

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-020

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None

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Report format for LM-79_G

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Report No.: 251110010GZU-020

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. PBL579927HAB

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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TEST: Electrical and Photometric as required to the IES LM-79 test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number: QGZ251106008.

STANDARDS USED: The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:

IES LM-79-24 Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products

ANSI C78.377-2017 (R2022) Specifications of the Chromaticity of Solid State Lighting Products

DESCRIPTION OF SAMPLE: The client submitted one sample of model PBL579927HAB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-023.

MANUFACTURER /FACTORY & ADDRESS: Guangzhou Xiongyi Precision Metalworking Co., Ltd
Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450

DATES OF TESTS: 12 December 2025

ISSUED BY: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

TEST LOCATION: Room101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China

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TEST REPORT

SUMMARY

Model Number:	PBS79927HAB
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For PBS79927HAB

Criteria	Result
Total Lumen Output	2353.6 lm
Total Power	34.3 W
Luminaire Efficacy	68.7 lm/W
S/MH(C0/180)	1.34
S/MH(C90/270)	1.23
Correlated Color Temperature (CCT)	2647 K
Color Rendering Index (CRI)	92
R9	58
Chromaticity Coordinate (x)	0.4642
Chromaticity Coordinate (y)	0.4113
Chromaticity Coordinate (u')	0.2650
Chromaticity Coordinate (v')	0.5282

Remark:

N/A

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TEST REPORT

EQUIPMENT LIST

Equipment Used	Model Number	Control Number
Goniophotometer System	Go-R5000	SA063-16
KONICA MINOLTA - Illuminance meter	CX-2B_WL	SA063-16-01
Standard Lamp	D215S	SA063-16-06
Digital Power Meter	PLM3000	SA063-16-09
AC power source for Goniophotometer	PCR-1000WH	SA063-16-10
Temperature Meter	S500-TH	SA047-182

GENERAL REMARK

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When determining for test conclusion, measurement uncertainty of tests has been considered.

Throughout this report a ☐ comma ☒ point is used as the decimal separator.

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TEST REPORT

TEST METHOD

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IES LM-79

Light Distribution and Output Measurements

Light Distribution and total light output (luminous flux) were measured using a Go-R5000 Type-C Rotating Mirror Goniophotometer. Temperature 25°C and relative humidity of 60% was measured at a position in the testing laboratory.

The lamp rotates only around the fixed vertical axle in the prescribed burning position. The lamp and mirror permit the measurement of luminous intensity at the direction of any horizontal or vertical angle without tilting the lamp. The lamp was allowed to stabilize before measurements were made.

Chromaticity Measurements

Chromaticity was measured using a 2 meters integrating sphere spectral lamp measurement system, 4 π geometry, with an interior coating reflectance no less than 95 %. Temperature was measured at a position inside the sphere shielded from direct light. Relative humidity of 65% was measured at a position in the testing laboratory.

Spectral radiant flux measurements were made using spectroradiometer attached to the detector port of the integrating sphere. Each lamp was allowed to stabilise before measurements were made. The calibration of the integrating sphere spectroradiometer system is by the reference/standard lamps which are traceable to National Institute of Metrology P.R. CHINA. Lamp efficacy (lumens per watt) for each lamp model was then computed based on the luminous flux result. Electrical measurements including voltage, power and power factor were measured using YOKOGAWA - Digital Power Meter., model WT310E.

Correction factor (self-absorption) has been considered when doing measurement.

Standard lamp used for Goniophotometer method:

Model: D215S

Current: 4.809A DC

Standard lamp used for integrating sphere:

Model: D204

Current: 3.958A DC

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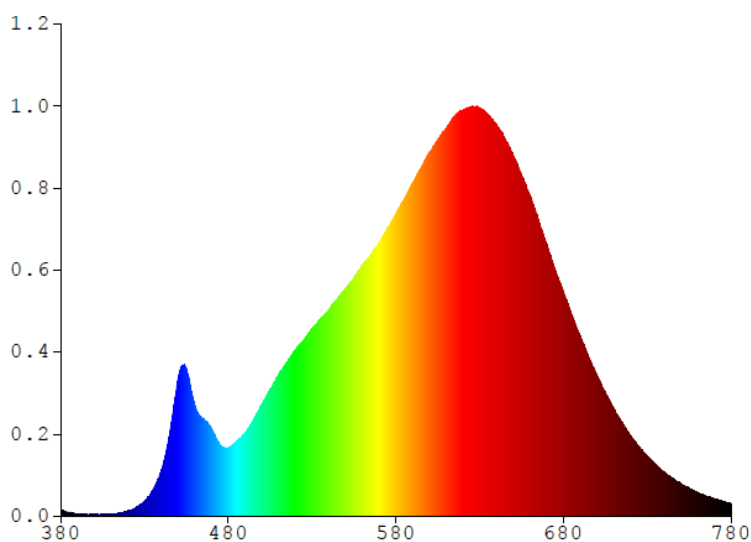
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For PBL579927HAB

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	5.4313	480	56.2370	580	249.040	680	185.0400	780	10.4050
385	3.2842	485	61.2160	585	261.180	685	165.9000		
390	1.9354	490	68.4060	590	274.280	690	148.5200		
395	1.2935	495	79.1480	595	286.510	695	131.2800		
400	1.2844	500	91.9080	600	299.870	700	116.1800		
405	1.1062	505	104.4200	605	309.620	705	101.7600		
410	1.7425	510	116.3800	610	319.540	710	88.8370		
415	2.4838	515	126.4800	615	329.530	715	77.2690		
420	4.3172	520	137.2100	620	334.630	720	66.4450		
425	7.2767	525	145.1600	625	337.160	725	57.5970		
430	12.3350	530	154.4400	630	336.940	730	49.2500		
435	21.4570	535	162.6000	635	331.230	735	42.6260		
440	37.2970	540	169.8900	640	322.420	740	36.4070		
445	67.4350	545	178.7300	645	311.760	745	31.3750		
450	112.700	550	187.4300	650	297.370	750	26.8380		
455	121.090	555	196.2600	655	280.810	755	23.2390		
460	91.4080	560	206.2900	660	263.880	760	19.7390		
465	79.8490	565	215.2200	665	245.160	765	16.7150		
470	72.1020	570	225.1400	670	224.120	770	14.3910		
475	58.9250	575	237.5100	675	199.240	775	12.3450		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL579927HAB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

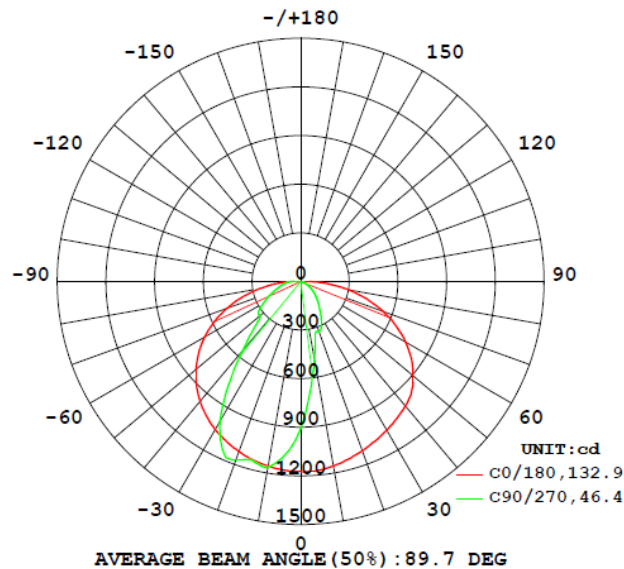
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31'	CIE 31'	CIE 76'	CIE 76'
					Chromaticit	Chromaticit	Chromaticit	Chromaticit
					y	y	y	y
					Coordinate	Coordinate	Coordinate	Coordinate
					(x)	(y)	(u')	(v')
PBL579927HAB								
S2511100 10-023	base-up	2647	92	58	0.4642	0.4113	0.2650	0.5282

Photometric and Electrical Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
PBL579927HAB							
S2511100 10-023	base-up	120.2	287.1	34.3	0.99	2353.6	68.7

Intensity (Candlepower) Summary at 25°C - Candelas



***** End of Page *****

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL579927HAB

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	1174.2	1129.3	1021.4	943.3	903.3
5	1170.6	1073.0	882.3	738.0	681.6
10	1156.2	1004.0	712.2	541.5	493.4
15	1135.1	921.9	548.7	392.5	353.8
20	1111.1	823.3	414.8	320.3	328.5
25	1086.3	710.8	314.3	311.6	299.4
30	1058.9	590.8	309.5	264.7	249.3
35	1032.1	474.4	278.1	217.2	204.8
40	1002.5	369.0	229.3	176.9	167.5
45	965.3	288.3	183.6	142.8	135.5
50	906.1	277.3	144.3	112.5	106.9
55	832.0	223.3	109.6	85.3	81.1
60	746.6	159.6	78.1	60.5	58.3
65	649.2	107.4	50.5	38.6	36.4
70	540.7	64.9	25.5	18.3	17.1
75	421.9	30.8	5.3	2.5	0.8
80	296.1	10.9	1.0	0.1	0.1
85	166.9	10.0	1.0	0.1	0.1
90	32.1	8.5	0.8	0.1	0.2
95	1.0	7.0	0.6	0.2	0.2
100	0.6	5.5	0.4	0.2	0.2
105	0.6	4.3	0.3	0.2	0.2
110	0.6	3.3	0.4	0.3	0.3
115	0.6	2.5	0.6	0.5	0.4
120	0.7	2.0	0.8	0.7	0.6
125	0.8	1.3	1.0	0.9	0.9
130	0.9	1.1	1.2	1.2	1.2
135	1.0	1.3	1.4	1.4	1.4
140	1.1	1.4	1.5	1.6	1.6
145	1.2	1.4	1.6	1.7	1.7
150	1.3	1.5	1.7	1.7	1.8
155	1.4	1.5	1.6	1.7	1.7
160	1.4	1.5	1.5	1.6	1.5
165	1.4	1.4	1.4	1.4	1.4
170	1.4	1.3	1.2	1.2	1.2
175	1.4	1.1	1.0	1.0	1.1
180	1.3	0.9	0.9	1.0	1.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL579927HAB

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
PBL579927HAB		
0-30	725.2	30.8
0-40	1147.5	48.8
0-60	1851.7	78.7
0-90	2319.2	98.5
60-90	467.5	19.8
0-180	2353.6	100.0

Beam Angle

Total Beam Angle(°)

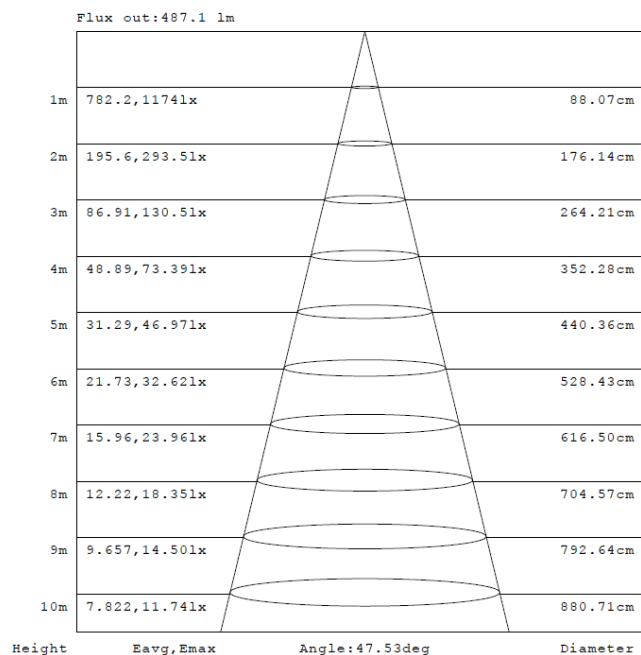
89.7

Illumination Plots

Model No.: PBL579927HAB

Mount Height: 2.5 m

Illuminance - Cone of Light



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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TEST REPORT

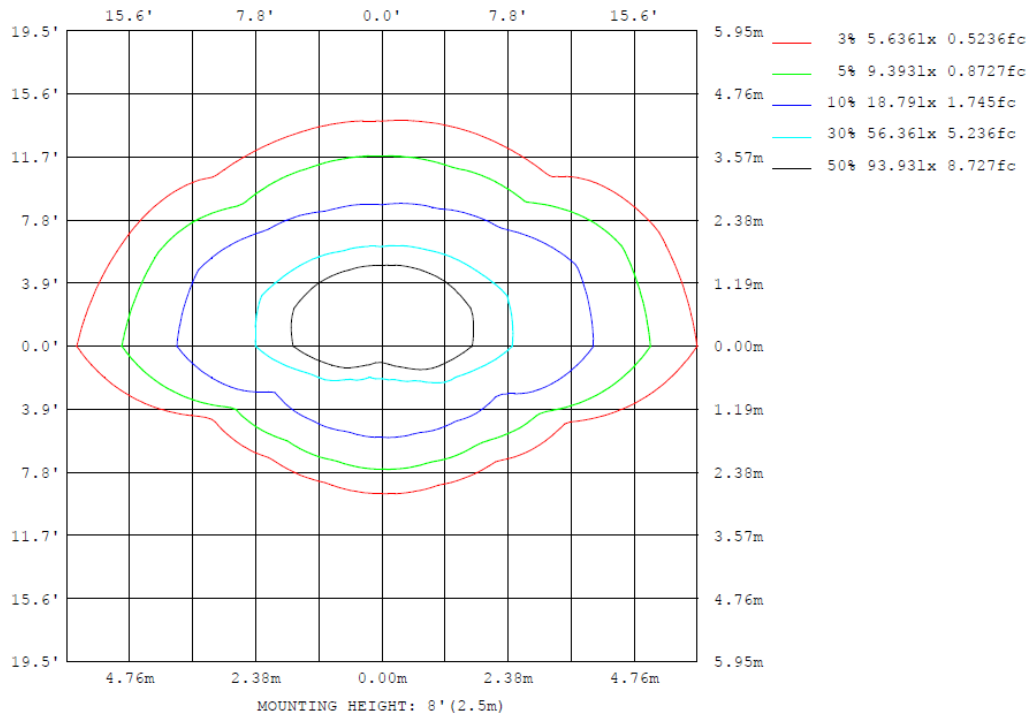
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL579927HAB

Model No.: PBL579927HAB

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For PBL579927HAB

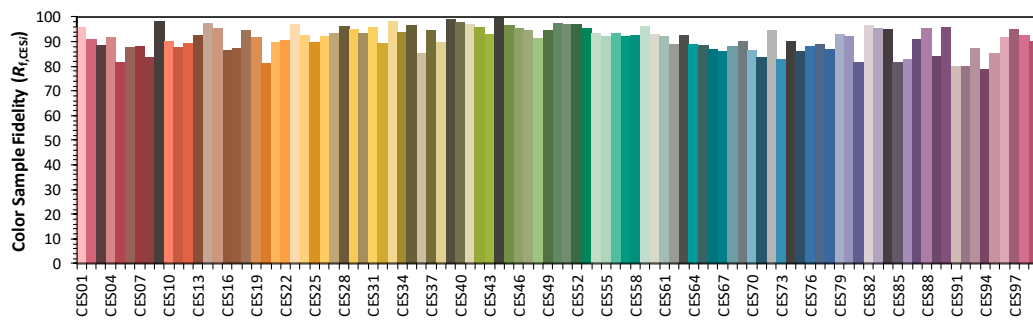
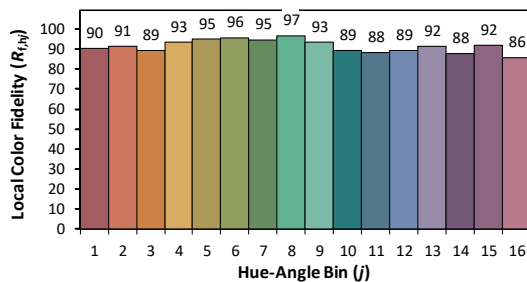
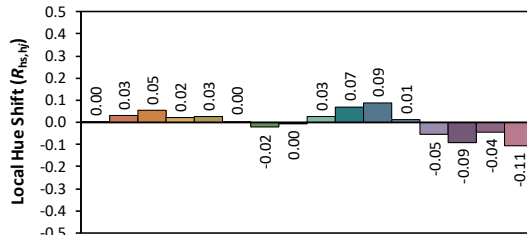
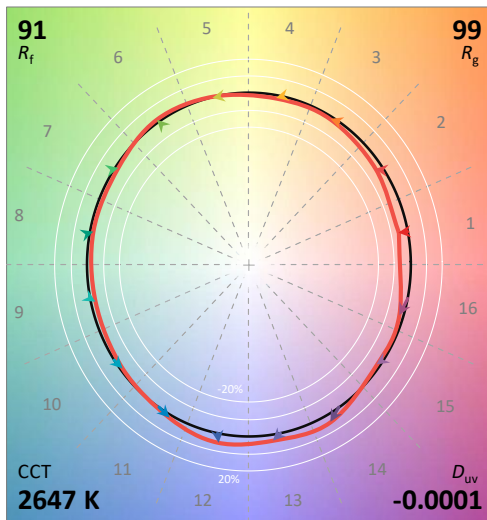
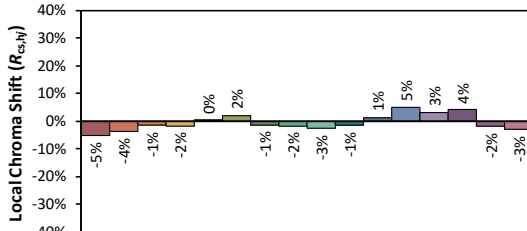
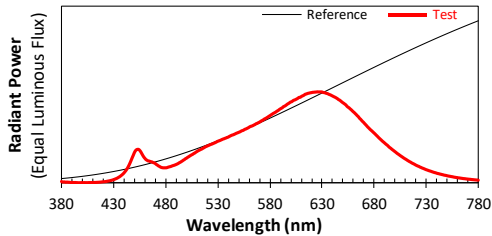
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/12/12

Model: PBL579927HAB



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

x 0.4642
 y 0.4113
 u' 0.2650
 v' 0.5282

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 58

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

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TEST REPORT

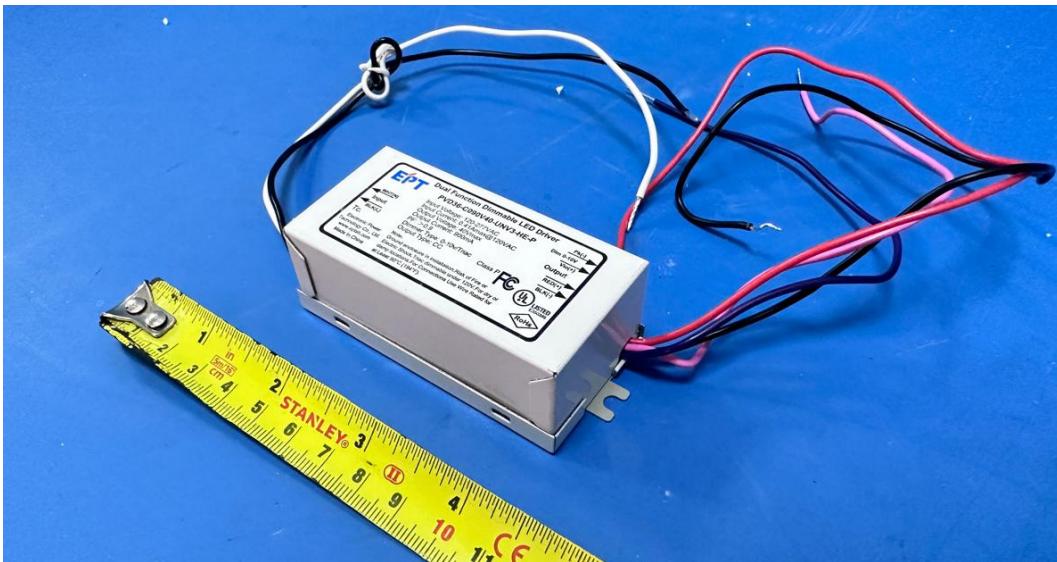
PRODUCT PICTURE (not to scale)



External view of PBL579927HAB



External view of PBL579927HAB



View of LED driver PVD36-C090V40-UNV3-HE-P

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

***** End of Report *****