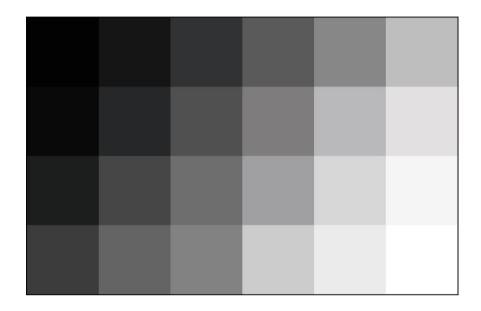# CERTIFICATE

SCANNER DYNAMIC RANGE CHART (ISO 21550) 10.000:1
TRANSMISSIVE

The TE240 D is designed to determine the dynamic range and the scanner opto electronic conversion function (OECF). The OECF describes how the scanner transforms luminance values of the object into digital code values in the digital image.The OECF is typically measured from a gray scale.

The specification of TE240 D is derived from ISO 21550.

The chart size is 50 x 50 mm (Image Engineering format: D35), the image size 18 x 28 mm.

The test chart contains a neutral gray scale with 24 patches. The patches are arranged from highest density in the top left corner to lowest density in the bottom right corner.

The density values of the gray scale is as follows (batch measured):

Step	Density (Status A)
1	0,110
2	0,111
3	0,130
4	0,226
5	0,444
6	0,746
7	1,088
8	1,466
9	1,925
10	2,368
11	2,549
12	2,725
13	2,968
14	3,195
15	3,292
16	3,336
17	3,442
18	3,553
19	3,642
20	3,692
21	3,748
22	3,817
23	3,881
24	3,995

In order to measure a scanner, the contrast of the chart should exceed the dynamic range of the camera under test. The TE240 D is therefore available in the contrast ranges 10.000:1 and 1.000.000:1.

Fiducial marks in the corners of the target can be used for automated analysis of the patches.

The density values of the patches can be used to create your specific reference file for the evaluation in the iQ-Analyzer software. To type in the values use the "Luminance and Density Data" button in the advanced settings of the OECF module.

Note: to reach density of 0 for patch 1 the film has to be cut out.