

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: 108P135

Luminaire Tested: **2GC-232 with RK - 2 X 4 Retrofit Kit**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 108P135
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC-232 with RK - 2 X 4 Retrofit Kit
Description: 2 X 4 Recessed Convertible Body Troffer with a
one piece specular aluminum retrofit reflector
kit and a .125 pattern 12 acrylic lens.
Light Source: Two-F32T8/35K - 2900 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad-Utrad B2321120RH Electronic

Summary

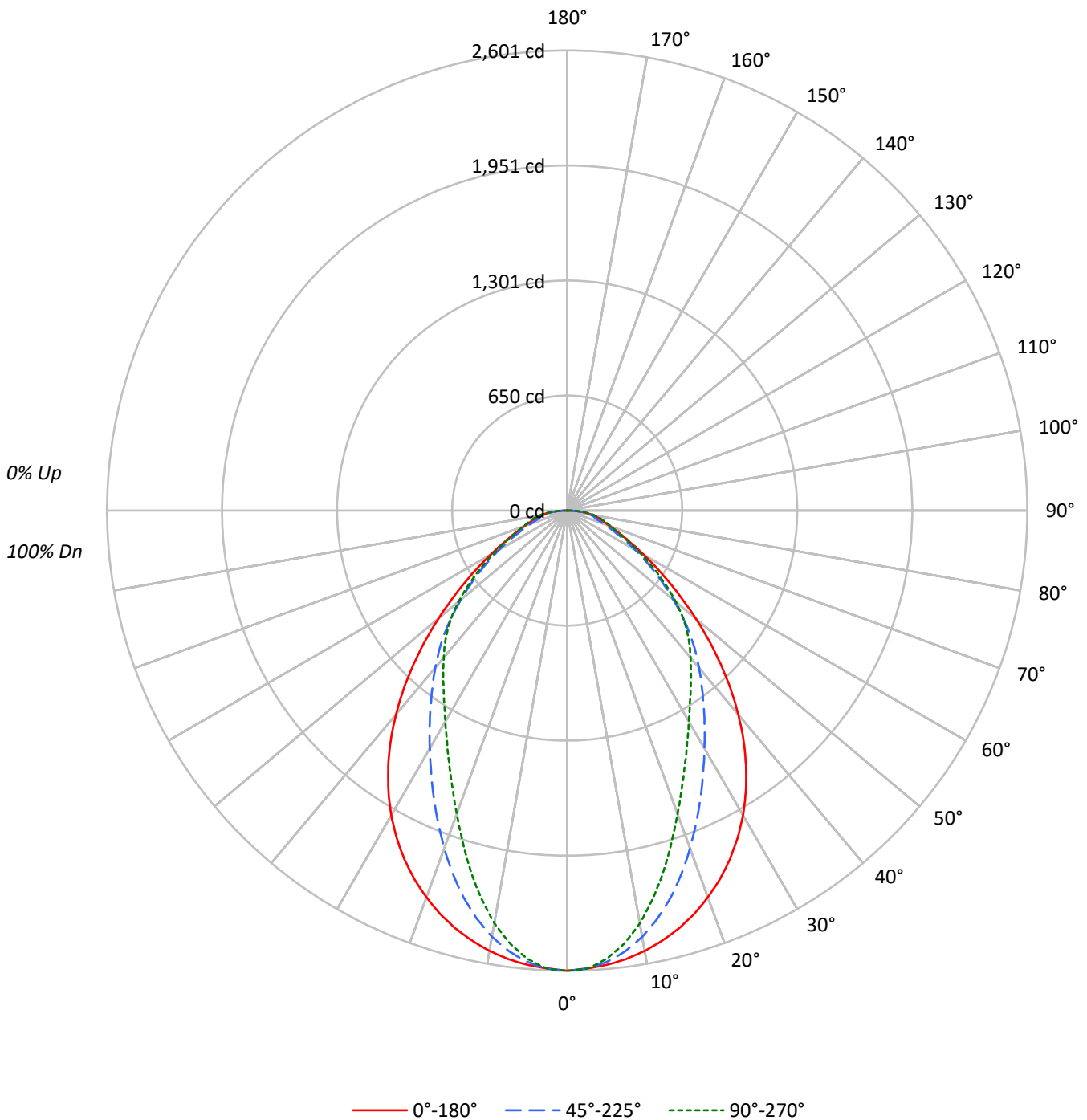
Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 4582.9 lumens
Efficiency: 79.0%
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.85 / 1.06
Luminous Opening: Rectangular (W 1.79' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 62.2
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: 108P135

CATALOG NUMBER: 2GC-232 with RK - 2 X 4 Retrofit Kit

Luminous Intensity Polar Plot





TEST NUMBER: 108P135

CATALOG NUMBER: 2GC-232 with RK - 2 X 4 Retrofit Kit

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	94	94	94	94	92	92	92	92	88	88	88	84	84	84	81	81	81	79																			
1	87	84	81	78	85	82	79	77	79	76	74	75	74	72	73	71	70	68																			
2	80	74	70	66	78	73	69	65	70	66	63	68	65	62	65	63	61	59																			
3	74	67	61	56	72	65	60	56	63	58	55	61	57	54	59	56	53	51																			
4	68	60	54	49	67	59	53	49	57	52	48	55	51	47	54	50	47	45																			
5	63	54	48	43	62	53	47	43	52	46	42	50	46	42	49	45	42	40																			
6	59	49	43	38	58	49	43	38	47	42	38	46	41	38	45	41	37	36																			
7	55	45	39	34	54	45	39	34	44	38	34	42	38	34	41	37	34	32																			
8	52	42	36	31	50	41	35	31	40	35	31	39	34	31	38	34	31	29																			
9	48	39	33	29	47	38	32	28	37	32	28	36	32	28	36	31	28	27																			
10	46	36	30	26	45	36	30	26	35	30	26	34	29	26	33	29	26	25																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4099	4099	4099
5°	4078	4053	4026
10°	4043	3914	3791
15°	3987	3692	3439
20°	3900	3406	3060
25°	3783	3104	2742
30°	3619	2824	2504
35°	3391	2585	2343
40°	3096	2386	2232
45°	2734	2179	2130
50°	2326	1922	1966
55°	1926	1659	1731
60°	1579	1402	1494
65°	1327	1163	1290
70°	1179	1000	1216
75°	1193	1011	1291
80°	1334	1207	1425
85°	1464	1374	1591



TEST NUMBER: 108P135

CATALOG NUMBER: 2GC-232 with RK - 2 X 4 Retrofit Kit

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	240.8	5.3	4.2	0°	2601	2601	2601	2601	2601	
10°-20°	635.3	13.9	11.0	5°	2578	2576	2562	2544	2545	244
20°-30°	841.9	18.4	14.5	15°	2444	2391	2263	2144	2108	688
30°-40°	883.1	19.3	15.2	25°	2176	2039	1785	1623	1577	999
40°-50°	791.0	17.3	13.6	35°	1763	1575	1344	1236	1218	1098
50°-60°	571.4	12.5	9.9	45°	1227	1097	978	949	956	944
60°-70°	339.7	7.4	5.9	55°	701	650	604	620	630	633
70°-80°	196.4	4.3	3.4	65°	356	340	312	342	346	360
80°-90°	83.3	1.8	1.4	75°	196	179	166	185	212	209
90°-100°	0.0	0.0	0.0	85°	81	76	76	87	88	79
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	5
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	1718.1	37.5	29.6	165°	0	0	0	0	0	0
0°-40°	2601.2	56.8	44.8	175°	0	0	0	0	0	0
0°-60°	3963.5	86.5	68.3	180°	0	0	0	0	0	0
0°-90°	4582.9	100.0	79.0							
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°	4582.9	100.0	79.0							



TEST NUMBER: 108P135

CATALOG NUMBER: 2GC-232 with RK - 2 X 4 Retrofit Kit

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2601	2601	2601	2601	2601
2.5°	2591	2595	2592	2587	2592
5°	2578	2576	2562	2544	2545
7.5°	2557	2548	2513	2477	2469
10°	2527	2506	2446	2386	2369
12.5°	2489	2454	2362	2272	2244
15°	2444	2391	2263	2144	2108
17.5°	2390	2317	2151	2009	1963
20°	2326	2234	2031	1873	1825
22.5°	2255	2141	1907	1742	1694
25°	2176	2039	1785	1623	1577
27.5°	2086	1929	1665	1512	1471
30°	1989	1814	1552	1411	1376
32.5°	1880	1695	1446	1319	1292
35°	1763	1575	1344	1236	1218
37.5°	1638	1455	1249	1159	1150
40°	1505	1334	1160	1087	1085
42.5°	1368	1216	1071	1020	1023
45°	1227	1097	978	949	956
47.5°	1086	978	881	872	884
50°	949	861	784	789	802
52.5°	820	750	691	704	714
55°	701	650	604	620	630
57.5°	595	561	521	543	549
60°	501	479	445	471	474
62.5°	422	406	374	403	405
65°	356	340	312	342	346
67.5°	300	285	259	290	300
70°	256	240	217	248	264
72.5°	222	206	186	214	237
75°	196	179	166	185	212
77.5°	173	154	151	161	187
80°	147	130	133	140	157
82.5°	116	105	107	117	125
85°	81	76	76	87	88
87.5°	40	40	40	50	48
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



TEST NUMBER: 108P135

CATALOG NUMBER: 2GC-232 with RK - 2 X 4 Retrofit Kit

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)