1 Linear Weight

$$T = \frac{\sigma_B \mu_A + \sigma_A \mu_B}{\sigma_B + \sigma_A}$$

		True Negative				True Positive			
1st Order	Centralized	41.09	32.95	40.70	**38.25**	100.00	100.00	100.00	**100.00**
	Equalized	37.69	38.89	41.26	**39.28**	62.96	64.00	53.85	**60.27**
2nd Order	Centralized	55.68	46.59	47.96	**50.08**	100.00	100.00	100.00	**100.00**
	Equalized	46.95	44.36	50.96	**47.42**	100.00	100.00	100.00	**100.00**

2 Square-Root Weight

$$T = \frac{\sqrt{\sigma_B}\mu_A + \sqrt{\sigma_A}\mu_B}{\sqrt{\sigma_B} + \sqrt{\sigma_A}}$$

		True Negative				True Positive			
1st Order	Centralized	97.22	98.15	97.45	**97.61**	100.00	100.00	100.00	**100.00**
	Equalized	68.50	70.59	68.87	**69.32**	19.51	30.43	39.47	**29.80**
2nd Order	Centralized	71.22	73.86	78.68	**74.59**	95.83	96.77	91.89	**94.83**
	Equalized	77.57	81.27	80.59	**79.81**	100.00	100.00	100.00	**100.00**

3 Logarithmic Weight

$$T = \frac{(ln\sigma_B)\mu_A + (ln\sigma_A)\mu_B}{ln\sigma_B + ln\sigma_A}$$

		True Negative				True Positive			
1st Order	Centralized	99.23	99.25	99.63	**99.37**	55.88	53.57	70.37	**59.94**
	Equalized	95.80	95.04	95.11	**95.32**	9.09	3.03	3.45	**5.19**
2nd Order	Centralized	91.37	94.74	90.49	**92.20**	97.50	68.97	93.75	**86.74**
	Equalized	97.70	99.26	99.26	**98.74**	85.29	95.83	96.00	**92.37**

4 Square-Log Weight

$$T = \frac{(\sqrt{|ln\sigma_B|})\mu_A + (\sqrt{|ln\sigma_A|})\mu_B}{\sqrt{|ln\sigma_B|} + \sqrt{|ln\sigma_A|}}$$

		True Negative				True Positive			
1st Order	Centralized	99.24	99.26	99.25	**99.25**	53.13	52.17	56.67	**53.99**
	Equalized	93.89	94.81	95.45	**94.72**	3.03	8.00	6.45	**5.83**
2nd Order	Centralized	91.92	89.92	88.01	**89.95**	65.71	92.59	85.71	**81.34**
	Equalized	95.88	99.23	97.76	**97.62**	100.00	88.89	100.00	**96.30**

5 Log-Square Weight

$$T = \frac{(ln\sqrt{\sigma_B})\mu_A + (ln\sqrt{\sigma_A})\mu_B}{ln\sqrt{\sigma_B} + ln\sqrt{\sigma_A}}$$

		True Negative				True Positive			
1st Order	Centralized	99.25	99.25	99.62	**99.37**	51.85	40.74	43.33	**45.31**
	Equalized	95.45	93.51	94.93	**94.63**	6.45	6.06	5.26	**5.92**
2nd Order	Centralized	91.70	93.21	89.27	**91.39**	83.33	100.00	94.12	**92.48**
	Equalized	99.62	99.63	97.37	**98.87**	93.10	80.77	96.55	**90.14**

6 Linear Additional Weight

$$T = \frac{\sigma_B(1-\alpha)\mu_A + \sigma_A\alpha\mu_B}{\sigma_B(1-\alpha) + \sigma_A\alpha}$$

		True Negative				True Positive			
1st Order	Centralized	20.44	23.11	22.05	**21.87**	100.00	100.00	96.88	**98.96**
	Equalized	22.26	22.93	23.79	**22.99**	76.19	75.86	80.77	**77.61**
2nd Order	Centralized	17.10	17.60	16.54	**17.08**	100.00	100.00	100.00	**100.00**
	Equalized	17.18	17.23	17.36	**17.26**	100.00	100.00	100.00	**100.00**

7 Square-Root Additional Weight

$$T = \frac{(\sigma_B\sqrt{1-\alpha})\mu_A + (\sigma_A\sqrt{\alpha})\mu_B}{\sigma_B\sqrt{1-\alpha} + \sigma_A\sqrt{\alpha}}$$

		True Negative				True Positive			
1st Order	Centralized	25.77	24.34	29.30	**26.47**	100.00	100.00	100.00	**100.00**
	Equalized	27.31	26.64	27.76	**27.24**	83.33	77.78	78.13	**79.75**
2nd Order	Centralized	20.91	18.96	19.10	**19.66**	100.00	100.00	100.00	**100.00**
	Equalized	17.74	17.16	17.91	**17.60**	100.00	100.00	100.00	**100.00**

8 Logarithmic Additional Weight

$$T = \frac{[\sigma_B ln(1-\alpha)]\mu_A + [\sigma_A ln\alpha]\mu_B}{\sigma_B ln(1-\alpha) + \sigma_A ln\alpha}$$

		True Negative				True Positive			
1st Order	Centralized	99.62	99.62	99.61	**99.62**	23.53	25.00	19.44	**22.66**
	Equalized	96.85	96.18	97.73	**96.92**	4.88	3.03	12.90	**6.94**
2nd Order	Centralized	97.72	96.63	98.87	**97.74**	25.00	42.86	48.28	**38.71**
	Equalized	100.00	99.62	100.00	**100.00**	47.83	37.93	46.15	**43.97**

9 Square-Log Additional Weight

$$T = \frac{\mu_A\sigma_B\sqrt{-ln(1-\alpha)} + \mu_B\sigma_A\sqrt{-ln\alpha}}{\sigma_B\sqrt{-ln(1-\alpha)} + \sigma_A\sqrt{-ln\alpha}}$$

		True Negative				True Positive			
1st Order	Centralized	98.47	98.48	98.13	**98.36**	82.35	100.00	100.00	**94.12**
	Equalized	88.93	89.02	89.63	**89.19**	9.09	22.58	16.00	**15.89**
2nd Order	Centralized	96.28	95.09	95.44	**95.60**	73.08	66.67	84.38	**74.71**
	Equalized	99.26	98.49	96.67	**98.14**	91.30	100.00	96.00	**95.77**

10 Log-Square Additional Weight

$$T = \frac{\mu_A\sigma_B ln\sqrt{1-\alpha} + \mu_B\sigma_A ln\sqrt{\alpha}}{\sigma_B ln\sqrt{1-\alpha} + \sigma_A ln\sqrt{\alpha}}$$

		True Negative				True Positive			
1st Order	Centralized	99.24	99.63	99.63	**99.50**	18.18	21.43	18.52	**19.38**
	Equalized	95.91	96.01	95.20	**95.70**	0.00	0.00	0.00	**0.00**
2nd Order	Centralized	98.48	98.43	99.63	**98.85**	25.00	27.50	37.04	**29.85**
	Equalized	100.00	99.27	100.00	**99.76**	32.14	54.55	31.03	**39.24**

11 Square-Log Combined Weight

$$T = \frac{\mu_A \sqrt{|ln\left[\sigma_B(1-\alpha)\right]|} + \mu_B \sqrt{|ln(\sigma_A \alpha)|}}{\sqrt{|ln\left[\sigma_B(1-\alpha)\right]|} + \sqrt{|ln(\sigma_A \alpha)|}}$$

		True Negative				True Positive			
1st Order	Centralized	99.26	99.22	99.62	**99.37**	50.00	59.46	39.39	**49.62**
	Equalized	94.70	94.70	95.20	**94.87**	12.90	0.00	4.17	**5.69**
2nd Order	Centralized	94.98	95.17	89.59	**93.25**	87.50	88.46	92.31	**89.42**
	Equalized	97.00	99.23	95.96	**97.40**	100.00	76.47	95.65	**90.71**

12 Log-Square Combined Weight

$$T = \frac{\mu_A ln\sqrt{\sigma_B(1-\alpha)} + \mu_B ln\sqrt{\sigma_A \alpha}}{ln\sqrt{\sigma_B(1-\alpha)} + ln\sqrt{\sigma_A \alpha}}$$

		True Negative				True Positive			
1st Order	Centralized	99.26	99.62	99.64	**99.51**	36.00	45.71	38.89	**40.20**
	Equalized	95.57	95.17	95.51	**95.42**	4.17	0.00	3.57	**2.58**
2nd Order	Centralized	94.31	93.94	94.30	**94.18**	87.10	63.52	78.13	**76.25**
	Equalized	99.62	98.89	99.62	**99.38**	78.79	70.83	75.86	**75.16**

13 Linear Balanced

$$T = \underset{\mu_A \le T \le \mu_B}{\arg\min} \quad \alpha \cdot \int_{-\infty}^{T} P_B(x)dx + (1-\alpha) \cdot \int_{T}^{+\infty} P_A(x)dx$$

		True Negative				True Positive			
1st Order	Centralized	95.47	88.81	85.50	**89.93**	100.00	96.30	100.00	**98.77**
	Equalized	73.99	80.52	79.85	**78.12**	40.91	30.14	11.11	**27.39**
2nd Order	Centralized	77.70	78.88	76.87	**77.82**	96.15	84.09	96.30	**92.18**
	Equalized	72.35	78.83	77.17	**76.12**	100.00	100.00	100.00	**100.00**

Total