

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: P298748

Luminaire Tested: **24FPX-31-L835-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: P298748  
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-L835-LV1-SWPD1  
Description: 2x4 FPX SERIES LED PANEL, 3500K 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**

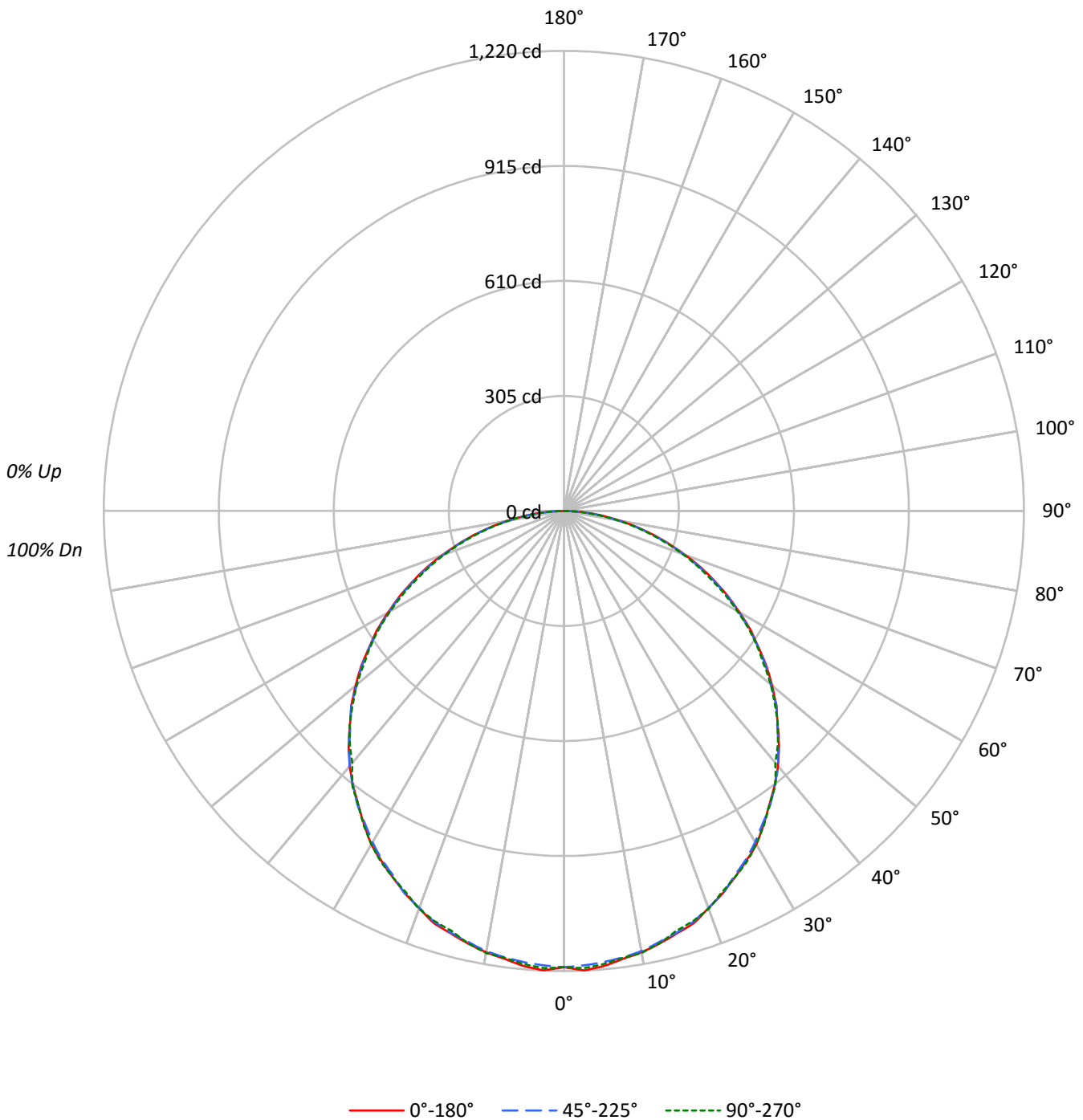
Lumens per Lamp: N/A  
Luminaire Lumens: 3478.2 lumens  
Efficiency: N/A  
Efficacy: 115.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 30.06  
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: P298748  
CATALOG NUMBER: 24FPX-31-L835-LV1-SWPD1

### Luminous Intensity Polar Plot





TEST NUMBER: P298748

CATALOG NUMBER: 24FPX-31-L835-LV1-SWPD1

**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°	1627	1627	1627
5°	1636	1623	1629
10°	1623	1619	1626
15°	1615	1612	1605
20°	1605	1604	1608
25°	1592	1586	1592
30°	1587	1576	1585
35°	1561	1566	1561
40°	1551	1553	1533
45°	1526	1522	1528
50°	1508	1500	1500
55°	1478	1476	1469
60°	1447	1441	1430
65°	1408	1401	1375
70°	1351	1340	1323
75°	1284	1263	1241
80°	1197	1158	1142
85°	1051	1003	988



TEST NUMBER: P298748

CATALOG NUMBER: 24FPX-31-L835-LV1-SWPD1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.3	3.3
10°-20°	326.5	9.4
20°-30°	494.4	14.2
30°-40°	595.7	17.1
40°-50°	619.5	17.8
50°-60°	562.2	16.2
60°-70°	434.0	12.5
70°-80°	257.1	7.4
80°-90°	74.6	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°	935.2	26.9
0°-40°	1530.9	44.0
0°-60°	2712.5	78.0
0°-90°	3478.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3478.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1212	1205	1201	1198	1206	115
15°	1160	1155	1158	1156	1152	328
25°	1072	1073	1068	1069	1072	495
35°	950	951	953	952	950	596
45°	802	804	800	802	803	620
55°	630	632	629	628	626	565
65°	442	442	440	436	432	438
75°	247	245	243	241	239	261
85°	68	65	65	64	64	77
90°	0	0	0	0	0	



TEST NUMBER: P298748

CATALOG NUMBER: 24FPX-31-L835-LV1-SWPD1

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1209.4	1209.4	1209.4	1209.4	1209.4
2.5°	1219.6	1204.4	1206.4	1202.3	1213.5
5°	1211.5	1205.4	1201.3	1198.3	1206.4
7.5°	1198.3	1193.2	1194.2	1193.2	1195.2
10°	1188.1	1188.1	1185.1	1182.0	1190.1
12.5°	1174.9	1174.9	1170.8	1167.8	1173.9
15°	1159.6	1154.6	1157.6	1155.6	1152.5
17.5°	1146.4	1140.3	1142.4	1133.2	1140.3
20°	1121.0	1119.0	1120.0	1114.9	1123.1
22.5°	1098.7	1101.7	1099.7	1097.6	1094.6
25°	1072.2	1073.3	1068.2	1069.2	1072.2
27.5°	1046.8	1049.9	1043.8	1043.8	1049.9
30°	1021.4	1017.4	1014.3	1020.4	1020.4
32.5°	985.8	981.8	981.8	984.8	987.9
35°	950.3	951.3	953.3	952.3	950.3
37.5°	917.8	915.7	918.8	918.8	920.8
40°	883.2	885.2	884.2	880.2	873.0
42.5°	844.6	846.6	841.5	846.6	839.5
45°	801.9	803.9	799.9	801.9	802.9
47.5°	764.3	762.3	764.3	761.2	759.2
50°	720.6	719.6	716.5	716.5	716.5
52.5°	677.9	674.8	674.8	674.8	668.8
55°	630.1	632.2	629.1	628.1	626.1
57.5°	587.4	583.4	582.4	582.4	581.3
60°	537.6	536.6	535.6	533.6	531.5
62.5°	490.9	486.8	487.8	485.8	482.8
65°	442.1	442.1	440.1	436.0	431.9
67.5°	395.4	393.3	390.3	388.2	384.2
70°	343.5	342.5	340.5	338.4	336.4
72.5°	293.7	292.7	291.7	289.7	287.6
75°	247.0	244.9	242.9	240.9	238.8
77.5°	198.2	197.2	196.2	193.1	193.1
80°	154.5	151.4	149.4	148.4	147.4
82.5°	108.7	108.7	106.7	105.7	105.7
85°	68.1	65.0	65.0	64.0	64.0
87.5°	29.5	28.5	26.4	26.4	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)