

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: 181P102

Luminaire Tested: **2GC-SS-232H8224**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 181P102  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GC-SS-232H8224  
Description: 2 X 4 Silver Steel Recessed Convertible Body Luminaire  
with a Clear Plastic Hemispherical-Prismatic H8224 Lens.  
Light Source: Two - FO32/735 - 2800 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 88.22

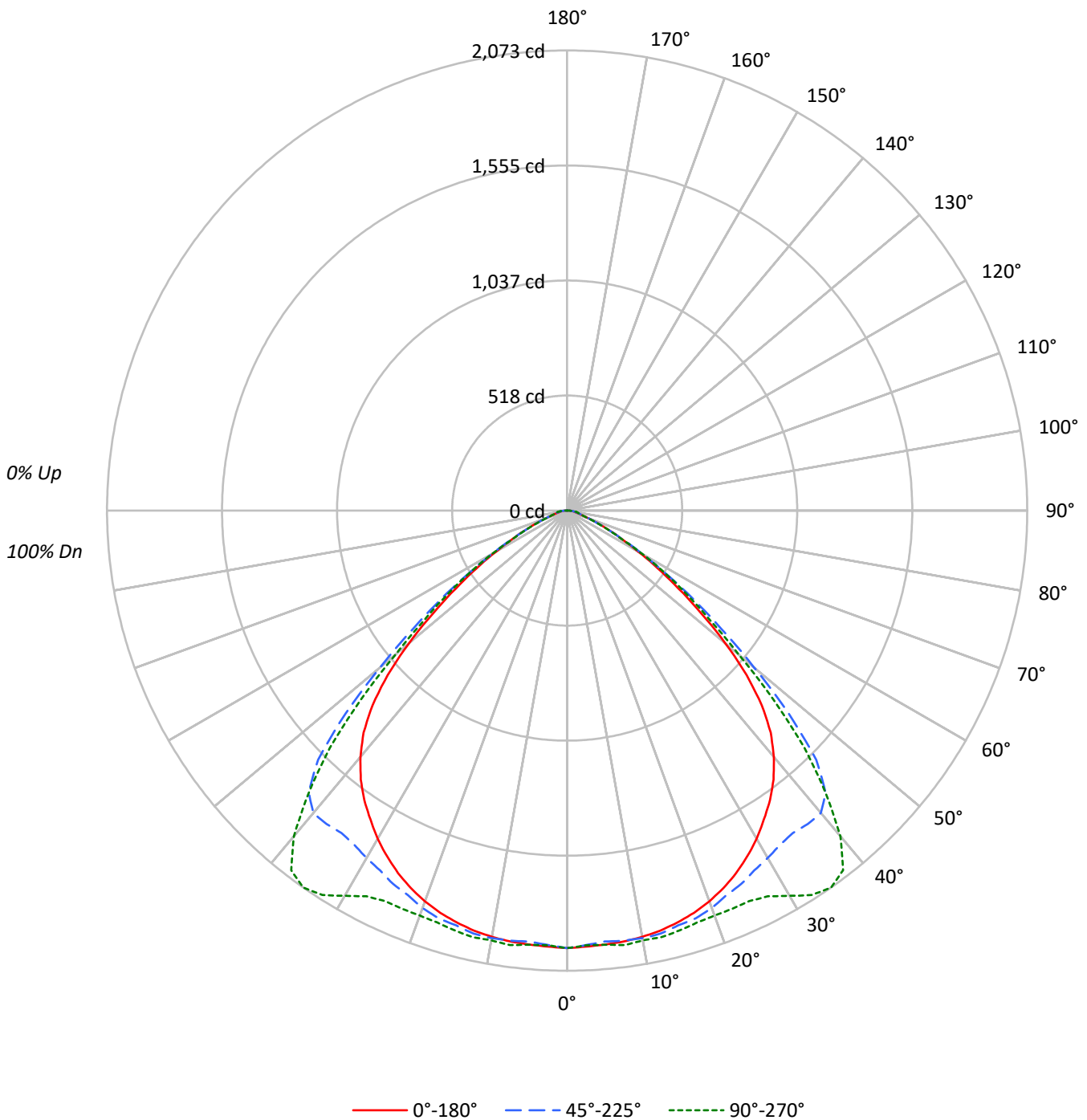
**Summary**

Lumens per Lamp: 2800 (2 lamps)  
Luminaire Lumens: 4743.6 lumens  
Efficiency: 84.7%  
Efficacy: 80.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.56 / 1.47  
Luminous Opening: Rectangular (W 1.79' x L: 3.81' x H: 0')  
CIE Type: Direct

Input Watts (W): 59  
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: 181P102  
CATALOG NUMBER: 2GC-SS-232H8224

### Luminous Intensity Polar Plot





TEST NUMBER: 181P102

CATALOG NUMBER: 2GC-SS-232H8224

**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	101	101	101	101	98	98	98	98	94	94	94		90	90	90		86	86	86	85
1	94	91	88	85	92	89	86	84	85	83	81		82	81	79		79	78	77	75
2	87	81	77	73	85	80	75	72	77	73	70		74	71	69		72	69	67	65
3	80	73	67	62	78	72	66	62	69	65	61		67	63	60		65	62	59	57
4	74	65	59	54	73	64	58	54	62	57	53		60	56	52		59	55	52	50
5	69	59	52	47	67	58	52	47	56	51	47		55	50	46		53	49	46	44
6	64	54	47	42	62	53	46	42	51	46	41		50	45	41		49	44	41	39
7	59	49	42	37	58	48	42	37	47	41	37		46	40	37		45	40	36	35
8	55	45	38	33	54	44	38	33	43	37	33		42	37	33		41	36	33	31
9	52	41	34	30	50	40	34	30	40	34	30		39	33	30		38	33	30	28
10	48	38	31	27	47	37	31	27	37	31	27		36	31	27		35	30	27	25

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

	0°	45°	90°
0°	3111	3111	3111
5°	3108	3088	3110
10°	3125	3135	3151
15°	3139	3160	3199
20°	3146	3200	3260
25°	3138	3232	3380
30°	3111	3293	3652
35°	3069	3416	3994
40°	2985	3665	3946
45°	2768	3542	3373
50°	2288	2701	2478
55°	1687	1890	1811
60°	1168	1231	1231
65°	773	762	751
70°	475	485	448
75°	329	360	372
80°	300	373	427
85°	398	435	561



TEST NUMBER: 181P102

CATALOG NUMBER: 2GC-SS-232H8224

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	186.9	3.9	3.3	0°	1971	1971	1971	1971	1971	
10°-20°	547.8	11.5	9.8	5°	1962	1955	1949	1957	1963	187
20°-30°	862.6	18.2	15.4	15°	1921	1920	1934	1958	1958	542
30°-40°	1129.8	23.8	20.2	25°	1802	1813	1856	1913	1941	830
40°-50°	1095.8	23.1	19.6	35°	1593	1620	1773	2016	2073	994
50°-60°	611.4	12.9	10.9	45°	1240	1309	1587	1544	1511	940
60°-70°	217.2	4.6	3.9	55°	613	703	687	667	658	558
70°-80°	66.8	1.4	1.2	65°	207	205	204	209	201	215
80°-90°	25.3	0.5	0.5	75°	54	57	59	62	61	62
90°-100°	0.0	0.0	0.0	85°	22	26	24	25	31	20
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°	1597.3	33.7	28.5	165°	0	0	0	0	0	0
0°-40°	2727.1	57.5	48.7	175°	0	0	0	0	0	0
0°-60°	4434.3	93.5	79.2	180°	0	0	0	0	0	0
0°-90°	4743.6	100.0	84.7							
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°	4743.6	100.0	84.7							



TEST NUMBER: 181P102

CATALOG NUMBER: 2GC-SS-232H8224

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1971	1971	1971	1971	1971
2.5°	1966	1967	1959	1959	1960
5°	1962	1955	1949	1957	1963
7.5°	1958	1946	1954	1968	1974
10°	1950	1937	1956	1967	1966
12.5°	1938	1929	1952	1958	1968
15°	1921	1920	1934	1958	1958
17.5°	1900	1903	1926	1940	1946
20°	1873	1882	1905	1934	1941
22.5°	1841	1852	1875	1920	1942
25°	1802	1813	1856	1913	1941
27.5°	1757	1774	1827	1922	1958
30°	1707	1734	1807	1939	2004
32.5°	1650	1680	1785	1984	2053
35°	1593	1620	1773	2016	2073
37.5°	1527	1563	1780	2018	2042
40°	1449	1493	1779	1945	1915
42.5°	1357	1411	1723	1758	1723
45°	1240	1309	1587	1544	1511
47.5°	1096	1182	1354	1305	1260
50°	932	1022	1100	1057	1009
52.5°	762	860	875	838	812
55°	613	703	687	667	658
57.5°	482	546	525	522	520
60°	370	394	390	397	390
62.5°	279	281	283	288	274
65°	207	205	204	209	201
67.5°	151	148	147	150	145
70°	103	99	105	107	97
72.5°	71	72	75	79	74
75°	54	57	59	62	61
77.5°	41	48	49	50	53
80°	33	41	41	40	47
82.5°	27	35	32	32	40
85°	22	26	24	25	31
87.5°	14	13	14	15	15
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: 181P102

CATALOG NUMBER: 2GC-SS-232H8224

**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)