

TEST REPORT

Product: LED Backlit Panel Light

Product/Item No. PB-H12030

Brand: **Blinq88**
LED LIGHTING

Electrical Rating: 220-240 VAC 50/60 Hz; 30 W; 4000 K

Applicant: Blinq (HK) – Rep. Office for: Blinq88

Address: Amtel Building - Unit A/5F. 144-148 Des Voeux Road – Central, Hong Kong, China

Manufacturer: Same as applicant

Address: Same as applicant

Testing Laboratory: SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Address: 588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Number of Samples received: 1

Date of samples reception: 2020-06-06

Date Test Conducted: 2020-06-06 to 2020-06-24

Test Requested: The Total Luminous Flux, Electrical Power, Luminous Intensity Distribution and Color characteristics

Test Method (standards): IES LM-79-08
Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Remark: N/A



Prepared and checked by:

Abby Yang
Abby Yang
Project Engineer

Reviewed by:

Henry Hu
Henry Hu
Lighting Team Leader

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SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.
Testing Center Electronic Laboratory

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1. TEST CONDITIONS

Before measurements are taken, there is no seasoning for the LED luminaires, and LED luminaires in emitting-light surface down position was stabilized for 45 minutes in the ambient temperature $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$.

The AC Power Source DPS-1060 (Everfine) as used to generate 230V/50Hz to the tested samples for the mentioned tests which was measured by Everfine GO-R5000 system.

The Electrical quantities are measured by means of a calibrated Digital Power Meter PF2010 (Everfine).

The sample was mounted at emitting-light surface down position. The geometric centre of the LED luminaires was considered as optical reference centre for photometric test.

Light distribution was measured by calibrated Everfine GO-R5000 Type C goniophotometer with the distance 2.471 m between the detector and the sample's reference center.

The Total Luminous Flux & Color Characteristics of the light emitted by the LED luminaires was measured by calibrated Everfine GO-R5000 Type C goniophotometer with the distance 2.471 m between the detector and the sample's reference center.

The ambient temperature during measurements was 25°C

The uncertainty of luminous flux measurement is $U=2.12\%$ ($K=2$), the uncertainty of the CCT measurement is $U=2.26\%$ ($K=2$), all measurements results are traceable to NIM.



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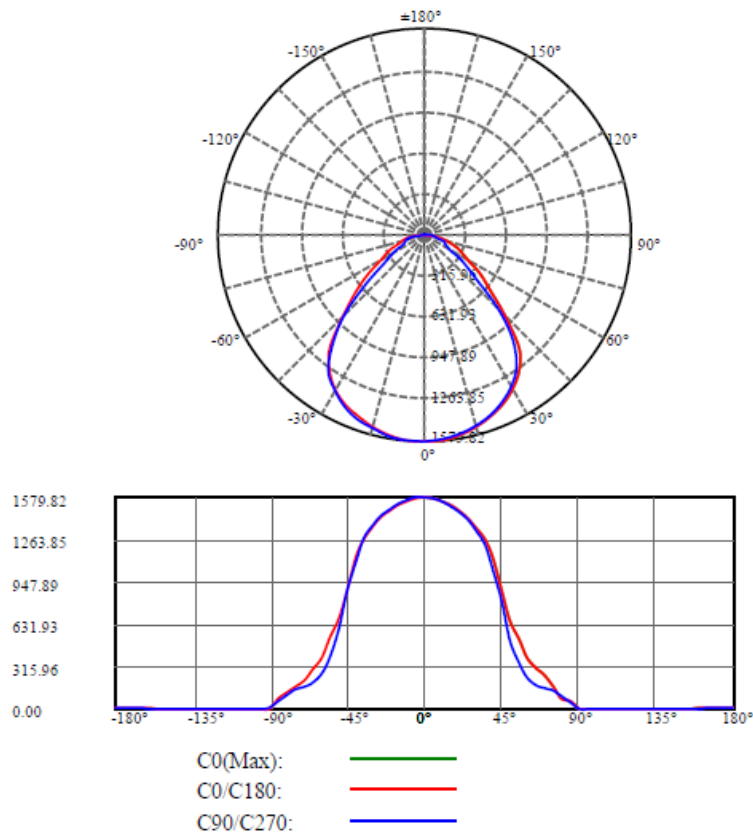
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2. TEST RESULTS

1. The Total Luminous Flux and Electrical Power

Test Voltage:	230.07 V
Test Current:	0.12548 A
Power:	27.37 W
Stabilization time	45 min
Total operating time for measurements	100 min
Total Luminous Flux:	3573 lm
Luminous Efficacy:	130.5 lm/W
Date Test Conducted :	

2. Light distribution Curve [unit: cd]



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3. Luminous Intensity (cd) Distribution Data

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1579.82	1572.75	1553.55	1521.23	1479.82	1426.28	1354.56	1261.63	1126.28
5.0	1579.82	1571.74	1551.53	1520.22	1478.81	1424.26	1352.54	1259.61	1124.26
10.0	1579.82	1572.74	1551.52	1519.17	1477.73	1424.16	1353.41	1260.42	1122.95
15.0	1579.82	1571.73	1550.51	1518.16	1476.72	1422.14	1352.40	1260.42	1119.92
20.0	1579.82	1570.71	1550.49	1517.11	1474.63	1421.03	1352.25	1260.21	1114.57
25.0	1579.82	1570.70	1550.45	1517.03	1474.50	1420.82	1351.96	1258.79	1111.95
30.0	1579.82	1571.70	1550.41	1516.95	1473.35	1420.62	1350.65	1256.35	1107.29
35.0	1579.82	1570.69	1549.38	1515.89	1472.26	1418.49	1348.48	1252.08	1101.91
40.0	1579.82	1570.68	1548.34	1514.84	1470.16	1416.35	1345.28	1248.83	1097.55
45.0	1579.82	1570.67	1548.32	1513.78	1469.08	1414.22	1342.08	1245.57	1094.19
50.0	1579.82	1569.66	1547.31	1513.78	1468.06	1412.18	1340.05	1242.52	1091.14
55.0	1579.82	1569.66	1547.31	1512.76	1467.05	1411.17	1337.00	1239.47	1085.04
60.0	1579.82	1570.67	1547.31	1512.76	1467.05	1411.17	1335.99	1237.44	1078.95
65.0	1579.82	1569.66	1547.33	1511.79	1467.12	1410.26	1336.14	1235.63	1074.19
70.0	1579.82	1569.66	1547.33	1512.81	1468.13	1412.29	1337.16	1235.63	1069.12
75.0	1579.82	1570.69	1547.35	1512.85	1468.21	1412.40	1337.31	1234.83	1059.30
80.0	1579.82	1570.69	1547.37	1512.89	1469.29	1413.52	1337.47	1233.03	1049.49
85.0	1579.82	1569.69	1547.41	1512.98	1469.43	1412.72	1336.77	1231.45	1044.10
90.0	1579.82	1569.70	1547.43	1514.03	1469.50	1412.83	1336.92	1230.66	1042.42
95.0	1579.82	1570.71	1548.44	1514.03	1469.50	1412.83	1336.92	1231.67	1043.43
100.0	1579.82	1570.71	1548.44	1515.05	1469.50	1413.84	1336.92	1232.68	1045.45
105.0	1579.82	1570.71	1548.44	1515.05	1469.50	1413.84	1336.92	1232.68	1047.48
110.0	1579.82	1570.71	1548.44	1515.05	1469.50	1412.83	1336.92	1232.68	1054.56
115.0	1579.82	1570.71	1548.44	1515.05	1469.50	1412.83	1336.92	1232.68	1061.65
120.0	1579.82	1571.72	1549.44	1516.02	1471.46	1414.75	1337.78	1235.50	1066.38
125.0	1579.82	1570.71	1549.46	1516.06	1470.52	1414.85	1338.95	1236.73	1070.75
130.0	1579.82	1571.72	1549.46	1517.07	1472.54	1415.86	1340.97	1240.78	1077.84
135.0	1579.82	1570.71	1550.49	1517.11	1473.62	1417.99	1344.16	1245.04	1083.22
140.0	1579.82	1571.73	1550.51	1518.16	1473.69	1420.12	1347.34	1248.29	1086.57
145.0	1579.82	1571.74	1551.53	1519.21	1475.78	1422.24	1349.51	1251.53	1089.91
150.0	1579.82	1571.74	1551.55	1519.25	1476.85	1424.36	1352.69	1254.77	1095.27
155.0	1579.82	1571.75	1551.57	1520.30	1477.93	1425.47	1354.85	1259.01	1102.64
160.0	1579.82	1571.75	1551.57	1520.30	1477.93	1426.48	1356.87	1263.05	1111.72
165.0	1579.82	1571.74	1552.56	1521.27	1479.88	1427.39	1359.75	1265.87	1120.51
170.0	1579.82	1571.74	1551.55	1521.27	1478.87	1427.39	1359.75	1266.88	1127.58
175.0	1579.82	1572.75	1553.55	1522.24	1480.83	1428.30	1360.62	1267.69	1132.34
180.0	1579.82	1571.74	1552.56	1522.28	1480.89	1428.40	1359.75	1268.90	1133.63
185.0	1579.82	1572.75	1553.55	1523.25	1481.84	1430.32	1361.63	1270.72	1136.38
190.0	1579.82	1572.75	1553.55	1524.26	1482.85	1431.33	1363.65	1273.75	1139.41
195.0	1579.82	1572.75	1553.55	1524.26	1483.86	1433.35	1366.68	1275.77	1139.41
200.0	1579.82	1573.75	1555.54	1525.20	1484.74	1435.19	1369.44	1279.43	1139.86



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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
205.0	1579.82	1573.74	1555.53	1526.18	1485.70	1437.12	1371.33	1280.25	1139.57
210.0	1579.82	1574.75	1556.51	1527.12	1486.59	1437.95	1372.08	1280.88	1139.01
215.0	1579.82	1574.75	1556.49	1528.10	1487.54	1437.86	1372.96	1280.69	1137.71
220.0	1579.82	1574.74	1557.49	1528.07	1487.48	1437.77	1371.81	1280.49	1138.44
225.0	1579.82	1574.74	1557.49	1528.07	1487.48	1436.75	1370.80	1278.46	1137.43
230.0	1579.82	1574.74	1557.49	1529.08	1487.48	1436.75	1368.77	1276.44	1135.40
235.0	1579.82	1574.74	1557.49	1529.08	1488.50	1437.77	1368.77	1275.42	1130.33
240.0	1579.82	1575.76	1558.51	1530.10	1489.51	1438.78	1368.77	1274.41	1126.27
245.0	1579.82	1575.76	1559.52	1531.11	1490.53	1439.79	1370.80	1275.42	1124.24
250.0	1579.82	1575.76	1559.54	1531.14	1491.60	1440.90	1371.95	1276.63	1118.45
255.0	1579.82	1575.76	1559.55	1531.18	1491.66	1442.00	1374.11	1277.84	1113.67
260.0	1579.82	1575.77	1559.56	1531.21	1492.72	1443.10	1375.25	1279.04	1109.92
265.0	1579.82	1576.78	1560.59	1532.25	1493.79	1444.20	1375.38	1279.24	1106.18
270.0	1579.82	1576.78	1560.60	1532.28	1493.85	1444.29	1375.51	1278.42	1103.44
275.0	1579.82	1576.78	1560.60	1532.28	1493.85	1444.29	1375.51	1279.43	1104.46
280.0	1579.82	1576.78	1559.60	1531.30	1492.89	1443.36	1374.63	1278.61	1107.79
285.0	1579.82	1577.79	1560.60	1532.28	1493.85	1443.28	1374.50	1279.43	1115.58
290.0	1579.82	1576.78	1560.60	1531.27	1492.84	1442.27	1372.48	1278.42	1120.64
295.0	1579.82	1576.78	1559.59	1531.27	1491.82	1440.24	1371.47	1277.41	1124.68
300.0	1579.82	1575.77	1559.59	1530.26	1490.81	1439.23	1370.46	1276.40	1127.72
305.0	1579.82	1575.77	1558.58	1530.26	1490.81	1439.23	1369.44	1276.40	1130.75
310.0	1579.82	1575.77	1559.59	1530.26	1489.80	1439.23	1370.46	1276.40	1133.79
315.0	1579.82	1575.77	1558.59	1529.28	1488.85	1438.31	1370.59	1275.58	1132.05
320.0	1579.82	1575.77	1558.59	1529.28	1489.86	1439.32	1371.60	1276.59	1131.04
325.0	1579.82	1575.78	1558.60	1529.31	1488.91	1438.40	1370.72	1276.78	1131.33
330.0	1579.82	1575.78	1557.61	1528.33	1487.96	1437.48	1369.85	1277.99	1131.61
335.0	1579.82	1573.76	1556.61	1526.35	1487.01	1435.56	1367.96	1276.16	1131.90
340.0	1579.82	1573.76	1555.61	1525.34	1484.99	1434.55	1365.95	1275.15	1130.89
345.0	1579.82	1573.76	1554.58	1524.30	1483.92	1432.43	1363.79	1271.93	1132.62
350.0	1579.82	1573.76	1554.56	1523.25	1482.85	1430.32	1360.62	1267.69	1132.34
355.0	1579.82	1572.75	1553.55	1522.24	1481.84	1428.30	1356.58	1263.65	1129.31
360.0	1579.82	1572.75	1553.55	1521.23	1479.82	1426.28	1354.56	1261.63	1126.28



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C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	868.70	658.80	515.26	386.37	308.08	252.33	164.55	82.53	61.52
5.0	869.71	652.74	500.41	374.15	299.70	247.58	164.24	88.99	59.29
10.0	875.32	633.34	459.90	347.09	282.31	239.35	182.44	103.20	55.69
15.0	873.30	605.14	416.33	298.78	237.02	213.67	186.08	111.69	53.37
20.0	868.80	573.06	380.09	261.25	190.04	173.46	174.06	120.86	49.96
25.0	866.87	553.64	364.37	244.47	163.25	147.35	168.41	117.37	45.67
30.0	858.86	551.52	362.00	241.84	158.79	143.79	164.57	116.31	46.54
35.0	847.24	565.16	368.12	252.24	179.80	156.36	161.74	117.40	50.33
40.0	834.58	585.63	390.39	277.69	213.93	187.53	166.00	111.99	54.83
45.0	824.96	603.68	427.21	315.86	247.69	210.51	162.86	108.61	57.81
50.0	817.85	615.06	472.52	352.13	275.73	213.96	153.71	106.17	58.82
55.0	816.83	625.42	496.09	374.08	287.52	211.83	142.03	100.38	61.57
60.0	819.88	630.30	492.13	370.83	284.27	209.69	136.24	98.85	62.18
65.0	819.35	616.29	467.85	352.51	272.31	212.50	149.86	106.00	59.09
70.0	816.31	589.79	427.44	323.98	255.76	213.72	164.38	108.03	55.03
75.0	809.69	558.57	393.69	297.50	233.88	201.31	165.69	108.97	50.63
80.0	805.12	530.83	365.04	264.96	205.23	183.23	152.91	104.75	50.09
85.0	804.09	516.48	346.75	242.44	180.87	165.17	137.93	94.69	48.51
90.0	799.52	513.42	339.24	235.40	176.81	161.42	136.12	93.62	46.35
95.0	791.43	520.80	342.18	240.36	181.87	164.26	139.76	99.48	48.58
100.0	781.31	536.49	357.76	256.86	201.20	173.47	143.10	104.95	51.41
105.0	775.23	556.02	390.45	292.48	231.86	192.70	155.55	108.19	52.73
110.0	779.28	580.72	438.12	335.09	260.50	209.60	166.89	113.35	54.25
115.0	786.37	604.70	481.23	370.21	277.00	210.61	160.82	117.50	59.00
120.0	790.92	622.20	503.92	390.40	286.59	209.33	146.64	111.40	62.48
125.0	791.43	620.79	503.50	390.15	290.56	208.08	145.33	105.56	62.04
130.0	795.47	608.45	478.09	371.02	281.05	205.55	151.81	106.77	60.72
135.0	803.06	594.20	434.90	332.65	259.53	205.52	158.99	109.94	57.95
140.0	811.64	579.37	397.73	289.38	225.00	191.94	159.40	109.36	52.96
145.0	825.26	566.07	375.36	259.70	189.19	164.35	144.65	105.56	52.73
150.0	842.91	555.71	365.23	244.29	168.18	146.37	133.35	101.15	55.32
155.0	856.49	555.46	365.80	244.03	167.36	146.08	135.59	105.52	55.89
160.0	865.57	574.22	379.42	259.07	185.02	159.19	147.09	115.31	57.20
165.0	869.15	608.31	410.45	290.63	218.45	181.50	159.29	119.72	61.17
170.0	872.18	642.53	456.38	336.66	255.40	203.41	171.10	123.56	66.62
175.0	874.76	666.27	497.99	368.49	282.23	213.54	173.03	127.68	72.53
180.0	875.21	677.55	525.02	384.30	294.36	212.69	164.44	128.20	76.42
185.0	879.81	676.27	520.21	381.12	293.13	215.76	167.88	127.38	75.15
190.0	886.88	664.55	485.86	361.52	277.28	216.57	176.67	126.26	71.52
195.0	897.99	645.06	446.87	318.08	240.91	201.01	171.52	124.85	67.48
200.0	907.23	623.84	412.86	278.64	201.88	173.96	160.00	125.41	65.34



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C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
205.0	908.82	610.37	397.43	262.22	177.01	151.81	144.72	119.83	64.87
210.0	903.91	612.37	395.21	260.63	174.60	147.14	139.03	111.87	65.16
215.0	894.35	622.60	406.72	275.50	192.56	160.31	145.71	113.67	63.68
220.0	886.81	635.78	433.36	305.72	229.01	188.02	162.85	119.93	64.53
225.0	880.72	651.51	476.99	349.24	270.71	214.40	169.95	125.31	71.33
230.0	875.65	667.95	521.94	399.27	302.77	227.49	168.94	125.92	79.24
235.0	872.60	681.85	555.02	434.68	317.69	229.72	169.04	121.96	80.36
240.0	871.59	686.62	562.02	442.80	323.67	231.14	170.77	127.44	83.51
245.0	868.54	673.63	542.54	421.79	314.75	233.78	184.16	138.60	81.27
250.0	863.93	650.08	502.84	381.77	293.25	228.86	188.30	134.56	74.83
255.0	861.35	626.45	451.85	332.48	260.03	208.55	171.26	126.77	70.23
260.0	863.84	610.25	411.97	291.46	223.60	186.84	158.29	120.92	68.15
265.0	869.35	600.05	389.94	272.34	201.70	171.34	152.11	116.89	65.08
270.0	872.84	595.41	383.32	266.10	192.37	165.97	144.63	110.04	62.10
275.0	875.88	594.71	387.77	271.87	196.62	169.82	146.96	109.13	64.12
280.0	876.33	598.67	403.90	291.50	219.44	186.08	159.80	119.98	66.81
285.0	877.90	614.02	434.30	324.66	253.66	213.41	178.41	128.85	67.56
290.0	876.89	633.14	470.10	356.93	281.78	229.69	182.46	127.64	71.41
295.0	871.83	648.72	504.39	388.08	299.88	232.42	168.80	120.26	74.03
300.0	866.78	655.59	526.23	412.25	310.81	228.48	155.45	110.34	76.26
305.0	860.71	652.46	529.07	414.58	311.61	225.75	154.64	113.99	76.77
310.0	857.67	643.96	508.33	385.35	294.42	221.40	164.96	124.50	74.54
315.0	859.15	630.01	461.01	339.01	265.53	217.52	171.93	122.81	70.45
320.0	863.19	611.11	414.61	294.43	228.84	192.45	164.75	119.67	65.70
325.0	868.70	594.25	384.45	262.43	191.42	159.19	158.28	123.54	59.60
330.0	876.22	579.84	374.41	249.24	168.98	149.20	162.73	115.99	54.41
335.0	879.69	573.01	373.67	249.58	167.67	150.52	165.95	114.70	51.75
340.0	880.70	585.22	384.46	263.61	187.44	166.35	172.41	118.44	55.49
345.0	880.26	610.22	415.19	291.94	225.11	208.66	185.94	120.13	56.23
350.0	876.78	634.25	452.93	338.19	275.76	238.18	188.08	113.84	59.60
355.0	870.72	649.10	493.04	374.35	303.94	249.40	173.54	99.40	59.90
360.0	868.70	658.80	515.26	386.37	308.08	252.33	164.55	82.53	61.52



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C/T(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	1.43	0.85	0.86	1.01	1.17	1.53	1.72	1.70	1.89
5.0	1.52	0.86	0.87	1.01	1.18	1.54	1.72	1.71	1.90
10.0	1.65	0.86	0.87	1.03	1.19	1.53	1.72	1.72	1.90
15.0	1.73	0.86	0.87	1.03	1.21	1.55	1.72	1.74	1.89
20.0	1.79	0.85	0.87	1.03	1.21	1.56	1.74	1.77	1.89
25.0	1.85	0.85	0.87	1.03	1.22	1.56	1.75	1.80	1.90
30.0	1.95	0.85	0.87	1.02	1.21	1.56	1.75	1.83	1.93
35.0	2.11	0.85	0.86	1.01	1.19	1.54	1.75	1.85	1.94
40.0	2.29	0.85	0.86	1.00	1.18	1.52	1.74	1.86	1.94
45.0	2.47	0.84	0.84	0.99	1.16	1.51	1.73	1.87	1.95
50.0	2.58	0.84	0.84	0.97	1.14	1.51	1.72	1.86	1.94
55.0	2.66	0.83	0.82	0.96	1.13	1.50	1.70	1.86	1.93
60.0	2.70	0.82	0.82	0.93	1.12	1.48	1.69	1.85	1.91
65.0	2.66	0.81	0.80	0.92	1.10	1.46	1.68	1.83	1.89
70.0	2.62	0.79	0.79	0.91	1.09	1.44	1.67	1.82	1.87
75.0	2.56	0.77	0.78	0.90	1.07	1.42	1.65	1.81	1.86
80.0	2.47	0.75	0.76	0.88	1.04	1.40	1.63	1.79	1.84
85.0	2.33	0.74	0.75	0.87	1.03	1.39	1.62	1.79	1.82
90.0	2.28	0.73	0.74	0.85	1.02	1.38	1.60	1.78	1.79
95.0	2.34	0.73	0.73	0.85	1.01	1.36	1.59	1.77	1.82
100.0	2.48	0.73	0.73	0.84	1.00	1.36	1.59	1.76	1.83
105.0	2.61	0.73	0.73	0.84	1.00	1.35	1.58	1.76	1.83
110.0	2.69	0.74	0.74	0.84	1.00	1.35	1.58	1.75	1.83
115.0	2.72	0.75	0.74	0.85	1.01	1.35	1.58	1.75	1.83
120.0	2.74	0.76	0.75	0.86	1.01	1.36	1.57	1.75	1.84
125.0	2.63	0.77	0.76	0.87	1.02	1.37	1.58	1.75	1.85
130.0	2.53	0.77	0.76	0.87	1.03	1.38	1.59	1.75	1.85
135.0	2.40	0.77	0.76	0.88	1.03	1.38	1.60	1.76	1.86
140.0	2.18	0.76	0.77	0.89	1.05	1.38	1.62	1.76	1.87
145.0	2.03	0.76	0.77	0.90	1.07	1.41	1.65	1.76	1.87
150.0	1.88	0.76	0.78	0.91	1.08	1.43	1.67	1.76	1.87
155.0	1.78	0.77	0.79	0.93	1.10	1.46	1.67	1.75	1.86
160.0	1.74	0.79	0.80	0.94	1.13	1.47	1.68	1.71	1.85
165.0	1.72	0.81	0.82	0.96	1.14	1.48	1.68	1.70	1.85
170.0	1.75	0.83	0.83	0.98	1.15	1.47	1.67	1.68	1.85
175.0	1.79	0.86	0.86	0.99	1.14	1.47	1.68	1.68	1.86
180.0	1.80	0.88	0.87	0.99	1.15	1.48	1.68	1.67	1.86
185.0	2.36	0.89	0.87	0.99	1.15	1.48	1.68	1.67	1.85
190.0	3.01	0.89	0.88	1.00	1.15	1.47	1.67	1.68	1.85
195.0	3.57	0.89	0.87	1.01	1.16	1.48	1.67	1.69	1.83
200.0	4.07	0.88	0.87	0.99	1.16	1.49	1.67	1.71	1.82



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C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
205.0	4.59	0.87	0.86	0.98	1.15	1.49	1.67	1.73	1.83
210.0	5.20	0.87	0.85	0.97	1.13	1.48	1.67	1.74	1.84
215.0	6.04	0.87	0.84	0.96	1.12	1.46	1.67	1.76	1.85
220.0	6.88	0.88	0.83	0.94	1.11	1.44	1.65	1.78	1.85
225.0	7.99	0.88	0.83	0.93	1.10	1.43	1.63	1.79	1.85
230.0	9.72	0.89	0.82	0.91	1.08	1.41	1.62	1.77	1.84
235.0	10.46	0.89	0.82	0.90	1.06	1.40	1.60	1.76	1.83
240.0	11.15	0.89	0.81	0.89	1.03	1.38	1.58	1.74	1.81
245.0	11.19	0.87	0.80	0.87	1.01	1.36	1.56	1.72	1.78
250.0	10.77	0.85	0.78	0.86	0.99	1.34	1.55	1.71	1.76
255.0	10.27	0.83	0.76	0.84	0.97	1.32	1.53	1.70	1.75
260.0	9.58	0.81	0.75	0.83	0.96	1.31	1.52	1.69	1.73
265.0	9.12	0.80	0.74	0.81	0.95	1.30	1.51	1.68	1.72
270.0	8.75	0.79	0.74	0.81	0.94	1.28	1.50	1.68	1.69
275.0	9.16	0.78	0.73	0.81	0.94	1.28	1.49	1.68	1.74
280.0	9.61	0.78	0.73	0.80	0.94	1.28	1.50	1.68	1.74
285.0	9.88	0.79	0.73	0.80	0.94	1.28	1.50	1.68	1.75
290.0	10.07	0.79	0.74	0.81	0.95	1.28	1.50	1.68	1.76
295.0	9.69	0.80	0.75	0.82	0.96	1.29	1.50	1.68	1.77
300.0	9.57	0.81	0.75	0.83	0.97	1.30	1.51	1.68	1.78
305.0	9.29	0.81	0.76	0.84	0.98	1.30	1.53	1.69	1.80
310.0	8.49	0.81	0.76	0.85	0.99	1.32	1.54	1.69	1.81
315.0	7.43	0.81	0.77	0.86	1.01	1.34	1.56	1.71	1.82
320.0	6.55	0.80	0.77	0.88	1.02	1.36	1.59	1.72	1.83
325.0	5.69	0.79	0.78	0.89	1.04	1.39	1.63	1.73	1.84
330.0	4.79	0.79	0.79	0.91	1.07	1.43	1.66	1.73	1.84
335.0	4.08	0.79	0.80	0.93	1.10	1.46	1.67	1.73	1.85
340.0	3.51	0.81	0.81	0.95	1.13	1.48	1.68	1.73	1.84
345.0	2.96	0.82	0.83	0.98	1.15	1.49	1.69	1.71	1.85
350.0	2.61	0.83	0.84	0.99	1.16	1.51	1.69	1.70	1.87
355.0	1.99	0.84	0.85	1.00	1.16	1.51	1.71	1.69	1.88
360.0	1.43	0.85	0.86	1.01	1.17	1.53	1.72	1.70	1.89



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Ch _T (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	2.37	2.94	3.35	4.05	4.58	5.00	5.44	5.66	5.79
5.0	2.37	2.94	3.35	4.04	4.56	4.98	5.43	5.65	5.79
10.0	2.39	2.95	3.36	4.04	4.55	4.96	5.43	5.65	5.79
15.0	2.37	2.94	3.37	4.03	4.53	4.94	5.42	5.64	5.79
20.0	2.35	2.92	3.34	4.02	4.52	4.92	5.40	5.61	5.78
25.0	2.34	2.91	3.32	3.98	4.50	4.90	5.38	5.59	5.76
30.0	2.33	2.89	3.31	3.94	4.48	4.89	5.35	5.57	5.75
35.0	2.32	2.89	3.30	3.92	4.45	4.86	5.33	5.53	5.72
40.0	2.33	2.89	3.28	3.88	4.45	4.84	5.31	5.50	5.71
45.0	2.31	2.89	3.29	3.84	4.43	4.83	5.29	5.48	5.69
50.0	2.29	2.89	3.29	3.81	4.42	4.82	5.25	5.46	5.68
55.0	2.26	2.89	3.29	3.79	4.41	4.82	5.22	5.45	5.68
60.0	2.25	2.89	3.30	3.79	4.38	4.82	5.20	5.43	5.68
65.0	2.22	2.87	3.31	3.77	4.35	4.81	5.17	5.42	5.69
70.0	2.20	2.87	3.32	3.77	4.32	4.81	5.15	5.41	5.71
75.0	2.18	2.86	3.33	3.77	4.28	4.82	5.13	5.42	5.73
80.0	2.18	2.86	3.33	3.77	4.25	4.82	5.12	5.41	5.79
85.0	2.17	2.85	3.32	3.76	4.22	4.80	5.11	5.43	5.85
90.0	2.18	2.83	3.32	3.74	4.19	4.78	5.11	5.48	5.92
95.0	2.16	2.83	3.32	3.74	4.15	4.76	5.12	5.54	5.99
100.0	2.16	2.82	3.32	3.74	4.14	4.73	5.17	5.61	6.01
105.0	2.16	2.82	3.31	3.74	4.13	4.73	5.23	5.66	6.01
110.0	2.16	2.81	3.30	3.73	4.14	4.74	5.28	5.71	5.99
115.0	2.17	2.81	3.29	3.73	4.15	4.76	5.33	5.73	5.97
120.0	2.17	2.82	3.29	3.74	4.18	4.77	5.37	5.73	5.92
125.0	2.19	2.81	3.28	3.72	4.21	4.81	5.39	5.73	5.88
130.0	2.21	2.81	3.27	3.73	4.25	4.83	5.41	5.72	5.84
135.0	2.21	2.82	3.27	3.74	4.29	4.86	5.41	5.68	5.82
140.0	2.23	2.82	3.25	3.77	4.34	4.90	5.42	5.68	5.80
145.0	2.25	2.83	3.25	3.80	4.38	4.93	5.42	5.68	5.81
150.0	2.26	2.82	3.26	3.85	4.44	4.97	5.43	5.67	5.80
155.0	2.26	2.83	3.27	3.88	4.49	4.98	5.44	5.67	5.81
160.0	2.28	2.85	3.28	3.92	4.53	4.99	5.45	5.68	5.82
165.0	2.30	2.88	3.31	3.98	4.54	5.02	5.47	5.69	5.82
170.0	2.32	2.90	3.32	4.01	4.56	5.02	5.47	5.69	5.82
175.0	2.33	2.89	3.31	4.01	4.56	5.01	5.46	5.68	5.83
180.0	2.33	2.89	3.31	4.01	4.53	4.99	5.44	5.66	5.81
185.0	2.32	2.88	3.30	3.99	4.52	4.96	5.42	5.66	5.81
190.0	2.32	2.88	3.29	3.98	4.48	4.93	5.40	5.65	5.81
195.0	2.29	2.86	3.27	3.96	4.46	4.90	5.38	5.63	5.80
200.0	2.27	2.83	3.26	3.92	4.44	4.87	5.36	5.59	5.78



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C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
205.0	2.25	2.81	3.23	3.89	4.41	4.85	5.32	5.57	5.75
210.0	2.24	2.79	3.21	3.85	4.39	4.81	5.30	5.53	5.73
215.0	2.23	2.79	3.19	3.80	4.36	4.79	5.26	5.50	5.70
220.0	2.22	2.78	3.18	3.76	4.33	4.75	5.24	5.46	5.67
225.0	2.20	2.77	3.18	3.72	4.32	4.73	5.20	5.42	5.65
230.0	2.17	2.76	3.17	3.68	4.29	4.71	5.15	5.39	5.64
235.0	2.15	2.75	3.17	3.67	4.28	4.70	5.11	5.37	5.63
240.0	2.13	2.74	3.18	3.65	4.25	4.69	5.08	5.35	5.62
245.0	2.11	2.74	3.18	3.64	4.22	4.69	5.06	5.33	5.63
250.0	2.10	2.73	3.18	3.64	4.19	4.69	5.04	5.31	5.65
255.0	2.09	2.73	3.18	3.64	4.15	4.68	5.02	5.31	5.66
260.0	2.08	2.72	3.19	3.64	4.13	4.68	5.00	5.31	5.72
265.0	2.07	2.71	3.19	3.63	4.10	4.68	4.99	5.32	5.78
270.0	2.07	2.71	3.19	3.62	4.07	4.65	4.99	5.36	5.86
275.0	2.07	2.71	3.20	3.62	4.04	4.63	5.00	5.42	5.92
280.0	2.06	2.71	3.19	3.62	4.02	4.60	5.05	5.48	5.93
285.0	2.07	2.72	3.20	3.62	4.03	4.60	5.11	5.54	5.94
290.0	2.07	2.72	3.20	3.62	4.04	4.62	5.16	5.59	5.92
295.0	2.08	2.72	3.19	3.63	4.05	4.64	5.22	5.61	5.89
300.0	2.10	2.72	3.20	3.63	4.08	4.66	5.26	5.62	5.85
305.0	2.11	2.74	3.20	3.64	4.11	4.69	5.29	5.62	5.80
310.0	2.13	2.74	3.20	3.65	4.16	4.73	5.31	5.62	5.77
315.0	2.16	2.76	3.19	3.67	4.20	4.77	5.33	5.61	5.74
320.0	2.18	2.77	3.20	3.71	4.27	4.82	5.34	5.60	5.74
325.0	2.20	2.79	3.20	3.76	4.32	4.86	5.35	5.61	5.74
330.0	2.23	2.80	3.23	3.81	4.38	4.90	5.37	5.61	5.74
335.0	2.25	2.82	3.25	3.85	4.45	4.94	5.40	5.62	5.75
340.0	2.28	2.84	3.27	3.91	4.50	4.97	5.42	5.64	5.76
345.0	2.31	2.89	3.31	3.98	4.54	5.01	5.45	5.65	5.78
350.0	2.34	2.91	3.33	4.02	4.58	5.02	5.46	5.67	5.79
355.0	2.36	2.93	3.34	4.05	4.59	5.01	5.45	5.66	5.79
360.0	2.37	2.94	3.35	4.05	4.58	5.00	5.44	5.66	5.79



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C/γ(°)	180.0
0.0	5.81
5.0	5.82
10.0	5.82
15.0	5.81
20.0	5.81
25.0	5.79
30.0	5.78
35.0	5.76
40.0	5.76
45.0	5.76
50.0	5.76
55.0	5.77
60.0	5.79
65.0	5.81
70.0	5.87
75.0	5.92
80.0	5.97
85.0	6.00
90.0	6.00
95.0	6.00
100.0	5.98
105.0	5.93
110.0	5.88
115.0	5.82
120.0	5.79
125.0	5.77
130.0	5.77
135.0	5.77
140.0	5.76
145.0	5.78
150.0	5.79
155.0	5.81
160.0	5.83
165.0	5.84
170.0	5.85
175.0	5.86
180.0	5.84
185.0	5.85
190.0	5.85
195.0	5.84
200.0	5.83
205.0	5.80
210.0	5.79
215.0	5.77
220.0	5.74
225.0	5.74
230.0	5.74
235.0	5.75
240.0	5.76
245.0	5.78
250.0	5.83
255.0	5.89
260.0	5.92
265.0	5.95
270.0	5.95
275.0	5.95
280.0	5.92
285.0	5.88
290.0	5.82
295.0	5.77
300.0	5.72
305.0	5.70
310.0	5.69
315.0	5.70
320.0	5.71
325.0	5.73
330.0	5.74
335.0	5.76
340.0	5.78
345.0	5.79
350.0	5.81
355.0	5.81
360.0	5.81



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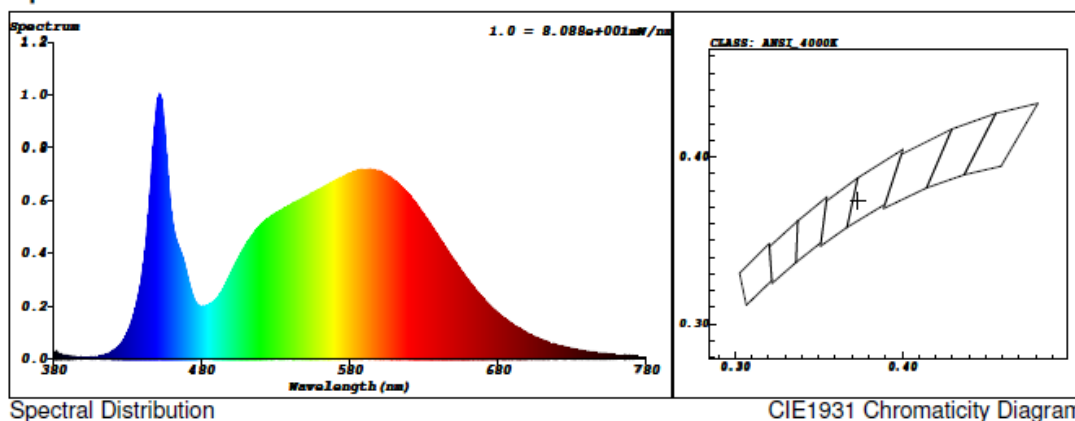
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4. Color Characteristics of the LED luminaire

Test Voltage:	230 V
Stabilization time	45
Total operating time for measurements	60
Chromaticity Coordiante	$x=0.3735; y=0.3737$
Correlated Color Temperature:	4173 K
Duv:	$6.81e-04$
Color Rendering Index	82.5
R9:	11

Relative spectrum distribution

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

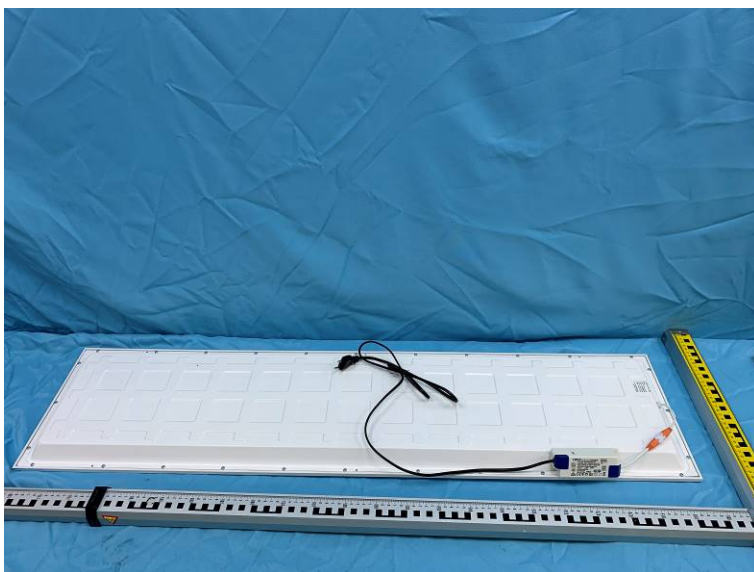
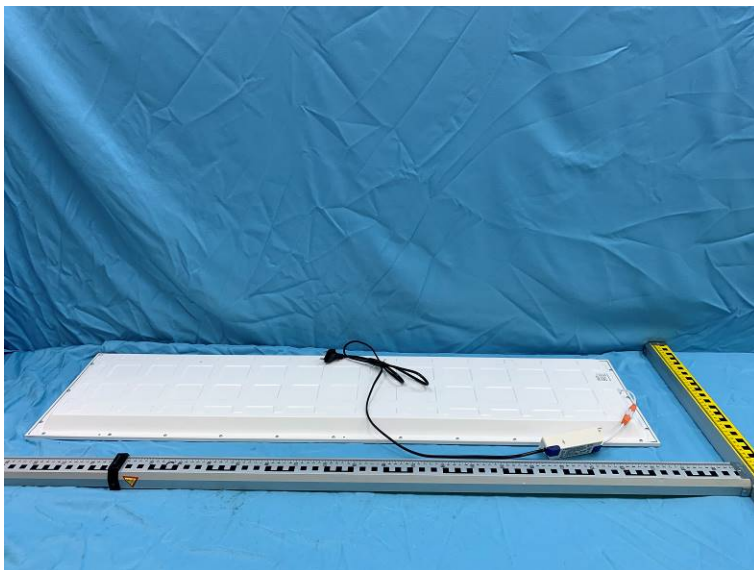


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Annex1: Photo documentation



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ANNEX2: STANDARD BULB USED FOR SYSTEM CALIBRAITON

For Everfine GO-R5000 system

Model	D908S
Intensity Distribution Type	Omni-Directional Type
Calibration current(A)	7,3200
Reference voltage (V)	90,30
Calibration CCT (K)	2856
Calibration luminous Flux (lm)	11270



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ANNEX3: LIST OF EQUIPMENT USED

Registration No	Equipment name	Model No	Manufacturer	Cal. Date (cycle in years)
SHES333401a	Distribution photometer	GO-R5000	Everfine	2019/12/29
SHES333401b	The controller	CT500	Everfine	2019/12/29
SHES333401c	Spectral radiometer	HAAS-2000	Everfine	2019/12/29
SHES333401d	Standard light source for GO-R5000 system	D908S	Everfine	2019/09/02
SHES333401e	Imaging luminance meter	CX-2B_WL	Everfine	2019/12/29
SHES333401f	Photo sensor(near)	ID-1000_P-C	Everfine	2019/12/29
SHES333401g	Photo sensor(far)	ID-1000_P-B	Everfine	2019/12/29
SHES333401h	AC Power source	DPS-1060	Everfine	2019/12/29
SHES333401i	power supply	WY12010	Everfine	2019/12/29
SHES333401j	Digital Power Meter	PF2010A	Everfine	2019/12/29
SHES333401k	Temperature probe	GO-R5000	Everfine	2019/12/29
SHES331506	Standard light source	D204	Everfine	2020/04/07

— End of report —



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