

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: 230P105

Luminaire Tested: **GR8-232A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 230P105
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GR8-232A
Description: 1 X 4 Recessed Luminaire with a .095 Pattern 12 acrylic lens and dedicated T8 sockets installed.
Light Source: Two - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 88.1

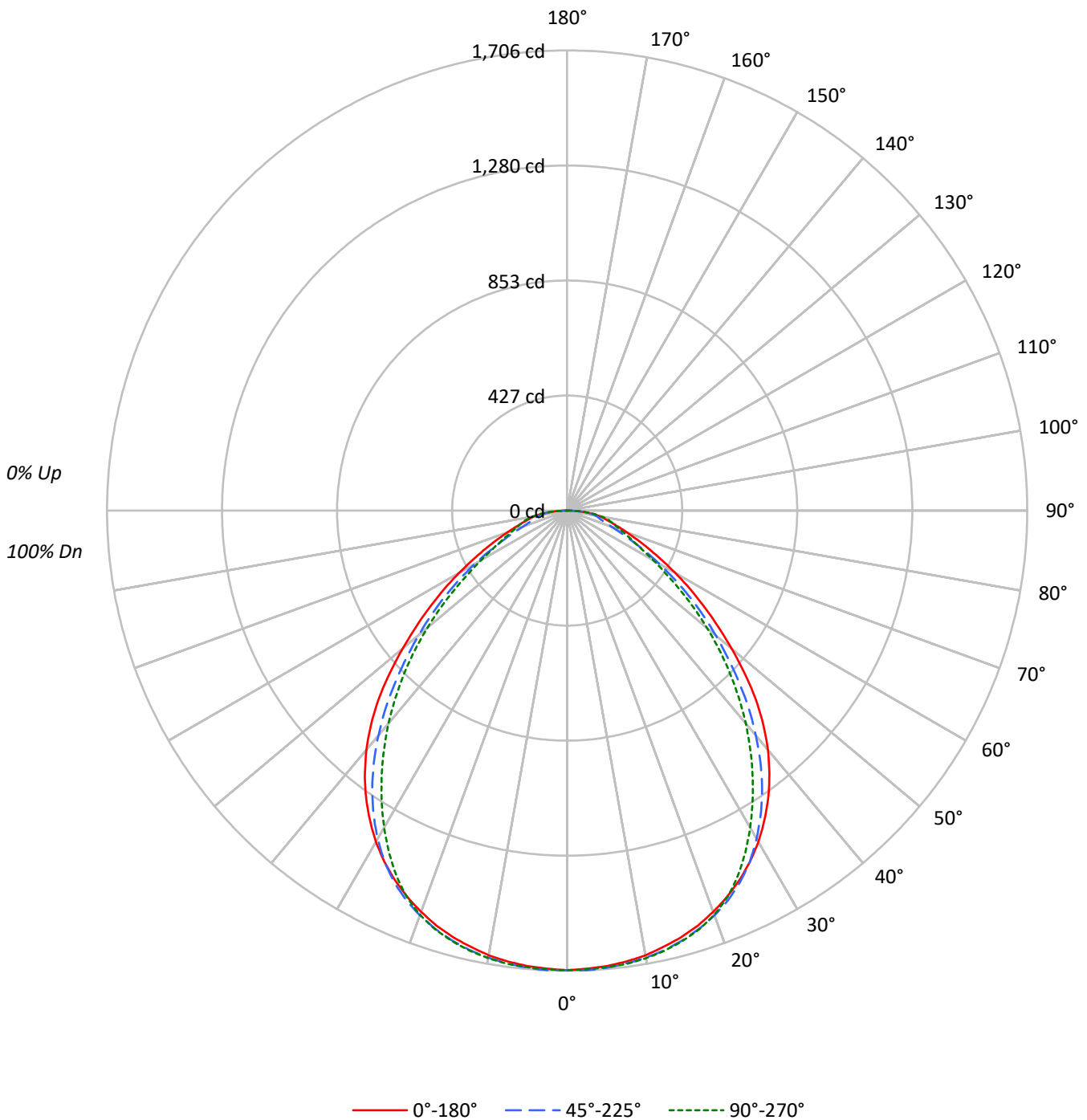
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 3819.2 lumens
Efficiency: 68.2%
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.26
Luminous Opening: Rectangular (W 0.79' x L: 3.8' x H: 0')
CIE Type: Direct

Input Watts (W): 58
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	81	81	81	81	79	79	79	79	76	76	76	73	73	73	70	70	70	68
1	75	72	69	67	73	70	68	66	68	66	64	65	63	62	63	61	60	59
2	69	64	60	56	67	63	59	55	60	57	54	58	55	53	56	54	52	50
3	63	57	52	48	62	56	51	47	54	50	47	52	49	46	50	48	45	44
4	59	51	46	41	57	50	45	41	49	44	41	47	43	40	46	42	40	38
5	54	46	40	36	53	45	40	36	44	39	36	43	39	35	41	38	35	34
6	50	42	36	32	49	41	36	32	40	35	32	39	35	31	38	34	31	30
7	47	38	33	29	46	38	32	29	37	32	28	36	31	28	35	31	28	27
8	44	35	30	26	43	35	29	26	34	29	26	33	29	25	32	28	25	24
9	41	32	27	23	40	32	27	23	31	27	23	30	26	23	30	26	23	22
10	39	30	25	21	38	30	25	21	29	24	21	28	24	21	28	24	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6110	6110	6110
5°	6101	6122	6115
10°	6095	6128	6135
15°	6077	6125	6132
20°	6040	6094	6086
25°	5978	6010	5919
30°	5871	5817	5618
35°	5690	5515	5248
40°	5420	5097	4821
45°	5010	4574	4330
50°	4435	4005	3776
55°	3870	3438	3176
60°	3313	2818	2646
65°	2817	2240	2308
70°	2464	1835	2212
75°	2314	1787	2383
80°	2540	2209	2726
85°	2674	2468	2962



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	161.5	4.2	2.9	0°	1704	1704	1704	1704	1704	
10°-20°	464.3	12.2	8.3	5°	1695	1693	1701	1701	1699	161
20°-30°	693.5	18.2	12.4	15°	1637	1637	1650	1654	1652	462
30°-40°	781.1	20.5	13.9	25°	1511	1514	1519	1505	1496	695
40°-50°	700.2	18.3	12.5	35°	1300	1291	1260	1212	1199	811
50°-60°	495.8	13.0	8.9	45°	988	959	902	860	854	758
60°-70°	287.8	7.5	5.1	55°	619	581	550	515	508	556
70°-80°	167.0	4.4	3.0	65°	332	294	264	276	272	334
80°-90°	67.9	1.8	1.2	75°	167	159	129	167	172	181
90°-100°	0.0	0.0	0.0	85°	65	62	60	70	72	65
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°	1319.4	34.5	23.6	165°	0	0	0	0	0	0
0°-40°	2100.5	55.0	37.5	175°	0	0	0	0	0	0
0°-60°	3296.6	86.3	58.9	180°	0	0	0	0	0	0
0°-90°	3819.2	100.0	68.2							
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°	3819.2	100.0	68.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1704	1704	1704	1704	1704
2.5°	1700	1698	1706	1705	1702
5°	1695	1693	1701	1701	1699
7.5°	1686	1684	1693	1695	1695
10°	1674	1672	1683	1686	1685
12.5°	1656	1657	1669	1672	1671
15°	1637	1637	1650	1654	1652
17.5°	1613	1613	1626	1629	1628
20°	1583	1585	1597	1598	1595
22.5°	1550	1553	1562	1557	1552
25°	1511	1514	1519	1505	1496
27.5°	1468	1469	1467	1442	1430
30°	1418	1417	1405	1371	1357
32.5°	1361	1358	1336	1294	1280
35°	1300	1291	1260	1212	1199
37.5°	1232	1218	1177	1128	1115
40°	1158	1138	1089	1042	1030
42.5°	1077	1052	997	952	942
45°	988	959	902	860	854
47.5°	892	862	807	767	765
50°	795	766	718	678	677
52.5°	704	672	633	595	591
55°	619	581	550	515	508
57.5°	539	494	469	439	432
60°	462	416	393	374	369
62.5°	392	349	324	319	315
65°	332	294	264	276	272
67.5°	280	250	214	242	238
70°	235	213	175	215	211
72.5°	197	184	147	191	189
75°	167	159	129	167	172
77.5°	144	135	119	143	154
80°	123	111	107	119	132
82.5°	95	86	88	97	104
85°	65	62	60	70	72
87.5°	34	34	30	36	34
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)