

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: P298545

Luminaire Tested: **22FPX-21-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: P298545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1903-179-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22FPX-21-L830-LV1-SWPD1
Description: 2x2 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

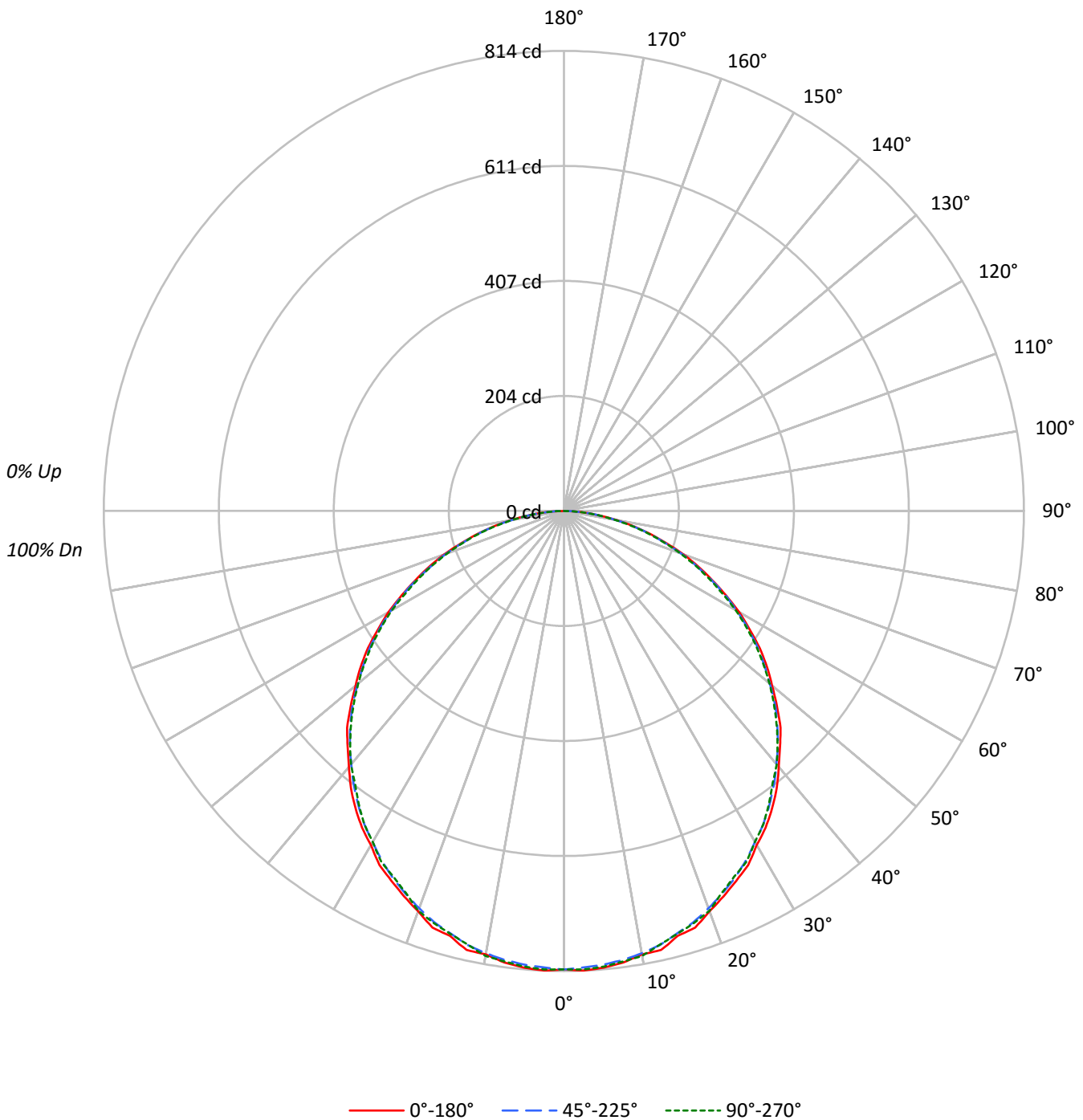
Lumens per Lamp: N/A
Luminaire Lumens: 2307.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 22.28
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	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	65	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	61	53	47	59	52	46	57	51	46	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
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°	2183	2183	2183
5°	2191	2176	2186
10°	2176	2172	2184
15°	2168	2156	2158
20°	2158	2143	2156
25°	2143	2127	2119
30°	2121	2101	2101
35°	2111	2084	2078
40°	2078	2055	2059
45°	2064	2033	2025
50°	2015	1991	1988
55°	1984	1958	1946
60°	1928	1903	1889
65°	1845	1828	1805
70°	1778	1750	1721
75°	1658	1630	1611
80°	1497	1469	1441
85°	1266	1238	1210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	3.3
10°-20°	219.2	9.5
20°-30°	330.8	14.3
30°-40°	397.8	17.2
40°-50°	412.2	17.9
50°-60°	372.9	16.2
60°-70°	284.6	12.3
70°-80°	165.9	7.2
80°-90°	46.9	2.0
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°	626.7	27.2
0°-40°	1024.5	44.4
0°-60°	1809.6	78.4
0°-90°	2307.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2307.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	811	811	811	811	811	
5°	811	808	806	806	809	77
15°	778	777	774	776	775	221
25°	722	722	716	716	714	333
35°	642	638	634	633	632	401
45°	542	536	534	531	532	416
55°	423	420	417	416	415	377
65°	290	290	287	286	283	288
75°	160	159	157	154	155	168
85°	41	43	40	41	39	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	811.1	811.1	811.1	811.1	811.1
2.5°	813.9	809.3	808.4	810.2	812.0
5°	811.1	808.4	805.7	805.7	809.3
7.5°	805.7	802.9	801.1	801.1	803.8
10°	796.5	793.8	794.7	794.7	799.3
12.5°	795.6	787.4	786.5	787.4	785.6
15°	778.3	777.4	773.8	775.6	774.7
17.5°	772.8	767.4	762.8	763.7	764.6
20°	753.7	751.9	748.2	749.2	752.8
22.5°	738.2	739.1	732.7	732.7	730.9
25°	721.8	721.8	716.3	716.3	713.6
27.5°	706.3	701.8	697.2	698.1	699.9
30°	682.6	680.8	676.2	677.2	676.2
32.5°	664.4	663.5	657.1	655.3	657.1
35°	642.5	638.0	634.3	633.4	632.5
37.5°	618.8	615.2	610.6	609.7	607.0
40°	591.5	590.6	585.1	586.0	586.0
42.5°	566.0	563.2	560.5	558.7	559.6
45°	542.3	535.9	534.1	531.3	532.2
47.5°	511.3	508.5	506.7	503.1	504.0
50°	481.2	481.2	475.7	474.8	474.8
52.5°	453.0	451.1	446.6	447.5	444.8
55°	422.9	420.1	417.4	415.6	414.7
57.5°	390.1	387.3	385.5	382.8	382.8
60°	358.2	354.5	353.6	350.0	350.9
62.5°	323.5	322.6	321.7	319.0	316.2
65°	289.8	289.8	287.1	286.2	283.4
67.5°	257.9	256.1	253.4	253.4	251.5
70°	226.0	223.3	222.4	219.6	218.7
72.5°	190.5	190.5	187.7	186.8	186.8
75°	159.5	158.6	156.8	154.0	154.9
77.5°	127.6	126.7	125.8	123.9	123.0
80°	96.6	96.6	94.8	95.7	93.0
82.5°	67.4	68.4	66.5	66.5	64.7
85°	41.0	42.8	40.1	41.0	39.2
87.5°	17.3	17.3	16.4	16.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)