

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: P188427

Luminaire Tested: **22SR-LD2-20-C-UNV-L840-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188427
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-L840-CD1-TB-U
Description: METALUX 2X2 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1296.0 lumens
Efficiency: N/A
Efficacy: 84.2 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

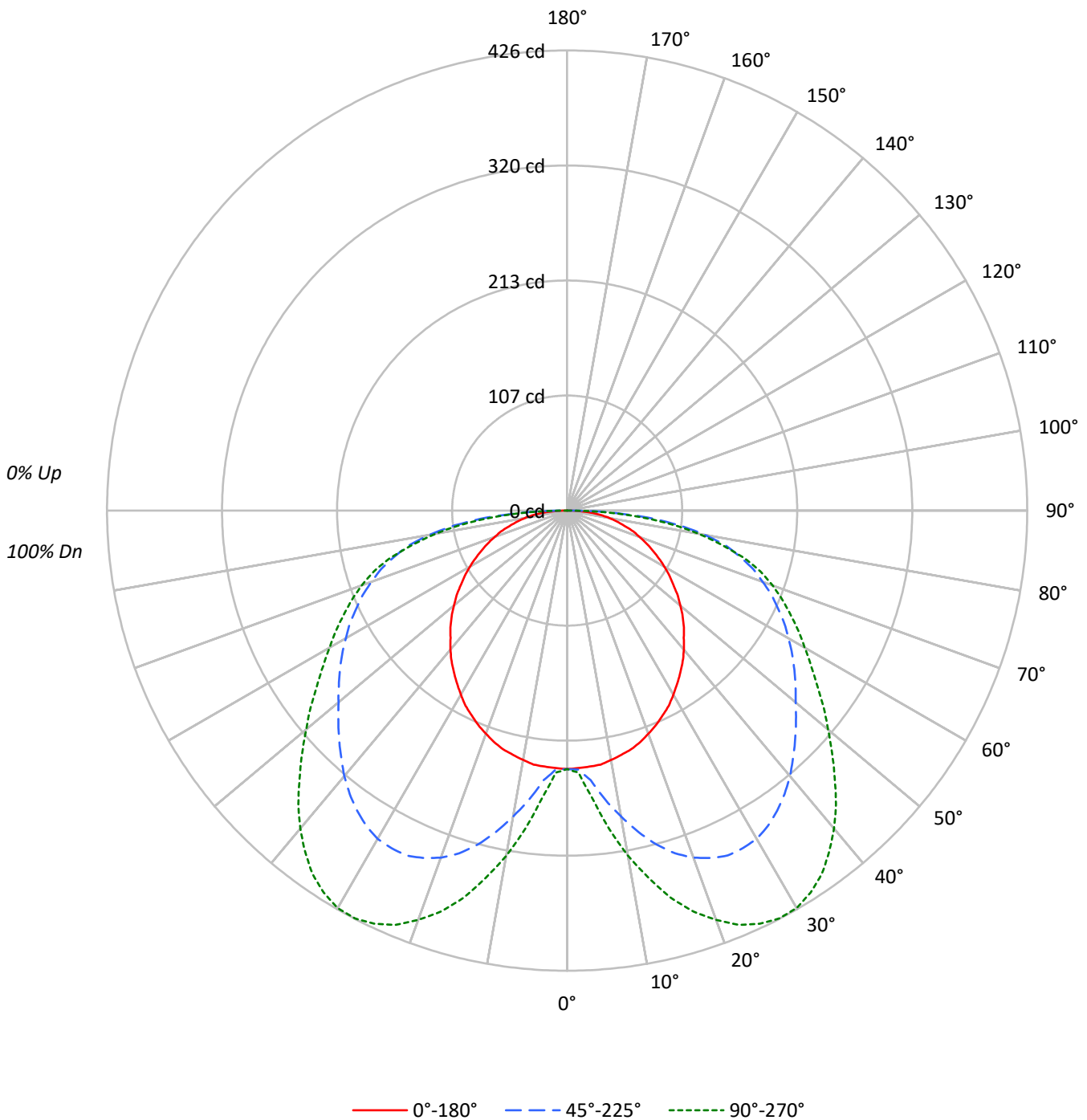
Input Watts (W): 15.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	644	644	644
5°	643	677	722
10°	640	785	886
15°	637	892	1034
20°	629	979	1155
25°	621	1046	1253
30°	611	1090	1320
35°	601	1114	1350
40°	591	1127	1350
45°	581	1136	1333
50°	572	1157	1320
55°	563	1205	1326
60°	560	1273	1367
65°	555	1373	1452
70°	560	1515	1592
75°	573	1727	1762
80°	617	2001	1914
85°	667	2306	2090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.1	1.9
10°-20°	88.1	6.8
20°-30°	154.9	12.0
30°-40°	201.0	15.5
40°-50°	215.8	16.7
50°-60°	209.4	16.2
60°-70°	189.1	14.6
70°-80°	149.0	11.5
80°-90°	63.6	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°	268.1	20.7
0°-40°	469.1	36.2
0°-60°	894.3	69.0
0°-90°	1296.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1296.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	239	239	239	239	239	
5°	238	240	250	263	267	23
15°	229	264	320	359	371	64
25°	209	274	352	404	422	96
35°	183	258	339	393	411	114
45°	153	226	299	338	350	118
55°	120	194	257	279	283	108
65°	87	161	216	226	228	87
75°	55	121	166	168	170	59
85°	22	54	75	70	68	23
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°	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3
2.5°	238.6	238.6	238.6	238.6	239.3	238.6	239.3	240.0	240.0	240.0	240.7
5°	237.9	238.6	238.6	238.6	239.3	240.7	242.1	244.9	248.4	250.5	253.3
7.5°	237.2	237.2	237.2	238.6	241.4	246.3	251.9	258.1	264.4	270.0	275.6
10°	234.4	235.1	235.8	240.0	246.3	254.7	263.7	272.8	279.8	287.4	295.1
12.5°	231.6	232.3	235.1	242.1	252.6	263.7	274.2	285.4	296.5	304.9	314.7
15°	228.8	229.5	233.7	244.9	258.1	270.7	284.0	297.2	308.4	320.2	330.7
17.5°	224.7	225.4	232.3	247.0	261.6	277.0	291.6	307.0	320.2	332.8	344.0
20°	219.8	221.2	230.2	247.0	263.7	280.5	297.2	313.3	327.9	341.9	355.1
22.5°	214.9	217.0	228.1	247.0	265.1	283.3	301.4	318.1	333.5	348.1	362.1
25°	209.3	211.4	225.4	245.6	264.4	283.3	302.8	320.2	336.3	352.3	366.3
27.5°	203.7	206.5	221.9	242.1	262.3	281.9	301.4	319.5	336.3	352.3	367.7
30°	196.7	200.2	217.7	238.6	258.8	279.1	298.6	317.5	334.2	350.9	365.6
32.5°	189.8	194.0	212.1	233.0	254.0	274.2	293.7	312.6	329.3	346.1	361.4
35°	182.8	187.7	206.5	227.4	248.4	267.9	287.4	306.3	323.0	339.1	354.4
37.5°	175.8	180.7	199.5	220.5	241.4	260.9	279.8	297.9	315.4	330.7	345.4
40°	168.1	173.7	193.3	213.5	233.7	253.3	271.4	289.5	305.6	320.9	334.2
42.5°	159.8	166.7	185.6	205.8	225.4	244.2	262.3	279.8	295.8	309.8	322.3
45°	152.8	159.1	177.9	198.1	217.0	235.8	254.0	270.7	285.4	298.6	310.5
47.5°	145.1	152.1	170.2	190.5	209.3	226.8	244.9	260.2	274.9	287.4	298.6
50°	136.7	145.1	162.6	182.1	201.6	219.1	236.5	251.2	265.1	276.3	286.8
52.5°	129.1	137.4	155.6	174.4	193.3	211.4	226.8	242.1	255.4	266.5	275.6
55°	120.0	130.5	147.9	166.7	184.9	203.0	219.1	233.7	246.3	256.8	265.1
57.5°	112.3	122.8	140.2	159.1	177.2	194.7	210.7	224.7	237.2	247.0	254.0
60°	104.0	115.1	132.6	151.4	168.8	186.3	202.3	216.3	227.4	236.5	243.5
62.5°	95.6	107.4	124.9	143.0	160.5	177.9	194.0	207.2	217.7	226.8	232.3
65°	87.2	99.1	117.2	134.7	152.1	169.5	184.2	197.4	207.9	215.6	221.2
67.5°	79.5	91.4	108.8	125.6	143.7	159.8	175.1	187.7	197.4	205.1	209.3
70°	71.2	83.7	99.8	116.5	134.0	150.0	164.7	176.5	186.3	192.6	196.7
72.5°	64.2	75.4	90.7	106.7	123.5	139.5	153.5	166.1	174.4	180.7	183.5
75°	55.1	67.0	81.6	97.0	113.0	128.4	141.6	152.8	161.2	166.1	168.8
77.5°	47.4	59.3	72.6	85.8	101.2	115.8	128.4	138.8	146.5	150.7	152.1
80°	39.8	49.5	61.4	74.0	87.2	100.5	112.3	121.4	127.7	129.1	129.8
82.5°	31.4	39.1	48.8	60.0	71.2	81.6	92.1	98.4	104.0	104.7	104.7
85°	21.6	26.5	33.5	41.2	49.5	58.6	66.3	71.2	73.3	74.7	74.7
87.5°	11.2	13.3	16.7	19.5	24.4	30.7	34.9	35.6	37.7	38.4	39.8
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°	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3
2.5°	241.4	241.4	242.1	242.1	242.1	242.8	242.8	242.8
5°	256.8	258.8	261.6	264.4	265.1	267.2	267.2	267.2
7.5°	279.1	283.3	287.4	290.9	293.7	294.4	295.8	297.2
10°	302.1	307.0	313.3	316.8	318.8	321.6	322.3	324.4
12.5°	322.3	329.3	334.9	340.5	344.0	346.8	347.5	348.1
15°	339.1	348.1	355.8	361.4	364.9	367.7	370.5	371.2
17.5°	354.4	363.5	371.2	377.5	383.0	386.5	387.9	389.3
20°	366.3	376.1	384.4	391.4	397.0	400.5	402.6	403.3
22.5°	374.7	385.1	394.2	401.9	406.8	411.6	413.7	415.1
25°	379.5	390.7	400.5	408.2	414.4	418.6	421.4	422.1
27.5°	380.9	392.8	402.6	410.9	417.2	421.4	424.2	425.6
30°	379.5	391.4	401.9	410.2	416.5	420.7	423.5	424.9
32.5°	374.7	386.5	397.0	405.4	411.6	415.8	417.9	419.3
35°	367.0	378.8	389.3	397.0	402.6	407.5	409.5	410.9
37.5°	357.9	369.1	378.2	385.8	390.7	394.9	397.7	398.4
40°	346.1	356.5	364.9	372.6	377.5	380.9	383.0	384.4
42.5°	333.5	342.6	350.2	356.5	362.1	365.6	367.7	368.4
45°	320.9	328.6	335.6	341.2	344.7	348.1	349.5	350.2
47.5°	307.7	315.4	320.9	325.8	328.6	330.7	332.1	332.8
50°	295.1	301.4	306.3	309.8	311.9	314.0	315.4	315.4
52.5°	282.6	288.1	291.6	294.4	297.2	298.6	299.3	299.3
55°	271.4	274.9	278.4	279.8	280.5	281.2	282.6	282.6
57.5°	259.5	262.3	264.4	265.8	266.5	267.9	267.9	267.9
60°	247.7	249.8	250.5	251.9	252.6	253.3	254.0	254.0
62.5°	235.8	237.2	238.6	238.6	239.3	240.7	240.7	241.4
65°	223.3	224.7	225.4	226.1	226.8	227.4	228.1	228.1
67.5°	211.4	212.1	212.1	212.8	213.5	214.9	215.6	215.6
70°	198.1	198.1	198.1	198.8	199.5	200.9	201.6	202.3
72.5°	184.2	184.2	184.2	184.9	185.6	187.0	187.7	187.7
75°	168.8	168.8	168.1	168.8	168.1	168.8	168.1	169.5
77.5°	150.7	148.6	147.9	147.2	145.8	146.5	145.8	146.5
80°	128.4	126.3	124.2	123.5	123.5	122.8	122.1	123.5
82.5°	102.6	100.5	99.1	98.4	98.4	98.4	99.1	97.7
85°	73.3	71.2	69.8	69.8	68.4	68.4	68.4	67.7
87.5°	36.3	37.7	37.0	37.0	34.9	33.5	34.2	34.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)