

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: P298749

Luminaire Tested: **24FPX-31-L840-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: P298749
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-L840-LV1-SWPD1
Description: 2x4 FPX SERIES LED PANEL, 4000K 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

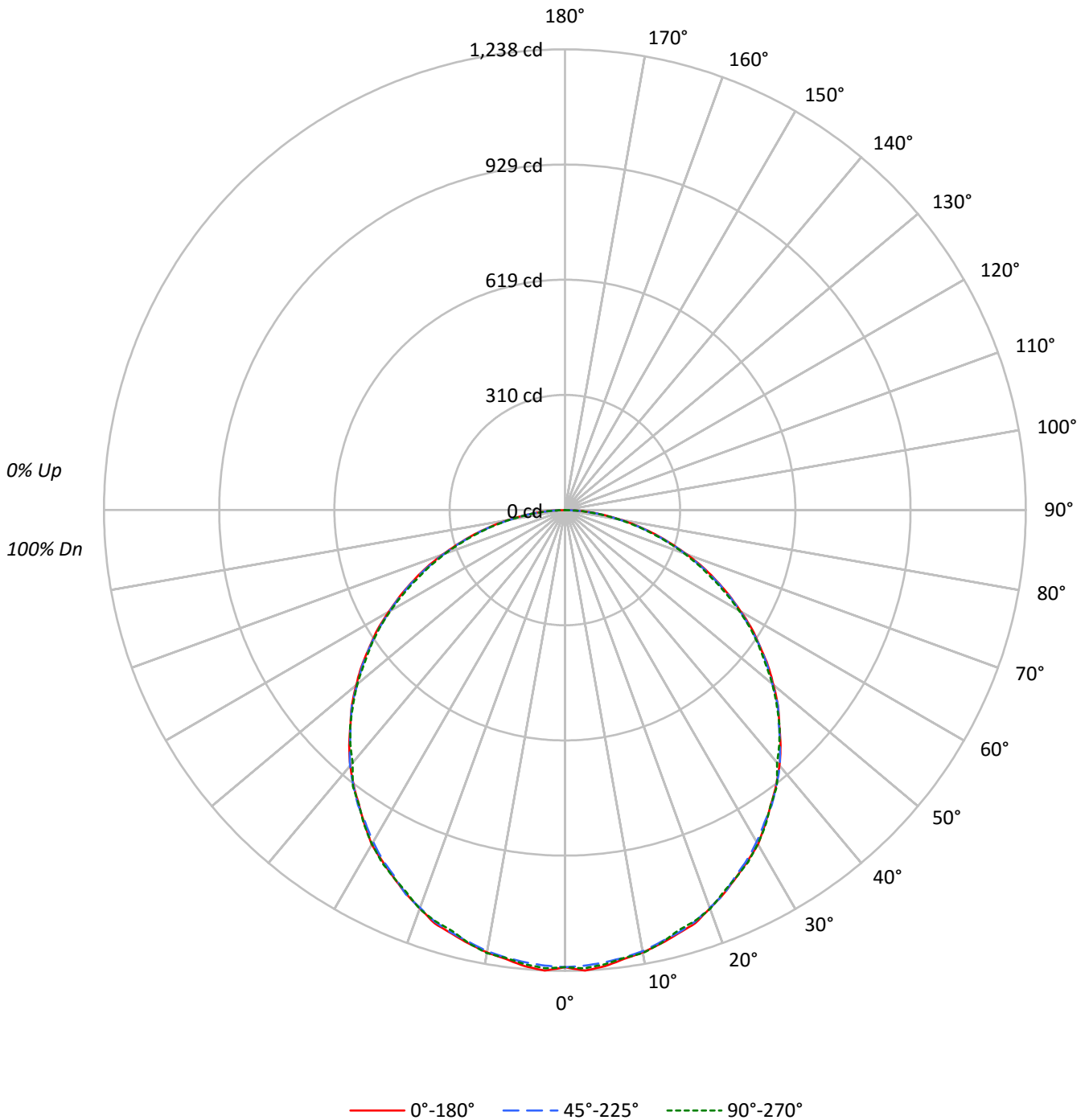
Lumens per Lamp: N/A
Luminaire Lumens: 3532.1 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.76
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



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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°	1653	1653	1653
5°	1662	1648	1655
10°	1648	1644	1651
15°	1640	1637	1630
20°	1630	1628	1633
25°	1616	1610	1616
30°	1611	1600	1610
35°	1585	1590	1585
40°	1575	1577	1557
45°	1549	1545	1551
50°	1532	1523	1523
55°	1501	1499	1491
60°	1469	1464	1453
65°	1429	1423	1396
70°	1372	1360	1344
75°	1304	1282	1261
80°	1216	1175	1160
85°	1067	1020	1003



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.0	3.3
10°-20°	331.5	9.4
20°-30°	502.1	14.2
30°-40°	605.0	17.1
40°-50°	629.1	17.8
50°-60°	570.9	16.2
60°-70°	440.7	12.5
70°-80°	261.1	7.4
80°-90°	75.8	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°	949.6	26.9
0°-40°	1554.6	44.0
0°-60°	2754.5	78.0
0°-90°	3532.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3532.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1230	1224	1220	1217	1225	117
15°	1178	1172	1176	1174	1170	333
25°	1089	1090	1085	1086	1089	503
35°	965	966	968	967	965	605
45°	814	816	812	814	815	630
55°	640	642	639	638	636	573
65°	449	449	447	443	439	445
75°	251	249	247	245	242	265
85°	69	66	66	65	65	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1228.2	1228.2	1228.2	1228.2	1228.2
2.5°	1238.5	1223.0	1225.1	1220.9	1232.3
5°	1230.2	1224.0	1219.9	1216.8	1225.1
7.5°	1216.8	1211.7	1212.7	1211.7	1213.7
10°	1206.5	1206.5	1203.4	1200.3	1208.6
12.5°	1193.1	1193.1	1188.9	1185.9	1192.0
15°	1177.6	1172.4	1175.5	1173.5	1170.4
17.5°	1164.2	1158.0	1160.0	1150.8	1158.0
20°	1138.4	1136.3	1137.3	1132.2	1140.4
22.5°	1115.7	1118.8	1116.7	1114.6	1111.5
25°	1088.8	1089.9	1084.7	1085.7	1088.8
27.5°	1063.0	1066.1	1059.9	1059.9	1066.1
30°	1037.2	1033.1	1030.0	1036.2	1036.2
32.5°	1001.1	997.0	997.0	1000.1	1003.2
35°	965.0	966.0	968.1	967.1	965.0
37.5°	932.0	929.9	933.0	933.0	935.1
40°	896.9	898.9	897.9	893.8	886.6
42.5°	857.7	859.7	854.6	859.7	852.5
45°	814.3	816.4	812.2	814.3	815.3
47.5°	776.1	774.1	776.1	773.0	771.0
50°	731.7	730.7	727.6	727.6	727.6
52.5°	688.4	685.3	685.3	685.3	679.1
55°	639.9	641.9	638.9	637.8	635.8
57.5°	596.5	592.4	591.4	591.4	590.3
60°	546.0	544.9	543.9	541.8	539.8
62.5°	498.5	494.4	495.4	493.3	490.2
65°	449.0	449.0	446.9	442.8	438.6
67.5°	401.5	399.4	396.3	394.3	390.1
70°	348.8	347.8	345.7	343.7	341.6
72.5°	298.3	297.2	296.2	294.1	292.1
75°	250.8	248.7	246.7	244.6	242.5
77.5°	201.3	200.2	199.2	196.1	196.1
80°	156.9	153.8	151.7	150.7	149.7
82.5°	110.4	110.4	108.4	107.3	107.3
85°	69.1	66.1	66.1	65.0	65.0
87.5°	29.9	28.9	26.8	26.8	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)