

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	4954.0	64.61
Copper	22.09	0.29
Other Plastics	2232.41	29.12
Paint	128.0	1.67
PCB Alu	55.8	0.73
PCB Copper	36.39	0.47
PCB Iron	28.09	0.37
PCB Non-ferrous metal	0.21	0.0
PCB Support	117.91	1.54
PCB Tin	6.43	0.08
Silica Sand	0.5	0.01
Stainless Steel	2.0	0.03



Steel

83.36

1.09

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) x 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	BDP263	BDP263LED8-4S740DM50	544	4.9	111.0	0.121	0.121	0.091	0.091	0.067	0.0	0.0	0.0	0.0
2	BDP263	BDP263LED10-4S740DM50	680	6.2	109.7	0.153	0.153	0.115	0.115	0.084	0.0	0.0	0.0	0.0
3	BDP263	BDP263LED12-4S740DM50	816	7.5	108.8	0.185	0.185	0.139	0.139	0.102	0.0	0.0	0.0	0.0
4	BDP263	BDP263LED14-4S740DM50	952	8.9	107.0	0.22	0.22	0.165	0.165	0.121	0.0	0.0	0.0	0.0
5	BDP263	BDP263LED16-4S740DM50	1088	10.0	108.8	0.247	0.247	0.185	0.185	0.136	0.0	0.0	0.0	0.0
6	BDP263	BDP263LED18-4S740DM50	1224	11.2	109.3	0.277	0.277	0.208	0.208	0.152	0.0	0.0	0.0	0.0
7	BDP263	BDP263LED20-4S740DM50	1360	12.4	109.7	0.306	0.306	0.229	0.229	0.168	0.0	0.0	0.0	0.0
8	BDP263	BDP263LED22-4S740DM50	1496	13.6	110.0	0.336	0.336	0.252	0.252	0.185	0.0	0.0	0.0	0.0
9	BDP263	BDP263LED24-4S740DM50	1632	14.8	110.3	0.365	0.365	0.274	0.274	0.201	0.0	0.0	0.0	0.0
10	BDP263	BDP263LED27-4S740DM50	1836	16.6	110.6	0.41	0.41	0.307	0.307	0.226	0.0	0.0	0.0	0.0

11	BDP263	BDP263LED30-4S740DM50	2040	18.6	109.7	0.459	0.459	0.344	0.344	0.252	0.0	0.0	0.0	0.0
12	BDP263	BDP263LED35-4S740DM50	2380	22.0	108.2	0.543	0.543	0.407	0.407	0.299	0.0	0.0	0.0	0.0
13	BDP263	BDP263LED39-4S740DM50	2613	22.5	116.1	0.556	0.556	0.417	0.417	0.306	0.0	0.0	0.0	0.0
14	BDP263	BDP263LED45-4S740DM50	3015	26.5	113.8	0.654	0.654	0.491	0.491	0.36	0.0	0.0	0.0	0.0
15	BDP263	BDP263LED50-4S740DM50	3350	29.5	113.6	0.728	0.728	0.546	0.546	0.4	0.0	0.0	0.0	0.0
16	BDP263	BDP263LED55-4S740DM50	3752	33.0	113.7	0.815	0.815	0.611	0.611	0.448	0.0	0.0	0.0	0.0
17	BDP263	BDP263LED59-4S740DM50	4020	35.5	113.2	0.877	0.877	0.658	0.658	0.482	0.0	0.0	0.0	0.0
18	BDP263	BDP263LED64-4S740DM50	4288	39.0	109.9	0.963	0.963	0.722	0.722	0.53	0.0	0.0	0.0	0.0
19	BDP263	BDP263LED69-4S740DM50	4690	38.5	121.8	0.951	0.951	0.713	0.713	0.523	0.0	0.0	0.0	0.0
20	BDP263	BDP263LED74-4S740DM50	4958	41.5	119.5	1.025	1.025	0.769	0.769	0.564	0.0	0.0	0.0	0.0
21	BDP263	BDP263LED79-4S740DM50	5226	44.5	117.4	1.099	1.099	0.824	0.824	0.604	0.0	0.0	0.0	0.0
22	BDP263	BDP263LED84-4S740DM50	5544	47.5	116.7	1.173	1.173	0.88	0.88	0.645	0.0	0.0	0.0	0.0
23	BDP263	BDP263LED90-4S740DM50	5940	51.0	116.5	1.259	1.259	0.944	0.944	0.692	0.0	0.0	0.0	0.0
24	BDP263	BDP263LED94-4S740DM50	6204	54.0	114.9	1.333	1.333	1.0	1.0	0.733	0.0	0.0	0.0	0.0

25	BDP263	BDP263LED100-4S740DM50	6500	57.0	114.0	1.407	1.407	1.055	1.055	0.774	0.0	0.0	0.0	0.0
26	BDP263	BDP263LED8-4S730DM50	544	5.2	104.6	0.128	0.128	0.096	0.096	0.07	0.0	0.0	0.0	0.0
27	BDP263	BDP263LED10-4S730DM50	680	6.6	103.0	0.163	0.163	0.122	0.122	0.09	0.0	0.0	0.0	0.0
28	BDP263	BDP263LED12-4S730DM50	816	8.0	102.0	0.198	0.198	0.149	0.149	0.109	0.0	0.0	0.0	0.0
29	BDP263	BDP263LED14-4S730DM50	952	9.4	101.3	0.232	0.232	0.174	0.174	0.128	0.0	0.0	0.0	0.0
30	BDP263	BDP263LED16-4S730DM50	1088	10.6	102.6	0.262	0.262	0.197	0.197	0.144	0.0	0.0	0.0	0.0
31	BDP263	BDP263LED18-4S730DM50	1224	11.8	103.7	0.291	0.291	0.218	0.218	0.16	0.0	0.0	0.0	0.0
32	BDP263	BDP263LED20-4S730DM50	1360	13.0	104.6	0.321	0.321	0.241	0.241	0.177	0.0	0.0	0.0	0.0
33	BDP263	BDP263LED22-4S730DM50	1496	14.4	103.9	0.356	0.356	0.267	0.267	0.196	0.0	0.0	0.0	0.0
34	BDP263	BDP263LED24-4S730DM50	1632	15.8	103.3	0.39	0.39	0.292	0.292	0.215	0.0	0.0	0.0	0.0
35	BDP263	BDP263LED27-4S730DM50	1836	17.8	103.1	0.44	0.44	0.33	0.33	0.242	0.0	0.0	0.0	0.0
36	BDP263	BDP263LED30-4S730DM50	2040	19.8	103.0	0.489	0.489	0.367	0.367	0.269	0.0	0.0	0.0	0.0
37	BDP263	BDP263LED35-4S730DM50	2380	23.5	101.3	0.58	0.58	0.435	0.435	0.319	0.0	0.0	0.0	0.0
38	BDP263	BDP263LED39-4S730DM50	2613	24.0	108.9	0.593	0.593	0.445	0.445	0.326	0.0	0.0	0.0	0.0

39	BDP263	BDP263LED45-4S730DM50	3015	28.0	107.7	0.691	0.691	0.518	0.518	0.38	0.0	0.0	0.0	0.0
40	BDP263	BDP263LED50-4S730DM50	3350	31.5	106.3	0.778	0.778	0.584	0.584	0.428	0.0	0.0	0.0	0.0
41	BDP263	BDP263LED55-4S730DM50	3752	35.0	107.2	0.864	0.864	0.648	0.648	0.475	0.0	0.0	0.0	0.0
42	BDP263	BDP263LED59-4S730DM50	4020	38.0	105.8	0.938	0.938	0.704	0.704	0.516	0.0	0.0	0.0	0.0
43	BDP263	BDP263LED64-4S730DM50	4288	38.0	112.8	0.938	0.938	0.704	0.704	0.516	0.0	0.0	0.0	0.0
44	BDP263	BDP263LED69-4S730DM50	4690	41.0	114.4	1.012	1.012	0.759	0.759	0.557	0.0	0.0	0.0	0.0
45	BDP263	BDP263LED74-4S730DM50	4958	44.0	112.7	1.086	1.086	0.815	0.815	0.597	0.0	0.0	0.0	0.0
46	BDP263	BDP263LED79-4S730DM50	5280	47.5	111.2	1.173	1.173	0.88	0.88	0.645	0.0	0.0	0.0	0.0
47	BDP263	BDP263LED84-4S730DM50	5544	51.0	108.7	1.259	1.259	0.944	0.944	0.692	0.0	0.0	0.0	0.0
48	BDP263	BDP263LED90-4S730DM50	5940	55.0	108.0	1.358	1.358	1.018	1.018	0.747	0.0	0.0	0.0	0.0
49	BDP263	BDP263LED94-4S730DM50	6110	57.0	107.2	1.407	1.407	1.055	1.055	0.774	0.0	0.0	0.0	0.0
50	BDP263	BDP263LED100-4S730DM50	6500	61.0	106.6	1.506	1.506	1.129	1.129	0.828	0.0	0.0	0.0	0.0
51	BDP263	BDP263LED7-4S727DM50	476	5.1	93.3	0.126	0.126	0.095	0.095	0.069	0.0	0.0	0.0	0.0
52	BDP263	BDP263LED9-4S727DM50	612	6.6	92.7	0.163	0.163	0.122	0.122	0.09	0.0	0.0	0.0	0.0

53	BDP263	BDP263LED11-4S727DM50	748	8.3	90.1	0.205	0.205	0.154	0.154	0.113	0.0	0.0	0.0	0.0
54	BDP263	BDP263LED13-4S727DM50	884	9.7	91.1	0.24	0.24	0.18	0.18	0.132	0.0	0.0	0.0	0.0
55	BDP263	BDP263LED14-4S727DM50	952	10.4	91.5	0.257	0.257	0.193	0.193	0.141	0.0	0.0	0.0	0.0
56	BDP263	BDP263LED16-4S727DM50	1088	11.8	92.2	0.291	0.291	0.218	0.218	0.16	0.0	0.0	0.0	0.0
57	BDP263	BDP263LED18-4S727DM50	1224	13.2	92.7	0.326	0.326	0.244	0.244	0.179	0.0	0.0	0.0	0.0
58	BDP263	BDP263LED20-4S727DM50	1360	14.6	93.2	0.36	0.36	0.27	0.27	0.198	0.0	0.0	0.0	0.0
59	BDP263	BDP263LED22-4S727DM50	1496	16.2	92.3	0.4	0.4	0.3	0.3	0.22	0.0	0.0	0.0	0.0
60	BDP263	BDP263LED24-4S727DM50	1632	17.6	92.7	0.435	0.435	0.326	0.326	0.239	0.0	0.0	0.0	0.0
61	BDP263	BDP263LED27-4S727DM50	1836	20.0	91.8	0.494	0.494	0.37	0.37	0.272	0.0	0.0	0.0	0.0
62	BDP263	BDP263LED30-4S727DM50	2040	22.5	90.7	0.556	0.556	0.417	0.417	0.306	0.0	0.0	0.0	0.0
63	BDP263	BDP263LED35-4S727DM50	2345	26.5	88.5	0.654	0.654	0.491	0.491	0.36	0.0	0.0	0.0	0.0
64	BDP263	BDP263LED39-4S727DM50	2613	27.5	95.0	0.679	0.679	0.509	0.509	0.373	0.0	0.0	0.0	0.0
65	BDP263	BDP263LED45-4S727DM50	3015	32.0	94.2	0.79	0.79	0.593	0.593	0.435	0.0	0.0	0.0	0.0
66	BDP263	BDP263LED50-4S727DM50	3350	36.0	93.1	0.889	0.889	0.667	0.667	0.489	0.0	0.0	0.0	0.0

67	BDP263	BDP263LED55-4S727DM50	3696	40.0	92.4	0.988	0.988	0.741	0.741	0.543	0.0	0.0	0.0	0.0
68	BDP263	BDP263LED59-4S727DM50	4020	39.5	101.8	0.975	0.975	0.731	0.731	0.536	0.0	0.0	0.0	0.0
69	BDP263	BDP263LED64-4S727DM50	4288	42.5	100.9	1.049	1.049	0.787	0.787	0.577	0.0	0.0	0.0	0.0
70	BDP263	BDP263LED69-4S727DM50	4690	46.5	100.9	1.148	1.148	0.861	0.861	0.631	0.0	0.0	0.0	0.0
71	BDP263	BDP263LED74-4S727DM50	4884	50.0	97.7	1.235	1.235	0.926	0.926	0.679	0.0	0.0	0.0	0.0
72	BDP263	BDP263LED79-4S727DM50	5280	54.0	97.8	1.333	1.333	1.0	1.0	0.733	0.0	0.0	0.0	0.0
73	BDP263	BDP263LED84-4S727DM50	5460	57.0	95.8	1.407	1.407	1.055	1.055	0.774	0.0	0.0	0.0	0.0
74	BDP263	BDP263LED90-4S727DM50	5850	62.0	94.4	1.531	1.531	1.148	1.148	0.842	0.0	0.0	0.0	0.0
75	BDP263	BDP263LED94-4S727DM50	6110	65.0	94.0	1.605	1.605	1.204	1.204	0.883	0.0	0.0	0.0	0.0
76	BDP263	BDP263LED100-4S727DM50	6400	70.0	91.4	1.728	1.728	1.296	1.296	0.95	0.0	0.0	0.0	0.0
77	BDP263	BDP263LED7-4S722DM50	476	5.7	83.5	0.141	0.141	0.106	0.106	0.078	0.0	0.0	0.0	0.0
78	BDP263	BDP263LED9-4S722DM50	612	7.5	81.6	0.185	0.185	0.139	0.139	0.102	0.0	0.0	0.0	0.0
79	BDP263	BDP263LED11-4S722DM50	748	9.2	81.3	0.227	0.227	0.17	0.17	0.125	0.0	0.0	0.0	0.0
80	BDP263	BDP263LED12-4S722DM50	816	10.0	81.6	0.247	0.247	0.185	0.185	0.136	0.0	0.0	0.0	0.0

81	BDP263	BDP263LED14-4S722DM50	952	11.6	82.1	0.286	0.286	0.214	0.214	0.157	0.0	0.0	0.0	0.0
82	BDP263	BDP263LED16-4S722DM50	1088	13.0	83.7	0.321	0.321	0.241	0.241	0.177	0.0	0.0	0.0	0.0
83	BDP263	BDP263LED18-4S722DM50	1224	14.6	83.8	0.36	0.36	0.27	0.27	0.198	0.0	0.0	0.0	0.0
84	BDP263	BDP263LED20-4S722DM50	1360	16.4	82.9	0.405	0.405	0.304	0.304	0.223	0.0	0.0	0.0	0.0
85	BDP263	BDP263LED22-4S722DM50	1496	18.0	83.1	0.444	0.444	0.333	0.333	0.244	0.0	0.0	0.0	0.0
86	BDP263	BDP263LED24-4S722DM50	1632	19.8	82.4	0.489	0.489	0.367	0.367	0.269	0.0	0.0	0.0	0.0
87	BDP263	BDP263LED27-4S722DM50	1836	22.5	81.6	0.556	0.556	0.417	0.417	0.306	0.0	0.0	0.0	0.0
88	BDP263	BDP263LED30-4S722DM50	2010	25.0	80.4	0.617	0.617	0.463	0.463	0.339	0.0	0.0	0.0	0.0
89	BDP263	BDP263LED35-4S722DM50	2345	27.5	85.3	0.679	0.679	0.509	0.509	0.373	0.0	0.0	0.0	0.0
90	BDP263	BDP263LED39-4S722DM50	2613	30.5	85.7	0.753	0.753	0.565	0.565	0.414	0.0	0.0	0.0	0.0
91	BDP263	BDP263LED45-4S722DM50	3015	36.0	83.8	0.889	0.889	0.667	0.667	0.489	0.0	0.0	0.0	0.0
92	BDP263	BDP263LED50-4S722DM50	3350	37.0	90.5	0.914	0.914	0.685	0.685	0.503	0.0	0.0	0.0	0.0
93	BDP263	BDP263LED55-4S722DM50	3618	41.0	88.2	1.012	1.012	0.759	0.759	0.557	0.0	0.0	0.0	0.0
94	BDP263	BDP263LED59-4S722DM50	4020	44.0	91.4	1.086	1.086	0.815	0.815	0.597	0.0	0.0	0.0	0.0

95	BDP263	BDP263LED64-4S722DM50	4224	48.0	88.0	1.185	1.185	0.889	0.889	0.652	0.0	0.0	0.0	0.0
96	BDP263	BDP263LED69-4S722DM50	4620	52.0	88.8	1.284	1.284	0.963	0.963	0.706	0.0	0.0	0.0	0.0
97	BDP263	BDP263LED74-4S722DM50	4884	56.0	87.2	1.383	1.383	1.037	1.037	0.761	0.0	0.0	0.0	0.0

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	BDP263	BDP263LED8-4S740DM50	544	4.9	111.0	0.121	0.078	0.058	0.058	0.043	0.0	0.0	0.0	0.0
2	BDP263	BDP263LED10-4S740DM50	680	6.2	109.7	0.153	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
3	BDP263	BDP263LED12-4S740DM50	816	7.5	108.8	0.185	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
4	BDP263	BDP263LED14-4S740DM50	952	8.9	107.0	0.22	0.081	0.061	0.061	0.045	0.0	0.0	0.0	0.0
5	BDP263	BDP263LED16-4S740DM50	1088	10.0	108.8	0.247	0.08	0.06	0.06	0.044	0.0	0.0	0.0	0.0
6	BDP263	BDP263LED18-4S740DM50	1224	11.2	109.3	0.277	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
7	BDP263	BDP263LED20-4S740DM50	1360	12.4	109.7	0.306	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
8	BDP263	BDP263LED22-4S740DM50	1496	13.6	110.0	0.336	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
9	BDP263	BDP263LED24-4S740DM50	1632	14.8	110.3	0.365	0.078	0.058	0.058	0.043	0.0	0.0	0.0	0.0
10	BDP263	BDP263LED27-4S740DM50	1836	16.6	110.6	0.41	0.078	0.058	0.058	0.043	0.0	0.0	0.0	0.0
11	BDP263	BDP263LED30-4S740DM50	2040	18.6	109.7	0.459	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
12	BDP263	BDP263LED35-4S740DM50	2380	22.0	108.2	0.543	0.08	0.06	0.06	0.044	0.0	0.0	0.0	0.0

13	BDP263	BDP263LED39-4S740DM50	2613	22.5	116.1	0.556	0.075	0.056	0.056	0.041	0.0	0.0	0.0	0.0
14	BDP263	BDP263LED45-4S740DM50	3015	26.5	113.8	0.654	0.076	0.057	0.057	0.042	0.0	0.0	0.0	0.0
15	BDP263	BDP263LED50-4S740DM50	3350	29.5	113.6	0.728	0.076	0.057	0.057	0.042	0.0	0.0	0.0	0.0
16	BDP263	BDP263LED55-4S740DM50	3752	33.0	113.7	0.815	0.076	0.057	0.057	0.042	0.0	0.0	0.0	0.0
17	BDP263	BDP263LED59-4S740DM50	4020	35.5	113.2	0.877	0.076	0.057	0.057	0.042	0.0	0.0	0.0	0.0
18	BDP263	BDP263LED64-4S740DM50	4288	39.0	109.9	0.963	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
19	BDP263	BDP263LED69-4S740DM50	4690	38.5	121.8	0.951	0.071	0.053	0.053	0.039	0.0	0.0	0.0	0.0
20	BDP263	BDP263LED74-4S740DM50	4958	41.5	119.5	1.025	0.073	0.055	0.055	0.04	0.0	0.0	0.0	0.0
21	BDP263	BDP263LED79-4S740DM50	5226	44.5	117.4	1.099	0.074	0.055	0.055	0.041	0.0	0.0	0.0	0.0
22	BDP263	BDP263LED84-4S740DM50	5544	47.5	116.7	1.173	0.074	0.055	0.055	0.041	0.0	0.0	0.0	0.0
23	BDP263	BDP263LED90-4S740DM50	5940	51.0	116.5	1.259	0.074	0.055	0.055	0.041	0.0	0.0	0.0	0.0
24	BDP263	BDP263LED94-4S740DM50	6204	54.0	114.9	1.333	0.075	0.056	0.056	0.041	0.0	0.0	0.0	0.0
25	BDP263	BDP263LED100-4S740DM50	6500	57.0	114.0	1.407	0.076	0.057	0.057	0.042	0.0	0.0	0.0	0.0
26	BDP263	BDP263LED8-4S730DM50	544	5.2	104.6	0.128	0.082	0.061	0.061	0.045	0.0	0.0	0.0	0.0

27	BDP263	BDP263LED10-4S730DM50	680	6.6	103.0	0.163	0.084	0.063	0.063	0.046	0.0	0.0	0.0	0.0
28	BDP263	BDP263LED12-4S730DM50	816	8.0	102.0	0.198	0.085	0.064	0.064	0.047	0.0	0.0	0.0	0.0
29	BDP263	BDP263LED14-4S730DM50	952	9.4	101.3	0.232	0.085	0.064	0.064	0.047	0.0	0.0	0.0	0.0
30	BDP263	BDP263LED16-4S730DM50	1088	10.6	102.6	0.262	0.084	0.063	0.063	0.046	0.0	0.0	0.0	0.0
31	BDP263	BDP263LED18-4S730DM50	1224	11.8	103.7	0.291	0.083	0.062	0.062	0.046	0.0	0.0	0.0	0.0
32	BDP263	BDP263LED20-4S730DM50	1360	13.0	104.6	0.321	0.082	0.061	0.061	0.045	0.0	0.0	0.0	0.0
33	BDP263	BDP263LED22-4S730DM50	1496	14.4	103.9	0.356	0.083	0.062	0.062	0.046	0.0	0.0	0.0	0.0
34	BDP263	BDP263LED24-4S730DM50	1632	15.8	103.3	0.39	0.083	0.062	0.062	0.046	0.0	0.0	0.0	0.0
35	BDP263	BDP263LED27-4S730DM50	1836	17.8	103.1	0.44	0.084	0.063	0.063	0.046	0.0	0.0	0.0	0.0
36	BDP263	BDP263LED30-4S730DM50	2040	19.8	103.0	0.489	0.084	0.063	0.063	0.046	0.0	0.0	0.0	0.0
37	BDP263	BDP263LED35-4S730DM50	2380	23.5	101.3	0.58	0.085	0.064	0.064	0.047	0.0	0.0	0.0	0.0
38	BDP263	BDP263LED39-4S730DM50	2613	24.0	108.9	0.593	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
39	BDP263	BDP263LED45-4S730DM50	3015	28.0	107.7	0.691	0.08	0.06	0.06	0.044	0.0	0.0	0.0	0.0
40	BDP263	BDP263LED50-4S730DM50	3350	31.5	106.3	0.778	0.081	0.061	0.061	0.045	0.0	0.0	0.0	0.0

41	BDP263	BDP263LED55-4S730DM50	3752	35.0	107.2	0.864	0.08	0.06	0.06	0.044	0.0	0.0	0.0	0.0
42	BDP263	BDP263LED59-4S730DM50	4020	38.0	105.8	0.938	0.082	0.061	0.061	0.045	0.0	0.0	0.0	0.0
43	BDP263	BDP263LED64-4S730DM50	4288	38.0	112.8	0.938	0.077	0.058	0.058	0.042	0.0	0.0	0.0	0.0
44	BDP263	BDP263LED69-4S730DM50	4690	41.0	114.4	1.012	0.076	0.057	0.057	0.042	0.0	0.0	0.0	0.0
45	BDP263	BDP263LED74-4S730DM50	4958	44.0	112.7	1.086	0.077	0.058	0.058	0.042	0.0	0.0	0.0	0.0
46	BDP263	BDP263LED79-4S730DM50	5280	47.5	111.2	1.173	0.077	0.058	0.058	0.042	0.0	0.0	0.0	0.0
47	BDP263	BDP263LED84-4S730DM50	5544	51.0	108.7	1.259	0.079	0.059	0.059	0.043	0.0	0.0	0.0	0.0
48	BDP263	BDP263LED90-4S730DM50	5940	55.0	108.0	1.358	0.08	0.06	0.06	0.044	0.0	0.0	0.0	0.0
49	BDP263	BDP263LED94-4S730DM50	6110	57.0	107.2	1.407	0.08	0.06	0.06	0.044	0.0	0.0	0.0	0.0
50	BDP263	BDP263LED100-4S730DM50	6500	61.0	106.6	1.506	0.081	0.061	0.061	0.045	0.0	0.0	0.0	0.0
51	BDP263	BDP263LED7-4S727DM50	476	5.1	93.3	0.126	0.093	0.07	0.07	0.051	0.0	0.0	0.0	0.0
52	BDP263	BDP263LED9-4S727DM50	612	6.6	92.7	0.163	0.093	0.07	0.07	0.051	0.0	0.0	0.0	0.0
53	BDP263	BDP263LED11-4S727DM50	748	8.3	90.1	0.205	0.096	0.072	0.072	0.053	0.0	0.0	0.0	0.0
54	BDP263	BDP263LED13-4S727DM50	884	9.7	91.1	0.24	0.095	0.071	0.071	0.052	0.0	0.0	0.0	0.0

55	BDP263	BDP263LED14-4S727DM50	952	10.4	91.5	0.257	0.095	0.071	0.071	0.052	0.0	0.0	0.0	0.0
56	BDP263	BDP263LED16-4S727DM50	1088	11.8	92.2	0.291	0.094	0.071	0.071	0.052	0.0	0.0	0.0	0.0
57	BDP263	BDP263LED18-4S727DM50	1224	13.2	92.7	0.326	0.093	0.07	0.07	0.051	0.0	0.0	0.0	0.0
58	BDP263	BDP263LED20-4S727DM50	1360	14.6	93.2	0.36	0.093	0.07	0.07	0.051	0.0	0.0	0.0	0.0
59	BDP263	BDP263LED22-4S727DM50	1496	16.2	92.3	0.4	0.094	0.071	0.071	0.052	0.0	0.0	0.0	0.0
60	BDP263	BDP263LED24-4S727DM50	1632	17.6	92.7	0.435	0.093	0.07	0.07	0.051	0.0	0.0	0.0	0.0
61	BDP263	BDP263LED27-4S727DM50	1836	20.0	91.8	0.494	0.094	0.071	0.071	0.052	0.0	0.0	0.0	0.0
62	BDP263	BDP263LED30-4S727DM50	2040	22.5	90.7	0.556	0.096	0.072	0.072	0.053	0.0	0.0	0.0	0.0
63	BDP263	BDP263LED35-4S727DM50	2345	26.5	88.5	0.654	0.097	0.073	0.073	0.053	0.0	0.0	0.0	0.0
64	BDP263	BDP263LED39-4S727DM50	2613	27.5	95.0	0.679	0.091	0.068	0.068	0.05	0.0	0.0	0.0	0.0
65	BDP263	BDP263LED45-4S727DM50	3015	32.0	94.2	0.79	0.092	0.069	0.069	0.051	0.0	0.0	0.0	0.0
66	BDP263	BDP263LED50-4S727DM50	3350	36.0	93.1	0.889	0.092	0.069	0.069	0.051	0.0	0.0	0.0	0.0
67	BDP263	BDP263LED55-4S727DM50	3696	40.0	92.4	0.988	0.094	0.071	0.071	0.052	0.0	0.0	0.0	0.0
68	BDP263	BDP263LED59-4S727DM50	4020	39.5	101.8	0.975	0.085	0.064	0.064	0.047	0.0	0.0	0.0	0.0

69	BDP263	BDP263LED64-4S727DM50	4288	42.5	100.9	1.049	0.086	0.065	0.065	0.047	0.0	0.0	0.0	0.0
70	BDP263	BDP263LED69-4S727DM50	4690	46.5	100.9	1.148	0.086	0.065	0.065	0.047	0.0	0.0	0.0	0.0
71	BDP263	BDP263LED74-4S727DM50	4884	50.0	97.7	1.235	0.089	0.067	0.067	0.049	0.0	0.0	0.0	0.0
72	BDP263	BDP263LED79-4S727DM50	5280	54.0	97.8	1.333	0.088	0.066	0.066	0.048	0.0	0.0	0.0	0.0
73	BDP263	BDP263LED84-4S727DM50	5460	57.0	95.8	1.407	0.09	0.068	0.068	0.05	0.0	0.0	0.0	0.0
74	BDP263	BDP263LED90-4S727DM50	5850	62.0	94.4	1.531	0.092	0.069	0.069	0.051	0.0	0.0	0.0	0.0
75	BDP263	BDP263LED94-4S727DM50	6110	65.0	94.0	1.605	0.091	0.068	0.068	0.05	0.0	0.0	0.0	0.0
76	BDP263	BDP263LED100-4S727DM50	6400	70.0	91.4	1.728	0.095	0.071	0.071	0.052	0.0	0.0	0.0	0.0
77	BDP263	BDP263LED7-4S722DM50	476	5.7	83.5	0.141	0.104	0.078	0.078	0.057	0.0	0.0	0.0	0.0
78	BDP263	BDP263LED9-4S722DM50	612	7.5	81.6	0.185	0.106	0.08	0.08	0.058	0.0	0.0	0.0	0.0
79	BDP263	BDP263LED11-4S722DM50	748	9.2	81.3	0.227	0.106	0.08	0.08	0.058	0.0	0.0	0.0	0.0
80	BDP263	BDP263LED12-4S722DM50	816	10.0	81.6	0.247	0.106	0.08	0.08	0.058	0.0	0.0	0.0	0.0
81	BDP263	BDP263LED14-4S722DM50	952	11.6	82.1	0.286	0.105	0.079	0.079	0.058	0.0	0.0	0.0	0.0
82	BDP263	BDP263LED16-4S722DM50	1088	13.0	83.7	0.321	0.103	0.077	0.077	0.057	0.0	0.0	0.0	0.0

83	BDP263	BDP263LED18-4S722DM50	1224	14.6	83.8	0.36	0.103	0.077	0.077	0.057	0.0	0.0	0.0	0.0
84	BDP263	BDP263LED20-4S722DM50	1360	16.4	82.9	0.405	0.104	0.078	0.078	0.057	0.0	0.0	0.0	0.0
85	BDP263	BDP263LED22-4S722DM50	1496	18.0	83.1	0.444	0.104	0.078	0.078	0.057	0.0	0.0	0.0	0.0
86	BDP263	BDP263LED24-4S722DM50	1632	19.8	82.4	0.489	0.105	0.079	0.079	0.058	0.0	0.0	0.0	0.0
87	BDP263	BDP263LED27-4S722DM50	1836	22.5	81.6	0.556	0.106	0.08	0.08	0.058	0.0	0.0	0.0	0.0
88	BDP263	BDP263LED30-4S722DM50	2010	25.0	80.4	0.617	0.107	0.08	0.08	0.059	0.0	0.0	0.0	0.0
89	BDP263	BDP263LED35-4S722DM50	2345	27.5	85.3	0.679	0.101	0.076	0.076	0.056	0.0	0.0	0.0	0.0
90	BDP263	BDP263LED39-4S722DM50	2613	30.5	85.7	0.753	0.101	0.076	0.076	0.056	0.0	0.0	0.0	0.0
91	BDP263	BDP263LED45-4S722DM50	3015	36.0	83.8	0.889	0.103	0.077	0.077	0.057	0.0	0.0	0.0	0.0
92	BDP263	BDP263LED50-4S722DM50	3350	37.0	90.5	0.914	0.095	0.071	0.071	0.052	0.0	0.0	0.0	0.0
93	BDP263	BDP263LED55-4S722DM50	3618	41.0	88.2	1.012	0.098	0.074	0.074	0.054	0.0	0.0	0.0	0.0
94	BDP263	BDP263LED59-4S722DM50	4020	44.0	91.4	1.086	0.094	0.071	0.071	0.052	0.0	0.0	0.0	0.0
95	BDP263	BDP263LED64-4S722DM50	4224	48.0	88.0	1.185	0.098	0.074	0.074	0.054	0.0	0.0	0.0	0.0
96	BDP263	BDP263LED69-4S722DM50	4620	52.0	88.8	1.284	0.098	0.074	0.074	0.054	0.0	0.0	0.0	0.0

97	BDP263	BDP263LED74-4S722DM50	4884	56.0	87.2	1.383	0.1	0.075	0.075	0.055	0.0	0.0	0.0	0.0
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