

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: P843292

Luminaire Tested: 24CGSB-30-L835

Issue Date: 5/31/2024

Tested By:

Approved By:



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Test Information

Test Method: LM-79-2019
 Report Number: P843292
 Test Lab: INNOVATION CENTER
 Issue Date: 5/31/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: METALUX
 Catalog Number: 24CGSB-30-L835
 Description: 2x4 CGSB AT 3000LM 3500K 80CRI
 Light Source: -
 Ballast/Driver: -

Summary

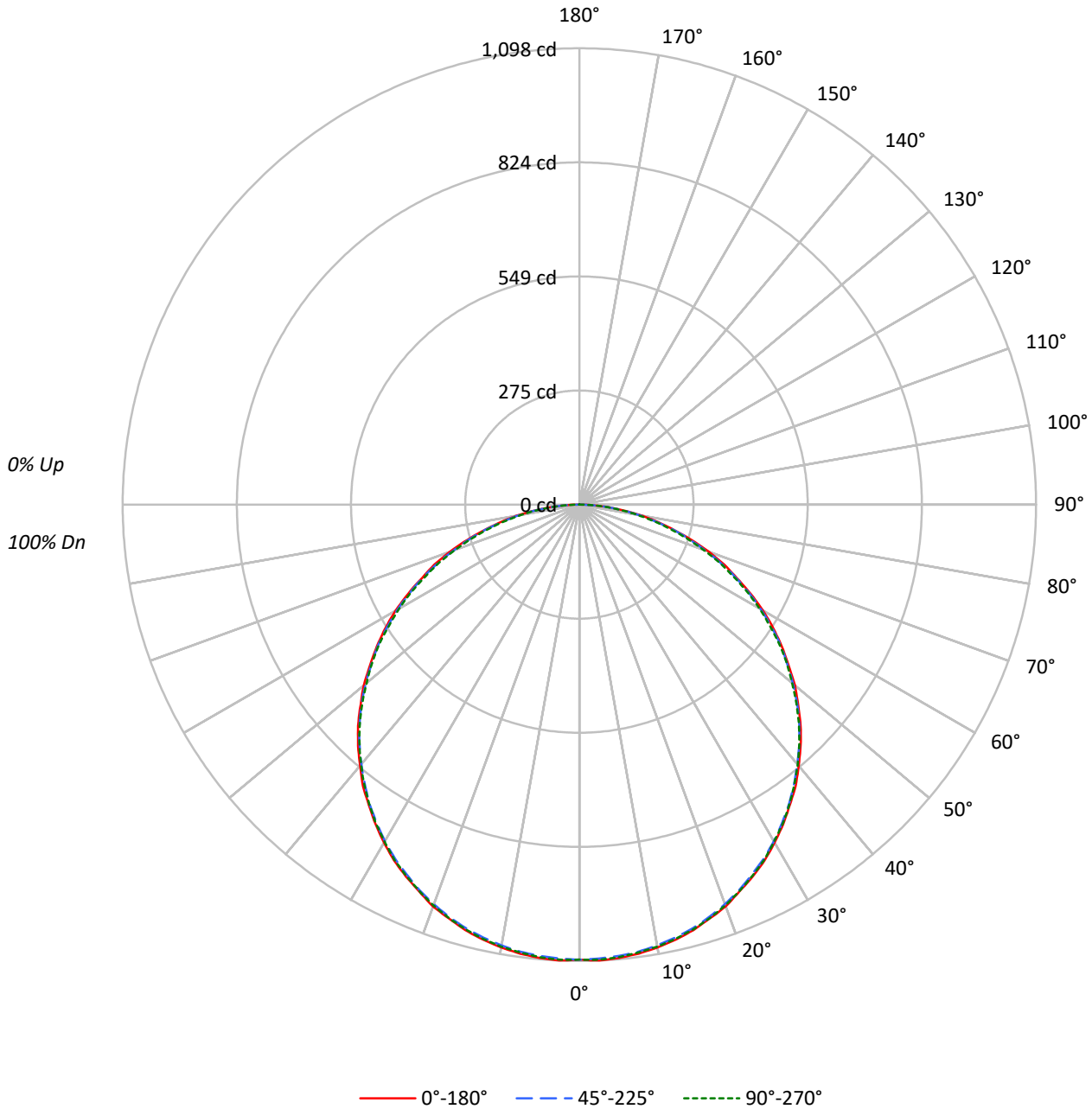
Lumens per Lamp: N/A
 Luminaire Lumens: 3239.3 lumens
 Efficiency: N/A
 Efficacy: 132.8 lumens/watt
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
 Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
 CIE Type: Direct

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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	1473	1473	1473
5°	1479	1472	1476
10°	1478	1471	1475
15°	1476	1470	1474
20°	1473	1465	1469
25°	1465	1458	1462
30°	1459	1453	1455
35°	1449	1444	1446
40°	1441	1432	1434
45°	1432	1423	1421
50°	1416	1404	1398
55°	1393	1386	1379
60°	1372	1356	1345
65°	1328	1319	1300
70°	1300	1264	1245
75°	1229	1214	1173
80°	1175	1137	1090
85°	1048	1033	956

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1432 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.8	3.2
10°-20°	298.1	9.2
20°-30°	453.6	14.0
30°-40°	550.6	17.0
40°-50°	576.6	17.8
50°-60°	526.9	16.3
60°-70°	409.5	12.6
70°-80°	245.6	7.6
80°-90°	74.7	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°	855.5	26.4
0°-40°	1406.1	43.4
0°-60°	2509.6	77.5
0°-90°	3239.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3239.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1095	1095	1095	1095	1095	
5°	1095	1092	1090	1090	1093	104
15°	1060	1056	1055	1055	1058	299
25°	987	983	982	983	985	455
35°	882	880	879	879	880	553
45°	752	748	748	747	747	580
55°	594	592	591	586	588	531
65°	417	416	414	409	408	415
75°	236	236	234	230	226	252
85°	68	67	67	65	62	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1094.9	1094.9	1094.9	1094.9	1094.9
2.5°	1097.9	1093.9	1092.9	1092.9	1095.9
5°	1094.9	1091.9	1089.9	1089.9	1092.9
7.5°	1089.9	1085.9	1084.9	1084.9	1086.9
10°	1081.9	1078.9	1076.9	1076.9	1079.9
12.5°	1071.9	1067.9	1066.9	1067.9	1069.9
15°	1059.9	1056.0	1055.0	1055.0	1057.9
17.5°	1044.0	1041.0	1040.0	1040.0	1043.0
20°	1029.0	1024.0	1023.0	1024.0	1026.0
22.5°	1007.0	1005.1	1004.1	1005.1	1006.0
25°	987.1	983.1	982.1	983.1	985.1
27.5°	965.1	961.1	960.1	960.1	963.1
30°	939.2	936.2	935.2	935.2	936.2
32.5°	912.2	910.2	907.2	908.2	910.2
35°	882.3	880.3	879.3	879.3	880.3
37.5°	854.3	850.4	847.4	847.4	849.4
40°	820.4	818.4	815.4	816.4	816.4
42.5°	787.5	784.5	782.5	781.5	782.5
45°	752.5	748.5	747.6	746.6	746.6
47.5°	713.6	713.6	710.6	708.6	707.6
50°	676.7	672.7	670.7	667.7	667.7
52.5°	633.8	632.8	629.8	628.8	628.8
55°	593.8	591.9	590.9	585.9	587.9
57.5°	552.9	548.9	547.9	544.9	542.9
60°	510.0	508.0	504.0	500.0	500.0
62.5°	464.1	463.1	459.1	456.1	455.1
65°	417.2	416.2	414.2	409.2	408.2
67.5°	377.3	373.3	368.3	364.3	364.3
70°	330.4	325.4	321.4	317.4	316.4
72.5°	282.5	279.5	277.5	273.5	270.5
75°	236.5	235.5	233.5	229.6	225.6
77.5°	193.6	192.6	187.6	184.6	181.6
80°	151.7	147.7	146.7	142.7	140.7
82.5°	106.8	108.8	103.8	102.8	101.8
85°	67.9	66.9	66.9	64.9	61.9
87.5°	29.9	30.9	30.9	30.9	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)