

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: P188699

Luminaire Tested: **24SR-LD2-48-C-UNV-L840-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188699
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33587)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-48-C-UNV-L840-CD1-TB-U
Description: METALUX 2X4 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: 3235.0 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 2.07 / 1.9
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

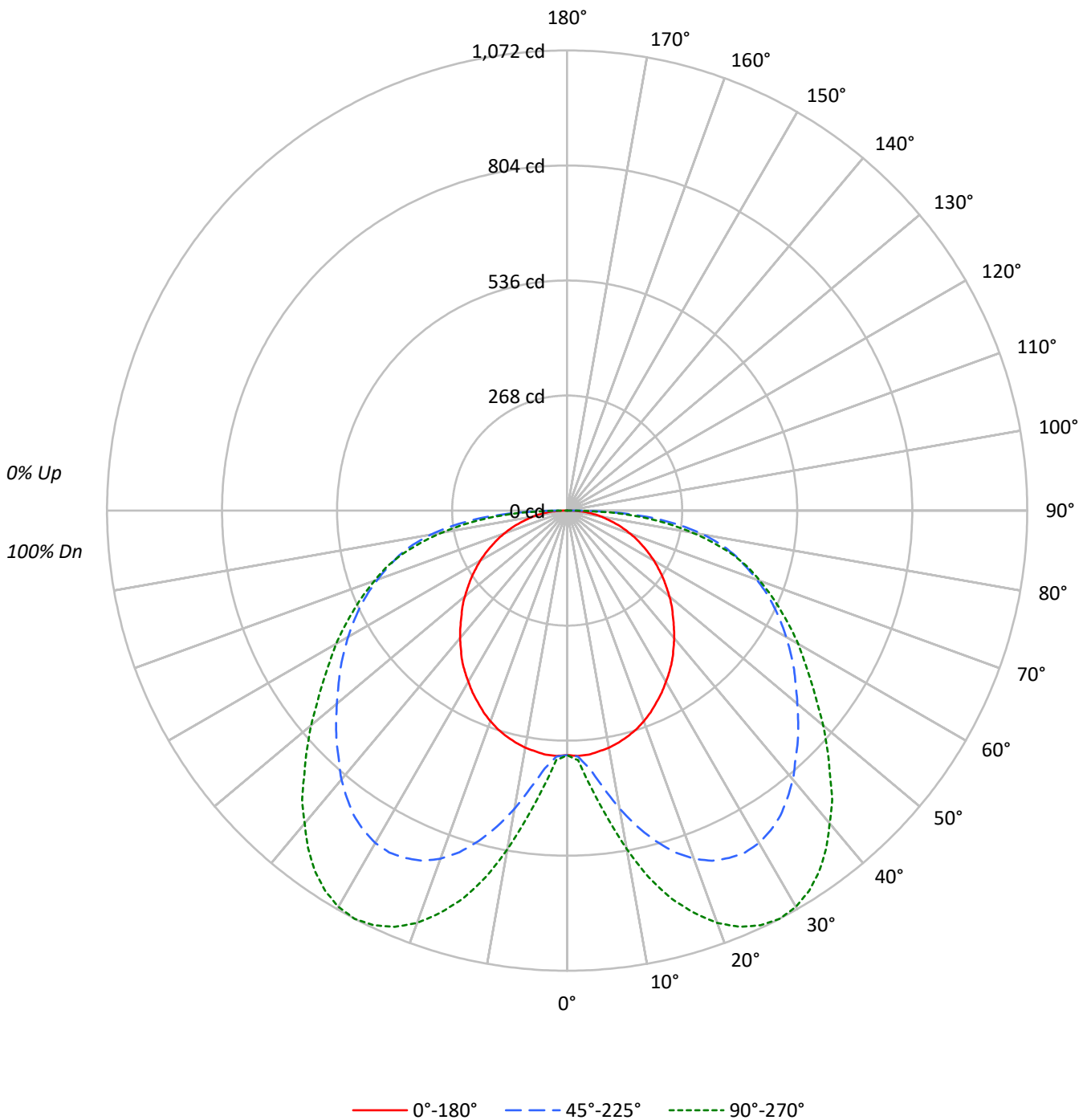
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	100	95	91	103	98	93	89	94	90	86	90	86	83	86	83	81	79					79			
2	95	86	78	71	93	84	77	70	80	74	69	77	72	67	74	69	65	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°	766	766	766
5°	771	815	877
10°	766	963	1094
15°	759	1110	1303
20°	748	1236	1464
25°	731	1326	1582
30°	715	1389	1656
35°	701	1424	1683
40°	681	1437	1671
45°	663	1446	1647
50°	651	1465	1630
55°	639	1514	1628
60°	629	1586	1673
65°	618	1695	1746
70°	612	1849	1878
75°	608	2108	2088
80°	626	2505	2294
85°	692	3111	2688



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	1.9
10°-20°	219.1	6.8
20°-30°	390.2	12.1
30°-40°	506.0	15.6
40°-50°	539.5	16.7
50°-60°	519.0	16.0
60°-70°	464.4	14.4
70°-80°	365.6	11.3
80°-90°	170.5	5.3
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°	670.0	20.7
0°-40°	1175.9	36.4
0°-60°	2234.5	69.1
0°-90°	3235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3235.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	571	578	603	635	649	54
15°	545	648	797	901	935	154
25°	492	688	893	1027	1066	227
35°	427	655	867	991	1025	266
45°	348	571	760	848	866	270
55°	272	491	645	688	694	243
65°	194	416	532	543	548	193
75°	117	320	405	400	402	124
85°	45	170	202	179	174	47
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°	569.6	569.6	569.6	569.6	569.6	569.6	569.6	569.6	569.6	569.6	569.6
2.5°	572.1	572.1	570.8	570.8	572.1	572.1	572.1	572.1	573.3	573.3	574.5
5°	570.8	569.6	569.6	572.1	575.8	579.5	583.2	589.5	594.4	603.1	610.6
7.5°	565.8	565.8	568.3	574.5	583.2	595.7	609.4	624.3	638.0	651.6	667.8
10°	560.9	560.9	567.1	578.3	595.7	618.1	640.5	662.8	684.0	705.1	722.5
12.5°	553.4	554.6	564.6	584.5	613.1	644.2	672.8	701.4	730.0	753.6	779.7
15°	544.7	547.2	562.1	592.0	629.3	666.6	701.4	736.2	768.5	797.1	824.5
17.5°	534.7	538.5	559.6	598.2	641.7	684.0	727.5	767.3	802.1	834.5	865.5
20°	522.3	528.5	557.1	603.1	651.6	700.1	746.2	788.4	828.2	863.1	897.9
22.5°	508.6	516.1	552.2	604.4	657.9	710.1	761.1	804.6	846.9	883.0	919.0
25°	492.5	503.7	547.2	603.1	660.4	716.3	768.5	813.3	856.8	892.9	932.7
27.5°	477.5	490.0	538.5	598.2	657.9	716.3	768.5	815.8	860.6	897.9	936.4
30°	460.1	476.3	529.8	590.7	651.6	710.1	763.6	810.8	854.4	894.1	933.9
32.5°	444.0	461.4	516.1	578.3	640.5	698.9	753.6	799.6	843.2	883.0	921.5
35°	426.6	444.0	501.2	565.8	625.5	684.0	736.2	783.5	825.8	866.8	902.9
37.5°	406.7	426.6	485.0	548.4	606.9	665.3	716.3	762.3	804.6	843.2	878.0
40°	388.0	409.1	466.4	529.8	588.2	644.2	693.9	737.5	778.5	818.3	849.4
42.5°	368.1	390.5	448.9	509.9	567.1	620.6	667.8	712.6	752.4	787.2	818.3
45°	348.2	373.1	430.3	490.0	544.7	598.2	645.4	686.5	725.0	759.8	786.0
47.5°	330.8	355.7	410.4	470.1	524.8	575.8	621.8	661.6	698.9	730.0	756.1
50°	310.9	335.8	391.7	450.2	503.7	554.6	598.2	636.7	671.5	700.1	725.0
52.5°	291.0	318.4	373.1	431.5	485.0	533.5	577.0	614.3	645.4	671.5	692.7
55°	272.3	299.7	355.7	412.9	466.4	514.9	555.9	592.0	621.8	645.4	661.6
57.5°	252.5	282.3	339.5	396.7	448.9	495.0	536.0	569.6	596.9	616.8	630.5
60°	233.8	264.9	323.3	379.3	431.5	477.5	516.1	548.4	572.1	589.5	600.7
62.5°	213.9	247.5	305.9	361.9	412.9	458.9	495.0	524.8	547.2	560.9	568.3
65°	194.0	230.1	288.5	344.5	394.2	437.7	472.6	499.9	519.8	532.3	538.5
67.5°	175.3	212.7	271.1	325.8	374.3	415.4	448.9	475.1	492.5	502.4	504.9
70°	155.5	194.0	252.5	305.9	353.2	391.7	424.1	446.5	462.6	470.1	472.6
72.5°	136.8	175.3	232.6	284.8	329.6	365.6	396.7	419.1	432.8	437.7	437.7
75°	116.9	155.5	211.4	261.2	302.2	338.3	366.9	386.8	399.2	405.4	402.9
77.5°	97.0	135.6	189.0	235.0	272.3	304.7	333.3	351.9	364.4	368.1	365.6
80°	80.8	115.7	162.9	205.2	240.0	269.9	296.0	314.6	325.8	323.3	317.1
82.5°	62.2	94.5	135.6	171.6	202.7	231.3	256.2	271.1	273.6	268.6	261.2
85°	44.8	69.6	103.2	131.8	159.2	180.3	197.7	207.7	207.7	201.5	196.5
87.5°	26.1	41.0	59.7	79.6	92.0	105.7	119.4	121.9	121.9	121.9	115.7
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°	569.6	569.6	569.6	569.6	569.6	569.6	569.6	569.6
2.5°	578.3	579.5	580.8	582.0	583.2	583.2	583.2	582.0
5°	618.1	625.5	631.7	639.2	641.7	644.2	646.7	649.2
7.5°	681.5	691.4	701.4	711.3	717.6	725.0	722.5	722.5
10°	742.4	761.1	772.3	784.7	790.9	798.4	802.1	800.9
12.5°	802.1	823.3	839.4	850.6	860.6	868.0	870.5	874.3
15°	853.1	874.3	894.1	907.8	920.3	927.7	932.7	935.2
17.5°	895.4	916.5	938.9	956.3	967.5	977.5	980.0	982.4
20°	926.5	953.8	975.0	993.6	1006.1	1016.0	1021.0	1022.2
22.5°	951.4	977.5	1001.1	1019.8	1033.4	1044.6	1049.6	1049.6
25°	965.0	992.4	1017.3	1037.2	1050.8	1060.8	1065.8	1065.8
27.5°	970.0	998.6	1022.2	1042.1	1057.1	1067.0	1070.7	1072.0
30°	966.3	994.9	1018.5	1037.2	1052.1	1060.8	1064.5	1065.8
32.5°	953.8	982.4	1004.8	1022.2	1035.9	1045.9	1049.6	1049.6
35°	933.9	960.1	982.4	999.9	1012.3	1019.8	1024.7	1024.7
37.5°	907.8	933.9	953.8	968.8	980.0	988.7	991.2	991.2
40°	878.0	900.4	919.0	933.9	943.9	950.1	952.6	951.4
42.5°	844.4	865.5	880.5	892.9	901.6	907.8	911.6	914.0
45°	809.6	829.5	843.2	853.1	859.3	863.1	866.8	865.5
47.5°	778.5	790.9	803.4	810.8	817.0	820.8	822.0	822.0
50°	742.4	753.6	763.6	769.8	773.5	776.0	776.0	778.5
52.5°	706.4	716.3	723.8	730.0	732.5	733.7	735.0	733.7
55°	674.0	680.2	685.2	690.2	692.7	693.9	696.4	693.9
57.5°	640.5	645.4	651.6	652.9	655.4	655.4	656.6	655.4
60°	606.9	610.6	613.1	614.3	618.1	619.3	619.3	621.8
62.5°	573.3	574.5	578.3	579.5	580.8	583.2	585.7	584.5
65°	539.7	541.0	542.2	544.7	547.2	549.7	549.7	548.4
67.5°	504.9	506.1	507.4	509.9	512.4	512.4	513.6	513.6
70°	471.3	471.3	472.6	473.8	476.3	477.5	478.8	477.5
72.5°	436.5	436.5	436.5	437.7	439.0	441.5	442.7	442.7
75°	400.4	400.4	400.4	399.2	400.4	402.9	401.7	401.7
77.5°	360.6	356.9	353.2	350.7	351.9	350.7	350.7	350.7
80°	310.9	304.7	299.7	297.2	296.0	297.2	296.0	296.0
82.5°	256.2	250.0	245.0	241.3	242.5	240.0	241.3	238.8
85°	190.3	185.3	180.3	177.8	179.1	179.1	177.8	174.1
87.5°	111.9	105.7	104.5	103.2	104.5	103.2	99.5	100.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)