



Shenzhen Belling Efficiency Testing Lab Co., Ltd



Report No.:BL201015011-9C

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Version 1.0
Total pages 22

Test report of

IES LM-79-08

**Approved Method: Electrical and Photometric
Measurements of Solid-State Lighting Products**

Applicant:

RAB Lighting Inc

Address:

Northvale, New Jersey, 07647, USA

For Product:

LED temporary work light

Model No.:

TEMP-150-850/35CP

Test laboratory: Shenzhen Belling Efficiency Testing Lab Co., Ltd, 1Floor, No.1 Building, Meibaohe Industrial Park, Dalang Street, Longhua District, Shenzhen, Guangdong Prov.518101 China.

Complied by: Jarvis zhang

Review by: Jason zhou

Project Engineer

Technical Manager

Note: The test data was only valid for the test sample(s). This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or use in part without prior written consent from Shenzhen Belling Efficiency Testing Lab Co., Ltd. This report must not be used by the customer to claim product certification, approval, or endorsement By NVLAP, NIST, or any agency of the U.S. Government.



1 General

1.1 Product Information

Manufacturer	RAB Lighting Inc
Manufacturer Address	Northvale, New Jersey, 07647, USA
Brand Name	/
Luminaire Type	LED temporary work light
Model Number	TEMP-150-850/35CP
Rated Inputs	AC 100-277V 50/60Hz
Rated Power	150 W
Nominal CCT	5000K
Date of Receipt Samples	2020-10-10
Date of test	2020-10-10 to 2020-10-16
Burning Time Before Test	0hour(For New Products)

1.2 Standards or methods

- ANSI C78.377-2017: Specifications for the Chromaticity of Solid State Lighting Products
- ANSI C82.77-10:2014: Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment - Solid State
- CIE Publication No.13.3-1995: Method of Measuring and Specifying Color Rendering of Light Sources
- IESNA LM-79-08 Approved Method: Electric & Photometric Measurement of Solid-state Lighting Products



1.3 Equipment list

Device	Manufacture	Model No.	Serial No.	Calibration due date
Goniophotometric System	SENSING	GMS-3000	N.A	2021-04-02
AC Power Source	ALL POWER	APW-110N	992257	2021-04-02
Total Luminous Flux Standard Lamp	SENSING	110V/100W	S1510065	2021-04-08
Total Spectral Radiant Flux Standard Lamp	SENSING	12V/20W	LSD12201731	2021-04-08
Digital Power Meter	YOKOGAWA	WT310	C2QM02030V	2021-04-02
Integral Sphere	SENSING	SPR-600M	N.A	2021-04-02
Digital Power Meter	YOKOGAWA	WT210	91L929742	2021-04-02
Optical Color and Electrical Measurement System	SENSING	SPR-3000	S1101108	2021-04-02
Environment Measurer	XUYAO	HS-1	N/A	2021-04-08
Environment Measurer	XUYAO	HS-1	N/A	2021-04-08
Stop watch	KISLO	K610	N/A	2021-04-27
Digital Anemometer	TECMAN	TD8901	026141	2021-09-09

Statement of Traceability: Shenzhen Belling Efficiency Testing Lab Co., Ltd attests that all calibration has been performed using suitable standards traceable to national primary standards and International System of Unit (SI).



1.4 Report Revision:

Original report BL201015011-9 dated at 2020-10-20 was recalled and declared as invalid by Shenzhen Belling Efficiency Testing Lab Co.,Ltd. Report BL201015011-9A was issued on to replace report BL201015011-9.

The report BL201015011-9A dated at 2020-10-28 was recalled and declared as invalid by Shenzhen Belling Efficiency Testing Lab Co.,Ltd. Report BL201015011-9B was issued on to replace report BL201015011-9A.

The report BL201015011-9B dated at 2021-06-09 was recalled and declared as invalid by Shenzhen Belling Efficiency Testing Lab Co.,Ltd. Report BL201015011-9C was issued on to replace report BL201015011-9B.

Report Number	Report Data	Contents
BL201015011-9	2020-10-20	Original report
BL201015011-9A	2020-10-28	(1)Revise the Brand Name, (2)Add the TM-30
BL201015011-9B	2021-06-09	Revise the Model Number
BL201015011-9C	2021-07-08	Add the THD and PF



2 Test conducted and method

2.1 Ambient Condition

The ambient temperature in which measurements are being taken was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, the air flow around the sample(s) being tested did not affect the performance.

2.2 Power Supply Characteristics

The AC power supply had a sinusoidal voltage wave shape at the prescribed frequency (60 Hz) such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item.

The voltage of AC power supply (RMS voltage) applied to the device under test was regulated to within ± 0.2 percent under load.

2.3 Seasoning and Stabilization

No seasoning was performed in accordance with IESNA LM-79-08. And before the measurement, the sample was stabilized until the light output and power variations were less than 0.5% in 30 minutes intervals (3 readings, 15 minutes apart).

2.4 Integrating Sphere System

The system includes AC power source, digital power meter, DC power supply, spectrophotometer, and integrating sphere. The integrating sphere system is calibrated by standard light source before measurement. The system and standard light source has been calibrated regularly and traceable to the National Primary Standards. 4π geometry was used during measurement. The product was operated in its intended orientation in application and was recorded in this report.

Integrating Sphere Uncertainty: The uncertainty of the light output (luminous flux) measurements is $U=1.8\%$ ($K=2$), at the 95% confidence level. The uncertainty of the correlated color temperature measurements is $U=20\text{K}$ ($K=2$), at the 95% confidence level. The uncertainty of the CRI is $U=1.8\%$ ($K=2$), at the 95% confidence level. The uncertainty of power meter AC current $U=0.18\%$ of rdg, AC Voltage $U=0.16\%$ of rdg, Power $U=0.20\%$ ($K=2$), at the 95% confidence level.



2.5 Goniophotometer System

The goniophotometer system is calibrated by standard light source before measurement. The standard light source has been calibrated regularly and traceable to the National Primary Standards.

Type C goniophotometer was used for measuring total luminous flux, luminous intensity distribution, and color spatial uniformity. The product was operated in its intended orientation in application and was recorded in this report. The method according to IESNA LM-79-08 following chapter.

Goniophotometer Uncertainty :The uncertainty of the luminous intensity is $U=1.6\%$ ($K=2$), at the 95% confidence level.



3 Test Result Summary

3.1 Integrating Sphere System (Total operating time for integrating sphere test: 1.0 hour)

3.1.1 Electrical data

Model Number	Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
TEMP-150-850/35CP	119.98	60	1.218	144.99	0.992
	277.07	60	0.599	145.88	0.879

3.1.2 Photometric data

Model Number	Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)	CRI	R9
TEMP-150-850/35CP	17572.79	121.2	4870	83.4	12
	17520.19	120.1	4909	83.6	13

3.1.3 Chromaticity Coordinate

Model Number	Duv	x	y	u'	v'
TEMP-150-850/35CP	+0.00303	0.3496	0.3613	0.2107	0.49
	+0.00265	0.3483	0.3595	0.2106	0.489



3.2 Goniophotometer System (Total operating time for luminous intensity distribution: 1.0 hour)

3.2.1 Electrical data

Model Number	Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
TEMP-150-850/35CP	120.03	60	1.210	144.04	0.9917
	277.07	60	0.601	145.54	0.8736

3.2.2 Photometric data

Input Voltage(V)	Luminous Flux (lm)	Efficacy (lm/W)	Zonal Lumen in 0-60°(%lm)	Zonal Lumen in 0-90°(%lm)
120	17512.92	121.58	19.09	50.66
277	17487.27	120.15	19.10	50.65



4 Test Data

TEMP-150-850/35CP Tested at 120V

Test Condition

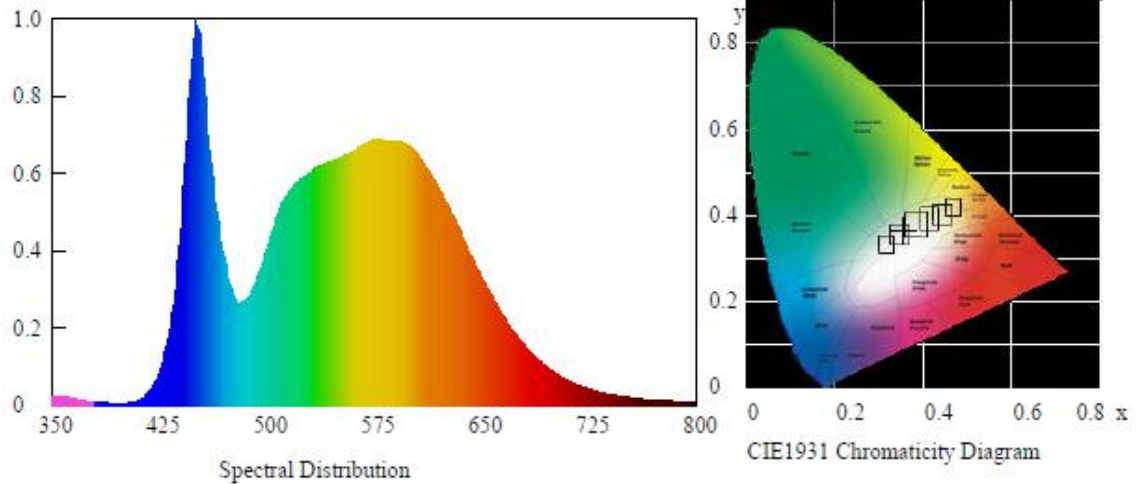
Temperature: 25°C

RH: 58%

Spectrum Range: 350-800 nm

Scan Step: 5 nm

Spectroradiometric Parameters

Chromaticity Coordinates: $x=0.3496$ $y=0.3613$ $u'=0.2107$ $v'=0.49$

Correlated Color Temperature: 4870 K

Dominant Wavelength: 570.0 nm(E)

Colour Fidelity Index: $R_f=82$ Gamut Index: $R_g=94$

Luminous Flux: 17572.79 lm

Purity: 0.1324

Chromaticity Difference: +0.00303Duv

Peak Wavelength: 450.0 nm

Color Ratio: $K_r=34.1\%$ $K_g=54.8\%$ $K_b=11.1\%$

Bandwidth: 28.2nm

Radiant Flux: 65.228 W

Rendering Index: $R_a=83.4$ $R_1=82$ $R_2=88$ $R_3=93$ $R_4=83$ $R_5=81$ $R_6=83$ $R_7=88$ $R_8=69$ $R_9=12$ $R_{10}=72$ $R_{11}=81$ $R_{12}=57$ $R_{13}=84$ $R_{14}=96$ $R_{15}=76$ $R_e=76$

Electric Parameters

Voltage: 119.98 V

Current: 1.218 A

Power Factor: 0.992

Power: 144.99 W

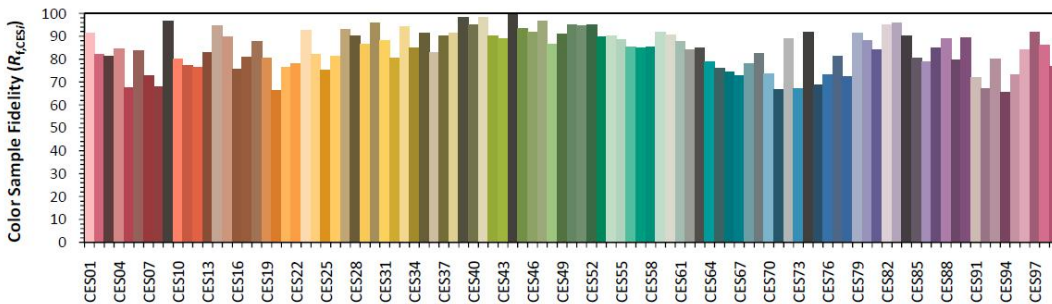
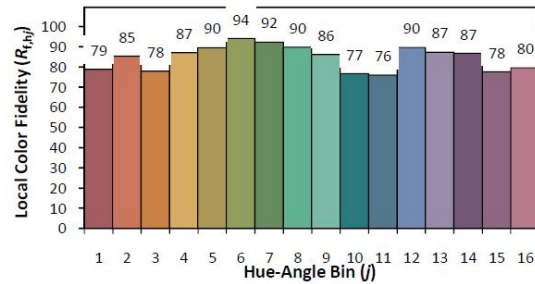
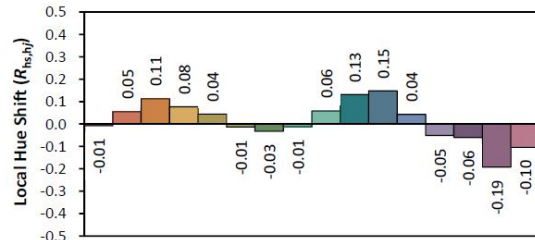
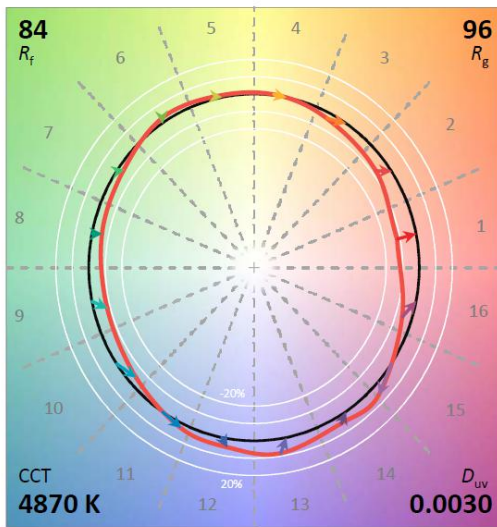
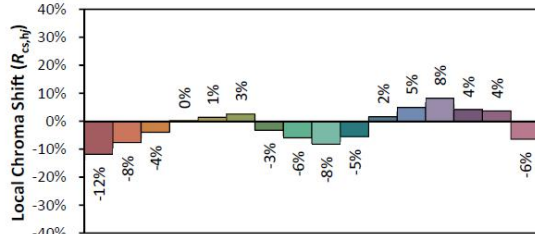
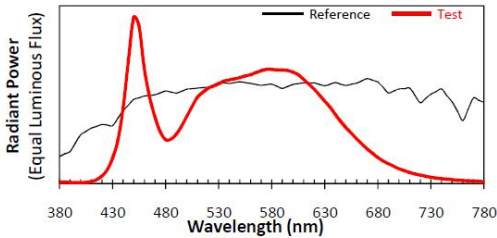
Luminous Efficacy: 121.2 lm/W



ANSI/IES TM-30-18 Color Rendition Report

Source: BL201015011-9B
Date: 2020/10/22

Manufacturer: RAB Lighting Inc
Model: TEMP-150-850/35CP



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.3496
 y 0.3613
 u' 0.2107
 v' 0.4900

CIE 13.3-1995 (CRI)
 R_a 83
 R_9 12

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.



Zonal Flux Diagram

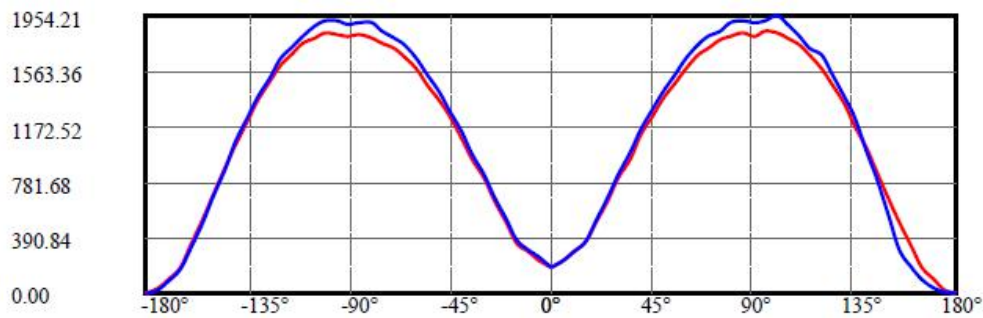
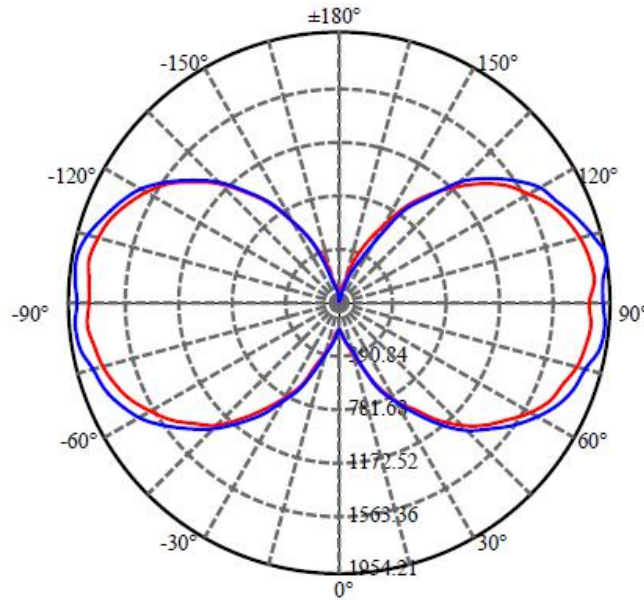
Zonal flux distribution table

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	187.632	0.000	0	0.00%	0.00%
5.0	235.086	5.053	5.053	0.00%	0.03%
10.0	291.471	18.837	23.89	0.00%	0.14%
15.0	367.301	39.078	62.968	0.00%	0.36%
20.0	502.850	71.713	134.681	0.00%	0.77%
25.0	661.372	122.105	256.786	0.00%	1.47%
30.0	811.657	186.413	443.199	0.00%	2.53%
35.0	954.657	260.102	703.301	0.00%	4.02%
40.0	1112.329	344.861	1048.162	0.00%	5.99%
45.0	1247.633	436.966	1485.128	0.00%	8.48%
50.0	1367.171	528.359	2013.488	0.00%	11.50%
55.0	1480.519	619.183	2632.67	0.00%	15.03%
60.0	1593.377	710.522	3343.192	0.00%	19.09%
65.0	1674.858	794.514	4137.706	0.00%	23.63%
70.0	1733.494	863.017	5000.723	0.00%	28.55%
75.0	1776.712	917.512	5918.235	0.00%	33.79%
80.0	1819.583	962.268	6880.503	0.00%	39.29%
85.0	1834.062	992.783	7873.286	0.00%	44.96%
90.0	1811.835	998.275	8871.561	0.00%	50.66%
95.0	1837.601	999.244	9870.805	0.00%	56.36%
100.0	1844.281	1000.456	10871.261	0.00%	62.08%
105.0	1809.686	977.700	11848.961	0.00%	67.66%
110.0	1750.740	930.638	12779.599	0.00%	72.97%
115.0	1680.650	868.850	13648.449	0.00%	77.93%
120.0	1592.000	795.587	14444.036	0.00%	82.48%
125.0	1476.374	709.246	15153.282	0.00%	86.53%
130.0	1343.426	613.118	15766.401	0.00%	90.03%
135.0	1192.485	512.418	16278.818	0.00%	92.95%
140.0	1025.623	410.701	16689.519	0.00%	95.30%
145.0	853.330	313.489	17003.008	0.00%	97.09%
150.0	658.926	222.690	17225.698	0.00%	98.36%
155.0	481.112	144.273	17369.971	0.00%	99.18%
160.0	315.628	83.563	17453.534	0.00%	99.66%
165.0	169.925	40.016	17493.551	0.00%	99.89%
170.0	84.737	15.106	17508.657	0.00%	99.98%
175.0	25.187	3.932	17512.59	0.00%	100.00%
180.0	2.641	0.333	17512.922	0.00%	100.00%



Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]



C0/C180: ——

C90/C270: ——

Field angle(10%Imax):C0/180Left:165.1 Right:164.9

:C90/270Left:164.2 Right:159.6

Beam Angle(50%Imax):C0/180Left:143.8 Right:142.8

:C90/270Left:142.3 Right:140.4

**Luminous Intensity Distribution Data**

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	187.63	234.96	286.03	358.31	500.39	661.01	812.57	946.21	1110.95
22.5	187.63	233.93	290.97	369.01	501.22	657.72	801.25	946.63	1108.28
45.0	187.63	234.34	294.26	367.57	507.39	668.01	820.40	955.07	1113.84
67.5	187.63	233.10	296.12	378.49	514.39	667.60	812.57	957.95	1104.77
90.0	187.63	232.69	291.59	366.13	507.19	683.25	833.99	995.22	1154.40
112.5	187.63	230.84	291.79	375.60	506.57	667.60	814.42	971.54	1135.46
135.0	187.63	229.81	290.56	363.25	497.51	663.07	816.48	974.22	1115.89
157.5	187.63	232.08	293.65	378.49	502.45	655.25	801.04	934.89	1099.63
180.0	187.63	227.96	286.44	357.69	491.74	654.63	810.72	949.10	1093.86
202.5	187.63	236.19	286.64	366.54	504.72	643.51	798.57	936.12	1111.36
225.0	187.63	227.75	282.94	345.33	476.30	637.95	792.39	930.98	1086.65
247.5	187.63	233.72	286.85	355.63	483.51	633.83	777.77	912.65	1074.92
270.0	187.63	249.78	304.97	380.34	519.95	685.72	833.99	984.10	1144.11
292.5	187.63	248.34	301.06	381.78	518.31	669.87	837.69	978.54	1131.34
315.0	187.63	237.22	286.23	359.13	505.95	666.98	816.07	962.28	1106.42
337.5	187.63	238.66	293.44	373.54	508.01	665.95	806.60	939.01	1105.39
360.0	187.63	234.96	286.03	358.31	500.39	661.01	812.57	946.21	1110.95
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	1247.27	1367.12	1475.23	1582.93	1680.95	1726.04	1779.79	1811.71	1828.39
22.5	1238.01	1362.18	1473.38	1598.37	1667.97	1743.13	1796.06	1828.39	1834.98
45.0	1238.01	1366.50	1470.70	1570.98	1654.79	1706.69	1742.52	1799.56	1791.94
67.5	1226.89	1358.88	1471.32	1585.19	1637.50	1700.51	1735.93	1783.08	1768.87
90.0	1300.20	1421.90	1536.18	1650.47	1744.78	1807.38	1844.45	1906.23	1922.29
112.5	1274.25	1391.21	1509.41	1633.79	1732.43	1790.50	1836.01	1893.25	1901.69
135.0	1255.92	1370.21	1473.79	1591.58	1664.47	1724.19	1762.90	1801.62	1820.15
157.5	1228.95	1344.06	1457.73	1578.40	1649.85	1703.39	1738.40	1773.61	1798.32
180.0	1246.86	1358.47	1468.85	1572.63	1661.38	1718.42	1764.76	1796.06	1822.83
202.5	1235.54	1347.97	1456.28	1576.34	1667.97	1732.84	1775.88	1815.83	1849.80
225.0	1226.89	1331.91	1437.96	1537.62	1621.43	1670.65	1716.78	1761.05	1792.14
247.5	1201.76	1309.26	1421.69	1536.59	1614.02	1669.83	1715.34	1756.11	1785.97
270.0	1290.31	1417.16	1543.60	1656.24	1747.87	1802.44	1847.54	1899.84	1910.34
292.5	1279.40	1407.07	1533.71	1647.38	1736.34	1808.82	1850.42	1900.05	1909.31
315.0	1249.54	1364.44	1487.58	1594.87	1670.24	1724.81	1771.76	1811.50	1824.06
337.5	1222.36	1356.41	1470.91	1580.66	1645.73	1706.27	1748.90	1775.46	1783.91
360.0	1247.27	1367.12	1475.23	1582.93	1680.95	1726.04	1779.79	1811.71	1828.39
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	1809.65	1846.51	1831.89	1800.18	1748.28	1671.68	1580.04	1466.99	1331.70
22.5	1817.88	1862.16	1841.57	1811.91	1757.34	1679.09	1573.45	1459.79	1318.52
45.0	1780.20	1815.62	1813.77	1764.96	1712.25	1653.35	1560.07	1443.11	1315.02
67.5	1757.55	1800.79	1800.38	1746.64	1682.18	1605.37	1483.26	1384.01	1232.45
90.0	1900.67	1911.99	1954.21	1894.90	1810.88	1727.90	1670.44	1539.07	1387.92
112.5	1881.72	1894.90	1923.93	1876.37	1808.00	1715.54	1610.31	1472.14	1370.62
135.0	1801.41	1818.91	1839.92	1802.03	1760.02	1700.10	1628.02	1510.85	1386.68
157.5	1765.37	1787.82	1800.18	1775.67	1719.87	1655.21	1572.22	1472.35	1341.38
180.0	1802.85	1817.47	1827.56	1798.53	1755.70	1690.01	1604.14	1498.91	1359.91
202.5	1816.24	1838.68	1842.18	1823.65	1766.20	1704.83	1613.82	1495.62	1377.42
225.0	1762.29	1776.29	1798.53	1770.52	1720.69	1670.24	1590.55	1482.02	1356.82
247.5	1749.72	1767.85	1786.17	1767.43	1711.42	1657.47	1582.52	1470.70	1338.70
270.0	1889.34	1913.23	1918.79	1880.07	1806.56	1733.66	1649.44	1518.27	1383.59
292.5	1891.60	1916.11	1916.73	1883.16	1817.06	1732.84	1630.08	1511.06	1371.03
315.0	1804.50	1833.12	1826.95	1798.73	1741.90	1656.65	1578.60	1465.35	1327.79
337.5	1758.37	1800.18	1785.76	1760.23	1693.51	1636.47	1545.04	1431.78	1295.25
360.0	1809.65	1846.51	1831.89	1800.18	1748.28	1671.68	1580.04	1466.99	1331.70



<i>C/γ(°)</i>	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	1180.55	1021.79	844.49	652.16	494.01	329.06	180.80	92.87	24.51
22.5	1175.82	1011.90	853.14	663.28	493.80	329.27	181.62	80.52	21.00
45.0	1171.08	1012.73	832.13	649.27	490.10	313.62	149.09	63.01	17.09
67.5	1103.54	937.36	821.22	620.45	432.64	259.87	100.49	32.33	7.41
90.0	1233.06	990.69	801.66	538.28	305.18	185.33	95.14	36.24	14.42
112.5	1205.06	947.04	751.21	516.45	343.69	229.40	150.32	84.43	28.42
135.0	1212.88	1054.32	861.37	680.99	498.13	322.48	167.62	93.49	31.51
157.5	1194.97	1046.50	895.35	709.82	527.37	357.28	196.86	98.84	33.98
180.0	1210.21	1044.85	883.61	694.37	518.10	339.77	185.54	100.08	32.33
202.5	1211.44	1061.33	883.20	701.37	528.40	360.36	203.25	100.90	34.60
225.0	1206.29	1055.56	887.53	701.78	520.57	352.33	194.60	106.46	35.01
247.5	1197.44	1060.71	896.79	720.32	538.49	361.19	201.80	104.20	35.01
270.0	1233.68	1064.21	876.20	684.90	503.28	311.56	172.98	84.02	19.15
292.5	1208.15	1051.23	872.08	665.34	503.48	331.33	176.48	90.61	21.21
315.0	1180.97	1038.47	844.28	671.10	501.22	332.77	177.92	93.28	22.24
337.5	1154.61	1011.29	849.02	672.96	499.36	334.42	184.30	94.52	25.12
360.0	1180.55	1021.79	844.49	652.16	494.01	329.06	180.80	92.87	24.51
<i>C/γ(°)</i>	180.0								
0.0	2.64								
22.5	2.64								
45.0	2.64								
67.5	2.64								
90.0	2.64								
112.5	2.64								
135.0	2.64								
157.5	2.64								
180.0	2.64								
202.5	2.64								
225.0	2.64								
247.5	2.64								
270.0	2.64								
292.5	2.64								
315.0	2.64								
337.5	2.64								
360.0	2.64								

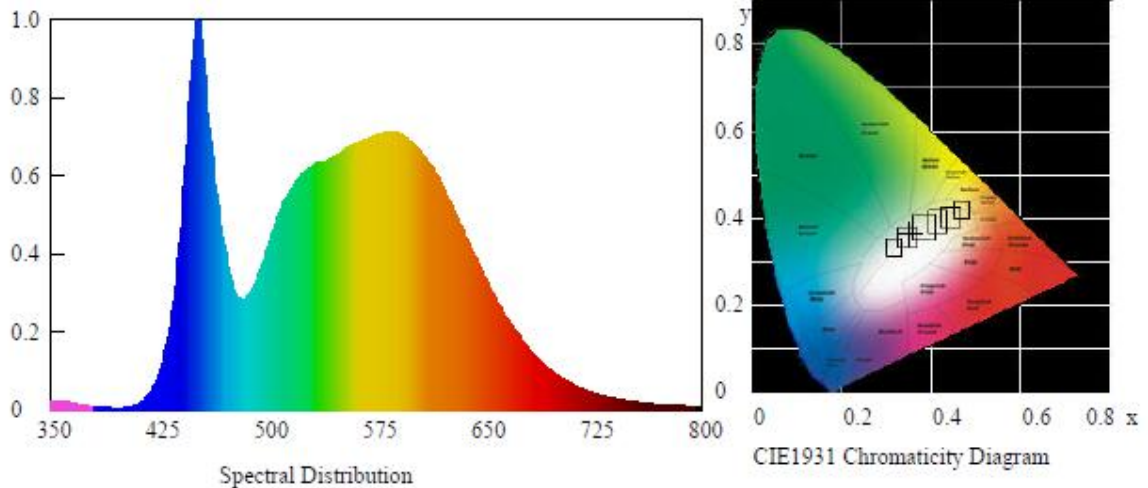
**TEMP-150-850/35CP Tested at 277V****Test Condition**

Temperature: 25°C

RH: 58%

Spectrum Range: 350-800 nm

Scan Step: 5 nm

Spectroradiometric ParametersChromaticity Coordinates: $x=0.3483$ $y=0.3595$ $u'=0.2106$ $v'=0.489$

Correlated Color Temperature: 4909 K

Dominant Wavelength: 570.0 nm(E)

Colour Fidelity Index: $R_f=82$ Gamut Index: $R_g=94$

Luminous Flux: 17520.19 lm

Purity: 0.1234

Chromaticity Difference: +0.00265Duv

Peak Wavelength: 450.0 nm

Color Ratio: $K_r=34.1\%$ $K_g=54.8\%$ $K_b=11.1\%$

Bandwidth: 26.4nm

Radiant Flux: 65.426 W

Rendering Index: $R_a=83.6$

R1=82 R2=89 R3=93 R4=82 R5=81 R6=84 R7=88 R8=69

R9=13 R10=73 R11=81 R12=57 R13=85 R14=96 R15=77 Re=77

Electric Parameters

Voltage: 277.07 V

Current: 0.599 A

Power Factor: 0.879

Power: 145.88 W

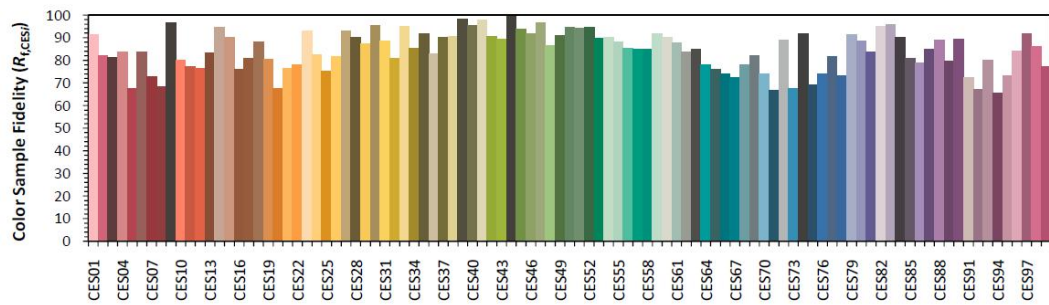
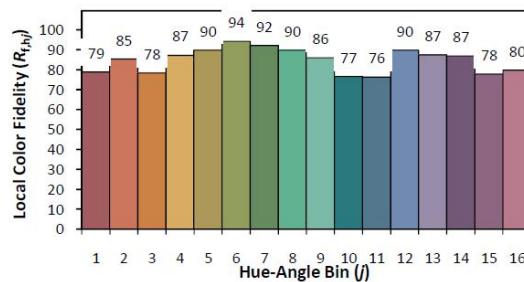
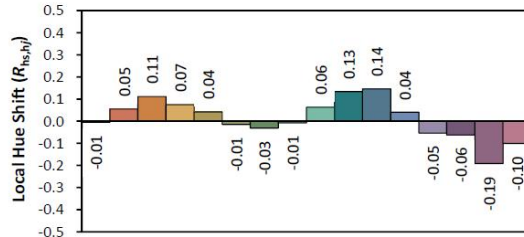
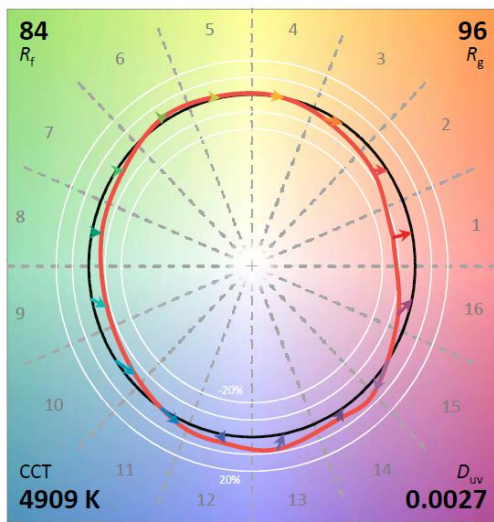
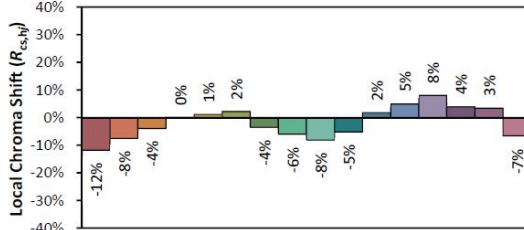
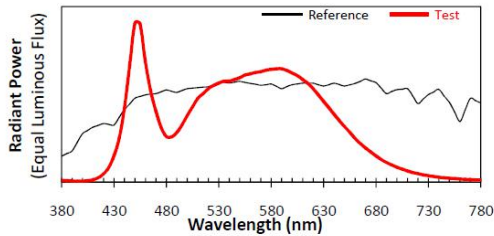
Luminous Efficacy: 120.1 lm/W



ANSI/IES TM-30-18 Color Rendition Report

Source: BL201015011-9B
Date: 2020/10/22

Manufacturer: RAB Lighting Inc
Model: TEMP-150-850/35CP



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.3483
 y 0.3595
 u' 0.2106
 v' 0.4890

CIE 13.3-1995 (CRI)
 R_a 84
 R_g 13

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.



Zonal Flux Diagram

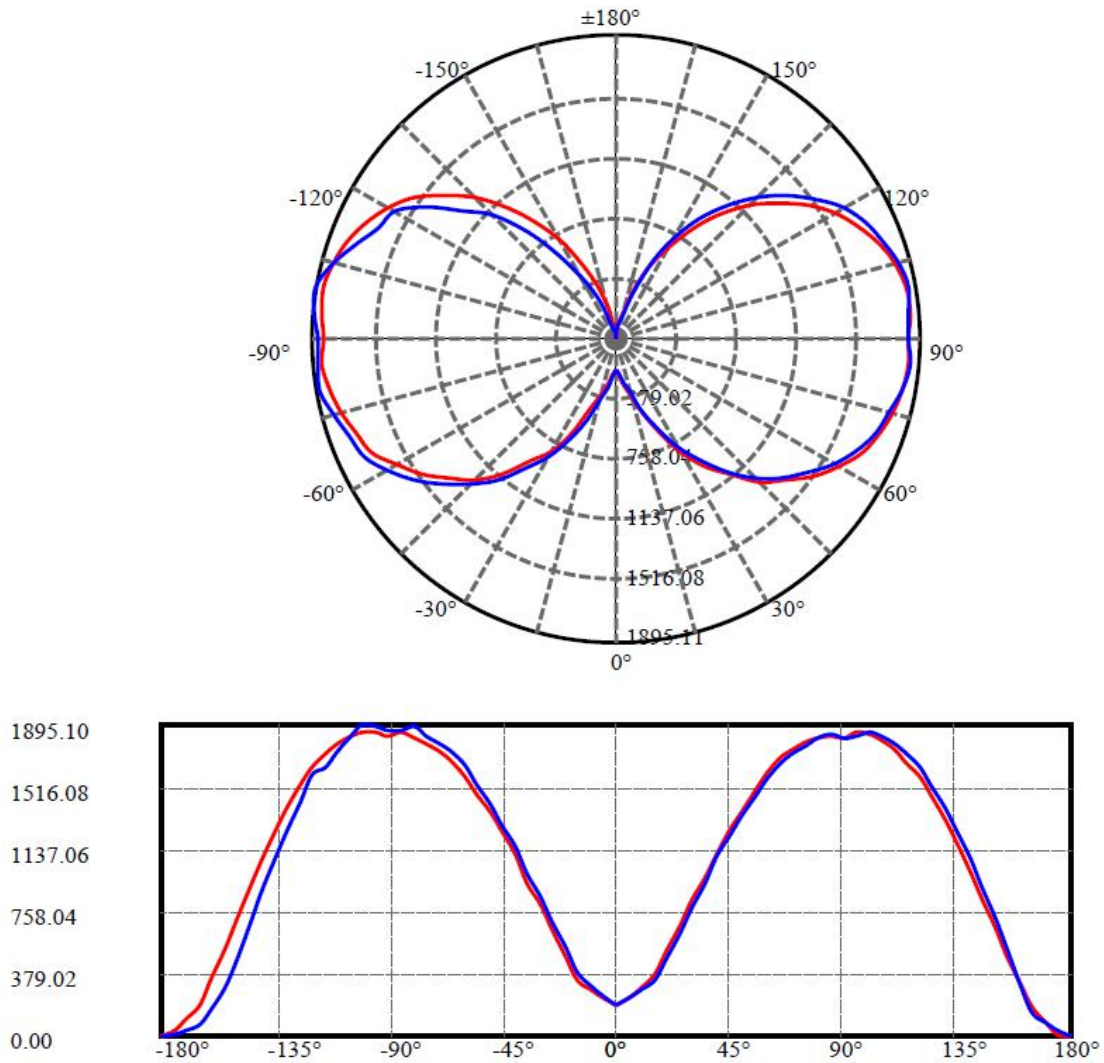
Zonal flux distribution table

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	191.992	0.000	0	0.00%	0.00%
5.0	237.223	5.131	5.131	0.00%	0.03%
10.0	293.195	18.975	24.106	0.00%	0.14%
15.0	368.164	39.231	63.337	0.00%	0.36%
20.0	504.974	71.959	135.296	0.00%	0.77%
25.0	660.780	122.266	257.562	0.00%	1.47%
30.0	810.769	186.226	443.788	0.00%	2.54%
35.0	953.434	259.791	703.579	0.00%	4.02%
40.0	1113.256	344.812	1048.39	0.00%	6.00%
45.0	1245.072	436.664	1485.054	0.00%	8.49%
50.0	1362.885	526.976	2012.03	0.00%	11.51%
55.0	1479.077	617.937	2629.967	0.00%	15.04%
60.0	1590.378	709.496	3339.463	0.00%	19.10%
65.0	1672.683	793.256	4132.719	0.00%	23.63%
70.0	1730.200	861.632	4994.351	0.00%	28.56%
75.0	1773.250	915.746	5910.097	0.00%	33.80%
80.0	1816.095	960.409	6870.505	0.00%	39.29%
85.0	1829.660	990.639	7861.145	0.00%	44.95%
90.0	1810.561	996.721	8857.866	0.00%	50.65%
95.0	1834.641	998.085	9855.95	0.00%	56.36%
100.0	1841.719	998.955	10854.906	0.00%	62.07%
105.0	1804.190	975.544	11830.449	0.00%	67.65%
110.0	1746.931	928.206	12758.655	0.00%	72.96%
115.0	1678.732	867.400	13626.055	0.00%	77.92%
120.0	1591.871	795.090	14421.145	0.00%	82.47%
125.0	1473.659	708.589	15129.734	0.00%	86.52%
130.0	1338.483	611.453	15741.187	0.00%	90.02%
135.0	1188.443	510.602	16251.789	0.00%	92.93%
140.0	1024.066	409.664	16661.453	0.00%	95.28%
145.0	851.219	312.877	16974.33	0.00%	97.07%
150.0	662.337	222.882	17197.212	0.00%	98.34%
155.0	486.170	145.345	17342.557	0.00%	99.17%
160.0	319.412	84.491	17427.047	0.00%	99.66%
165.0	172.473	40.538	17467.586	0.00%	99.89%
170.0	85.638	15.311	17482.897	0.00%	99.97%
175.0	26.899	4.026	17486.922	0.00%	100.00%
180.0	2.556	0.352	17487.275	0.00%	100.00%



Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]



C0/C180: —

C90/C270: —

Field angle(10%Imax):C0/180Left:165.5 Right:164.7

:C90/270Left:159.1 Right:163.6

Beam Angle(50%Imax):C0/180Left:144.3 Right:142.4

:C90/270Left:138.3 Right:143.9

**Luminous Intensity Distribution Data**

$C/\gamma(^{\circ})$	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	191.99	240.72	297.97	377.04	516.45	672.54	821.22	966.39	1109.10
22.5	191.99	244.43	300.03	390.02	522.43	670.48	824.51	959.81	1129.07
45.0	191.99	238.46	295.29	364.28	502.66	668.22	811.75	954.25	1104.36
67.5	191.99	243.81	299.21	376.63	513.57	658.13	810.92	942.51	1100.24
90.0	191.99	232.08	283.97	341.42	471.97	620.65	781.89	924.18	1089.33
112.5	191.99	237.84	283.56	347.19	480.01	630.33	783.12	924.59	1089.12
135.0	191.99	231.05	278.41	333.80	475.48	631.36	789.30	927.06	1083.77
157.5	191.99	232.69	282.94	350.69	486.80	646.39	782.09	923.56	1095.71
180.0	191.99	230.43	280.47	345.95	481.65	648.66	804.13	934.89	1107.45
202.5	191.99	230.02	284.79	359.34	492.36	652.16	795.07	944.57	1113.63
225.0	191.99	227.34	288.50	358.10	489.48	654.42	804.95	955.89	1120.42
247.5	191.99	228.78	292.62	371.90	499.16	667.60	805.57	954.04	1111.16
270.0	191.99	242.99	308.27	385.08	537.66	698.28	846.34	994.40	1154.20
292.5	191.99	245.05	304.15	402.37	544.46	684.08	840.37	1001.61	1153.37
315.0	191.99	245.87	303.32	386.72	533.34	690.05	840.37	986.78	1137.10
337.5	191.99	244.02	307.65	400.11	532.10	679.13	830.69	960.42	1114.04
360.0	191.99	240.72	297.97	377.04	516.45	672.54	821.22	966.39	1109.10
$C/\gamma(^{\circ})$	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	1255.72	1370.41	1497.06	1598.58	1697.63	1741.49	1792.14	1816.65	1830.24
22.5	1254.07	1373.09	1492.12	1611.76	1693.51	1769.90	1807.59	1840.95	1850.83
45.0	1242.13	1350.44	1466.17	1569.75	1653.35	1706.27	1748.49	1797.91	1799.35
67.5	1227.92	1340.76	1468.02	1577.57	1647.17	1710.19	1746.02	1787.41	1791.94
90.0	1226.06	1346.73	1458.76	1562.95	1656.44	1720.28	1760.64	1808.41	1841.77
112.5	1239.04	1351.88	1470.70	1588.90	1678.68	1746.84	1795.23	1847.95	1876.16
135.0	1229.98	1327.99	1455.67	1549.98	1636.47	1693.92	1739.02	1781.85	1816.85
157.5	1212.68	1337.67	1443.31	1555.95	1629.26	1686.09	1730.57	1769.29	1797.91
180.0	1250.16	1361.35	1472.76	1577.78	1671.68	1724.81	1779.99	1815.21	1845.48
202.5	1240.68	1364.03	1465.96	1593.84	1676.00	1741.08	1797.09	1831.48	1866.48
225.0	1239.45	1370.21	1472.35	1570.37	1658.29	1705.04	1751.58	1809.24	1819.94
247.5	1235.74	1356.82	1463.49	1580.66	1651.09	1704.01	1737.78	1793.59	1803.68
270.0	1288.05	1411.81	1527.95	1645.73	1728.51	1778.14	1822.41	1879.87	1863.60
292.5	1272.81	1394.30	1522.80	1652.12	1729.75	1791.53	1832.30	1879.04	1864.83
315.0	1264.16	1384.83	1496.65	1607.84	1687.33	1735.93	1771.14	1810.68	1809.44
337.5	1242.54	1363.83	1491.50	1602.28	1667.77	1727.69	1760.02	1788.03	1796.06
360.0	1255.72	1370.41	1497.06	1598.58	1697.63	1741.49	1792.14	1816.65	1830.24
$C/\gamma(^{\circ})$	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	1816.65	1846.92	1835.59	1796.67	1743.34	1661.80	1573.66	1456.08	1319.96
22.5	1835.80	1869.16	1855.98	1819.12	1757.55	1681.36	1582.10	1462.87	1336.03
45.0	1782.26	1809.85	1810.06	1778.14	1712.86	1646.76	1568.51	1445.99	1316.87
67.5	1765.99	1803.26	1808.82	1768.46	1707.10	1640.79	1557.39	1444.55	1307.40
90.0	1817.88	1824.47	1851.66	1823.24	1775.67	1712.86	1634.61	1521.15	1384.83
112.5	1857.63	1859.27	1879.46	1858.25	1809.03	1735.10	1643.26	1533.51	1405.83
135.0	1794.41	1802.65	1824.06	1797.09	1755.28	1697.21	1627.20	1523.21	1384.01
157.5	1771.14	1791.94	1797.91	1779.38	1727.48	1675.18	1595.69	1487.79	1354.15
180.0	1825.30	1844.24	1851.86	1824.47	1779.17	1722.13	1636.47	1528.77	1389.36
202.5	1837.24	1865.45	1870.81	1841.15	1795.44	1738.81	1634.61	1514.56	1388.54
225.0	1797.09	1820.15	1841.15	1796.67	1757.96	1707.51	1624.11	1513.53	1382.98
247.5	1774.64	1799.76	1825.50	1790.91	1735.93	1676.62	1569.54	1434.25	1309.26
270.0	1861.75	1885.84	1894.08	1818.71	1726.66	1641.00	1587.25	1429.72	1248.10
292.5	1861.95	1892.84	1895.11	1831.48	1749.11	1651.91	1526.09	1405.22	1282.07
315.0	1797.91	1826.53	1822.00	1782.88	1724.40	1641.41	1573.04	1446.61	1315.23
337.5	1771.35	1811.91	1803.47	1760.43	1693.92	1629.26	1536.39	1430.75	1291.13
360.0	1816.65	1846.92	1835.59	1796.67	1743.34	1661.80	1573.66	1456.08	1319.96



<i>C/γ(°)</i>	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	1172.32	1004.49	838.52	653.80	486.39	321.86	176.68	87.93	17.50
22.5	1171.49	1018.70	843.67	666.37	497.10	327.62	179.77	90.40	19.36
45.0	1177.88	1023.02	843.67	660.81	494.01	327.62	179.36	90.61	21.21
67.5	1169.64	1020.55	856.02	674.19	496.48	325.98	179.56	86.28	20.39
90.0	1246.04	1080.48	908.53	720.11	533.55	306.41	142.29	87.93	38.71
112.5	1242.54	1099.42	915.74	733.91	547.96	378.28	219.31	110.79	41.19
135.0	1239.24	1088.71	900.09	726.70	541.99	365.72	206.13	109.14	44.48
157.5	1215.97	1069.77	910.59	728.14	544.46	375.40	224.04	112.64	43.24
180.0	1243.98	1076.36	900.91	705.49	524.69	353.98	193.98	105.43	40.77
202.5	1237.39	1073.68	906.47	715.58	536.84	369.63	210.25	103.79	40.36
225.0	1226.06	1068.33	891.44	707.96	522.63	341.01	179.56	77.43	30.07
247.5	1159.55	1018.29	879.29	690.46	499.16	317.12	143.53	41.80	16.47
270.0	1084.80	877.44	684.90	462.09	295.50	165.15	71.25	34.60	9.06
292.5	1122.48	888.35	693.14	472.39	313.83	225.49	136.53	70.43	13.59
315.0	1157.49	986.37	806.60	621.89	457.35	292.00	152.18	77.43	15.65
337.5	1148.22	991.11	839.96	657.51	486.80	317.33	165.15	83.61	18.33
360.0	1172.32	1004.49	838.52	653.80	486.39	321.86	176.68	87.93	17.50
<i>C/γ(°)</i>	180.0								
0.0	2.56								
22.5	2.56								
45.0	2.56								
67.5	2.56								
90.0	2.56								
112.5	2.56								
135.0	2.56								
157.5	2.56								
180.0	2.56								
202.5	2.56								
225.0	2.56								
247.5	2.56								
270.0	2.56								
292.5	2.56								
315.0	2.56								
337.5	2.56								
360.0	2.56								



5 Additional Test

Electrical data at 120V, 277V

Model Number	Test Item	Test Voltage (V)	Frequency(Hz)	Test Result
TEMP-150-850/35CP	Power Factor	120	60	0.992
	THD	120	60	16.2%
	Power Factor	277	60	0.879
	THD	277	60	18.1%



Photo Document



****End of test report****