

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: 108P161

Luminaire Tested: **2GC-232A19/156**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 108P161
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC-232A19/156
Description: 2 X 4 Recessed Convertible Body Luminaire with a .156
Pattern 19 acrylic lens.
Light Source: Two - FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 88.1

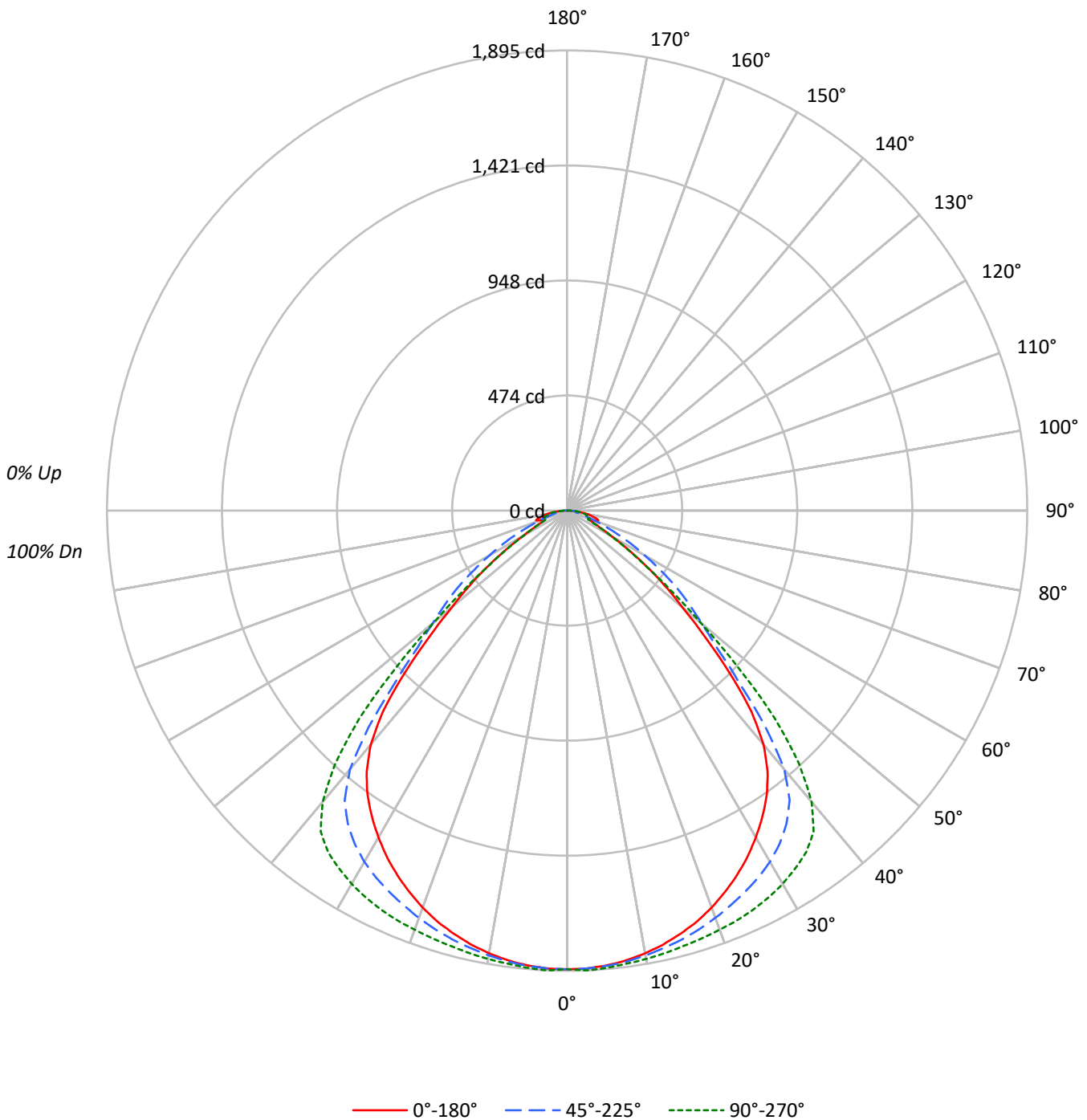
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 4135.1 lumens
Efficiency: 73.8%
Efficacy: 68.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.4 / 1.31
Luminous Opening: Rectangular (W 1.79' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 60
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

TEST NUMBER: 108P161
CATALOG NUMBER: 2GC-232A19/156

Luminous Intensity Polar Plot





TEST NUMBER: 108P161

CATALOG NUMBER: 2GC-232A19/156

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	88	88	88	88	86	86	86	86	82	82	82	79	79	79	75	75	75	74
1	82	79	76	74	80	77	75	73	74	72	70	71	70	68	69	67	66	65
2	76	70	66	63	74	69	65	62	67	63	60	64	62	59	62	60	58	56
3	70	63	58	54	68	62	57	53	60	56	53	58	55	52	56	53	51	49
4	65	57	51	47	63	56	51	47	54	50	46	53	49	45	51	48	45	43
5	60	52	46	41	59	51	45	41	49	44	41	48	44	40	47	43	40	38
6	56	47	41	37	54	46	41	37	45	40	36	44	39	36	43	39	36	34
7	52	43	37	33	51	42	37	33	41	36	33	40	36	32	39	35	32	31
8	49	39	34	30	47	39	33	30	38	33	29	37	33	29	36	32	29	28
9	45	36	31	27	44	36	30	27	35	30	27	34	30	27	34	29	26	25
10	43	34	28	25	42	33	28	24	33	28	24	32	27	24	31	27	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2966	2966	2966
5°	2963	2966	2979
10°	2951	2965	2989
15°	2932	2971	3017
20°	2907	2982	3069
25°	2869	3002	3141
30°	2817	3028	3218
35°	2747	3019	3291
40°	2578	2851	3210
45°	2105	2223	2684
50°	1510	1766	1746
55°	1084	1495	1068
60°	669	1162	656
65°	438	843	424
70°	533	555	436
75°	758	376	552
80°	778	298	651
85°	667	703	739



TEST NUMBER: 108P161

CATALOG NUMBER: 2GC-232A19/156

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	179.0	4.3	3.2	0°	1889	1889	1889	1889	1889	
10°-20°	516.8	12.5	9.2	5°	1880	1879	1882	1886	1890	179
20°-30°	799.6	19.3	14.3	15°	1804	1809	1828	1848	1856	509
30°-40°	978.6	23.7	17.5	25°	1656	1675	1733	1792	1813	762
40°-50°	817.5	19.8	14.6	35°	1433	1479	1575	1674	1717	890
50°-60°	450.2	10.9	8.0	45°	948	1024	1001	1149	1209	724
60°-70°	221.9	5.4	4.0	55°	396	501	546	542	390	357
70°-80°	125.4	3.0	2.2	65°	118	242	227	276	114	133
80°-90°	46.1	1.1	0.8	75°	125	148	62	157	91	123
90°-100°	0.0	0.0	0.0	85°	37	53	39	50	41	41
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°	1495.4	36.2	26.7	165°	0	0	0	0	0	0
0°-40°	2474.0	59.8	44.2	175°	0	0	0	0	0	0
0°-60°	3741.7	90.5	66.8	180°	0	0	0	0	0	0
0°-90°	4135.1	100.0	73.8							
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°	4135.1	100.0	73.8							



TEST NUMBER: 108P161

CATALOG NUMBER: 2GC-232A19/156

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1889	1889	1889	1889	1889
2.5°	1887	1885	1887	1891	1895
5°	1880	1879	1882	1886	1890
7.5°	1868	1868	1873	1879	1882
10°	1851	1852	1860	1869	1875
12.5°	1830	1832	1845	1859	1866
15°	1804	1809	1828	1848	1856
17.5°	1775	1781	1808	1836	1847
20°	1740	1749	1785	1822	1837
22.5°	1699	1714	1759	1809	1827
25°	1656	1675	1733	1792	1813
27.5°	1608	1632	1704	1772	1796
30°	1554	1585	1670	1746	1775
32.5°	1496	1535	1628	1714	1748
35°	1433	1479	1575	1674	1717
37.5°	1356	1411	1505	1620	1667
40°	1258	1318	1391	1518	1566
42.5°	1123	1184	1209	1354	1413
45°	948	1024	1001	1149	1209
47.5°	768	873	834	939	952
50°	618	741	723	772	715
52.5°	504	618	633	645	532
55°	396	501	546	542	390
57.5°	294	399	454	457	286
60°	213	322	370	386	209
62.5°	156	272	296	327	153
65°	118	242	227	276	114
67.5°	101	220	167	238	92
70°	116	198	121	209	95
72.5°	135	172	88	184	98
75°	125	148	62	157	91
77.5°	103	129	44	128	80
80°	86	102	33	100	72
82.5°	63	73	36	73	60
85°	37	53	39	50	41
87.5°	15	28	25	25	20
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



TEST NUMBER: 108P161

CATALOG NUMBER: 2GC-232A19/156

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)