



# Certificate of Analysis

## Screen Protective Film - MXB

Company	Photodon, LLC	Michigan	USA	Phone 847-377-1185	Fax 877-255-2570
Product Name	MXB-Blue Light Cut		Product Type	D/S HC-PET	Date 2015/March
Film Roll Size	104 cm x 200 meters (41 inches x 656 feet)				
Test Condition	Temp ( °C) 22 ± 2		Humidity 28%		
	<b>Test Items</b>	<b>Unit</b>	<b>Spec</b>	<b>Result</b>	<b>Test Method</b>
<b>Material</b>	Top Liner	µm	60	60	Micro Meter
	AG Resin / Hard Coating	µm	≥ 2	3.5	Micro Meter
	Substrate PET Film	µm	Norminal ± 1	104 ± 1	Micro Meter
	Silicone Resin	µm	30 ± 2	29	Micro Meter
	Release Liner	µm	50	50	Micro Meter
	Thickness without liners	130µm ± 1	.005"		
<b>Optical Properties</b>	Total Luminous Transmittance	%	≥ 80	83.6	JIS K 7105
	Blue Light Cut	%	425-675nm	~20	Spectrometer
	Gardner Haze	%	≤ 1 ± 1	0.5	JIS K 7105
<b>Thermal Properties</b>	Rainbow Moire	-	No Visible	Good	Eye Test
	Thermal Shrinkage	%	MD/TD ≤ 1	0.13/0.14	
	Retentivity	mm/hr	<3.0	2.4	500g/100°C
<b>Mechanical Properties</b>	Heat Cycle		No Visible	OK	-20°C / 80°C 30°C Cycle
	Wrap	mm	≤ 10	1	150 / 60min
	Flexibility		No Visible	OK	Finger Test
	Pencil Hardness	H	≥ 2	2	JIS K 5600
	Linear Flaw	ea	No Visible	Good	Eye Test
	Spot Flaw	ea	Wide + Length/2 ≤0.3mm 10ea↓	5 ± 1	Eye Test, Lupe, Light Table
	Adhesion	-	100/100	100/100	Cross Hatch Test
<b>Chemical Resistance</b>	<b>Resistant to:</b>				
	Alcohols	Hydrocarbons			
	Dilute acids	Ketones			
	Dilute alkalis	Household cleaning agents			
	Esters				