

Report No. <u>12156-1</u>

Date: <u>18/05/07</u>

CHINA HUAYANG TECHNOLOGY & TRADE CORPORATION

Electricity Consumption Reduction Pilot Program

TEST RESULTS
FOR:
WALK-IN REFRIGERATION
AND
SPACE COOLING

Located at:

Guo YI HOTEL.
No.1 XICHENG DISTRICT WENXING DONG
JEI BEIJING, CHINA 100044

A Confidential Report

Prepared by

Intellidyne LLC



Test Report

Report No. 12156-1

	Date: 18/05/07
Customer:	Test Site Location:
China Huayang Technology and Trade Corporation	Guo Yi Hotel
Longji Building	No. 1 Xicheng District Wenxing Dong
No. 67 Jinbao Street	Jei Beijing, China, 100044
Dongcheng District	
Beijing, China, 8000	
T 1 T DUESTING DAID CONDITIONING	
Test Type: ☐ HEATING ☑ AIR CONDITIONING	REFRIGERATION OTHER:
Product Tested: ☐ HW ☐ LCH ☐ LCS ☐ CHW ☐ CHS	□ AC □ CAC □ RU □ OTHER:
Type of Equipment:	
Manufacturer: TICA	
Model: TAC204C (4 UNITS)	Test Start Date: 05/03/07
Capacity / SetPt: 20 Ton (2 x 10 Ton Compressors) EACH UNIT	300 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Fuel Type: ELECTRIC	Test End Date: 05/10/07
Application: Chilled Water for Air Conditioning	
	No. of Days in Toots
Area Served: Restaurant Area	No. of Days in Test: 8
Misc.	
TOTAL COMPRESSOR RUN-TIME:	in MIN.
IntelliCon ON-DAYS: 81:26:42	IntelliCon On-Days: 11%
Intellicon on-DATO. 01.20.42	intellicon on-bays. 1176
IntelliCon OFF-DAYS: 104:36:56 RUN-TIME was re	duced by: 22.15% IntelliCon Off-Days: 14%
COOLING DEGREE-DAYS (FOR TEST PERIOD)	USAGE PER DEGREE-DAY
COOLING DEGREE-DATS (FOR TEST I ERIOD)	OGAGET ER BEGREE-DAT
IntelliCon ON-DAYS: 29.3 It was 6.9%	Warmer on the On-Days. ON-DAYS: 2:46:52
IntelliCon OFF-DAYS: 27.4	OFF-DAYS: 3:49:02
======	
Total Degree-Days: 56.7	
SOLAR LOAD COMPENSATION: (Lumens/Sq. Ft.)	Individual Compressor Data
IntelliCon ON-DAYS: 344041	ON-DAY OFF-DAY
##G##G## G## 2717-61	Chiller #1
IntelliCon OFF-DAYS: 335698 It was 2.49%	Sunnier on the On-Days. Comp 1 RT 1:32:38 3:42:17
	Comp 2 RT Broken Broken
	OL:11 #0
	Chiller #2
	Comp 1 RT 20:42:00 27:19:04
	Comp 2 RT 16:04:28 15:31:33
	Chiller #3
	Comp 1 RT 20:46:40 28:00:40
A II O I OO 4 F24	Comp 2 RT 20:42:41 27:56:58
Adj. Savings = 22.15%	27.50.50
	Chiller #4
COMMENTS: Compressor # 2 in the #1 Chiller was out-of-service	e for the duration of the test. Comp 1 RT 1:17:58 1:57:33
Cooling Degree-Day adjustments were not made f	or this report even though it Comp 2 RT 0:20:17 0:08:51

was 6.9% warmer during the "On" Days. Since no adjustment was made, the savings results are slightly understated. Compressor utilization during the test

period was less than normally expected.



Customer:

Test Report

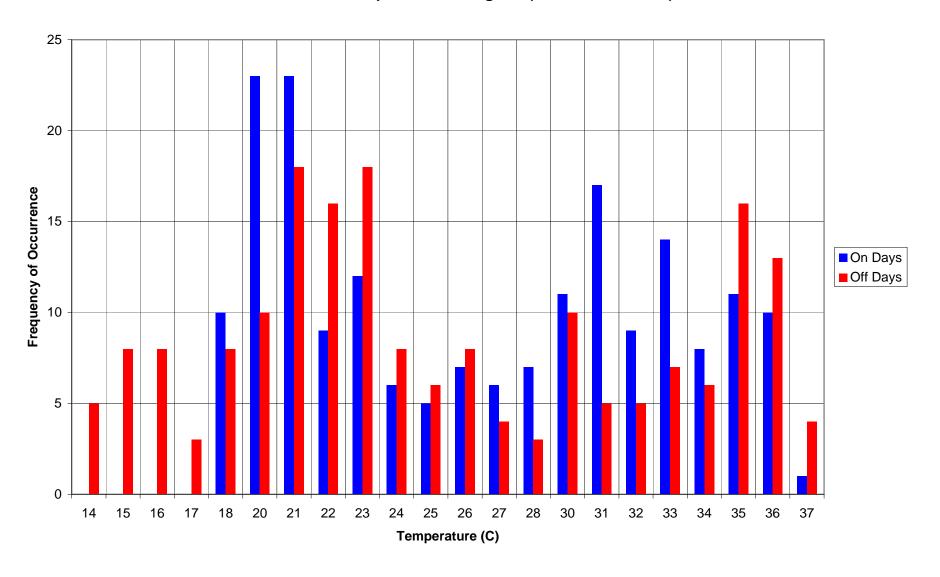
Test Site Location:

Report No. 12156-2

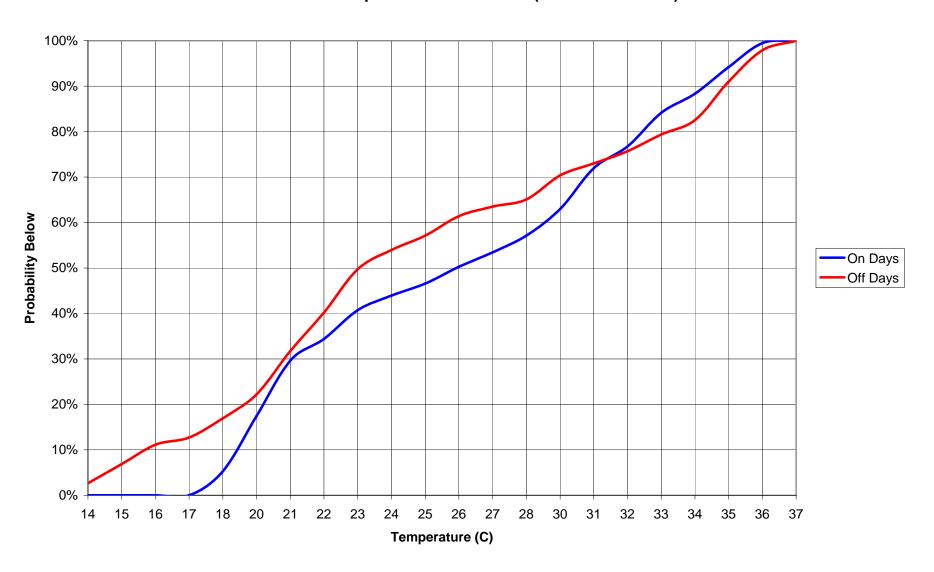
Date: 18/05/07

China Huayang Longji Building No. 67 Jinbao S Dongcheng Dis Beijing, China, 800	Street	and Trade (Corporati	on		No. 12	i Hotel Xicheng ijing, Ch			ng Dong		
Test Type:	HEATING	☐ AIR CO	NDITIONING		✓ REFRIG	ERATION		OTHE	R:			
Product Tested:	☐HW ☐LCH	I LCS	CHW	CHS	☐ AC	CAC	✓ RU	ОТНЕ	R:			
Type of Equipme	nt: Hitachi											
Model: 755FS					-	То	st Start D	Data: C	05/03/07			
		Dog C. Fron	70r 7 Do	- C	-	16	Si Siari L	Date.	13/03/07			
Capacity / SetPt:		Deg.C., Free.	zer = -/ De	eg. C.	-	-	Foot End	Datai	E/10/07			
Fuel Type: Electric	Walk-in Refriger	star and Fran	70"		-		Test End	Date.	13/10/07			
	Walk-in Refrigera				-	No of	f Days in	Toct	0			
	waik-in Reinger	ator and Freez	zei		-	NO. OI	Days III	rest:	8			
Misc.					-							
TOTAL COMPRES	SSOR RUN-TIM	E:	▽ in ⊦	IRS	☐ in MIN.			<u>C</u> (OMPRES:	SOR USAC	SE FACTO	<u>)F</u>
IntelliCon (ON-DAYS: 25	:39:50						li.	ntelliCon	On-Days:	27%	
IntelliCon O	FF-DAYS: 28	:55:15	RUN-TI	ME was re	educed by:	11.26	<mark>%</mark>	11	ntelliCon	Off-Days:	30%	
COOLING DEGRE	EE-DAYS (FOR	TEST PERIO	D)						USAGE	PER DEGR	REE-DAY	i
IntelliCon (ON-DAYS:	29.3	It was	6.9%	Warmer o	n the On	-Days.		ON-DA	AYS: 0:	52:35	
IntelliCon O		<u>27.4</u>							OFF-D/	4 <i>YS:</i> 1:	03:19	
Total Deg	ree-Days:	<u>56.7</u>										
SOLAR LOAD CO	MPENSATION:	(Lumens/So	q. Ft.)						ndividual	Liquid Lir	ne Runtim	e Data
IntelliCon (ON-DAYS: 3	44041								ON-DAY	<u>OF</u>	F-DAY
IntelliCon O	FF-DAYS: 3	35698	It was	2.49%	Sunnier o	n the On	-Days.	F		21:33:07 18:58:00		:59:05 :05:09
	gs = 11. Degree-Day data since the control						adjustme	ents are i	not neede	d for this ty	pe of appl	ication,

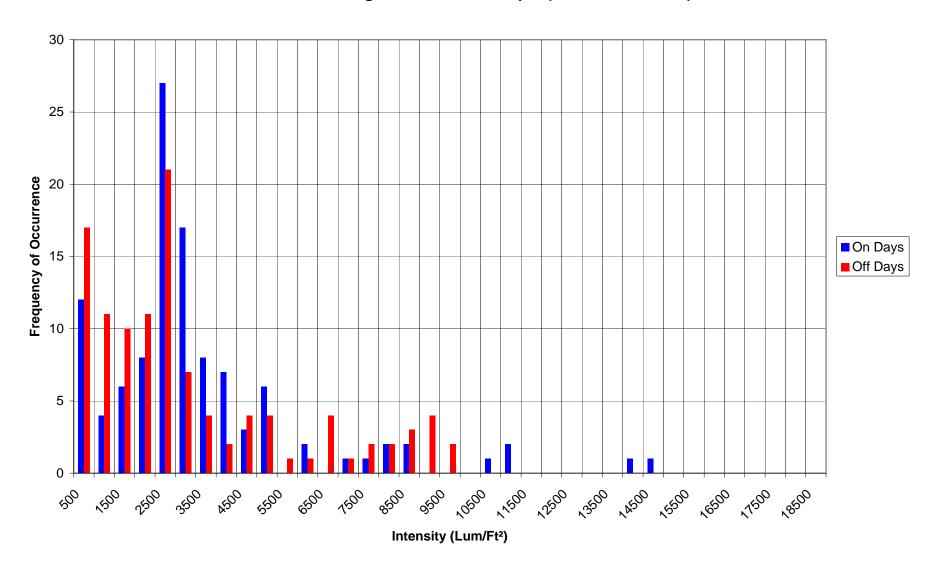
Gou Yi Hotel Refrigeration / AC Pilot Program Outside Air Temperature Histogram (03/05/07--10/05/07)



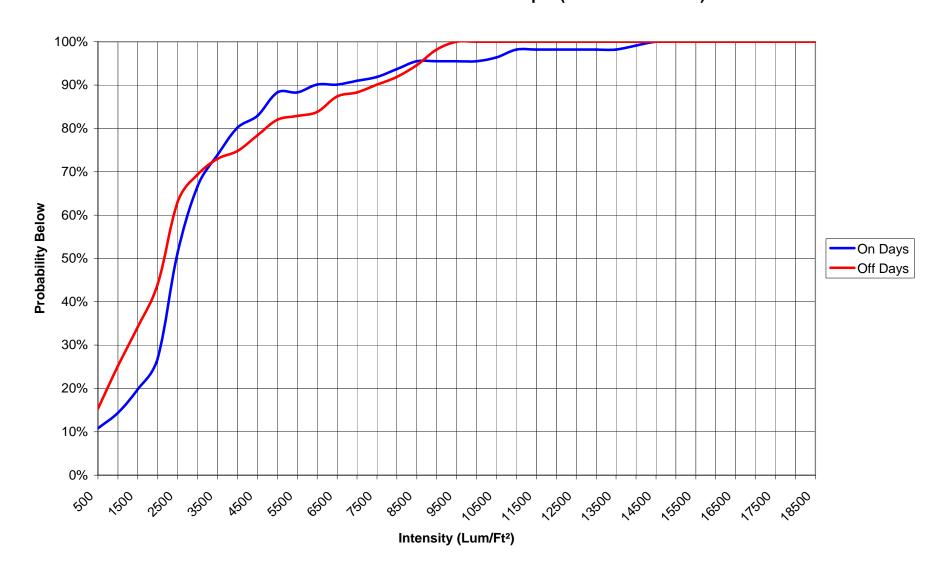
Gou Yi Hotel Refrigeration / AC Pilot Program Outside Air Temperature Probabilities (03/05/07--10/05/07)



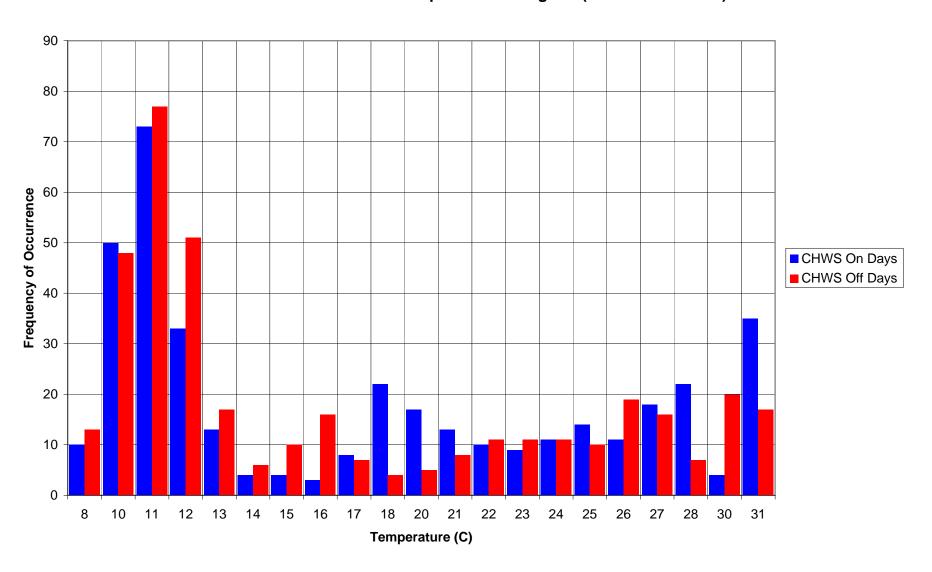
Gou Yi Hotel Refrigeration / AC Pilot Program Solar Load Histogram 6:00 am - 8:00 pm (03/05/07--10/05/07)



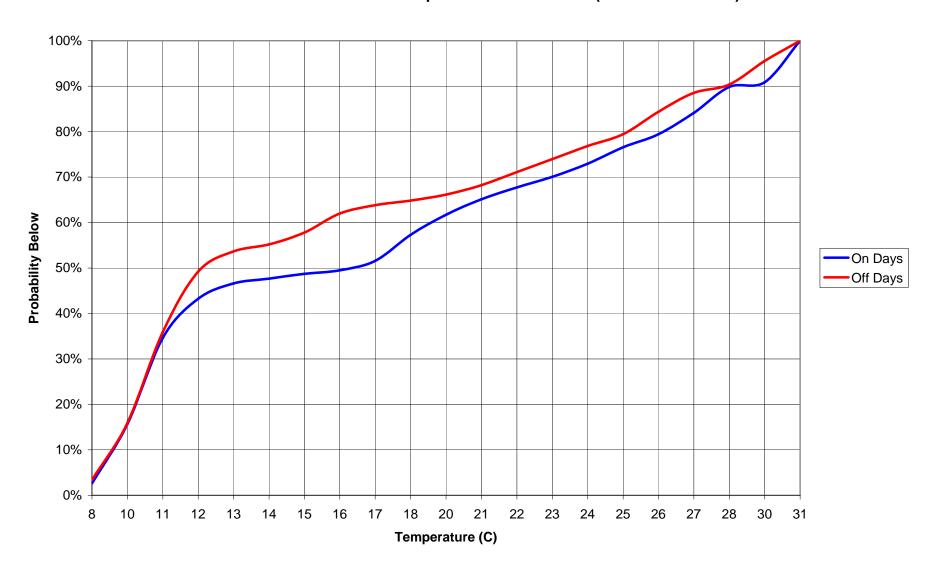
Gou Yi Hotel Refrigeration / AC Pilot Program Solar Load Probabilities 6:00 am - 8:00 pm (03/05/07--10/05/07)



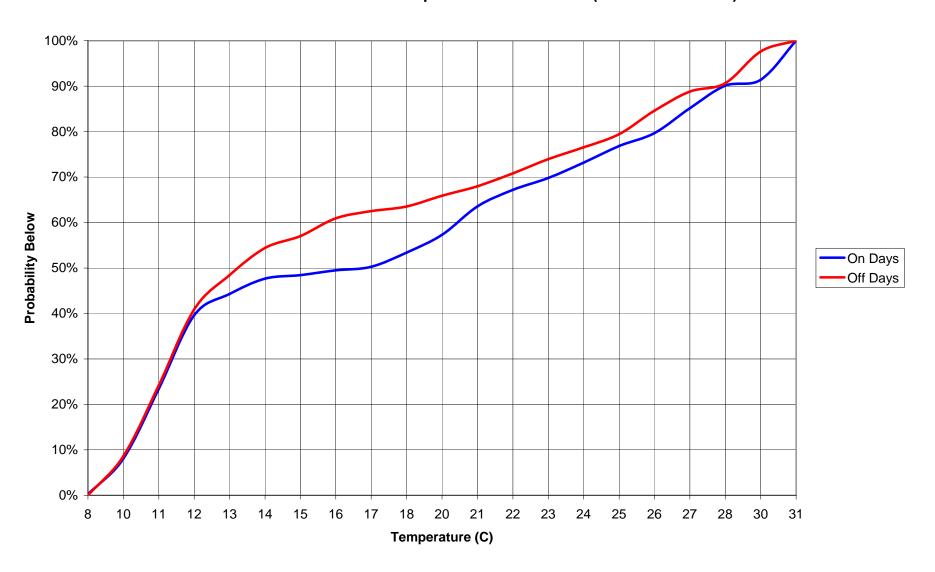
Gou Yi Hotel Refrigeration / AC Pilot Program CHILLED WATER SUPPLY Temperature Histogram (03/05/07--10/05/07)



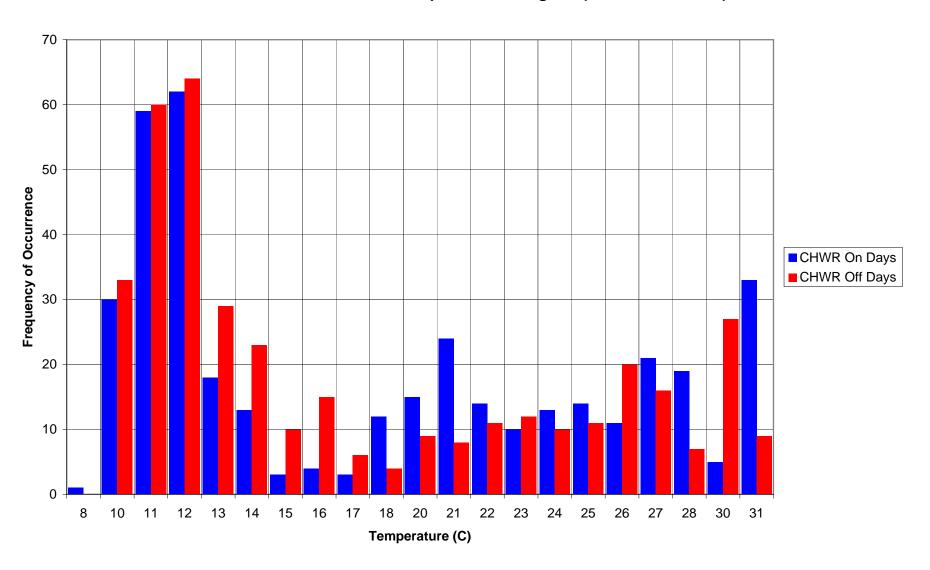
Gou Yi Hotel Refrigeration / AC Pilot Program CHILLED WATER SUPPLY Temperature Probabilities (03/05/07--10/03/07)



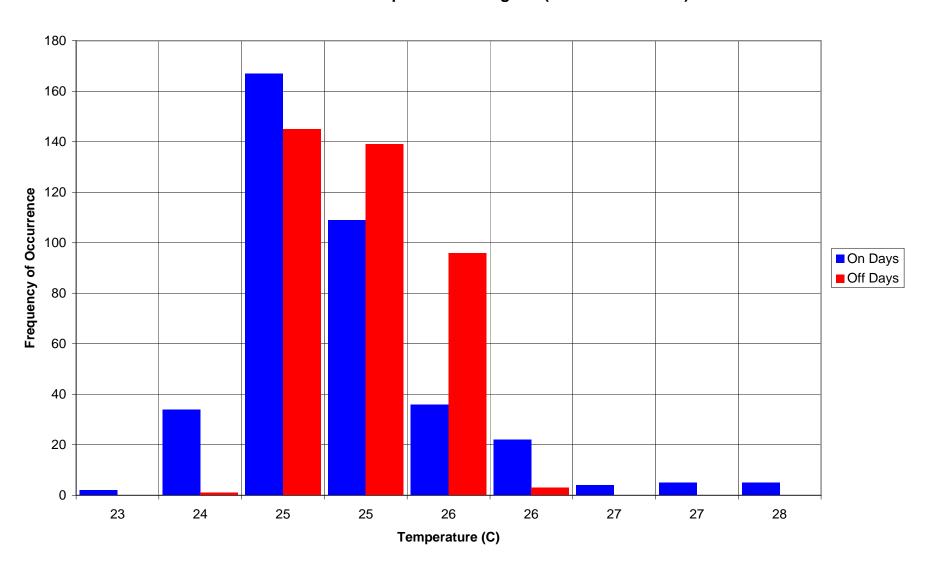
Gou Yi Hotel Refrigeration / AC Pilot Program CHILLED WATER RETURN Temperature Probabilities (03/05/07--10/05/07)



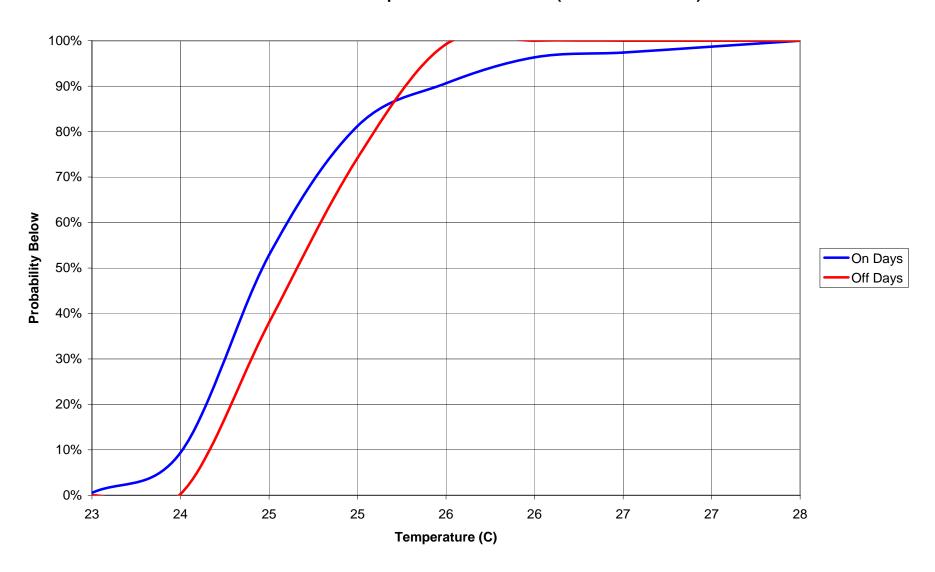
Gou Yi Hotel Refrigeration / AC Pilot Program CHILLED WATER RETURN Temperature Histogram (03/05/07--10/05/07)



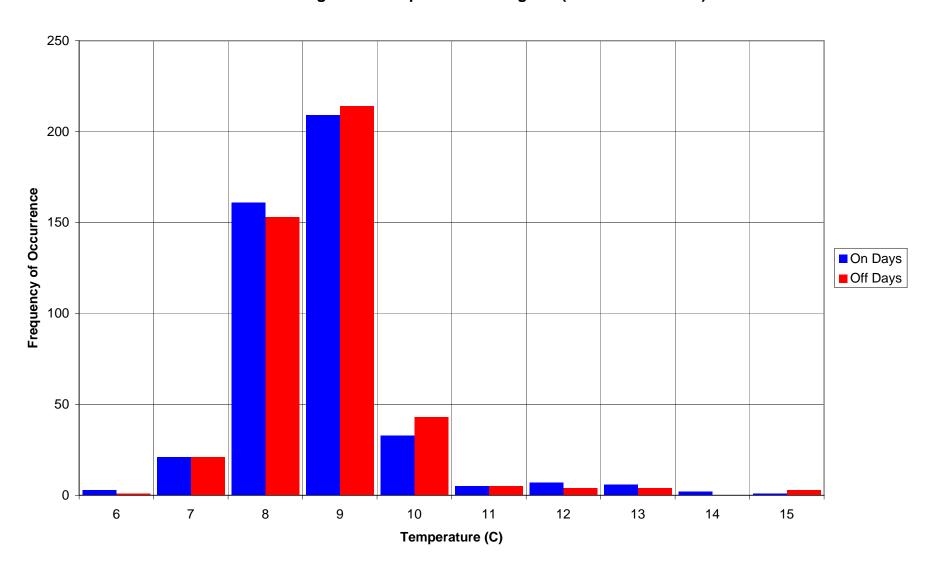
Gou Yi Hotel Refrigeration / AC Pilot Program Restaurant Area Temperature Histogram (03/05/07--10/05/07)



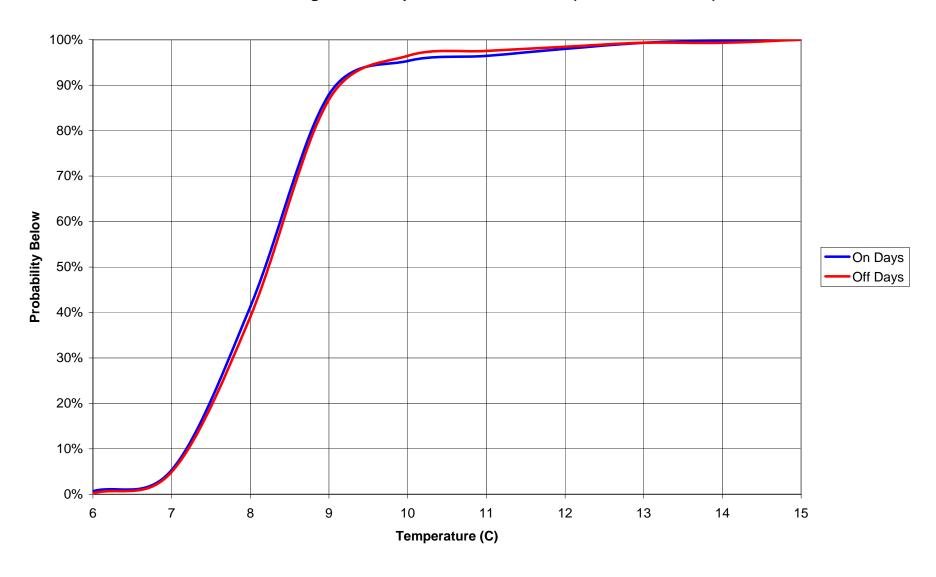
Gou Yi Hotel Refrigeration / AC Pilot Program Restaurant Area Temperature Probabilities (03/05/07--10/03/07)



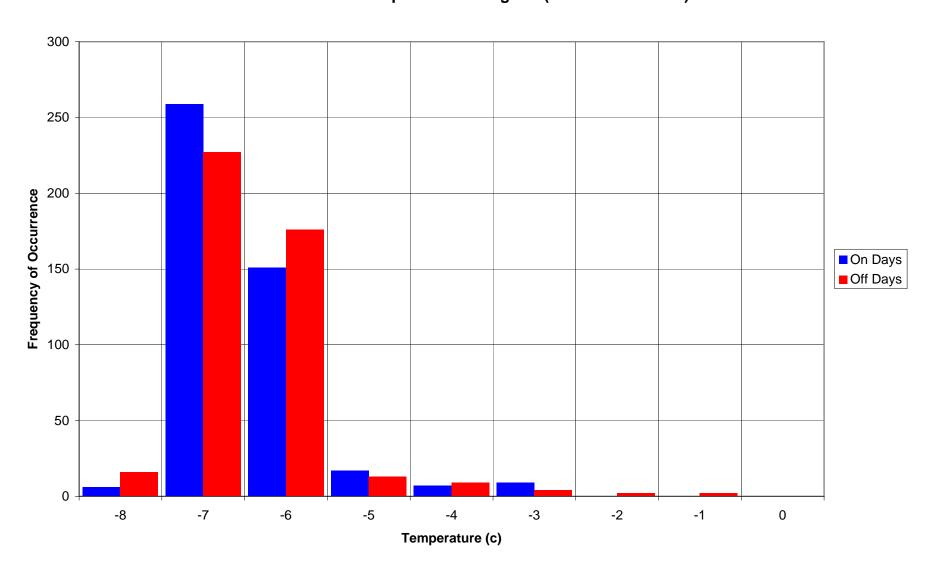
Gou Yi Hotel Refrigeration / AC Pilot Program Walk-in Refrigerator Temperature Histogram (02/05/07--11/05/07)



Gou Yi Hotel Refrigeration / AC Pilot Program Walk-in Refrigerator Temperature Probabilities (02/05/07--11/03/07)



Gou Yi Hotel Refrigeration / AC Pilot Program Walk-in Freezer Temperature Histogram (02/05/07--11/05/07)



Gou Yi Hotel Refrigeration / AC Pilot Program Walk-in Freezer Temperature Probabilities (02/05/07--11/03/07)

