

APPENDIX 1

MATERIAL COMPOSITION

The product material composition is illustrated in the table below. The material weight is given in grams and in percentage on total product weight.

Table 1: Material composition

Material	Weight (g)	Weight-%
Aluminium	4686.0	63.83
Copper	8.78	0.12
Other Plastics	1856.68	25.29
Paint	162.0	2.21
PCB Alu	52.03	0.71
PCB Copper	95.92	1.31
PCB Iron	88.42	1.2
PCB Non-ferrous metal	0.02	0.0
PCB Support	347.64	4.74
PCB Tin	5.68	0.08
Stainless Steel	2.0	0.03
Steel	35.66	0.49

APPENDIX 2

USE PHASE (B6) VALUES FOR DIFFERENT COUNTRY MIX

In this EPD the B6 impact has been calculated using the energy mix of EU. The table in this appendix is useful for conversion and comparison of B6 values with other energy country mix. The Global Warming Potential Total (GWP tot) value is illustrated for each country. The value refers to 1 kwh.

Example on how to use the table:

If for example this EPD was done according to EU energy mix and you want to see how the GWP total changes according to a Finland country energy mix, you can take the original value in the results table here highlighted in yellow:

ENVIRONMENTAL IMPACT DATA, RESULTS PER DECLARED UNIT

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	4.44E-01	4.75E-03	2.34E-02	4.72E-01	9.50E-04	8.13E-03	ND	ND	ND	ND	ND	4.06E-02	ND	0.00E+00	5.50E-04	2.23E-03	7.33E-04	-2.82E-02

Divide that value according to the EU value from the following table (EU = 3.30E-01) and then multiplying for the Finland value from the same table (FINLAND = 1.54E-01).

Thus, the calculation of this example would be:

New B6 GWP tot for Finland = $(4.06E-02 / 3.30E-01) \times 1.54E-01 = 1.89E-02$.

Country	GWP tot (kg CO2 eq. per kwh)		
AFRICA	7.30E-01	GERMANY	3.90E-01
APAC	9.50E-01	INDIA	1.50E+00
AUSTRALIA	8.40E-01	ITALY	3.50E-01
AUSTRIA	2.30E-01	LATAM	3.90E-01
BELGIUM	2.00E-01	NAM	4.50E-01
CHINA	1.02E+00	NETHERLANDS	3.90E-01
DENMARK	1.60E-01	NORWAY	4.50E-02
EU	3.30E-01	ROW	7.30E-01
FINLAND	1.54E-01	SPAIN	2.10E-01
FRANCE	8.70E-02	SWEDEN	3.70E-02
		UK	2.60E-01

Source Ecoinvent 3.10.1

APPENDIX 3 - EPD HUB ALIGNED

This section represents the scaling method for the **B6 module**, following the PEP EcoPassport PSR for luminaires (PSR-0014-ed2.0-EN-2023 07 13). The GWP results were scaled from a reference variant of a product family, based on various light management scenarios and power inputs of the luminaires within the same product family.

To calculate the Scaled Impact (*SI*), we have followed the below methods:

1. Calculate the power scaling factor (PSF), which is the ratio of the power input of the variant in questions P_{in} and the power input of the base variant P_{base} .

$$PSF = \frac{P_{in}}{P_{base}}$$

2. Calculate the Total Scaling factor by multiplying the PSF by the control scaling factor (CSF), where the CSF is determined according the relevant control factor scenario (e.g. if the luminaire has a presence detection system). The presented controls factors values in Table A1 are based on BS EN 15193-1:2017. Please refer to this publication or contact Signify directly for more information.

$$TSF = PSF * CSF$$

Table 1: Light management function (PEP EcoPassport aligned)

Scenario	Abbrev.	CSF
No control	NC	1
Daylight dependency factor	DD	0.75
Presence sensing	PS	0.75
Daylight dependency and presence sensing	DD+PS	0.55

3. Lastly, the GWP of the base variant is then scaled by the TSF.

$$\text{Scaled Impact} = \text{GWP}_{\text{case}} * \text{TSF}$$

The following list of product configurations is not exhaustive. Please use the formula defined in point 1 above to calculate the exact power scaling factor (PSF) for any specific configuration.

Table 2: GWP per scaling factor (EPD Hub aligned)

	12NC or Product Family Code	Description	Flux [lm]	Power [W]	Efficacy [lm/W]	PSF	Total Scaling Factor (TSF)				Scaled Impacts (GWP100 B6 - kg CO2eq.)			
							NC	DD	PS	DD+PS	NC	DD	PS	DD+PS
1	BDP266	BDP266LED8-4S740DS50 DR	656	5.6	117.1	0.196	0.196	0.147	0.147	0.108	183.8	137.8	137.8	101.3
2	BDP266	BDP266LED10-4S740DS50 DR	820	6.8	120.6	0.239	0.239	0.179	0.179	0.131	224.1	167.8	167.8	122.8
3	BDP266	BDP266LED12-4S740DS50 DR	984	7.7	127.8	0.27	0.27	0.203	0.203	0.149	253.2	190.3	190.3	139.7
4	BDP266	BDP266LED14-4S740DS50 DR	1148	8.9	129.0	0.312	0.312	0.234	0.234	0.172	292.5	219.4	219.4	161.3
5	BDP266	BDP266LED16-4S740DS50 DR	1312	10.0	131.2	0.351	0.351	0.263	0.263	0.193	329.1	246.6	246.6	181.0
6	BDP266	BDP266LED18-4S740DS50 DR	1476	11.2	131.8	0.393	0.393	0.295	0.295	0.216	368.5	276.6	276.6	202.5
7	BDP266	BDP266LED20-4S740DS50 DR	1640	12.4	132.3	0.435	0.435	0.326	0.326	0.239	407.9	305.7	305.7	224.1
8	BDP266	BDP266LED22-4S740DS50 DR	1782	13.6	131.0	0.477	0.477	0.358	0.358	0.262	447.3	335.7	335.7	245.7
9	BDP266	BDP266LED24-4S740DS50 DR	1944	15.0	129.6	0.526	0.526	0.395	0.395	0.289	493.2	370.4	370.4	271.0
10	BDP266	BDP266LED27-4S740DS50 DR	2187	17.0	128.6	0.596	0.596	0.447	0.447	0.328	558.8	419.1	419.1	307.5

11	BDP266	BDP266LED30-4S740DS50 DR	2430	19.0	127.9	0.667	0.667	0.5	0.5	0.367	625.4	468.8	468.8	344.1
12	BDP266	BDP266LED34-4S740DS50 DR	2754	20.0	137.7	0.702	0.702	0.526	0.526	0.386	658.2	493.2	493.2	361.9
13	BDP266	BDP266LED35-4S740DS50 DR	2835	20.5	138.3	0.719	0.719	0.539	0.539	0.395	674.2	505.4	505.4	370.4
14	BDP266	BDP266LED39-4S740DS50 DR	3159	23.0	137.3	0.807	0.807	0.605	0.605	0.444	756.7	567.3	567.3	416.3
15	BDP266	BDP266LED40-4S740DS50 DR	3240	23.5	137.9	0.825	0.825	0.619	0.619	0.454	773.6	580.4	580.4	425.7
16	BDP266	BDP266LED44-4S740DS50 DR	3564	26.0	137.1	0.912	0.912	0.684	0.684	0.502	855.1	641.4	641.4	470.7
17	BDP266	BDP266LED45-4S740DS50 DR	3645	27.0	135.0	0.947	0.947	0.71	0.71	0.521	888.0	665.7	665.7	488.5
18	BDP266	BDP266LED50-4S740DS50 DR	4050	28.5	142.1	1.0	1.0	0.75	0.75	0.55	937.6	703.2	703.2	515.7
19	BDP266	BDP266LED55-4S740DS50 DR	4536	31.5	144.0	1.105	1.105	0.829	0.829	0.608	1036.1	777.3	777.3	570.1
20	BDP266	BDP266LED59-4S740DS50 DR	4860	33.5	145.1	1.175	1.175	0.881	0.881	0.646	1101.7	826.1	826.1	605.7
21	BDP266	BDP266LED64-4S740DS50 DR	5120	37.0	138.4	1.298	1.298	0.974	0.974	0.714	1217.1	913.3	913.3	669.5
22	BDP266	BDP266LED69-4S740DS50 DR	5600	40.0	140.0	1.404	1.404	1.053	1.053	0.772	1316.5	987.3	987.3	723.9
23	BDP266	BDP266LED74-4S740DS50 DR	5920	43.0	137.7	1.509	1.509	1.132	1.132	0.83	1414.9	1061.4	1061.4	778.2
24	BDP266	BDP266LED79-4S740DS50 DR	6240	44.5	140.2	1.561	1.561	1.171	1.171	0.859	1463.7	1098.0	1098.0	805.4

25	BDP266	BDP266LED84-4S740DS50 DR	6720	47.5	141.5	1.667	1.667	1.25	1.25	0.917	1563.1	1172.1	1172.1	859.8
26	BDP266	BDP266LED90-4S740DS50 DR	7200	51.0	141.2	1.789	1.789	1.342	1.342	0.984	1677.5	1258.3	1258.3	922.6
27	BDP266	BDP266LED94-4S740DS50 DR	7520	54.0	139.3	1.895	1.895	1.421	1.421	1.042	1776.8	1332.4	1332.4	977.0
28	BDP266	BDP266LED109-4S740DS50 DR	8690	63.0	137.9	2.211	2.211	1.658	1.658	1.216	2073.1	1554.6	1554.6	1140.2
29	BDP266	BDP266LED120-4S740DS50 DR	9480	71.0	133.5	2.491	2.491	1.868	1.868	1.37	2335.7	1751.5	1751.5	1284.6
30	BDP266	BDP266LED130-4S740DS50 DR	10270	77.0	133.4	2.702	2.702	2.026	2.026	1.486	2533.5	1899.7	1899.7	1393.3
31	BDP266	BDP266LED8-4S730DS50 DR	656	5.9	111.2	0.207	0.207	0.155	0.155	0.114	194.1	145.3	145.3	106.9
32	BDP266	BDP266LED10-4S730DS50 DR	820	7.1	115.5	0.249	0.249	0.187	0.187	0.137	233.5	175.3	175.3	128.5
33	BDP266	BDP266LED12-4S730DS50 DR	984	8.2	120.0	0.288	0.288	0.216	0.216	0.158	270.0	202.5	202.5	148.1
34	BDP266	BDP266LED14-4S730DS50 DR	1148	9.4	122.1	0.33	0.33	0.247	0.247	0.182	309.4	231.6	231.6	170.7
35	BDP266	BDP266LED16-4S730DS50 DR	1312	10.6	123.8	0.372	0.372	0.279	0.279	0.205	348.8	261.6	261.6	192.2
36	BDP266	BDP266LED18-4S730DS50 DR	1476	11.8	125.1	0.414	0.414	0.31	0.31	0.228	388.2	290.7	290.7	213.8
37	BDP266	BDP266LED20-4S730DS50 DR	1620	13.2	122.7	0.463	0.463	0.347	0.347	0.255	434.1	325.4	325.4	239.1
38	BDP266	BDP266LED22-4S730DS50 DR	1782	14.6	122.1	0.512	0.512	0.384	0.384	0.282	480.1	360.1	360.1	264.4

39	BDP266	BDP266LED24-4S730DS50 DR	1944	16.0	121.5	0.561	0.561	0.421	0.421	0.309	526.0	394.8	394.8	289.7
40	BDP266	BDP266LED27-4S730DS50 DR	2187	18.0	121.5	0.632	0.632	0.474	0.474	0.348	592.6	444.4	444.4	326.3
41	BDP266	BDP266LED30-4S730DS50 DR	2430	20.5	118.5	0.719	0.719	0.539	0.539	0.395	674.2	505.4	505.4	370.4
42	BDP266	BDP266LED34-4S730DS50 DR	2754	21.0	131.1	0.737	0.737	0.553	0.553	0.405	691.0	518.5	518.5	379.7
43	BDP266	BDP266LED35-4S730DS50 DR	2835	22.0	128.9	0.772	0.772	0.579	0.579	0.425	723.9	542.9	542.9	398.5
44	BDP266	BDP266LED39-4S730DS50 DR	3159	24.5	128.9	0.86	0.86	0.645	0.645	0.473	806.4	604.8	604.8	443.5
45	BDP266	BDP266LED40-4S730DS50 DR	3240	25.0	129.6	0.877	0.877	0.658	0.658	0.482	822.3	617.0	617.0	451.9
46	BDP266	BDP266LED44-4S730DS50 DR	3564	28.0	127.3	0.982	0.982	0.736	0.736	0.54	920.8	690.1	690.1	506.3
47	BDP266	BDP266LED45-4S730DS50 DR	3645	28.5	127.9	1.0	1.0	0.75	0.75	0.55	937.6	703.2	703.2	515.7
48	BDP266	BDP266LED50-4S730DS50 DR	4050	30.0	135.0	1.053	1.053	0.79	0.79	0.579	987.3	740.7	740.7	542.9
49	BDP266	BDP266LED55-4S730DS50 DR	4536	33.5	135.4	1.175	1.175	0.881	0.881	0.646	1101.7	826.1	826.1	605.7
50	BDP266	BDP266LED59-4S730DS50 DR	4860	36.0	135.0	1.263	1.263	0.947	0.947	0.695	1184.3	888.0	888.0	651.7
51	BDP266	BDP266LED64-4S730DS50 DR	5120	39.0	131.3	1.368	1.368	1.026	1.026	0.752	1282.7	962.0	962.0	705.1
52	BDP266	BDP266LED69-4S730DS50 DR	5600	42.5	131.8	1.491	1.491	1.118	1.118	0.82	1398.0	1048.3	1048.3	768.9

53	BDP266	BDP266LED74-4S730DS50 DR	5920	46.0	128.7	1.614	1.614	1.211	1.211	0.888	1513.4	1135.5	1135.5	832.6
54	BDP266	BDP266LED79-4S730DS50 DR	6400	47.5	134.7	1.667	1.667	1.25	1.25	0.917	1563.1	1172.1	1172.1	859.8
55	BDP266	BDP266LED84-4S730DS50 DR	6720	51.0	131.8	1.789	1.789	1.342	1.342	0.984	1677.5	1258.3	1258.3	922.6
56	BDP266	BDP266LED90-4S730DS50 DR	7200	55.0	130.9	1.93	1.93	1.448	1.448	1.062	1809.7	1357.7	1357.7	995.8
57	BDP266	BDP266LED94-4S730DS50 DR	7520	57.0	131.9	2.0	2.0	1.5	1.5	1.1	1875.3	1406.5	1406.5	1031.4
58	BDP266	BDP266LED109-4S730DS50 DR	8690	68.0	127.8	2.386	2.386	1.79	1.79	1.312	2237.2	1678.4	1678.4	1230.2
59	BDP266	BDP266LED120-4S730DS50 DR	9480	76.0	124.7	2.667	2.667	2.0	2.0	1.467	2500.7	1875.3	1875.3	1375.5
60	BDP266	BDP266LED8-4S727DS50 DR	656	6.5	100.9	0.228	0.228	0.171	0.171	0.125	213.8	160.3	160.3	117.2
61	BDP266	BDP266LED10-4S727DS50 DR	820	7.9	103.8	0.277	0.277	0.208	0.208	0.152	259.7	195.0	195.0	142.5
62	BDP266	BDP266LED12-4S727DS50 DR	984	9.1	108.1	0.319	0.319	0.239	0.239	0.175	299.1	224.1	224.1	164.1
63	BDP266	BDP266LED14-4S727DS50 DR	1148	10.4	110.4	0.365	0.365	0.274	0.274	0.201	342.2	256.9	256.9	188.5
64	BDP266	BDP266LED16-4S727DS50 DR	1312	11.8	111.2	0.414	0.414	0.31	0.31	0.228	388.2	290.7	290.7	213.8
65	BDP266	BDP266LED18-4S727DS50 DR	1458	13.2	110.5	0.463	0.463	0.347	0.347	0.255	434.1	325.4	325.4	239.1
66	BDP266	BDP266LED20-4S727DS50 DR	1620	14.8	109.5	0.519	0.519	0.389	0.389	0.285	486.6	364.7	364.7	267.2

67	BDP266	BDP266LED22-4S727DS50 DR	1782	16.4	108.7	0.575	0.575	0.431	0.431	0.316	539.1	404.1	404.1	296.3
68	BDP266	BDP266LED24-4S727DS50 DR	1944	18.0	108.0	0.632	0.632	0.474	0.474	0.348	592.6	444.4	444.4	326.3
69	BDP266	BDP266LED27-4S727DS50 DR	2187	20.5	106.7	0.719	0.719	0.539	0.539	0.395	674.2	505.4	505.4	370.4
70	BDP266	BDP266LED30-4S727DS50 DR	2430	21.0	115.7	0.737	0.737	0.553	0.553	0.405	691.0	518.5	518.5	379.7
71	BDP266	BDP266LED34-4S727DS50 DR	2754	24.0	114.8	0.842	0.842	0.631	0.631	0.463	789.5	591.7	591.7	434.1
72	BDP266	BDP266LED35-4S727DS50 DR	2835	24.5	115.7	0.86	0.86	0.645	0.645	0.473	806.4	604.8	604.8	443.5
73	BDP266	BDP266LED39-4S727DS50 DR	3159	27.5	114.9	0.965	0.965	0.724	0.724	0.531	904.8	678.9	678.9	497.9
74	BDP266	BDP266LED40-4S727DS50 DR	3240	28.5	113.7	1.0	1.0	0.75	0.75	0.55	937.6	703.2	703.2	515.7
75	BDP266	BDP266LED44-4S727DS50 DR	3520	31.5	111.7	1.105	1.105	0.829	0.829	0.608	1036.1	777.3	777.3	570.1
76	BDP266	BDP266LED45-4S727DS50 DR	3600	32.0	112.5	1.123	1.123	0.842	0.842	0.618	1053.0	789.5	789.5	579.5
77	BDP266	BDP266LED50-4S727DS50 DR	4050	34.0	119.1	1.193	1.193	0.895	0.895	0.656	1118.6	839.2	839.2	615.1
78	BDP266	BDP266LED55-4S727DS50 DR	4480	37.5	119.5	1.316	1.316	0.987	0.987	0.724	1233.9	925.5	925.5	678.9
79	BDP266	BDP266LED59-4S727DS50 DR	4800	40.5	118.5	1.421	1.421	1.066	1.066	0.782	1332.4	999.5	999.5	733.2
80	BDP266	BDP266LED64-4S727DS50 DR	5120	44.5	115.1	1.561	1.561	1.171	1.171	0.859	1463.7	1098.0	1098.0	805.4

81	BDP266	BDP266LED69-4S727DS50 DR	5530	48.0	115.2	1.684	1.684	1.263	1.263	0.926	1579.0	1184.3	1184.3	868.3
82	BDP266	BDP266LED74-4S727DS50 DR	5846	52.0	112.4	1.825	1.825	1.369	1.369	1.004	1711.2	1283.6	1283.6	941.4
83	BDP266	BDP266LED79-4S727DS50 DR	6400	54.0	118.5	1.895	1.895	1.421	1.421	1.042	1776.8	1332.4	1332.4	977.0
84	BDP266	BDP266LED84-4S727DS50 DR	6720	57.0	117.9	2.0	2.0	1.5	1.5	1.1	1875.3	1406.5	1406.5	1031.4
85	BDP266	BDP266LED90-4S727DS50 DR	7110	62.0	114.7	2.175	2.175	1.631	1.631	1.196	2039.4	1529.3	1529.3	1121.4
86	BDP266	BDP266LED94-4S727DS50 DR	7426	65.0	114.2	2.281	2.281	1.711	1.711	1.255	2138.8	1604.3	1604.3	1176.8
87	BDP266	BDP266LED109-4S727DS50 DR	8690	77.0	112.9	2.702	2.702	2.026	2.026	1.486	2533.5	1899.7	1899.7	1393.3
88	BDP266	BDP266LED6-4S722DS50 DR	492	5.6	87.9	0.196	0.196	0.147	0.147	0.108	183.8	137.8	137.8	101.3
89	BDP266	BDP266LED8-4S722DS50 DR	656	7.1	92.4	0.249	0.249	0.187	0.187	0.137	233.5	175.3	175.3	128.5
90	BDP266	BDP266LED10-4S722DS50 DR	810	8.8	92.0	0.309	0.309	0.232	0.232	0.17	289.7	217.5	217.5	159.4
91	BDP266	BDP266LED12-4S722DS50 DR	984	10.0	98.4	0.351	0.351	0.263	0.263	0.193	329.1	246.6	246.6	181.0
92	BDP266	BDP266LED14-4S722DS50 DR	1148	11.6	99.0	0.407	0.407	0.305	0.305	0.224	381.6	286.0	286.0	210.0
93	BDP266	BDP266LED16-4S722DS50 DR	1296	13.2	98.2	0.463	0.463	0.347	0.347	0.255	434.1	325.4	325.4	239.1
94	BDP266	BDP266LED18-4S722DS50 DR	1458	14.8	98.5	0.519	0.519	0.389	0.389	0.285	486.6	364.7	364.7	267.2

95	BDP266	BDP266LED20-4S722DS50 DR	1620	16.6	97.6	0.582	0.582	0.436	0.436	0.32	545.7	408.8	408.8	300.0
96	BDP266	BDP266LED22-4S722DS50 DR	1782	18.4	96.8	0.646	0.646	0.485	0.485	0.355	605.7	454.8	454.8	332.9
97	BDP266	BDP266LED24-4S722DS50 DR	1944	20.5	94.8	0.719	0.719	0.539	0.539	0.395	674.2	505.4	505.4	370.4
98	BDP266	BDP266LED27-4S722DS50 DR	2187	21.0	104.1	0.737	0.737	0.553	0.553	0.405	691.0	518.5	518.5	379.7
99	BDP266	BDP266LED30-4S722DS50 DR	2430	23.5	103.4	0.825	0.825	0.619	0.619	0.454	773.6	580.4	580.4	425.7
100	BDP266	BDP266LED34-4S722DS50 DR	2754	27.0	102.0	0.947	0.947	0.71	0.71	0.521	888.0	665.7	665.7	488.5

PEP ECOPASSPORT ALIGNED

This section represents the scaling method for the **B6 module**, following the PEP EcoPassport PSR for luminaries (PSR-0014-ed2.0-EN-2023 07 13). The GWP results were scaled from a reference variant of a product family, based on various light management functions, the lumen output (O_{lum}) and reference service life (RSL) of each product within the same product family.

To calculate the Scaled Impact (SI_{pep}), we have followed the below methods:

1. Calculate the power scaling factor (PSF), which is the ratio of the power input of the variant in questions P_{in} and the power input of the base variant P_{base} .

$$PSF = \frac{P_{in}}{P_{base}}$$

2. Using this scaled GWP, we then can apply the PEP Ecopassport method for calculating the environmental impact of the functional unit for a luminary (1000 lumens over 35000 hours), applied to B6, where the Functional Unit application considers the lumen output (O_{lum}) and reference service lifetime (RSL) of the product to estimate the final environmental impact. The scaled impact (SI_{pep}) is presented in Table A4.

$$GSF = \frac{FU_{pep}}{FU_p} = \frac{1,000}{O_{lum}} * \frac{35,000}{RSL}$$

3. Calculate the GWP scaling factor ($PGSF$), by multiplying the PSF by the GSF.

$$PGSF = PSF * GSF$$

- Calculate the Total Scaling factor by multiplying the PSF by the control scaling factor (CSF), where the CSF is determined according the relevant control factor scenario (e.g. if the luminaire has a presence detection system), as presented in Table A1.

$$TSF = PGSF * CSF$$

Table 3: Light management functions (PEP EcoPassport aligned)

Scenario	Abbrev.	CSF
No control	NC	1
Daylight dependency factor	DD	0.75
Presence sensing	PS	0.75
Daylight dependency and presence sensing	DD+PS	0.55

- Lastly, the GWP of the base variant is then scaled by the TSF.

$$Scaled\ GWP = GWP_{case} * TSF$$

Table 4: Impact per scaling factor (PEP EcoPassport aligned)

	12NC or Product Family Code	Description	Flux [lm]	Power [W]	Efficacy [lm/W]	PSF	Total Scaling Factor (TSF)				Scaled Impacts (GWP100 B6 - kg CO2eq.)			
							NC	DD	PS	DD+PS	NC	DD	PS	DD+PS
1	BDP266	BDP266LED8-4S740DS50 DR	656	5.6	117.1	0.196	0.105	0.079	0.079	0.058	98.5	74.1	74.1	54.4
2	BDP266	BDP266LED10-4S740DS50 DR	820	6.8	120.6	0.239	0.102	0.076	0.076	0.056	95.6	71.3	71.3	52.5
3	BDP266	BDP266LED12-4S740DS50 DR	984	7.7	127.8	0.27	0.096	0.072	0.072	0.053	90.0	67.5	67.5	49.7
4	BDP266	BDP266LED14-4S740DS50 DR	1148	8.9	129.0	0.312	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
5	BDP266	BDP266LED16-4S740DS50 DR	1312	10.0	131.2	0.351	0.094	0.071	0.071	0.052	88.1	66.6	66.6	48.8
6	BDP266	BDP266LED18-4S740DS50 DR	1476	11.2	131.8	0.393	0.093	0.07	0.07	0.051	87.2	65.6	65.6	47.8
7	BDP266	BDP266LED20-4S740DS50 DR	1640	12.4	132.3	0.435	0.093	0.07	0.07	0.051	87.2	65.6	65.6	47.8
8	BDP266	BDP266LED22-4S740DS50 DR	1782	13.6	131.0	0.477	0.093	0.07	0.07	0.051	87.2	65.6	65.6	47.8
9	BDP266	BDP266LED24-4S740DS50 DR	1944	15.0	129.6	0.526	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
10	BDP266	BDP266LED27-4S740DS50 DR	2187	17.0	128.6	0.596	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
11	BDP266	BDP266LED30-4S740DS50 DR	2430	19.0	127.9	0.667	0.096	0.072	0.072	0.053	90.0	67.5	67.5	49.7
12	BDP266	BDP266LED34-4S740DS50 DR	2754	20.0	137.7	0.702	0.089	0.067	0.067	0.049	83.5	62.8	62.8	45.9

13	BDP266	BDP266LED35-4S740DS50 DR	2835	20.5	138.3	0.719	0.088	0.066	0.066	0.048	82.5	61.9	61.9	45.0
14	BDP266	BDP266LED39-4S740DS50 DR	3159	23.0	137.3	0.807	0.09	0.068	0.068	0.05	84.4	63.8	63.8	46.9
15	BDP266	BDP266LED40-4S740DS50 DR	3240	23.5	137.9	0.825	0.089	0.067	0.067	0.049	83.5	62.8	62.8	45.9
16	BDP266	BDP266LED44-4S740DS50 DR	3564	26.0	137.1	0.912	0.089	0.067	0.067	0.049	83.5	62.8	62.8	45.9
17	BDP266	BDP266LED45-4S740DS50 DR	3645	27.0	135.0	0.947	0.091	0.068	0.068	0.05	85.3	63.8	63.8	46.9
18	BDP266	BDP266LED50-4S740DS50 DR	4050	28.5	142.1	1.0	0.086	0.065	0.065	0.047	80.6	60.9	60.9	44.1
19	BDP266	BDP266LED55-4S740DS50 DR	4536	31.5	144.0	1.105	0.085	0.064	0.064	0.047	79.7	60.0	60.0	44.1
20	BDP266	BDP266LED59-4S740DS50 DR	4860	33.5	145.1	1.175	0.085	0.064	0.064	0.047	79.7	60.0	60.0	44.1
21	BDP266	BDP266LED64-4S740DS50 DR	5120	37.0	138.4	1.298	0.088	0.066	0.066	0.048	82.5	61.9	61.9	45.0
22	BDP266	BDP266LED69-4S740DS50 DR	5600	40.0	140.0	1.404	0.087	0.065	0.065	0.048	81.6	60.9	60.9	45.0
23	BDP266	BDP266LED74-4S740DS50 DR	5920	43.0	137.7	1.509	0.089	0.067	0.067	0.049	83.5	62.8	62.8	45.9
24	BDP266	BDP266LED79-4S740DS50 DR	6240	44.5	140.2	1.561	0.087	0.065	0.065	0.048	81.6	60.9	60.9	45.0
25	BDP266	BDP266LED84-4S740DS50 DR	6720	47.5	141.5	1.667	0.087	0.065	0.065	0.048	81.6	60.9	60.9	45.0
26	BDP266	BDP266LED90-4S740DS50 DR	7200	51.0	141.2	1.789	0.088	0.066	0.066	0.048	82.5	61.9	61.9	45.0

27	BDP266	BDP266LED94-4S740DS50 DR	7520	54.0	139.3	1.895	0.089	0.067	0.067	0.049	83.5	62.8	62.8	45.9
28	BDP266	BDP266LED109-4S740DS50 DR	8690	63.0	137.9	2.211	0.088	0.066	0.066	0.048	82.5	61.9	61.9	45.0
29	BDP266	BDP266LED120-4S740DS50 DR	9480	71.0	133.5	2.491	0.092	0.069	0.069	0.051	86.3	64.7	64.7	47.8
30	BDP266	BDP266LED130-4S740DS50 DR	10270	77.0	133.4	2.702	0.092	0.069	0.069	0.051	86.3	64.7	64.7	47.8
31	BDP266	BDP266LED8-4S730DS50 DR	656	5.9	111.2	0.207	0.111	0.083	0.083	0.061	104.1	77.8	77.8	57.2
32	BDP266	BDP266LED10-4S730DS50 DR	820	7.1	115.5	0.249	0.106	0.08	0.08	0.058	99.4	75.0	75.0	54.4
33	BDP266	BDP266LED12-4S730DS50 DR	984	8.2	120.0	0.288	0.103	0.077	0.077	0.057	96.6	72.2	72.2	53.4
34	BDP266	BDP266LED14-4S730DS50 DR	1148	9.4	122.1	0.33	0.101	0.076	0.076	0.056	94.7	71.3	71.3	52.5
35	BDP266	BDP266LED16-4S730DS50 DR	1312	10.6	123.8	0.372	0.099	0.074	0.074	0.054	92.8	69.4	69.4	50.6
36	BDP266	BDP266LED18-4S730DS50 DR	1476	11.8	125.1	0.414	0.098	0.074	0.074	0.054	91.9	69.4	69.4	50.6
37	BDP266	BDP266LED20-4S730DS50 DR	1620	13.2	122.7	0.463	0.1	0.075	0.075	0.055	93.8	70.3	70.3	51.6
38	BDP266	BDP266LED22-4S730DS50 DR	1782	14.6	122.1	0.512	0.1	0.075	0.075	0.055	93.8	70.3	70.3	51.6
39	BDP266	BDP266LED24-4S730DS50 DR	1944	16.0	121.5	0.561	0.101	0.076	0.076	0.056	94.7	71.3	71.3	52.5
40	BDP266	BDP266LED27-4S730DS50 DR	2187	18.0	121.5	0.632	0.101	0.076	0.076	0.056	94.7	71.3	71.3	52.5

41	BDP266	BDP266LED30-4S730DS50 DR	2430	20.5	118.5	0.719	0.104	0.078	0.078	0.057	97.5	73.1	73.1	53.4
42	BDP266	BDP266LED34-4S730DS50 DR	2754	21.0	131.1	0.737	0.094	0.071	0.071	0.052	88.1	66.6	66.6	48.8
43	BDP266	BDP266LED35-4S730DS50 DR	2835	22.0	128.9	0.772	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
44	BDP266	BDP266LED39-4S730DS50 DR	3159	24.5	128.9	0.86	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
45	BDP266	BDP266LED40-4S730DS50 DR	3240	25.0	129.6	0.877	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
46	BDP266	BDP266LED44-4S730DS50 DR	3564	28.0	127.3	0.982	0.096	0.072	0.072	0.053	90.0	67.5	67.5	49.7
47	BDP266	BDP266LED45-4S730DS50 DR	3645	28.5	127.9	1.0	0.096	0.072	0.072	0.053	90.0	67.5	67.5	49.7
48	BDP266	BDP266LED50-4S730DS50 DR	4050	30.0	135.0	1.053	0.091	0.068	0.068	0.05	85.3	63.8	63.8	46.9
49	BDP266	BDP266LED55-4S730DS50 DR	4536	33.5	135.4	1.175	0.09	0.068	0.068	0.05	84.4	63.8	63.8	46.9
50	BDP266	BDP266LED59-4S730DS50 DR	4860	36.0	135.0	1.263	0.091	0.068	0.068	0.05	85.3	63.8	63.8	46.9
51	BDP266	BDP266LED64-4S730DS50 DR	5120	39.0	131.3	1.368	0.093	0.07	0.07	0.051	87.2	65.6	65.6	47.8
52	BDP266	BDP266LED69-4S730DS50 DR	5600	42.5	131.8	1.491	0.092	0.069	0.069	0.051	86.3	64.7	64.7	47.8
53	BDP266	BDP266LED74-4S730DS50 DR	5920	46.0	128.7	1.614	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
54	BDP266	BDP266LED79-4S730DS50 DR	6400	47.5	134.7	1.667	0.092	0.069	0.069	0.051	86.3	64.7	64.7	47.8

55	BDP266	BDP266LED84-4S730DS50 DR	6720	51.0	131.8	1.789	0.093	0.07	0.07	0.051	87.2	65.6	65.6	47.8
56	BDP266	BDP266LED90-4S730DS50 DR	7200	55.0	130.9	1.93	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
57	BDP266	BDP266LED94-4S730DS50 DR	7520	57.0	131.9	2.0	0.094	0.071	0.071	0.052	88.1	66.6	66.6	48.8
58	BDP266	BDP266LED109-4S730DS50 DR	8690	68.0	127.8	2.386	0.095	0.071	0.071	0.052	89.1	66.6	66.6	48.8
59	BDP266	BDP266LED120-4S730DS50 DR	9480	76.0	124.7	2.667	0.099	0.074	0.074	0.054	92.8	69.4	69.4	50.6
60	BDP266	BDP266LED8-4S727DS50 DR	656	6.5	100.9	0.228	0.122	0.091	0.091	0.067	114.4	85.3	85.3	62.8
61	BDP266	BDP266LED10-4S727DS50 DR	820	7.9	103.8	0.277	0.118	0.088	0.088	0.065	110.6	82.5	82.5	60.9
62	BDP266	BDP266LED12-4S727DS50 DR	984	9.1	108.1	0.319	0.114	0.086	0.086	0.063	106.9	80.6	80.6	59.1
63	BDP266	BDP266LED14-4S727DS50 DR	1148	10.4	110.4	0.365	0.111	0.083	0.083	0.061	104.1	77.8	77.8	57.2
64	BDP266	BDP266LED16-4S727DS50 DR	1312	11.8	111.2	0.414	0.111	0.083	0.083	0.061	104.1	77.8	77.8	57.2
65	BDP266	BDP266LED18-4S727DS50 DR	1458	13.2	110.5	0.463	0.111	0.083	0.083	0.061	104.1	77.8	77.8	57.2
66	BDP266	BDP266LED20-4S727DS50 DR	1620	14.8	109.5	0.519	0.112	0.084	0.084	0.062	105.0	78.8	78.8	58.1
67	BDP266	BDP266LED22-4S727DS50 DR	1782	16.4	108.7	0.575	0.113	0.085	0.085	0.062	106.0	79.7	79.7	58.1
68	BDP266	BDP266LED24-4S727DS50 DR	1944	18.0	108.0	0.632	0.114	0.086	0.086	0.063	106.9	80.6	80.6	59.1

69	BDP266	BDP266LED27-4S727DS50 DR	2187	20.5	106.7	0.719	0.115	0.086	0.086	0.063	107.8	80.6	80.6	59.1
70	BDP266	BDP266LED30-4S727DS50 DR	2430	21.0	115.7	0.737	0.106	0.08	0.08	0.058	99.4	75.0	75.0	54.4
71	BDP266	BDP266LED34-4S727DS50 DR	2754	24.0	114.8	0.842	0.107	0.08	0.08	0.059	100.3	75.0	75.0	55.3
72	BDP266	BDP266LED35-4S727DS50 DR	2835	24.5	115.7	0.86	0.106	0.08	0.08	0.058	99.4	75.0	75.0	54.4
73	BDP266	BDP266LED39-4S727DS50 DR	3159	27.5	114.9	0.965	0.107	0.08	0.08	0.059	100.3	75.0	75.0	55.3
74	BDP266	BDP266LED40-4S727DS50 DR	3240	28.5	113.7	1.0	0.108	0.081	0.081	0.059	101.3	75.9	75.9	55.3
75	BDP266	BDP266LED44-4S727DS50 DR	3520	31.5	111.7	1.105	0.109	0.082	0.082	0.06	102.2	76.9	76.9	56.3
76	BDP266	BDP266LED45-4S727DS50 DR	3600	32.0	112.5	1.123	0.109	0.082	0.082	0.06	102.2	76.9	76.9	56.3
77	BDP266	BDP266LED50-4S727DS50 DR	4050	34.0	119.1	1.193	0.103	0.077	0.077	0.057	96.6	72.2	72.2	53.4
78	BDP266	BDP266LED55-4S727DS50 DR	4480	37.5	119.5	1.316	0.103	0.077	0.077	0.057	96.6	72.2	72.2	53.4
79	BDP266	BDP266LED59-4S727DS50 DR	4800	40.5	118.5	1.421	0.104	0.078	0.078	0.057	97.5	73.1	73.1	53.4
80	BDP266	BDP266LED64-4S727DS50 DR	5120	44.5	115.1	1.561	0.106	0.08	0.08	0.058	99.4	75.0	75.0	54.4
81	BDP266	BDP266LED69-4S727DS50 DR	5530	48.0	115.2	1.684	0.106	0.08	0.08	0.058	99.4	75.0	75.0	54.4
82	BDP266	BDP266LED74-4S727DS50 DR	5846	52.0	112.4	1.825	0.11	0.083	0.083	0.061	103.1	77.8	77.8	57.2

83	BDP266	BDP266LED79-4S727DS50 DR	6400	54.0	118.5	1.895	0.104	0.078	0.078	0.057	97.5	73.1	73.1	53.4
84	BDP266	BDP266LED84-4S727DS50 DR	6720	57.0	117.9	2.0	0.104	0.078	0.078	0.057	97.5	73.1	73.1	53.4
85	BDP266	BDP266LED90-4S727DS50 DR	7110	62.0	114.7	2.175	0.107	0.08	0.08	0.059	100.3	75.0	75.0	55.3
86	BDP266	BDP266LED94-4S727DS50 DR	7426	65.0	114.2	2.281	0.107	0.08	0.08	0.059	100.3	75.0	75.0	55.3
87	BDP266	BDP266LED109-4S727DS50 DR	8690	77.0	112.9	2.702	0.108	0.081	0.081	0.059	101.3	75.9	75.9	55.3
88	BDP266	BDP266LED6-4S722DS50 DR	492	5.6	87.9	0.196	0.139	0.104	0.104	0.076	130.3	97.5	97.5	71.3
89	BDP266	BDP266LED8-4S722DS50 DR	656	7.1	92.4	0.249	0.133	0.1	0.1	0.073	124.7	93.8	93.8	68.4
90	BDP266	BDP266LED10-4S722DS50 DR	810	8.8	92.0	0.309	0.133	0.1	0.1	0.073	124.7	93.8	93.8	68.4
91	BDP266	BDP266LED12-4S722DS50 DR	984	10.0	98.4	0.351	0.125	0.094	0.094	0.069	117.2	88.1	88.1	64.7
92	BDP266	BDP266LED14-4S722DS50 DR	1148	11.6	99.0	0.407	0.124	0.093	0.093	0.068	116.3	87.2	87.2	63.8
93	BDP266	BDP266LED16-4S722DS50 DR	1296	13.2	98.2	0.463	0.125	0.094	0.094	0.069	117.2	88.1	88.1	64.7
94	BDP266	BDP266LED18-4S722DS50 DR	1458	14.8	98.5	0.519	0.125	0.094	0.094	0.069	117.2	88.1	88.1	64.7
95	BDP266	BDP266LED20-4S722DS50 DR	1620	16.6	97.6	0.582	0.126	0.095	0.095	0.069	118.1	89.1	89.1	64.7
96	BDP266	BDP266LED22-4S722DS50 DR	1782	18.4	96.8	0.646	0.127	0.095	0.095	0.07	119.1	89.1	89.1	65.6

97	BDP266	BDP266LED24-4S722DS50 DR	1944	20.5	94.8	0.719	0.129	0.097	0.097	0.071	121.0	91.0	91.0	66.6
98	BDP266	BDP266LED27-4S722DS50 DR	2187	21.0	104.1	0.737	0.118	0.088	0.088	0.065	110.6	82.5	82.5	60.9
99	BDP266	BDP266LED30-4S722DS50 DR	2430	23.5	103.4	0.825	0.119	0.089	0.089	0.065	111.6	83.5	83.5	60.9
100	BDP266	BDP266LED34-4S722DS50 DR	2754	27.0	102.0	0.947	0.12	0.09	0.09	0.066	112.5	84.4	84.4	61.9