

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: 163P113

Luminaire Tested: **GC2048-232A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 163P113
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GC2048-232A
Description: 20 X 48 Recessed Convertible Body Luminaire with a
.095 pattern 12 acrylic lens.
Light Source: Two - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 87.6%

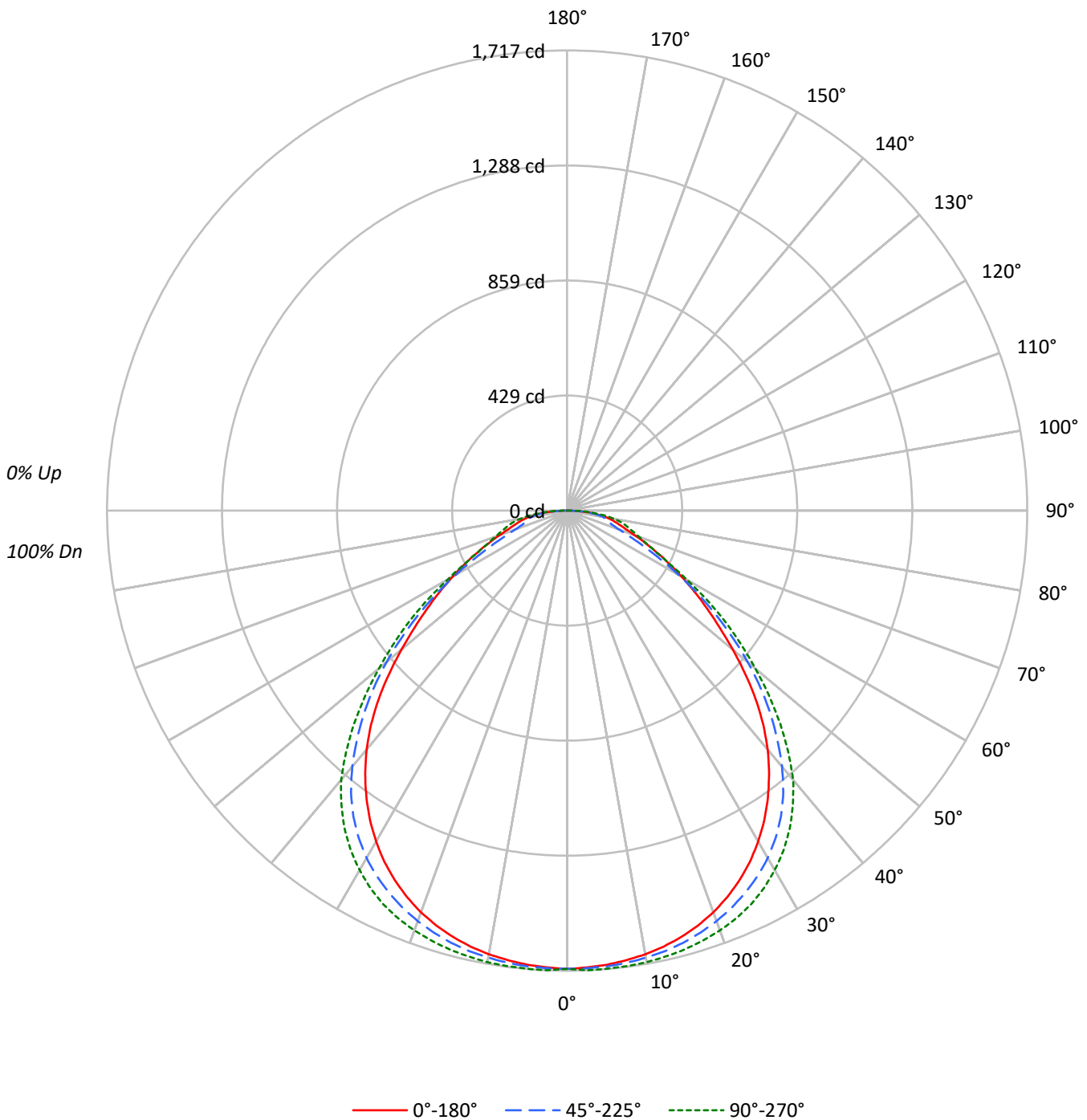
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 4283.1 lumens
Efficiency: 76.5%
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.33 / 1.35
Luminous Opening: Rectangular (W 1.46' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 58.2
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	50	30	10	0	
RCR																						
0	91	91	91	91	89	89	89	89	85	85	85	81	81	81	78	78	78	76				76
1	84	80	77	75	82	79	76	73	75	73	71	72	71	69	70	68	67				65	
2	77	71	66	62	75	70	65	61	67	63	60	64	61	59	62	60	57				56	
3	71	63	57	53	69	62	56	52	60	55	51	57	54	50	56	52	49				48	
4	65	56	50	45	63	55	49	45	53	48	44	52	47	44	50	46	43				41	
5	60	51	44	39	58	50	44	39	48	43	39	47	42	38	45	41	38				36	
6	56	46	39	35	54	45	39	34	44	38	34	43	38	34	41	37	34				32	
7	52	42	35	31	50	41	35	31	40	34	30	39	34	30	38	33	30				29	
8	48	38	32	28	47	38	32	28	37	31	27	36	31	27	35	30	27				26	
9	45	35	29	25	44	35	29	25	34	28	25	33	28	25	32	28	24				23	
10	42	32	27	23	41	32	26	23	31	26	23	31	26	22	30	26	22				21	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3311	3311	3311
5°	3306	3317	3335
10°	3305	3330	3364
15°	3301	3347	3397
20°	3286	3358	3434
25°	3251	3360	3465
30°	3188	3347	3463
35°	3087	3288	3422
40°	2942	3152	3316
45°	2724	2938	3077
50°	2428	2647	2762
55°	2150	2289	2420
60°	1909	1862	1994
65°	1690	1443	1681
70°	1517	1166	1608
75°	1496	1182	1743
80°	1684	1505	1996
85°	1822	1755	2177



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	162.5	3.8	2.9	0°	1710	1710	1710	1710	1710	
10°-20°	471.5	11.0	8.4	5°	1701	1701	1707	1710	1716	162
20°-30°	723.7	16.9	12.9	15°	1647	1652	1670	1685	1695	465
30°-40°	861.8	20.1	15.4	25°	1522	1536	1573	1606	1622	700
40°-50°	816.5	19.1	14.6	35°	1306	1333	1391	1431	1448	815
50°-60°	602.9	14.1	10.8	45°	995	1021	1073	1099	1124	764
60°-70°	349.7	8.2	6.2	55°	637	646	678	698	717	573
70°-80°	206.3	4.8	3.7	65°	369	332	315	361	367	369
80°-90°	88.3	2.1	1.6	75°	200	186	158	212	233	215
90°-100°	0.0	0.0	0.0	85°	82	78	79	93	98	81
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	6
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°	1357.7	31.7	24.2	165°	0	0	0	0	0	0
0°-40°	2219.5	51.8	39.6	175°	0	0	0	0	0	0
0°-60°	3638.9	85.0	65.0	180°	0	0	0	0	0	0
0°-90°	4283.1	100.0	76.5							
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°	4283.1	100.0	76.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1710	1710	1710	1710	1710
2.5°	1706	1705	1709	1711	1717
5°	1701	1701	1707	1710	1716
7.5°	1692	1694	1702	1707	1714
10°	1681	1683	1694	1703	1711
12.5°	1666	1669	1684	1696	1704
15°	1647	1652	1670	1685	1695
17.5°	1623	1630	1652	1671	1683
20°	1595	1603	1630	1654	1667
22.5°	1561	1573	1604	1633	1647
25°	1522	1536	1573	1606	1622
27.5°	1477	1494	1538	1573	1589
30°	1426	1447	1497	1533	1549
32.5°	1369	1393	1448	1486	1503
35°	1306	1333	1391	1431	1448
37.5°	1238	1267	1325	1365	1384
40°	1164	1193	1247	1286	1312
42.5°	1083	1111	1162	1197	1221
45°	995	1021	1073	1099	1124
47.5°	901	928	979	995	1021
50°	806	835	879	889	917
52.5°	717	742	778	790	815
55°	637	646	678	698	717
57.5°	563	553	578	603	614
60°	493	466	481	510	515
62.5°	428	392	391	427	431
65°	369	332	315	361	367
67.5°	315	283	253	312	319
70°	268	244	206	273	284
72.5°	229	213	175	242	256
75°	200	186	158	212	233
77.5°	177	160	149	184	209
80°	151	134	135	156	179
82.5°	118	107	112	127	142
85°	82	78	79	93	98
87.5°	43	44	43	52	52
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)