

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	4646.0	62.31
Copper	31.17	0.42
Other Plastics	2276.76	30.54
Paint	159.0	2.13
PCB Alu	27.9	0.37
PCB Copper	37.88	0.51
PCB Iron	32.51	0.44
PCB Non-ferrous metal	0.14	0.0
PCB Support	130.87	1.76
PCB Tin	3.54	0.05
Silica Sand	0.25	0.0
Stainless Steel	2.0	0.03



Steel	107.69	1.44
Tin	0.26	0.0

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	BDP267	BDP267LED8-4S740DM33	680	5.6	121.4	0.273	0.273	0.205	0.205	0.15	184.1	138.3	138.3	101.2
2	BDP267	BDP267LED10-4S740DM33	850	6.8	125.0	0.332	0.332	0.249	0.249	0.183	223.9	167.9	167.9	123.4
3	BDP267	BDP267LED12-4S740DM33	1020	7.7	132.5	0.376	0.376	0.282	0.282	0.207	253.6	190.2	190.2	139.6
4	BDP267	BDP267LED14-4S740DM33	1190	8.9	133.7	0.434	0.434	0.326	0.326	0.239	292.7	219.9	219.9	161.2
5	BDP267	BDP267LED16-4S740DM33	1360	10.0	136.0	0.488	0.488	0.366	0.366	0.268	329.1	246.8	246.8	180.8
6	BDP267	BDP267LED18-4S740DM33	1530	11.2	136.6	0.546	0.546	0.41	0.41	0.3	368.2	276.5	276.5	202.3
7	BDP267	BDP267LED20-4S740DM33	1700	12.4	137.1	0.605	0.605	0.454	0.454	0.333	408.0	306.2	306.2	224.6
8	BDP267	BDP267LED22-4S740DM33	1848	13.6	135.9	0.663	0.663	0.497	0.497	0.365	447.2	335.2	335.2	246.2
9	BDP267	BDP267LED24-4S740DM33	2016	15.0	134.4	0.732	0.732	0.549	0.549	0.403	493.7	370.3	370.3	271.8
10	BDP267	BDP267LED27-4S740DM33	2268	17.0	133.4	0.829	0.829	0.622	0.622	0.456	559.1	419.5	419.5	307.5

11	BDP267	BDP267LED30-4S740DM33	2520	19.0	132.6	0.927	0.927	0.695	0.695	0.51	625.2	468.7	468.7	344.0
12	BDP267	BDP267LED34-4S740DM33	2856	20.0	142.8	0.976	0.976	0.732	0.732	0.537	658.3	493.7	493.7	362.2
13	BDP267	BDP267LED35-4S740DM33	2940	20.5	143.4	1.0	1.0	0.75	0.75	0.55	674.5	505.8	505.8	370.9
14	BDP267	BDP267LED39-4S740DM33	3276	23.0	142.4	1.122	1.122	0.842	0.842	0.617	756.7	567.9	567.9	416.1
15	BDP267	BDP267LED40-4S740DM33	3360	23.5	143.0	1.146	1.146	0.859	0.859	0.63	772.9	579.4	579.4	424.9
16	BDP267	BDP267LED44-4S740DM33	3696	26.0	142.2	1.268	1.268	0.951	0.951	0.697	855.2	641.4	641.4	470.1
17	BDP267	BDP267LED45-4S740DM33	3780	27.0	140.0	1.317	1.317	0.988	0.988	0.724	888.3	666.4	666.4	488.3
18	BDP267	BDP267LED50-4S740DM33	4200	28.5	147.4	1.39	1.39	1.042	1.042	0.764	937.5	702.8	702.8	515.3
19	BDP267	BDP267LED55-4S740DM33	4704	31.5	149.3	1.537	1.537	1.153	1.153	0.845	1036.6	777.6	777.6	569.9
20	BDP267	BDP267LED59-4S740DM33	5040	33.5	150.4	1.634	1.634	1.225	1.225	0.899	1102.1	826.2	826.2	606.3
21	BDP267	BDP267LED64-4S740DM33	5312	37.0	143.6	1.805	1.805	1.354	1.354	0.993	1217.4	913.2	913.2	669.7
22	BDP267	BDP267LED69-4S740DM33	5810	40.0	145.2	1.951	1.951	1.463	1.463	1.073	1315.9	986.7	986.7	723.7
23	BDP267	BDP267LED74-4S740DM33	6142	43.0	142.8	2.098	2.098	1.573	1.573	1.154	1415.0	1060.9	1060.9	778.3
24	BDP267	BDP267LED79-4S740DM33	6474	44.5	145.5	2.171	2.171	1.628	1.628	1.194	1464.2	1098.0	1098.0	805.3

25	BDP267	BDP267LED84-4S740DM33	6972	47.5	146.8	2.317	2.317	1.738	1.738	1.274	1562.7	1172.2	1172.2	859.2
26	BDP267	BDP267LED90-4S740DM33	7470	51.0	146.5	2.488	2.488	1.866	1.866	1.368	1678.0	1258.5	1258.5	922.6
27	BDP267	BDP267LED94-4S740DM33	7802	54.0	144.5	2.634	2.634	1.975	1.975	1.449	1776.5	1332.0	1332.0	977.3
28	BDP267	BDP267LED109-4S740DM33	9130	63.0	144.9	3.073	3.073	2.305	2.305	1.69	2072.6	1554.6	1554.6	1139.8
29	BDP267	BDP267LED120-4S740DM33	9960	71.0	140.3	3.463	3.463	2.597	2.597	1.905	2335.6	1751.5	1751.5	1284.8
30	BDP267	BDP267LED130-4S740DM33	10660	77.0	138.4	3.756	3.756	2.817	2.817	2.066	2533.2	1899.9	1899.9	1393.4
31	BDP267	BDP267LED8-4S730DM33	680	5.9	115.3	0.288	0.288	0.216	0.216	0.158	194.2	145.7	145.7	106.6
32	BDP267	BDP267LED10-4S730DM33	850	7.1	119.7	0.346	0.346	0.259	0.259	0.19	233.4	174.7	174.7	128.1
33	BDP267	BDP267LED12-4S730DM33	1020	8.2	124.4	0.4	0.4	0.3	0.3	0.22	269.8	202.3	202.3	148.4
34	BDP267	BDP267LED14-4S730DM33	1190	9.4	126.6	0.459	0.459	0.344	0.344	0.252	309.6	232.0	232.0	170.0
35	BDP267	BDP267LED16-4S730DM33	1360	10.6	128.3	0.517	0.517	0.388	0.388	0.284	348.7	261.7	261.7	191.5
36	BDP267	BDP267LED18-4S730DM33	1530	11.8	129.7	0.576	0.576	0.432	0.432	0.317	388.5	291.4	291.4	213.8
37	BDP267	BDP267LED20-4S730DM33	1680	13.2	127.3	0.644	0.644	0.483	0.483	0.354	434.3	325.8	325.8	238.8
38	BDP267	BDP267LED22-4S730DM33	1848	14.6	126.6	0.712	0.712	0.534	0.534	0.392	480.2	360.2	360.2	264.4

39	BDP267	BDP267LED24-4S730DM33	2016	16.0	126.0	0.78	0.78	0.585	0.585	0.429	526.1	394.6	394.6	289.3
40	BDP267	BDP267LED27-4S730DM33	2268	18.0	126.0	0.878	0.878	0.658	0.658	0.483	592.2	443.8	443.8	325.8
41	BDP267	BDP267LED30-4S730DM33	2520	20.5	122.9	1.0	1.0	0.75	0.75	0.55	674.5	505.8	505.8	370.9
42	BDP267	BDP267LED34-4S730DM33	2856	21.0	136.0	1.024	1.024	0.768	0.768	0.563	690.6	518.0	518.0	379.7
43	BDP267	BDP267LED35-4S730DM33	2940	22.0	133.6	1.073	1.073	0.805	0.805	0.59	723.7	542.9	542.9	397.9
44	BDP267	BDP267LED39-4S730DM33	3276	24.5	133.7	1.195	1.195	0.896	0.896	0.657	806.0	604.3	604.3	443.1
45	BDP267	BDP267LED40-4S730DM33	3360	25.0	134.4	1.22	1.22	0.915	0.915	0.671	822.8	617.1	617.1	452.6
46	BDP267	BDP267LED44-4S730DM33	3696	28.0	132.0	1.366	1.366	1.025	1.025	0.751	921.3	691.3	691.3	506.5
47	BDP267	BDP267LED45-4S730DM33	3780	28.5	132.6	1.39	1.39	1.042	1.042	0.764	937.5	702.8	702.8	515.3
48	BDP267	BDP267LED50-4S730DM33	4200	30.0	140.0	1.463	1.463	1.097	1.097	0.805	986.7	739.9	739.9	542.9
49	BDP267	BDP267LED55-4S730DM33	4704	33.5	140.4	1.634	1.634	1.225	1.225	0.899	1102.1	826.2	826.2	606.3
50	BDP267	BDP267LED59-4S730DM33	5040	36.0	140.0	1.756	1.756	1.317	1.317	0.966	1184.3	888.3	888.3	651.5
51	BDP267	BDP267LED64-4S730DM33	5312	39.0	136.2	1.902	1.902	1.426	1.426	1.046	1282.8	961.8	961.8	705.5
52	BDP267	BDP267LED69-4S730DM33	5810	42.5	136.7	2.073	2.073	1.555	1.555	1.14	1398.1	1048.8	1048.8	768.9

53	BDP267	BDP267LED74-4S730DM33	6142	46.0	133.5	2.244	2.244	1.683	1.683	1.234	1513.5	1135.1	1135.1	832.3
54	BDP267	BDP267LED79-4S730DM33	6640	47.5	139.8	2.317	2.317	1.738	1.738	1.274	1562.7	1172.2	1172.2	859.2
55	BDP267	BDP267LED84-4S730DM33	6972	51.0	136.7	2.488	2.488	1.866	1.866	1.368	1678.0	1258.5	1258.5	922.6
56	BDP267	BDP267LED90-4S730DM33	7470	55.0	135.8	2.683	2.683	2.012	2.012	1.476	1809.5	1357.0	1357.0	995.5
57	BDP267	BDP267LED94-4S730DM33	7802	57.0	136.9	2.78	2.78	2.085	2.085	1.529	1875.0	1406.2	1406.2	1031.2
58	BDP267	BDP267LED109-4S730DM33	9130	68.0	134.3	3.317	3.317	2.488	2.488	1.824	2237.2	1678.0	1678.0	1230.2
59	BDP267	BDP267LED120-4S730DM33	9840	76.0	129.5	3.707	3.707	2.78	2.78	2.039	2500.2	1875.0	1875.0	1375.2
60	BDP267	BDP267LED8-4S727DM33	680	6.5	104.6	0.317	0.317	0.238	0.238	0.174	213.8	160.5	160.5	117.4
61	BDP267	BDP267LED10-4S727DM33	850	7.9	107.6	0.385	0.385	0.289	0.289	0.212	259.7	194.9	194.9	143.0
62	BDP267	BDP267LED12-4S727DM33	1020	9.1	112.1	0.444	0.444	0.333	0.333	0.244	299.5	224.6	224.6	164.6
63	BDP267	BDP267LED14-4S727DM33	1190	10.4	114.4	0.507	0.507	0.38	0.38	0.279	341.9	256.3	256.3	188.2
64	BDP267	BDP267LED16-4S727DM33	1360	11.8	115.3	0.576	0.576	0.432	0.432	0.317	388.5	291.4	291.4	213.8
65	BDP267	BDP267LED18-4S727DM33	1512	13.2	114.5	0.644	0.644	0.483	0.483	0.354	434.3	325.8	325.8	238.8
66	BDP267	BDP267LED20-4S727DM33	1680	14.8	113.5	0.722	0.722	0.541	0.541	0.397	487.0	364.9	364.9	267.8

67	BDP267	BDP267LED22-4S727DM33	1848	16.4	112.7	0.8	0.8	0.6	0.6	0.44	539.6	404.7	404.7	296.8
68	BDP267	BDP267LED24-4S727DM33	2016	18.0	112.0	0.878	0.878	0.658	0.658	0.483	592.2	443.8	443.8	325.8
69	BDP267	BDP267LED27-4S727DM33	2268	20.5	110.6	1.0	1.0	0.75	0.75	0.55	674.5	505.8	505.8	370.9
70	BDP267	BDP267LED30-4S727DM33	2520	21.0	120.0	1.024	1.024	0.768	0.768	0.563	690.6	518.0	518.0	379.7
71	BDP267	BDP267LED34-4S727DM33	2856	24.0	119.0	1.171	1.171	0.878	0.878	0.644	789.8	592.2	592.2	434.3
72	BDP267	BDP267LED35-4S727DM33	2940	24.5	120.0	1.195	1.195	0.896	0.896	0.657	806.0	604.3	604.3	443.1
73	BDP267	BDP267LED39-4S727DM33	3276	27.5	119.1	1.341	1.341	1.006	1.006	0.738	904.4	678.5	678.5	497.7
74	BDP267	BDP267LED40-4S727DM33	3360	28.5	117.9	1.39	1.39	1.042	1.042	0.764	937.5	702.8	702.8	515.3
75	BDP267	BDP267LED44-4S727DM33	3652	31.5	115.9	1.537	1.537	1.153	1.153	0.845	1036.6	777.6	777.6	569.9
76	BDP267	BDP267LED45-4S727DM33	3735	32.0	116.7	1.561	1.561	1.171	1.171	0.859	1052.8	789.8	789.8	579.4
77	BDP267	BDP267LED50-4S727DM33	4200	34.0	123.5	1.659	1.659	1.244	1.244	0.912	1118.9	839.0	839.0	615.1
78	BDP267	BDP267LED55-4S727DM33	4648	37.5	123.9	1.829	1.829	1.372	1.372	1.006	1233.6	925.3	925.3	678.5
79	BDP267	BDP267LED59-4S727DM33	4980	40.5	123.0	1.976	1.976	1.482	1.482	1.087	1332.7	999.5	999.5	733.1
80	BDP267	BDP267LED64-4S727DM33	5312	44.5	119.4	2.171	2.171	1.628	1.628	1.194	1464.2	1098.0	1098.0	805.3

81	BDP267	BDP267LED69-4S727DM33	5810	48.0	121.0	2.341	2.341	1.756	1.756	1.288	1578.9	1184.3	1184.3	868.7
82	BDP267	BDP267LED74-4S727DM33	6142	52.0	118.1	2.537	2.537	1.903	1.903	1.395	1711.1	1283.5	1283.5	940.9
83	BDP267	BDP267LED79-4S727DM33	6640	54.0	123.0	2.634	2.634	1.975	1.975	1.449	1776.5	1332.0	1332.0	977.3
84	BDP267	BDP267LED84-4S727DM33	6972	57.0	122.3	2.78	2.78	2.085	2.085	1.529	1875.0	1406.2	1406.2	1031.2
85	BDP267	BDP267LED90-4S727DM33	7470	62.0	120.5	3.024	3.024	2.268	2.268	1.663	2039.5	1529.7	1529.7	1121.6
86	BDP267	BDP267LED94-4S727DM33	7802	65.0	120.0	3.171	3.171	2.378	2.378	1.744	2138.7	1603.8	1603.8	1176.2
87	BDP267	BDP267LED109-4S727DM33	9020	77.0	117.1	3.756	3.756	2.817	2.817	2.066	2533.2	1899.9	1899.9	1393.4
88	BDP267	BDP267LED6-4S722DM33	510	5.6	91.1	0.273	0.273	0.205	0.205	0.15	184.1	138.3	138.3	101.2
89	BDP267	BDP267LED8-4S722DM33	680	7.1	95.8	0.346	0.346	0.259	0.259	0.19	233.4	174.7	174.7	128.1
90	BDP267	BDP267LED10-4S722DM33	840	8.8	95.5	0.429	0.429	0.322	0.322	0.236	289.3	217.2	217.2	159.2
91	BDP267	BDP267LED12-4S722DM33	1020	10.0	102.0	0.488	0.488	0.366	0.366	0.268	329.1	246.8	246.8	180.8
92	BDP267	BDP267LED14-4S722DM33	1190	11.6	102.6	0.566	0.566	0.424	0.424	0.311	381.7	286.0	286.0	209.8
93	BDP267	BDP267LED16-4S722DM33	1344	13.2	101.8	0.644	0.644	0.483	0.483	0.354	434.3	325.8	325.8	238.8
94	BDP267	BDP267LED18-4S722DM33	1512	14.8	102.2	0.722	0.722	0.541	0.541	0.397	487.0	364.9	364.9	267.8

95	BDP267	BDP267LED20-4S722DM33	1680	16.6	101.2	0.81	0.81	0.608	0.608	0.446	546.3	410.1	410.1	300.8
96	BDP267	BDP267LED22-4S722DM33	1848	18.4	100.4	0.898	0.898	0.673	0.673	0.494	605.7	453.9	453.9	333.2
97	BDP267	BDP267LED24-4S722DM33	2016	20.5	98.3	1.0	1.0	0.75	0.75	0.55	674.5	505.8	505.8	370.9
98	BDP267	BDP267LED27-4S722DM33	2268	21.0	108.0	1.024	1.024	0.768	0.768	0.563	690.6	518.0	518.0	379.7
99	BDP267	BDP267LED30-4S722DM33	2520	23.5	107.2	1.146	1.146	0.859	0.859	0.63	772.9	579.4	579.4	424.9
100	BDP267	BDP267LED34-4S722DM33	2856	27.0	105.8	1.317	1.317	0.988	0.988	0.724	888.3	666.4	666.4	488.3

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	BDP267	BDP267LED8-4S740DM33	680	5.6	121.4	0.273	0.141	0.106	0.106	0.078	95.1	71.5	71.5	52.6
2	BDP267	BDP267LED10-4S740DM33	850	6.8	125.0	0.332	0.137	0.103	0.103	0.075	92.4	69.5	69.5	50.6
3	BDP267	BDP267LED12-4S740DM33	1020	7.7	132.5	0.376	0.129	0.097	0.097	0.071	87.0	65.4	65.4	47.9
4	BDP267	BDP267LED14-4S740DM33	1190	8.9	133.7	0.434	0.128	0.096	0.096	0.07	86.3	64.7	64.7	47.2
5	BDP267	BDP267LED16-4S740DM33	1360	10.0	136.0	0.488	0.125	0.094	0.094	0.069	84.3	63.4	63.4	46.5
6	BDP267	BDP267LED18-4S740DM33	1530	11.2	136.6	0.546	0.125	0.094	0.094	0.069	84.3	63.4	63.4	46.5
7	BDP267	BDP267LED20-4S740DM33	1700	12.4	137.1	0.605	0.125	0.094	0.094	0.069	84.3	63.4	63.4	46.5
8	BDP267	BDP267LED22-4S740DM33	1848	13.6	135.9	0.663	0.125	0.094	0.094	0.069	84.3	63.4	63.4	46.5
9	BDP267	BDP267LED24-4S740DM33	2016	15.0	134.4	0.732	0.127	0.095	0.095	0.07	85.7	64.1	64.1	47.2
10	BDP267	BDP267LED27-4S740DM33	2268	17.0	133.4	0.829	0.128	0.096	0.096	0.07	86.3	64.7	64.7	47.2
11	BDP267	BDP267LED30-4S740DM33	2520	19.0	132.6	0.927	0.129	0.097	0.097	0.071	87.0	65.4	65.4	47.9
12	BDP267	BDP267LED34-4S740DM33	2856	20.0	142.8	0.976	0.12	0.09	0.09	0.066	80.9	60.7	60.7	44.5

13	BDP267	BDP267LED35-4S740DM33	2940	20.5	143.4	1.0	0.119	0.089	0.089	0.065	80.3	60.0	60.0	43.8
14	BDP267	BDP267LED39-4S740DM33	3276	23.0	142.4	1.122	0.12	0.09	0.09	0.066	80.9	60.7	60.7	44.5
15	BDP267	BDP267LED40-4S740DM33	3360	23.5	143.0	1.146	0.119	0.089	0.089	0.065	80.3	60.0	60.0	43.8
16	BDP267	BDP267LED44-4S740DM33	3696	26.0	142.2	1.268	0.12	0.09	0.09	0.066	80.9	60.7	60.7	44.5
17	BDP267	BDP267LED45-4S740DM33	3780	27.0	140.0	1.317	0.122	0.091	0.091	0.067	82.3	61.4	61.4	45.2
18	BDP267	BDP267LED50-4S740DM33	4200	28.5	147.4	1.39	0.115	0.086	0.086	0.063	77.6	58.0	58.0	42.5
19	BDP267	BDP267LED55-4S740DM33	4704	31.5	149.3	1.537	0.114	0.086	0.086	0.063	76.9	58.0	58.0	42.5
20	BDP267	BDP267LED59-4S740DM33	5040	33.5	150.4	1.634	0.113	0.085	0.085	0.062	76.2	57.3	57.3	41.8
21	BDP267	BDP267LED64-4S740DM33	5312	37.0	143.6	1.805	0.119	0.089	0.089	0.065	80.3	60.0	60.0	43.8
22	BDP267	BDP267LED69-4S740DM33	5810	40.0	145.2	1.951	0.117	0.088	0.088	0.064	78.9	59.4	59.4	43.2
23	BDP267	BDP267LED74-4S740DM33	6142	43.0	142.8	2.098	0.12	0.09	0.09	0.066	80.9	60.7	60.7	44.5
24	BDP267	BDP267LED79-4S740DM33	6474	44.5	145.5	2.171	0.117	0.088	0.088	0.064	78.9	59.4	59.4	43.2
25	BDP267	BDP267LED84-4S740DM33	6972	47.5	146.8	2.317	0.116	0.087	0.087	0.064	78.2	58.7	58.7	43.2
26	BDP267	BDP267LED90-4S740DM33	7470	51.0	146.5	2.488	0.117	0.088	0.088	0.064	78.9	59.4	59.4	43.2

27	BDP267	BDP267LED94-4S740DM33	7802	54.0	144.5	2.634	0.119	0.089	0.089	0.065	80.3	60.0	60.0	43.8
28	BDP267	BDP267LED109-4S740DM33	9130	63.0	144.9	3.073	0.117	0.088	0.088	0.064	78.9	59.4	59.4	43.2
29	BDP267	BDP267LED120-4S740DM33	9960	71.0	140.3	3.463	0.121	0.091	0.091	0.067	81.6	61.4	61.4	45.2
30	BDP267	BDP267LED130-4S740DM33	10660	77.0	138.4	3.756	0.124	0.093	0.093	0.068	83.6	62.7	62.7	45.9
31	BDP267	BDP267LED8-4S730DM33	680	5.9	115.3	0.288	0.148	0.111	0.111	0.081	99.8	74.9	74.9	54.6
32	BDP267	BDP267LED10-4S730DM33	850	7.1	119.7	0.346	0.143	0.107	0.107	0.079	96.4	72.2	72.2	53.3
33	BDP267	BDP267LED12-4S730DM33	1020	8.2	124.4	0.4	0.137	0.103	0.103	0.075	92.4	69.5	69.5	50.6
34	BDP267	BDP267LED14-4S730DM33	1190	9.4	126.6	0.459	0.135	0.101	0.101	0.074	91.1	68.1	68.1	49.9
35	BDP267	BDP267LED16-4S730DM33	1360	10.6	128.3	0.517	0.133	0.1	0.1	0.073	89.7	67.4	67.4	49.2
36	BDP267	BDP267LED18-4S730DM33	1530	11.8	129.7	0.576	0.132	0.099	0.099	0.073	89.0	66.8	66.8	49.2
37	BDP267	BDP267LED20-4S730DM33	1680	13.2	127.3	0.644	0.134	0.101	0.101	0.074	90.4	68.1	68.1	49.9
38	BDP267	BDP267LED22-4S730DM33	1848	14.6	126.6	0.712	0.135	0.101	0.101	0.074	91.1	68.1	68.1	49.9
39	BDP267	BDP267LED24-4S730DM33	2016	16.0	126.0	0.78	0.136	0.102	0.102	0.075	91.7	68.8	68.8	50.6
40	BDP267	BDP267LED27-4S730DM33	2268	18.0	126.0	0.878	0.135	0.101	0.101	0.074	91.1	68.1	68.1	49.9

41	BDP267	BDP267LED30-4S730DM33	2520	20.5	122.9	1.0	0.139	0.104	0.104	0.076	93.7	70.1	70.1	51.3
42	BDP267	BDP267LED34-4S730DM33	2856	21.0	136.0	1.024	0.126	0.095	0.095	0.069	85.0	64.1	64.1	46.5
43	BDP267	BDP267LED35-4S730DM33	2940	22.0	133.6	1.073	0.128	0.096	0.096	0.07	86.3	64.7	64.7	47.2
44	BDP267	BDP267LED39-4S730DM33	3276	24.5	133.7	1.195	0.128	0.096	0.096	0.07	86.3	64.7	64.7	47.2
45	BDP267	BDP267LED40-4S730DM33	3360	25.0	134.4	1.22	0.127	0.095	0.095	0.07	85.7	64.1	64.1	47.2
46	BDP267	BDP267LED44-4S730DM33	3696	28.0	132.0	1.366	0.13	0.098	0.098	0.072	87.7	66.1	66.1	48.6
47	BDP267	BDP267LED45-4S730DM33	3780	28.5	132.6	1.39	0.129	0.097	0.097	0.071	87.0	65.4	65.4	47.9
48	BDP267	BDP267LED50-4S730DM33	4200	30.0	140.0	1.463	0.121	0.091	0.091	0.067	81.6	61.4	61.4	45.2
49	BDP267	BDP267LED55-4S730DM33	4704	33.5	140.4	1.634	0.121	0.091	0.091	0.067	81.6	61.4	61.4	45.2
50	BDP267	BDP267LED59-4S730DM33	5040	36.0	140.0	1.756	0.121	0.091	0.091	0.067	81.6	61.4	61.4	45.2
51	BDP267	BDP267LED64-4S730DM33	5312	39.0	136.2	1.902	0.126	0.095	0.095	0.069	85.0	64.1	64.1	46.5
52	BDP267	BDP267LED69-4S730DM33	5810	42.5	136.7	2.073	0.124	0.093	0.093	0.068	83.6	62.7	62.7	45.9
53	BDP267	BDP267LED74-4S730DM33	6142	46.0	133.5	2.244	0.128	0.096	0.096	0.07	86.3	64.7	64.7	47.2
54	BDP267	BDP267LED79-4S730DM33	6640	47.5	139.8	2.317	0.123	0.092	0.092	0.068	83.0	62.0	62.0	45.9

55	BDP267	BDP267LED84-4S730DM33	6972	51.0	136.7	2.488	0.124	0.093	0.093	0.068	83.6	62.7	62.7	45.9
56	BDP267	BDP267LED90-4S730DM33	7470	55.0	135.8	2.683	0.126	0.095	0.095	0.069	85.0	64.1	64.1	46.5
57	BDP267	BDP267LED94-4S730DM33	7802	57.0	136.9	2.78	0.125	0.094	0.094	0.069	84.3	63.4	63.4	46.5
58	BDP267	BDP267LED109-4S730DM33	9130	68.0	134.3	3.317	0.126	0.095	0.095	0.069	85.0	64.1	64.1	46.5
59	BDP267	BDP267LED120-4S730DM33	9840	76.0	129.5	3.707	0.133	0.1	0.1	0.073	89.7	67.4	67.4	49.2
60	BDP267	BDP267LED8-4S727DM33	680	6.5	104.6	0.317	0.163	0.122	0.122	0.09	109.9	82.3	82.3	60.7
61	BDP267	BDP267LED10-4S727DM33	850	7.9	107.6	0.385	0.159	0.119	0.119	0.087	107.2	80.3	80.3	58.7
62	BDP267	BDP267LED12-4S727DM33	1020	9.1	112.1	0.444	0.152	0.114	0.114	0.084	102.5	76.9	76.9	56.7
63	BDP267	BDP267LED14-4S727DM33	1190	10.4	114.4	0.507	0.149	0.112	0.112	0.082	100.5	75.5	75.5	55.3
64	BDP267	BDP267LED16-4S727DM33	1360	11.8	115.3	0.576	0.148	0.111	0.111	0.081	99.8	74.9	74.9	54.6
65	BDP267	BDP267LED18-4S727DM33	1512	13.2	114.5	0.644	0.149	0.112	0.112	0.082	100.5	75.5	75.5	55.3
66	BDP267	BDP267LED20-4S727DM33	1680	14.8	113.5	0.722	0.15	0.112	0.112	0.083	101.2	75.5	75.5	56.0
67	BDP267	BDP267LED22-4S727DM33	1848	16.4	112.7	0.8	0.151	0.113	0.113	0.083	101.8	76.2	76.2	56.0
68	BDP267	BDP267LED24-4S727DM33	2016	18.0	112.0	0.878	0.153	0.115	0.115	0.084	103.2	77.6	77.6	56.7

69	BDP267	BDP267LED27-4S727DM33	2268	20.5	110.6	1.0	0.154	0.115	0.115	0.085	103.9	77.6	77.6	57.3
70	BDP267	BDP267LED30-4S727DM33	2520	21.0	120.0	1.024	0.142	0.106	0.106	0.078	95.8	71.5	71.5	52.6
71	BDP267	BDP267LED34-4S727DM33	2856	24.0	119.0	1.171	0.144	0.108	0.108	0.079	97.1	72.8	72.8	53.3
72	BDP267	BDP267LED35-4S727DM33	2940	24.5	120.0	1.195	0.142	0.106	0.106	0.078	95.8	71.5	71.5	52.6
73	BDP267	BDP267LED39-4S727DM33	3276	27.5	119.1	1.341	0.143	0.107	0.107	0.079	96.4	72.2	72.2	53.3
74	BDP267	BDP267LED40-4S727DM33	3360	28.5	117.9	1.39	0.145	0.109	0.109	0.08	97.8	73.5	73.5	54.0
75	BDP267	BDP267LED44-4S727DM33	3652	31.5	115.9	1.537	0.148	0.111	0.111	0.081	99.8	74.9	74.9	54.6
76	BDP267	BDP267LED45-4S727DM33	3735	32.0	116.7	1.561	0.147	0.11	0.11	0.081	99.1	74.2	74.2	54.6
77	BDP267	BDP267LED50-4S727DM33	4200	34.0	123.5	1.659	0.138	0.104	0.104	0.076	93.1	70.1	70.1	51.3
78	BDP267	BDP267LED55-4S727DM33	4648	37.5	123.9	1.829	0.137	0.103	0.103	0.075	92.4	69.5	69.5	50.6
79	BDP267	BDP267LED59-4S727DM33	4980	40.5	123.0	1.976	0.138	0.104	0.104	0.076	93.1	70.1	70.1	51.3
80	BDP267	BDP267LED64-4S727DM33	5312	44.5	119.4	2.171	0.143	0.107	0.107	0.079	96.4	72.2	72.2	53.3
81	BDP267	BDP267LED69-4S727DM33	5810	48.0	121.0	2.341	0.14	0.105	0.105	0.077	94.4	70.8	70.8	51.9
82	BDP267	BDP267LED74-4S727DM33	6142	52.0	118.1	2.537	0.145	0.109	0.109	0.08	97.8	73.5	73.5	54.0

83	BDP267	BDP267LED79-4S727DM33	6640	54.0	123.0	2.634	0.14	0.105	0.105	0.077	94.4	70.8	70.8	51.9
84	BDP267	BDP267LED84-4S727DM33	6972	57.0	122.3	2.78	0.139	0.104	0.104	0.076	93.7	70.1	70.1	51.3
85	BDP267	BDP267LED90-4S727DM33	7470	62.0	120.5	3.024	0.142	0.106	0.106	0.078	95.8	71.5	71.5	52.6
86	BDP267	BDP267LED94-4S727DM33	7802	65.0	120.0	3.171	0.143	0.107	0.107	0.079	96.4	72.2	72.2	53.3
87	BDP267	BDP267LED109-4S727DM33	9020	77.0	117.1	3.756	0.146	0.109	0.109	0.08	98.5	73.5	73.5	54.0
88	BDP267	BDP267LED6-4S722DM33	510	5.6	91.1	0.273	0.187	0.14	0.14	0.103	126.1	94.4	94.4	69.5
89	BDP267	BDP267LED8-4S722DM33	680	7.1	95.8	0.346	0.178	0.134	0.134	0.098	120.1	90.4	90.4	66.1
90	BDP267	BDP267LED10-4S722DM33	840	8.8	95.5	0.429	0.179	0.134	0.134	0.098	120.7	90.4	90.4	66.1
91	BDP267	BDP267LED12-4S722DM33	1020	10.0	102.0	0.488	0.167	0.125	0.125	0.092	112.6	84.3	84.3	62.0
92	BDP267	BDP267LED14-4S722DM33	1190	11.6	102.6	0.566	0.166	0.124	0.124	0.091	112.0	83.6	83.6	61.4
93	BDP267	BDP267LED16-4S722DM33	1344	13.2	101.8	0.644	0.167	0.125	0.125	0.092	112.6	84.3	84.3	62.0
94	BDP267	BDP267LED18-4S722DM33	1512	14.8	102.2	0.722	0.167	0.125	0.125	0.092	112.6	84.3	84.3	62.0
95	BDP267	BDP267LED20-4S722DM33	1680	16.6	101.2	0.81	0.168	0.126	0.126	0.092	113.3	85.0	85.0	62.0
96	BDP267	BDP267LED22-4S722DM33	1848	18.4	100.4	0.898	0.17	0.128	0.128	0.094	114.7	86.3	86.3	63.4

97	BDP267	BDP267LED24-4S722DM33	2016	20.5	98.3	1.0	0.174	0.131	0.131	0.096	117.4	88.4	88.4	64.7
98	BDP267	BDP267LED27-4S722DM33	2268	21.0	108.0	1.024	0.158	0.118	0.118	0.087	106.6	79.6	79.6	58.7
99	BDP267	BDP267LED30-4S722DM33	2520	23.5	107.2	1.146	0.159	0.119	0.119	0.087	107.2	80.3	80.3	58.7
100	BDP267	BDP267LED34-4S722DM33	2856	27.0	105.8	1.317	0.162	0.121	0.121	0.089	109.3	81.6	81.6	60.0