

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: P31027

Luminaire Tested: **2GR5-354T5A-UNV-EBT1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P31027
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR5-354T5A-UNV-EBT1
Description: METALUX 2' X 4' COMMERCIAL T5HO TROFFER WITH ACRYLIC PRISMATIC LENS
Light Source: (3) DOUBLE BIPIN T5 LINEAR FLUORESCENT LAMPS 5000K
GE F54W/T5/850/ECO
Ballast/Driver: -
GE454MVPS90-E

Summary

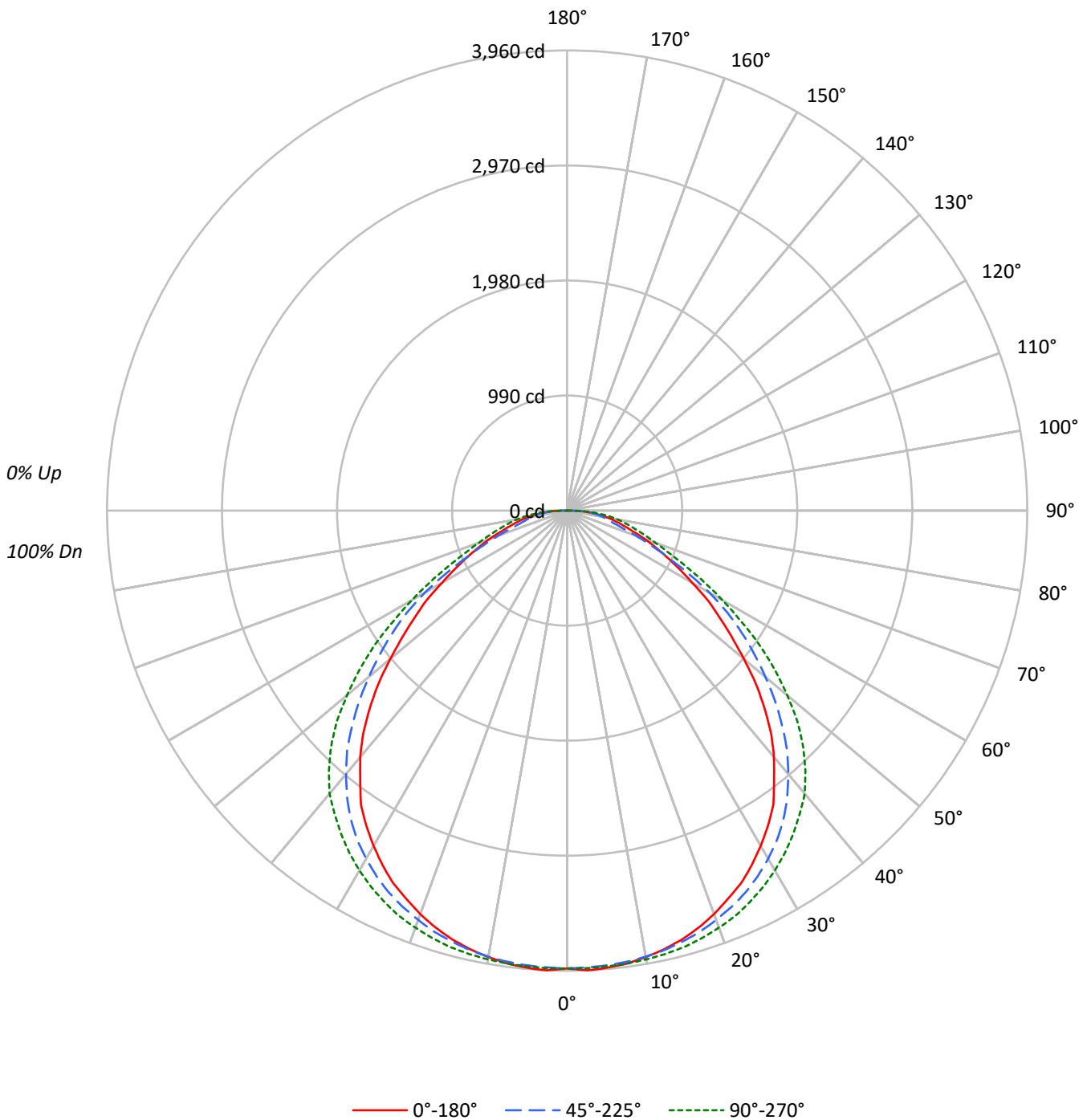
Lumens per Lamp: 4400 (3 lamps)
Luminaire Lumens: 10539.9 lumens
Efficiency: 79.8%
Efficacy: 63.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.34 / 1.38
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 165.7
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

TEST NUMBER: P31027

CATALOG NUMBER: 2GR5-354T5A-UNV-EBT1

Luminous Intensity Polar Plot





TEST NUMBER: P31027

CATALOG NUMBER: 2GR5-354T5A-UNV-EBT1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	50	30	10	0													
RCR																																					
0	95	95	95	95	93	93	93	93	89	89	89	85	85	85	81	81	81	80																			
1	87	84	80	77	85	82	79	76	78	76	74	75	73	71	72	71	69	68																			
2	80	73	68	64	78	72	67	63	69	65	62	67	63	60	64	61	59	57																			
3	73	65	59	54	71	64	58	53	61	56	52	59	55	51	57	54	51	49																			
4	67	58	51	46	65	57	50	46	55	49	45	53	48	44	51	47	44	42																			
5	62	52	45	40	60	51	44	40	49	44	39	48	43	39	46	42	38	37																			
6	57	47	40	35	56	46	39	35	45	39	34	43	38	34	42	37	34	32																			
7	53	43	36	31	52	42	35	31	41	35	31	40	34	30	38	34	30	29																			
8	49	39	32	28	48	38	32	28	37	31	27	36	31	27	35	31	27	26																			
9	46	36	29	25	45	35	29	25	34	29	25	33	28	25	33	28	24	23																			
10	43	33	27	23	42	33	27	23	32	26	22	31	26	22	30	26	22	21																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6322	6322	6322
5°	6361	6328	6341
10°	6358	6351	6390
15°	6346	6377	6459
20°	6311	6402	6523
25°	6267	6423	6582
30°	6172	6409	6626
35°	6057	6356	6646
40°	5800	6200	6663
45°	5444	5936	6519
50°	4950	5559	6168
55°	4476	5133	5670
60°	3979	4534	4955
65°	3584	3649	4241
70°	3307	2927	3781
75°	3118	2548	3714
80°	3327	2855	4093
85°	3719	3572	4676



TEST NUMBER: P31027

CATALOG NUMBER: 2GR5-354T5A-UNV-EBT1

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	374.5	3.6	2.8	0°	3940	3940	3940	3940	3940	
10°-20°	1085.7	10.3	8.2	5°	3949	3933	3929	3930	3937	375
20°-30°	1669.7	15.8	12.6	15°	3820	3814	3839	3867	3888	1078
30°-40°	2021.8	19.2	15.3	25°	3540	3554	3628	3686	3718	1628
40°-50°	2016.5	19.1	15.3	35°	3092	3122	3245	3343	3393	1922
50°-60°	1617.1	15.3	12.3	45°	2399	2454	2616	2784	2873	1845
60°-70°	996.2	9.5	7.5	55°	1600	1666	1835	1943	2027	1436
70°-80°	536.3	5.1	4.1	65°	944	902	961	1062	1117	945
80°-90°	222.1	2.1	1.7	75°	503	465	411	565	599	543
90°-100°	0.0	0.0	0.0	85°	202	187	194	247	254	214
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°	3129.8	29.7	23.7							
0°-40°	5151.6	48.9	39.0							
0°-60°	8785.3	83.4	66.6							
0°-90°	10539.9	100.0	79.8							
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°	10539.9	100.0	79.8							



TEST NUMBER: P31027

CATALOG NUMBER: 2GR5-354T5A-UNV-EBT1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3940	3940	3940	3940	3940
2.5°	3960	3942	3935	3932	3941
5°	3949	3933	3929	3930	3937
7.5°	3932	3916	3917	3922	3933
10°	3902	3891	3898	3909	3922
12.5°	3865	3858	3873	3893	3908
15°	3820	3814	3839	3867	3888
17.5°	3763	3764	3801	3836	3858
20°	3696	3703	3749	3794	3820
22.5°	3617	3636	3693	3747	3777
25°	3540	3554	3628	3686	3718
27.5°	3440	3463	3549	3618	3651
30°	3331	3368	3459	3534	3576
32.5°	3216	3253	3362	3446	3490
35°	3092	3122	3245	3343	3393
37.5°	2925	2990	3111	3232	3288
40°	2769	2823	2960	3107	3181
42.5°	2597	2650	2802	2953	3034
45°	2399	2454	2616	2784	2873
47.5°	2201	2262	2429	2592	2690
50°	1983	2060	2227	2388	2471
52.5°	1784	1861	2031	2172	2252
55°	1600	1666	1835	1943	2027
57.5°	1433	1462	1637	1709	1774
60°	1240	1255	1413	1473	1544
62.5°	1087	1067	1178	1254	1325
65°	944	902	961	1062	1117
67.5°	820	761	780	892	943
70°	705	633	624	762	806
72.5°	593	543	494	654	695
75°	503	465	411	565	599
77.5°	428	392	351	481	518
80°	360	325	309	404	443
82.5°	285	257	259	332	354
85°	202	187	194	247	254
87.5°	119	116	112	155	156
90°	0	0	0	0	0

(END OF REPORT)