

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: P188416

Luminaire Tested: **22SR-LD2-29-C-UNV-L840-CD1-TB-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188416  
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-LD2-29-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: 1904.1 lumens  
Efficiency: N/A  
Efficacy: 81.4 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

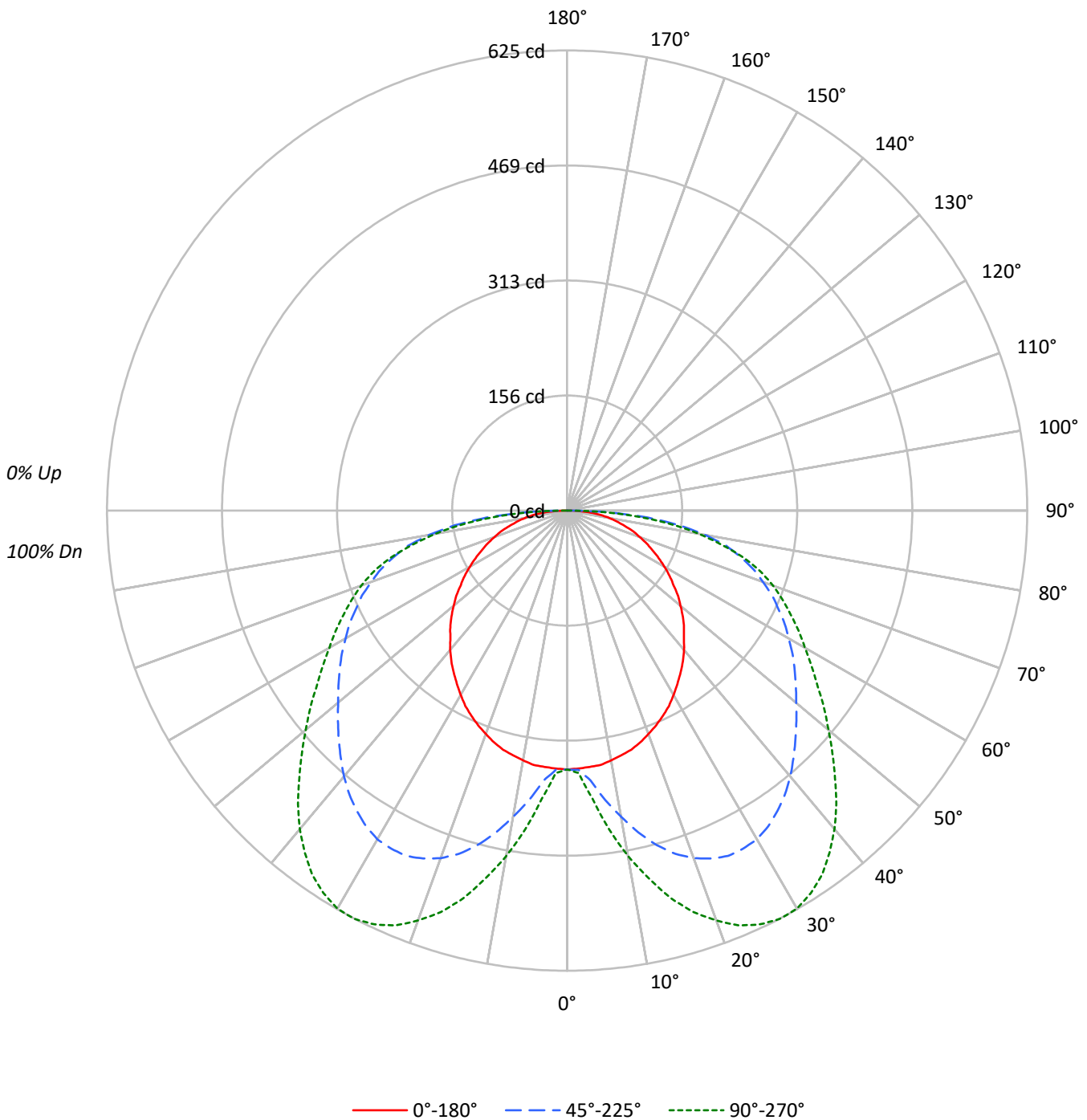
Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	106	101	95	91	104	98	93	89	94	90	86	90	87	84	86	84	81	79					79			
2	95	86	78	71	93	84	77	70	80	74	69	77	72	67	74	69	66	63					63			
3	86	74	65	58	83	73	64	57	69	62	56	67	60	55	64	59	54	52					52			
4	78	65	55	48	76	64	54	47	61	53	47	59	52	46	56	50	45	43					43			
5	72	58	48	40	69	56	47	40	54	46	40	52	45	39	50	44	39	36					36			
6	66	51	42	35	64	50	41	35	49	40	34	47	39	34	45	39	34	31					31			
7	61	46	37	30	59	45	37	30	44	36	30	42	35	30	41	34	29	27					27			
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24					24			
9	53	38	30	24	51	38	29	24	37	29	24	35	28	23	34	28	23	21					21			
10	49	35	27	21	48	35	27	21	34	26	21	33	26	21	32	25	21	19					19			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	946	946	946
5°	944	994	1061
10°	941	1154	1302
15°	937	1311	1519
20°	925	1438	1697
25°	913	1537	1841
30°	898	1602	1940
35°	882	1637	1983
40°	868	1656	1984
45°	854	1670	1958
50°	841	1699	1940
55°	827	1770	1947
60°	822	1870	2008
65°	816	2017	2134
70°	823	2226	2339
75°	842	2537	2590
80°	905	2938	2811
85°	982	3387	3069



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.8	1.9
10°-20°	129.4	6.8
20°-30°	227.6	12.0
30°-40°	295.3	15.5
40°-50°	317.0	16.7
50°-60°	307.6	16.2
60°-70°	277.9	14.6
70°-80°	218.9	11.5
80°-90°	93.4	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°	393.8	20.7
0°-40°	689.2	36.2
0°-60°	1313.8	69.0
0°-90°	1904.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1904.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	352	352	352	352	352	
5°	350	353	368	386	393	33
15°	336	388	470	527	545	95
25°	308	402	518	594	620	142
35°	269	379	498	578	604	168
45°	224	333	439	497	515	173
55°	176	285	377	410	415	158
65°	128	236	317	332	335	127
75°	81	177	244	248	249	86
85°	32	79	110	102	99	34
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°	351.6	351.6	351.6	351.6	351.6	351.6	351.6	351.6	351.6	351.6	351.6
2.5°	350.6	350.6	350.6	350.6	351.6	350.6	351.6	352.6	352.6	352.6	353.6
5°	349.5	350.6	350.6	350.6	351.6	353.6	355.7	359.8	364.9	368.0	372.1
7.5°	348.5	348.5	348.5	350.6	354.7	361.8	370.0	379.3	388.5	396.7	404.9
10°	344.4	345.4	346.5	352.6	361.8	374.1	387.5	400.8	411.0	422.3	433.6
12.5°	340.3	341.3	345.4	355.7	371.1	387.5	402.8	419.2	435.6	447.9	462.3
15°	336.2	337.2	343.4	359.8	379.3	397.7	417.2	436.7	453.1	470.5	485.9
17.5°	330.1	331.1	341.3	362.9	384.4	406.9	428.5	451.0	470.5	488.9	505.3
20°	322.9	324.9	338.3	362.9	387.5	412.1	436.7	460.2	481.8	502.3	521.7
22.5°	315.7	318.8	335.2	362.9	389.5	416.2	442.8	467.4	490.0	511.5	532.0
25°	307.5	310.6	331.1	360.8	388.5	416.2	444.9	470.5	494.1	517.6	538.1
27.5°	299.3	303.4	326.0	355.7	385.4	414.1	442.8	469.5	494.1	517.6	540.2
30°	289.1	294.2	319.8	350.6	380.3	410.0	438.7	466.4	491.0	515.6	537.1
32.5°	278.8	285.0	311.6	342.4	373.1	402.8	431.5	459.2	483.8	508.4	531.0
35°	268.6	275.7	303.4	334.2	364.9	393.6	422.3	450.0	474.6	498.2	520.7
37.5°	258.3	265.5	293.2	323.9	354.7	383.4	411.0	437.7	463.3	485.9	507.4
40°	247.0	255.2	283.9	313.7	343.4	372.1	398.7	425.4	449.0	471.5	491.0
42.5°	234.7	245.0	272.7	302.4	331.1	358.8	385.4	411.0	434.6	455.1	473.6
45°	224.5	233.7	261.4	291.1	318.8	346.5	373.1	397.7	419.2	438.7	456.1
47.5°	213.2	223.5	250.1	279.8	307.5	333.1	359.8	382.3	403.9	422.3	438.7
50°	200.9	213.2	238.8	267.5	296.2	321.9	347.5	369.0	389.5	405.9	421.3
52.5°	189.6	201.9	228.6	256.3	283.9	310.6	333.1	355.7	375.2	391.6	404.9
55°	176.3	191.7	217.3	245.0	271.6	298.3	321.9	343.4	361.8	377.2	389.5
57.5°	165.0	180.4	206.0	233.7	260.4	286.0	309.6	330.1	348.5	362.9	373.1
60°	152.7	169.1	194.8	222.4	248.1	273.7	297.3	317.8	334.2	347.5	357.7
62.5°	140.4	157.9	183.5	210.1	235.8	261.4	285.0	304.4	319.8	333.1	341.3
65°	128.1	145.6	172.2	197.8	223.5	249.1	270.6	290.1	305.5	316.7	324.9
67.5°	116.9	134.3	159.9	184.5	211.2	234.7	257.3	275.7	290.1	301.4	307.5
70°	104.6	123.0	146.6	171.2	196.8	220.4	241.9	259.3	273.7	282.9	289.1
72.5°	94.3	110.7	133.3	156.8	181.4	205.0	225.5	244.0	256.3	265.5	269.6
75°	81.0	98.4	119.9	142.5	166.1	188.6	208.1	224.5	236.8	244.0	248.1
77.5°	69.7	87.1	106.6	126.1	148.6	170.2	188.6	204.0	215.3	221.4	223.5
80°	58.4	72.8	90.2	108.7	128.1	147.6	165.0	178.4	187.6	189.6	190.7
82.5°	46.1	57.4	71.8	88.2	104.6	119.9	135.3	144.5	152.7	153.8	153.8
85°	31.8	39.0	49.2	60.5	72.8	86.1	97.4	104.6	107.6	109.7	109.7
87.5°	16.4	19.5	24.6	28.7	35.9	45.1	51.3	52.3	55.4	56.4	58.4
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°	351.6	351.6	351.6	351.6	351.6	351.6	351.6	351.6
2.5°	354.7	354.7	355.7	355.7	355.7	356.7	356.7	356.7
5°	377.2	380.3	384.4	388.5	389.5	392.6	392.6	392.6
7.5°	410.0	416.2	422.3	427.4	431.5	432.6	434.6	436.7
10°	443.8	451.0	460.2	465.4	468.4	472.5	473.6	476.6
12.5°	473.6	483.8	492.0	500.2	505.3	509.4	510.5	511.5
15°	498.2	511.5	522.8	531.0	536.1	540.2	544.3	545.3
17.5°	520.7	534.0	545.3	554.5	562.7	567.9	569.9	572.0
20°	538.1	552.5	564.8	575.0	583.2	588.4	591.4	592.5
22.5°	550.4	565.8	579.1	590.4	597.6	604.8	607.8	609.9
25°	557.6	574.0	588.4	599.6	608.9	615.0	619.1	620.1
27.5°	559.7	577.1	591.4	603.7	613.0	619.1	623.2	625.3
30°	557.6	575.0	590.4	602.7	611.9	618.1	622.2	624.2
32.5°	550.4	567.9	583.2	595.5	604.8	610.9	614.0	616.0
35°	539.2	556.6	572.0	583.2	591.4	598.6	601.7	603.7
37.5°	525.8	542.2	555.6	566.8	574.0	580.2	584.3	585.3
40°	508.4	523.8	536.1	547.4	554.5	559.7	562.7	564.8
42.5°	490.0	503.3	514.6	523.8	532.0	537.1	540.2	541.2
45°	471.5	482.8	493.0	501.2	506.4	511.5	513.5	514.6
47.5°	452.0	463.3	471.5	478.7	482.8	485.9	487.9	488.9
50°	433.6	442.8	450.0	455.1	458.2	461.3	463.3	463.3
52.5°	415.1	423.3	428.5	432.6	436.7	438.7	439.7	439.7
55°	398.7	403.9	409.0	411.0	412.1	413.1	415.1	415.1
57.5°	381.3	385.4	388.5	390.5	391.6	393.6	393.6	393.6
60°	363.9	367.0	368.0	370.0	371.1	372.1	373.1	373.1
62.5°	346.5	348.5	350.6	350.6	351.6	353.6	353.6	354.7
65°	328.0	330.1	331.1	332.1	333.1	334.2	335.2	335.2
67.5°	310.6	311.6	311.6	312.6	313.7	315.7	316.7	316.7
70°	291.1	291.1	291.1	292.1	293.2	295.2	296.2	297.3
72.5°	270.6	270.6	270.6	271.6	272.7	274.7	275.7	275.7
75°	248.1	248.1	247.0	248.1	247.0	248.1	247.0	249.1
77.5°	221.4	218.3	217.3	216.3	214.2	215.3	214.2	215.3
80°	188.6	185.5	182.5	181.4	181.4	180.4	179.4	181.4
82.5°	150.7	147.6	145.6	144.5	144.5	144.5	145.6	143.5
85°	107.6	104.6	102.5	102.5	100.5	100.5	100.5	99.4
87.5°	53.3	55.4	54.3	54.3	51.3	49.2	50.2	50.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)