

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: METALUX

Report Number: 230p136

Luminaire Tested: **GR5-128T5-A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 230p136
Test Lab: METALUX RESEARCH LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GR5-128T5-A
Description: 1 X 4 GR5 SERIES LUMINAIRE WITH A PRISMATIC ACRYLIC LENS
Light Source: ONE - F28T5/835 - 2600 LUMENS - 28 WATTS
Ballast/Driver: UNIVERSAL- B228PUNV-C

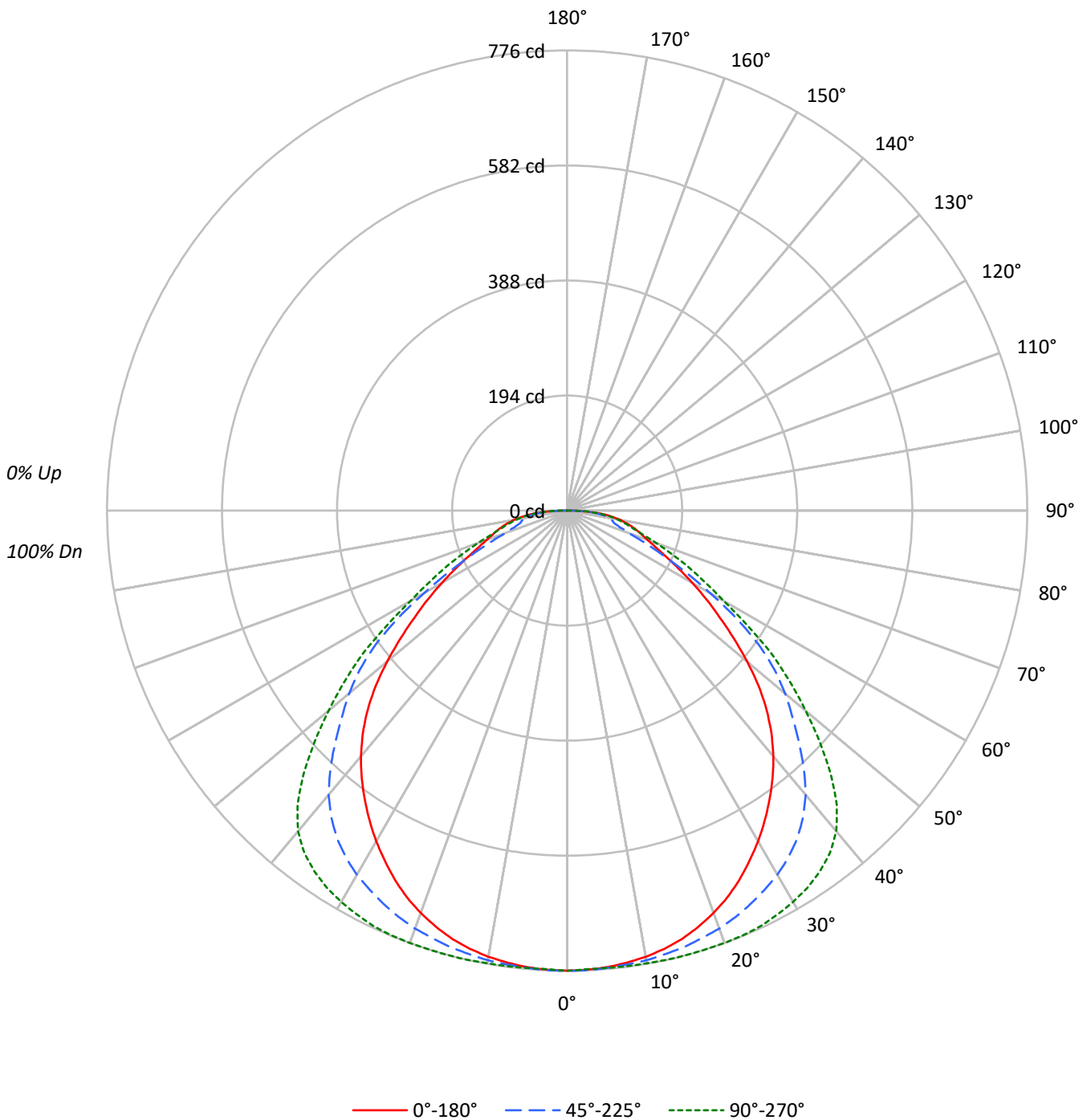
Summary

Lumens per Lamp: 2600 (1 lamp)
Luminaire Lumens: 2160.3 lumens
Efficiency: 83.1%
Efficacy: 65.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.46 / 1.43
Luminous Opening: Rectangular (W 0.82' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 33
Input Voltage (V): NR
Input Current (Ain): 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	0
RCR																				
0	99	99	99	99	97	97	97	97	92	92	92		88	88	88		85	85	85	83
1	91	87	83	80	88	85	82	79	81	79	77		78	76	74		75	74	72	70
2	83	76	71	66	81	75	70	66	72	68	64		69	66	63		67	64	61	59
3	76	67	61	56	74	66	60	55	64	59	54		61	57	53		59	56	52	51
4	70	60	53	48	68	59	52	47	57	51	47		55	50	46		53	49	45	44
5	64	54	47	41	62	53	46	41	51	45	40		50	44	40		48	43	40	38
6	59	49	41	36	58	48	41	36	46	40	36		45	39	35		44	39	35	33
7	55	44	37	32	54	43	37	32	42	36	32		41	35	31		40	35	31	29
8	51	40	33	28	50	40	33	28	39	33	28		38	32	28		37	32	28	26
9	48	37	30	26	47	36	30	26	35	30	25		35	29	25		34	29	25	24
10	45	34	28	23	44	34	27	23	33	27	23		32	27	23		31	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2662	2662	2662
5°	2662	2666	2666
10°	2662	2683	2700
15°	2657	2707	2756
20°	2636	2738	2833
25°	2601	2771	2926
30°	2551	2809	3019
35°	2492	2831	3112
40°	2423	2804	3162
45°	2310	2683	3052
50°	2114	2562	2802
55°	1878	2363	2518
60°	1674	1914	2093
65°	1494	1453	1835
70°	1444	1113	1595
75°	1564	1087	1511
80°	1798	1442	1719
85°	2165	1890	2047



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	73.7	3.4	2.8	0°	776	776	776	776	776	
10°-20°	215.4	10.0	8.3	5°	773	772	774	776	774	73
20°-30°	337.1	15.6	13.0	15°	748	751	762	772	776	211
30°-40°	419.2	19.4	16.1	25°	687	701	732	761	773	316
40°-50°	423.4	19.6	16.3	35°	595	620	676	721	743	372
50°-60°	334.9	15.5	12.9	45°	476	493	553	605	629	365
60°-70°	194.5	9.0	7.5	55°	314	344	395	408	421	283
70°-80°	111.0	5.1	4.3	65°	184	189	179	196	226	186
80°-90°	51.0	2.4	2.0	75°	118	112	82	102	114	124
90°-100°	0.0	0.0	0.0	85°	55	52	48	47	52	56
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°	626.3	29.0	24.1							
0°-40°	1045.5	48.4	40.2							
0°-60°	1803.8	83.5	69.4							
0°-90°	2160.3	100.0	83.1							
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°	2160.3	100.0	83.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776	776	776	776	776
2.5°	775	773	776	777	774
5°	773	772	774	776	774
7.5°	769	769	772	776	775
10°	764	764	770	775	775
12.5°	757	759	766	774	776
15°	748	751	762	772	776
17.5°	736	742	756	771	776
20°	722	731	750	768	776
22.5°	706	717	742	765	775
25°	687	701	732	761	773
27.5°	666	683	721	755	768
30°	644	664	709	746	762
32.5°	620	643	694	735	754
35°	595	620	676	721	743
37.5°	569	595	653	702	728
40°	541	567	626	677	706
42.5°	510	532	591	645	673
45°	476	493	553	605	629
47.5°	438	452	515	562	578
50°	396	414	480	516	525
52.5°	354	380	441	466	473
55°	314	344	395	408	421
57.5°	278	304	339	342	360
60°	244	261	279	282	305
62.5°	212	221	225	233	262
65°	184	189	179	196	226
67.5°	161	163	141	164	190
70°	144	143	111	139	159
72.5°	130	127	93	119	133
75°	118	112	82	102	114
77.5°	105	98	78	89	100
80°	91	82	73	76	87
82.5°	75	68	63	62	71
85°	55	52	48	47	52
87.5°	29	33	29	31	32
90°	0	0	0	0	0

(END OF REPORT)