

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: P843295

Luminaire Tested: 24CGSB-30-L930

Issue Date: 5/31/2024

Tested By:

Approved By:



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Test Information

Test Method: LM-79-2019
 Report Number: P843295
 Test Lab: INNOVATION CENTER
 Issue Date: 5/31/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: METALUX
 Catalog Number: 24CGSB-30-L930
 Description: 2x4 CGSB AT 3000LM 3000K 90CRI
 Light Source: -
 Ballast/Driver: -

Summary

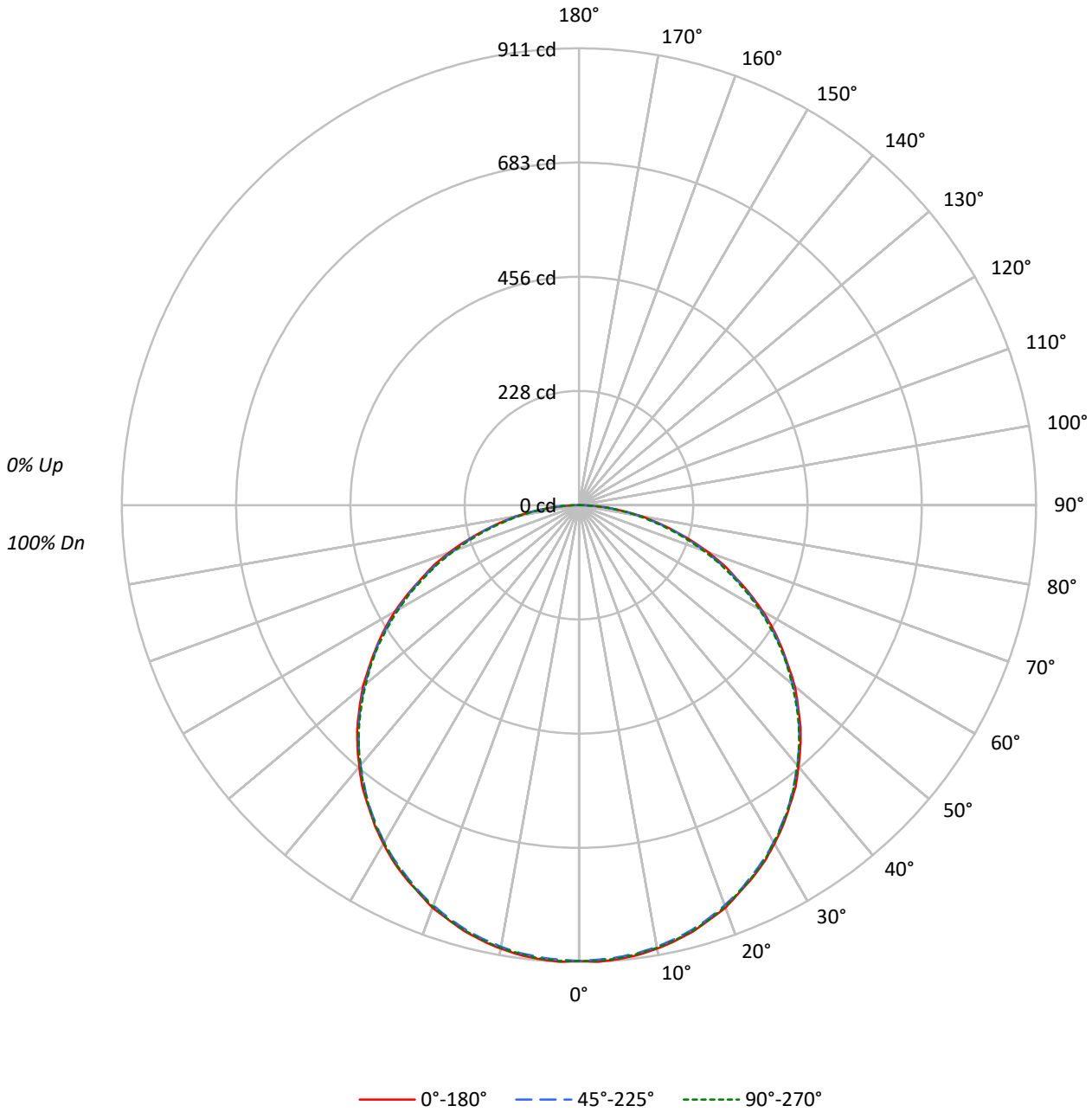
Lumens per Lamp: N/A
 Luminaire Lumens: 2688.7 lumens
 Efficiency: N/A
 Efficacy: 110.2 lumens/watt
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
 Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
 CIE Type: Direct

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°	1223	1223	1223
5°	1227	1222	1225
10°	1227	1221	1225
15°	1226	1220	1223
20°	1223	1216	1219
25°	1216	1210	1214
30°	1211	1206	1207
35°	1203	1199	1200
40°	1196	1189	1190
45°	1188	1181	1179
50°	1176	1165	1160
55°	1156	1150	1145
60°	1139	1126	1117
65°	1103	1095	1079
70°	1079	1049	1033
75°	1020	1007	973
80°	976	944	905
85°	869	857	794

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1188 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	3.2
10°-20°	247.4	9.2
20°-30°	376.5	14.0
30°-40°	457.0	17.0
40°-50°	478.6	17.8
50°-60°	437.3	16.3
60°-70°	339.9	12.6
70°-80°	203.8	7.6
80°-90°	62.0	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°	710.0	26.4
0°-40°	1167.0	43.4
0°-60°	2082.9	77.5
0°-90°	2688.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2688.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	909	906	905	905	907	86
15°	880	876	876	876	878	248
25°	819	816	815	816	818	378
35°	732	731	730	730	731	459
45°	625	621	620	620	620	481
55°	493	491	490	486	488	441
65°	346	345	344	340	339	345
75°	196	196	194	190	187	209
85°	56	56	56	54	51	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.7	908.7	908.7	908.7	908.7
2.5°	911.2	907.9	907.1	907.1	909.6
5°	908.7	906.3	904.6	904.6	907.1
7.5°	904.6	901.3	900.5	900.5	902.1
10°	898.0	895.5	893.8	893.8	896.3
12.5°	889.7	886.4	885.6	886.4	888.0
15°	879.8	876.4	875.6	875.6	878.1
17.5°	866.5	864.0	863.2	863.2	865.7
20°	854.1	849.9	849.1	849.9	851.6
22.5°	835.8	834.2	833.4	834.2	835.0
25°	819.3	816.0	815.1	816.0	817.6
27.5°	801.1	797.7	796.9	796.9	799.4
30°	779.5	777.0	776.2	776.2	777.0
32.5°	757.2	755.5	753.0	753.8	755.5
35°	732.3	730.6	729.8	729.8	730.6
37.5°	709.1	705.8	703.3	703.3	705.0
40°	680.9	679.3	676.8	677.6	677.6
42.5°	653.6	651.1	649.5	648.6	649.5
45°	624.6	621.3	620.5	619.6	619.6
47.5°	592.3	592.3	589.8	588.2	587.3
50°	561.7	558.3	556.7	554.2	554.2
52.5°	526.0	525.2	522.7	521.9	521.9
55°	492.9	491.2	490.4	486.3	487.9
57.5°	458.9	455.6	454.8	452.3	450.6
60°	423.3	421.7	418.3	415.0	415.0
62.5°	385.2	384.4	381.1	378.6	377.7
65°	346.3	345.4	343.8	339.6	338.8
67.5°	313.1	309.8	305.7	302.4	302.4
70°	274.2	270.1	266.7	263.4	262.6
72.5°	234.4	232.0	230.3	227.0	224.5
75°	196.3	195.5	193.8	190.5	187.2
77.5°	160.7	159.9	155.7	153.3	150.8
80°	125.9	122.6	121.8	118.5	116.8
82.5°	88.6	90.3	86.2	85.3	84.5
85°	56.3	55.5	55.5	53.8	51.4
87.5°	24.9	25.7	25.7	25.7	25.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)