

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: 108P138

Luminaire Tested: **2GC-232H8224**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 108P138
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC-232H8224
Description: 2 X 4 Recessed Convertible Body Troffer
with .an 8224 refractive grid lens
Light Source: Two-F32T8/35K - 2900 Lumens ea. - 32 watts ea.
Ballast/Driver: Triad-Utrad B232I120RH Electronic

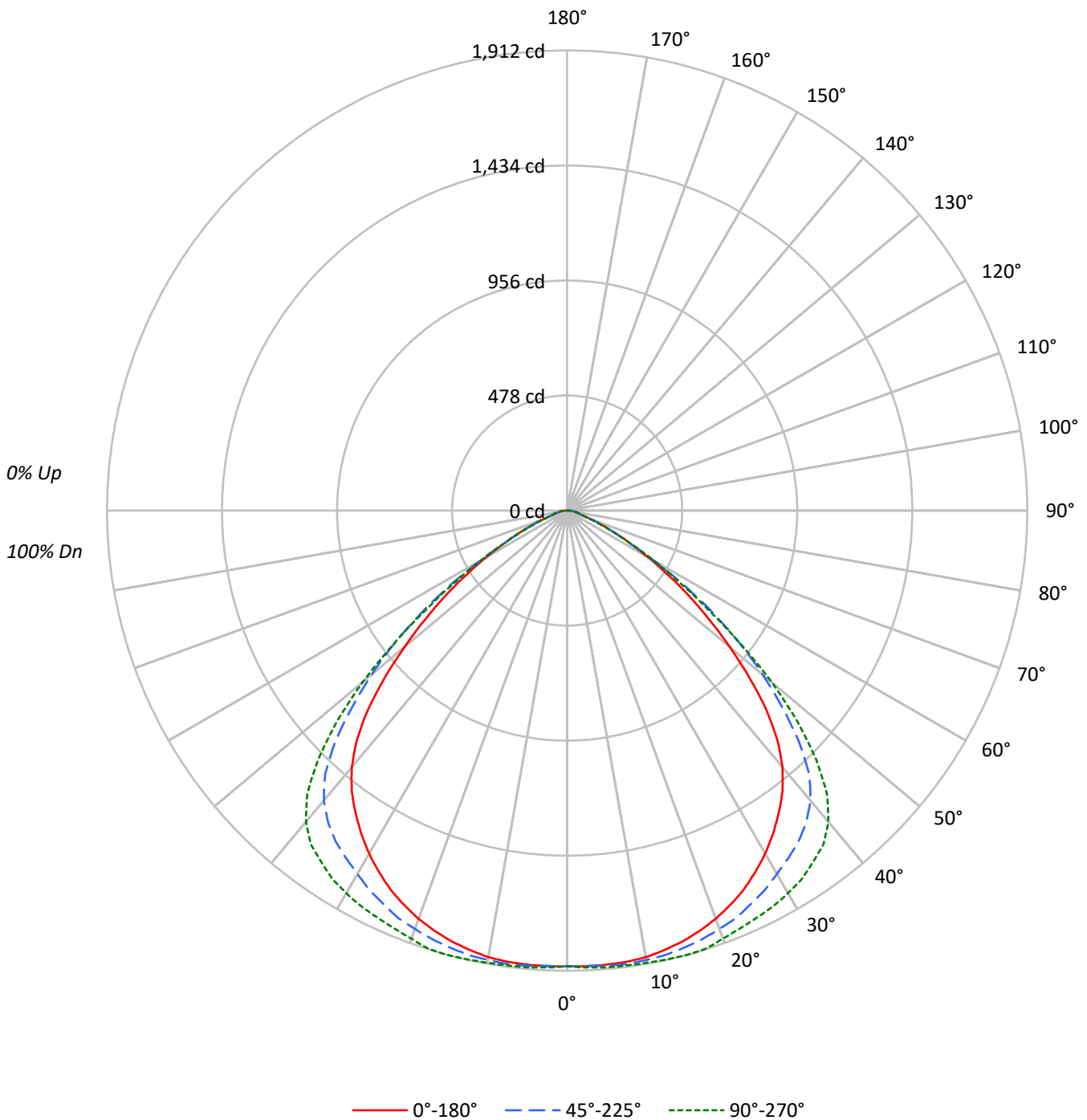
Summary

Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 4551.2 lumens
Efficiency: 78.5%
Efficacy: 73.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.44 / 1.43
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

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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	93	93	93	93	91	91	91	91	87	87	87		83	83	83		80	80	80	78
1	87	84	81	79	85	82	80	78	79	77	75		76	75	73		73	72	71	69
2	81	75	71	67	79	74	70	66	71	68	65		69	66	63		66	64	62	60
3	74	67	62	58	73	66	61	57	64	60	56		62	58	55		60	57	54	53
4	69	60	54	50	67	59	54	49	58	53	49		56	52	48		54	51	48	46
5	64	55	48	44	62	54	48	43	52	47	43		51	46	42		49	45	42	41
6	59	49	43	38	58	49	43	38	47	42	38		46	41	38		45	41	37	36
7	55	45	39	34	53	44	38	34	43	38	34		42	37	34		41	37	33	32
8	51	41	35	31	50	41	35	31	40	34	30		39	34	30		38	33	30	29
9	48	38	32	28	47	37	32	28	37	31	28		36	31	27		35	31	27	26
10	45	35	29	25	44	35	29	25	34	29	25		33	28	25		32	28	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2985	2985	2985
5°	2996	3002	3013
10°	3015	3034	3053
15°	3023	3067	3119
20°	3027	3102	3174
25°	3020	3137	3244
30°	2995	3171	3341
35°	2949	3226	3428
40°	2863	3236	3472
45°	2610	3044	3260
50°	2160	2599	2721
55°	1695	2025	1953
60°	1226	1311	1305
65°	813	787	802
70°	488	484	442
75°	323	335	353
80°	309	327	372
85°	416	362	452



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	181.1	4.0	3.1	0°	1894	1894	1894	1894	1894	
10°-20°	531.8	11.7	9.2	5°	1894	1893	1898	1903	1905	180
20°-30°	832.3	18.3	14.4	15°	1853	1863	1880	1901	1912	523
30°-40°	1041.5	22.9	18.0	25°	1737	1755	1804	1855	1866	800
40°-50°	1018.6	22.4	17.6	35°	1533	1577	1677	1765	1782	957
50°-60°	630.9	13.9	10.9	45°	1171	1233	1366	1446	1463	891
60°-70°	227.8	5.0	3.9	55°	617	683	737	721	711	555
70°-80°	64.5	1.4	1.1	65°	218	208	211	226	215	225
80°-90°	22.6	0.5	0.4	75°	53	54	55	60	58	63
90°-100°	0.0	0.0	0.0	85°	23	22	20	22	25	21
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	2
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°	1545.2	34.0	26.6	165°	0	0	0	0	0	0
0°-40°	2586.8	56.8	44.6	175°	0	0	0	0	0	0
0°-60°	4236.3	93.1	73.0	180°	0	0	0	0	0	0
0°-90°	4551.2	100.0	78.5							
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°	4551.2	100.0	78.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1894	1894	1894	1894	1894
2.5°	1895	1892	1894	1896	1900
5°	1894	1893	1898	1903	1905
7.5°	1891	1892	1900	1903	1906
10°	1884	1888	1896	1904	1908
12.5°	1870	1878	1891	1900	1910
15°	1853	1863	1880	1901	1912
17.5°	1831	1842	1867	1898	1910
20°	1805	1814	1850	1885	1893
22.5°	1773	1788	1833	1873	1879
25°	1737	1755	1804	1855	1866
27.5°	1693	1715	1778	1836	1854
30°	1646	1673	1743	1812	1836
32.5°	1592	1627	1711	1790	1815
35°	1533	1577	1677	1765	1782
37.5°	1470	1514	1632	1724	1749
40°	1392	1442	1573	1669	1688
42.5°	1294	1350	1489	1580	1599
45°	1171	1233	1366	1446	1463
47.5°	1028	1096	1216	1285	1298
50°	881	958	1060	1109	1110
52.5°	745	820	900	916	905
55°	617	683	737	721	711
57.5°	496	546	571	554	549
60°	389	415	416	421	414
62.5°	295	297	296	313	298
65°	218	208	211	226	215
67.5°	155	145	150	159	147
70°	106	96	105	112	96
72.5°	73	68	74	80	71
75°	53	54	55	60	58
77.5°	42	44	44	47	48
80°	34	37	36	37	41
82.5°	28	31	28	29	35
85°	23	22	20	22	25
87.5°	17	12	12	12	13
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



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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)