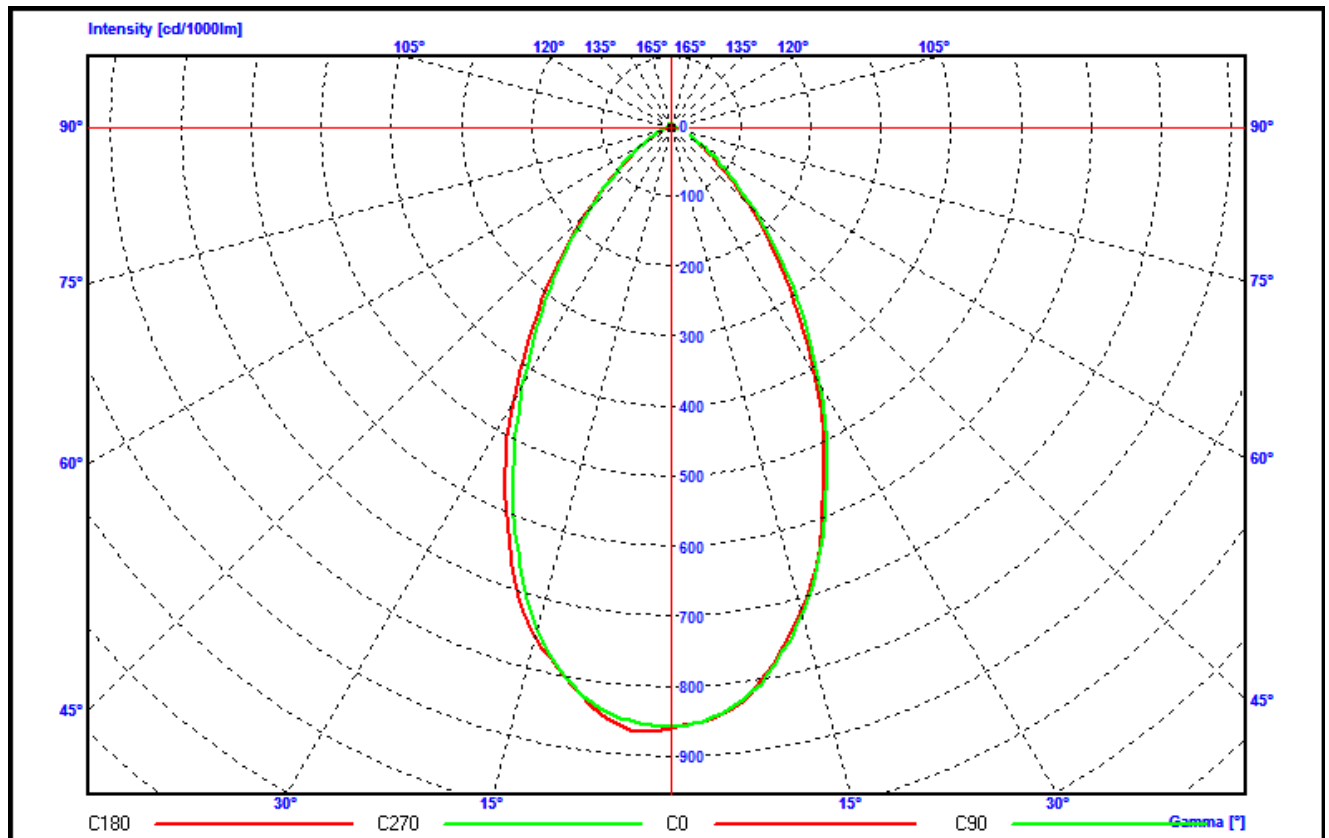


LEDVANCE Lighting Co.Ltd.

PHOTOMETRIC RESULTS

Program:	T8/T5 C15 G5 180		
Name:	20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin		
Meas.-no.:	1		
Flux:	750.84 lm		Operator: Thomas.liu
Comment:	UI=230.03V II=0.0496A WI=8.69W PF=0.7616		
Maximum intensity:	647.810 cd		

Polar diagram 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement



Program:	T8/T5 C15 G5 180		
Name:	20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz		
Meas.-no.:	1		
Flux:	750.84 lm		Operator: Thomas.liu
Comment:	UI=230.03V II=0.04		
Maximum intensity:	647.810 cd		

LEDVANCE Lighting Co.Ltd.

PHOTOMETRIC RESULTS

Program:	T8/T5 C15 G5 180		
Name:	20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin		
Meas.-no.:	1		
Flux:	750.84 lm		Operator: Thomas.liu
Comment:	UI=230.03V II=0.0496A WI=8.69W PF=0.7616		
Maximum intensity:	647.810 cd		

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	0.00	15.00	30.00	45.00	60.00	75.00	90.00	105.00	120.00
0.00	644.2	643.3	643.8	642.9	643.3	642.2	642.4	642.2	641.3
1.00	640.8	639.7	639.9	639.5	640.2	639.9	641.5	643.1	642.9
2.00	639.3	637.0	636.6	636.4	637.2	636.6	638.8	639.0	642.9
3.00	637.5	633.9	633.7	632.1	633.2	634.1	637.0	638.1	638.8
4.00	635.0	630.5	629.4	627.1	628.3	628.3	633.7	633.2	640.8
5.00	631.2	627.8	625.1	622.2	622.6	622.4	629.6	629.8	636.8
6.00	626.9	621.5	620.4	616.8	615.5	615.9	624.0	622.2	629.4
7.00	621.1	614.1	614.3	608.9	607.8	607.8	617.9	617.5	623.1
8.00	612.1	606.2	606.5	599.9	599.3	599.5	611.2	611.2	620.8
9.00	602.2	596.1	597.7	590.7	590.7	590.7	604.4	604.4	611.0
10.00	592.8	585.3	586.9	581.1	580.8	580.6	595.0	594.8	599.1
11.00	581.3	573.7	576.6	571.2	570.7	568.3	585.3	584.9	590.7
12.00	569.2	561.3	563.8	558.2	557.0	555.0	573.9	573.4	578.8
13.00	558.4	547.8	551.2	545.6	545.1	543.1	563.5	561.3	568.9
14.00	546.9	536.6	537.3	532.5	532.3	531.0	552.3	549.2	559.1
15.00	536.1	524.0	521.8	518.8	519.3	517.7	540.0	536.8	550.3
16.00	524.0	510.7	506.9	504.0	505.4	502.9	527.6	523.6	535.5
17.00	511.6	496.6	492.5	489.2	490.1	487.6	515.0	508.7	520.9
18.00	497.7	482.7	478.6	473.4	475.9	472.3	500.9	493.7	507.1
19.00	481.5	468.7	462.9	457.5	460.9	457.3	486.0	479.1	495.2
20.00	465.4	452.5	448.3	440.6	445.4	441.8	469.8	465.1	481.1
21.00	448.3	437.7	434.1	424.2	429.6	427.4	454.1	449.8	469.4
22.00	431.6	421.8	419.1	408.7	414.8	413.0	439.7	435.9	453.2
23.00	415.2	405.4	403.1	392.8	399.5	398.2	423.8	419.1	437.5
24.00	400.2	389.2	386.9	377.5	384.0	382.9	408.5	405.8	422.4
25.00	385.4	372.8	372.1	362.4	369.4	367.8	393.2	389.9	407.4
26.00	369.9	356.4	356.6	347.8	354.1	352.3	378.2	375.7	388.7
27.00	353.7	340.4	340.2	333.5	338.8	336.8	362.9	359.7	373.0
28.00	338.6	324.0	324.7	318.2	324.2	321.3	346.9	344.0	356.8
29.00	321.8	308.1	309.9	303.1	309.0	306.3	331.2	329.4	341.5
30.00	304.9	294.1	294.1	287.6	293.0	292.1	315.7	314.1	326.7
31.00	289.2	278.4	280.0	272.8	278.2	278.0	300.6	299.3	309.9
32.00	273.2	264.9	265.1	258.4	263.8	263.8	285.1	282.2	295.5
33.00	258.0	251.2	252.1	244.5	250.5	251.4	269.6	267.2	283.3

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	0.00	15.00	30.00	45.00	60.00	75.00	90.00	105.00	120.00
34.00	244.0	238.4	238.9	231.7	237.5	238.6	255.9	252.8	268.7
35.00	229.6	224.7	224.7	219.8	225.1	225.4	242.7	239.3	254.4
36.00	216.4	210.8	211.0	207.4	211.9	211.9	229.6	224.9	240.4
37.00	202.9	196.2	198.0	194.4	199.3	198.6	216.8	211.9	226.5
38.00	190.5	183.6	185.8	182.2	187.0	186.1	204.7	200.0	212.8
39.00	177.5	171.4	173.9	170.3	174.8	174.1	191.9	187.2	199.3
40.00	166.1	159.8	162.2	158.6	163.1	162.0	179.8	176.2	187.0
41.00	155.0	149.0	151.0	147.9	151.9	150.8	167.9	163.1	173.9
42.00	144.3	138.2	140.4	137.1	141.1	140.0	156.4	151.9	159.8
43.00	133.9	128.5	130.3	127.4	130.8	130.6	146.1	141.3	148.5
44.00	124.0	119.3	120.4	117.5	120.9	120.9	135.0	131.2	138.4
45.00	114.6	109.7	111.7	108.5	112.6	111.5	124.9	121.1	128.1
46.00	105.2	101.3	102.7	100.2	104.3	102.7	115.7	111.2	118.4
47.00	96.8	93.5	94.8	93.0	95.7	94.8	106.5	103.4	109.0
48.00	89.0	86.1	87.2	85.6	87.9	87.4	98.2	95.0	100.7
49.00	81.8	78.9	80.2	79.3	81.1	80.4	90.3	87.6	92.6
50.00	75.0	72.4	74.4	73.0	74.6	74.2	83.1	80.7	85.6
51.00	69.0	66.7	68.3	67.2	68.5	68.3	76.6	74.2	79.1
52.00	63.1	61.3	63.1	62.0	62.9	62.9	70.6	68.3	72.1
53.00	58.0	56.2	58.2	57.3	58.0	57.7	64.7	62.9	66.3
54.00	53.3	51.5	53.5	52.6	53.5	52.8	59.8	57.5	60.9
55.00	49.0	47.6	49.2	48.5	49.2	48.8	55.1	53.0	56.0
56.00	44.9	43.6	45.2	44.7	45.4	44.9	50.6	48.5	50.8
57.00	40.9	40.0	41.6	40.9	41.3	41.3	46.5	44.7	46.7
58.00	37.5	36.4	38.2	37.5	38.2	38.0	42.7	40.9	43.1
59.00	34.4	33.5	35.1	34.6	35.1	34.8	39.3	37.7	39.5
60.00	31.2	30.8	32.1	31.7	32.1	31.7	36.0	34.4	36.0
61.00	29.0	28.3	29.4	29.0	29.4	29.2	32.8	31.7	33.0
62.00	26.5	25.6	27.0	26.5	27.2	26.7	30.1	29.0	30.1
63.00	24.5	23.6	24.7	24.3	24.7	24.5	27.6	26.5	27.6
64.00	22.2	21.6	22.5	22.0	22.7	22.5	25.4	24.3	25.2
65.00	20.4	19.5	20.4	20.2	20.7	20.4	22.9	22.0	23.1
66.00	18.9	17.8	18.7	18.4	19.1	18.7	20.9	20.2	21.1
67.00	17.3	16.4	17.1	17.1	17.3	17.1	19.1	18.4	19.3
68.00	15.7	15.1	15.5	15.5	15.7	15.7	17.5	16.9	17.5
69.00	14.4	13.7	14.4	14.2	14.6	14.4	16.0	15.5	16.0
70.00	13.3	12.8	13.0	13.0	13.3	13.3	14.6	14.2	14.6
71.00	12.1	11.9	12.1	11.9	12.4	12.4	13.5	13.0	13.5
72.00	11.2	10.8	11.2	11.0	11.2	11.2	12.4	11.9	12.4
73.00	10.6	9.9	10.1	10.1	10.3	10.3	11.2	10.8	11.2
74.00	9.7	9.0	9.2	9.2	9.4	9.2	10.3	9.9	10.3
75.00	8.8	8.1	8.3	8.3	8.5	8.3	9.4	9.0	9.4
76.00	8.1	7.6	7.6	7.4	7.6	7.6	8.5	8.1	8.3

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	0.00	15.00	30.00	45.00	60.00	75.00	90.00	105.00	120.00
77.00	7.4	6.7	7.0	6.7	7.0	6.7	7.4	7.2	7.6
78.00	6.7	6.3	6.3	5.8	6.3	6.1	6.7	6.5	6.7
79.00	6.1	5.6	5.6	5.4	5.6	5.6	6.1	5.8	6.3
80.00	5.6	4.9	5.2	4.9	5.2	4.9	5.6	5.4	5.6
81.00	4.9	4.7	4.7	4.5	4.7	4.5	4.9	4.9	5.2
82.00	4.5	4.3	4.3	4.0	4.3	4.0	4.5	4.5	4.7
83.00	4.3	3.8	3.8	3.8	3.8	3.8	4.0	4.0	4.3
84.00	3.8	3.6	3.6	3.4	3.6	3.6	3.8	3.8	3.8
85.00	3.6	3.4	3.4	3.1	3.4	3.1	3.4	3.4	3.6
86.00	3.4	3.1	3.1	2.9	3.1	2.9	3.1	3.1	3.4
87.00	3.1	2.9	2.9	2.7	2.7	2.7	2.9	2.9	3.1
88.00	2.9	2.7	2.7	2.5	2.5	2.5	2.7	2.7	2.9
89.00	2.7	2.5	2.5	2.5	2.5	2.2	2.5	2.5	2.7
90.00	2.5	2.2	2.5	2.2	2.2	2.2	2.2	2.2	2.5
91.00	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.5
92.00	2.2	2.2	2.2	2.2	2.2	2.2	2.0	2.2	2.2
93.00	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
94.00	2.2	2.2	2.2	2.5	2.5	2.7	2.2	2.5	2.2
95.00	2.2	2.5	2.5	2.7	2.7	3.1	2.7	2.9	2.7
96.00	2.5	2.5	2.7	2.9	3.1	3.4	3.1	3.1	3.1
97.00	2.5	2.7	2.9	3.1	3.1	3.4	3.4	3.4	3.4
98.00	2.7	2.9	2.9	3.1	3.1	3.1	3.4	3.4	3.4
99.00	2.9	2.9	2.9	2.9	3.1	3.1	3.1	3.4	3.4
100.00	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1
101.00	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1
102.00	2.7	2.7	2.9	2.9	2.9	2.7	2.9	2.9	2.9
103.00	2.7	2.7	2.7	2.9	2.7	2.7	2.7	2.9	2.9
104.00	2.7	2.9	2.7	2.9	2.7	2.9	2.7	2.9	2.9
105.00	2.7	2.7	2.7	2.9	2.7	2.9	2.7	2.9	2.7
106.00	2.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
107.00	2.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
108.00	2.7	2.9	2.9	3.1	2.9	3.1	2.9	2.9	2.9
109.00	2.7	2.9	2.9	3.1	3.1	3.1	2.9	3.1	3.1
110.00	2.7	2.9	2.9	3.1	3.1	3.1	2.9	2.9	3.1
111.00	2.9	2.9	2.9	3.1	3.1	3.4	3.1	3.1	3.1
112.00	2.9	2.9	2.9	3.1	3.1	3.1	3.1	3.4	3.1
113.00	2.9	2.9	3.1	3.4	3.4	3.1	3.1	3.4	3.4
114.00	2.9	3.1	3.1	3.1	3.1	2.9	2.9	3.1	3.4
115.00	2.9	2.9	3.1	3.1	2.9	2.9	2.9	3.1	3.1
116.00	3.1	2.9	2.9	2.9	2.9	2.9	2.9	3.1	2.9
117.00	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1
118.00	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1
119.00	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	0.00	15.00	30.00	45.00	60.00	75.00	90.00	105.00	120.00
120.00	2.9	2.9	2.9	2.9	2.9	3.1	2.9	3.1	3.1
121.00	2.9	3.1	2.9	3.1	2.9	3.1	3.1	3.1	3.1
122.00	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.4	3.1
123.00	3.1	3.1	3.1	3.4	3.1	3.4	3.1	3.4	3.4
124.00	3.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
125.00	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
126.00	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
127.00	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
128.00	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
129.00	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
130.00	3.4	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4
131.00	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
132.00	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.6
133.00	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.6
134.00	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.6
135.00	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.6
136.00	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.6
137.00	3.6	3.4	3.4	3.4	3.4	3.4	3.1	3.4	3.4
138.00	3.6	3.4	3.4	3.4	3.4	3.4	3.1	3.4	3.4
139.00	3.6	3.4	3.4	3.4	3.4	3.4	3.1	3.1	3.4
140.00	3.6	3.4	3.4	3.4	3.4	3.1	3.1	3.1	3.1
141.00	3.6	3.4	3.4	3.4	3.4	3.1	3.1	3.1	3.1
142.00	3.6	3.4	3.4	3.4	3.4	3.1	3.1	3.1	3.1
143.00	3.6	3.4	3.4	3.4	3.4	3.1	3.1	3.1	3.1
144.00	3.6	3.4	3.4	3.4	3.1	3.1	2.9	3.1	3.1
145.00	3.6	3.4	3.4	3.4	3.1	3.1	2.9	2.9	3.1
146.00	3.6	3.4	3.4	3.1	3.1	2.9	2.9	2.9	2.9
147.00	3.4	3.4	3.4	3.1	3.1	2.9	2.9	2.9	2.9
148.00	3.4	3.4	3.1	3.1	3.1	2.9	2.9	2.9	2.9
149.00	3.1	3.1	3.1	3.1	2.9	2.9	2.9	2.9	2.9
150.00	3.1	3.1	3.1	3.1	2.9	2.9	2.9	2.9	2.9
151.00	3.1	3.1	3.1	3.1	2.9	2.9	2.9	2.9	2.9
152.00	3.1	3.1	3.1	2.9	2.9	2.9	2.7	2.9	2.9
153.00	3.1	3.1	3.1	2.9	2.9	2.9	2.7	2.9	2.9
154.00	3.1	2.9	2.9	2.9	2.9	2.7	2.7	2.9	2.9
155.00	2.9	2.7	2.7	2.7	2.7	2.7	2.5	2.7	2.7
156.00	2.7	2.7	2.5	2.5	2.5	2.5	2.2	2.5	2.5
157.00	2.7	2.5	2.5	2.2	2.5	2.2	2.2	2.5	2.5
158.00	2.5	2.2	2.2	2.0	2.2	2.2	2.0	2.0	2.2
159.00	2.0	1.6	1.8	1.6	1.8	1.6	1.6	1.6	1.8
160.00	1.1	1.1	0.9	1.1	1.1	0.9	1.1	0.9	1.1
161.00	0.9	0.9	0.9	1.1	0.9	1.1	0.9	0.9	1.1
162.00	0.9	0.9	0.9	0.9	1.1	0.9	0.9	0.9	0.9

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	0.00	15.00	30.00	45.00	60.00	75.00	90.00	105.00	120.00
163.00	0.9	0.9	1.1	1.1	0.9	1.1	0.9	0.9	0.9
164.00	0.9	0.9	0.9	1.1	1.1	0.9	0.9	0.9	1.1
165.00	0.9	0.9	0.9	0.9	1.1	1.1	0.9	1.1	1.1
166.00	0.9	0.9	0.9	1.1	1.1	1.1	0.9	1.1	1.1
167.00	0.9	0.9	1.1	0.9	1.1	1.1	0.9	1.1	1.1
168.00	0.9	0.9	0.9	1.1	1.1	1.1	0.9	0.9	1.1
169.00	0.9	0.9	0.9	1.1	1.1	1.1	0.9	1.1	1.1
170.00	0.9	1.1	1.1	1.1	1.1	1.1	0.9	1.1	1.1
171.00	0.9	0.9	1.1	1.1	1.1	1.1	0.9	1.1	1.1
172.00	0.9	1.1	1.1	1.1	1.1	1.1	0.9	1.1	1.1
173.00	0.9	0.9	1.1	1.1	1.1	1.1	0.9	1.1	1.1
174.00	0.9	0.9	0.9	1.1	1.1	1.1	0.9	1.1	1.1
175.00	0.9	0.9	1.1	1.1	1.1	1.1	0.9	1.1	1.1
176.00	0.9	0.9	1.1	1.1	1.1	1.1	0.9	1.1	1.1
177.00	0.9	1.1	0.9	1.1	1.1	1.1	1.1	1.1	1.1
178.00	0.9	1.1	1.1	0.9	1.1	1.1	1.1	1.1	1.1
179.00	1.1	1.1	1.1	1.1	0.9	1.1	0.9	1.1	1.1
180.00	0.9	0.9	1.1	0.9	0.9	1.1	1.1	1.1	1.1

G/C [cd]	135.00	150.00	165.00	180.00	195.00	210.00	225.00	240.00	255.00
0.00	645.6	643.8	644.4	644.2	643.3	643.8	642.9	643.3	642.2
1.00	645.3	645.8	645.6	645.6	645.6	645.6	645.3	645.6	645.1
2.00	645.8	646.7	647.6	647.8	647.1	647.1	646.7	646.0	645.6
3.00	645.1	646.5	647.8	647.6	647.4	647.1	647.6	645.8	645.1
4.00	643.3	646.0	646.2	646.7	645.8	646.5	646.9	645.8	643.1
5.00	640.4	644.4	644.0	643.1	644.2	645.1	645.3	643.5	640.8
6.00	635.5	640.8	639.5	638.8	640.2	641.5	642.0	640.6	637.5
7.00	627.8	634.8	633.4	631.9	635.7	636.8	638.8	636.8	634.8
8.00	620.8	627.4	626.7	625.1	629.4	633.2	635.2	633.2	630.7
9.00	612.5	620.6	619.0	616.4	622.9	627.4	630.5	627.6	625.3
10.00	603.5	610.7	610.1	608.0	615.2	619.5	624.4	622.0	619.9
11.00	594.6	601.7	601.5	599.9	606.9	610.5	617.3	615.7	611.9
12.00	584.2	592.5	592.1	591.0	599.1	601.3	608.5	606.2	603.8
13.00	574.3	583.1	583.1	582.4	589.6	592.5	600.4	596.8	594.6
14.00	564.2	573.9	575.7	575.9	581.1	582.2	590.5	586.5	584.7
15.00	554.3	565.8	566.7	565.6	569.8	570.7	579.5	574.3	573.7
16.00	543.5	555.5	556.1	554.1	560.4	558.8	568.0	563.3	561.3
17.00	531.6	543.3	544.2	542.7	550.5	548.3	554.1	551.4	547.4
18.00	520.0	530.3	532.1	528.7	537.0	535.5	540.6	537.0	533.0
19.00	506.9	517.9	518.8	515.0	524.0	521.8	526.5	522.4	518.4
20.00	492.5	504.9	503.6	499.5	510.3	508.5	513.0	508.3	504.5
21.00	476.8	491.0	488.7	483.6	494.8	493.2	496.8	492.5	490.3
22.00	461.1	475.2	474.1	468.3	479.5	478.6	481.1	477.0	474.8

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	135.00	150.00	165.00	180.00	195.00	210.00	225.00	240.00	255.00
23.00	444.5	459.1	459.1	453.0	462.0	463.1	464.2	461.3	458.4
24.00	429.4	443.6	443.8	437.0	444.9	445.4	448.7	444.5	443.1
25.00	413.4	429.6	428.7	421.3	429.2	429.0	433.4	428.7	426.5
26.00	399.1	414.6	412.1	406.0	413.7	412.5	417.9	413.4	411.4
27.00	383.3	397.9	395.2	390.8	397.3	395.7	401.3	397.0	394.6
28.00	367.2	381.1	377.9	374.8	382.0	380.0	386.3	380.9	379.1
29.00	352.6	363.3	360.6	356.6	365.4	362.4	370.5	364.5	363.6
30.00	335.9	345.6	343.6	339.7	349.4	346.7	354.1	348.1	346.9
31.00	320.4	328.1	327.2	323.1	332.3	329.2	338.6	331.4	329.6
32.00	304.7	312.1	310.8	306.9	315.5	313.7	321.8	315.3	313.9
33.00	289.2	296.8	295.5	289.9	300.4	298.2	304.9	299.1	298.4
34.00	274.1	282.7	281.1	274.8	284.9	283.8	288.7	284.5	284.2
35.00	259.3	267.4	266.0	259.5	269.2	268.3	272.6	269.2	269.4
36.00	244.0	253.0	250.5	244.2	254.6	254.1	257.5	254.6	255.7
37.00	229.2	239.3	235.9	230.1	241.1	240.2	243.4	241.1	242.5
38.00	216.2	224.9	221.6	216.4	227.2	227.2	230.5	228.3	229.9
39.00	213.2	210.5	206.9	201.8	212.8	212.6	217.3	215.3	215.5
40.00	189.0	195.9	192.6	188.5	198.0	198.2	204.7	201.8	202.0
41.00	176.6	182.7	179.5	175.3	184.7	184.3	192.6	187.8	188.5
42.00	77.7	169.6	167.0	162.9	171.2	172.1	179.3	175.3	175.5
43.00	151.9	157.5	155.9	151.9	159.1	160.2	166.5	162.9	162.7
44.00	141.1	146.5	144.3	140.7	147.6	148.5	154.4	151.7	151.7
45.00	130.6	135.9	133.9	130.3	137.1	137.7	143.4	140.9	141.1
46.00	120.7	125.6	123.1	120.2	126.5	127.9	132.3	130.8	131.0
47.00	110.8	115.5	113.9	110.8	116.4	117.5	122.2	120.7	121.3
48.00	102.7	106.3	104.9	101.6	107.2	108.5	112.8	111.2	111.7
49.00	93.9	98.2	96.4	93.5	98.4	99.8	104.3	102.5	102.9
50.00	86.5	90.6	89.0	85.8	90.6	91.7	95.5	94.8	94.6
51.00	79.5	83.1	82.0	79.1	83.1	84.3	88.3	86.7	86.5
52.00	72.8	76.4	75.3	72.6	76.4	77.3	80.9	79.8	79.5
53.00	67.0	69.9	69.0	66.3	70.6	71.0	74.6	73.0	73.3
54.00	61.1	64.5	63.4	61.1	64.7	65.4	68.5	67.0	67.2
55.00	56.4	59.3	58.4	56.0	59.1	59.8	62.9	61.6	61.6
56.00	51.7	54.4	53.5	50.8	54.4	55.1	57.7	56.4	56.4
57.00	47.2	49.9	49.2	46.7	49.9	50.3	53.3	51.7	51.9
58.00	43.4	46.1	44.9	42.9	45.6	46.3	48.8	47.6	47.6
59.00	39.8	42.2	41.3	39.3	41.8	42.7	44.5	43.6	43.6
60.00	36.4	38.6	38.0	36.2	38.4	39.1	41.1	40.2	40.2
61.00	33.3	35.5	34.8	33.0	35.3	36.0	37.7	37.1	37.1
62.00	30.3	32.6	31.9	30.3	32.6	33.3	34.8	34.4	34.4
63.00	27.9	29.7	29.2	27.6	29.9	30.8	31.9	31.5	31.7
64.00	25.4	27.0	26.5	25.2	27.2	28.1	29.2	29.0	29.0
65.00	15.5	24.5	24.0	22.9	24.9	25.6	27.0	26.5	26.7

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	135.00	150.00	165.00	180.00	195.00	210.00	225.00	240.00	255.00
66.00	17.5	22.5	22.0	20.9	22.7	23.4	24.7	24.5	24.7
67.00	19.3	20.4	20.0	19.1	20.7	21.6	22.7	22.5	22.7
68.00	17.5	18.7	18.2	17.5	19.1	20.0	21.1	20.9	20.9
69.00	16.0	16.9	16.9	16.0	17.5	18.2	19.5	19.3	19.3
70.00	14.6	15.5	15.3	14.6	16.0	16.6	18.0	17.8	17.8
71.00	13.5	14.4	13.9	13.5	14.6	15.5	16.6	16.6	16.4
72.00	12.4	13.0	13.0	12.6	13.5	14.4	15.5	15.5	15.3
73.00	11.2	12.1	11.9	11.5	12.6	13.3	14.4	13.9	13.9
74.00	10.3	11.0	11.0	10.6	11.7	12.1	13.3	12.8	12.8
75.00	9.4	9.9	10.1	9.7	10.6	11.0	11.9	11.7	11.7
76.00	8.5	9.2	9.2	9.0	9.7	10.1	11.0	10.8	10.6
77.00	7.6	8.3	8.3	8.3	9.0	9.4	10.1	9.9	9.9
78.00	6.7	7.6	7.6	7.4	8.3	8.5	9.2	9.2	9.2
79.00	6.3	6.7	6.7	6.7	7.6	7.9	8.5	8.5	8.5
80.00	5.6	6.1	6.1	6.1	6.7	7.2	7.6	7.6	7.9
81.00	5.2	5.6	5.6	5.4	6.1	6.5	7.0	7.0	7.2
82.00	4.7	5.2	4.9	4.9	5.6	5.8	6.5	6.5	6.5
83.00	4.3	4.5	4.7	4.5	4.9	5.4	5.8	5.8	6.1
84.00	4.0	4.3	4.3	4.0	4.5	4.9	5.4	5.4	5.4
85.00	3.6	3.8	3.8	3.8	4.3	4.5	4.9	4.9	4.9
86.00	3.4	3.6	3.6	3.6	3.8	4.0	4.5	4.5	4.7
87.00	3.1	3.4	3.4	3.1	3.6	3.8	4.3	4.3	4.3
88.00	2.9	3.1	3.1	3.1	3.4	3.6	4.0	4.0	4.0
89.00	2.7	2.9	2.9	2.7	3.1	3.4	3.6	3.6	3.6
90.00	2.5	2.7	2.7	2.5	2.7	2.9	3.4	3.1	3.1
91.00	2.5	2.5	2.7	2.5	2.5	2.7	2.9	2.9	2.9
92.00	2.5	2.5	2.5	2.5	2.5	2.7	2.7	2.7	2.7
93.00	2.2	2.5	2.5	2.2	2.5	2.5	2.5	2.5	2.5
94.00	2.2	2.2	2.5	2.2	2.5	2.5	2.5	2.5	2.5
95.00	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
96.00	3.1	2.5	2.5	2.5	2.5	2.7	2.5	2.5	2.5
97.00	3.4	2.9	2.9	2.9	2.7	2.9	2.7	2.7	2.5
98.00	3.4	3.1	3.1	3.4	3.1	3.1	3.1	2.9	2.7
99.00	3.4	3.4	3.4	3.4	3.6	3.4	3.4	3.1	2.9
100.00	3.1	3.4	3.4	3.4	3.6	3.6	3.6	3.6	3.1
101.00	3.1	3.4	3.4	3.4	3.6	3.4	3.6	3.4	3.4
102.00	2.9	3.1	3.1	3.1	3.4	3.4	3.4	3.4	3.4
103.00	2.9	2.9	3.1	3.1	3.1	3.1	3.1	3.4	3.1
104.00	2.9	2.9	3.1	2.9	3.1	3.1	3.1	3.1	3.1
105.00	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1	3.1
106.00	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1	2.9
107.00	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1	2.9
108.00	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1	2.9

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	135.00	150.00	165.00	180.00	195.00	210.00	225.00	240.00	255.00
109.00	3.1	3.1	3.1	2.9	2.9	3.1	3.1	3.1	3.1
110.00	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.9
111.00	2.9	3.1	3.1	3.1	3.1	3.4	3.1	2.9	2.9
112.00	3.4	3.1	3.1	3.1	3.1	3.4	3.1	3.1	2.9
113.00	3.4	3.1	3.1	3.1	3.1	3.4	3.1	3.1	3.1
114.00	3.1	3.1	3.1	3.1	2.9	2.9	3.4	3.4	3.1
115.00	3.1	3.1	3.1	3.1	2.9	2.9	3.1	3.1	3.1
116.00	1.8	3.4	3.1	2.9	2.9	2.9	3.1	3.1	2.9
117.00	2.9	3.4	3.1	2.9	2.9	2.9	2.9	3.1	2.9
118.00	2.9	3.4	3.1	2.9	2.9	2.9	3.1	3.1	3.1
119.00	3.1	3.1	3.1	3.1	2.9	2.9	2.9	3.1	3.1
120.00	3.1	3.1	3.1	3.1	2.9	2.9	3.1	3.1	3.1
121.00	3.1	3.4	3.4	3.1	3.1	3.1	3.1	3.1	3.1
122.00	3.1	3.4	3.4	3.4	3.1	3.1	3.1	3.1	3.1
123.00	3.4	3.4	3.4	3.4	3.1	3.4	3.4	3.1	3.4
124.00	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
125.00	3.4	3.4	3.6	3.4	3.4	3.6	3.6	3.6	3.6
126.00	3.4	3.4	3.6	3.6	3.6	3.6	3.6	3.6	3.6
127.00	3.4	3.6	3.6	3.6	3.6	3.8	3.8	3.6	3.8
128.00	3.4	3.6	3.6	3.6	3.6	3.8	3.8	3.8	3.8
129.00	3.4	3.6	3.6	3.6	3.6	3.8	3.8	3.8	3.8
130.00	3.4	3.6	3.6	3.6	3.8	3.8	4.0	3.8	3.8
131.00	3.6	3.6	3.6	3.8	3.8	3.8	4.0	3.8	3.8
132.00	3.6	3.6	3.6	3.8	3.8	4.0	4.0	3.8	3.8
133.00	3.6	3.6	3.6	3.8	4.0	4.0	4.0	4.0	3.8
134.00	3.6	3.6	3.8	3.8	4.0	4.0	4.0	4.0	4.0
135.00	3.6	3.6	3.8	3.8	4.0	4.0	4.0	4.0	4.0
136.00	3.4	3.6	3.6	3.8	4.0	4.3	4.3	4.3	4.3
137.00	2.7	3.6	3.8	4.0	4.0	4.3	4.3	4.3	4.3
138.00	1.3	3.6	3.6	4.0	4.3	4.5	4.3	4.3	4.3
139.00	3.4	3.6	3.6	3.8	4.0	4.3	4.5	4.3	4.5
140.00	3.4	3.4	3.8	3.8	4.0	4.3	4.5	4.5	4.5
141.00	3.4	3.4	3.6	3.8	4.0	4.3	4.3	4.3	4.3
142.00	2.7	3.4	3.6	3.8	4.0	4.0	4.3	4.3	4.3
143.00	3.1	3.4	3.6	3.8	3.8	4.0	4.0	4.3	4.3
144.00	3.1	3.4	3.6	3.6	3.8	3.8	4.0	4.0	4.0
145.00	3.1	3.4	3.6	3.6	3.6	3.6	3.8	4.0	4.0
146.00	3.1	3.4	3.4	3.6	3.6	3.6	3.8	4.0	4.0
147.00	3.1	3.4	3.4	3.4	3.6	3.6	3.6	3.8	3.8
148.00	3.1	3.1	3.4	3.4	3.4	3.4	3.6	3.8	3.8
149.00	3.1	3.1	3.4	3.4	3.4	3.4	3.6	3.6	3.8
150.00	2.9	3.1	3.4	3.4	3.4	3.4	3.4	3.6	3.8
151.00	3.1	3.1	3.4	3.1	3.4	3.4	3.4	3.6	3.6

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	135.00	150.00	165.00	180.00	195.00	210.00	225.00	240.00	255.00
152.00	2.9	3.1	3.1	3.1	3.1	3.1	3.4	3.4	3.4
153.00	2.9	3.1	3.1	3.1	3.1	3.4	3.4	3.4	3.4
154.00	2.9	3.1	3.1	2.9	3.1	3.1	3.1	3.1	3.1
155.00	0.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1	3.1
156.00	2.5	2.7	2.7	2.7	2.9	2.9	2.9	2.9	2.9
157.00	2.5	2.7	2.7	2.7	2.7	2.9	2.9	2.9	2.9
158.00	2.2	2.5	2.5	2.5	2.5	2.7	2.7	2.7	2.7
159.00	1.6	2.0	2.0	1.6	2.0	1.8	2.2	2.0	2.2
160.00	0.9	1.1	1.1	0.9	1.1	0.9	0.9	0.9	0.9
161.00	0.9	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
162.00	0.9	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
163.00	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
164.00	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
165.00	0.9	0.9	1.1	0.9	0.9	0.9	0.9	0.9	0.9
166.00	0.9	0.9	1.1	0.9	0.9	0.9	0.9	0.9	0.9
167.00	1.1	0.9	1.1	0.9	0.9	0.9	0.9	0.9	0.9
168.00	0.9	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
169.00	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
170.00	0.9	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
171.00	0.9	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
172.00	1.1	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.9
173.00	0.4	1.1	0.9	1.1	0.9	0.9	0.9	0.9	0.9
174.00	0.2	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
175.00	0.2	1.1	1.1	1.1	0.9	0.9	1.1	0.9	0.9
176.00	0.7	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9
177.00	1.1	1.1	1.1	1.1	0.9	0.9	0.9	1.1	1.1
178.00	1.1	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.9
179.00	1.1	1.1	1.1	1.1	0.9	0.9	1.1	0.9	1.1
180.00	0.9	1.1	1.1	1.1	0.9	0.9	1.1	0.9	1.1

G/C [cd]	270.00	285.00	300.00	315.00	330.00	345.00
0.00	642.4	642.2	641.3	645.6	643.8	644.4
1.00	642.4	644.7	644.0	643.5	642.9	642.9
2.00	641.5	643.3	642.4	642.2	640.6	641.1
3.00	639.7	641.1	640.6	638.8	638.6	638.8
4.00	637.5	639.5	639.0	637.2	635.7	635.5
5.00	635.2	639.7	633.9	635.0	631.6	631.9
6.00	632.3	634.6	633.0	630.5	626.2	626.7
7.00	627.8	628.3	630.1	625.3	619.5	618.8
8.00	622.4	625.3	621.1	619.5	611.2	610.7
9.00	615.2	619.5	614.1	610.1	602.4	601.3
10.00	607.4	614.8	605.8	601.1	592.5	590.7
11.00	599.3	604.0	593.4	591.0	582.9	580.6

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	270.00	285.00	300.00	315.00	330.00	345.00
12.00	590.1	594.6	584.4	580.4	572.1	571.0
13.00	580.8	586.7	574.3	568.5	562.9	562.2
14.00	569.6	575.0	560.6	558.2	551.4	550.7
15.00	556.6	561.1	546.2	546.7	539.3	539.7
16.00	542.9	546.7	534.6	533.9	526.0	527.8
17.00	528.7	533.2	520.0	520.6	512.5	513.2
18.00	513.9	516.1	506.7	505.4	496.4	496.6
19.00	498.4	503.6	491.2	489.2	479.5	479.5
20.00	482.4	486.0	475.5	473.0	461.3	462.4
21.00	466.5	470.1	462.0	455.5	443.1	444.9
22.00	450.5	452.3	443.6	437.5	427.2	429.9
23.00	434.1	437.3	425.8	419.3	411.9	413.0
24.00	416.6	420.6	408.7	403.6	395.0	397.0
25.00	400.4	405.8	390.5	387.6	378.4	380.6
26.00	384.2	389.2	373.7	372.1	362.7	363.6
27.00	367.6	372.1	356.6	356.4	345.1	346.0
28.00	351.4	359.5	340.4	341.3	327.6	329.2
29.00	336.6	343.8	324.0	325.1	310.5	313.0
30.00	319.5	326.7	311.2	307.6	293.9	296.4
31.00	303.1	308.7	294.8	291.2	279.1	281.3
32.00	287.2	293.2	280.7	275.7	264.5	266.7
33.00	272.3	276.6	266.9	260.9	250.3	253.2
34.00	257.3	264.5	252.8	246.7	236.8	239.5
35.00	243.4	248.5	240.0	232.1	222.9	225.1
36.00	230.1	234.1	224.5	218.0	208.7	211.2
37.00	217.7	221.6	211.2	204.3	195.3	198.0
38.00	205.6	208.5	196.8	190.3	182.7	184.5
39.00	193.2	196.2	182.0	177.5	170.1	171.0
40.00	181.3	181.8	169.0	165.8	158.6	159.3
41.00	169.0	169.9	158.4	154.6	146.7	148.1
42.00	156.6	158.0	146.7	144.0	136.2	137.5
43.00	144.5	145.8	135.9	133.0	125.8	126.5
44.00	134.1	135.5	125.6	122.9	115.9	116.8
45.00	124.3	126.1	116.4	113.5	106.7	108.1
46.00	115.5	115.9	107.4	104.0	98.2	100.0
47.00	106.1	107.2	99.1	95.0	90.3	91.9
48.00	97.7	98.4	90.6	87.6	82.9	84.9
49.00	89.9	90.6	83.4	80.4	75.9	77.7
50.00	82.9	83.6	76.4	73.9	69.7	71.5
51.00	76.2	77.1	70.3	66.7	64.3	65.4
52.00	69.9	70.6	64.3	62.5	58.9	60.0
53.00	64.3	65.4	58.6	57.1	54.2	55.1
54.00	59.3	60.2	54.4	53.0	49.9	50.6

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	270.00	285.00	300.00	315.00	330.00	345.00
55.00	54.6	55.1	50.1	48.8	45.8	46.3
56.00	50.3	50.3	46.1	44.3	42.0	42.5
57.00	46.3	46.5	42.2	40.7	38.6	39.1
58.00	42.9	42.9	39.1	37.5	35.7	36.0
59.00	39.3	39.3	36.0	34.8	32.6	33.3
60.00	36.4	36.6	33.5	32.1	30.1	30.3
61.00	33.7	33.7	30.8	29.7	27.6	27.9
62.00	31.2	31.2	28.5	27.4	25.4	25.6
63.00	28.8	28.5	26.5	25.2	23.4	23.4
64.00	26.3	26.1	24.3	22.9	21.6	21.3
65.00	24.0	24.3	22.2	21.1	19.8	19.8
66.00	22.2	22.2	20.4	19.3	18.0	18.0
67.00	20.4	20.7	18.9	17.8	16.6	16.4
68.00	18.9	18.9	17.3	16.2	15.1	14.8
69.00	17.3	17.5	15.7	14.8	13.9	13.7
70.00	16.2	16.0	14.4	13.7	12.8	12.6
71.00	15.1	14.8	13.3	12.4	11.7	11.5
72.00	13.9	13.7	12.1	11.5	10.8	10.6
73.00	12.8	12.6	11.2	10.6	9.9	9.9
74.00	11.7	11.5	10.3	9.7	9.2	9.2
75.00	10.6	10.3	9.7	9.2	8.5	8.8
76.00	9.7	9.4	9.0	8.5	7.9	7.9
77.00	9.0	8.8	8.3	7.9	7.2	7.2
78.00	8.5	8.3	7.6	7.0	6.5	6.5
79.00	7.9	7.6	7.0	6.5	6.1	5.8
80.00	7.2	7.0	6.3	6.1	5.4	5.2
81.00	6.5	6.3	5.8	5.4	4.9	4.9
82.00	6.1	5.8	5.2	4.9	4.5	4.5
83.00	5.4	5.4	4.9	4.5	4.3	4.0
84.00	4.9	4.9	4.5	4.3	3.8	3.8
85.00	4.7	4.5	4.0	3.8	3.6	3.6
86.00	4.3	4.3	3.8	3.6	3.4	3.1
87.00	4.0	4.0	3.6	3.4	3.1	2.9
88.00	3.6	3.6	3.4	3.1	2.7	2.7
89.00	3.4	3.4	2.9	2.9	2.5	2.5
90.00	2.9	2.9	2.7	2.5	2.5	2.2
91.00	2.7	2.7	2.5	2.5	2.2	2.2
92.00	2.5	2.5	2.5	2.5	2.2	2.2
93.00	2.5	2.5	2.2	2.2	2.2	2.2
94.00	2.5	2.5	2.2	2.2	2.2	2.2
95.00	2.5	2.5	2.2	2.2	2.2	2.2
96.00	2.5	2.5	2.5	2.2	2.5	2.5
97.00	2.7	2.5	2.7	2.7	2.7	2.7

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	270.00	285.00	300.00	315.00	330.00	345.00
98.00	2.9	2.7	2.9	2.9	2.9	2.9
99.00	3.1	2.9	3.1	3.1	3.1	2.9
100.00	3.1	3.1	3.1	3.1	3.1	2.9
101.00	3.1	3.1	3.1	3.1	2.9	2.9
102.00	3.1	3.1	2.9	2.9	2.9	2.7
103.00	3.1	3.1	2.9	2.9	2.9	2.7
104.00	3.1	3.1	2.9	2.9	2.7	2.7
105.00	3.1	2.9	2.7	2.9	2.7	2.7
106.00	3.1	2.9	2.7	2.9	2.7	2.7
107.00	3.1	2.9	2.7	2.9	2.7	2.7
108.00	3.1	2.9	2.9	2.7	2.7	2.7
109.00	3.1	2.9	2.7	2.7	2.7	2.7
110.00	3.1	2.9	2.9	2.7	2.7	2.7
111.00	3.1	2.9	2.9	2.7	2.7	2.7
112.00	3.1	2.9	2.9	2.7	2.7	2.7
113.00	3.4	3.1	2.9	2.9	2.7	2.7
114.00	3.1	3.1	3.1	2.9	2.9	2.9
115.00	3.1	3.1	3.1	3.1	2.9	2.9
116.00	3.1	3.1	3.1	3.1	2.9	2.9
117.00	3.1	3.1	3.1	2.9	2.9	2.9
118.00	3.1	3.1	2.9	2.9	2.9	2.9
119.00	3.4	3.1	2.9	2.9	2.9	2.9
120.00	3.4	3.1	3.1	2.9	2.9	2.9
121.00	3.4	3.4	3.1	2.9	2.9	3.1
122.00	3.4	3.4	3.4	3.1	2.9	3.1
123.00	3.6	3.6	3.4	3.1	3.1	3.1
124.00	3.6	3.6	3.4	3.1	3.1	3.4
125.00	3.8	3.8	3.4	3.4	3.4	3.4
126.00	4.0	3.8	3.6	3.4	3.4	3.4
127.00	4.0	3.8	3.6	3.6	3.4	3.4
128.00	4.0	3.8	3.8	3.6	3.4	3.4
129.00	4.0	3.8	3.8	3.8	3.6	3.4
130.00	4.0	3.8	3.8	3.8	3.6	3.4
131.00	4.0	3.8	3.8	3.8	3.6	3.6
132.00	4.3	3.8	3.8	3.8	3.6	3.6
133.00	4.3	3.8	3.8	4.0	3.8	3.6
134.00	4.3	4.0	3.4	4.0	3.8	3.6
135.00	4.3	4.3	2.7	4.0	3.8	3.6
136.00	4.5	4.3	2.5	4.0	3.8	3.6
137.00	4.5	4.5	2.5	4.0	3.8	3.6
138.00	4.5	4.5	2.7	4.0	3.8	3.8
139.00	4.5	4.5	2.7	4.0	3.8	3.6
140.00	4.5	4.5	2.9	4.0	3.8	3.6

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Intensity [cd] 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

G/C [cd]	270.00	285.00	300.00	315.00	330.00	345.00
141.00	4.3	4.3	2.7	3.8	3.8	3.6
142.00	4.3	4.3	2.2	3.8	3.8	3.8
143.00	4.3	4.0	2.0	3.8	3.8	3.6
144.00	4.0	4.0	2.2	3.6	3.8	3.6
145.00	4.0	4.0	2.5	3.6	3.6	3.6
146.00	4.0	3.8	2.5	3.4	3.6	3.4
147.00	4.0	3.8	2.7	3.4	3.6	3.4
148.00	3.8	3.8	2.7	2.9	3.4	3.4
149.00	3.8	3.6	2.9	2.9	3.4	3.1
150.00	3.6	3.4	2.7	2.7	3.1	3.1
151.00	3.6	3.1	2.7	2.7	3.1	3.1
152.00	3.4	3.1	2.7	2.7	3.1	3.1
153.00	3.4	2.9	2.7	2.7	2.9	3.1
154.00	3.4	2.9	2.2	2.7	2.9	3.1
155.00	3.1	2.7	2.0	2.7	2.7	2.9
156.00	3.1	2.7	1.8	2.5	2.5	2.9
157.00	2.9	2.7	1.6	1.8	2.2	2.7
158.00	2.7	2.2	1.6	2.0	2.0	2.5
159.00	2.2	2.0	1.1	1.6	1.3	1.8
160.00	1.3	0.9	0.9	0.9	0.9	1.1
161.00	0.9	0.9	0.9	0.9	0.9	0.9
162.00	0.9	0.9	0.9	0.9	0.9	0.9
163.00	0.9	0.9	0.9	0.9	0.9	0.9
164.00	1.1	0.9	0.9	0.9	0.9	0.9
165.00	0.9	0.9	0.9	0.9	0.9	0.9
166.00	0.9	0.9	0.9	0.9	0.9	0.9
167.00	0.9	0.9	0.9	0.9	0.9	0.9
168.00	0.9	0.9	0.9	0.7	0.9	0.9
169.00	0.9	0.9	0.9	1.1	0.9	0.9
170.00	1.1	0.9	0.9	0.9	1.1	0.9
171.00	0.9	1.1	1.1	0.9	0.9	0.9
172.00	1.1	0.9	1.1	1.1	1.1	0.9
173.00	0.9	0.9	1.1	1.1	1.1	0.9
174.00	0.9	1.1	0.9	1.1	0.9	1.1
175.00	0.9	1.1	1.1	1.1	0.9	1.1
176.00	0.9	1.1	1.1	1.1	1.1	0.9
177.00	0.9	1.1	0.9	1.1	1.1	0.9
178.00	0.9	1.1	1.1	1.1	1.1	1.1
179.00	0.9	1.1	1.1	1.1	1.1	1.1
180.00	0.9	1.1	1.1	1.1	1.1	1.1

LEDVANCE Lighting Co.Ltd.

PHOTOMETRIC RESULTS

Program:	T8/T5 C15 G5 180		
Name:	20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin		
Meas.-no.:	1		
Flux:	750.84 lm		Operator: Thomas.liu
Comment:	UI=230.03V II=0.0496A WI=8.69W PF=0.7616		
Maximum intensity:	647.810 cd		

Zonal flux 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

Gamma [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
0.0	854.1	859.8	856.7	0.00	0.00	0.00	0.00
1.0	851.7	860.1	856.7	0.62	0.62	0.08	0.08
2.0	847.5	862.8	855.4	1.85	2.46	0.25	0.33
3.0	841.8	862.8	853.3	3.07	5.53	0.41	0.74
4.0	835.2	861.6	850.2	4.28	9.81	0.57	1.31
5.0	828.7	859.5	846.0	5.48	15.29	0.73	2.04
6.0	819.7	855.0	839.7	6.65	21.94	0.89	2.92
7.0	809.5	850.8	832.0	7.79	29.73	1.04	3.96
8.0	798.1	846.0	823.4	8.90	38.63	1.18	5.14
9.0	786.8	839.7	813.1	9.96	48.59	1.33	6.47
10.0	773.3	831.7	801.4	10.97	59.56	1.46	7.93
11.0	756.8	822.1	788.8	11.93	71.49	1.59	9.52
12.0	739.2	810.4	774.8	12.83	84.32	1.71	11.23
13.0	723.3	799.6	761.2	13.69	98.01	1.82	13.05
14.0	707.2	786.5	746.8	14.49	112.50	1.93	14.98
15.0	689.5	771.8	731.1	15.23	127.74	2.03	17.01
16.0	669.8	756.5	714.4	15.90	143.64	2.12	19.13
17.0	649.4	738.0	696.7	16.50	160.14	2.20	21.33
18.0	629.1	720.0	677.7	17.01	177.15	2.27	23.59
19.0	609.0	701.2	658.3	17.45	194.60	2.32	25.92
20.0	586.9	683.2	637.9	17.81	212.42	2.37	28.29
21.0	565.0	661.7	617.3	18.10	230.51	2.41	30.70
22.0	544.4	640.7	596.5	18.31	248.83	2.44	33.14
23.0	523.1	618.3	574.9	18.46	267.28	2.46	35.60
24.0	502.8	597.6	553.8	18.53	285.81	2.47	38.07
25.0	482.7	577.3	532.9	18.55	304.37	2.47	40.54
26.0	463.3	556.6	512.0	18.52	322.89	2.47	43.00
27.0	444.1	534.5	490.3	18.41	341.30	2.45	45.46
28.0	423.8	514.4	469.3	18.24	359.54	2.43	47.89
29.0	403.7	493.5	448.0	18.02	377.56	2.40	50.28

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Zonal flux 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

Gamma [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
30.0	383.1	471.6	426.6	17.73	395.29	2.36	52.65
31.0	363.3	451.0	405.4	17.38	412.68	2.32	54.96
32.0	344.2	428.5	384.8	17.00	429.67	2.26	57.23
33.0	325.6	406.1	365.2	16.59	446.26	2.21	59.43
34.0	308.5	384.6	346.4	16.17	462.43	2.15	61.59
35.0	292.7	363.0	327.3	15.71	478.15	2.09	63.68
36.0	276.2	343.0	308.5	15.20	493.35	2.02	65.71
37.0	258.9	324.1	290.5	14.67	508.02	1.95	67.66
38.0	242.7	307.0	273.2	14.13	522.14	1.88	69.54
39.0	226.5	289.4	256.2	13.57	535.71	1.81	71.35
40.0	211.3	272.6	238.7	12.96	548.67	1.73	73.07
41.0	195.4	256.5	222.5	12.33	561.00	1.64	74.72
42.0	103.5	238.8	201.9	11.58	572.58	1.54	76.26
43.0	167.6	221.8	191.9	10.95	583.53	1.46	77.72
44.0	154.4	205.6	177.9	10.48	594.01	1.40	79.11
45.0	142.2	190.9	164.7	9.89	603.89	1.32	80.43
46.0	130.8	176.3	152.1	9.30	613.20	1.24	81.67
47.0	120.3	162.8	140.2	8.73	621.93	1.16	82.83
48.0	110.4	150.2	129.1	8.17	630.10	1.09	83.92
49.0	101.2	138.9	118.8	7.64	637.74	1.02	84.94
50.0	45.2	127.2	107.1	7.07	644.81	0.94	85.88
51.0	85.6	117.6	100.5	6.59	651.41	0.88	86.76
52.0	78.4	107.7	92.3	6.21	657.62	0.83	87.58
53.0	72.1	99.4	84.8	5.79	663.40	0.77	88.35
54.0	66.4	91.3	78.0	5.39	668.79	0.72	89.07
55.0	61.0	83.8	71.7	5.02	673.81	0.67	89.74
56.0	56.0	76.9	65.7	4.66	678.47	0.62	90.36
57.0	51.5	70.9	60.4	4.33	682.80	0.58	90.94
58.0	47.6	64.9	55.5	4.02	686.82	0.54	91.47
59.0	43.4	59.3	50.9	3.74	690.56	0.50	91.97
60.0	40.1	54.8	46.8	3.47	694.03	0.46	92.43
61.0	36.8	50.3	43.0	3.22	697.24	0.43	92.86
62.0	33.8	46.4	39.6	2.99	700.23	0.40	93.26
63.0	31.1	42.5	36.3	2.77	703.00	0.37	93.63
64.0	28.4	38.9	33.1	2.56	705.56	0.34	93.97
65.0	20.6	35.9	29.9	2.34	707.90	0.31	94.28
66.0	23.3	32.9	27.6	2.15	710.05	0.29	94.57
67.0	21.8	30.2	25.5	2.00	712.06	0.27	94.83
68.0	19.8	28.1	23.3	1.86	713.91	0.25	95.08

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Zonal flux 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

Gamma [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
69.0	18.3	26.0	21.4	1.71	715.62	0.23	95.31
70.0	16.8	23.9	19.6	1.58	717.21	0.21	95.52
71.0	15.3	22.1	18.1	1.46	718.67	0.20	95.72
72.0	14.1	20.6	16.7	1.36	720.03	0.18	95.90
73.0	13.2	19.2	15.3	1.26	721.29	0.17	96.06
74.0	12.0	17.7	14.1	1.16	722.45	0.15	96.22
75.0	10.8	15.9	12.8	1.07	723.52	0.14	96.36
76.0	9.9	14.7	11.7	0.98	724.49	0.13	96.49
77.0	9.0	13.5	10.7	0.90	725.39	0.12	96.61
78.0	7.8	12.3	9.8	0.82	726.22	0.11	96.72
79.0	7.2	11.4	8.9	0.75	726.97	0.10	96.82
80.0	6.6	10.5	8.1	0.69	727.66	0.09	96.91
81.0	6.0	9.6	7.4	0.63	728.28	0.08	97.00
82.0	5.4	8.7	6.7	0.57	728.86	0.08	97.07
83.0	5.1	8.1	6.1	0.52	729.38	0.07	97.14
84.0	4.5	7.2	5.6	0.48	729.86	0.06	97.21
85.0	4.2	6.6	5.2	0.44	730.30	0.06	97.26
86.0	3.9	6.3	4.8	0.41	730.71	0.05	97.32
87.0	3.6	5.7	4.5	0.38	731.09	0.05	97.37
88.0	3.3	5.4	4.1	0.35	731.45	0.05	97.42
89.0	3.0	4.8	3.8	0.33	731.77	0.04	97.46
90.0	3.0	4.5	3.5	0.30	732.07	0.04	97.50
91.0	3.0	3.9	3.3	0.28	732.35	0.04	97.54
92.0	2.7	3.6	3.2	0.27	732.62	0.04	97.57
93.0	3.0	3.3	3.1	0.26	732.88	0.03	97.61
94.0	3.0	3.6	3.2	0.26	733.13	0.03	97.64
95.0	3.0	4.2	3.3	0.27	733.40	0.04	97.68
96.0	3.0	4.5	3.6	0.28	733.68	0.04	97.71
97.0	3.3	4.5	3.9	0.30	733.99	0.04	97.76
98.0	3.6	4.5	4.1	0.32	734.31	0.04	97.80
99.0	3.9	4.8	4.2	0.34	734.65	0.05	97.84
100.0	3.9	4.8	4.2	0.34	734.99	0.05	97.89
101.0	3.9	4.8	4.2	0.34	735.33	0.05	97.93
102.0	3.6	4.5	4.0	0.33	735.67	0.04	97.98
103.0	3.6	4.5	3.9	0.32	735.99	0.04	98.02
104.0	3.6	4.2	3.9	0.31	736.30	0.04	98.06
105.0	3.6	4.2	3.8	0.31	736.61	0.04	98.10
106.0	3.6	4.2	3.9	0.31	736.91	0.04	98.14
107.0	3.6	4.2	3.9	0.31	737.22	0.04	98.19

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Zonal flux 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

Gamma [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
108.0	3.6	4.2	3.9	0.31	737.53	0.04	98.23
109.0	3.6	4.2	4.0	0.31	737.83	0.04	98.27
110.0	3.6	4.2	4.0	0.31	738.14	0.04	98.31
111.0	3.6	4.5	4.0	0.31	738.45	0.04	98.35
112.0	3.6	4.5	4.1	0.31	738.77	0.04	98.39
113.0	3.6	4.5	4.2	0.31	739.08	0.04	98.43
114.0	3.9	4.5	4.1	0.31	739.39	0.04	98.47
115.0	3.9	4.2	4.1	0.31	739.70	0.04	98.52
116.0	2.4	4.5	4.0	0.30	740.00	0.04	98.56
117.0	3.9	4.5	4.0	0.29	740.29	0.04	98.59
118.0	3.9	4.5	4.0	0.29	740.59	0.04	98.63
119.0	3.9	4.5	4.0	0.29	740.88	0.04	98.67
120.0	3.9	4.5	4.1	0.29	741.17	0.04	98.71
121.0	3.9	4.5	4.2	0.29	741.46	0.04	98.75
122.0	3.9	4.5	4.3	0.30	741.75	0.04	98.79
123.0	4.2	4.8	4.4	0.30	742.06	0.04	98.83
124.0	4.2	4.8	4.5	0.30	742.36	0.04	98.87
125.0	4.5	5.1	4.6	0.31	742.67	0.04	98.91
126.0	4.5	5.4	4.7	0.31	742.98	0.04	98.95
127.0	4.5	5.4	4.7	0.31	743.29	0.04	98.99
128.0	4.5	5.4	4.8	0.31	743.60	0.04	99.03
129.0	4.5	5.4	4.8	0.31	743.90	0.04	99.08
130.0	4.5	5.4	4.8	0.30	744.21	0.04	99.12
131.0	4.5	5.4	4.8	0.30	744.51	0.04	99.16
132.0	4.5	5.7	4.9	0.30	744.81	0.04	99.20
133.0	4.5	5.7	4.9	0.30	745.11	0.04	99.24
134.0	4.5	5.7	4.9	0.29	745.40	0.04	99.28
135.0	3.6	5.7	4.9	0.29	745.69	0.04	99.31
136.0	3.3	6.0	4.9	0.28	745.97	0.04	99.35
137.0	3.3	6.0	4.9	0.28	746.25	0.04	99.39
138.0	1.8	6.0	4.9	0.27	746.53	0.04	99.43
139.0	3.6	6.0	5.0	0.27	746.79	0.04	99.46
140.0	3.9	6.0	5.0	0.26	747.06	0.04	99.50
141.0	3.6	5.7	4.9	0.26	747.32	0.03	99.53
142.0	3.0	5.7	4.8	0.25	747.56	0.03	99.56
143.0	2.7	5.7	4.8	0.24	747.80	0.03	99.59
144.0	3.0	5.4	4.7	0.23	748.03	0.03	99.63
145.0	3.3	5.4	4.6	0.22	748.25	0.03	99.66
146.0	3.3	5.4	4.5	0.21	748.47	0.03	99.68

LEDVANCE Lighting Co.Ltd.

20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin

Zonal flux 20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin / C-Plane measurement

Gamma [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
147.0	3.6	5.4	4.5	0.20	748.67	0.03	99.71
148.0	3.6	5.1	4.4	0.20	748.87	0.03	99.74
149.0	3.9	5.1	4.3	0.19	749.05	0.02	99.76
150.0	3.6	5.1	4.2	0.18	749.23	0.02	99.79
151.0	3.6	4.8	4.2	0.17	749.40	0.02	99.81
152.0	3.6	4.5	4.1	0.16	749.57	0.02	99.83
153.0	3.6	4.5	4.1	0.16	749.72	0.02	99.85
154.0	3.0	4.5	4.0	0.15	749.87	0.02	99.87
155.0	1.2	4.2	3.6	0.13	750.00	0.02	99.89
156.0	2.4	4.2	3.5	0.12	750.13	0.02	99.90
157.0	2.1	3.9	3.4	0.11	750.24	0.02	99.92
158.0	2.1	3.6	3.1	0.10	750.34	0.01	99.93
159.0	1.5	3.0	2.4	0.08	750.42	0.01	99.94
160.0	1.2	1.8	1.3	0.05	750.48	0.01	99.95
161.0	1.2	1.5	1.3	0.04	750.51	0.00	99.96
162.0	1.2	1.5	1.2	0.03	750.54	0.00	99.96
163.0	1.2	1.5	1.2	0.03	750.58	0.00	99.96
164.0	1.2	1.5	1.3	0.03	750.61	0.00	99.97
165.0	1.2	1.5	1.3	0.03	750.63	0.00	99.97
166.0	1.2	1.5	1.3	0.03	750.66	0.00	99.98
167.0	1.2	1.5	1.3	0.02	750.68	0.00	99.98
168.0	0.9	1.5	1.3	0.02	750.71	0.00	99.98
169.0	1.2	1.5	1.3	0.02	750.73	0.00	99.98
170.0	1.2	1.5	1.3	0.02	750.75	0.00	99.99
171.0	1.2	1.5	1.3	0.02	750.77	0.00	99.99
172.0	1.2	1.5	1.4	0.02	750.78	0.00	99.99
173.0	0.6	1.5	1.3	0.01	750.80	0.00	99.99
174.0	0.3	1.5	1.3	0.01	750.81	0.00	100.00
175.0	0.3	1.5	1.3	0.01	750.82	0.00	100.00
176.0	0.9	1.5	1.3	0.01	750.83	0.00	100.00
177.0	1.2	1.5	1.4	0.01	750.83	0.00	100.00
178.0	1.2	1.5	1.4	0.01	750.84	0.00	100.00
179.0	1.2	1.5	1.4	0.00	750.84	0.00	100.00
180.0	1.2	1.5	1.4	0.00	750.84	0.00	100.00

LEDVANCE Lighting Co.Ltd.

PHOTOMETRIC RESULTS

Program:	T8/T5 C15 G5 180		
Name:	20071145-Intensity LED PAR16 80 60 8.1W/965 230V50Hz 00144#-1#(Liu yulin		
Meas.-no.:	1		
Flux:	750.84 lm		Operator: Thomas.liu
Comment:	UI=230.03V II=0.0496A WI=8.69W PF=0.7616		
Maximum intensity:	647.810 cd		

Protocol

LiTG-class:	A52									
UTE-class:	0.98 B + 0.02 T									
IES-class:	77 - 95 - 99 - 98 - 100									
TM5-class:	BZ1									
Divergences in the plane through maximum intensity:				Horizontal			Vertical			
One half peak divergence:				59.5°			59.8°			
Half peak side angle (left):				-29.9°			-31.0°			
Half peak side angle (right):				29.6°			28.9°			
One tenth peak divergence:				106.1°			105.0°			
Tenth peak side angle (left):				-53.0°			-53.3°			
Tenth peak side angle (right):				53.1°			51.7°			
C-planes:	0.0°	15.0°	30.0°	45.0°	60.0°	75.0°	90.0°	105.0°	120.0°	135.0°
	150.0°	165.0°	180.0°	195.0°	210.0°	225.0°	240.0°	255.0°	270.0°	285.0°
	300.0°	315.0°	330.0°	345.0°						
Gamma:	0.0°	1.0°	2.0°	3.0°	4.0°	5.0°	6.0°	7.0°	8.0°	9.0°
	10.0°	11.0°	12.0°	13.0°	14.0°	15.0°	16.0°	17.0°	18.0°	19.0°
	20.0°	21.0°	22.0°	23.0°	24.0°	25.0°	26.0°	27.0°	28.0°	29.0°
	30.0°	31.0°	32.0°	33.0°	34.0°	35.0°	36.0°	37.0°	38.0°	39.0°
	40.0°	41.0°	42.0°	43.0°	44.0°	45.0°	46.0°	47.0°	48.0°	49.0°
	50.0°	51.0°	52.0°	53.0°	54.0°	55.0°	56.0°	57.0°	58.0°	59.0°
	60.0°	61.0°	62.0°	63.0°	64.0°	65.0°	66.0°	67.0°	68.0°	69.0°
	70.0°	71.0°	72.0°	73.0°	74.0°	75.0°	76.0°	77.0°	78.0°	79.0°
	80.0°	81.0°	82.0°	83.0°	84.0°	85.0°	86.0°	87.0°	88.0°	89.0°
	90.0°	91.0°	92.0°	93.0°	94.0°	95.0°	96.0°	97.0°	98.0°	99.0°
	100.0°	101.0°	102.0°	103.0°	104.0°	105.0°	106.0°	107.0°	108.0°	109.0°
	110.0°	111.0°	112.0°	113.0°	114.0°	115.0°	116.0°	117.0°	118.0°	119.0°
	120.0°	121.0°	122.0°	123.0°	124.0°	125.0°	126.0°	127.0°	128.0°	129.0°
	130.0°	131.0°	132.0°	133.0°	134.0°	135.0°	136.0°	137.0°	138.0°	139.0°
	140.0°	141.0°	142.0°	143.0°	144.0°	145.0°	146.0°	147.0°	148.0°	149.0°
	150.0°	151.0°	152.0°	153.0°	154.0°	155.0°	156.0°	157.0°	158.0°	159.0°
	160.0°	161.0°	162.0°	163.0°	164.0°	165.0°	166.0°	167.0°	168.0°	169.0°
	170.0°	171.0°	172.0°	173.0°	174.0°	175.0°	176.0°	177.0°	178.0°	179.0°
	180.0°									