

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P298747

Luminaire Tested: **24FPX-31-L830-LV1-SWPD1**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P298747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1903-179-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24FPX-31-L830-LV1-SWPD1
Description: 2x4 FPX SERIES LED PANEL, 3000K CCT AND 80CRI
Light Source: -
Ballast/Driver: -

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
	AS-5443-2	Good	REFLECTOR
	AS-5443-3	Good	DRIVER
	AS-5443-4	Good	UPPER MODULE
	AS-5443-5	Good	LENS
	AS-5443-6	Good	DRIVER 2
	AS-5443-7	Good	TRIM RING

Summary

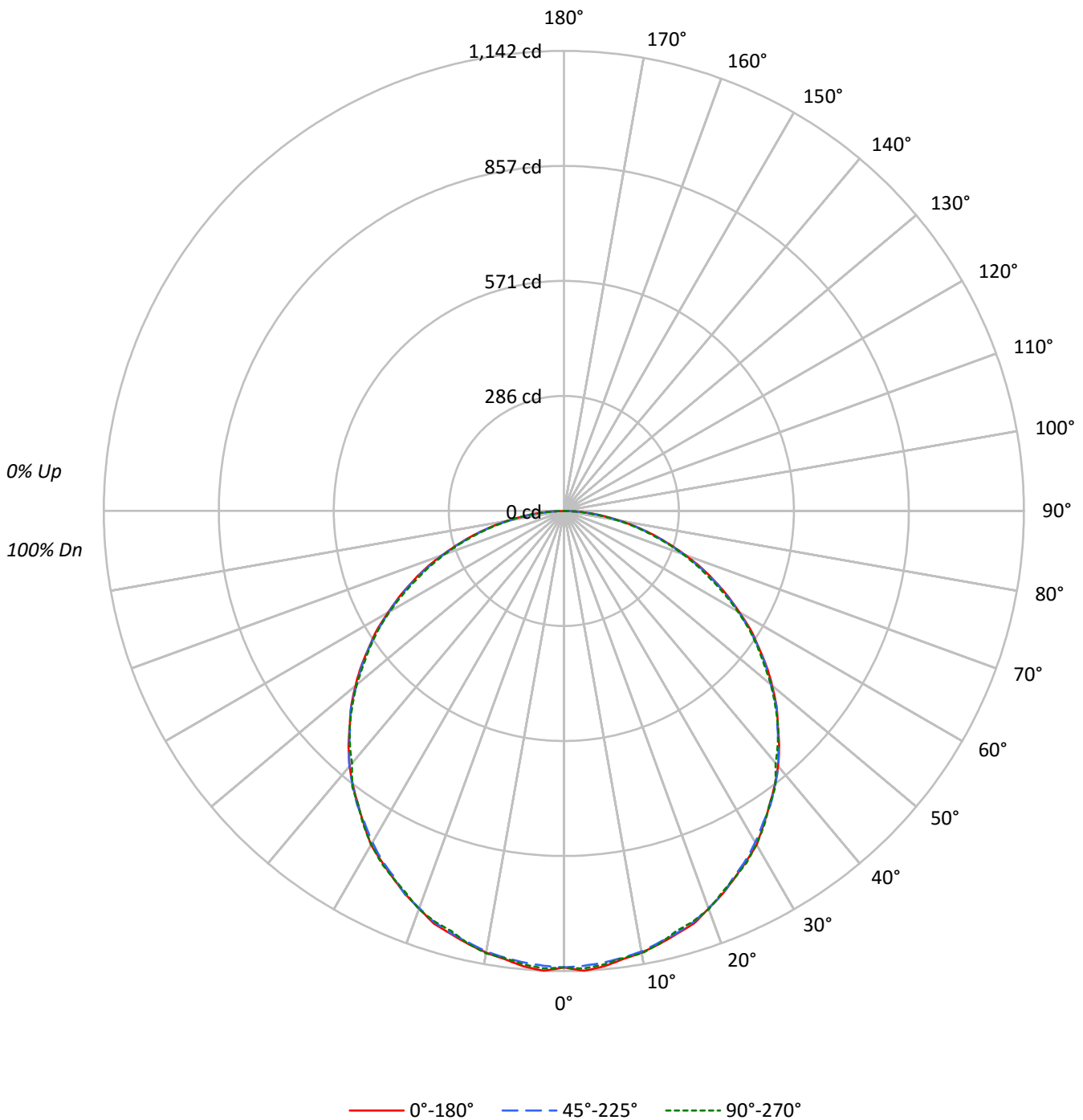
Lumens per Lamp: N/A
Luminaire Lumens: 3258.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.86
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



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1524	1524	1524
5°	1533	1520	1526
10°	1520	1517	1523
15°	1513	1510	1504
20°	1503	1502	1506
25°	1491	1485	1491
30°	1486	1476	1485
35°	1462	1467	1462
40°	1453	1455	1436
45°	1429	1426	1431
50°	1413	1405	1405
55°	1384	1382	1376
60°	1355	1350	1340
65°	1318	1312	1288
70°	1266	1255	1240
75°	1202	1183	1163
80°	1121	1084	1069
85°	985	940	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.0	3.3
10°-20°	305.8	9.4
20°-30°	463.1	14.2
30°-40°	558.0	17.1
40°-50°	580.2	17.8
50°-60°	526.6	16.2
60°-70°	406.5	12.5
70°-80°	240.8	7.4
80°-90°	69.9	2.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	875.9	26.9
0°-40°	1433.9	44.0
0°-60°	2540.7	78.0
0°-90°	3258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1133	1133	1133	1133	1133	
5°	1135	1129	1125	1122	1130	108
15°	1086	1081	1084	1082	1080	307
25°	1004	1005	1000	1002	1004	464
35°	890	891	893	892	890	558
45°	751	753	749	751	752	581
55°	590	592	589	588	586	529
65°	414	414	412	408	405	410
75°	231	229	228	226	224	244
85°	64	61	61	60	60	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1132.9	1132.9	1132.9	1132.9	1132.9
2.5°	1142.4	1128.1	1130.0	1126.2	1136.7
5°	1134.8	1129.0	1125.2	1122.4	1130.0
7.5°	1122.4	1117.6	1118.6	1117.6	1119.5
10°	1112.9	1112.9	1110.0	1107.2	1114.8
12.5°	1100.5	1100.5	1096.7	1093.8	1099.5
15°	1086.2	1081.4	1084.3	1082.4	1079.5
17.5°	1073.8	1068.1	1070.0	1061.5	1068.1
20°	1050.0	1048.1	1049.1	1044.3	1051.9
22.5°	1029.1	1031.9	1030.0	1028.1	1025.3
25°	1004.3	1005.3	1000.5	1001.5	1004.3
27.5°	980.5	983.4	977.7	977.7	983.4
30°	956.7	952.9	950.1	955.8	955.8
32.5°	923.4	919.6	919.6	922.5	925.3
35°	890.1	891.1	893.0	892.0	890.1
37.5°	859.6	857.7	860.6	860.6	862.5
40°	827.3	829.2	828.2	824.4	817.7
42.5°	791.1	793.0	788.2	793.0	786.3
45°	751.1	753.0	749.2	751.1	752.1
47.5°	715.9	714.0	715.9	713.0	711.1
50°	675.0	674.0	671.1	671.1	671.1
52.5°	635.0	632.1	632.1	632.1	626.4
55°	590.2	592.1	589.3	588.3	586.4
57.5°	550.2	546.4	545.5	545.5	544.5
60°	503.6	502.6	501.7	499.8	497.9
62.5°	459.8	456.0	456.9	455.0	452.2
65°	414.1	414.1	412.2	408.4	404.6
67.5°	370.3	368.4	365.6	363.7	359.8
70°	321.8	320.8	318.9	317.0	315.1
72.5°	275.1	274.2	273.2	271.3	269.4
75°	231.3	229.4	227.5	225.6	223.7
77.5°	185.6	184.7	183.7	180.9	180.9
80°	144.7	141.8	139.9	139.0	138.0
82.5°	101.9	101.9	100.0	99.0	99.0
85°	63.8	60.9	60.9	60.0	60.0
87.5°	27.6	26.7	24.8	24.8	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)