

Appendix A

Bin Centering Correction Table

The table in this appendix is here to give more detail about the bin centering correction. The bin centering correction was detailed in Section 6.1.2. For simplicity, I show only the table used to correct the differential cross section bin centers. The cross sections were based on the 2.4 and 3.1 GeV datasets. While the correction was applied to the double polarization observables, the 2.4 and 2.9 GeV datasets are closer in energy, so the effect was not as strong for C_x and C_z .

The tables in this appendix contain eight columns, which may be interpreted as follows:

1. The nominal bin center (GeV).
2. Corrected bin center reported with final results (GeV).
3. Correction to photon energy of 2.4 GeV dataset (MeV).
4. Correction to photon energy of 3.1 GeV dataset (MeV).
5. Half the difference between the individual corrections.
6. Nominal value of W (GeV)
7. Corrected value of W (GeV)
8. Shift in W (MeV).

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0.92500	0.91861	-4.834	-7.946	1.556	1.61745	1.61374	-3.711
0.95000	0.94378	-4.754	-7.692	1.469	1.63189	1.62831	-3.582
0.97500	0.96892	-4.696	-7.455	1.380	1.64620	1.64274	-3.466
1.00000	0.99405	-4.659	-7.236	1.288	1.66039	1.65703	-3.364
1.02500	1.01916	-4.644	-7.033	1.194	1.67446	1.67118	-3.275
1.05000	1.04425	-4.651	-6.847	1.098	1.68841	1.68521	-3.198
1.07500	1.06932	-4.679	-6.678	0.999	1.70225	1.69911	-3.133
1.10000	1.09437	-4.729	-6.526	0.898	1.71597	1.71289	-3.080
1.12500	1.11940	-4.800	-6.390	0.795	1.72959	1.72655	-3.038
1.15000	1.14442	-4.893	-6.272	0.690	1.74309	1.74009	-3.008
1.17500	1.16941	-5.007	-6.171	0.582	1.75650	1.75351	-2.988
1.20000	1.19439	-5.143	-6.087	0.472	1.76980	1.76683	-2.979
1.22500	1.21934	-5.301	-6.019	0.359	1.78301	1.78003	-2.981
1.25000	1.24422	-5.600	-5.969	0.184	1.79612	1.79309	-3.024
1.27500	1.26916	-5.751	-5.935	0.092	1.80913	1.80610	-3.033
1.30000	1.29444	-5.199	-5.918	0.360	1.82205	1.81918	-2.865
1.32500	1.31971	-4.668	-5.919	0.625	1.83488	1.83217	-2.709
1.35000	1.34495	-4.158	-5.936	0.889	1.84762	1.84505	-2.565
1.37500	1.37018	-3.668	-5.970	1.151	1.86027	1.85784	-2.432
1.40000	1.39539	-3.200	-6.021	1.411	1.87284	1.87053	-2.311

1.42500	1.42058	-2.752	-6.089	1.669	1.88532	1.88312	-2.201
1.45000	1.44575	-2.325	-6.174	1.925	1.89772	1.89562	-2.102
1.47500	1.47090	-1.919	-6.276	2.178	1.91004	1.90803	-2.014
1.50000	1.49604	-1.533	-6.394	2.431	1.92228	1.92035	-1.936
1.52500	1.52115	-1.168	-6.530	2.681	1.93445	1.93258	-1.868
1.55000	1.54625	-0.824	-6.683	2.929	1.94653	1.94472	-1.810
1.57500	1.57132	-0.501	-6.852	3.175	1.95855	1.95679	-1.762
1.60000	1.59596	-0.199	-7.883	3.842	1.97049	1.96856	-1.925
1.62500	1.62138	0.083	-7.313	3.698	1.98236	1.98064	-1.712
1.65000	1.64679	0.343	-6.759	3.551	1.99415	1.99264	-1.510
1.67500	1.67218	0.583	-6.222	3.403	2.00588	2.00456	-1.319
1.70000	1.69755	0.803	-5.701	3.252	2.01754	2.01640	-1.139
1.72500	1.72290	1.001	-5.196	3.099	2.02914	2.02817	-0.970
1.75000	1.74824	1.179	-4.708	2.943	2.04066	2.03985	-0.812
1.77500	1.77355	1.336	-4.236	2.786	2.05213	2.05146	-0.663
1.80000	1.79885	1.472	-3.780	2.626	2.06352	2.06300	-0.525
1.82500	1.82412	1.587	-3.341	2.464	2.07486	2.07446	-0.397
1.85000	1.84938	1.681	-2.918	2.300	2.08614	2.08586	-0.278
1.87500	1.87462	1.755	-2.511	2.133	2.09735	2.09718	-0.169
1.90000	1.89984	1.808	-2.120	1.964	2.10850	2.10843	-0.070
1.92500	1.92505	1.840	-1.746	1.793	2.11960	2.11962	0.021
1.95000	1.95023	1.852	-1.388	1.620	2.13064	2.13074	0.102
1.97500	1.97540	1.842	-1.047	1.445	2.14162	2.14179	0.174
2.00000	2.00055	1.812	-0.722	1.267	2.15254	2.15278	0.237
2.02500	2.02567	1.761	-0.413	1.087	2.16341	2.16371	0.293
2.05000	2.05078	1.689	-0.120	0.905	2.17423	2.17457	0.339
2.07500	2.07588	1.597	0.156	0.720	2.18499	2.18537	0.376
2.10000	2.10128	2.147	0.416	0.865	2.19570	2.19625	0.548
2.12500	2.12592	1.188	0.660	0.264	2.20636	2.20675	0.393
2.15000	2.15130	1.711	0.887	0.412	2.21696	2.21751	0.550
2.17500	2.17665	2.198	1.098	0.550	2.22752	2.22821	0.694
2.20000	2.20197	2.650	1.293	0.678	2.23802	2.23885	0.826
2.22500	2.22727	3.066	1.471	0.797	2.24848	2.24943	0.946
2.25000	2.25254	3.446	1.633	0.906	2.25889	2.25994	1.055
2.27500	2.27778	3.791	1.779	1.006	2.26925	2.27040	1.151
2.30000	2.30300	4.100	1.908	1.096	2.27956	2.28080	1.236
2.32500	2.32820	4.374	2.021	1.176	2.28983	2.29114	1.310
2.35000	2.35336	4.611	2.118	1.247	2.30005	2.30142	1.372
2.37500	2.37851	4.814	2.199	1.307	2.31023	2.31165	1.424
2.40000	2.40498	4.981	4.981	0.000	2.32036	2.32237	2.013
2.42500	2.43011	5.111	5.111	0.000	2.33044	2.33250	2.057
2.45000	2.45521	5.207	5.207	0.000	2.34049	2.34258	2.086
2.47500	2.48027	5.267	5.267	0.000	2.35049	2.35259	2.102
2.50000	2.50529	5.291	5.291	0.000	2.36045	2.36255	2.102
2.52500	2.53028	5.280	5.280	0.000	2.37036	2.37245	2.089
2.55000	2.55523	5.233	5.233	0.000	2.38024	2.38230	2.062
2.57500	2.58015	5.150	5.150	0.000	2.39007	2.39210	2.021
2.60000	2.60503	5.032	5.032	0.000	2.39987	2.40183	1.966
2.62500	2.62988	4.878	4.878	0.000	2.40962	2.41152	1.899
2.65000	2.65469	4.689	4.689	0.000	2.41934	2.42116	1.818
2.67500	2.67946	4.464	4.464	0.000	2.42901	2.43074	1.724
2.70000	2.70420	4.203	4.203	0.000	2.43865	2.44027	1.616
2.72500	2.72891	3.907	3.907	0.000	2.44825	2.44975	1.497
2.75000	2.75357	3.575	3.575	0.000	2.45781	2.45918	1.364
2.77500	2.77821	3.207	3.207	0.000	2.46734	2.46856	1.219
2.80000	2.80280	2.804	2.804	0.000	2.47683	2.47789	1.062
2.82500	2.82737	2.365	2.365	0.000	2.48628	2.48717	0.892
2.85000	2.85189	1.891	1.891	0.000	2.49570	2.49641	0.711
2.87500	2.87638	1.381	1.381	0.000	2.50508	2.50560	0.517
2.90000	2.90084	0.835	0.835	0.000	2.51442	2.51474	0.312
2.92500	2.92525	0.254	0.254	0.000	2.52374	2.52383	0.094
2.95000	2.94964	-0.363	-0.363	0.000	2.53301	2.53288	-0.134