

GROWGOYLE

Commercial VPD Target Chart

Fahrenheit · AIR VPD · room temperature vs relative humidity

	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%
64°	1.32	1.22	1.12	1.02	0.92	0.81	0.71	0.61	0.51	0.41	0.31
66°	1.42	1.31	1.20	1.09	0.98	0.87	0.76	0.65	0.55	0.44	0.33
68°	1.52	1.40	1.29	1.17	1.05	0.94	0.82	0.70	0.58	0.47	0.35
70°	1.63	1.50	1.38	1.25	1.13	1.00	0.88	0.75	0.63	0.50	0.38
72°	1.74	1.61	1.47	1.34	1.21	1.07	0.94	0.80	0.67	0.54	0.40
74°	1.86	1.72	1.58	1.43	1.29	1.15	1.00	0.86	0.72	0.57	0.43
76°	1.99	1.84	1.69	1.53	1.38	1.23	1.07	0.92	0.77	0.61	0.46
78°	2.13	1.96	1.80	1.64	1.47	1.31	1.15	0.98	0.82	0.65	0.49
80°	2.27	2.10	1.92	1.75	1.57	1.40	1.22	1.05	0.87	0.70	0.52
82°	2.43	2.24	2.05	1.87	1.68	1.49	1.31	1.12	0.93	0.75	0.56
84°	2.59	2.39	2.19	1.99	1.79	1.59	1.39	1.19	1.00	0.80	0.60
86°	2.76	2.55	2.33	2.12	1.91	1.70	1.49	1.27	1.06	0.85	0.64
88°	2.94	2.71	2.49	2.26	2.03	1.81	1.58	1.36	1.13	0.90	0.68
90°	3.13	2.89	2.65	2.41	2.17	1.93	1.69	1.44	1.20	0.96	0.72

Relative Humidity

Target Zones (kPa)

Below 0.40	Too Low
0.40 - 0.80	Propagation / Clones
0.80 - 1.20	Veg / Early Flower
1.20 - 1.60	Mid / Late Flower
Above 1.60	Too High

How to use this page

Use room air temperature and relative humidity.
This is AIR VPD, useful for a fast room check.
For plant-level accuracy, measure canopy temperature
and use the leaf VPD page that matches your offset.

GROWGOYLE

Commercial VPD Target Chart

Fahrenheit · LEAF VPD · assumes leaves are 2°F cooler than room air

	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%
64°	1.18	1.08	0.98	0.88	0.78	0.68	0.57	0.47	0.37	0.27	0.17
66°	1.27	1.16	1.05	0.94	0.84	0.73	0.62	0.51	0.40	0.29	0.18
68°	1.36	1.25	1.13	1.01	0.90	0.78	0.66	0.55	0.43	0.31	0.19
70°	1.46	1.34	1.21	1.09	0.96	0.84	0.71	0.59	0.46	0.34	0.21
72°	1.57	1.43	1.30	1.16	1.03	0.90	0.76	0.63	0.49	0.36	0.23
74°	1.68	1.53	1.39	1.25	1.10	0.96	0.82	0.67	0.53	0.39	0.24
76°	1.79	1.64	1.49	1.33	1.18	1.03	0.87	0.72	0.57	0.42	0.26
78°	1.92	1.75	1.59	1.43	1.26	1.10	0.94	0.77	0.61	0.45	0.28
80°	2.05	1.88	1.70	1.53	1.35	1.18	1.00	0.83	0.65	0.48	0.30
82°	2.19	2.00	1.82	1.63	1.44	1.26	1.07	0.88	0.70	0.51	0.32
84°	2.34	2.14	1.94	1.74	1.54	1.34	1.14	0.95	0.75	0.55	0.35
86°	2.49	2.28	2.07	1.86	1.65	1.43	1.22	1.01	0.80	0.59	0.37
88°	2.66	2.43	2.21	1.98	1.76	1.53	1.30	1.08	0.85	0.63	0.40
90°	2.84	2.60	2.35	2.11	1.87	1.63	1.39	1.15	0.91	0.67	0.43

Relative Humidity

Target Zones (kPa)

Below 0.40	Too Low
0.40 - 0.80	Propagation / Clones
0.80 - 1.20	Veg / Early Flower
1.20 - 1.60	Mid / Late Flower
Above 1.60	Too High

How to use this page

Use when canopy leaves measure about 2°F below room air.

Example: 78°F room, 76°F leaf, and 60% RH.

Leaf temperature varies with light, airflow, and transpiration.

If your measured offset differs, use growgoyle.ai/vpd.

GROWGOYLE

Commercial VPD Target Chart

Celsius · AIR VPD · room temperature vs relative humidity

	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%
16°C	1.18	1.09	1.00	0.91	0.82	0.73	0.64	0.55	0.45	0.36	0.27
17°C	1.26	1.16	1.07	0.97	0.87	0.78	0.68	0.58	0.48	0.39	0.29
18°C	1.34	1.24	1.14	1.03	0.93	0.83	0.72	0.62	0.52	0.41	0.31
19°C	1.43	1.32	1.21	1.10	0.99	0.88	0.77	0.66	0.55	0.44	0.33
20°C	1.52	1.40	1.29	1.17	1.05	0.94	0.82	0.70	0.58	0.47	0.35
21°C	1.62	1.49	1.37	1.24	1.12	0.99	0.87	0.75	0.62	0.50	0.37
22°C	1.72	1.59	1.45	1.32	1.19	1.06	0.93	0.79	0.66	0.53	0.40
23°C	1.83	1.69	1.55	1.40	1.26	1.12	0.98	0.84	0.70	0.56	0.42
24°C	1.94	1.79	1.64	1.49	1.34	1.19	1.04	0.90	0.75	0.60	0.45
25°C	2.06	1.90	1.74	1.58	1.43	1.27	1.11	0.95	0.79	0.63	0.48
26°C	2.18	2.02	1.85	1.68	1.51	1.34	1.18	1.01	0.84	0.67	0.50
27°C	2.32	2.14	1.96	1.78	1.60	1.43	1.25	1.07	0.89	0.71	0.53
28°C	2.46	2.27	2.08	1.89	1.70	1.51	1.32	1.13	0.94	0.76	0.57
29°C	2.60	2.40	2.20	2.00	1.80	1.60	1.40	1.20	1.00	0.80	0.60
30°C	2.76	2.55	2.33	2.12	1.91	1.70	1.49	1.27	1.06	0.85	0.64
31°C	2.92	2.70	2.47	2.25	2.02	1.80	1.57	1.35	1.12	0.90	0.67
32°C	3.09	2.85	2.62	2.38	2.14	1.90	1.66	1.43	1.19	0.95	0.71

Relative Humidity

Target Zones (kPa)

- Below 0.40 Too Low
- 0.40 - 0.80 Propagation / Clones
- 0.80 - 1.20 Veg / Early Flower
- 1.20 - 1.60 Mid / Late Flower
- Above 1.60 Too High

How to use this page

Use room air temperature and relative humidity.
This is AIR VPD, useful for a fast room check.
For plant-level accuracy, measure canopy temperature
and use the leaf VPD page that matches your offset.

GROWGOYLE

Commercial VPD Target Chart

Celsius · LEAF VPD · assumes leaves are 1°C cooler than room air

	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%
16°C	1.07	0.98	0.89	0.80	0.71	0.61	0.52	0.43	0.34	0.25	0.16
17°C	1.14	1.04	0.95	0.85	0.75	0.66	0.56	0.46	0.36	0.27	0.17
18°C	1.22	1.11	1.01	0.91	0.80	0.70	0.60	0.49	0.39	0.29	0.18
19°C	1.29	1.19	1.08	0.97	0.86	0.75	0.64	0.53	0.42	0.31	0.20
20°C	1.38	1.26	1.15	1.03	0.91	0.79	0.68	0.56	0.44	0.33	0.21
21°C	1.47	1.34	1.22	1.09	0.97	0.85	0.72	0.60	0.47	0.35	0.22
22°C	1.56	1.43	1.30	1.17	1.03	0.90	0.77	0.64	0.50	0.37	0.24
23°C	1.66	1.52	1.38	1.24	1.10	0.96	0.82	0.68	0.54	0.40	0.26
24°C	1.77	1.62	1.47	1.32	1.17	1.02	0.87	0.72	0.57	0.42	0.27
25°C	1.88	1.72	1.56	1.40	1.24	1.08	0.92	0.77	0.61	0.45	0.29
26°C	1.99	1.82	1.66	1.49	1.32	1.15	0.98	0.81	0.65	0.48	0.31
27°C	2.11	1.94	1.76	1.58	1.40	1.22	1.04	0.87	0.69	0.51	0.33
28°C	2.24	2.05	1.86	1.68	1.49	1.30	1.11	0.92	0.73	0.54	0.35
29°C	2.38	2.18	1.98	1.78	1.58	1.38	1.18	0.98	0.78	0.58	0.38
30°C	2.52	2.31	2.10	1.88	1.67	1.46	1.25	1.04	0.82	0.61	0.40
31°C	2.67	2.45	2.22	2.00	1.77	1.55	1.32	1.10	0.87	0.65	0.42
32°C	2.83	2.59	2.35	2.12	1.88	1.64	1.40	1.16	0.93	0.69	0.45

Relative Humidity

Target Zones (kPa)

Below 0.40	Too Low
0.40 - 0.80	Propagation / Clones
0.80 - 1.20	Veg / Early Flower
1.20 - 1.60	Mid / Late Flower
Above 1.60	Too High

How to use this page

Use when canopy leaves measure about 1°C below room air.
Example: 26°C room, 25°C leaf, and 60% RH.
Leaf temperature varies with light, airflow, and transpiration.
If your measured offset differs, use growgoyle.ai/vpd.