

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: P188695

Luminaire Tested: **24SR-LD2-45-C-UNV-L850-CD1-TB-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188695
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-LD2-45-C-UNV-L850-CD1-TB-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3306.0 lumens
Efficiency: N/A
Efficacy: 90.1 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

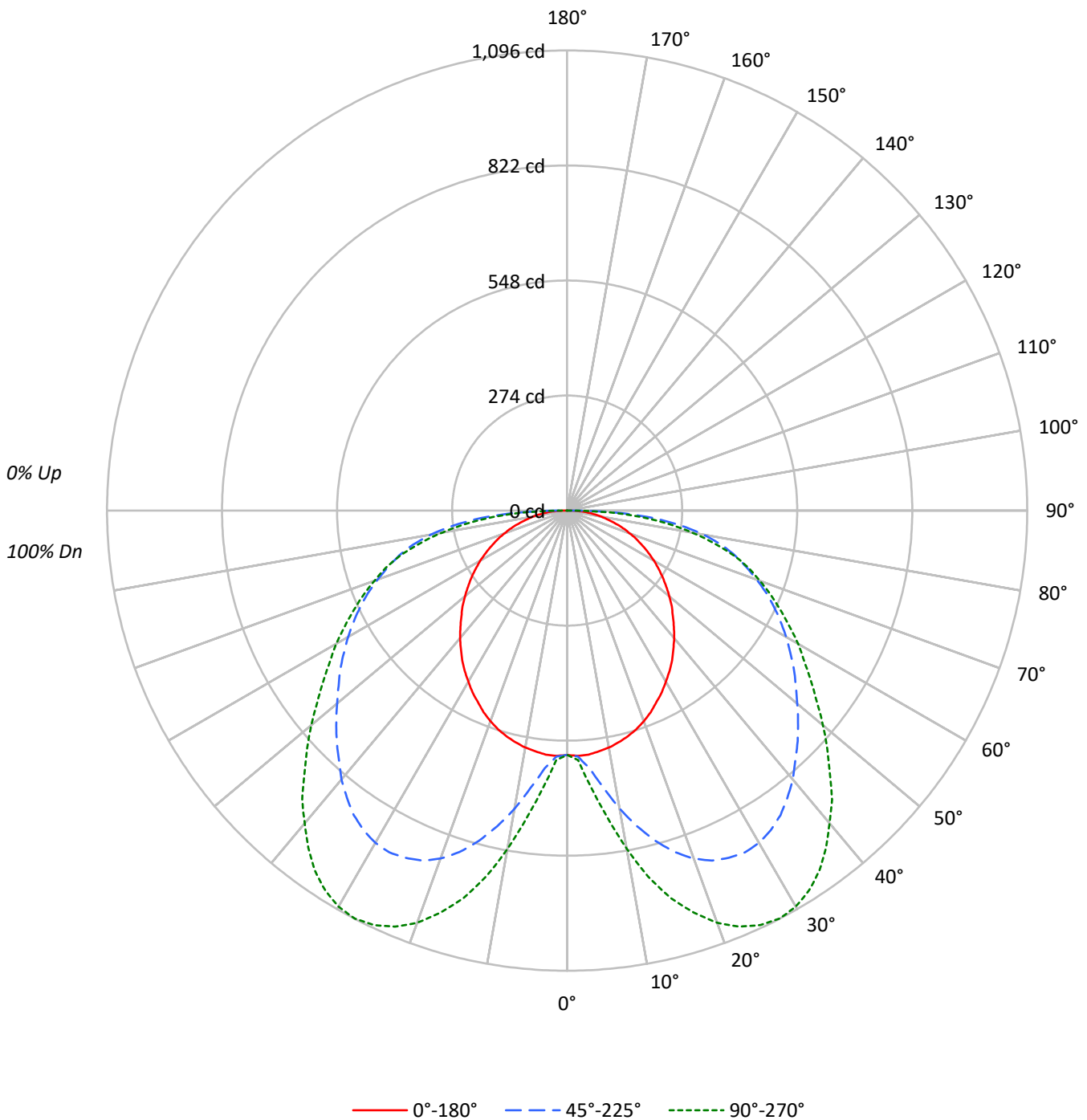
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	95	91	103	98	93	89	94	90	86		90	86	83		86	83	81	79
2	95	86	78	71	93	84	77	70	80	74	69		77	72	67		74	69	65	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°	783	783	783
5°	788	833	896
10°	783	985	1118
15°	775	1135	1331
20°	764	1263	1496
25°	747	1355	1617
30°	731	1420	1692
35°	716	1455	1720
40°	696	1469	1708
45°	677	1478	1683
50°	665	1498	1665
55°	653	1547	1664
60°	643	1621	1710
65°	631	1732	1784
70°	625	1890	1920
75°	621	2154	2134
80°	640	2560	2344
85°	707	3179	2746



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	1.9
10°-20°	223.9	6.8
20°-30°	398.8	12.1
30°-40°	517.1	15.6
40°-50°	551.4	16.7
50°-60°	530.4	16.0
60°-70°	474.6	14.4
70°-80°	373.7	11.3
80°-90°	174.2	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°	684.7	20.7
0°-40°	1201.7	36.4
0°-60°	2283.5	69.1
0°-90°	3306.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3306.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	582	582	582	582	582	
5°	583	590	616	649	663	55
15°	557	662	815	921	956	157
25°	503	703	912	1050	1089	232
35°	436	669	886	1013	1047	272
45°	356	584	776	867	884	276
55°	278	501	660	703	709	249
65°	198	425	544	555	560	197
75°	120	327	414	409	410	126
85°	46	174	206	183	178	48
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°	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1
2.5°	584.6	584.6	583.3	583.3	584.6	584.6	584.6	584.6	585.9	585.9	587.2
5°	583.3	582.1	582.1	584.6	588.4	592.2	596.0	602.4	607.5	616.4	624.0
7.5°	578.3	578.3	580.8	587.2	596.0	608.8	622.7	638.0	652.0	665.9	682.5
10°	573.2	573.2	579.5	591.0	608.8	631.6	654.5	677.4	699.0	720.6	738.4
12.5°	565.5	566.8	577.0	597.3	626.6	658.3	687.6	716.8	746.0	770.2	796.9
15°	556.7	559.2	574.4	604.9	643.1	681.2	716.8	752.4	785.4	814.6	842.6
17.5°	546.5	550.3	571.9	611.3	655.8	699.0	743.5	784.1	819.7	852.8	884.5
20°	533.8	540.1	569.4	616.4	665.9	715.5	762.5	805.7	846.4	882.0	917.6
22.5°	519.8	527.4	564.3	617.7	672.3	725.7	777.8	822.3	865.5	902.3	939.2
25°	503.3	514.7	559.2	616.4	674.8	732.0	785.4	831.2	875.6	912.5	953.2
27.5°	488.0	500.7	550.3	611.3	672.3	732.0	785.4	833.7	879.5	917.6	957.0
30°	470.2	486.8	541.4	603.7	665.9	725.7	780.3	828.6	873.1	913.8	954.4
32.5°	453.7	471.5	527.4	591.0	654.5	714.2	770.2	817.2	861.7	902.3	941.7
35°	435.9	453.7	512.2	578.3	639.3	699.0	752.4	800.7	843.9	885.8	922.7
37.5°	415.6	435.9	495.6	560.5	620.2	679.9	732.0	779.1	822.3	861.7	897.3
40°	396.5	418.1	476.6	541.4	601.1	658.3	709.2	753.6	795.6	836.2	868.0
42.5°	376.2	399.1	458.8	521.1	579.5	634.2	682.5	728.2	768.9	804.5	836.2
45°	355.9	381.3	439.7	500.7	556.7	611.3	659.6	701.5	740.9	776.5	803.2
47.5°	338.1	363.5	419.4	480.4	536.3	588.4	635.4	676.1	714.2	746.0	772.7
50°	317.7	343.1	400.3	460.1	514.7	566.8	611.3	650.7	686.3	715.5	740.9
52.5°	297.4	325.3	381.3	441.0	495.6	545.2	589.7	627.8	659.6	686.3	707.9
55°	278.3	306.3	363.5	421.9	476.6	526.2	568.1	604.9	635.4	659.6	676.1
57.5°	258.0	288.5	347.0	405.4	458.8	505.8	547.8	582.1	610.0	630.4	644.3
60°	238.9	270.7	330.4	387.6	441.0	488.0	527.4	560.5	584.6	602.4	613.8
62.5°	218.6	252.9	312.6	369.8	421.9	469.0	505.8	536.3	559.2	573.2	580.8
65°	198.3	235.1	294.8	352.0	402.9	447.4	482.9	510.9	531.2	543.9	550.3
67.5°	179.2	217.3	277.1	333.0	382.5	424.5	458.8	485.5	503.3	513.4	516.0
70°	158.9	198.3	258.0	312.6	360.9	400.3	433.4	456.3	472.8	480.4	482.9
72.5°	139.8	179.2	237.7	291.0	336.8	373.6	405.4	428.3	442.3	447.4	447.4
75°	119.5	158.9	216.1	266.9	308.8	345.7	374.9	395.2	408.0	414.3	411.8
77.5°	99.1	138.5	193.2	240.2	278.3	311.4	340.6	359.7	372.4	376.2	373.6
80°	82.6	118.2	166.5	209.7	245.3	275.8	302.5	321.5	333.0	330.4	324.1
82.5°	63.5	96.6	138.5	175.4	207.2	236.4	261.8	277.1	279.6	274.5	266.9
85°	45.8	71.2	105.5	134.7	162.7	184.3	202.1	212.2	212.2	205.9	200.8
87.5°	26.7	41.9	61.0	81.3	94.0	108.0	122.0	124.5	124.5	124.5	118.2
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°	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1
2.5°	591.0	592.2	593.5	594.8	596.0	596.0	596.0	594.8
5°	631.6	639.3	645.6	653.2	655.8	658.3	660.9	663.4
7.5°	696.5	706.6	716.8	727.0	733.3	740.9	738.4	738.4
10°	758.7	777.8	789.2	801.9	808.3	815.9	819.7	818.5
12.5°	819.7	841.3	857.9	869.3	879.5	887.1	889.6	893.4
15°	871.8	893.4	913.8	927.8	940.5	948.1	953.2	955.7
17.5°	915.0	936.6	959.5	977.3	988.8	998.9	1001.5	1004.0
20°	946.8	974.8	996.4	1015.4	1028.2	1038.3	1043.4	1044.7
22.5°	972.2	998.9	1023.1	1042.1	1056.1	1067.6	1072.6	1072.6
25°	986.2	1014.2	1039.6	1059.9	1073.9	1084.1	1089.2	1089.2
27.5°	991.3	1020.5	1044.7	1065.0	1080.3	1090.4	1094.2	1095.5
30°	987.5	1016.7	1040.9	1059.9	1075.2	1084.1	1087.9	1089.2
32.5°	974.8	1004.0	1026.9	1044.7	1058.7	1068.8	1072.6	1072.6
35°	954.4	981.1	1004.0	1021.8	1034.5	1042.1	1047.2	1047.2
37.5°	927.8	954.4	974.8	990.0	1001.5	1010.4	1012.9	1012.9
40°	897.3	920.1	939.2	954.4	964.6	971.0	973.5	972.2
42.5°	862.9	884.5	899.8	912.5	921.4	927.8	931.6	934.1
45°	827.4	847.7	861.7	871.8	878.2	882.0	885.8	884.5
47.5°	795.6	808.3	821.0	828.6	835.0	838.8	840.1	840.1
50°	758.7	770.2	780.3	786.7	790.5	793.0	793.0	795.6
52.5°	721.9	732.0	739.7	746.0	748.6	749.8	751.1	749.8
55°	688.8	695.2	700.3	705.3	707.9	709.2	711.7	709.2
57.5°	654.5	659.6	665.9	667.2	669.8	669.8	671.0	669.8
60°	620.2	624.0	626.6	627.8	631.6	632.9	632.9	635.4
62.5°	585.9	587.2	591.0	592.2	593.5	596.0	598.6	597.3
65°	551.6	552.8	554.1	556.7	559.2	561.7	561.7	560.5
67.5°	516.0	517.3	518.5	521.1	523.6	523.6	524.9	524.9
70°	481.7	481.7	482.9	484.2	486.8	488.0	489.3	488.0
72.5°	446.1	446.1	446.1	447.4	448.6	451.2	452.4	452.4
75°	409.2	409.2	409.2	408.0	409.2	411.8	410.5	410.5
77.5°	368.6	364.7	360.9	358.4	359.7	358.4	358.4	358.4
80°	317.7	311.4	306.3	303.7	302.5	303.7	302.5	302.5
82.5°	261.8	255.4	250.4	246.6	247.8	245.3	246.6	244.0
85°	194.4	189.4	184.3	181.7	183.0	183.0	181.7	177.9
87.5°	114.4	108.0	106.8	105.5	106.8	105.5	101.7	102.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)