

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: P843335

Luminaire Tested: 24CGSB-55-L930

Issue Date: 5/31/2024

Tested By:

Approved By:



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Test Information

Test Method: LM-79-2019
 Report Number: P843335
 Test Lab: INNOVATION CENTER
 Issue Date: 5/31/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: METALUX
 Catalog Number: 24CGSB-55-L930
 Description: 2x4 CGSB AT 5500LM 3000K 90CRI
 Light Source: -
 Ballast/Driver: -

Summary

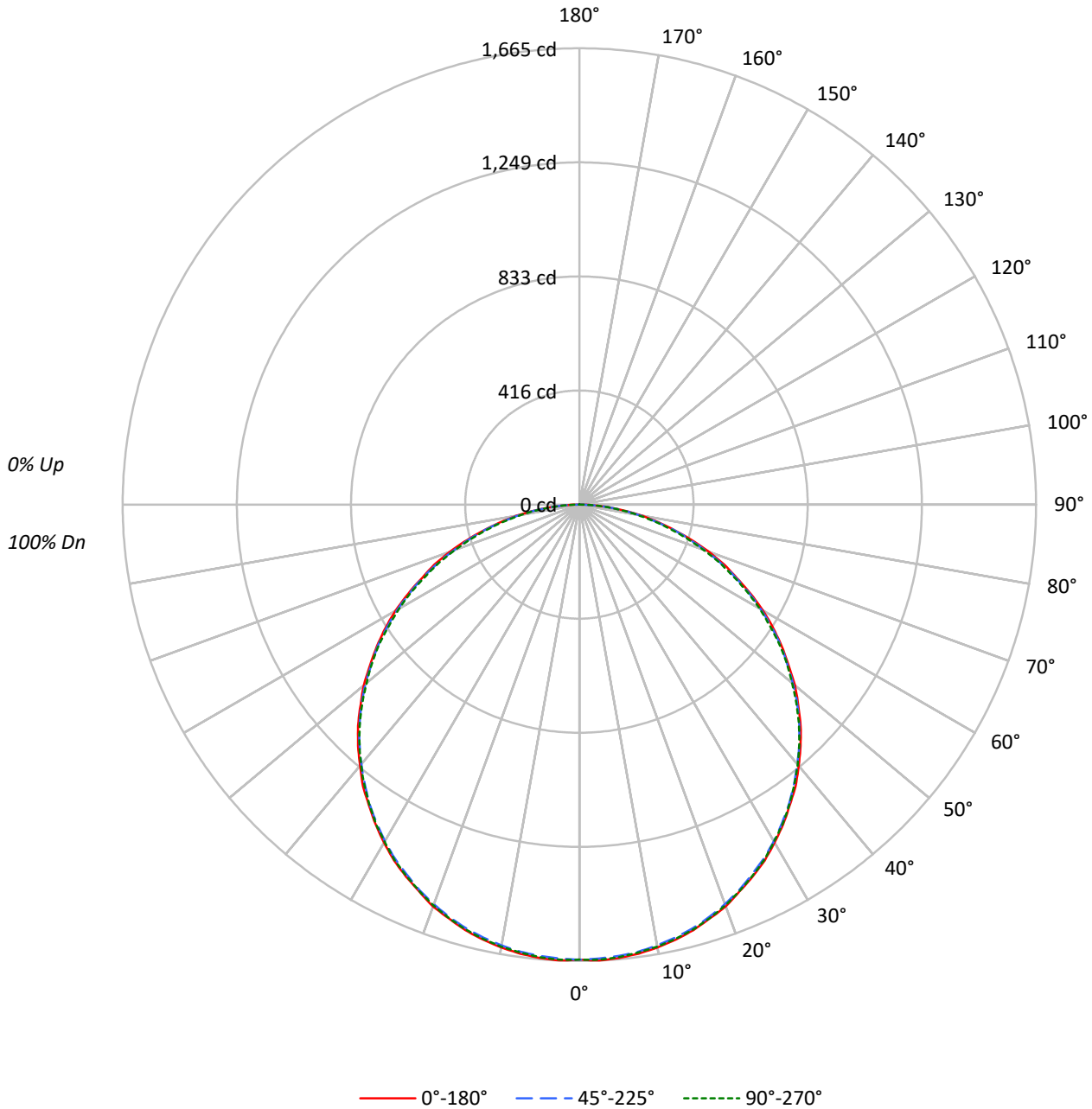
Lumens per Lamp: N/A
 Luminaire Lumens: 4912.3 lumens
 Efficiency: N/A
 Efficacy: 108.2 lumens/watt
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
 Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
 CIE Type: Direct

Input Watts (W): 45.4
 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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CATALOG NUMBER: 24CGSB-55-L930

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°	2234	2234	2234
5°	2242	2232	2238
10°	2241	2231	2237
15°	2239	2228	2235
20°	2234	2221	2228
25°	2222	2211	2218
30°	2213	2203	2206
35°	2198	2190	2193
40°	2185	2172	2174
45°	2171	2157	2154
50°	2148	2129	2119
55°	2112	2102	2091
60°	2081	2057	2041
65°	2014	2000	1971
70°	1971	1917	1888
75°	1865	1841	1778
80°	1783	1724	1654
85°	1589	1565	1448

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2171 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	3.2
10°-20°	452.0	9.2
20°-30°	687.9	14.0
30°-40°	834.9	17.0
40°-50°	874.4	17.8
50°-60°	799.0	16.3
60°-70°	621.0	12.6
70°-80°	372.4	7.6
80°-90°	113.3	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°	1297.3	26.4
0°-40°	2132.2	43.4
0°-60°	3805.6	77.5
0°-90°	4912.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4912.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1660	1660	1660	1660	1660	
5°	1660	1656	1653	1653	1657	158
15°	1607	1601	1600	1600	1604	454
25°	1497	1491	1489	1491	1494	690
35°	1338	1335	1333	1333	1335	838
45°	1141	1135	1134	1132	1132	879
55°	900	898	896	888	891	805
65°	633	631	628	620	619	630
75°	359	357	354	348	342	381
85°	103	101	101	98	94	116
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1660.3	1660.3	1660.3	1660.3	1660.3
2.5°	1664.8	1658.8	1657.3	1657.3	1661.8
5°	1660.3	1655.8	1652.7	1652.7	1657.3
7.5°	1652.7	1646.7	1645.2	1645.2	1648.2
10°	1640.6	1636.1	1633.1	1633.1	1637.6
12.5°	1625.5	1619.4	1617.9	1619.4	1622.5
15°	1607.3	1601.3	1599.8	1599.8	1604.3
17.5°	1583.1	1578.6	1577.1	1577.1	1581.6
20°	1560.4	1552.8	1551.3	1552.8	1555.9
22.5°	1527.1	1524.1	1522.6	1524.1	1525.6
25°	1496.8	1490.8	1489.3	1490.8	1493.8
27.5°	1463.6	1457.5	1456.0	1456.0	1460.5
30°	1424.2	1419.7	1418.1	1418.1	1419.7
32.5°	1383.3	1380.3	1375.8	1377.3	1380.3
35°	1337.9	1334.9	1333.4	1333.4	1334.9
37.5°	1295.6	1289.5	1285.0	1285.0	1288.0
40°	1244.1	1241.1	1236.5	1238.0	1238.0
42.5°	1194.1	1189.6	1186.6	1185.1	1186.6
45°	1141.2	1135.1	1133.6	1132.1	1132.1
47.5°	1082.2	1082.2	1077.6	1074.6	1073.1
50°	1026.2	1020.1	1017.1	1012.5	1012.5
52.5°	961.1	959.6	955.0	953.5	953.5
55°	900.5	897.5	896.0	888.4	891.4
57.5°	838.5	832.4	830.9	826.4	823.3
60°	773.4	770.4	764.3	758.3	758.3
62.5°	703.8	702.3	696.2	691.7	690.2
65°	632.6	631.1	628.1	620.5	619.0
67.5°	572.1	566.0	558.5	552.4	552.4
70°	501.0	493.4	487.3	481.3	479.8
72.5°	428.3	423.8	420.8	414.7	410.2
75°	358.7	357.2	354.2	348.1	342.1
77.5°	293.6	292.1	284.5	280.0	275.5
80°	230.1	224.0	222.5	216.4	213.4
82.5°	161.9	165.0	157.4	155.9	154.4
85°	102.9	101.4	101.4	98.4	93.8
87.5°	45.4	46.9	46.9	46.9	46.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)