

Perceptual Attributes Analysis of Real-World Materials

SUPPLEMENTAL MATERIAL

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A supplemental material to the paper: *Perceptual Attributes Analysis of Real-World Materials* submitted to ACM Transactions on Applied Perception.

It comprises a list of all tested materials and mean opinion scores (MOS) for perceptual attributes obtained from the experiment (Fig. 1–Fig. 5).









































No	UTIA material ID		L	B	S	R	H	P	T	D	V	O	K	A	
01	001: 3M_Scotchlite			2.9	1.7	1.0	1.0	1.1	1.0	2.7	1.6	1.2	2.0	4.2	3.8
02	002: car_paint01			7.7	1.8	1.0	1.1	1.0	1.0	8.3	1.1	1.6	1.8	3.3	4.9
03	003: carpet01			1.3	3.1	5.6	5.1	6.3	6.1	5.2	7.7	7.1	1.8	1.9	1.6
04	005: carpet04			1.4	3.7	4.2	5.3	5.9	4.0	5.1	5.6	8.3	2.0	2.2	2.3
05	006: carpet05			1.4	3.7	1.9	5.2	6.7	2.3	4.1	6.4	8.1	1.7	1.8	2.4
06	008: carpet08			1.6	2.8	4.3	5.0	5.9	4.1	3.7	3.6	7.7	3.9	3.0	2.7
07	009: corduroy01			2.2	2.2	5.3	4.0	5.1	7.2	3.2	3.4	3.0	3.1	2.7	2.0
08	010: fabric002			4.0	3.0	1.3	1.8	1.7	2.7	3.2	2.7	1.3	3.1	3.7	3.4
09	011: fabric005			2.3	2.2	4.9	4.8	4.8	5.3	5.0	4.9	3.7	2.1	3.4	2.3
10	012: fabric006			2.7	3.3	4.8	4.9	4.9	5.9	4.9	4.1	3.1	2.0	3.6	3.4
11	014: fabric009			2.6	2.7	1.9	3.9	3.3	2.2	3.1	2.1	2.9	3.6	3.8	3.4
12	021: fabric016			2.3	2.7	3.1	4.1	3.4	4.4	3.3	2.9	2.9	3.6	3.4	3.7
13	027: fabric022			1.8	2.2	2.0	4.2	2.7	2.3	2.7	2.8	3.1	2.6	4.1	4.7
14	028: fabric023			2.0	3.1	5.0	5.1	4.6	3.9	5.2	4.8	2.7	5.0	3.3	2.9
15	029: fabric024			2.1	1.6	5.2	5.0	4.8	5.0	5.1	4.8	2.6	6.3	3.0	3.3
16	034: fabric040			2.6	3.3	6.1	5.3	6.7	6.1	5.4	6.3	2.9	4.9	2.6	3.6
17	037: fabric043			1.6	3.4	5.4	5.6	6.0	4.9	4.2	5.2	3.1	5.1	2.7	2.2
18	038: fabric044			1.6	1.7	5.3	5.2	6.1	4.8	4.4	5.1	3.1	4.9	2.3	2.2
19	043: fabric049			1.7	2.1	3.8	4.9	4.9	4.1	4.7	4.1	2.9	4.6	2.7	2.2
20	044: fabric049_back			1.9	4.6	6.0	6.4	4.6	5.7	4.9	4.6	3.0	2.9	2.4	2.3

Figure 1: *MOS of perceptual attributes for individual materials.*









































No	UTIA material ID		L	B	S	R	H	P	T	D	V	O	K	A
21	047: fabric069	 	2.4	3.6	4.6	5.9	4.4	3.6	5.4	4.9	2.8	2.9	2.8	2.9
22	048: fabric070	 	1.9	2.2	4.3	4.7	4.6	4.1	4.4	4.6	2.7	3.7	2.9	2.9
23	051: fabric074	 	1.7	2.8	5.2	5.4	5.6	5.1	4.3	5.3	2.8	3.1	2.9	3.2
24	055: fabric080	 	2.0	1.6	1.4	2.1	2.2	1.2	2.9	1.8	2.6	3.4	2.7	2.8
25	060: fabric093	 	1.4	2.4	1.6	2.6	4.9	1.8	4.3	4.2	4.1	2.4	1.6	1.2
26	061: fabric094	 	6.0	1.4	1.9	2.0	1.4	1.4	3.2	2.2	1.1	2.6	3.1	4.3
27	062: fabric096	 	2.9	1.4	1.6	1.3	1.4	1.3	3.3	2.4	1.0	4.0	3.3	4.1
28	063: fabric098	 	1.4	1.0	2.1	1.9	1.9	1.6	4.2	3.2	1.6	7.0	2.7	3.4
29	064: fabric099	 	1.9	1.1	3.9	3.7	3.1	5.1	3.6	3.1	2.6	1.0	2.4	4.2
30	065: fabric100	 	1.9	1.2	3.7	4.2	2.0	5.8	4.1	3.7	1.4	3.2	3.1	2.3
31	066: fabric101	 	1.8	1.0	3.8	3.4	3.2	5.0	3.6	2.7	2.4	6.9	2.6	2.3
32	067: fabric102	 	2.4	1.0	1.2	1.4	1.8	1.7	2.4	1.7	1.6	3.1	3.7	3.3
33	070: fabric105	 	2.1	1.6	3.6	2.8	2.7	3.9	2.9	4.0	1.7	2.8	3.0	2.7
34	069: fabric104	 	3.0	1.9	2.7	2.3	2.6	3.6	3.2	3.6	1.3	2.4	3.2	3.0
35	071: fabric106	 	3.7	1.6	1.7	1.6	1.6	2.1	3.9	2.0	1.7	2.4	4.6	4.8
36	073: fabric108	 	1.3	1.0	1.4	1.3	2.0	1.7	3.7	2.9	1.8	2.7	3.8	1.8
37	074: fabric111	 	4.2	1.3	1.4	1.1	1.3	2.1	4.3	2.2	1.3	2.6	4.4	3.4
38	075: fabric112	 	4.1	1.4	1.8	1.6	1.7	3.1	4.6	2.8	1.9	2.6	3.7	3.1
39	078: fabric115	 	1.6	1.0	1.1	1.6	2.1	1.6	4.1	1.7	2.2	6.1	3.8	3.6
40	080: fabric117	 	1.1	1.3	1.4	2.1	2.2	1.8	3.8	1.7	1.7	2.7	3.6	4.2

Figure 2: MOS of perceptual attributes for individual materials.









































No	UTIA material ID		L	B	S	R	H	P	T	D	V	O	K	A
41	081: fabric118	 	2.1	2.4	3.6	2.8	3.2	4.8	4.3	3.6	3.0	2.4	2.8	3.1
42	085: fabric122	 	2.0	2.4	5.0	3.1	4.3	6.0	4.2	5.1	3.8	2.9	2.7	3.0
43	091: fabric129	 	1.8	1.8	5.1	4.0	4.1	5.4	4.3	5.0	3.7	3.7	3.2	3.2
44	095: fabric134	 	2.4	1.0	1.2	1.0	1.3	1.0	2.8	2.2	1.7	2.2	2.9	3.8
45	096: fabric135	 	5.8	1.9	2.4	2.2	1.6	2.1	2.9	2.7	1.2	2.1	4.7	4.4
46	097: fabric136	 	5.4	2.0	1.9	3.1	1.6	1.0	3.1	2.3	1.6	1.7	4.4	4.7
47	098: fabric137	 	1.3	1.0	1.2	1.0	1.4	1.1	3.3	1.8	1.1	4.1	4.4	3.8
48	099: fabric139	 	6.2	2.0	3.6	5.2	2.2	6.6	3.3	3.0	1.2	1.8	4.4	3.7
49	100: fabric140	 	1.8	1.4	2.2	2.4	1.9	4.4	4.6	3.8	2.3	2.9	3.3	1.9
50	101: fabric143	 	1.6	1.0	1.1	1.2	1.6	1.6	3.0	1.6	3.1	2.9	4.4	3.7
51	102: fabric144	 	1.9	1.0	1.9	1.4	1.6	1.6	3.0	1.3	2.9	2.4	3.6	3.0
52	103: fabric145	 	1.4	3.2	5.7	6.7	4.9	7.0	4.4	4.9	6.6	5.1	2.2	2.6
53	104: fabric146	 	1.6	1.6	5.7	6.9	5.2	8.1	4.6	4.7	6.6	5.2	2.2	2.4
54	105: glitter01	 	8.1	8.2	1.2	7.0	7.0	4.8	8.4	5.8	3.1	1.1	4.6	5.8
55	106: leather01	 	1.9	1.1	1.7	2.1	2.4	1.7	4.8	3.1	2.0	3.7	3.4	2.9
56	107: leather02	 	3.6	1.6	1.9	2.6	3.7	2.3	4.7	3.6	3.0	4.3	4.2	3.0
57	108: leather03	 	1.8	1.6	1.9	2.2	3.0	2.2	5.1	3.7	3.6	3.8	2.3	2.4
58	109: leather04	 	3.4	1.3	1.7	2.1	3.1	2.9	4.0	3.1	2.7	4.6	2.9	3.0
59	110: leather05	 	3.4	1.2	2.1	3.0	3.8	3.1	4.0	3.3	4.0	4.3	3.0	3.4
60	111: leather06	 	1.6	1.0	1.3	1.6	2.0	1.6	2.4	1.2	1.9	5.2	4.7	3.6

Figure 3: MOS of perceptual attributes for individual materials.

No	UTIA material ID		L	B	S	R	H	P	T	D	V	O	K	A	
61	112: leather07			2.0	1.2	2.2	2.4	2.6	2.4	3.9	3.0	2.4	3.3	3.4	3.3
62	113: leather08			2.9	1.1	1.6	1.8	2.6	1.7	4.0	3.1	3.1	3.0	3.3	3.0
63	114: leather09			4.0	1.4	2.4	2.1	2.4	2.3	5.6	2.9	2.4	2.4	3.0	2.3
64	115: leather10			1.7	1.0	1.2	1.8	2.3	1.3	6.1	1.9	3.1	2.8	3.3	3.7
65	116: leather11			2.6	1.1	1.7	2.2	3.0	2.4	6.0	2.6	3.6	3.3	3.9	3.7
66	117: leather12			1.7	1.1	3.0	2.9	4.4	3.6	6.6	2.2	3.2	3.2	3.6	3.2
67	118: leather13			1.9	1.3	2.6	3.7	4.2	2.7	6.1	3.2	4.1	3.2	3.7	3.3
68	119: leather14			2.7	1.1	1.3	2.4	2.7	2.4	5.7	2.2	3.4	3.1	3.8	3.3
69	121: leather16			2.4	1.2	1.2	2.1	2.2	3.3	6.0	3.1	3.6	2.8	3.3	3.2
70	122: paper01			1.3	1.0	1.0	1.0	1.0	1.0	4.9	1.4	1.7	2.0	3.8	1.2
71	125: plaster02			1.2	1.0	1.1	1.4	2.2	1.7	8.8	2.7	8.3	5.8	1.1	1.3
72	126: plastic01			6.1	1.3	1.8	4.3	3.6	1.3	4.3	3.8	7.7	1.3	1.8	1.8
73	127: plastic02			2.2	1.6	1.3	2.0	2.4	2.2	1.8	2.9	7.9	2.0	1.9	1.9
74	128: plastic04			3.0	1.1	2.2	2.0	1.9	1.9	5.8	2.4	3.8	2.1	2.7	2.7
75	129: plastic05			3.2	1.1	1.4	2.2	2.7	2.7	5.6	2.7	3.2	2.6	2.4	1.9
76	130: plastic06			1.8	2.6	4.8	2.9	2.4	4.6	5.1	3.6	1.6	3.6	3.0	2.9
77	131: plastic_tape01			6.1	1.3	3.0	2.8	2.3	2.9	4.9	2.3	2.1	1.7	2.4	2.8
78	135: wood01			1.9	2.8	5.2	4.3	5.3	3.3	8.0	5.2	4.3	7.4	2.9	3.1
79	136: wood02			1.6	3.0	5.0	4.1	3.4	2.9	6.0	5.0	2.8	6.3	4.0	4.2
80	137: wood05			1.6	2.4	4.9	3.6	3.1	3.1	5.9	5.1	2.9	6.3	3.9	4.0

Figure 4: *MOS of perceptual attributes for individual materials.*



























No	UTIA material ID		L	B	S	R	H	P	T	D	V	O	K	A	
81	138: wood06			1.8	2.3	4.8	4.0	2.8	3.2	6.6	4.0	2.7	6.9	3.9	3.3
82	139: wood09			2.1	2.3	5.0	3.8	3.2	3.7	6.7	4.0	2.3	6.0	3.4	4.1
83	140: wood30			2.7	2.1	4.6	3.7	3.0	4.8	6.1	4.3	2.6	6.2	3.4	3.1
84	141: wood33			1.7	2.4	4.7	4.0	3.2	4.6	6.1	4.9	2.6	6.7	3.1	3.1
85	142: wood36			3.1	1.8	4.1	2.9	3.2	4.6	6.7	4.4	2.4	5.4	3.2	3.3
86	143: wood38			2.2	3.4	4.7	4.1	3.4	3.8	6.7	5.4	2.2	5.6	3.6	3.9
87	144: wood42			1.7	3.4	4.9	4.1	3.3	3.8	6.6	5.0	2.3	6.4	3.3	3.9
88	145: wood44			1.7	3.8	4.8	3.6	3.4	3.6	6.7	6.0	3.0	6.8	3.7	4.3
89	146: wood45			1.7	1.8	3.8	2.7	2.8	3.2	6.6	4.9	2.1	6.1	3.1	3.7
90	147: wood58			1.9	2.6	3.8	3.3	2.8	3.8	6.8	3.2	3.0	6.4	3.1	3.9
91	148: wood59			1.8	2.7	3.7	2.8	2.6	3.7	6.8	3.9	2.0	6.3	3.4	3.7
92	149: wood60			1.7	3.6	4.9	3.6	3.8	4.0	6.7	4.7	2.9	5.9	3.3	3.9
93	150: wood63			1.9	3.1	5.0	3.6	3.1	3.7	6.8	4.7	2.6	6.1	3.3	3.6

Figure 5: MOS of perceptual attributes for individual materials.