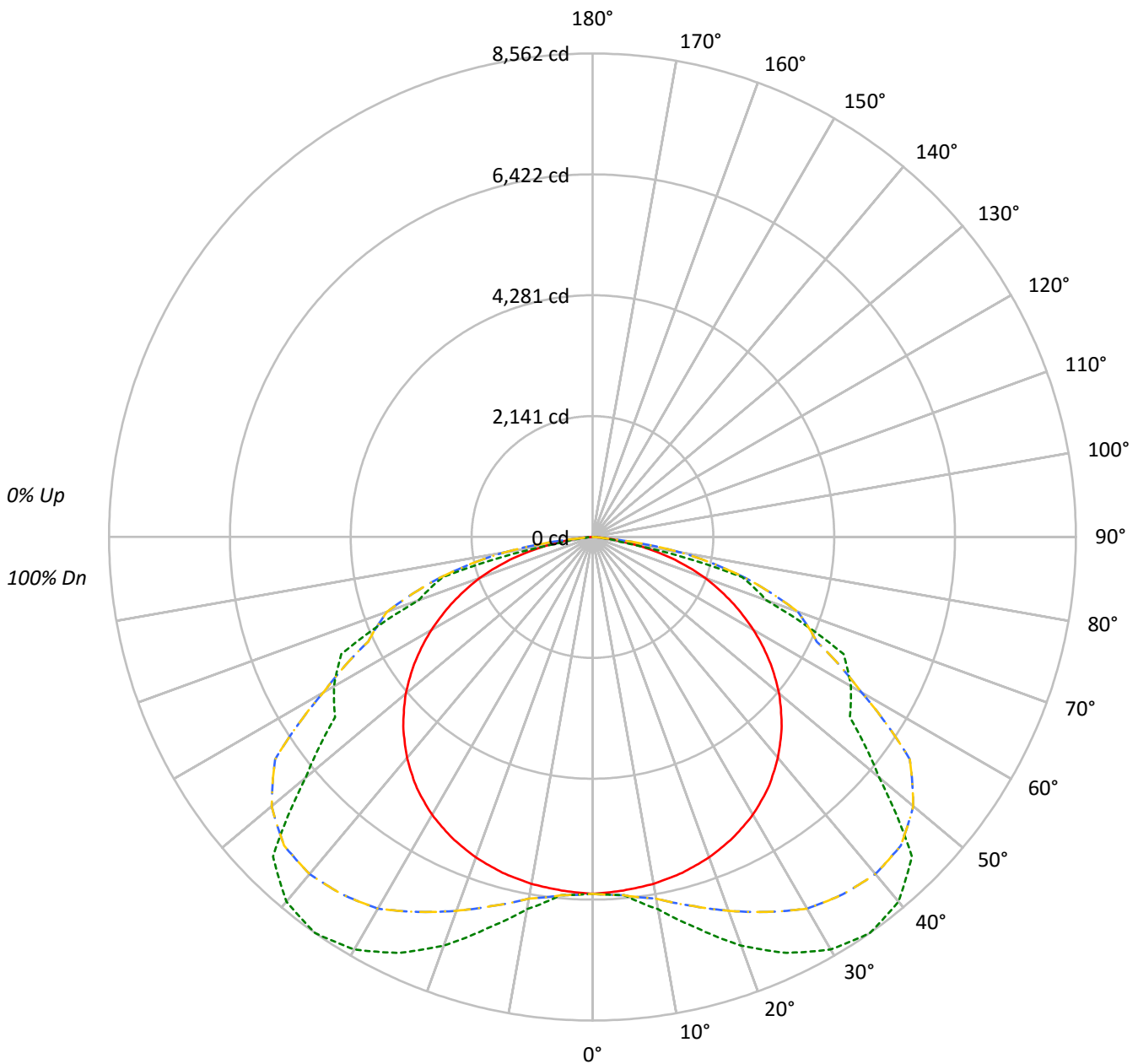
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28406.2 lumens
Efficiency: N/A
Efficacy: 223.4 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.88 / 1.85
Luminous Opening: Rectangular (W 1.96' x L: 3.96' x H: 0')
CIE Type: Direct

Input Watts (W): 127.17
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



— 0°-180° - - 45°-225° - - - 90°-270° - . - 135°-315°



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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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	97	88	81	75	94	86	79	74	83	77	72	79	75	70	76	72	69	66
3	88	76	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	54
4	80	67	57	50	77	65	57	50	63	55	49	60	54	48	58	52	48	45
5	73	59	49	42	71	58	49	42	56	48	42	54	47	41	52	46	41	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33
7	62	47	38	31	60	46	38	31	45	37	31	43	36	31	42	35	31	28
8	57	43	34	28	55	42	34	28	41	33	27	39	32	27	38	32	27	25
9	53	39	30	25	52	38	30	24	37	30	24	36	29	24	35	29	24	22
10	50	36	27	22	48	35	27	22	34	27	22	33	26	22	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8761	8761	8761	8761
5°	8747	8861	8747	8861
10°	8780	9427	8780	9427
15°	8836	10297	8836	10297
20°	8910	11362	8910	11362
25°	8999	12433	8999	12433
30°	9096	13506	9096	13506
35°	9184	14495	9184	14495
40°	9247	15261	9247	15261
45°	9294	15692	9294	15692
50°	9312	14304	9312	14304
55°	9258	13460	9258	13460
60°	9136	14664	9136	14664
65°	8922	16102	8922	16102
70°	8616	13296	8616	13296
75°	7780	14708	7780	14708
80°	5806	4329	5806	4329
85°	2625	1782	2625	1782



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.7	2.1
10°-20°	1909.0	6.7
20°-30°	3317.4	11.7
30°-40°	4615.5	16.2
40°-50°	5406.1	19.0
50°-60°	5158.4	18.2
60°-70°	4357.7	15.3
70°-80°	2609.7	9.2
80°-90°	421.7	1.5
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°	5837.1	20.5
0°-40°	10452.6	36.8
0°-60°	21017.2	74.0
0°-90°	28406.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	28406.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	6317	6317	6317	6317	6317	
5°	6283	6365	6283	6365	6283	598
15°	6154	7172	6154	7172	6154	1740
25°	5881	8125	5881	8125	5881	2713
35°	5425	8562	5425	8562	5425	3393
45°	4739	8001	4739	8001	4739	3653
55°	3829	5567	3829	5567	3829	3417
65°	2719	4907	2719	4907	2719	2688
75°	1452	2745	1452	2745	1452	1518
85°	165	112	165	112	165	276
90°	0	0	0	0	0	23
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: CRT2007161432-007
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	6317	6317	6317	6317	6317	6317	6317	6317	6317	6317	6317
5°	6283	6320	6367	6389	6365	6389	6367	6320	6283	6320	6367
10°	6235	6325	6505	6661	6694	6661	6505	6325	6235	6325	6505
15°	6154	6345	6759	7075	7172	7075	6759	6345	6154	6345	6759
20°	6037	6369	7043	7529	7699	7529	7043	6369	6037	6369	7043
25°	5881	6418	7325	7956	8125	7956	7325	6418	5881	6418	7325
30°	5680	6426	7598	8237	8434	8237	7598	6426	5680	6426	7598
35°	5425	6398	7727	8401	8562	8401	7727	6398	5425	6398	7727
40°	5108	6305	7792	8340	8430	8340	7792	6305	5108	6305	7792
45°	4739	6163	7724	8073	8001	8073	7724	6163	4739	6163	7724
50°	4316	5927	7417	7149	6630	7149	7417	5927	4316	5927	7417
55°	3829	5661	6861	5712	5567	5712	6861	5661	3829	5661	6861
60°	3294	5329	5504	5214	5287	5214	5504	5329	3294	5329	5504
65°	2719	4801	4384	4876	4907	4876	4384	4801	2719	4801	4384
70°	2125	3854	3869	3855	3279	3855	3869	3854	2125	3854	3869
75°	1452	2583	2802	2808	2745	2808	2802	2583	1452	2583	2802
80°	727	1399	1607	1078	542	1078	1607	1399	727	1399	1607
85°	165	380	107	116	112	116	107	380	165	380	107
90°	0	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	6317	6317	6317	6317	6317	6317
5°	6389	6365	6389	6367	6320	6283
10°	6661	6694	6661	6505	6325	6235
15°	7075	7172	7075	6759	6345	6154
20°	7529	7699	7529	7043	6369	6037
25°	7956	8125	7956	7325	6418	5881
30°	8237	8434	8237	7598	6426	5680
35°	8401	8562	8401	7727	6398	5425
40°	8340	8430	8340	7792	6305	5108
45°	8073	8001	8073	7724	6163	4739
50°	7149	6630	7149	7417	5927	4316
55°	5712	5567	5712	6861	5661	3829
60°	5214	5287	5214	5504	5329	3294
65°	4876	4907	4876	4384	4801	2719
70°	3855	3279	3855	3869	3854	2125
75°	2808	2745	2808	2802	2583	1452
80°	1078	542	1078	1607	1399	727
85°	116	112	116	107	380	165
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
100°	0	0	0	0	0	0
105°	0	0	0	0	0	0
110°	0	0	0	0	0	0
115°	0	0	0	0	0	0
120°	0	0	0	0	0	0
125°	0	0	0	0	0	0
130°	0	0	0	0	0	0
135°	0	0	0	0	0	0
140°	0	0	0	0	0	0
145°	0	0	0	0	0	0
150°	0	0	0	0	0	0
155°	0	0	0	0	0	0
160°	0	0	0	0	0	0
165°	0	0	0	0	0	0
170°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

(END OF REPORT)