

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: METALUX

Report Number: P843291

Luminaire Tested: 24CGSB-30-L830

Issue Date: 5/31/2024

Tested By:

Approved By:



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Test Information

Test Method: LM-79-2019
 Report Number: P843291
 Test Lab: INNOVATION CENTER
 Issue Date: 5/31/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: METALUX
 Catalog Number: 24CGSB-30-L830
 Description: 2x4 CGSB AT 3000LM 3000K 80CRI
 Light Source: -
 Ballast/Driver: -

Summary

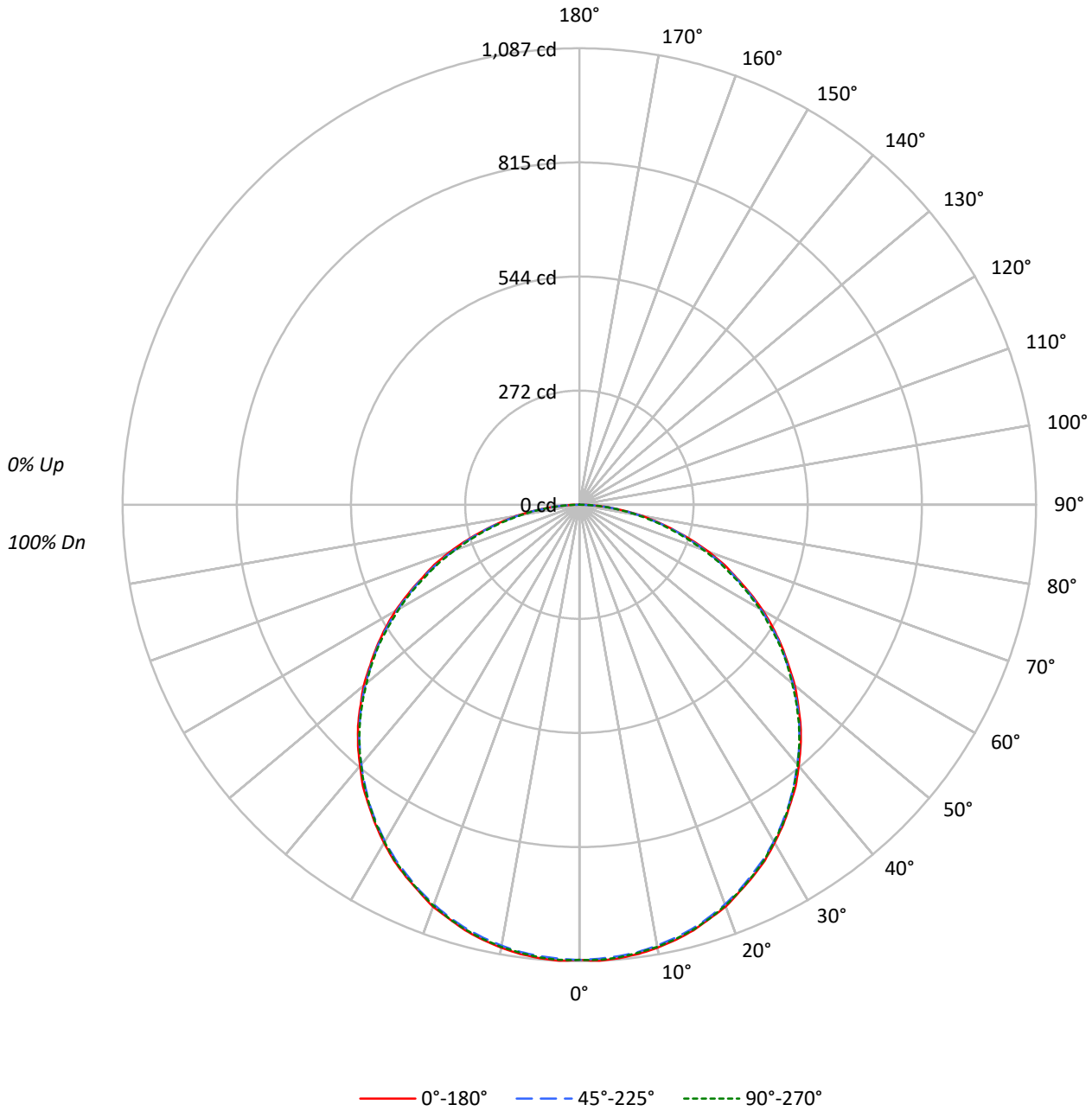
Lumens per Lamp: N/A
 Luminaire Lumens: 3207.0 lumens
 Efficiency: N/A
 Efficacy: 131.4 lumens/watt
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
 Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
 CIE Type: Direct

Input Watts (W): 24.4
 Input Voltage (V): 120
 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: 24 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P3	10/30/2015	4/30/2016
Power Meter	IN0214	1/12/2016	1/12/2017
AC Power Source	IN0062	1/12/2016	1/12/2017
DC Power Supply	--	--	--
Room Thermometer	IN0145	1/13/2016	1/13/2017

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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	108	103	99	95	106	101	97	93	97	94	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	62	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1458	1458	1458
5°	1464	1457	1461
10°	1463	1457	1461
15°	1462	1455	1459
20°	1459	1450	1454
25°	1451	1443	1448
30°	1445	1438	1440
35°	1435	1430	1431
40°	1427	1418	1420
45°	1418	1408	1406
50°	1402	1390	1384
55°	1379	1372	1365
60°	1359	1343	1332
65°	1315	1306	1287
70°	1287	1252	1232
75°	1218	1202	1161
80°	1164	1125	1079
85°	1037	1022	946

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1418 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.7	3.2
10°-20°	295.1	9.2
20°-30°	449.1	14.0
30°-40°	545.1	17.0
40°-50°	570.9	17.8
50°-60°	521.6	16.3
60°-70°	405.4	12.6
70°-80°	243.1	7.6
80°-90°	73.9	2.3
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°	846.9	26.4
0°-40°	1392.0	43.4
0°-60°	2484.5	77.5
0°-90°	3207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3207.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1084	1081	1079	1079	1082	103
15°	1049	1045	1044	1044	1047	296
25°	977	973	972	973	975	451
35°	874	872	870	870	872	547
45°	745	741	740	739	739	574
55°	588	586	585	580	582	526
65°	413	412	410	405	404	411
75°	234	233	231	227	223	249
85°	67	66	66	64	61	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1083.9	1083.9	1083.9	1083.9	1083.9
2.5°	1086.9	1082.9	1082.0	1082.0	1084.9
5°	1083.9	1081.0	1079.0	1079.0	1082.0
7.5°	1079.0	1075.0	1074.0	1074.0	1076.0
10°	1071.1	1068.1	1066.1	1066.1	1069.1
12.5°	1061.2	1057.2	1056.3	1057.2	1059.2
15°	1049.3	1045.4	1044.4	1044.4	1047.4
17.5°	1033.5	1030.6	1029.6	1029.6	1032.5
20°	1018.7	1013.8	1012.8	1013.8	1015.8
22.5°	997.0	995.0	994.0	995.0	996.0
25°	977.2	973.3	972.3	973.3	975.2
27.5°	955.5	951.5	950.5	950.5	953.5
30°	929.8	926.8	925.8	925.8	926.8
32.5°	903.1	901.1	898.2	899.2	901.1
35°	873.5	871.5	870.5	870.5	871.5
37.5°	845.8	841.8	838.9	838.9	840.9
40°	812.2	810.2	807.3	808.3	808.3
42.5°	779.6	776.6	774.7	773.7	774.7
45°	745.0	741.1	740.1	739.1	739.1
47.5°	706.5	706.5	703.5	701.5	700.6
50°	669.9	666.0	664.0	661.0	661.0
52.5°	627.4	626.4	623.5	622.5	622.5
55°	587.9	585.9	584.9	580.0	582.0
57.5°	547.4	543.4	542.5	539.5	537.5
60°	504.9	502.9	499.0	495.0	495.0
62.5°	459.5	458.5	454.5	451.6	450.6
65°	413.0	412.0	410.1	405.1	404.1
67.5°	373.5	369.5	364.6	360.7	360.7
70°	327.1	322.1	318.2	314.2	313.2
72.5°	279.6	276.7	274.7	270.7	267.8
75°	234.2	233.2	231.2	227.3	223.3
77.5°	191.7	190.7	185.8	182.8	179.8
80°	150.2	146.2	145.2	141.3	139.3
82.5°	105.7	107.7	102.8	101.8	100.8
85°	67.2	66.2	66.2	64.2	61.3
87.5°	29.6	30.6	30.6	30.6	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)