

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: P188429

Luminaire Tested: **22SR-LD2-20-C-UNV-L830-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33586)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SR-LD2-20-C-UNV-L830-CD1-TB-U
Description: METALUX 2X2 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1232.0 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 2.03 / 1.86
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

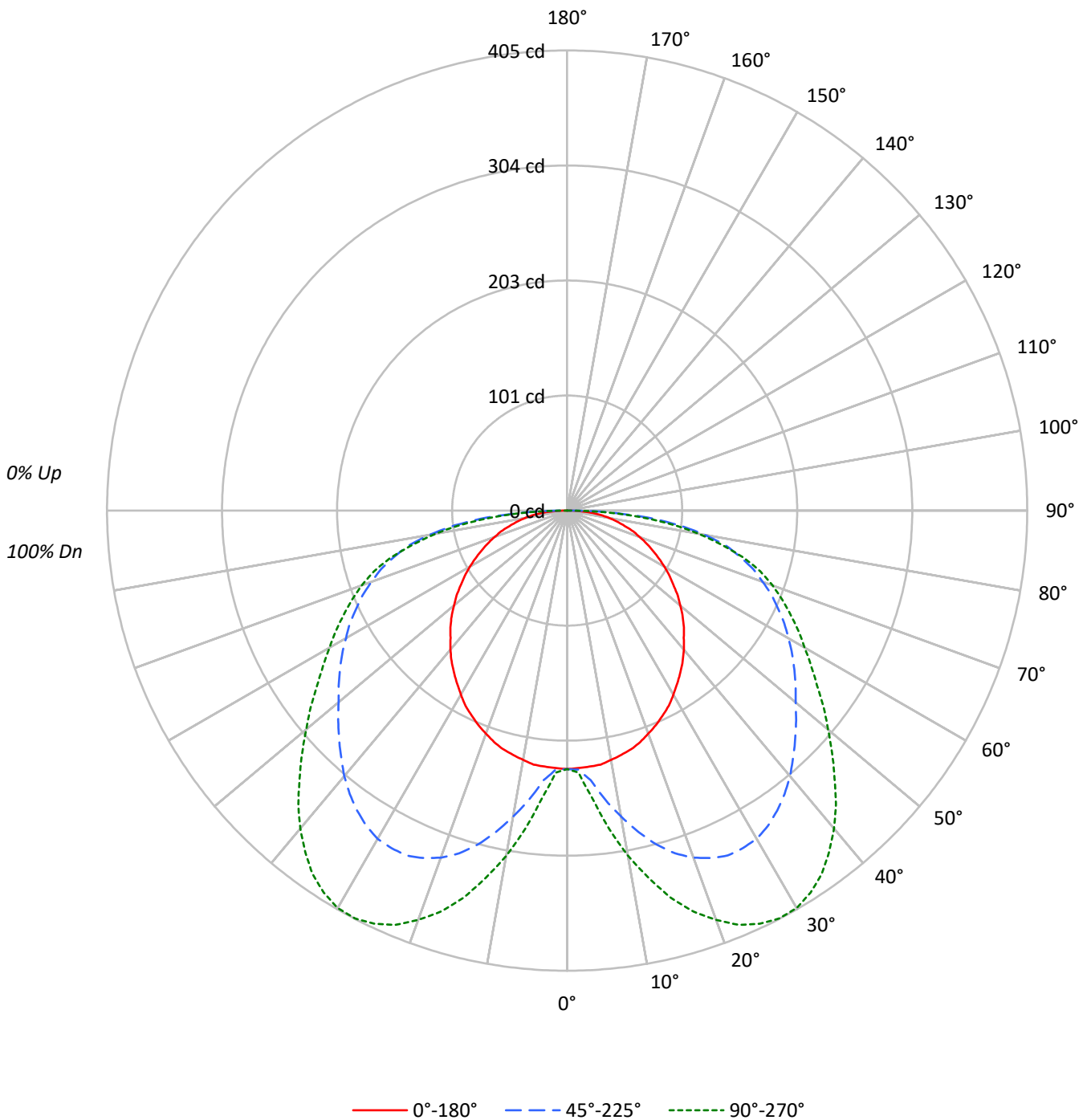
Input Watts (W): 15.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	101	95	91	104	98	93	89	94	90	86	90	87	84	86	84	81	79
2	95	86	78	71	93	84	77	70	80	74	69	77	72	67	74	69	66	63
3	86	74	65	58	83	73	64	57	69	62	56	67	60	55	64	59	54	52
4	78	65	55	48	76	64	54	47	61	53	47	59	52	46	56	50	45	43
5	72	58	48	40	69	56	47	40	54	46	40	52	45	39	50	44	39	36
6	66	51	42	35	64	50	41	35	49	40	34	47	39	34	45	39	34	31
7	61	46	37	30	59	45	37	30	44	36	30	42	35	30	41	34	29	27
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24
9	53	38	30	24	51	38	29	24	37	29	24	35	28	23	34	28	23	21
10	49	35	27	21	48	35	27	21	34	26	21	33	26	21	32	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	612	612	612
5°	611	643	686
10°	609	747	843
15°	606	848	983
20°	598	931	1098
25°	591	994	1192
30°	581	1037	1255
35°	571	1059	1283
40°	561	1072	1284
45°	553	1080	1267
50°	544	1099	1255
55°	535	1145	1260
60°	532	1210	1299
65°	528	1305	1381
70°	533	1441	1513
75°	545	1642	1676
80°	586	1901	1819
85°	636	2192	1985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.8	1.9
10°-20°	83.8	6.8
20°-30°	147.2	12.0
30°-40°	191.1	15.5
40°-50°	205.1	16.7
50°-60°	199.0	16.2
60°-70°	179.8	14.6
70°-80°	141.6	11.5
80°-90°	60.4	4.9
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°	254.8	20.7
0°-40°	445.9	36.2
0°-60°	850.1	69.0
0°-90°	1232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1232.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	228	228	228	228	228	
5°	226	228	238	250	254	22
15°	218	251	304	341	353	61
25°	199	260	335	384	401	92
35°	174	245	322	374	391	109
45°	145	215	284	322	333	112
55°	114	184	244	265	269	102
65°	83	153	205	215	217	82
75°	52	115	158	160	161	56
85°	21	51	71	66	64	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	227.5	227.5	227.5	227.5	227.5	227.5	227.5	227.5	227.5	227.5	227.5
2.5°	226.8	226.8	226.8	226.8	227.5	226.8	227.5	228.2	228.2	228.2	228.8
5°	226.2	226.8	226.8	226.8	227.5	228.8	230.1	232.8	236.1	238.1	240.8
7.5°	225.5	225.5	225.5	226.8	229.5	234.1	239.4	245.4	251.4	256.7	262.0
10°	222.8	223.5	224.2	228.2	234.1	242.1	250.7	259.3	266.0	273.3	280.6
12.5°	220.2	220.9	223.5	230.1	240.1	250.7	260.7	271.3	281.9	289.8	299.1
15°	217.5	218.2	222.2	232.8	245.4	257.3	269.9	282.5	293.2	304.4	314.4
17.5°	213.6	214.2	220.9	234.8	248.7	263.3	277.2	291.8	304.4	316.4	327.0
20°	208.9	210.2	218.9	234.8	250.7	266.6	282.5	297.8	311.7	325.0	337.6
22.5°	204.3	206.3	216.9	234.8	252.0	269.3	286.5	302.4	317.0	331.0	344.2
25°	199.0	201.0	214.2	233.5	251.4	269.3	287.8	304.4	319.7	334.9	348.2
27.5°	193.7	196.3	210.9	230.1	249.4	267.9	286.5	303.8	319.7	334.9	349.5
30°	187.0	190.3	206.9	226.8	246.1	265.3	283.9	301.8	317.7	333.6	347.5
32.5°	180.4	184.4	201.6	221.5	241.4	260.7	279.2	297.1	313.0	329.0	343.6
35°	173.8	178.4	196.3	216.2	236.1	254.7	273.3	291.2	307.1	322.3	336.9
37.5°	167.1	171.8	189.7	209.6	229.5	248.1	266.0	283.2	299.8	314.4	328.3
40°	159.8	165.1	183.7	203.0	222.2	240.8	258.0	275.2	290.5	305.1	317.7
42.5°	151.9	158.5	176.4	195.7	214.2	232.1	249.4	266.0	281.2	294.5	306.4
45°	145.2	151.2	169.1	188.4	206.3	224.2	241.4	257.3	271.3	283.9	295.1
47.5°	138.0	144.6	161.8	181.1	199.0	215.6	232.8	247.4	261.3	273.3	283.9
50°	130.0	138.0	154.5	173.1	191.7	208.3	224.8	238.8	252.0	262.6	272.6
52.5°	122.7	130.7	147.9	165.8	183.7	201.0	215.6	230.1	242.7	253.4	262.0
55°	114.1	124.0	140.6	158.5	175.8	193.0	208.3	222.2	234.1	244.1	252.0
57.5°	106.8	116.7	133.3	151.2	168.5	185.0	200.3	213.6	225.5	234.8	241.4
60°	98.8	109.4	126.0	143.9	160.5	177.1	192.3	205.6	216.2	224.8	231.5
62.5°	90.9	102.1	118.7	136.0	152.5	169.1	184.4	197.0	206.9	215.6	220.9
65°	82.9	94.2	111.4	128.0	144.6	161.2	175.1	187.7	197.6	204.9	210.2
67.5°	75.6	86.9	103.5	119.4	136.6	151.9	166.5	178.4	187.7	195.0	199.0
70°	67.7	79.6	94.8	110.8	127.3	142.6	156.5	167.8	177.1	183.1	187.0
72.5°	61.0	71.6	86.2	101.5	117.4	132.6	145.9	157.9	165.8	171.8	174.4
75°	52.4	63.7	77.6	92.2	107.4	122.0	134.6	145.2	153.2	157.9	160.5
77.5°	45.1	56.4	69.0	81.6	96.2	110.1	122.0	132.0	139.3	143.3	144.6
80°	37.8	47.1	58.4	70.3	82.9	95.5	106.8	115.4	121.4	122.7	123.4
82.5°	29.8	37.1	46.4	57.0	67.7	77.6	87.5	93.5	98.8	99.5	99.5
85°	20.6	25.2	31.8	39.1	47.1	55.7	63.0	67.7	69.6	71.0	71.0
87.5°	10.6	12.6	15.9	18.6	23.2	29.2	33.2	33.8	35.8	36.5	37.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	227.5	227.5	227.5	227.5	227.5	227.5	227.5	227.5
2.5°	229.5	229.5	230.1	230.1	230.1	230.8	230.8	230.8
5°	244.1	246.1	248.7	251.4	252.0	254.0	254.0	254.0
7.5°	265.3	269.3	273.3	276.6	279.2	279.9	281.2	282.5
10°	287.2	291.8	297.8	301.1	303.1	305.8	306.4	308.4
12.5°	306.4	313.0	318.4	323.7	327.0	329.6	330.3	331.0
15°	322.3	331.0	338.3	343.6	346.9	349.5	352.2	352.8
17.5°	336.9	345.5	352.8	358.8	364.1	367.4	368.8	370.1
20°	348.2	357.5	365.4	372.1	377.4	380.7	382.7	383.4
22.5°	356.2	366.1	374.7	382.0	386.7	391.3	393.3	394.6
25°	360.8	371.4	380.7	388.0	394.0	397.9	400.6	401.3
27.5°	362.1	373.4	382.7	390.6	396.6	400.6	403.2	404.6
30°	360.8	372.1	382.0	390.0	396.0	399.9	402.6	403.9
32.5°	356.2	367.4	377.4	385.3	391.3	395.3	397.3	398.6
35°	348.9	360.1	370.1	377.4	382.7	387.3	389.3	390.6
37.5°	340.2	350.9	359.5	366.8	371.4	375.4	378.0	378.7
40°	329.0	338.9	346.9	354.2	358.8	362.1	364.1	365.4
42.5°	317.0	325.7	332.9	338.9	344.2	347.5	349.5	350.2
45°	305.1	312.4	319.0	324.3	327.6	331.0	332.3	332.9
47.5°	292.5	299.8	305.1	309.7	312.4	314.4	315.7	316.4
50°	280.6	286.5	291.2	294.5	296.5	298.5	299.8	299.8
52.5°	268.6	273.9	277.2	279.9	282.5	283.9	284.5	284.5
55°	258.0	261.3	264.6	266.0	266.6	267.3	268.6	268.6
57.5°	246.7	249.4	251.4	252.7	253.4	254.7	254.7	254.7
60°	235.5	237.4	238.1	239.4	240.1	240.8	241.4	241.4
62.5°	224.2	225.5	226.8	226.8	227.5	228.8	228.8	229.5
65°	212.2	213.6	214.2	214.9	215.6	216.2	216.9	216.9
67.5°	201.0	201.6	201.6	202.3	203.0	204.3	204.9	204.9
70°	188.4	188.4	188.4	189.0	189.7	191.0	191.7	192.3
72.5°	175.1	175.1	175.1	175.8	176.4	177.7	178.4	178.4
75°	160.5	160.5	159.8	160.5	159.8	160.5	159.8	161.2
77.5°	143.3	141.3	140.6	139.9	138.6	139.3	138.6	139.3
80°	122.0	120.0	118.1	117.4	117.4	116.7	116.1	117.4
82.5°	97.5	95.5	94.2	93.5	93.5	93.5	94.2	92.9
85°	69.6	67.7	66.3	66.3	65.0	65.0	65.0	64.3
87.5°	34.5	35.8	35.2	35.2	33.2	31.8	32.5	32.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)