

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: P843296

Luminaire Tested: 24CGSB-30-L935

Issue Date: 5/31/2024

Tested By:

Approved By:



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Test Information

Test Method: LM-79-2019
 Report Number: P843296
 Test Lab: INNOVATION CENTER
 Issue Date: 5/31/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: METALUX
 Catalog Number: 24CGSB-30-L935
 Description: 2x4 CGSB AT 3000LM 3500K 90CRI
 Light Source: -
 Ballast/Driver: -

Summary

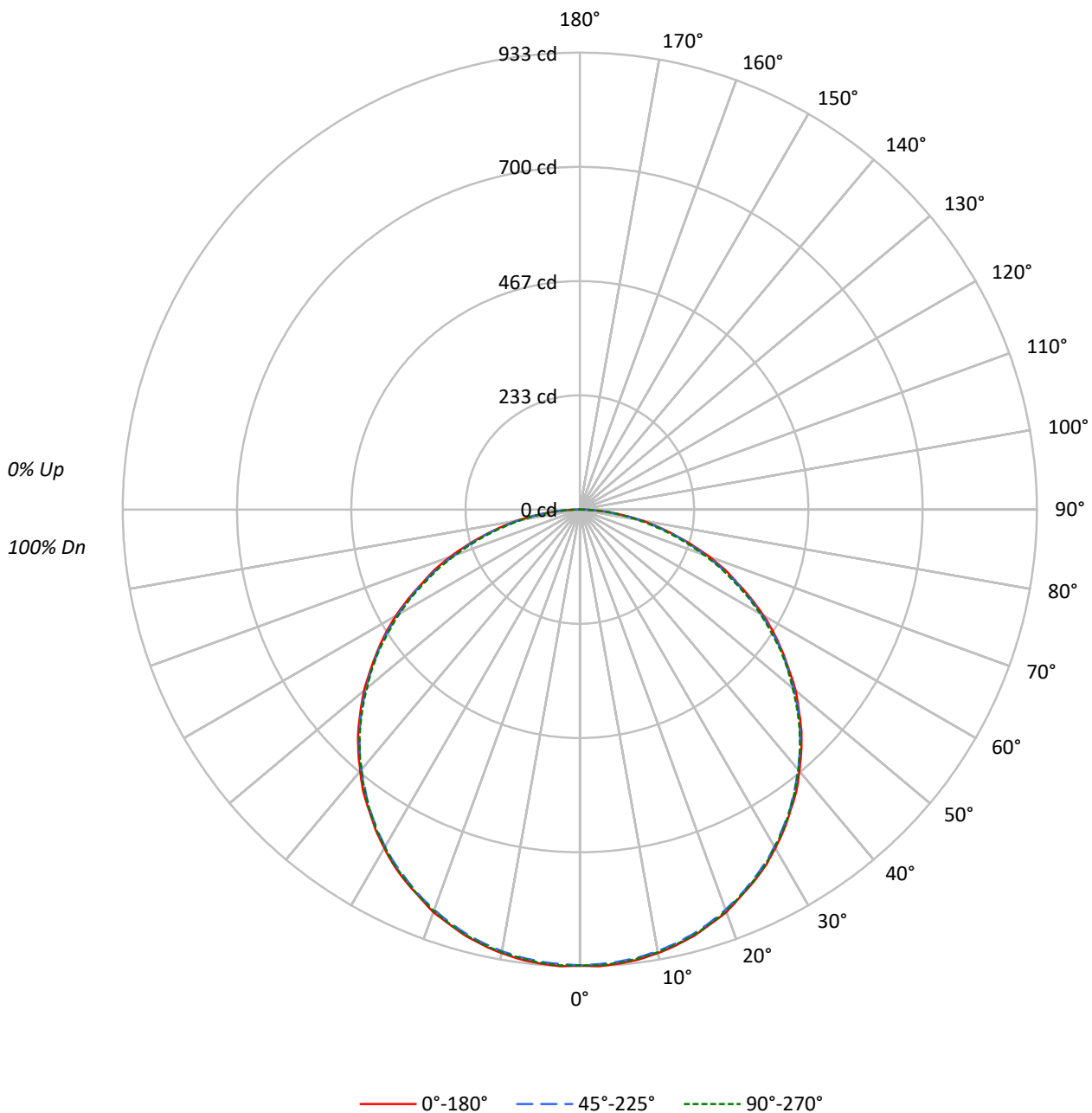
Lumens per Lamp: N/A
 Luminaire Lumens: 2753.4 lumens
 Efficiency: N/A
 Efficacy: 112.8 lumens/watt
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
 Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
 CIE Type: Direct

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°	1252	1252	1252
5°	1257	1251	1255
10°	1256	1251	1254
15°	1255	1249	1253
20°	1252	1245	1249
25°	1246	1239	1243
30°	1240	1235	1236
35°	1232	1228	1229
40°	1225	1217	1219
45°	1217	1209	1208
50°	1204	1193	1188
55°	1184	1178	1172
60°	1167	1153	1144
65°	1129	1121	1105
70°	1105	1075	1058
75°	1045	1032	997
80°	999	966	927
85°	891	877	812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1217 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	3.2
10°-20°	253.4	9.2
20°-30°	385.6	14.0
30°-40°	468.0	17.0
40°-50°	490.1	17.8
50°-60°	447.9	16.3
60°-70°	348.1	12.6
70°-80°	208.7	7.6
80°-90°	63.5	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°	727.2	26.4
0°-40°	1195.2	43.4
0°-60°	2133.2	77.5
0°-90°	2753.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2753.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	931	931	931	931	931	
5°	931	928	926	926	929	88
15°	901	898	897	897	899	254
25°	839	836	835	836	837	387
35°	750	748	747	747	748	470
45°	640	636	635	635	635	493
55°	505	503	502	498	500	451
65°	355	354	352	348	347	353
75°	201	200	198	195	192	214
85°	58	57	57	55	53	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.6	930.6	930.6	930.6	930.6
2.5°	933.2	929.8	928.9	928.9	931.5
5°	930.6	928.1	926.4	926.4	928.9
7.5°	926.4	923.0	922.2	922.2	923.9
10°	919.6	917.1	915.4	915.4	917.9
12.5°	911.1	907.7	906.9	907.7	909.4
15°	901.0	897.6	896.7	896.7	899.3
17.5°	887.4	884.8	884.0	884.0	886.5
20°	874.7	870.4	869.6	870.4	872.1
22.5°	856.0	854.3	853.4	854.3	855.1
25°	839.0	835.6	834.8	835.6	837.3
27.5°	820.4	817.0	816.1	816.1	818.7
30°	798.3	795.8	794.9	794.9	795.8
32.5°	775.4	773.7	771.2	772.0	773.7
35°	749.9	748.2	747.4	747.4	748.2
37.5°	726.2	722.8	720.3	720.3	721.9
40°	697.3	695.7	693.1	694.0	694.0
42.5°	669.4	666.8	665.1	664.3	665.1
45°	639.7	636.3	635.4	634.6	634.6
47.5°	606.6	606.6	604.0	602.3	601.5
50°	575.2	571.8	570.1	567.5	567.5
52.5°	538.7	537.9	535.3	534.5	534.5
55°	504.8	503.1	502.2	498.0	499.7
57.5°	470.0	466.6	465.7	463.2	461.5
60°	433.5	431.8	428.4	425.0	425.0
62.5°	394.5	393.6	390.2	387.7	386.8
65°	354.6	353.8	352.1	347.8	347.0
67.5°	320.7	317.3	313.0	309.6	309.6
70°	280.8	276.6	273.2	269.8	268.9
72.5°	240.1	237.5	235.8	232.4	229.9
75°	201.1	200.2	198.5	195.1	191.7
77.5°	164.6	163.7	159.5	156.9	154.4
80°	128.9	125.6	124.7	121.3	119.6
82.5°	90.8	92.5	88.2	87.4	86.5
85°	57.7	56.8	56.8	55.1	52.6
87.5°	25.5	26.3	26.3	26.3	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)