

Micromoles/m²/sec conversion to Daily Light Integral (DLI) moles/m²/day and leafy greens DLI target range

Micromoles/ m ² /sec	Conversion Factor ¹	Estimated DLI (moles/m ² /day) from Hours of LED Lighting								
		16	17	18	19	20	21	22	23	24
100	0.36	5.76	6.12	6.48	6.84	7.20	7.56	7.92	8.28	8.64
110	0.40	6.34	6.73	7.13	7.52	7.92	8.32	8.71	9.11	9.50
115	0.41	6.62	7.04	7.45	7.87	8.28	8.69	9.11	9.52	9.94
120	0.43	6.91	7.34	7.78	8.21	8.64	9.07	9.50	9.94	10.37
125	0.45	7.20	7.65	8.10	8.55	9.00	9.45	9.90	10.35	10.80
130	0.47	7.49	7.96	8.42	8.89	9.36	9.83	10.30	10.76	11.23
135	0.49	7.78	8.26	8.75	9.23	9.72	10.21	10.69	11.18	11.66
140	0.50	8.06	8.57	9.07	9.58	10.08	10.58	11.09	11.59	12.10
145	0.52	8.35	8.87	9.40	9.92	10.44	10.96	11.48	12.01	12.53
150	0.54	8.64	9.18	9.72	10.26	10.80	11.34	11.88	12.42	12.96
155	0.56	8.93	9.49	10.04	10.60	11.16	11.72	12.28	12.83	13.39
160	0.58	9.22	9.79	10.37	10.94	11.52	12.10	12.67	13.25	13.82
165	0.59	9.50	10.10	10.69	11.29	11.88	12.47	13.07	13.66	14.26
170	0.61	9.79	10.40	11.02	11.63	12.24	12.85	13.46	14.08	14.69
175	0.63	10.08	10.71	11.34	11.97	12.60	13.23	13.86	14.49	15.12
180	0.65	10.37	11.02	11.66	12.31	12.96	13.61	14.26	14.90	15.55
185	0.67	10.66	11.32	11.99	12.65	13.32	13.99	14.65	15.32	15.98
190	0.68	10.94	11.63	12.31	13.00	13.68	14.36	15.05	15.73	16.42
195	0.70	11.23	11.93	12.64	13.34	14.04	14.74	15.44	16.15	16.85
200	0.72	11.52	12.24	12.96	13.68	14.40	15.12	15.84	16.56	17.28
205	0.74	11.81	12.55	13.28	14.02	14.76	15.50	16.24	16.97	17.71
210	0.76	12.10	12.85	13.61	14.36	15.12	15.88	16.63	17.39	18.14
215	0.77	12.38	13.16	13.93	14.71	15.48	16.25	17.03	17.80	18.58
220	0.79	12.67	13.46	14.26	15.05	15.84	16.63	17.42	18.22	19.01
225	0.81	12.96	13.77	14.58	15.39	16.20	17.01	17.82	18.63	19.44
230	0.83	13.25	14.08	14.90	15.73	16.56	17.39	18.22	19.04	19.87
235	0.85	13.54	14.38	15.23	16.92	17.77	18.61	19.46	20.30	20.30
240	0.86	13.82	14.69	15.55	16.42	17.28	18.14	19.01	38.77	20.74
245	0.88	14.11	14.99	15.88	16.76	17.64	18.52	19.40	20.29	21.17
250	0.90	14.40	15.30	16.20	17.10	18.00	18.90	19.80	20.70	21.60
255	0.92	14.69	15.61	16.52	17.44	18.36	19.28	20.20	21.11	22.03
260	0.94	14.98	15.91	16.85	17.78	18.72	19.66	20.59	21.53	22.46
265	0.95	15.26	16.22	17.17	18.13	19.08	20.03	20.99	21.94	22.90
270	0.97	15.55	16.52	17.50	18.47	19.44	20.41	21.38	22.36	23.33
275	0.99	15.84	16.83	17.82	18.81	19.80	20.79	21.78	22.77	23.76
278	1.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00	24.00

¹ The conversion factor is calculated by the formula: Conversion factor = micromoles/m²/sec x 3,600. Then move the decimal point to the left six places. Multiply this conversion factor by the number of hours of LED lighting to get the estimated moles/m²/day (DLI)

DLI recommended profitable range sole-source lighting 10 to 12 moles/m²/day (DLI) - vertical farm per Higgins, Hort Americas

DLI range for leafy greens 12 to 20 moles/m²/day (DLI) with greenhouse minimum 12 to 14 moles/m²/day (DLI) per Runkle, MSU