

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: 109P173

Luminaire Tested: **2EP3GX-3U3S33I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 109P173
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-3U3S33I-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with a
3" deep 9 cell semi-specular parabolic louver.
Light Source: Three - F40CW/U/3 - 2725 Lumens ea. - 40 Watts ea.
Ballast/Driver: Advance REL-3S40-RH-TP Electronic: L.O.B.F. = 85.3

Summary

Lumens per Lamp: 2725 (3 lamps)
Luminaire Lumens: 4832.9 lumens
Efficiency: 59.1%
Efficacy: 48.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')
CIE Type: Direct

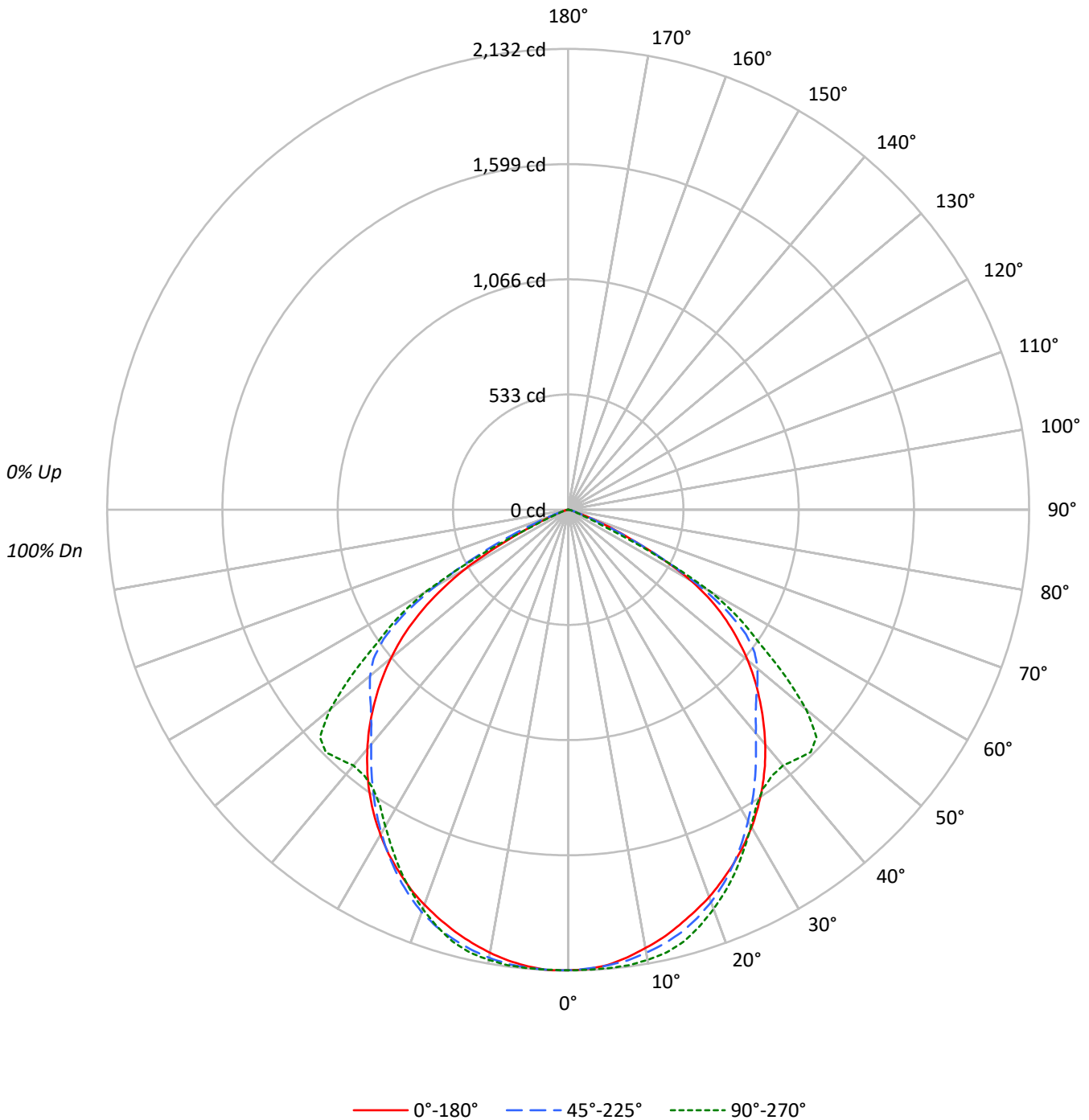
Input Watts (W): 99.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: 109P173

CATALOG NUMBER: 2EP3GX-3U3S33I-PAF

Luminous Intensity Polar Plot





TEST NUMBER: 109P173

CATALOG NUMBER: 2EP3GX-3U3S33I-PAF

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	70	70	70	70	69	69	69	69	66	66	66		63	63	63		60	60	60	59
1	66	63	61	60	64	62	60	59	60	58	57		57	56	55		55	54	53	52
2	61	57	53	50	59	55	52	50	53	51	49		52	49	48		50	48	47	45
3	56	50	46	43	54	50	46	43	48	45	42		46	44	41		45	43	40	39
4	51	45	41	37	50	44	40	37	43	39	36		42	38	36		40	38	35	34
5	48	41	36	32	46	40	35	32	39	35	32		38	34	31		37	34	31	30
6	44	37	32	28	43	36	32	28	35	31	28		34	31	28		33	30	28	26
7	41	33	29	25	40	33	28	25	32	28	25		31	28	25		30	27	25	24
8	38	31	26	23	37	30	26	23	29	25	22		29	25	22		28	25	22	21
9	36	28	23	20	35	28	23	20	27	23	20		26	23	20		26	23	20	19
10	33	26	21	19	33	26	21	18	25	21	18		25	21	18		24	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7580	7580	7580
5°	7548	7602	7573
10°	7437	7639	7520
15°	7325	7615	7442
20°	7219	7442	7362
25°	7096	7218	7261
30°	6970	6945	7130
35°	6800	6830	6956
40°	6584	7174	6710
45°	6313	7978	6384
50°	5999	7952	5932
55°	5538	6710	5222
60°	4674	5456	3955
65°	2651	1515	1776
70°	884	458	541
75°	275	275	234
80°	143	164	123
85°	82	82	82



TEST NUMBER: 109P173

CATALOG NUMBER: 2EP3GX-3U3S33I-PAF

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	201.6	4.2	2.5	0°	2131	2131	2131	2131	2131	
10°-20°	573.8	11.9	7.0	5°	2114	2116	2129	2127	2121	200
20°-30°	844.4	17.5	10.3	15°	1989	2024	2068	2056	2021	561
30°-40°	978.5	20.2	12.0	25°	1808	1809	1839	1867	1850	833
40°-50°	1032.4	21.4	12.6	35°	1566	1507	1573	1575	1602	978
50°-60°	862.9	17.9	10.6	45°	1255	1230	1586	1290	1269	967
60°-70°	307.1	6.4	3.8	55°	893	1004	1082	1043	842	790
70°-80°	28.8	0.6	0.4	65°	315	308	180	325	211	333
80°-90°	3.5	0.1	0.0	75°	20	24	20	24	17	30
90°-100°	0.0	0.0	0.0	85°	2	3	2	3	2	3
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	0
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°	1619.8	33.5	19.8	165°	0	0	0	0	0	0
0°-40°	2598.2	53.8	31.8	175°	0	0	0	0	0	0
0°-60°	4493.5	93.0	55.0	180°	0	0	0	0	0	0
0°-90°	4832.9	100.0	59.1							
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°	4832.9	100.0	59.1							



TEST NUMBER: 109P173

CATALOG NUMBER: 2EP3GX-3U3S33I-PAF

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2131	2131	2131	2131	2131	2131	2131	2131	2131
2.5°	2127	2122	2125	2128	2130	2132	2131	2128	2132
5°	2114	2107	2116	2125	2129	2132	2127	2122	2121
7.5°	2089	2086	2103	2117	2126	2126	2120	2107	2105
10°	2059	2058	2082	2104	2115	2115	2105	2087	2082
12.5°	2028	2028	2056	2084	2099	2099	2084	2063	2053
15°	1989	1991	2024	2051	2068	2072	2056	2036	2021
17.5°	1948	1953	1982	2005	2021	2028	2023	2004	1984
20°	1907	1909	1932	1946	1966	1970	1981	1965	1945
22.5°	1858	1863	1875	1881	1906	1908	1928	1921	1901
25°	1808	1812	1809	1812	1839	1842	1867	1874	1850
27.5°	1754	1756	1738	1737	1765	1772	1800	1819	1797
30°	1697	1696	1664	1657	1691	1696	1728	1760	1736
32.5°	1633	1626	1588	1576	1621	1620	1654	1694	1672
35°	1566	1552	1507	1507	1573	1550	1575	1621	1602
37.5°	1494	1472	1426	1461	1550	1503	1496	1539	1526
40°	1418	1388	1350	1433	1545	1477	1417	1452	1445
42.5°	1337	1300	1282	1420	1565	1464	1347	1362	1360
45°	1255	1210	1230	1426	1586	1466	1290	1268	1269
47.5°	1172	1119	1187	1420	1557	1455	1244	1171	1173
50°	1084	1030	1142	1357	1437	1387	1196	1075	1072
52.5°	990	943	1087	1220	1266	1246	1135	975	964
55°	893	855	1004	1045	1082	1068	1043	870	842
57.5°	786	756	870	860	941	874	901	750	708
60°	657	632	689	688	767	705	716	613	556
62.5°	483	473	494	488	471	503	514	454	369
65°	315	301	308	247	180	264	325	288	211
67.5°	186	164	159	92	70	98	173	158	107
70°	85	80	74	51	44	52	80	78	52
72.5°	35	39	36	33	29	34	38	39	27
75°	20	23	24	23	20	23	24	23	17
77.5°	12	15	16	16	13	16	16	15	11
80°	7	9	10	10	8	10	10	9	6
82.5°	4	5	6	6	5	6	6	5	4
85°	2	2	3	3	2	3	3	2	2
87.5°	1	0	1	1	0	1	1	0	0
90°	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



TEST NUMBER: 109P173

CATALOG NUMBER: 2EP3GX-3U3S33I-PAF

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)