

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: P188433

Luminaire Tested: **22SR-LD2-19-C-UNV-L830-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188433
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-LD2-19-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: 1177.0 lumens
Efficiency: N/A
Efficacy: 80.1 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

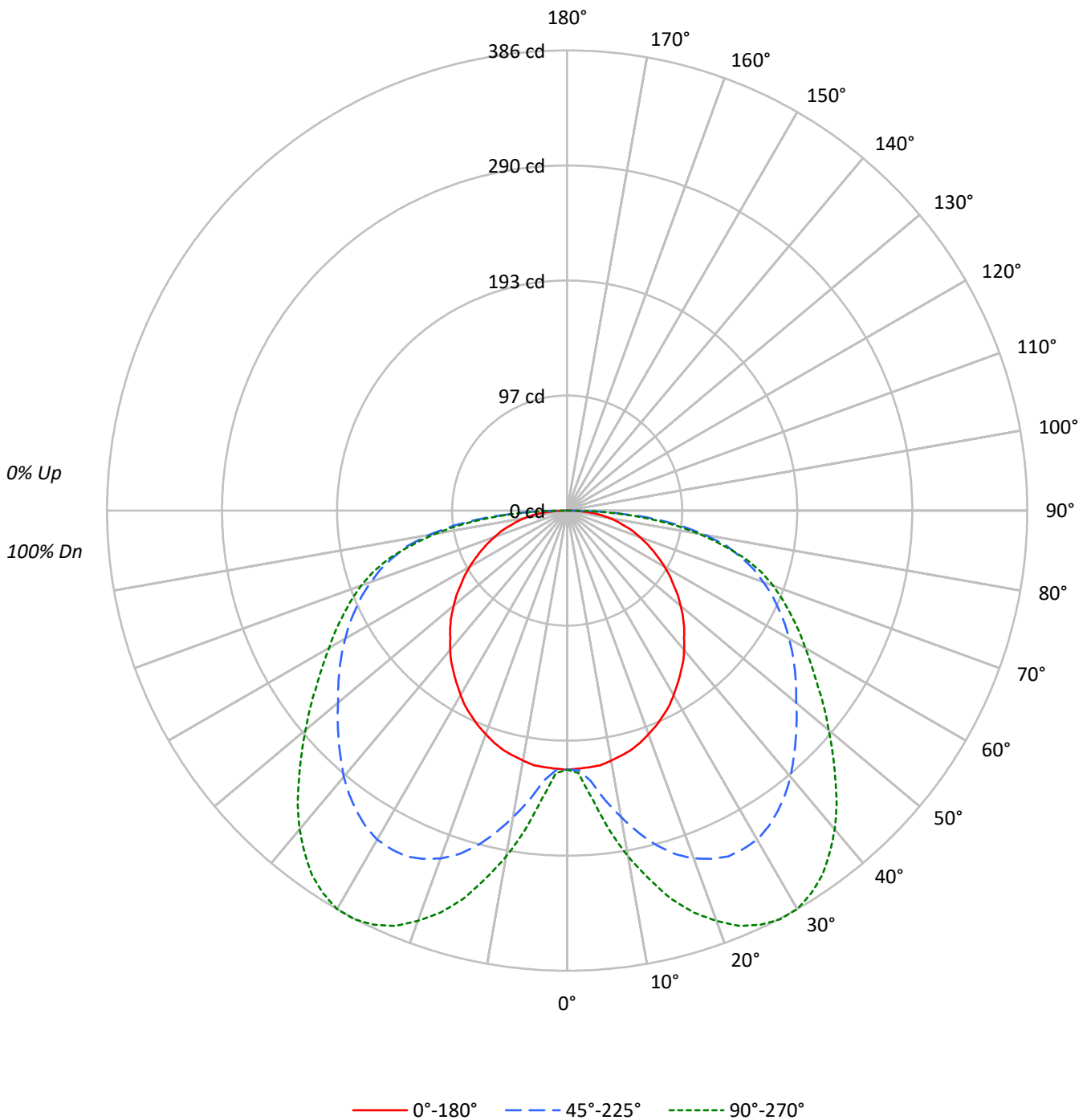
Input Watts (W): 14.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	585	585	585
5°	584	615	656
10°	582	713	805
15°	579	810	939
20°	572	889	1049
25°	564	950	1138
30°	555	990	1199
35°	545	1011	1226
40°	536	1024	1226
45°	528	1032	1211
50°	520	1050	1199
55°	511	1094	1204
60°	508	1156	1241
65°	504	1247	1319
70°	508	1376	1446
75°	521	1568	1601
80°	559	1816	1739
85°	605	2093	1899



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.8	1.9
10°-20°	80.0	6.8
20°-30°	140.7	12.0
30°-40°	182.6	15.5
40°-50°	196.0	16.7
50°-60°	190.1	16.2
60°-70°	171.8	14.6
70°-80°	135.3	11.5
80°-90°	57.7	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°	243.5	20.7
0°-40°	426.0	36.2
0°-60°	812.2	69.0
0°-90°	1177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1177.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	217	217	217	217	217	
5°	216	218	228	239	243	21
15°	208	240	291	326	337	59
25°	190	249	320	367	383	88
35°	166	234	308	357	373	104
45°	139	206	271	307	318	107
55°	109	176	233	253	257	98
65°	79	146	196	205	207	79
75°	50	110	151	153	154	53
85°	20	49	68	63	62	21
90°	0	0	0	0	0	



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CATALOG NUMBER: 22SR-LD2-19-C-UNV-L830-CD1-TB-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	217.3	217.3	217.3	217.3	217.3	217.3	217.3	217.3	217.3	217.3	217.3
2.5°	216.7	216.7	216.7	216.7	217.3	216.7	217.3	218.0	218.0	218.0	218.6
5°	216.1	216.7	216.7	216.7	217.3	218.6	219.9	222.4	225.6	227.5	230.0
7.5°	215.4	215.4	215.4	216.7	219.2	223.7	228.7	234.4	240.1	245.2	250.3
10°	212.9	213.5	214.2	218.0	223.7	231.3	239.5	247.7	254.1	261.1	268.0
12.5°	210.4	211.0	213.5	219.9	229.4	239.5	249.0	259.2	269.3	276.9	285.8
15°	207.8	208.5	212.3	222.4	234.4	245.8	257.9	269.9	280.1	290.8	300.3
17.5°	204.0	204.7	211.0	224.3	237.6	251.6	264.9	278.8	290.8	302.2	312.4
20°	199.6	200.9	209.1	224.3	239.5	254.7	269.9	284.5	297.8	310.5	322.5
22.5°	195.2	197.1	207.2	224.3	240.8	257.3	273.7	288.9	302.9	316.2	328.9
25°	190.1	192.0	204.7	223.0	240.1	257.3	275.0	290.8	305.4	320.0	332.7
27.5°	185.0	187.6	201.5	219.9	238.2	256.0	273.7	290.2	305.4	320.0	333.9
30°	178.7	181.9	197.7	216.7	235.1	253.5	271.2	288.3	303.5	318.7	332.0
32.5°	172.3	176.1	192.6	211.6	230.6	249.0	266.8	283.9	299.1	314.3	328.2
35°	166.0	170.4	187.6	206.6	225.6	243.3	261.1	278.2	293.4	307.9	321.9
37.5°	159.7	164.1	181.2	200.2	219.2	237.0	254.1	270.6	286.4	300.3	313.6
40°	152.7	157.8	175.5	193.9	212.3	230.0	246.5	263.0	277.5	291.5	303.5
42.5°	145.1	151.4	168.5	186.9	204.7	221.8	238.2	254.1	268.7	281.3	292.7
45°	138.8	144.5	161.6	180.0	197.1	214.2	230.6	245.8	259.2	271.2	282.0
47.5°	131.8	138.1	154.6	173.0	190.1	205.9	222.4	236.3	249.7	261.1	271.2
50°	124.2	131.8	147.6	165.4	183.1	199.0	214.8	228.1	240.8	250.9	260.4
52.5°	117.2	124.8	141.3	158.4	175.5	192.0	205.9	219.9	231.9	242.0	250.3
55°	109.0	118.5	134.3	151.4	167.9	184.4	199.0	212.3	223.7	233.2	240.8
57.5°	102.0	111.5	127.4	144.5	160.9	176.8	191.4	204.0	215.4	224.3	230.6
60°	94.4	104.5	120.4	137.5	153.3	169.2	183.8	196.4	206.6	214.8	221.1
62.5°	86.8	97.6	113.4	129.9	145.7	161.6	176.1	188.2	197.7	205.9	211.0
65°	79.2	90.0	106.5	122.3	138.1	154.0	167.3	179.3	188.8	195.8	200.9
67.5°	72.2	83.0	98.8	114.1	130.5	145.1	159.0	170.4	179.3	186.3	190.1
70°	64.6	76.0	90.6	105.8	121.7	136.2	149.5	160.3	169.2	174.9	178.7
72.5°	58.3	68.4	82.4	96.9	112.2	126.7	139.4	150.8	158.4	164.1	166.6
75°	50.1	60.8	74.1	88.1	102.6	116.6	128.6	138.8	146.4	150.8	153.3
77.5°	43.1	53.9	65.9	77.9	91.9	105.2	116.6	126.1	133.1	136.9	138.1
80°	36.1	45.0	55.8	67.2	79.2	91.2	102.0	110.3	116.0	117.2	117.9
82.5°	28.5	35.5	44.4	54.5	64.6	74.1	83.6	89.3	94.4	95.0	95.0
85°	19.6	24.1	30.4	37.4	45.0	53.2	60.2	64.6	66.5	67.8	67.8
87.5°	10.1	12.0	15.2	17.7	22.2	27.9	31.7	32.3	34.2	34.8	36.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188433

CATALOG NUMBER: 22SR-LD2-19-C-UNV-L830-CD1-TB-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	217.3	217.3	217.3	217.3	217.3	217.3	217.3	217.3
2.5°	219.2	219.2	219.9	219.9	219.9	220.5	220.5	220.5
5°	233.2	235.1	237.6	240.1	240.8	242.7	242.7	242.7
7.5°	253.5	257.3	261.1	264.2	266.8	267.4	268.7	269.9
10°	274.4	278.8	284.5	287.7	289.6	292.1	292.7	294.6
12.5°	292.7	299.1	304.1	309.2	312.4	314.9	315.5	316.2
15°	307.9	316.2	323.2	328.2	331.4	333.9	336.5	337.1
17.5°	321.9	330.1	337.1	342.8	347.9	351.0	352.3	353.6
20°	332.7	341.5	349.1	355.5	360.5	363.7	365.6	366.2
22.5°	340.3	349.8	358.0	365.0	369.4	373.8	375.7	377.0
25°	344.7	354.8	363.7	370.7	376.4	380.2	382.7	383.3
27.5°	346.0	356.7	365.6	373.2	378.9	382.7	385.2	386.5
30°	344.7	355.5	365.0	372.6	378.3	382.1	384.6	385.9
32.5°	340.3	351.0	360.5	368.1	373.8	377.6	379.5	380.8
35°	333.3	344.1	353.6	360.5	365.6	370.0	371.9	373.2
37.5°	325.1	335.2	343.4	350.4	354.8	358.6	361.2	361.8
40°	314.3	323.8	331.4	338.4	342.8	346.0	347.9	349.1
42.5°	302.9	311.1	318.1	323.8	328.9	332.0	333.9	334.6
45°	291.5	298.4	304.8	309.8	313.0	316.2	317.4	318.1
47.5°	279.4	286.4	291.5	295.9	298.4	300.3	301.6	302.2
50°	268.0	273.7	278.2	281.3	283.2	285.1	286.4	286.4
52.5°	256.6	261.7	264.9	267.4	269.9	271.2	271.8	271.8
55°	246.5	249.7	252.8	254.1	254.7	255.4	256.6	256.6
57.5°	235.7	238.2	240.1	241.4	242.0	243.3	243.3	243.3
60°	224.9	226.8	227.5	228.7	229.4	230.0	230.6	230.6
62.5°	214.2	215.4	216.7	216.7	217.3	218.6	218.6	219.2
65°	202.8	204.0	204.7	205.3	205.9	206.6	207.2	207.2
67.5°	192.0	192.6	192.6	193.3	193.9	195.2	195.8	195.8
70°	180.0	180.0	180.0	180.6	181.2	182.5	183.1	183.8
72.5°	167.3	167.3	167.3	167.9	168.5	169.8	170.4	170.4
75°	153.3	153.3	152.7	153.3	152.7	153.3	152.7	154.0
77.5°	136.9	135.0	134.3	133.7	132.4	133.1	132.4	133.1
80°	116.6	114.7	112.8	112.2	112.2	111.5	110.9	112.2
82.5°	93.1	91.2	90.0	89.3	89.3	89.3	90.0	88.7
85°	66.5	64.6	63.4	63.4	62.1	62.1	62.1	61.5
87.5°	32.9	34.2	33.6	33.6	31.7	30.4	31.0	31.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)