

附件二:

Fulham Lighting Control Sequence of Operations - Admin Facilities

	Open Office	Private Office	Conference/Team Room	Receptionist Area
Sequence of Operations				
Lights On:	User enters the space and the lights automatically turn on via the occupancy sensors to the Power On Level.	User enters the space and the lights automatically turn on via the occupancy sensors to the Power On Level.	The lights are turned on through the use of the wall station control. The user must press the button on the wall station to turn on the lights.	User enters the space and the lights automatically turn on via the occupancy sensors to the Power On Level.
Lights Adjust:	<u>Perimeter Zones:</u> Lights continually adjust based on the maximum level predetermined by the available daylight within the space. Daylight sensors programmed to provide enough light to meet the Target Occupied Light Level. <u>Interior Zones:</u> Light levels are constant during occupied times.	For both perimeter and interior offices, light levels can be adjusted via the wall station by the end user. <u>Perimeter Offices:</u> Lights continually adjust based on the maximum level predetermined by the available daylight within the space or adjusted at the wall station by the end user. Daylight sensors programmed to provide enough light to meet the Target Occupied Light Level. <u>Interior Offices:</u> Light levels are constant during occupied times unless adjusted at the wall station by the end user.	For both perimeter and interior conference rooms, light levels and scenes can be adjusted via the wall station or A/V controller by the end user to obtain required scene control for presentations. <u>Interior Conference Rooms:</u> Light levels and scenes are constant during occupied times unless adjusted at the wall station by the end user.	<u>Interior Zones:</u> Light levels are constant during occupied times.
Lights Off:	Lights turn-off is controlled by schedule.	Lights turn-off is controlled by schedule or lights are manually turned off at the wall station.	Lights turn-off is controlled by schedule or lights are manually turned off at the wall station.	Lights turn-off is controlled by schedule.
Hardware, Software & Design Specifications				
Occupancy Sensors Installed:	Yes	Yes	Yes	Yes
Occupancy Sensor Type:	Enocean	Enocean and Dali	Enocean	Enocean and Dali
Dimmable Ballasts/LED drivers:	Yes	Yes	Yes	Yes
Daylight Sensors Installed:	All lights within 15 ft. of perimeter controlled by JACE. JACE should be capable of dimming lights down to 10% output. Daylighting lights off to be evaluated on a case-by-case basis.	For perimeter offices only. All lights within 15 ft. of perimeter controlled by JACE. JACE should be capable of dimming lights down to at least 10% output. Daylighting lights off to be evaluated on a case-by-case basis.	N/A	No
Wall Stations Installed:	Not needed for most open office zones	Yes. Dali group to be programmed in the wall station	Yes. Dali scene to be programmed in the wall station	Yes. Dali group to be programmed in the wall station (All ON, All OFF, Manual Dimming)
Lighting Control Programming				
Occupancy/Vacancy Mode:	Occupancy mode	Occupancy mode	Vacancy mode	Occupancy mode
Occupancy Sensor Control Zone Size:	One occupancy sensor per zone. Zones no larger than 1000 SF. Sensors should be placed over cubes to focus on motion at desktops.	One sensor per office	One sensor per conference room or more if room size dictates	Occupancy sensor(s) should control all lights in the area.
Light Schedule:	Yes, schedule is set in JACE but occupancy can still trigger lights on	Yes, schedule is set in JACE but occupancy can still trigger lights on	No - lights are turned on by wall station and off by vacancy sensors or schedule	Yes, schedule is set in JACE but occupancy can still trigger lights on
Target Occupied Light Level:	400Lux at the work surface (to be achieved by a combination of overhead/task lighting)	400 Lux at the work surface (to be achieved by a combination of overhead/task lighting)	500Lux at the conference table at all lights on mode	400 Lux at the work surfaces
Target Unoccupied Light Level:	50% level out	10% level out	10% level out	50% level out
Lighting Occupied Timeout (business hour):	20 minutes, adjustable by user	20 minutes, adjustable by user	20 minutes, adjustable by user	30 minutes, adjustable by user
Lighting Occupied Timeout (non business hour):	5 Minutes, adjustable by user	5 minutes, adjustable by user	5 minutes, adjustable by user	5 minutes, adjustable by user
Security Lighting:	As needed if security cameras are installed	None	None	As needed if security cameras are installed
Night Lighting:	None unless code required	None	None	None
High-End Trim:	Yes - initially set by project team to meet desired Target Occupied Light Level. Can be adjusted by FM team post occupancy.	Yes - initially set by project team to meet desired Target Occupied Light Level. Can be adjusted by FM team post occupancy.	Yes - initially set by project team to meet desired Target Occupied Light Level. Can be adjusted by FM team post occupancy.	Yes - initially set by project team to meet desired Target Occupied Light Level. Can be adjusted by FM team post occupancy.
Load Shed/Demand Response Functionality:	case by case. To be developed late.	case by case. To be developed late.	case by case. To be developed late.	case by case. To be developed late.