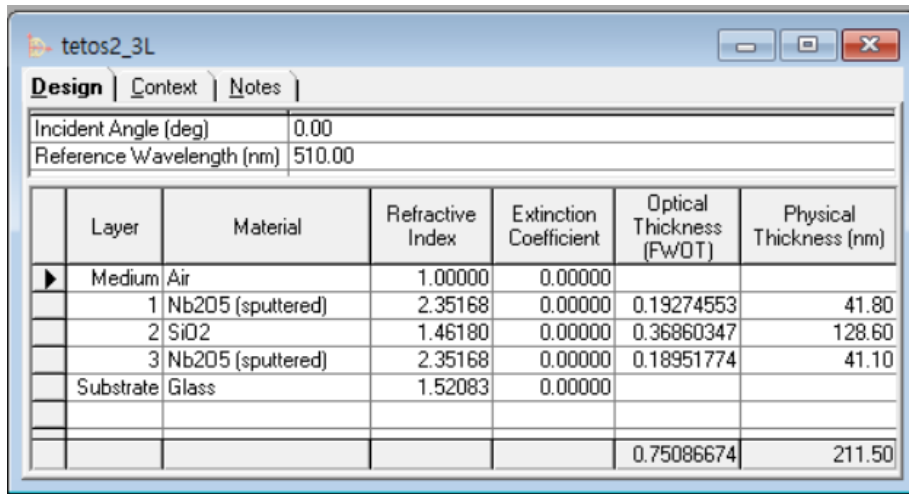


# Color Target

## 설계 조건



The screenshot shows a software window titled 'tetos2\_3L' with a 'Design' tab selected. It displays design parameters and a table of layers.

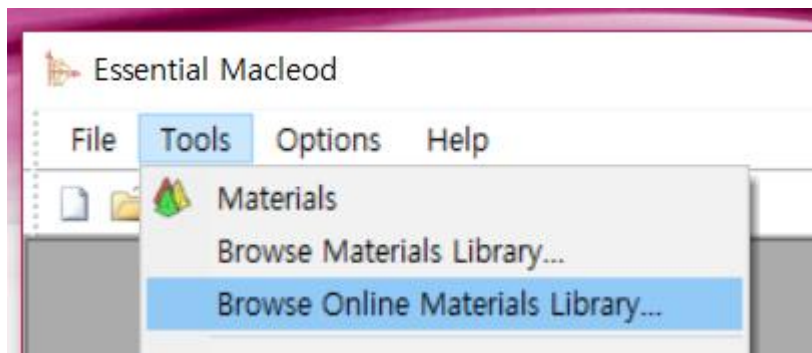
Layer	Material	Refractive Index	Extinction Coefficient	Optical Thickness (FWOT)	Physical Thickness (nm)
Medium	Air	1.00000	0.00000		
1	Nb2O5 (sputtered)	2.35168	0.00000	0.19274553	41.80
2	SiO2	1.46180	0.00000	0.36860347	128.60
3	Nb2O5 (sputtered)	2.35168	0.00000	0.18951774	41.10
Substrate	Glass	1.52083	0.00000		
				0.75086674	211.50

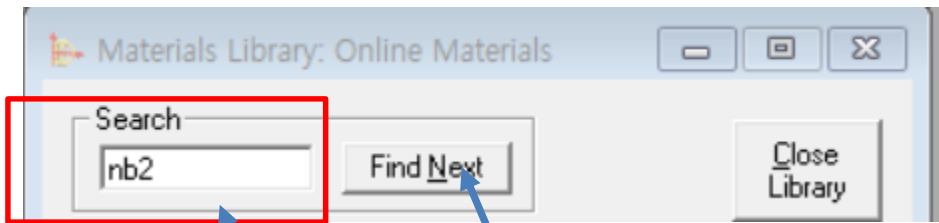
## Color of the output

		Standard
Reflective performance		over 550nm wavelength
color coordinates	X	0.30 ~ 0.44
	Y	0.48 ~ 0.53

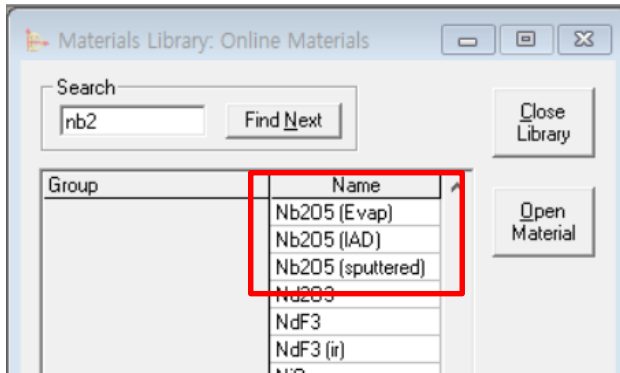
### 1. 물질 가져오기

프로그램 실행 > Tools

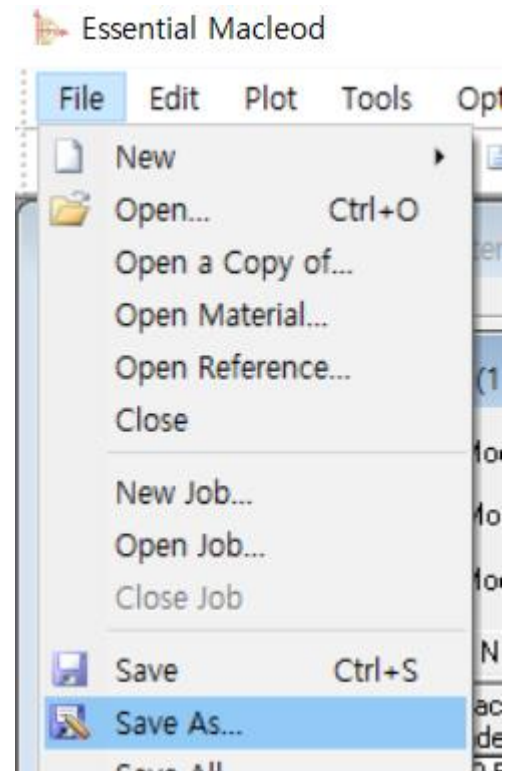
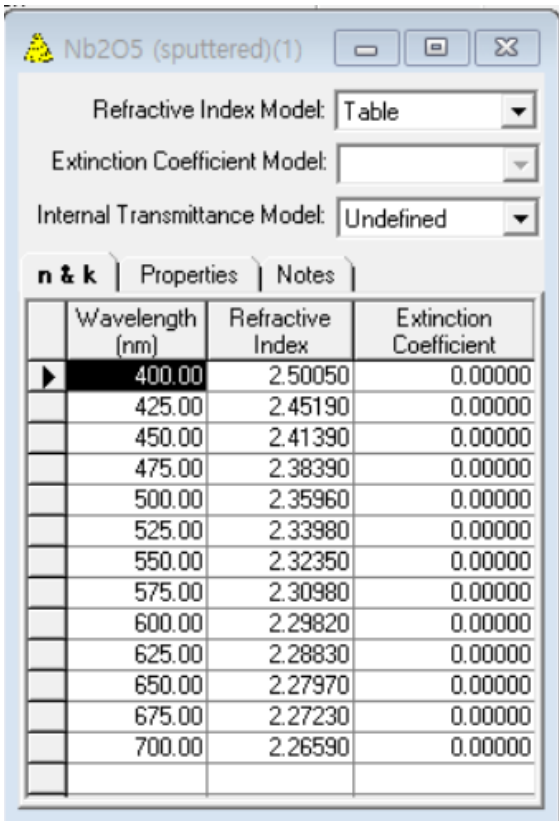




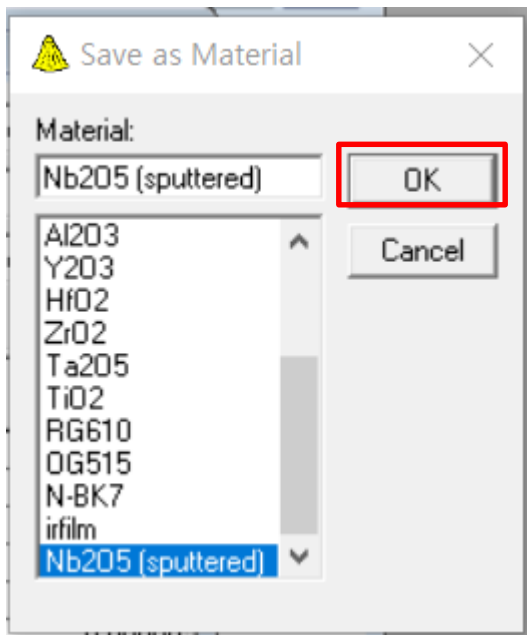
가져올 물질명 입력후 "Find Next " 클릭



해당 물질 선택, 마우스 더블클릭



해당 물질을 저장 ( 가져오기 )

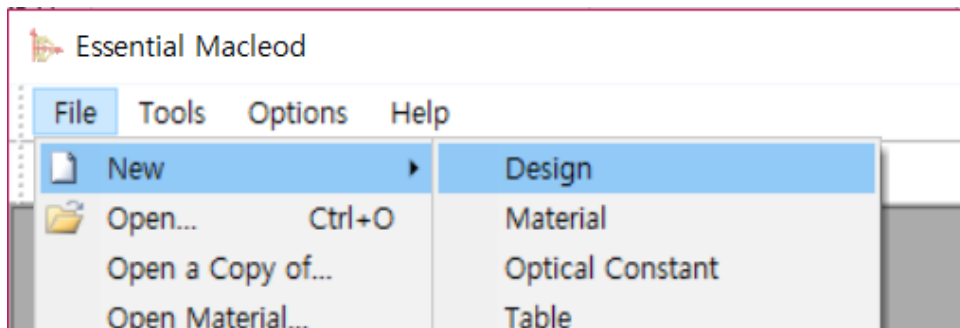


물질 폴더에 등록 창이 뜨면 물질 명을 확인 후 "OK "

열려 있는 모든 창을 닫는다.

## 2. 설계 파일 작성

File > New > Design



Layer	Material	Refractive Index	Extinction Coefficient	Optical Thickness (FWOT)	Physical Thickness (nm)
Medium	Air	1.00000	0.00000		
1	Na3AlF6	1.35000	0.00000	0.25000000	94.44
Substrate	Glass	1.52083	0.00000		

해당 Layer에 마우스를 놓고 ▼ 물질을 찾아서 선택, 입력.

Design2

Design | Context | Notes

Incident Angle (deg) 0.00  
Reference Wavelength (nm) 510.00

Layer	Material	Refractive Index	Extinction Coefficient	Optical Thickness (FWOT)
Medium	Air	1.00000	0.00000	
▶ 1	Nb2O5 (sputtered) ▼	2.35168	0.00000	0.43549628
Substrate	Y2O3 ▲	1.52083	0.00000	
	HfO2			
	ZrO2			
	Ta2O5			
	TiO2			
	RG610			
	OG515			
	N-BK7			
	irfilm			
	Nb2O5 (sputtered) ▼			

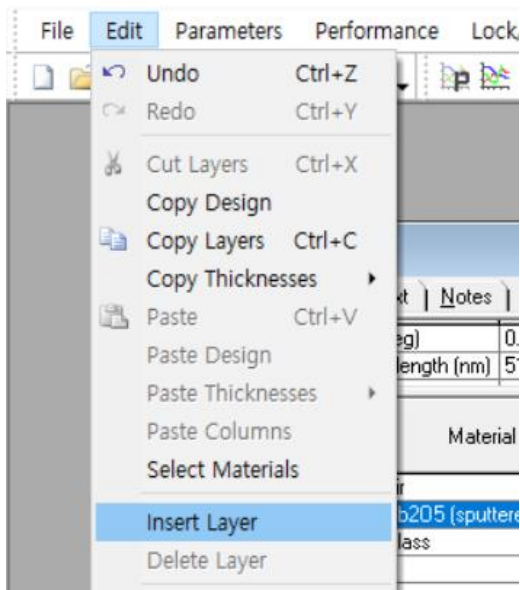
해당 물질 입력 완료

Design2

Design | Context | Notes

Incident Angle (deg) 0.00  
Reference Wavelength (nm) 510.00

Layer	Material	Refractive Index	Extinction Coefficient	Optical Thickness (FWOT)	Physical Thickness (nm)
Medium	Air	1.00000	0.00000		
▶ 1	Nb2O5 (sputtered) ▼	2.35168	0.00000	0.43549628	94.44
Substrate	Glass	1.52083	0.00000		



한 Layer를 선택 후,  
Edit > Insert Layer

Layer	Material	Refractive Index	Extinction Coefficient	Optical Thickness (FWOT)	Physical Thickness (nm)
Medium	Air	1.00000	0.00000		
1	Na3AlF6	1.35000	0.00000	0.00000000	0.00
2	Nb2O5 (sputtered)	2.35168	0.00000	0.43549628	94.44
Substrate	Glass	1.52083	0.00000		

새로운 Layer 하나가 생김

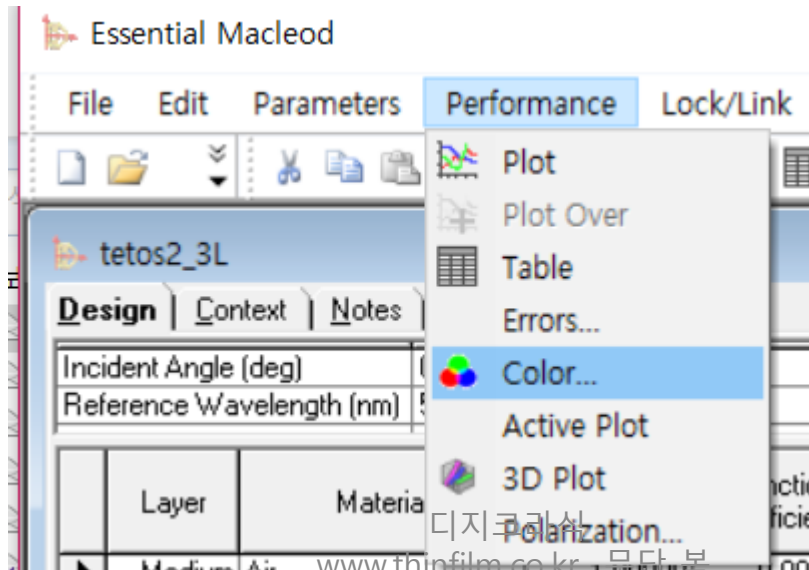
같은 방식으로 Layer를 추가하여 아래와 같이 설계 파일 작성

Layer	Material	Refractive Index	Extinction Coefficient	Optical Thickness (FWOT)	Physical Thickness (nm)
Medium	Air	1.00000	0.00000		
1	Nb2O5 (sputtered)	2.35168	0.00000	0.19274553	41.80
2	SiO2	1.46180	0.00000	0.36860347	128.60
3	Nb2O5 (sputtered)	2.35168	0.00000	0.18951774	41.10
Substrate	Glass	1.52083	0.00000		
				0.75086674	211.50

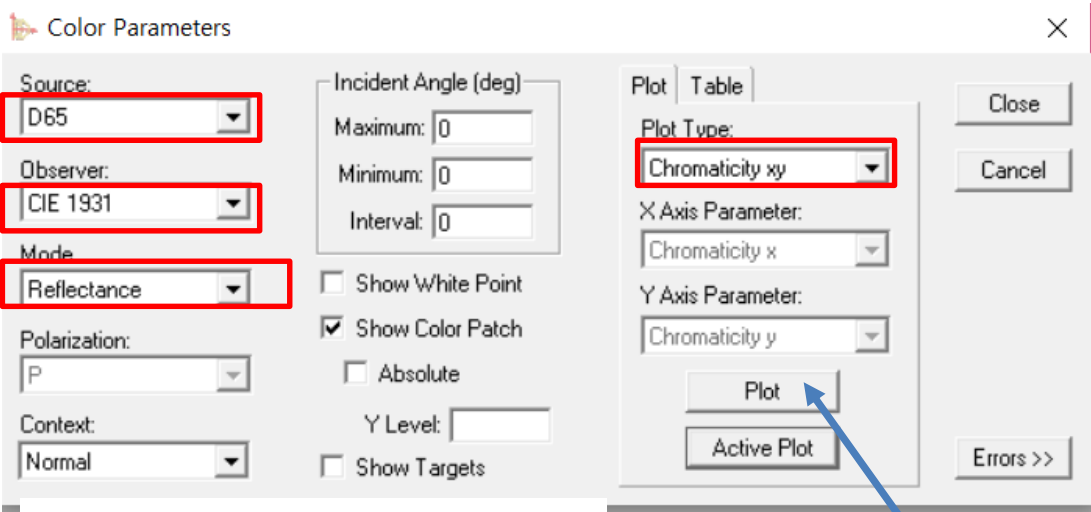
수치 입력

### 3. Color Plot

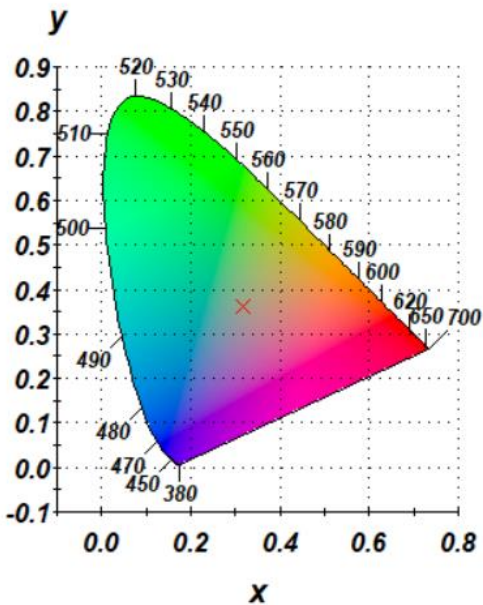
Performance > Color



# Color 표시 설정



**CIE 1931 Chromaticity Diagram**



클릭

“Table” 선택 “Shift” 키를 누르고  
마우스로 아래와 같이 선택

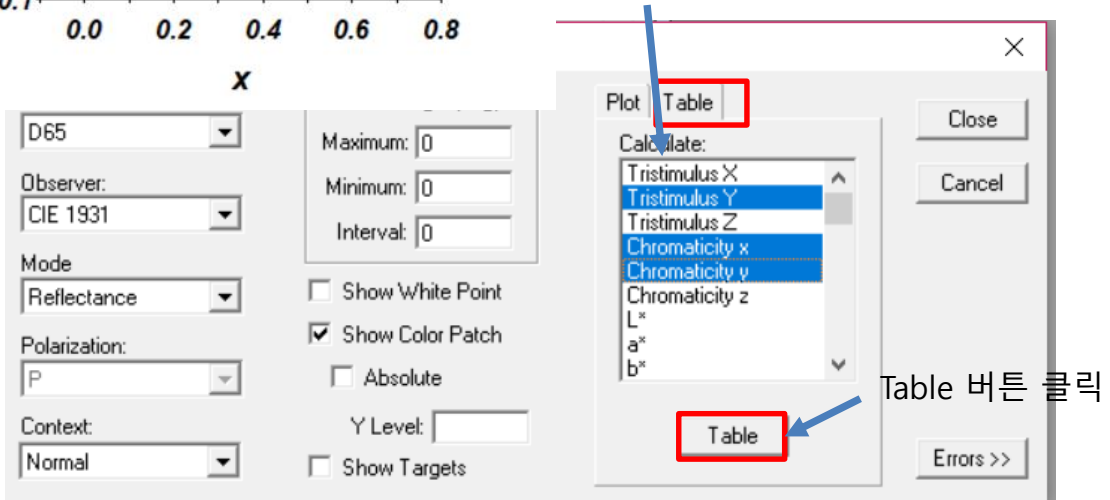
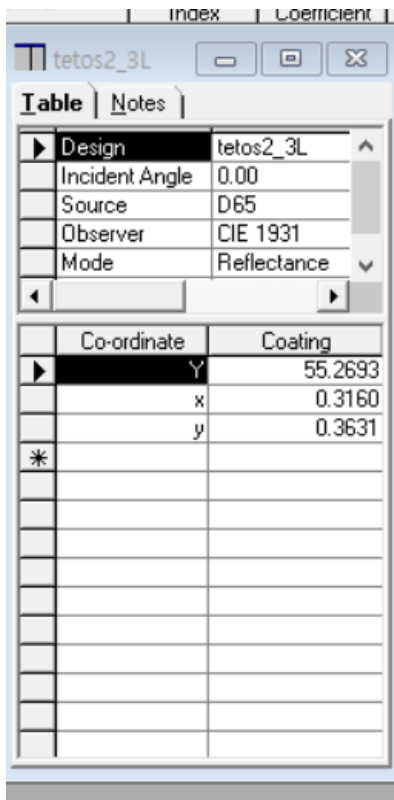


Table 버튼 클릭

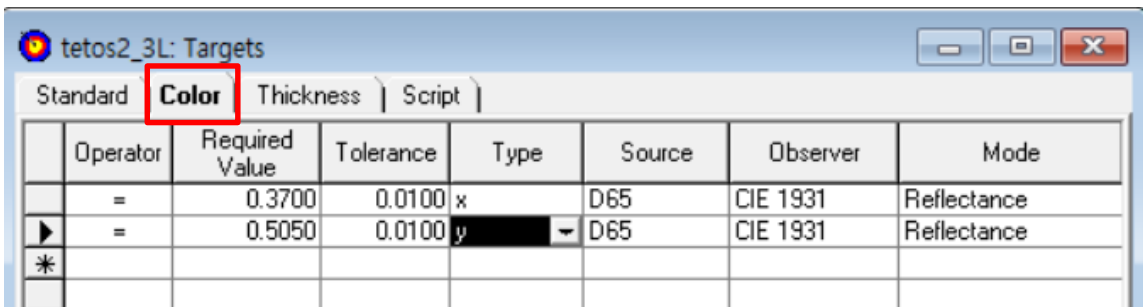


색상 좌표 수치가 보입니다.

Design file 창만 남기고 다른 창은 닫는다.

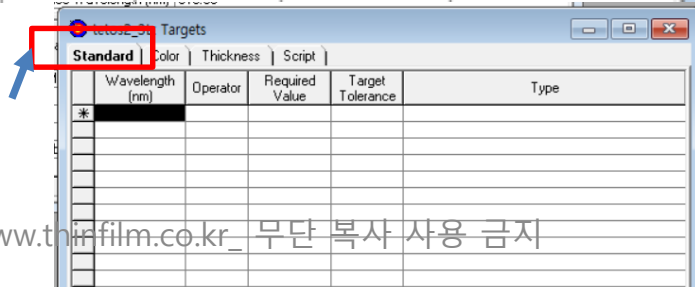
#### 4. Target 수치 입력

Parameters -> Refinement -> Targets



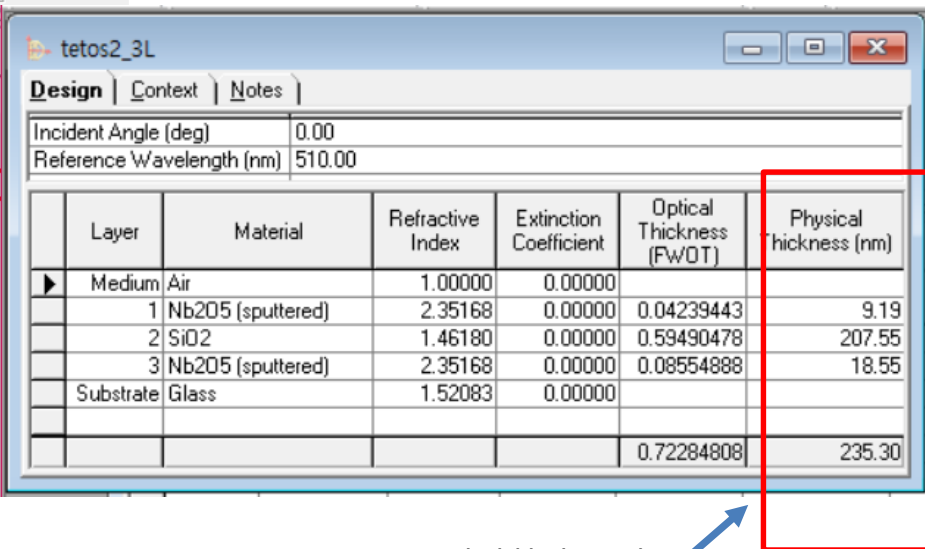
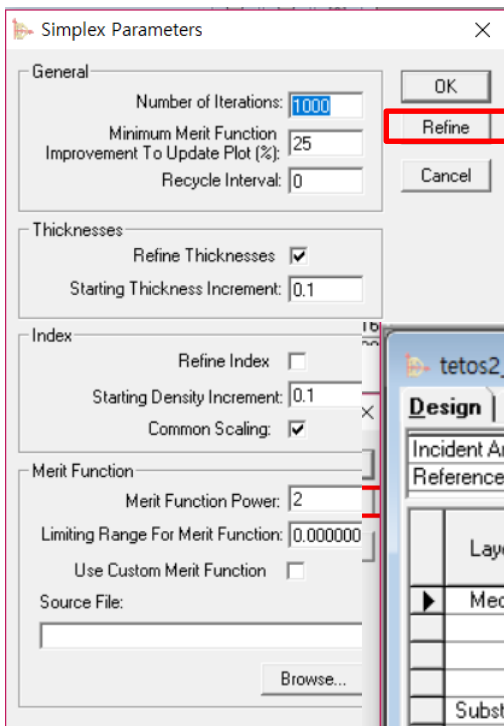
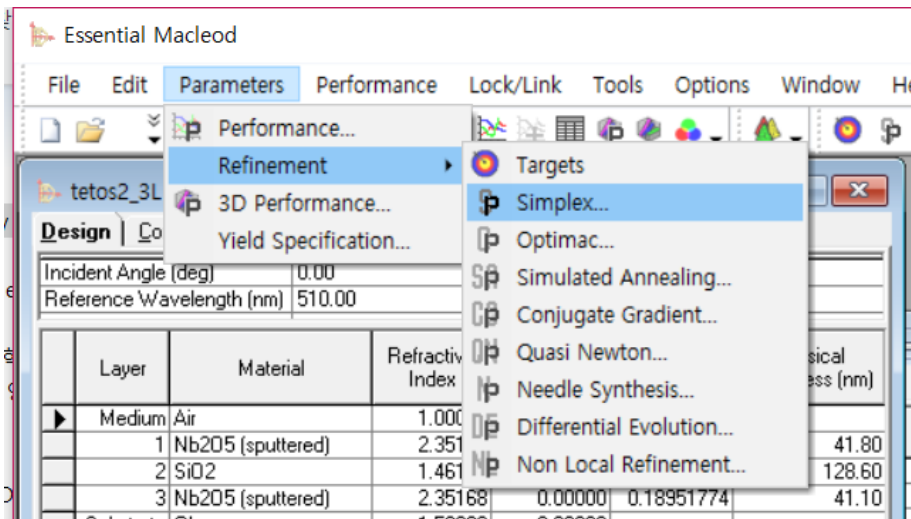
목표값 입력

Standard 값은 "Edit"로 모두 삭제



## 5. Refinement

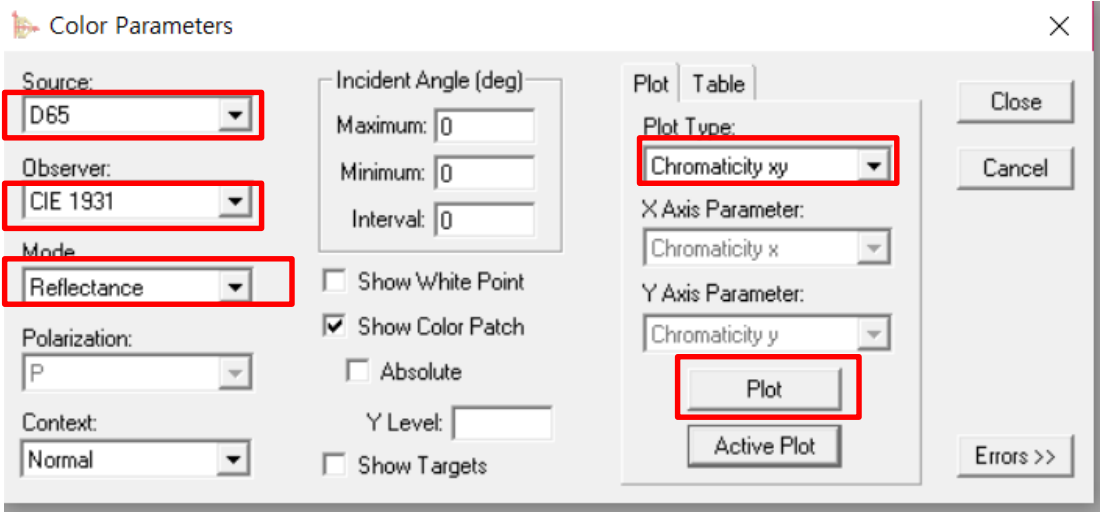
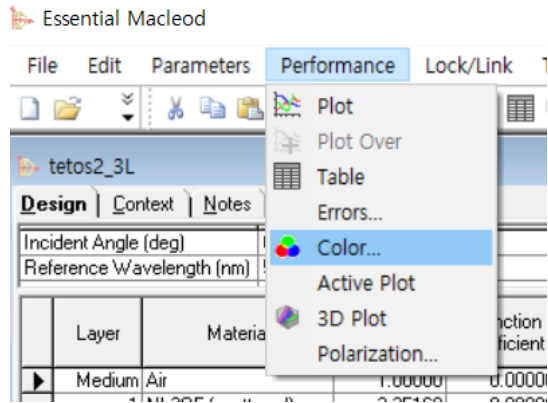
Parameters > Refinement > Simplex



최적화된 두께



# 최적화된 설계 파일의 색상



## CIE 1931 Chromaticity Diagram

