

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: 165P108

Luminaire Tested: **UTE-232A**

Issue Date: 3/3/2020



**Test Information**

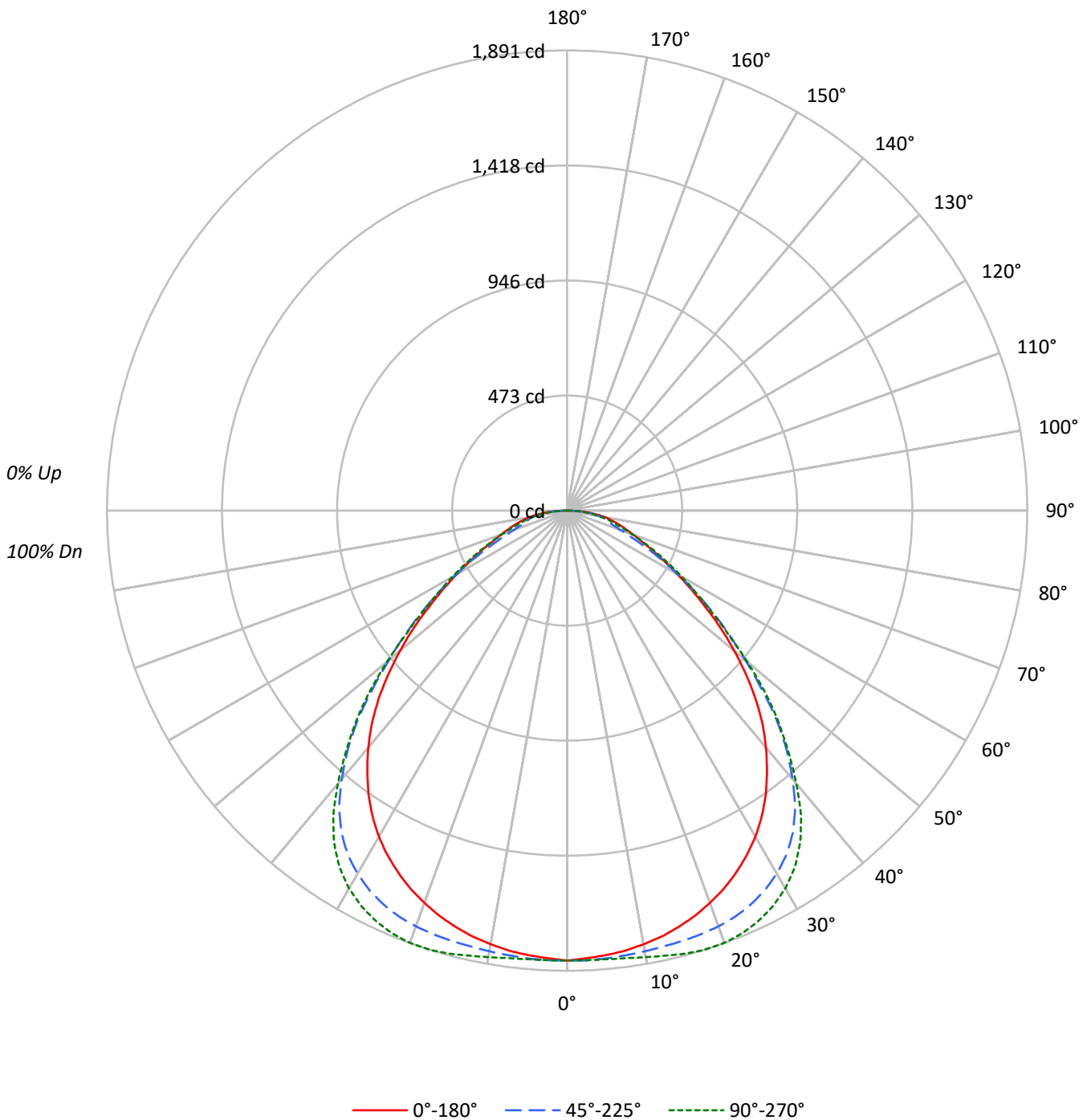
Test Method: LM-41-14  
Report Number: 165P108  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: UTE-232A  
Description: UT Series End Row Surface Luminaire with a Silver Steel ballast cover and Alcoa Everbrite reflector inserts with a pattern 12 acrylic lens.  
Light Source: Two - F32T8/SPX35 - 2950 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Motorola M2-IN-T8-GP-D-120 Electronic

**Summary**

Lumens per Lamp: 2950 (2 lamps)  
Luminaire Lumens: 4719.7 lumens  
Efficiency: 80.0%  
Efficacy: 84.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.39 / 1.38  
Luminous Opening: Rectangular (W 0.75' x L: 3.96' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 56.2  
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									
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	95	95	95	95	93	93	93	93	89	89	89	85	85	85	82	82	82	80																			
1	88	84	81	78	86	83	80	77	79	77	75	76	74	72	73	72	70	69																			
2	81	75	70	65	79	73	69	65	70	66	63	68	65	62	65	63	60	59																			
3	74	66	60	55	72	65	59	55	63	58	54	61	56	53	59	55	52	51																			
4	68	59	53	48	66	58	52	47	56	51	47	54	50	46	53	49	46	44																			
5	63	53	47	42	61	52	46	41	51	45	41	49	44	40	48	44	40	38																			
6	58	48	41	37	57	48	41	36	46	40	36	45	40	36	44	39	36	34																			
7	54	44	37	33	53	43	37	32	42	36	32	41	36	32	40	35	32	30																			
8	51	40	34	29	49	40	33	29	39	33	29	38	33	29	37	32	29	27																			
9	47	37	31	26	46	36	30	26	36	30	26	35	30	26	34	29	26	24																			
10	44	34	28	24	43	34	28	24	33	28	24	32	27	24	32	27	24	22																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6704	6704	6704
5°	6675	6722	6737
10°	6664	6771	6859
15°	6648	6873	7076
20°	6621	7015	7292
25°	6569	7145	7445
30°	6477	7214	7507
35°	6299	7157	7387
40°	6016	6825	6939
45°	5620	6245	6297
50°	5060	5393	5443
55°	4406	4621	4570
60°	3800	3822	3938
65°	3312	3046	3432
70°	3053	2459	2989
75°	3054	2452	2788
80°	3341	2861	2840
85°	3453	3245	2829



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	175.9	3.7	3.0	0°	1849	1849	1849	1849	1849	
10°-20°	517.7	11.0	8.8	5°	1834	1840	1847	1852	1851	174
20°-30°	814.6	17.3	13.8	15°	1771	1789	1831	1872	1885	500
30°-40°	983.6	20.8	16.7	25°	1642	1691	1786	1846	1861	756
40°-50°	912.1	19.3	15.5	35°	1423	1507	1617	1663	1669	887
50°-60°	651.4	13.8	11.0	45°	1096	1157	1218	1227	1228	841
60°-70°	379.3	8.0	6.4	55°	697	723	731	735	723	627
70°-80°	204.8	4.3	3.5	65°	386	377	355	380	400	389
80°-90°	80.2	1.7	1.4	75°	218	194	175	182	199	233
90°-100°	0.0	0.0	0.0	85°	83	84	78	74	68	84
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°	1508.2	32.0	25.6	165°	0	0	0	0	0	0
0°-40°	2491.8	52.8	42.2	175°	0	0	0	0	0	0
0°-60°	4055.3	85.9	68.7	180°	0	0	0	0	0	0
0°-90°	4719.7	100.0	80.0							
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°	4719.7	100.0	80.0							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1849	1849	1849	1849	1849
2.5°	1841	1845	1850	1851	1849
5°	1834	1840	1847	1852	1851
7.5°	1824	1831	1843	1853	1855
10°	1810	1820	1839	1858	1863
12.5°	1793	1805	1834	1864	1873
15°	1771	1789	1831	1872	1885
17.5°	1746	1768	1826	1877	1891
20°	1716	1746	1818	1875	1890
22.5°	1682	1720	1806	1864	1880
25°	1642	1691	1786	1846	1861
27.5°	1598	1657	1759	1818	1832
30°	1547	1618	1723	1780	1793
32.5°	1489	1569	1677	1730	1740
35°	1423	1507	1617	1663	1669
37.5°	1349	1431	1539	1575	1579
40°	1271	1347	1442	1470	1466
42.5°	1188	1257	1335	1354	1346
45°	1096	1157	1218	1227	1228
47.5°	997	1047	1084	1088	1101
50°	897	931	956	958	965
52.5°	797	824	840	841	834
55°	697	723	731	735	723
57.5°	606	625	625	637	628
60°	524	532	527	543	543
62.5°	450	449	437	457	467
65°	386	377	355	380	400
67.5°	331	316	284	313	338
70°	288	267	232	258	282
72.5°	252	228	197	215	235
75°	218	194	175	182	199
77.5°	188	166	159	156	170
80°	160	145	137	131	136
82.5°	126	120	110	104	101
85°	83	84	78	74	68
87.5°	39	42	35	29	28
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)