



PARK VENTURES

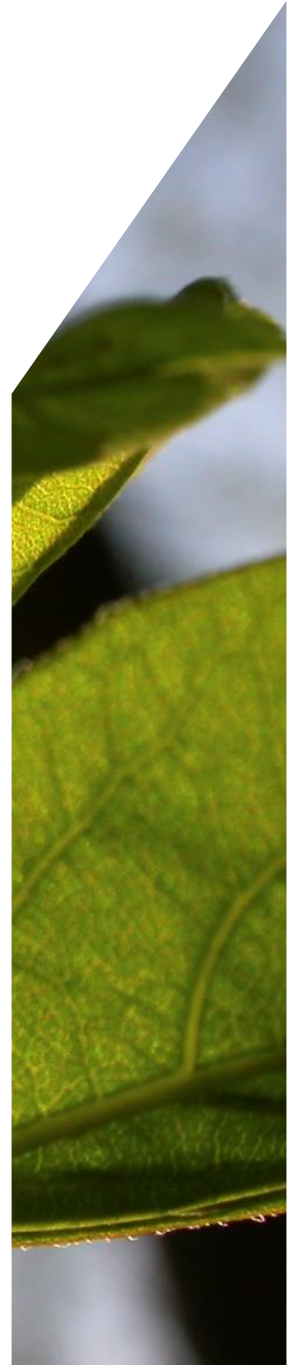
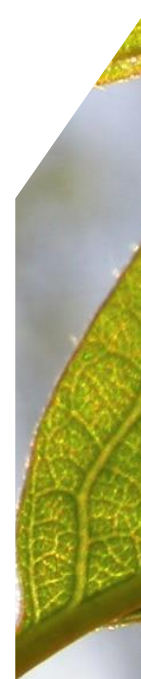
THE ECOPLEX ON WITTHAYU

THE ECOPLEX ON WITTHAYU

PROJECT OVERVIEW

DR. ATCH SRESHTHAPUTRA

MANAGING DIRECTOR. AFRICVS





Park Venture Hotel: LEED CS (Platinum awarded November 2012)

International Arena



Change Master

“ผู้ปรับเปลี่ยน”

Harmonizer

“ผู้ผสมผสาน”



Harmonizing Connoisseur

“ผู้เชี่ยวชาญการประสานวัฒนธรรมจีนกับ
สถาปัตยกรรมสมัยใหม่อย่างลงตัว”



Jin Mao Tower

Entertainer

“ผู้ให้ความบันเทิง”



Ruler

“ผู้มีอำนาจ และอิทธิพลครองเครือข่าย”

Explorer

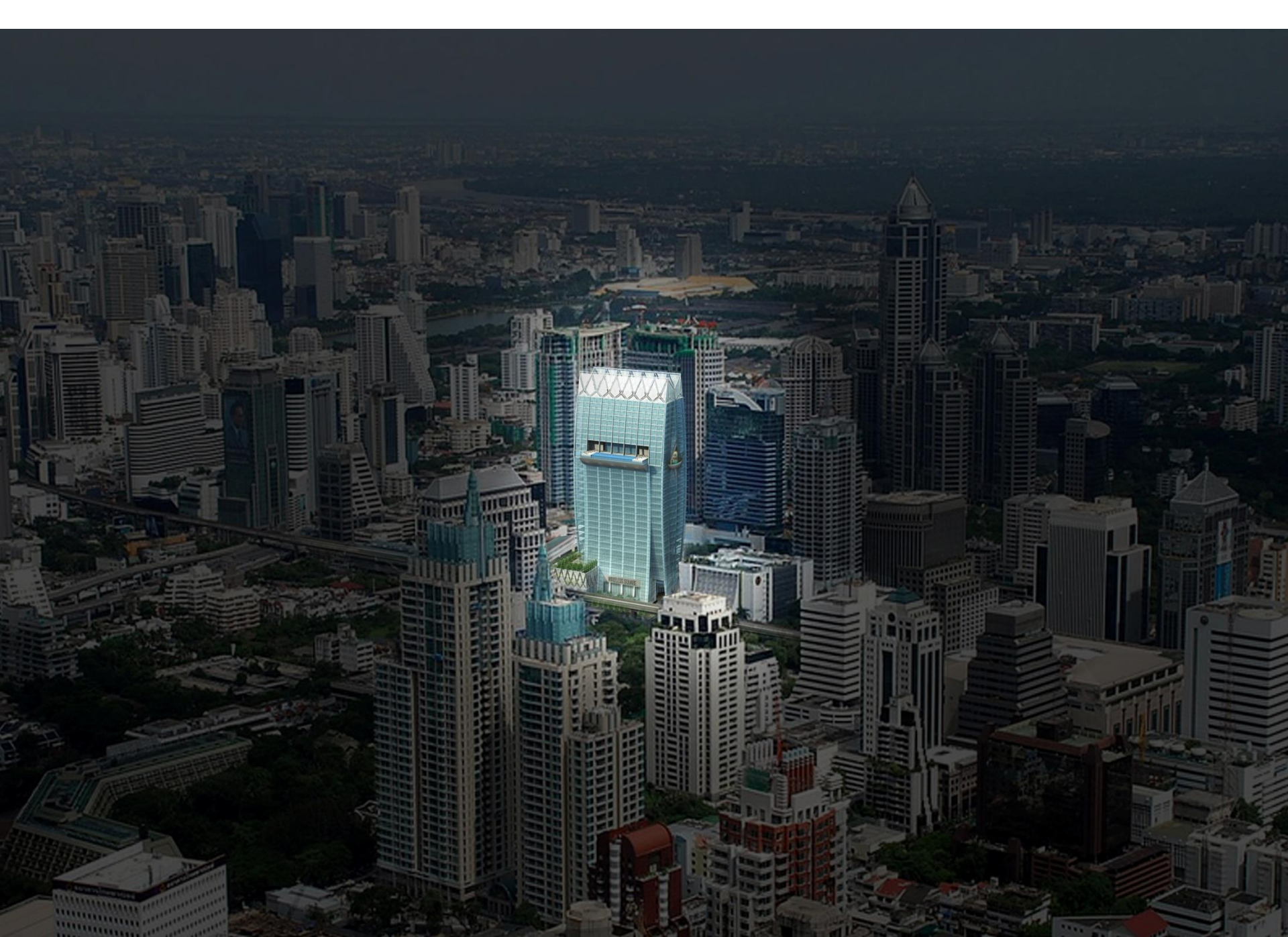
“ผู้เสาะหาประสบการณ์ใหม่ๆมาให้”



Project Comparison



Criteria	All Season Place	Q House Lumpini	Exchange Tower	The Office @ Central World	Athenee Tower	Park Ventures
Mixed Use	อาคารสำนักงาน/ศูนย์การค้า/ คอนโดมิเนียม/โรงแรม/ เซอร์วิสอพาร์ทเมนต์	อาคารสำนักงาน/ ศูนย์การค้า	อาคารสำนักงาน/ ศูนย์การค้า	อาคารสำนักงาน/ ศูนย์การค้า/ โรงแรม	อาคารสำนักงาน/ คอนโดมิเนียม/ โรงแรม	อาคารสำนักงาน/ ศูนย์การค้า/ โรงแรม
Accessibility	ดี	ดีมาก	ดีมาก	ดีมาก	ดี	ดีมาก
Distance from Mass Transit	BTS 400 m.	MTR ด้านหน้าอาคาร	BTS~50m.,MRT~2m.	BTS 400 m.	BTS 200 m.	BTS ด้านหน้าอาคาร
Lettable Area	121,347	60,000	36,000	78,000	40,000	27,500
Asking Price	850	800-850	750	800-850	800-850	850 up
Floor Plate Area (Net)	1,200	1,500-1,900	1,300	1,500	1,500	1,850-1,950
Floor to Ceiling	2.7	2.9	2.65	2.8	2.85	2.9
Shape (Effect to Quality of View)	สามเหลี่ยม, สี่เหลี่ยมผืนผ้า	จัตุรัส	จัตุรัส	สี่เหลี่ยมผืนผ้า	สี่เหลี่ยมผืนผ้า	สี่เหลี่ยมผืนผ้า
Decoration	ดี	ดี	ดี	ดีมาก	ดีมาก	ดีมาก
No.of Carpark	1:200	1:100	1:100	1:100	1:100	1:100





PARK VENTURES
THE ECOPLEX ON WITTHAYU

Design Inspiration



In this historic roads and the most prominent business location, we greet the world with Thailand warm gesture of 'Wai'



Univentures

© 2010 Univentures PLC. All rights reserved. This is confidential, proprietary and trade secret information of Univentures Public Company Limited.

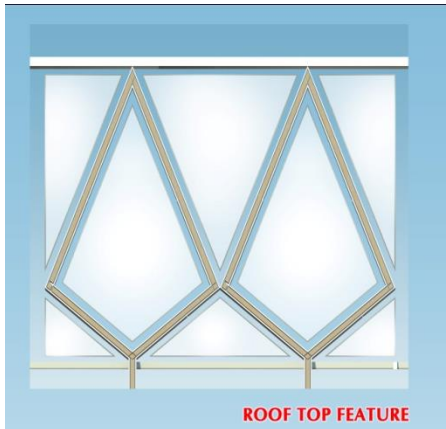


PARK VENTURES
THE ECOPLEX ON WITTHAYU

Building Shape



LOTUS CONCEPT

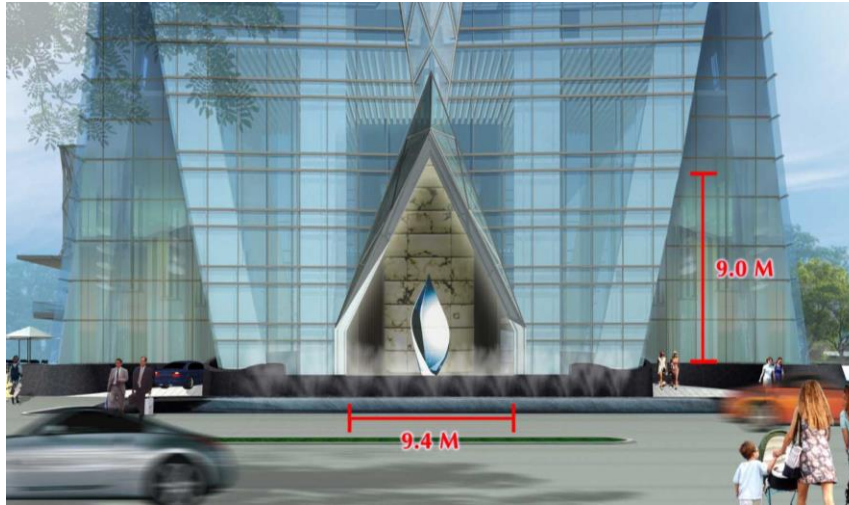


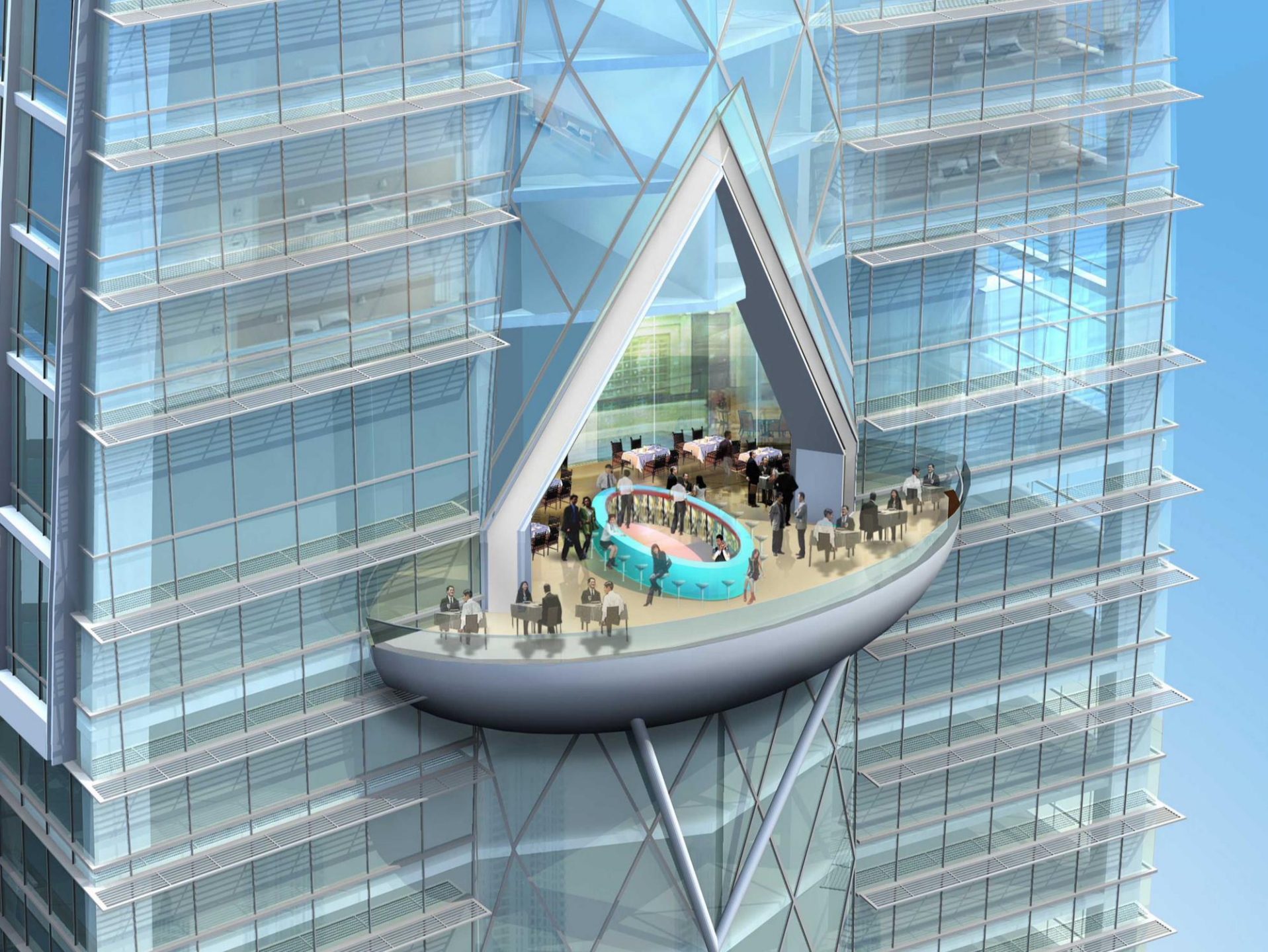
ROOF TOP FEATURE



Univentures

Hotel Drop-off







The Marina Bay Sand, Singapore



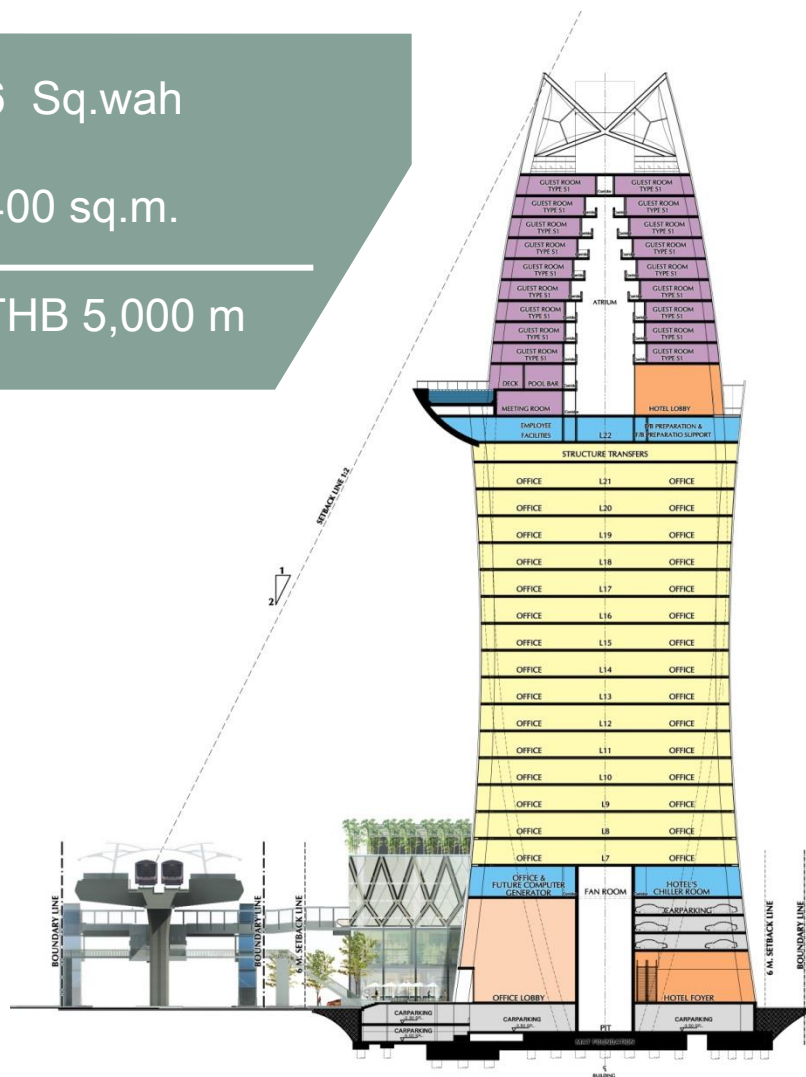
© Reuters

Project Facts

Land: 5 Rai - 36 Sq.wah

Total Area: 81,400 sq.m.

Project Value: THB 5,000 m



**HOTEL: 25,615 sq.m.
242 keys**

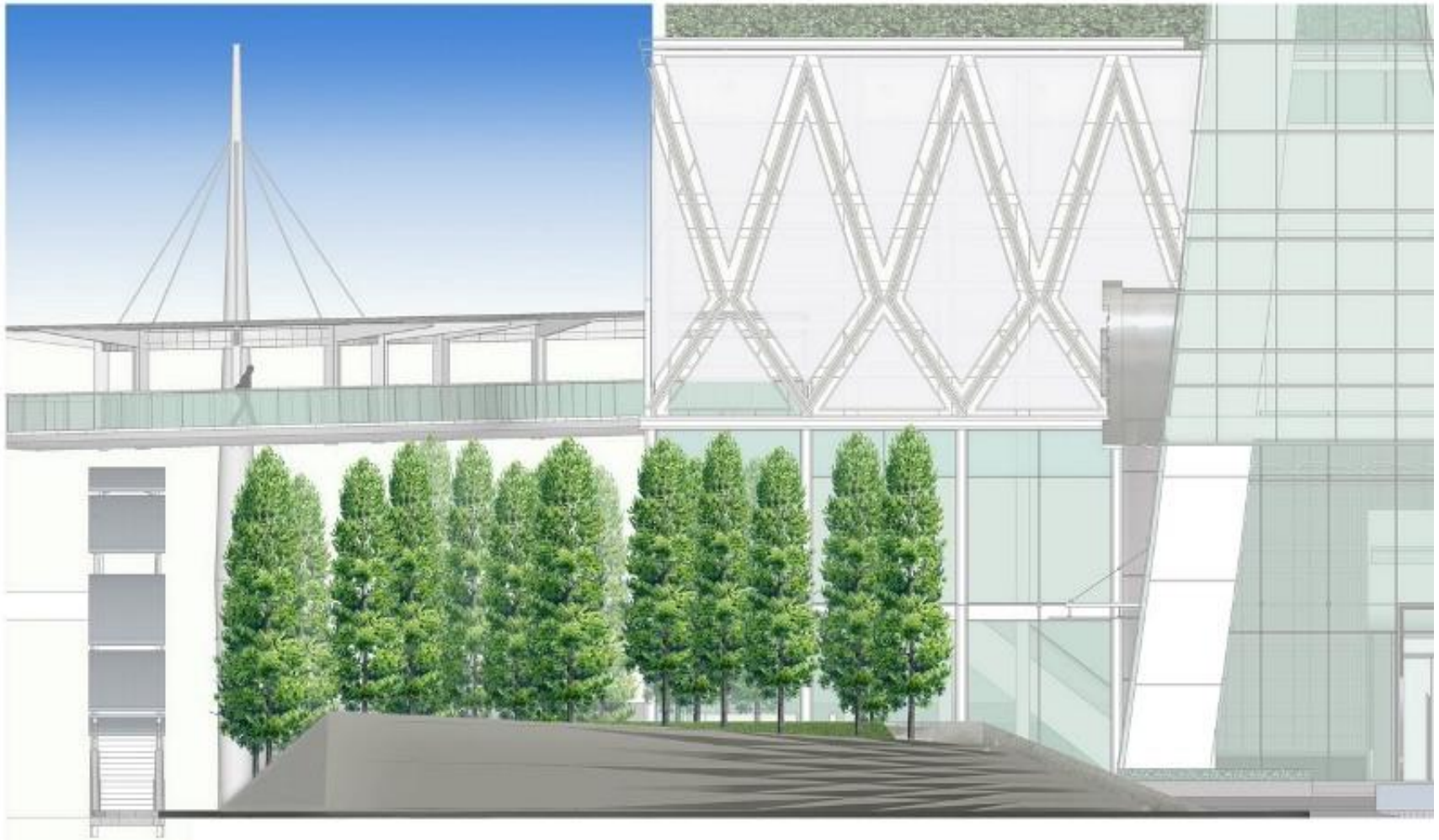
OFFICE: 27,000 sq.m.

RETAIL: 1,000 sq.m.



PARK VENTURES

THE ECOPLEX ON WITTHAYU

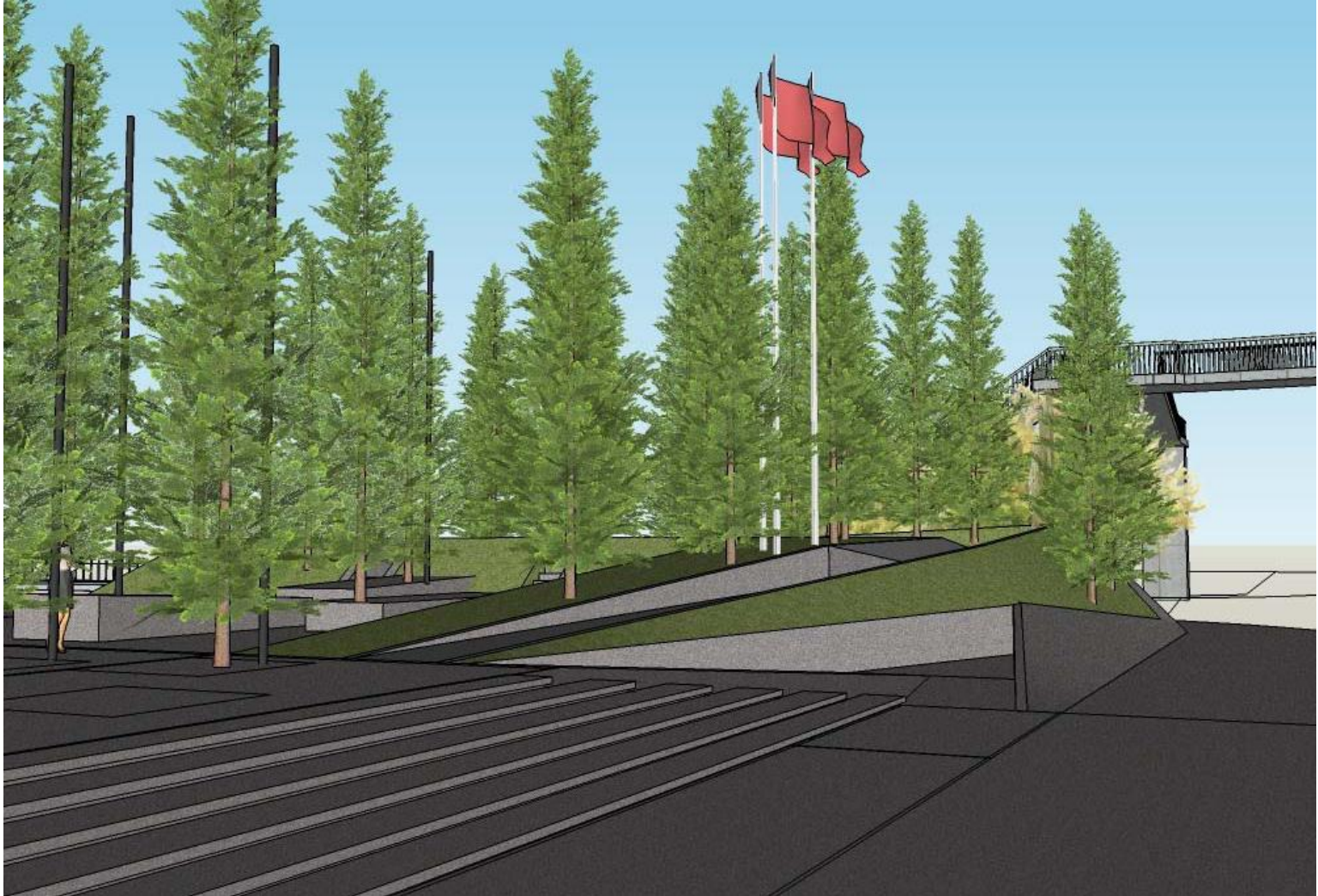


Univentures

© 2010 Univentures PLC. All rights reserved. This is confidential, proprietary and trade secret information of Univentures Public Company Limited.



Ground Floor Landscape





PARK VENTURES

THE ECOPLEX ON WITTHAYU



Univentures

© 2010 Univentures PLC. All rights reserved. This is confidential, proprietary and trade secret information of Univentures Public Company Limited.



Leadership in Energy and Environmental Design (LEED)

The US. Green Building Council (USGBC)

LEED Categories & Goal



Sustainable Sites

- Develop only appropriate sites
- Reuse existing buildings and/or site
- Protect natural and agricultural areas
- Reduce need for auto use
- Protect and/or restore natural sites

Water Efficiency

- Reduce quantity of water needed
- Reduce burden on municipal water supply and treatment

Energy & Atmosphere

- Energy Efficiency & Performance
- Implement renewable & alternative energy sources
- Adopt Ozone protection protocols

Material & Resources

- Dedicated area to separate, collect and store items for recycling
- Reuse/repurpose existing materials
- Construction waste management
- Use products with rapidly renewable or recycled content
- Purchase regionally sourced materials
- Use certified wood

Indoor Environmental Quality

- Establish good indoor air quality
- Eliminate, reduce and manage sources of indoor air pollution
- Ensure thermal comfort and systems controllability
- Provide occupant connection to the outdoor environment

Innovation In Design

- Recognize exceptional performance & innovation not addressed by LEED credit

LEED C&S Certification Levels



LEED Platinum	80 - 100 points
LEED Gold	60 - 79 points
LEED Silver	50 - 59 points
LEED Certified	40 - 49 points

LEED CS 2009: CREDITS

■ Sustainable Site	28 points
■ Water Efficiency	10 points
■ Energy & Atmosphere	37 points
■ Material & Resources	13 points
■ Indoor Environmental Quality	12 points
■ Innovation in Design	6 points
■ Regional Priority	4 points

ENERGY SIMULATION USING DOE-2

Some examples in the U.S.:

The White House
World Trade Center
Sears Tower
Boston City Hall
New York State Capitol
Texas State Capitol
Ronald Reagan Library
U.S. State Department
NREL Laboratory
Bank of Boston
Pacific Museum of Flight
Peachtree Place

Some Examples in other countries:

National Library (France)
New Parliament House (Australia)
Berlin Holocaust Center
Nestle' Headquarters (Switzerland)
U.S. Embassy (Berlin)
DOW Europe (Switzerland)
Renault Technocenter (France)
Citibank Plaza (Hong Kong)

File

Edit

Alternatives

Simulation

Organizers

Tools

Help

3D

Project

Blocks

Rooms

Facades

Systems

Zones

Name

22

Area (excluding floor multiplier):

2575

List of Blocks (14)

01

02

03

04

05

06

07

08

09

22

23

24

X

0

Y

0

Constructions

Roof

PV baseline roof

Ceiling

Gyp. bd. ceiling, radiant barrier

Floor

PV flr baseline

Int Floor

Simulated Slab

Partitions

Partition

Zoning

Custom Block

Level

Level 11

Number of Floors

1

Floor to Floor Ht.

3.5

Plenum

☒

Plenum Height

0.3

Edit Defaults

Apply Defaults

Dimensions are in meters.

North

Refresh 3D Image

Show 3D View

D:\Atch Dropbox\Dropbox\Atch soup\PV E-sim\111114\PV_111114.gph

Basecase 0

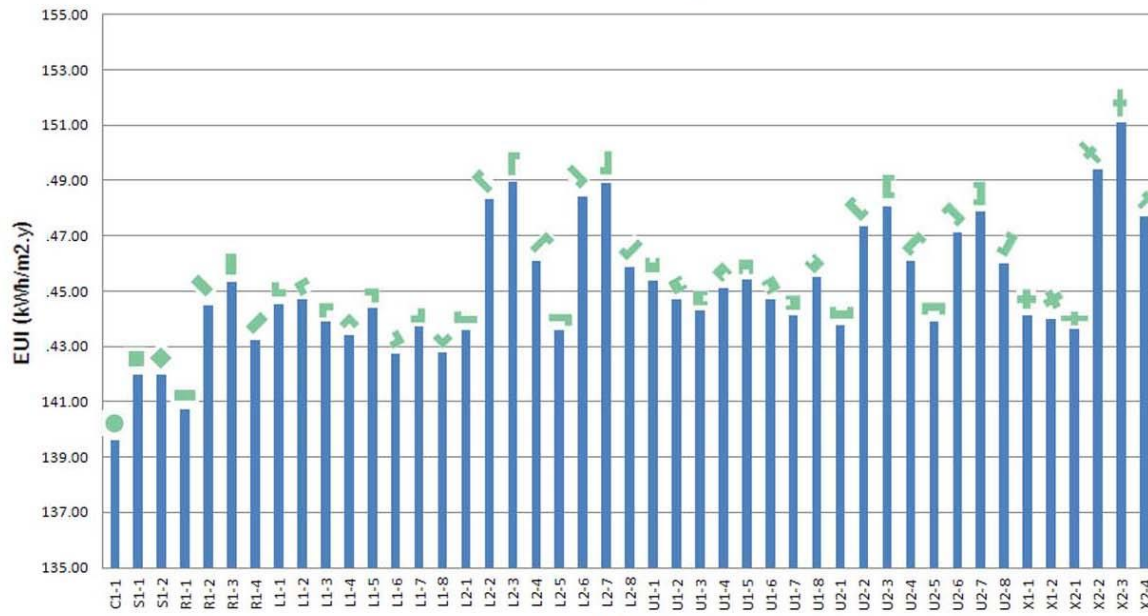
X = 0

Y = 0

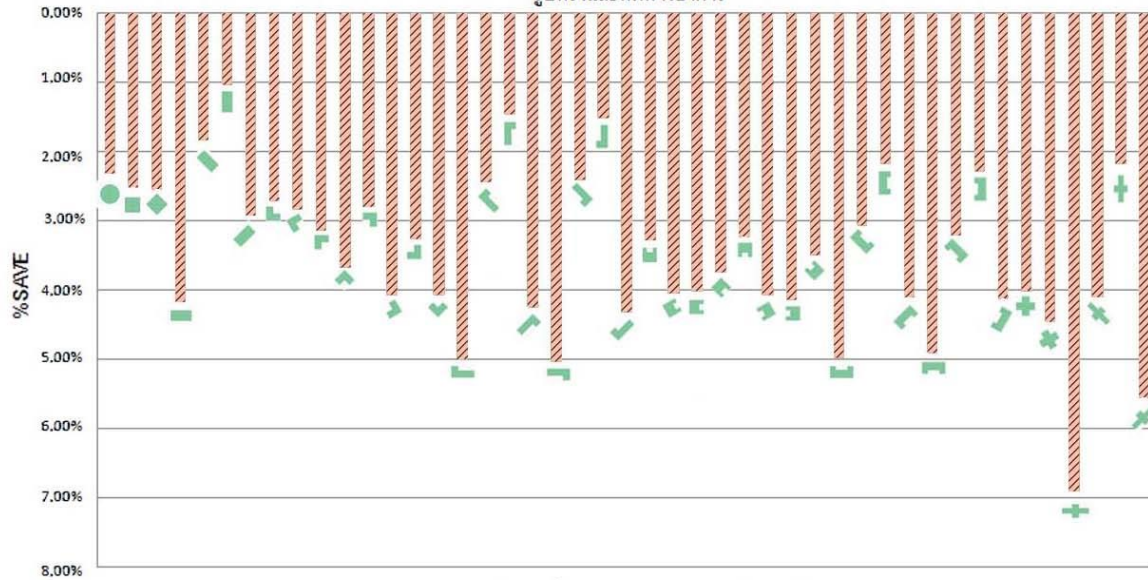
SI Units

5/16/2012

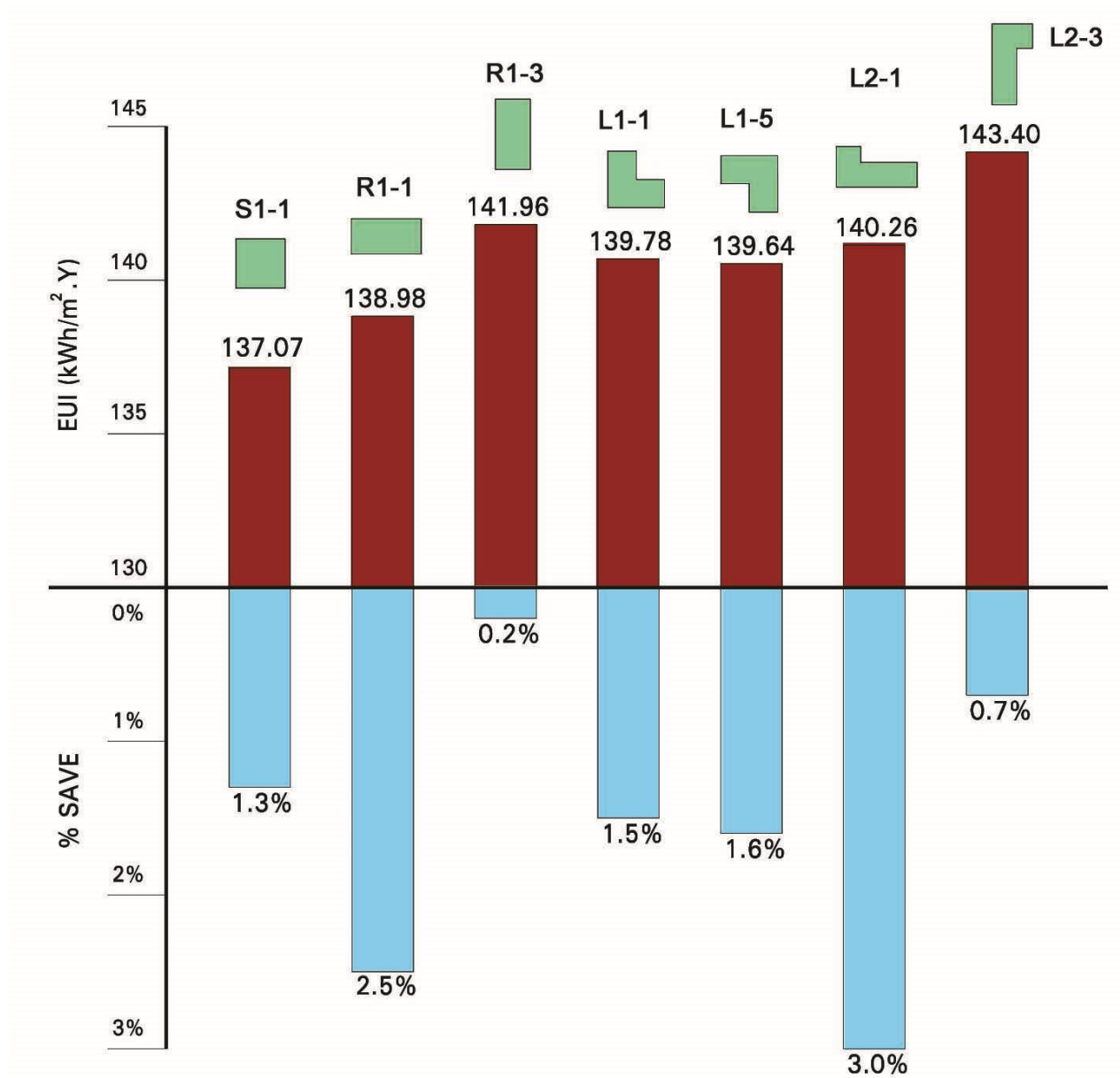
แสดงค่าเฉลี่ย EUI ของแต่ละรูปทรง



รูปทรงและทิศทางอาคาร

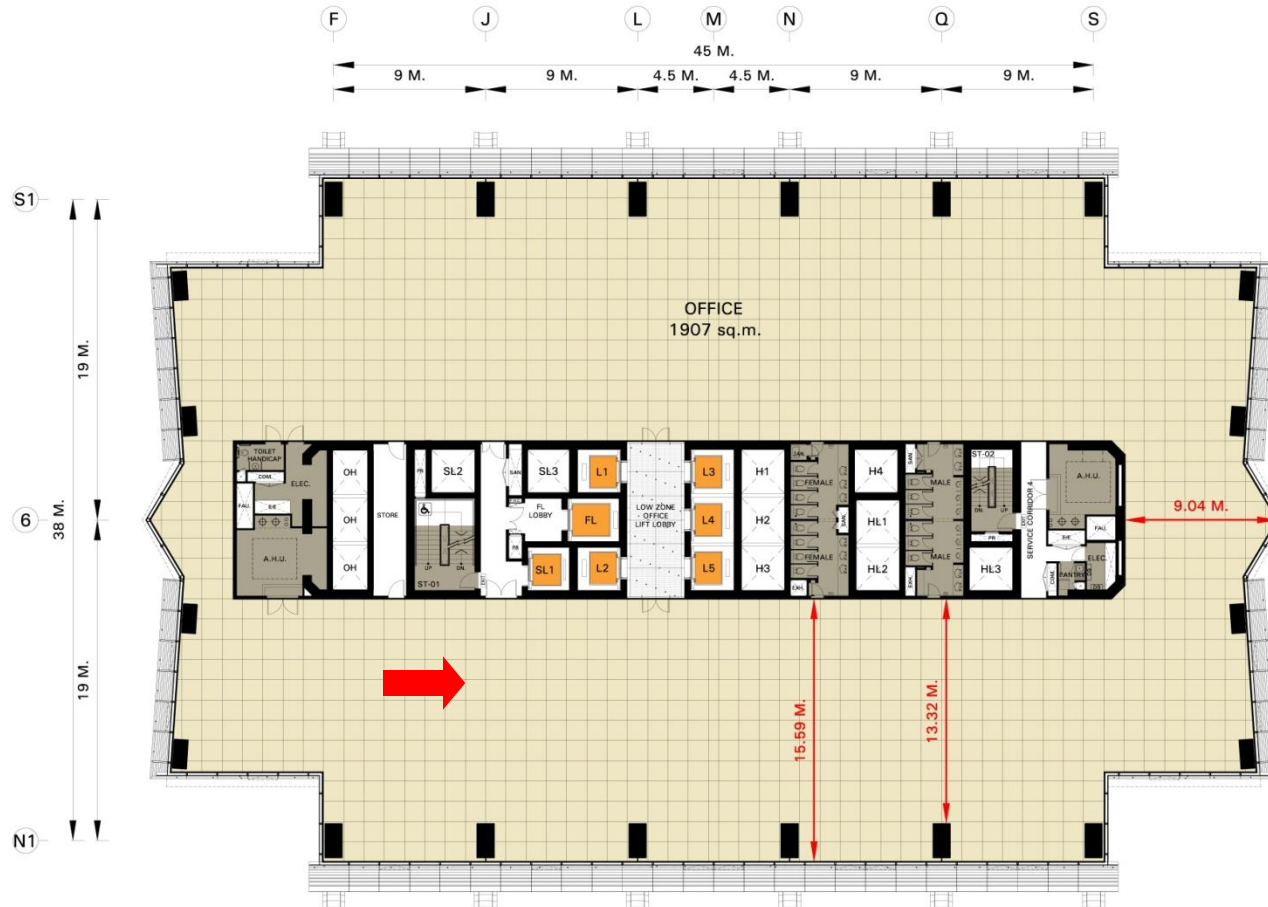


แสดงค่าเฉลี่ย %SAVE ของแต่ละรูปทรง

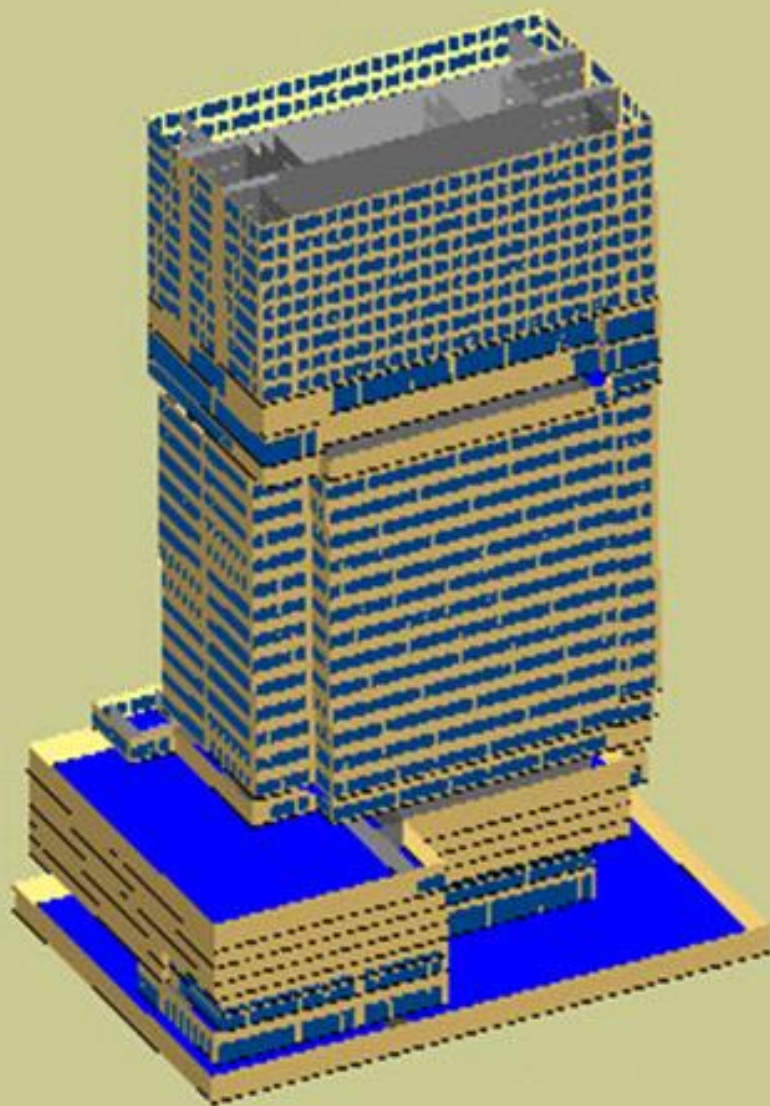


อ้างอิง: อุไรชา เจียรนัยพาณิชัย และ อรรจน์ เศรษฐบุตร (2556)

Tenant Office Floor



LEVEL 9 FLOOR PLAN (LOW ZONE)
NET FLOOR AREA (SINGLE TENANT)
1907 sq.m.



Viracon 6-6-12-6

$T_{vis} = 29 \%$

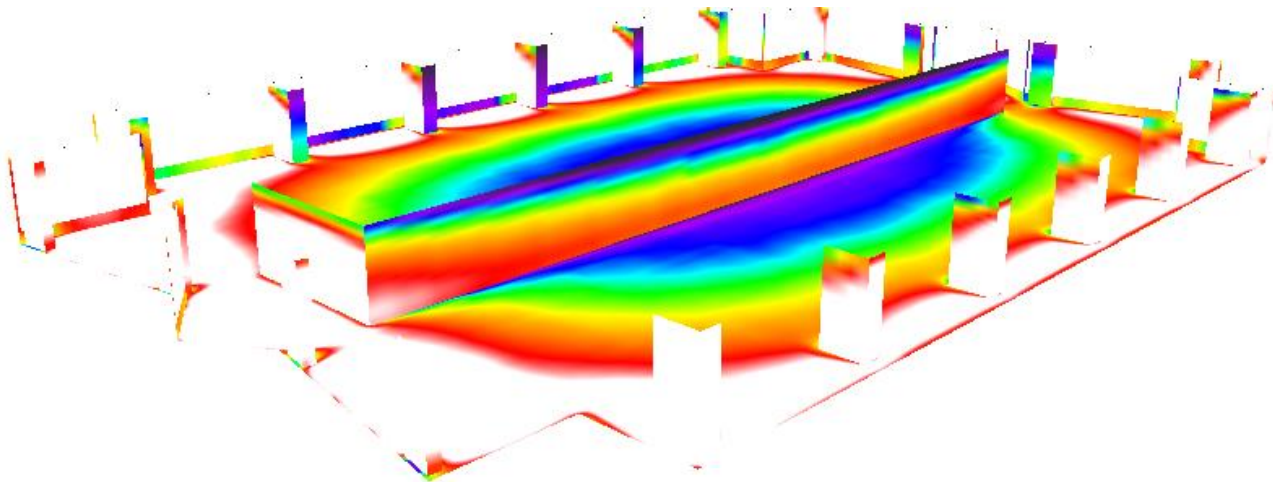
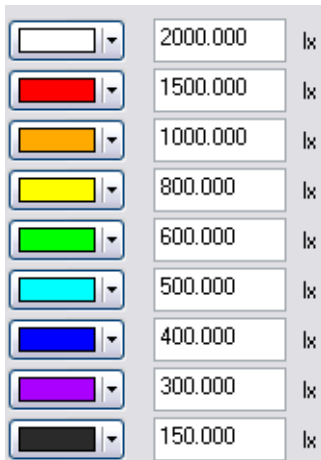
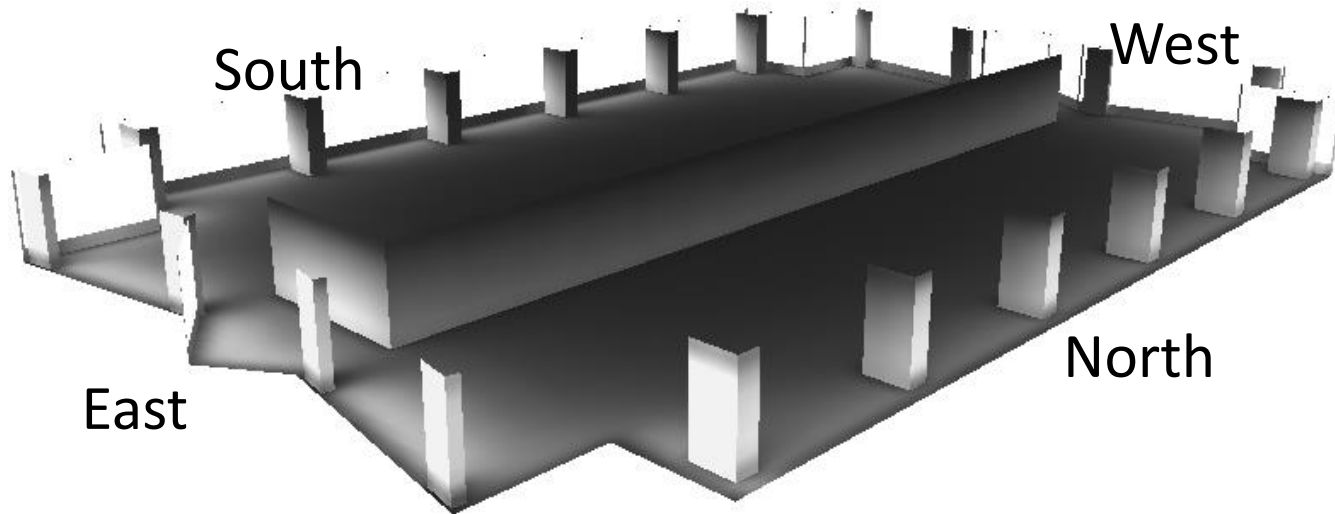
$SC = 0.23$

$SHGC = 0.20$

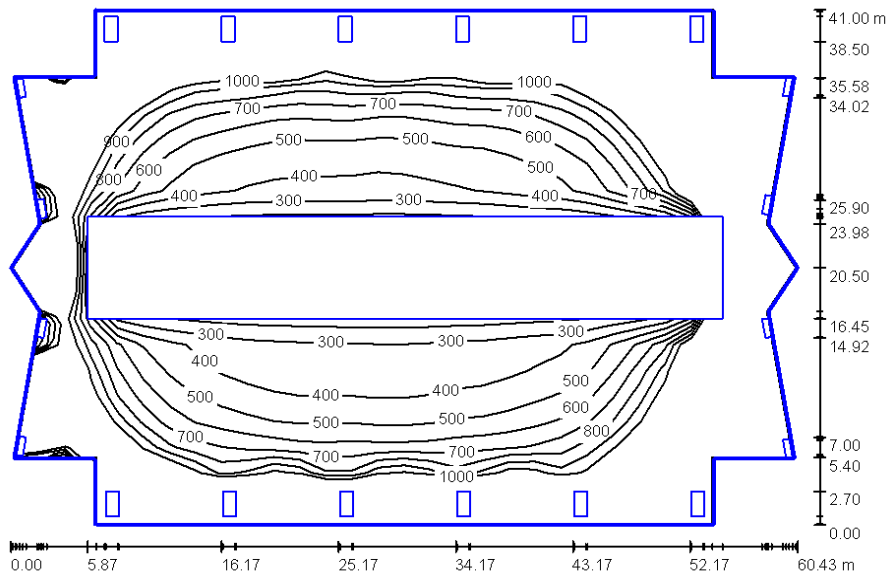
$U = 1.87 \text{ W/m}^2\text{K}$



Model 8th 21September 10:00



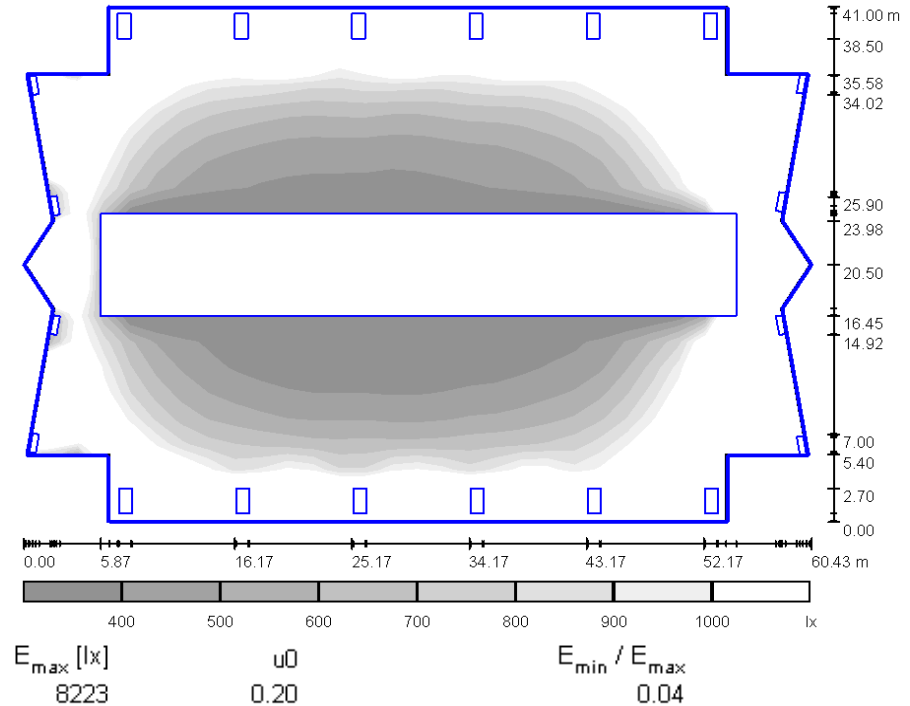
Tower-Hotel 8th 21September 15:00



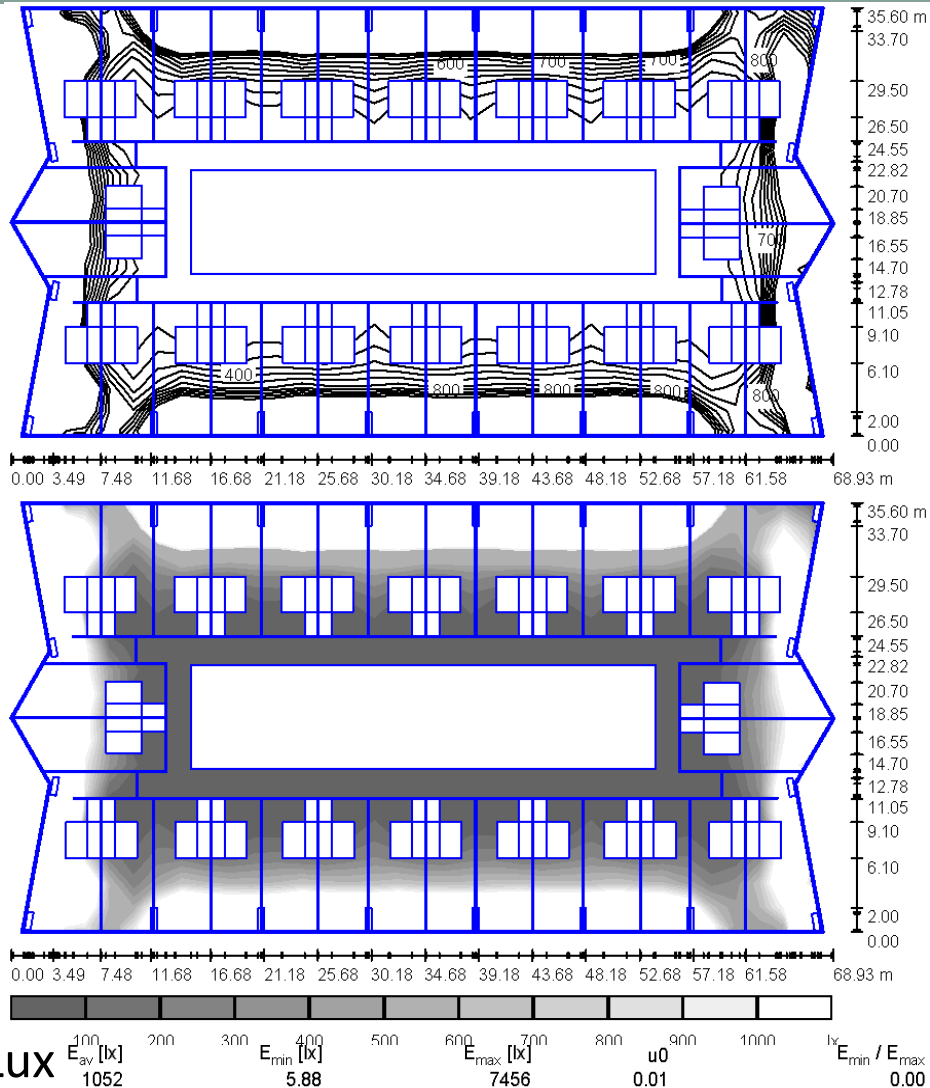
Unit: Lux

E_{av} [lx]
1515

E_{min} [lx]
304



Tower-Hotel 24th 21September 10:00





PARK VENTURES
THE ECOPLEX ON WITTHAYU

Tenant Office Floor



Column-free Design

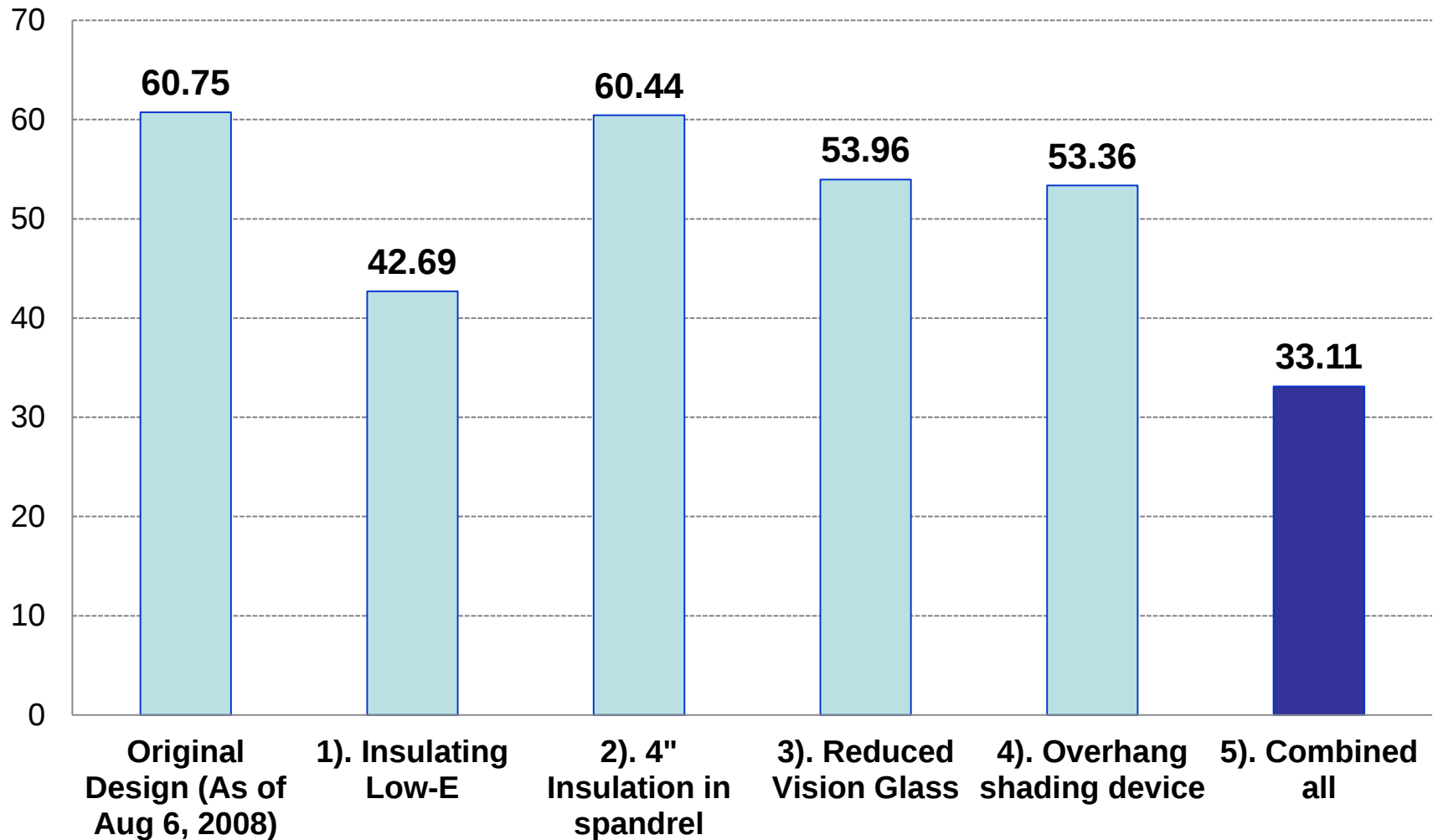


Univentures

© 2010 Univentures PLC. All rights reserved. This is confidential, proprietary and trade secret information of Univentures Public Company Limited.

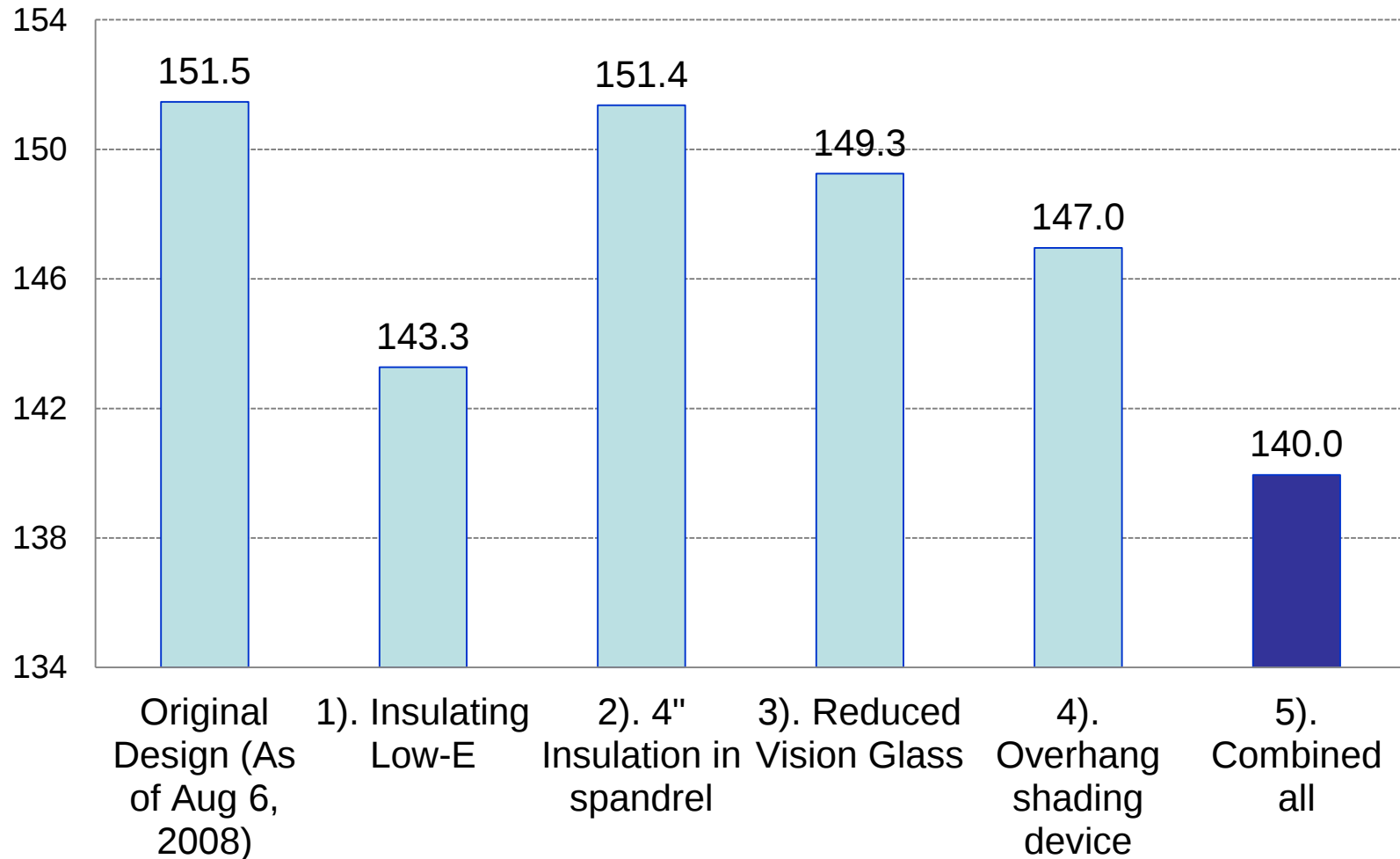


OTTV (Watt/m2)



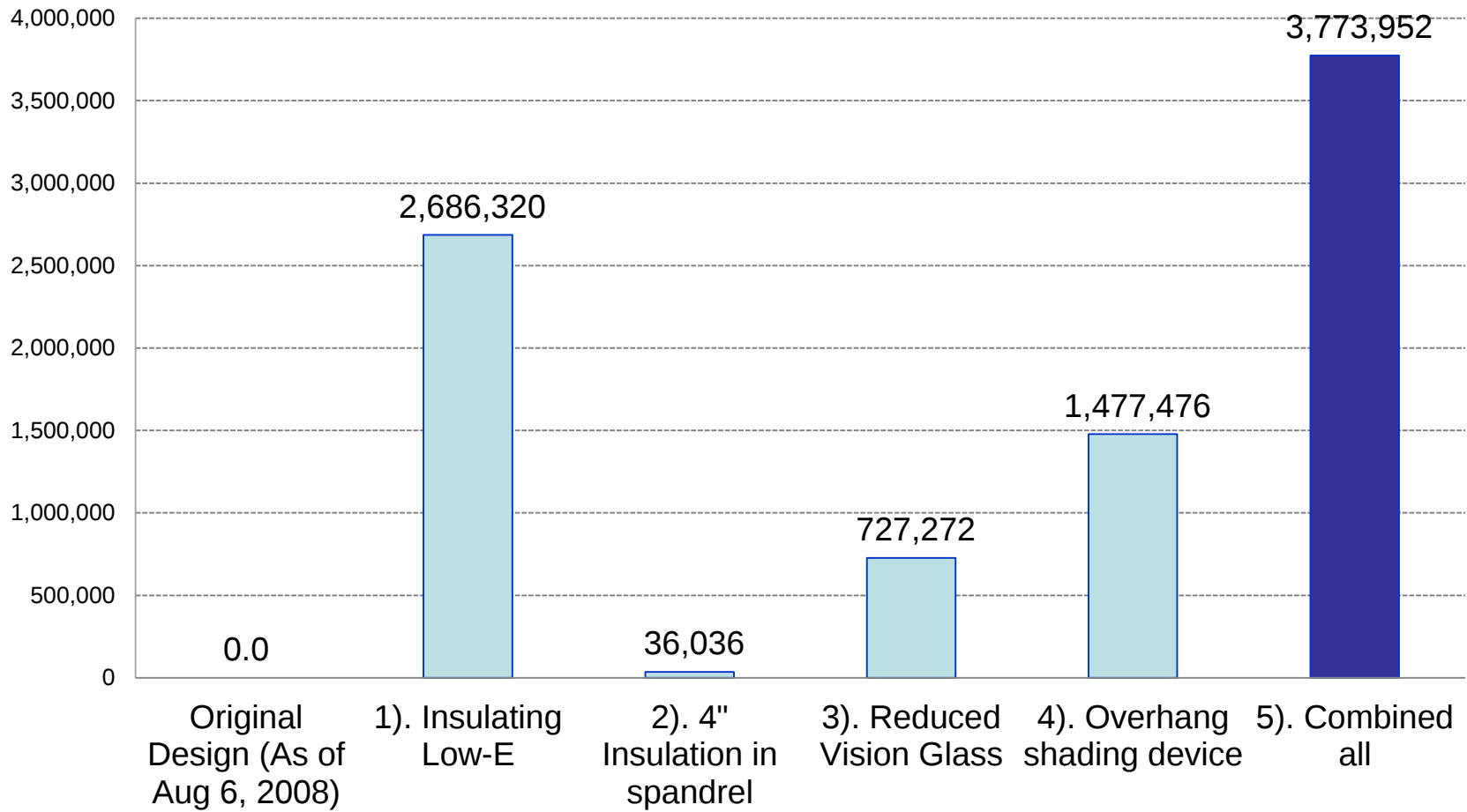


Energy Use Index (kWh/m².yr)



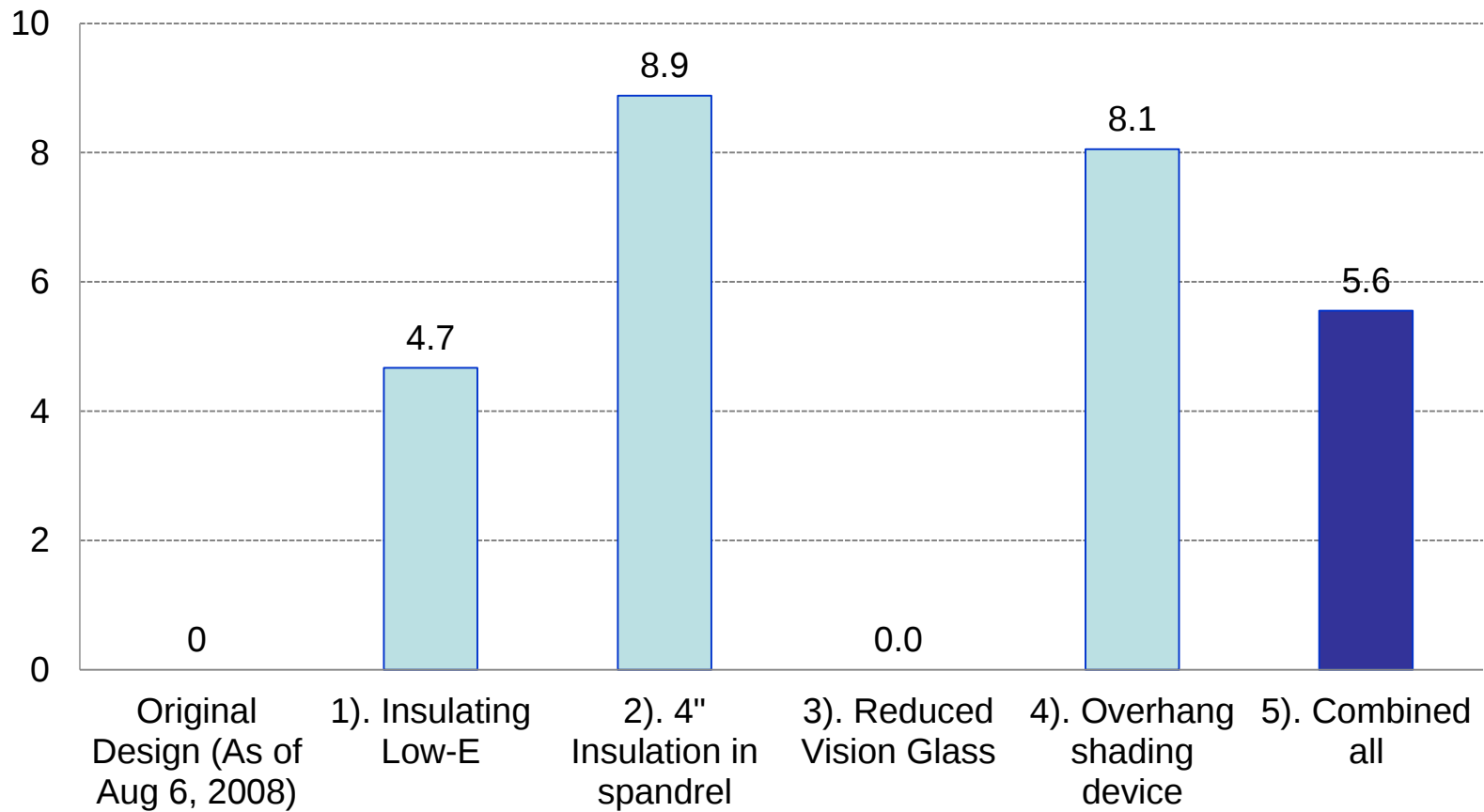


Energy Saving (Baht/Yr)





Payback (Years)

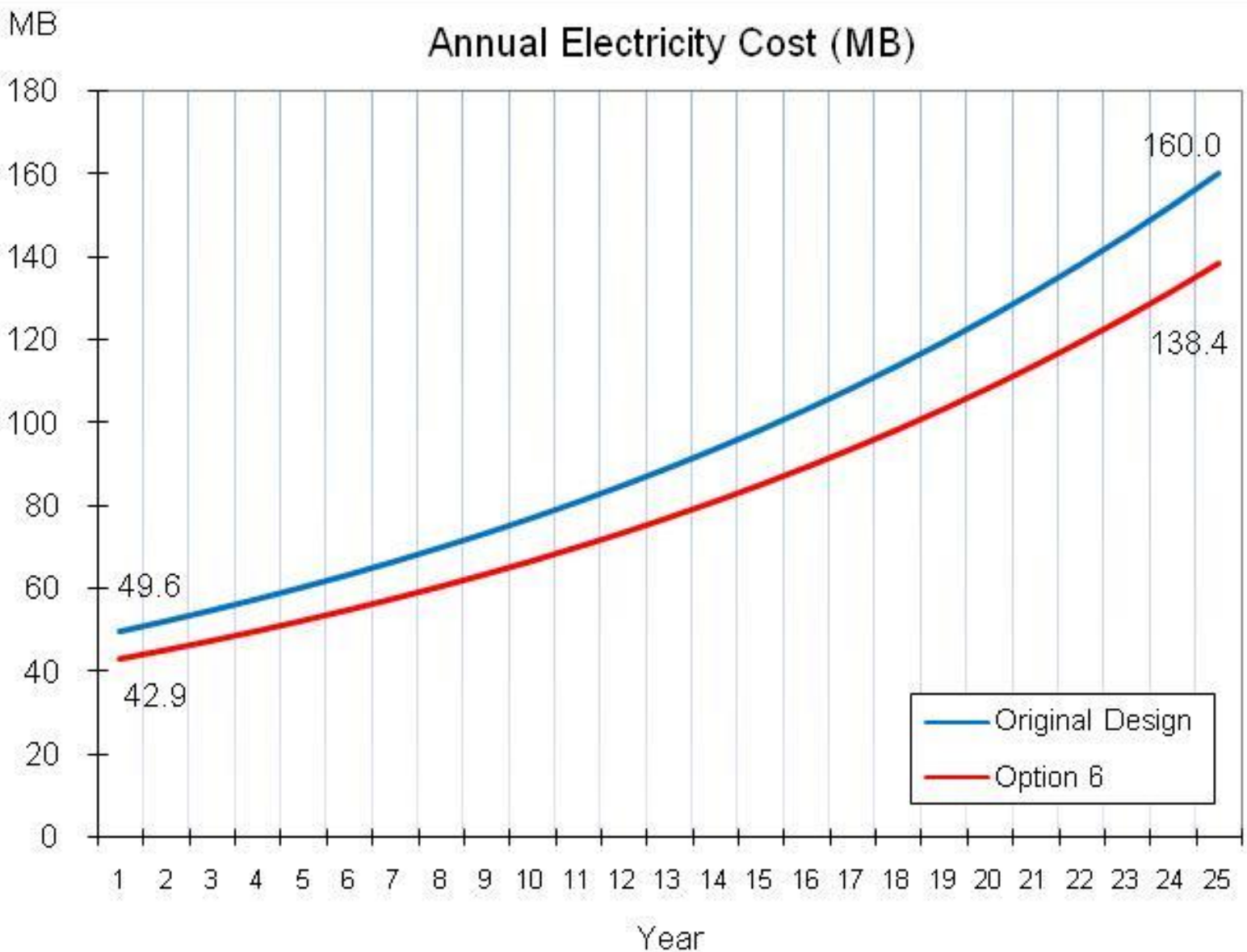


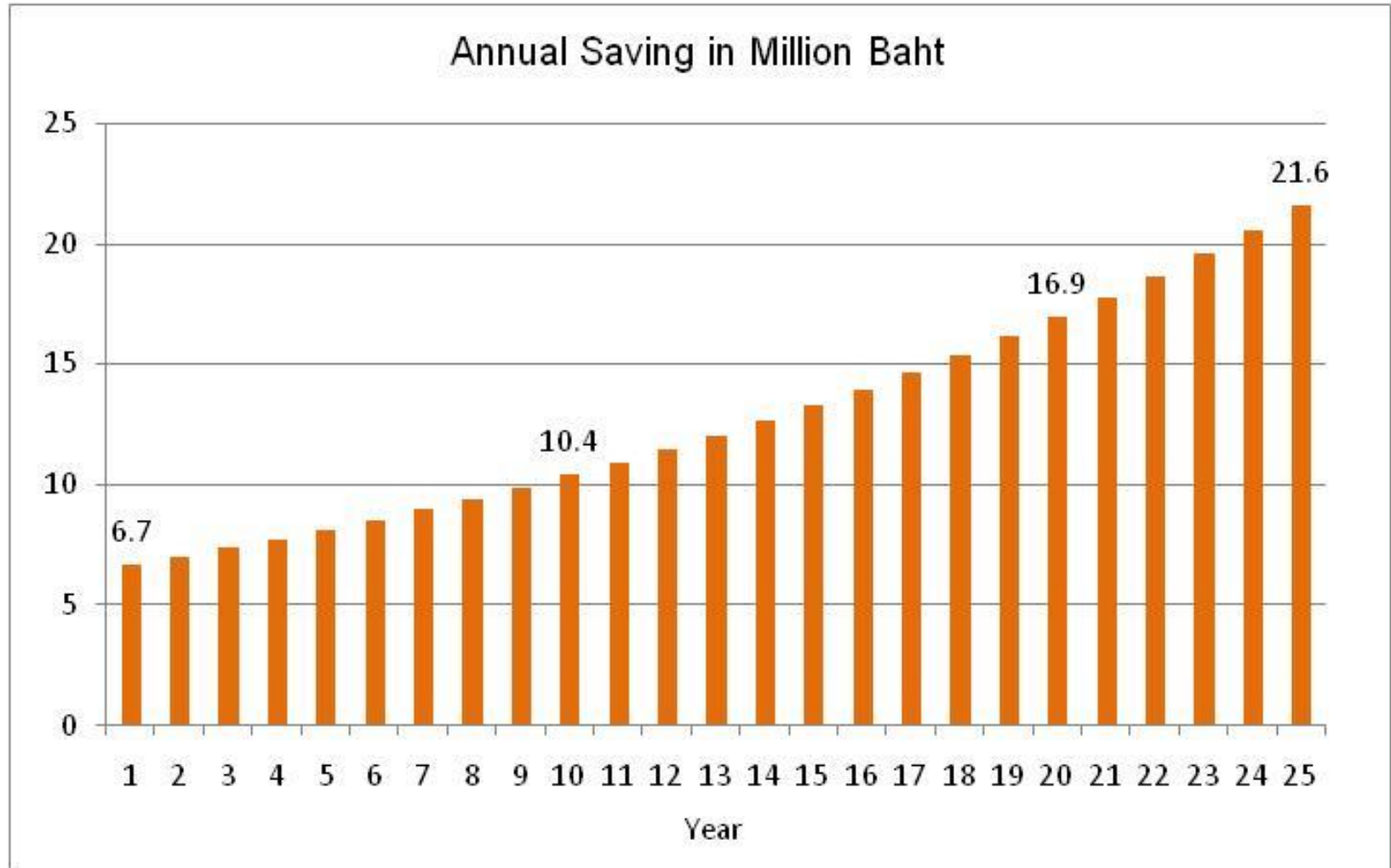
SUMMARY

131	Investment (Baht)	OTTV (Watt/m2)	Energy Use (kWh/m2.Yr)	Energy Saving (Baht/Yr)	Energy Saving (%)	Payback (Years)
Typical Buildings (Audit data)	-	60-100	150-200	-	-	-
Best Practice (Award winning)	-	20-30	100-120	-	-	-
Original Design (As of Aug 6, 2008)	-	60.75	151.5	-	-	-
1). Insulating Low-E	12,544,500	42.69	143.3	2,686,320	5.4%	4.7
2). 4" Insulation in spandrel	320,000	60.44	151.4	36,036	0.1%	8.9
3). Reduced Vision Glass	(3,800,000)	53.96	149.3	727,272	1.5%	0.0
4). Overhang shading device	11,900,000	53.36	147.0	1,477,476	3.0%	8.1
5). Combined all	20,964,500	33.11	140.0	3,773,952	7.6%	5.6
6). Combined all + Light sensor	27,964,500	33.11	131.0	6,705,972	13.5%	4.2

ค่า Investment สามารถหักลบส่วนของค่าเครื่องปรับอากาศที่จะมีขนาดเล็กลงได้อีก

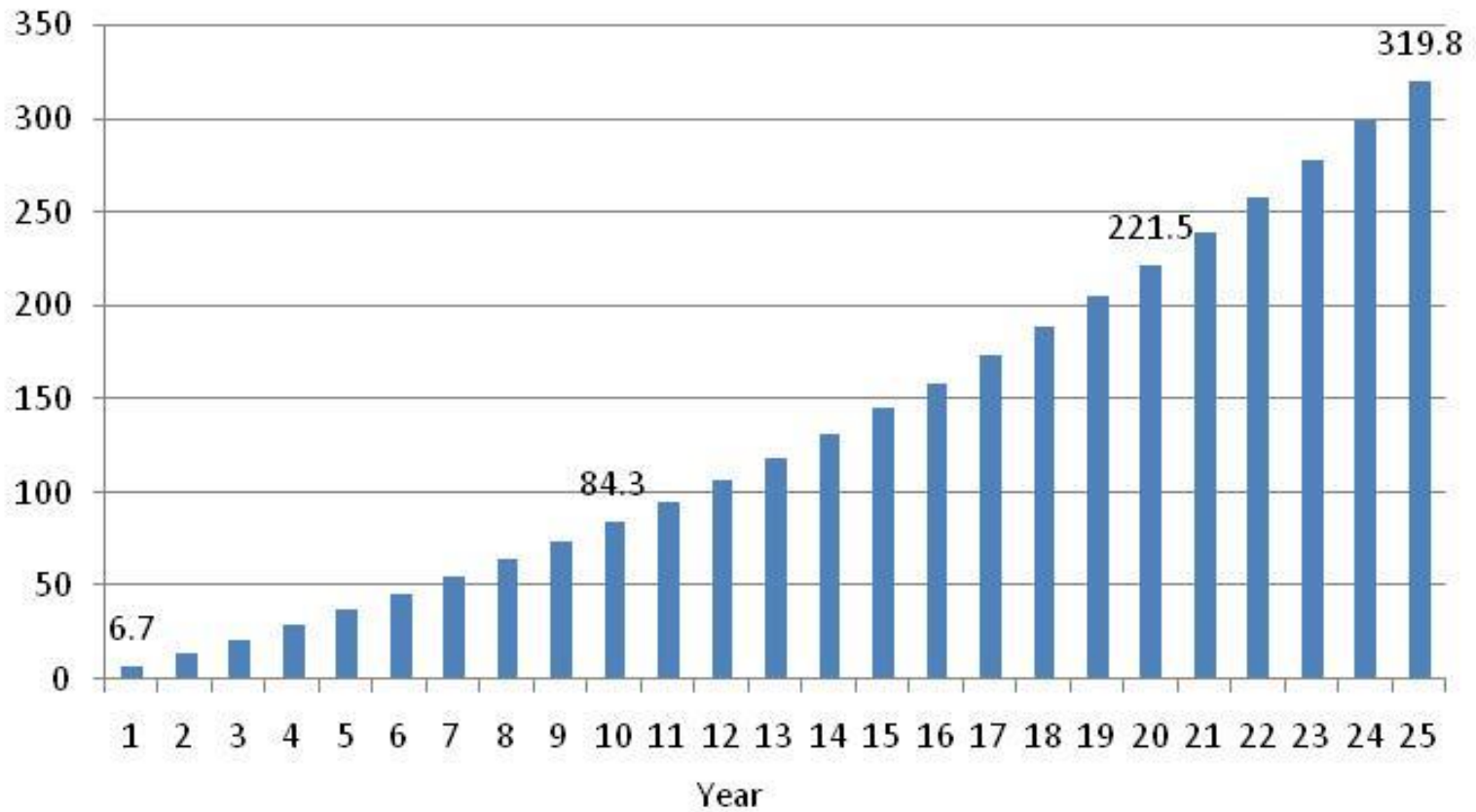








Cumulative Saving in Million Baht



LEED CS 2009: CREDITS

■ Sustainable Site	26 points
■ Water Efficiency	10 points
■ Energy & Atmosphere	17 points
■ Material & Resources	7 points
■ Indoor Environmental Quality	12 points
■ Innovation in Design	6 points
■ Regional Priority	4 points

TOTAL = 82 points

LEVEL = PLATINUM



พาร์ควেন্টเชอร์ อีโคเพล็กซ์
ได้รับมาตรฐาน LEED ระดับ Platinum
จากสภาอาคารเขียว ประเทศสหรัฐอเมริกา
เมื่อวันที่ 27 พฤศจิกายน 2555

Park Ventures Ecoplex
achieved LEED Platinum Level Certification
from the USGBC on 27 November 2012



Additional Construction Cost 7%

Rent increase 15%

Measured Energy Saving 25 %

Measured Water Saving 30 %

Tenants feel comfortable and good image

ที่มา: พรรณวดี มงคลเจริญ วิทยานิพนธ์มหาบัณฑิต คณะสถาปัตยกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย



The Winning Partnership

Developed by Univentures Group

Architect and Engineer	:	Palmer & Turner (Thailand)
Green Building Consultant	:	Asst. Prof. Dr. Atch Sreshthaputra
Construction Management	:	Project Asia
Main Contractor	:	Thai Obayashi
Quantity Surveyor	:	Davis Langdon & Seah
Façade Consultant	:	Aurecon Consuting (Thailand)
Lighting Consultant	:	EEC Lincolnescott (Vision Design)
Landscape Consultant	:	P Landscape
Design Consultant	:	Kudakarn
Office Space Consultant	:	CB Richard Ellis (Thailand)
Signage Consultant	:	Graphic 49
Brand Consultant	:	Brandscape / Brandity
Façade Contractor	:	Y.H.S. International

The Winning Partnership

Hotel Tenant	:	TCC Hotels Group
Hotel Operator	:	Okura Hotels & Resorts
Project and Construction Management:		Project Asia
Interior Designer	:	PIA
IT System Design Services	:	Network Design and Consulting.
Kitchen and Laundry Design Services:		Tri-Arc Enterprises
AV & Acoustics Sound Design Services:		Ketakan Consulting
Financial Supporter	:	Kasikornbank

