

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: 117P109

Luminaire Tested: **2GCAML-332S613I**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 117P109
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GCAML-332S613I
Description: 2 X 4 Recessed Air Supply Convertible Body Luminaire
with a 1.5" deep 78 cell semi-specular low iridescent
parabolic louver.
Light Source: Three - FO32T8/735 - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Advance REL-3P32-TP Electronic - L.O.B.F. = 89.5

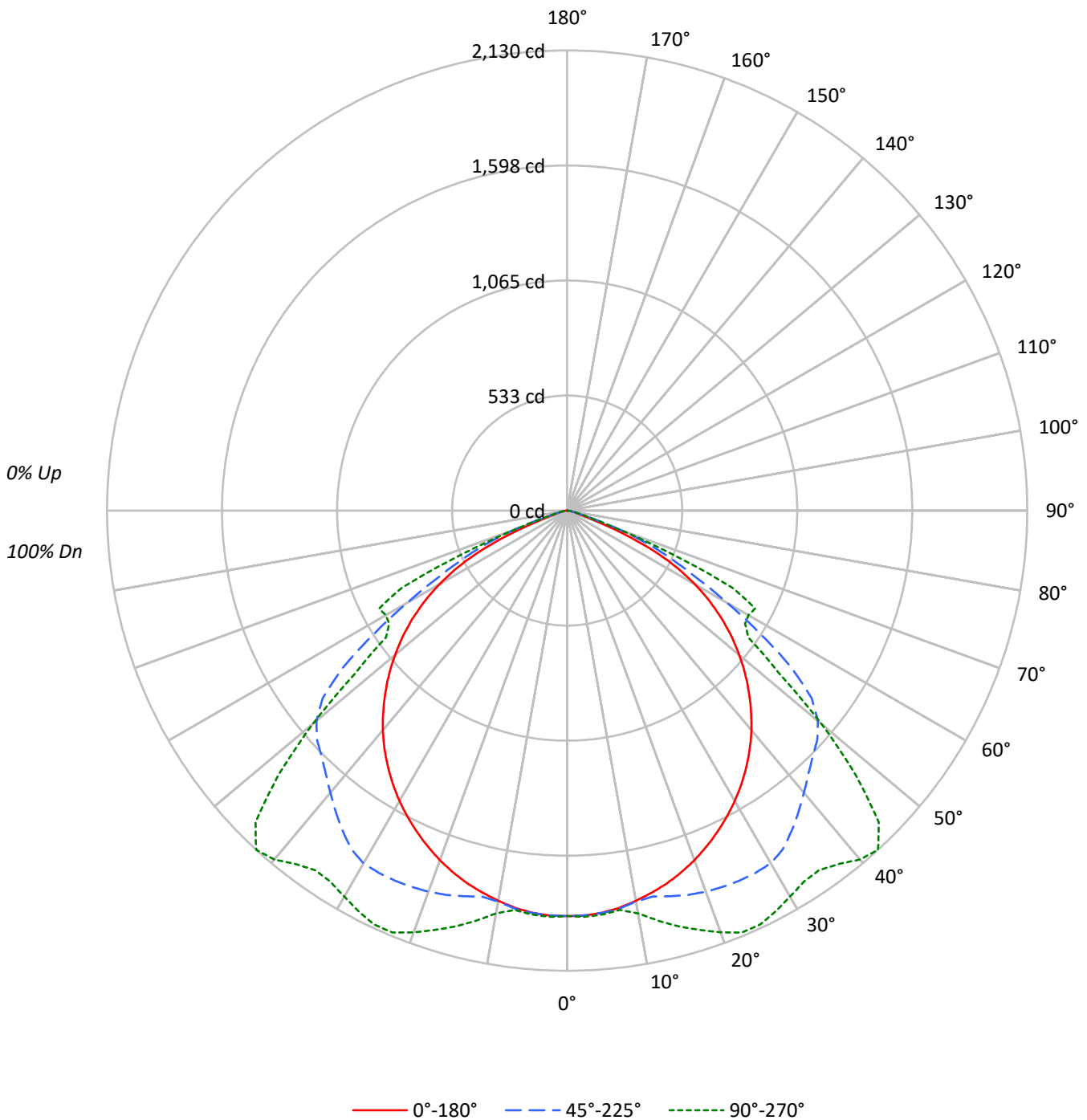
Summary

Lumens per Lamp: 2800 (3 lamps)
Luminaire Lumens: 5576.1 lumens
Efficiency: 66.4%
Efficacy: 63.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.69 / 1.58
Luminous Opening: Rectangular (W 1.72' x L: 3.71' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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	79	79	79	79	77	77	77	77	74	74	74		71	71	71		68	68	68	66
1	73	71	68	66	72	69	67	65	66	65	63		64	62	61		61	60	59	58
2	67	62	58	55	66	61	57	54	59	56	53		57	54	52		55	53	51	49
3	62	55	50	46	60	54	49	46	52	48	45		50	47	44		49	46	43	42
4	56	49	43	39	55	48	43	39	46	42	38		45	41	38		43	40	37	36
5	52	44	38	34	50	43	38	34	42	37	33		40	36	33		39	35	33	31
6	48	39	33	29	47	39	33	29	37	33	29		36	32	29		35	31	28	27
7	44	35	30	26	43	35	30	26	34	29	26		33	29	25		32	28	25	24
8	41	32	27	23	40	32	27	23	31	26	23		30	26	23		29	25	22	21
9	38	30	24	21	37	29	24	20	28	24	20		28	23	20		27	23	20	19
10	36	27	22	19	35	27	22	18	26	22	18		26	21	18		25	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3166	3166	3166
5°	3163	3166	3178
10°	3141	3146	3242
15°	3119	3227	3479
20°	3091	3369	3728
25°	3058	3516	3935
30°	3023	3672	4018
35°	2980	3729	4184
40°	2922	3754	4642
45°	2839	3836	4866
50°	2729	3976	4033
55°	2570	3729	3011
60°	2304	2888	3269
65°	1784	2155	3365
70°	720	1287	1208
75°	293	385	424
80°	194	233	243
85°	116	135	116



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	177.7	3.2	2.1	0°	1877	1877	1877	1877	1877	
10°-20°	529.3	9.5	6.3	5°	1868	1863	1870	1876	1877	177
20°-30°	863.6	15.5	10.3	15°	1786	1780	1848	1952	1992	504
30°-40°	1109.5	19.9	13.2	25°	1643	1676	1889	2059	2114	757
40°-50°	1241.7	22.3	14.8	35°	1447	1576	1811	1934	2032	904
50°-60°	984.8	17.7	11.7	45°	1190	1395	1608	1934	2040	917
60°-70°	573.3	10.3	6.8	55°	874	1078	1268	1050	1024	777
70°-80°	86.5	1.6	1.0	65°	447	556	540	732	843	425
80°-90°	9.5	0.2	0.1	75°	45	54	59	65	65	61
90°-100°	0.1	0.0	0.0	85°	6	7	7	7	6	8
100°-110°	0.0	0.0	0.0	90°	1	1	0	0	0	1
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°	1570.6	28.2	18.7	165°	0	0	0	0	0	0
0°-40°	2680.1	48.1	31.9	175°	0	0	0	0	0	0
0°-60°	4906.7	88.0	58.4	180°	0	0	0	0	0	0
0°-90°	5576.1	100.0	66.4							
90°-120°	0.1	0.0	0.0							
90°-150°	0.1	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	5576.1	100.0	66.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1877	1877	1877	1877	1877
2.5°	1876	1870	1875	1880	1882
5°	1868	1863	1870	1876	1877
7.5°	1854	1850	1858	1862	1864
10°	1834	1831	1837	1870	1893
12.5°	1811	1808	1830	1914	1944
15°	1786	1780	1848	1952	1992
17.5°	1756	1749	1865	1987	2035
20°	1722	1719	1877	2016	2077
22.5°	1684	1694	1885	2044	2114
25°	1643	1676	1889	2059	2114
27.5°	1599	1657	1890	2037	2091
30°	1552	1634	1885	2003	2063
32.5°	1501	1607	1858	1967	2038
35°	1447	1576	1811	1934	2032
37.5°	1389	1539	1759	1920	2062
40°	1327	1498	1705	1933	2108
42.5°	1260	1450	1653	1951	2130
45°	1190	1395	1608	1934	2040
47.5°	1117	1333	1570	1805	1813
50°	1040	1257	1515	1576	1537
52.5°	960	1170	1426	1314	1236
55°	874	1078	1268	1050	1024
57.5°	783	976	1057	881	976
60°	683	855	856	837	969
62.5°	575	713	679	798	981
65°	447	556	540	732	843
67.5°	292	387	407	512	522
70°	146	206	261	264	245
72.5°	73	94	123	119	111
75°	45	54	59	65	65
77.5°	30	35	37	41	40
80°	20	23	24	25	25
82.5°	12	14	14	15	14
85°	6	7	7	7	6
87.5°	2	2	3	2	2
90°	1	1	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)