

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: P34946

Luminaire Tested: **22SP3440**

Test Date: 05/17/16

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: P34946
Test Lab: INNOVATION CENTER-P3
Test Date: 05/17/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SP3440
Description: 2X2 LED FLAT PANEL
Light Source: (194) 4000K LED
ST2835N2MX-F32 BIN CODE 40M3
Ballast/Driver: (1) ELECTRONIC DRIVER
PRIVATE LABEL DRIVER

Luminaire Equipment: Sample No. Condition Description

Summary

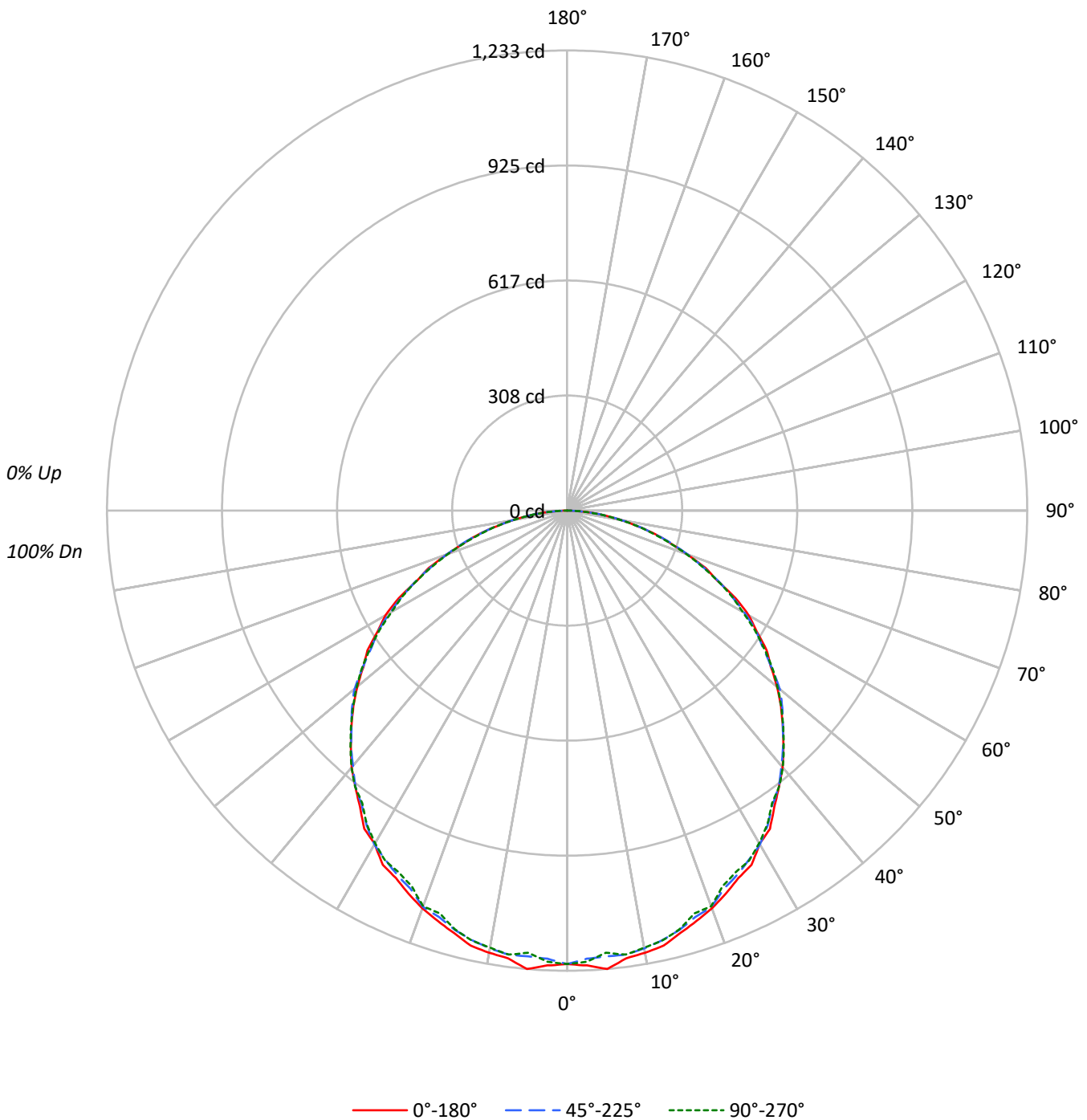
Lumens per Lamp: N/A
Luminaire Lumens: 3520.7 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.75' x L: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
Input Voltage (V): 120.0
Input Current (Ain): 0.275
Voltage Rise (V): NR
Power Factor: 0.9969
Total Harmonic Distortion (THDi): 8.19%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.7
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	91	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	64	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	62	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	33	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°	4270	4270	4270
5°	4350	4230	4195
10°	4293	4251	4244
15°	4265	4232	4228
20°	4242	4227	4219
25°	4212	4177	4146
30°	4184	4192	4176
35°	4153	4119	4106
40°	4120	4097	4125
45°	4061	4061	4071
50°	4013	4068	4024
55°	4001	3922	3946
60°	3951	3866	3817
65°	3684	3718	3701
70°	3504	3525	3484
75°	3327	3286	3246
80°	3016	2975	2915
85°	2621	2541	2500



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	3.3
10°-20°	328.7	9.3
20°-30°	499.5	14.2
30°-40°	603.9	17.2
40°-50°	631.6	17.9
50°-60°	574.9	16.3
60°-70°	440.5	12.5
70°-80°	254.8	7.2
80°-90°	72.0	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°	943.0	26.8
0°-40°	1546.8	43.9
0°-60°	2753.4	78.2
0°-90°	3520.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3520.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1215	1215	1215	1215	1215	
5°	1233	1207	1199	1209	1189	116
15°	1172	1162	1163	1164	1162	331
25°	1086	1100	1077	1084	1069	502
35°	968	961	960	963	957	607
45°	817	810	817	821	819	631
55°	653	638	640	645	644	580
65°	443	445	447	442	445	446
75°	245	241	242	238	239	257
85°	65	62	63	61	62	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1215	1215	1215	1215	1215
2.5°	1220	1210	1202	1213	1210
5°	1233	1207	1199	1209	1189
7.5°	1210	1199	1200	1209	1200
10°	1203	1185	1191	1192	1189
12.5°	1194	1177	1179	1179	1180
15°	1172	1162	1163	1164	1162
17.5°	1153	1144	1142	1162	1132
20°	1134	1120	1130	1127	1128
22.5°	1111	1106	1097	1127	1089
25°	1086	1100	1077	1084	1069
27.5°	1070	1045	1055	1062	1057
30°	1031	1036	1033	1029	1029
32.5°	1011	994	1000	1004	998
35°	968	961	960	963	957
37.5°	932	918	932	935	933
40°	898	898	893	896	899
42.5°	858	862	857	861	859
45°	817	810	817	821	819
47.5°	777	776	782	784	778
50°	734	724	744	733	736
52.5°	688	682	690	692	693
55°	653	638	640	645	644
57.5°	602	593	600	599	596
60°	562	546	550	544	543
62.5°	509	492	497	499	497
65°	443	445	447	442	445
67.5°	401	394	394	391	391
70°	341	339	343	341	339
72.5°	290	287	295	289	288
75°	245	241	242	238	239
77.5°	193	192	194	190	194
80°	149	147	147	143	144
82.5°	103	102	104	102	101
85°	65	62	63	61	62
87.5°	27	27	27	27	26
90°	0	0	0	0	0

(END OF REPORT)