



旋转反光镜立式空间光谱辐射分布式光 度计 (LSG-2000CCD)

Brochure

Global Office of Lisun Electronics Inc.

<http://www.Lisungroup.com>

Lisun Group (Hong Kong) Limited

Add: Room C, 15/F Hua Chiao Commercial Center, 678 Nathan Road, Mongkok, KL, HK

Tel: 00852-68852050 Fax: 00852-30785638

Email: SalesHK@Lisungroup.com

Lisun Electronics (Shanghai) Co., Ltd

Add: 113-114, No. 1 Building, Nanxiang Zhidi Industry Park, No. 1101, Huyi Road, Jiading District, Shanghai, 201802, China

Tel: +86(21)5108 3341 Fax: +86(21)5108 3342

Email: SalesSH@Lisungroup.com

Lisun Electronics Inc. (USA)

Add: 445 S. Figueroa Street, Los Angeles, CA 90071, U.S.A.

Email: Sales@Lisungroup.com

Lisun China Factory

Add: NO. 37, Xiangyuan Road, Hangzhou City, Zhejiang Province, China

Tel: +86-189-1799-6096

Email: Engineering@Lisungroup.com

[Lead in CFL & LED Test Instruments](#)

Rev. 1/29/2019

1. 系统配置

报价包括以下项目：

A. 角光度系统：

- 测角旋转控制台：采用日本三菱电机和德国角度解码器系统，使得角度能精确到 0.0017° 。远场测试（近场测试可选）。
- 高反光率透镜：特殊设计制造，以确保高反光率。
- 光度计旋转控制器：与电脑连接，由软件控制。
- 放置在暗室中的旋转控制器：方便客户在暗室装光源时控制旋转，而无需电脑控制。
- 双通道，高精度光度计
- A 级恒温探头（L 级可选）
- 十字激光对准系统用于校准
- 中英文软件

B. LMS-9000B 高精度 CCD 光谱辐射计

C. CLAMP-9000 附件和可调节的三脚架固定 LMS-9000B 光谱辐射计

D. SLS-150W 直流光强标准光源

E. LS2010 数字电参数测量仪：高精度测量交直流电压，电流，功率，功率因素，谐波。

F. DC3010 直流稳压稳流电源：30V/10A 恒流恒压直流输出

G. LSP-1KVA 交流电源：1000W 交流稳压电源

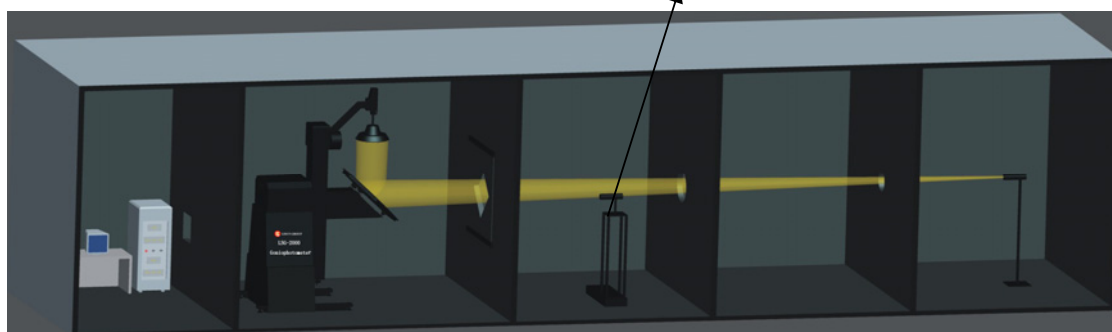
H. CASE-19IN 19 英寸标准机柜

I. 自动可调光阑：根据不同的光源尺寸可远程控制调节光阑尺寸

J. 两套夹具：两套多功能夹具。按照客户灯具类型定做

K. 包装：木质包装费用

LMS-9000B 高精度 CCD 光谱辐射计



LSG-2000CCD 旋转反光镜立式空间光谱辐射分布光度计示意图

2. 测试原理

旋转反光镜分布光度计是被测光源在限定的发光位置上绕垂直轴旋转，而反光镜绕水平轴旋转，同时，同轴同步朝相反的方向旋转。光源与镜子的复合运动允许测试任何水平或垂直方向角度，无需使灯具倾斜。因此，光强没有变化。光度探头固定反射镜前在一个位置上，保持限定的光度距离，采集各个方向上的光。

空间光谱辐射分布式光度计=分布式光度计+光谱辐射计，当仪器工作时可以测试 CCT 光谱空间分布参数。

仪器的转动由软件控制。如果镜子旋转轴优先旋转，则分布光度计会持续测试 C 角度决定的垂直平面上每一个 Y 角度的光强，测试微量相当于经度。同理，如果被测灯旋转轴优先，系统则会持续测试取决于 Y 角度的锥形面上每个 C 平面的光强。微量被看成是纬度，测试原理如下图：

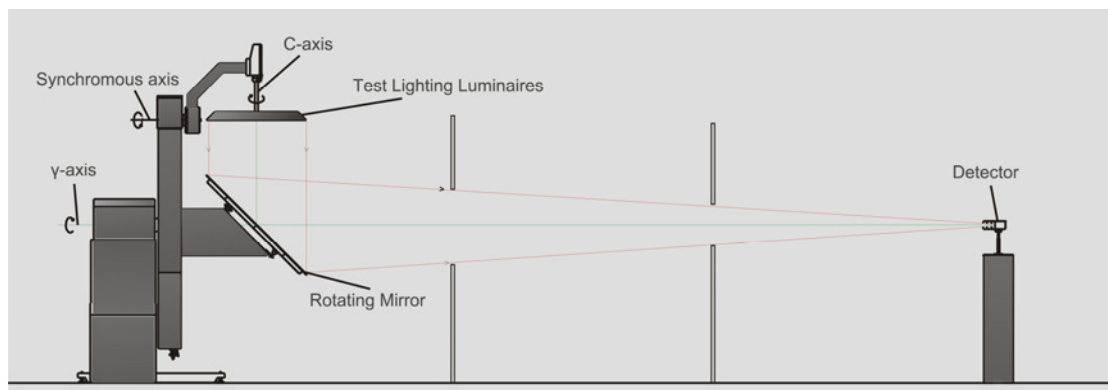


Figure Measurement Principle

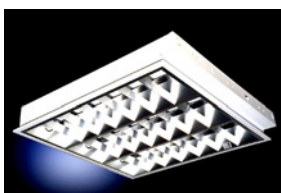
3. 系统功能



LSG-2000CCD 旋转反光镜立式空间光谱辐射分布光度计

The LSG-2000CCD 满足 LM-79 9.3.1 条款，CIE 和 GB 等关于光参数的测试。这套系统用于测试泛光灯、路灯和室内的灯具的空间光强分布、等光强曲线、各区域的光强分布曲线（以

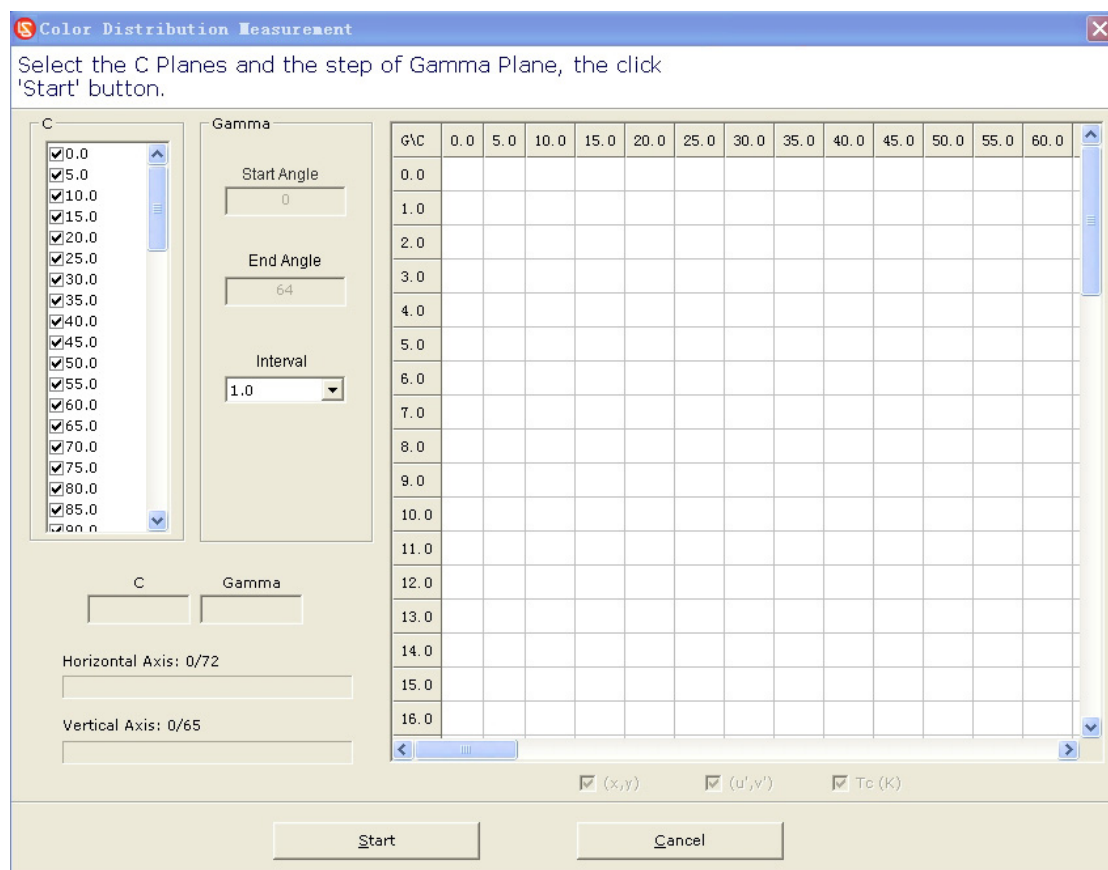
直角坐标系或极坐标系表示)、等照度曲线、亮度限制曲线、光效、眩光等级、有效光束角、上射光通量比、下射光通量比、总光通量、有效光通量、利用系数和电参数（电流，电压，功率，功率因素）。测试数据可以保存为 IES、LDT、CIB、TM4、CIE、CEN 和 CSV 格式，以便直接用于相关照明设计软件。



4. 技术参数

- 1) 被测光源绕反光镜旋转角度(γ) $\pm 180^\circ$ (or 0-360°), 被测光源绕自身旋转角度(C) $\pm 180^\circ$ (or 0-360°)
- 2) 角度精度: 0.1°以及角度分辨率: 0.01°
- 3) 光度测试范围: 照度 0.001lx~99,999lx; 光强 1.0cd~ 10^7 cd(探头)
- 4) 光度精度: CIE A 级 (L 级可选)
- 5) 测试精度: 2%(在标准灯下); 杂散光: 小于 0.1%
- 6) 和高精度快速 CCD 光谱辐射计一起使用测试空间光谱颜色
- 7) 软件可运行在 WinXP 或 Win7 系统下

型号	LSG-2000BCCD (大型)	LSG-2000CCD (中型)	LSG-2000SCCD (小型)
可测灯具尺寸 (mm)	1600	1300	800
最大可测重量 (KG)	50	50	30
最大可测功率 (W)	600V/10A, AC/DC	600V/10A, AC/DC	600V/10A, AC/DC



5. 实验室要求

1) 根据 CIE 要求房间尺寸

A. 暗室：放置分布光度计

尺寸：W5.0m*L5.0m*H5.9m

B. 暗室：光路

尺寸：W1.5m*H1.5m*L(15m – 30m)

C. 操作室

尺寸：不小于W3m*L3m

*暗室的墙壁，天花板及地板必须用哑光漆喷涂，或者用黑布和黑地毯。

*空调：放置在暗室中以控制灯具周围的温度以达到CIE要求。

注意：客户在下单之后，LISUN GROUP 的工程部门会根据客户实际的实验室空间出一份实验室设计图。

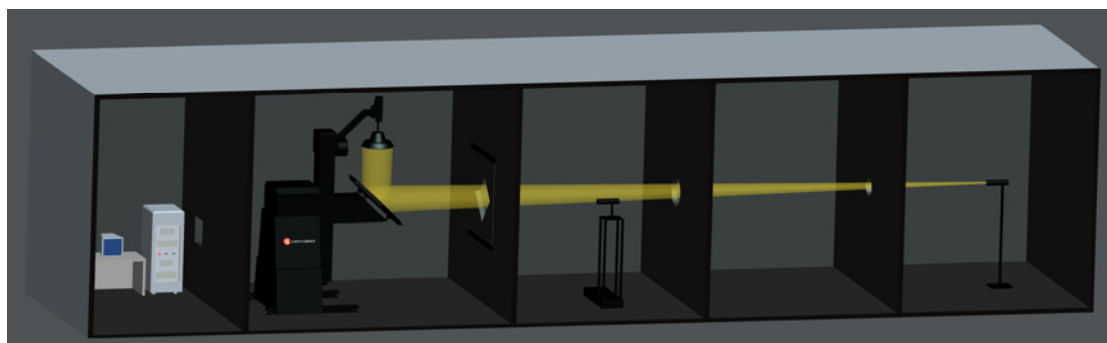
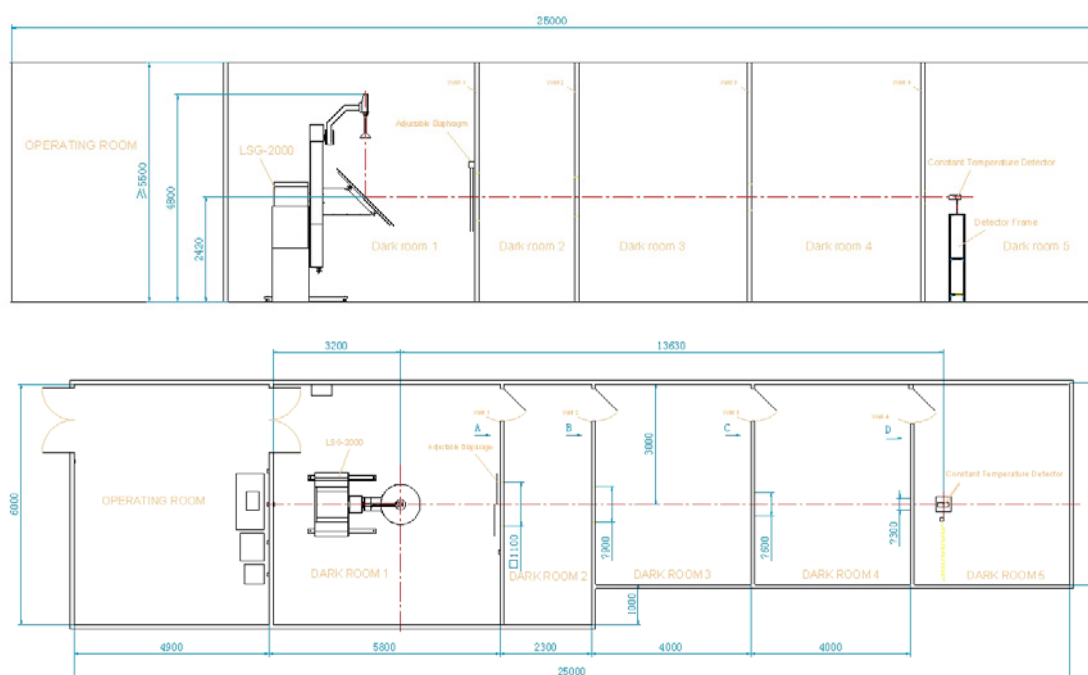


Fig: LSG-2000CCD 暗室示意图



2) 杂光消除要求

在 LSG-2000CCD 系统中，探头只能接收反光镜直接发射的光。灯具直接发射的光以及墙壁和地板反射的光应该用挡光板挡掉。暗室内表面及光通道中的挡光板应该用哑光漆涂黑或是用黑布，黑地毯盖住。

3) 环境温度

在测试时，灯具周围的温度必须控制在 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ，特殊情况可做以下调整：

- a. 钨丝白炽灯： $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$
- b. 双端荧光灯： $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- c. 高压汞灯： $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- d. 金卤灯： $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- e. 高压钠灯： $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- f. 低压钠灯： $25^{\circ}\text{C} \pm 2$

4) 空气流动

自然风，空调或是光源转动会引起光度计周围的空气流动，但是空气流动速度不能超

过 0.2m/s。

5) 振动和冲击

当点亮灯具的时候，振动不应该超过 $10\text{m/s}^2(4-3000\text{Hz})$ ，或者灯具移动范围不能超过 30mm(至少 4Hz)。

6) 烟雾，灰尘及湿度

测试环境应保持无烟，无尘及干燥的环境中。同时，测试中，烟雾，灰尘及潮湿都会影响反光镜反射及减少杂散光。所以，实验室必须保持整洁干净，无烟无尘，干燥。湿度不应超过 60%RH。

6. 服务

1) 安装与培训

LISUN GROUP 工程师负责安装仪器及培训使用人员。

2) 质保期：24 个月

保修期内免费保修，如需上门服务，需要支付差旅费用。

3) 免费升级软件

7. 仪器设计标准

LSG-2000CCD 设计结构，技术参数，测试操作步骤及软件可满足一下标准要求：

3.1 CIE Pub. NO.70, "The Measurement of Absolute Luminous Intensity Distributions"

3.2 CIE DIV. II -TC10, "Photometry of Luminaires"

3.3 IES LM-35-1989, "IES Approved Method for Photometric Testing of Floodlights"

3.4 IES LM-31, "IES Approved Method for Photometric Testing of Roadway Luminaires"

3.5 IES-LM-79, "Electrical and Photometric Measurements of Solid-State Lighting Products"

3.6 GB/T 7002-1986, "Luminosity Test of Flood Luminaires"

3.7 GB/T 9467-1988, "Luminosity Test of Indoor Luminaires"

3.8 GB/T 9468-1988, "Luminosity Test of Street Luminaires"

3.9 IES 61341 "Method of Measurement of Center Beam Intensity and Beam Angle(s) of Reflector Lamp"

3.10 CIE Pub.NO.76, "Photometry-the CIE System of Physical Photometry"

8. 典型海外买家资料：

请联系 LISUN 销售部门索取资料。

9. 应用软件

LSG-2000CCD 操作可完全由软件实现，包括光度计的运转，数据的采集及处理，实时显示在电脑屏幕上。可直接打印测试报告，操作更方便，数据更安全。

系统可导出以下格式文件:

IESNA Files (*.ies)
EULUMDAT Files (*.ldt)
CIEBSE TM14 Files (*.cib)
CIEBSE TM14 Files (*.tm4)
CIE Files (*.cie)
DIN CEN Files (*.cen)
Excel File (*.csv)

应用软件可以实现照明设计要求的基本计算，如在一个工作平面上的等照度分布曲线，亮度限制曲线，光效，有效光束角，上射光通量比，下射光通量比，有效光通量，利用系数曲线等。

The Next Page is the Test Report of LSG-2000CCD:

Report No.: 20140410002

Test Time: 2014-5-6 16:57

Luminaire Property

Luminaire Manufacturer: YAMING
 Luminaire Category: HID Lamp
 Current: 1.756 A
 Power Factor: 0.484

Voltage: 220.0 V
 Power: 187.10 W

Photometric Results

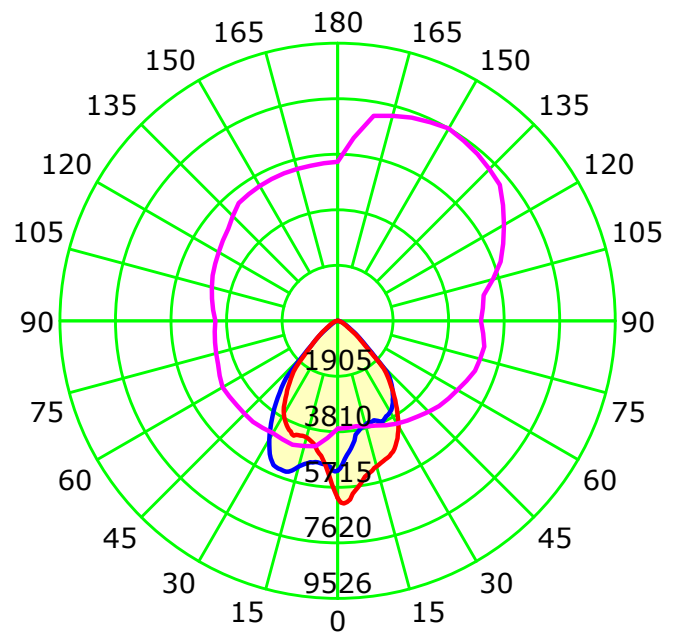
CIE Class: Direct
 Measurement Flux: 9187.4 lm
 Downward Ratio: 100%
 Field Angle: H111.5 V108.6
 Luminaire Efficacy Rating (LER): 49
 Max. Intensity: 7620.86 cd

Total Rated Lamp Lumens: 9187.4 lm
 Efficiency: 100%
 Upward Ratio: 0%
 Beam Angle: H84.6 V72.8
 Central Intensity: 5143.91 cd
 Pos of Max. Intensity: H150 V22

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

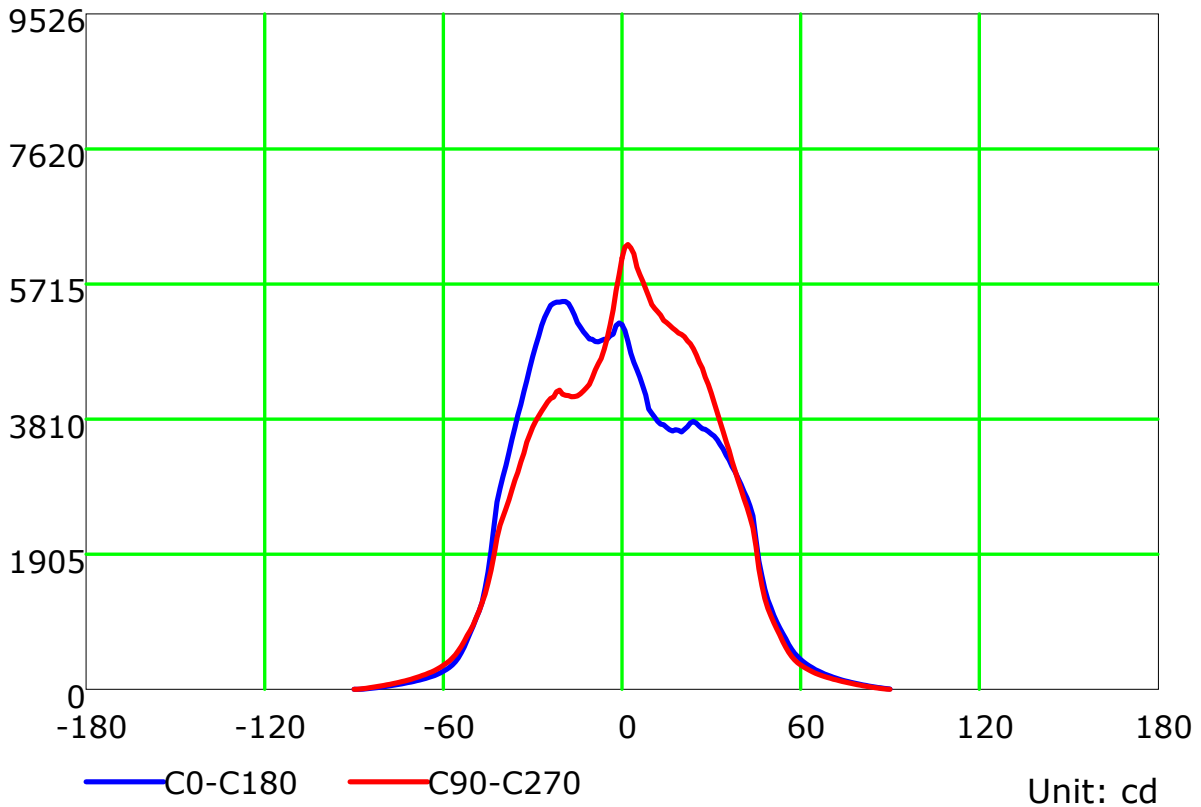
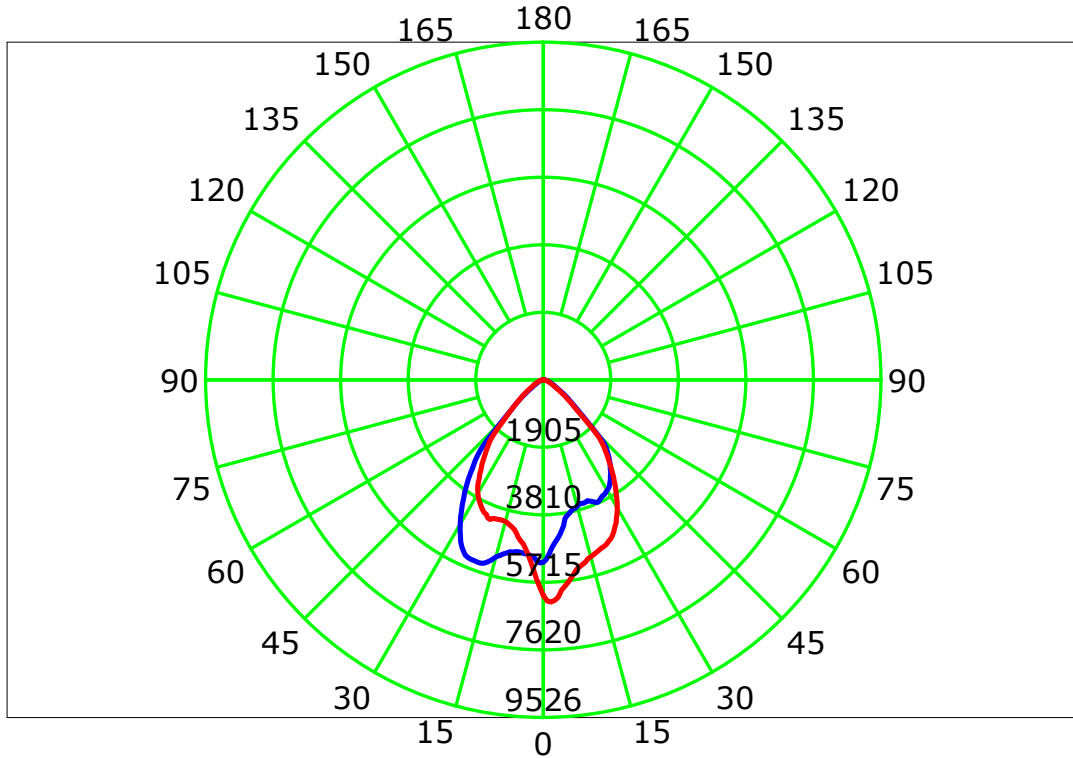
— C0-C180 — C90-C270 — G22

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:



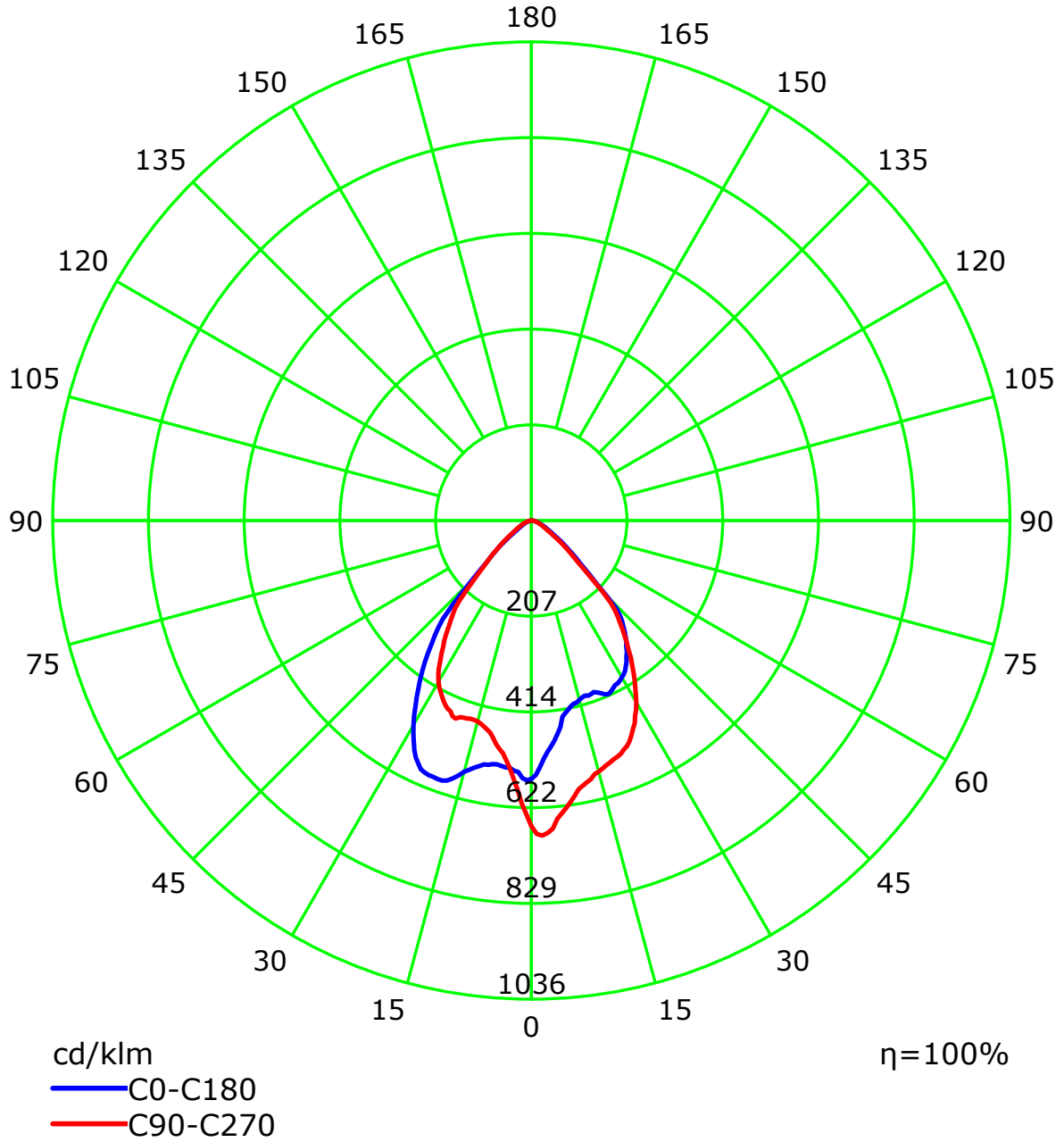
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0
Test Lab: LISUN GROUP
Test Type: TYPE C
Temperature: 25C
Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
Test Device: LSG-2000CCD
Distance: 6.435 m
Humidity: 65%
Inspector:

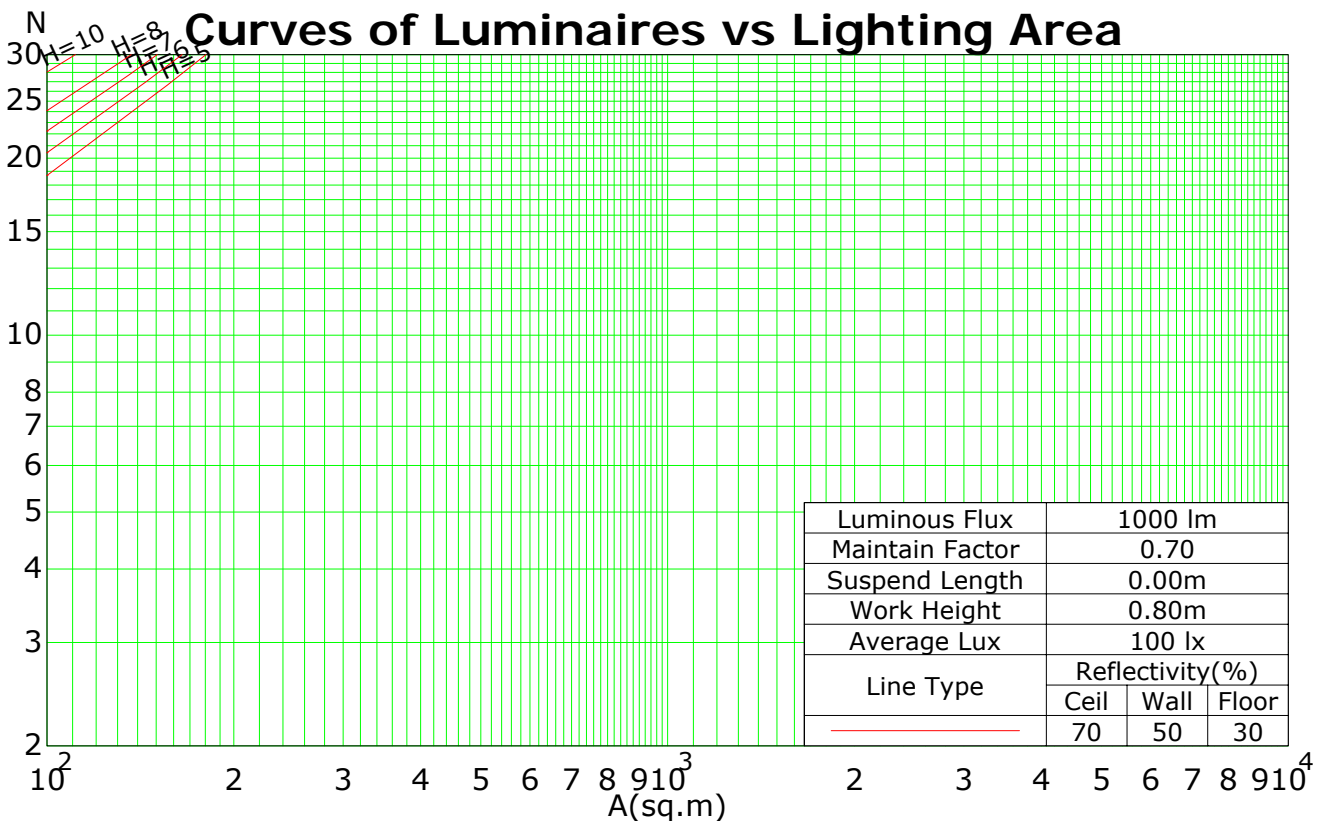
Luminous Intensity Distribution Curve(cd/klm)



Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	88	85	83	81
3	98	90	83	79	96	88	82	78	85	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40
10	62	50	44	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37

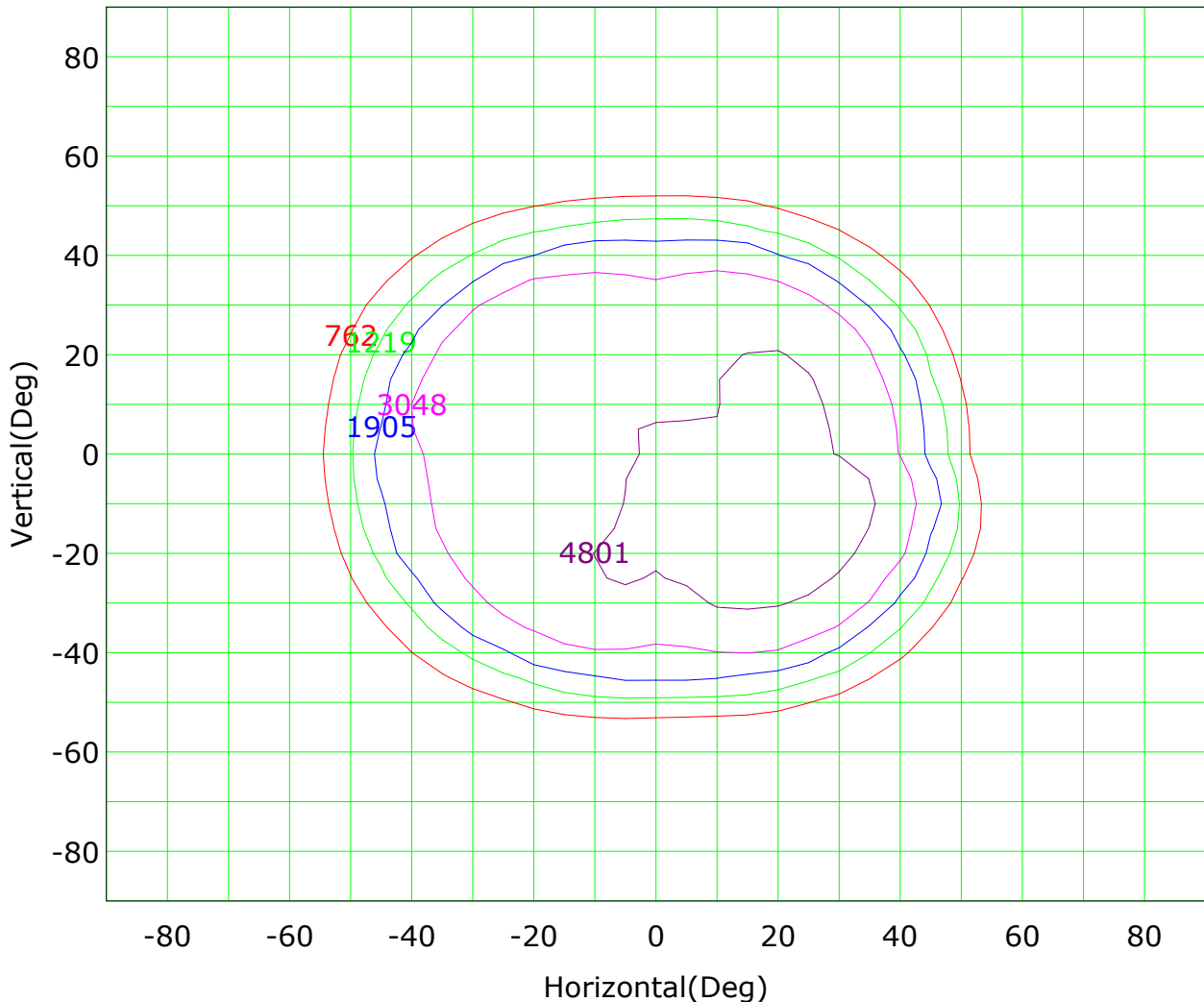
Spacing Criteria (0-180): 1.20
 Spacing Criteria (90-270): 1.00
 Spacing Criteria (Diagonal): 1.25



C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

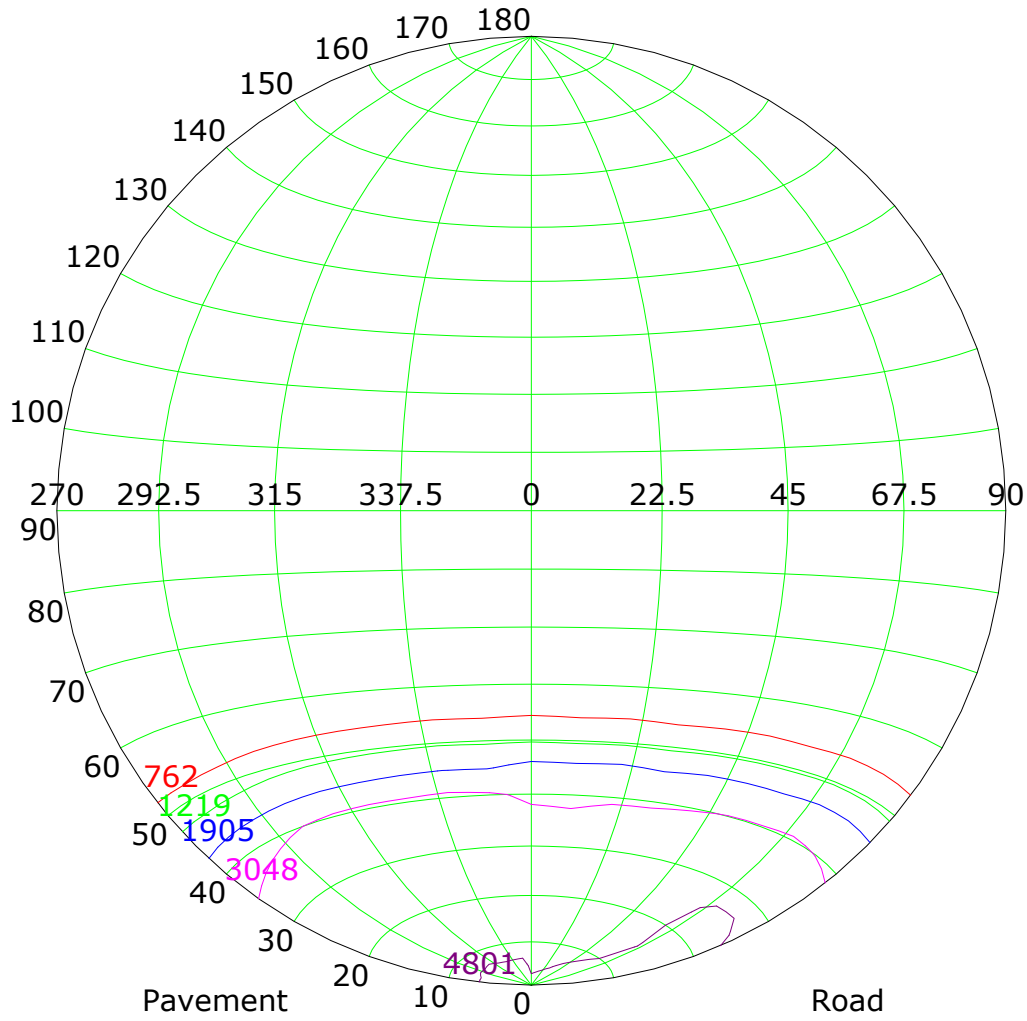
Isocandela (rectangle)



Imax (100%): 7621 cd

- | | |
|-------------------|-------------------|
| — (10%): 762 cd | — (16%): 1219 cd |
| — (25%): 1905 cd | — (40%): 3048 cd |
| — (63%): 4801 cd | — (100%): 7621 cd |

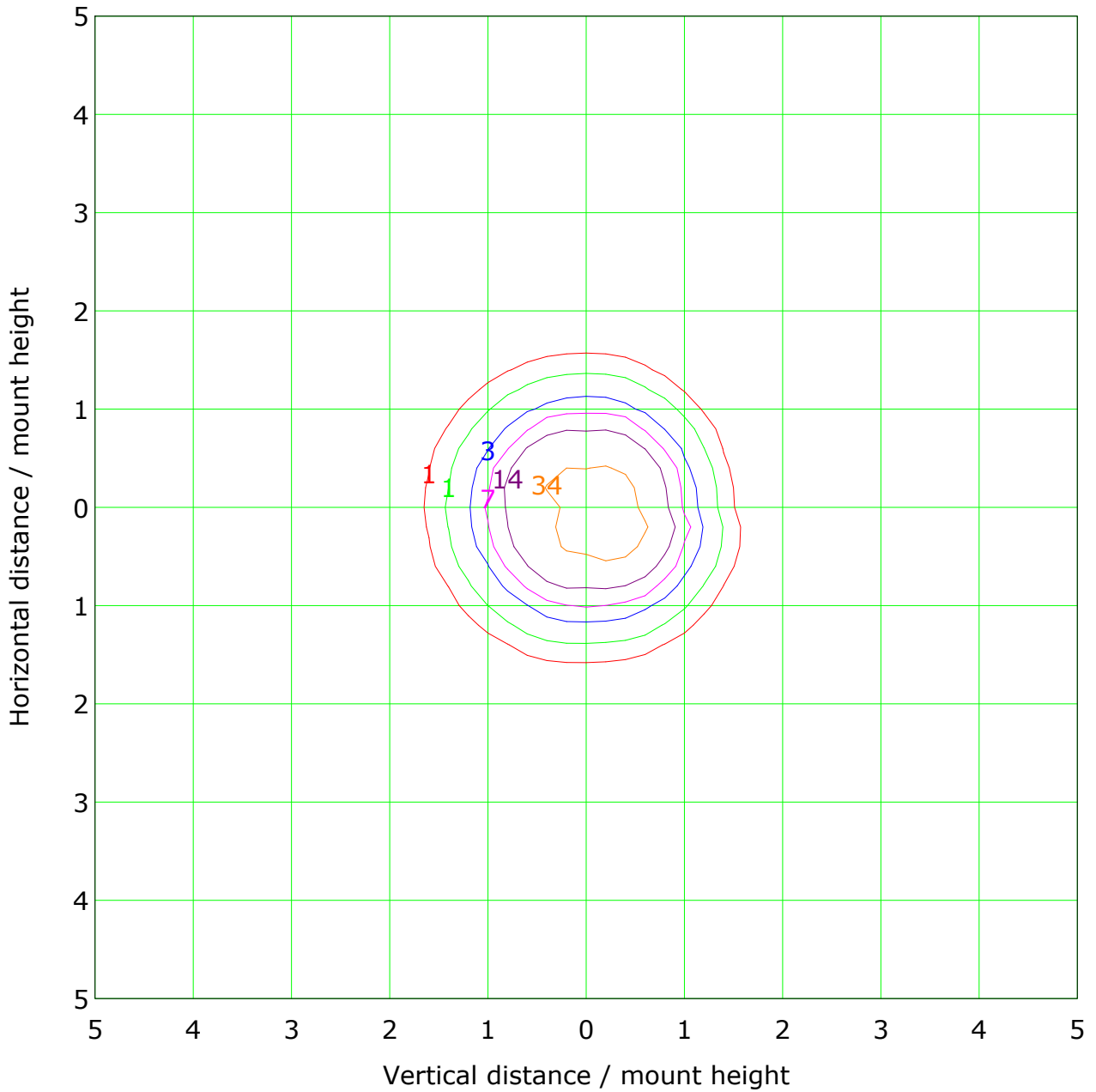
Isocandela (sphere)



Imax (100%): 7621 cd

- | | |
|-------------------|-------------------|
| — (10%): 762 cd | — (16%): 1219 cd |
| — (25%): 1905 cd | — (40%): 3048 cd |
| — (63%): 4801 cd | — (100%): 7621 cd |

IsoLux Plot



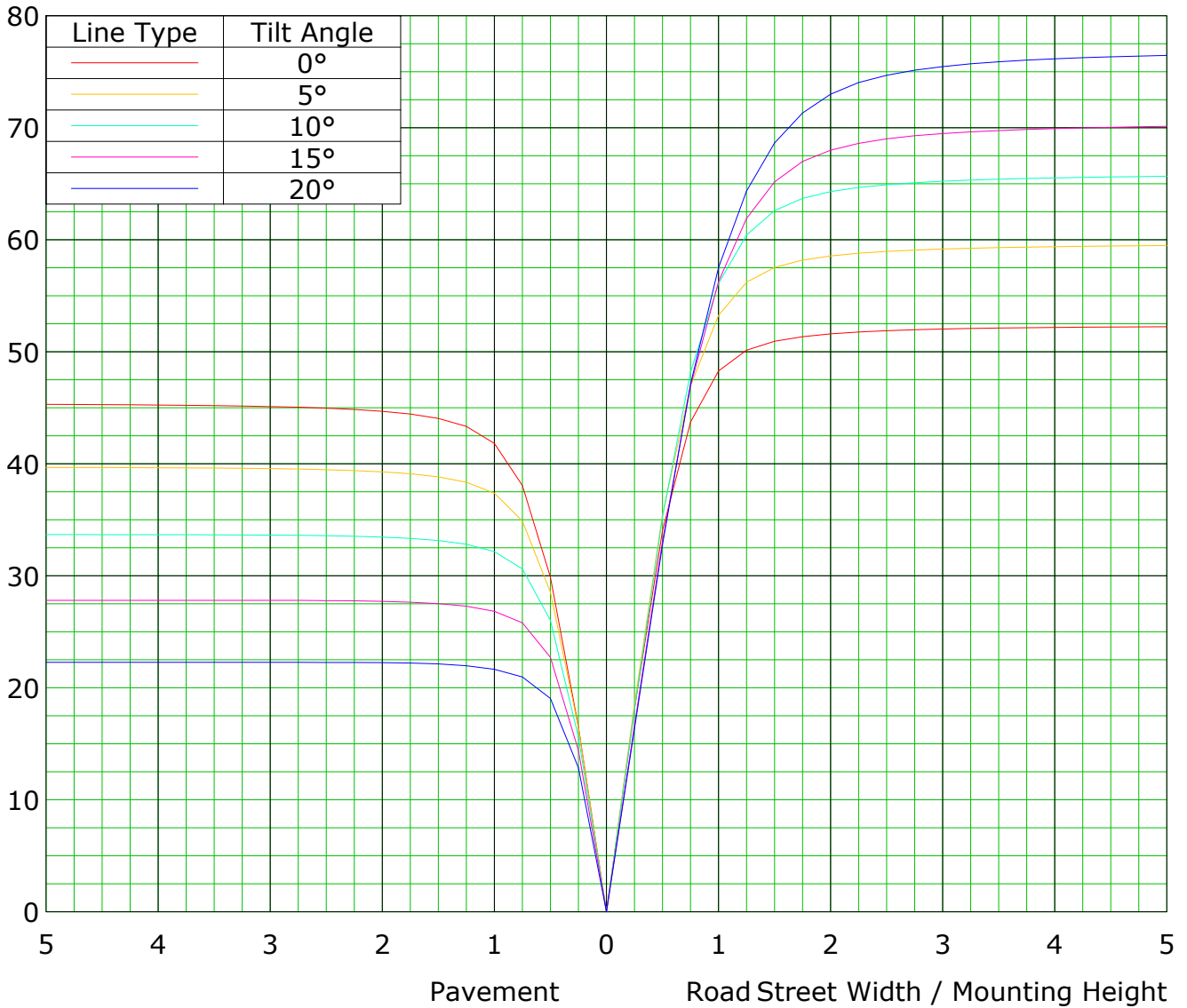
Mounting Height: 10.0m		Max Lux(100%): 67.9 lx	
<ul style="list-style-type: none"> — (1%): 0.7 lx — (5%): 3.4 lx — (20%): 13.6 lx — (100%): 67.9 lx 	<ul style="list-style-type: none"> — (2%): 1.4 lx — (10%): 6.8 lx — (50%): 33.9 lx 		

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Roadway CU Curve

Efficiency(%)



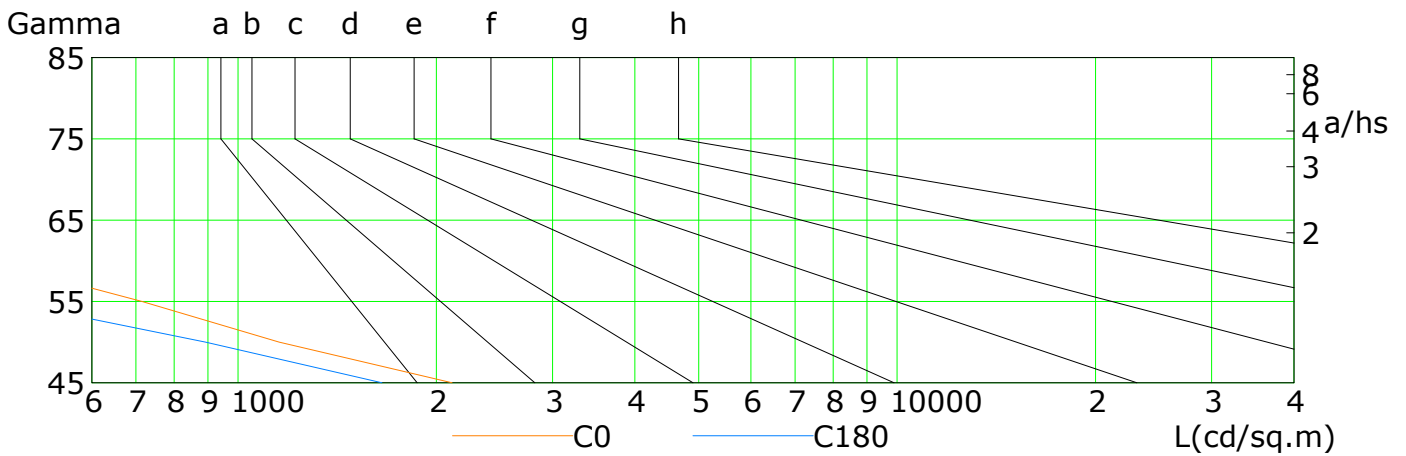
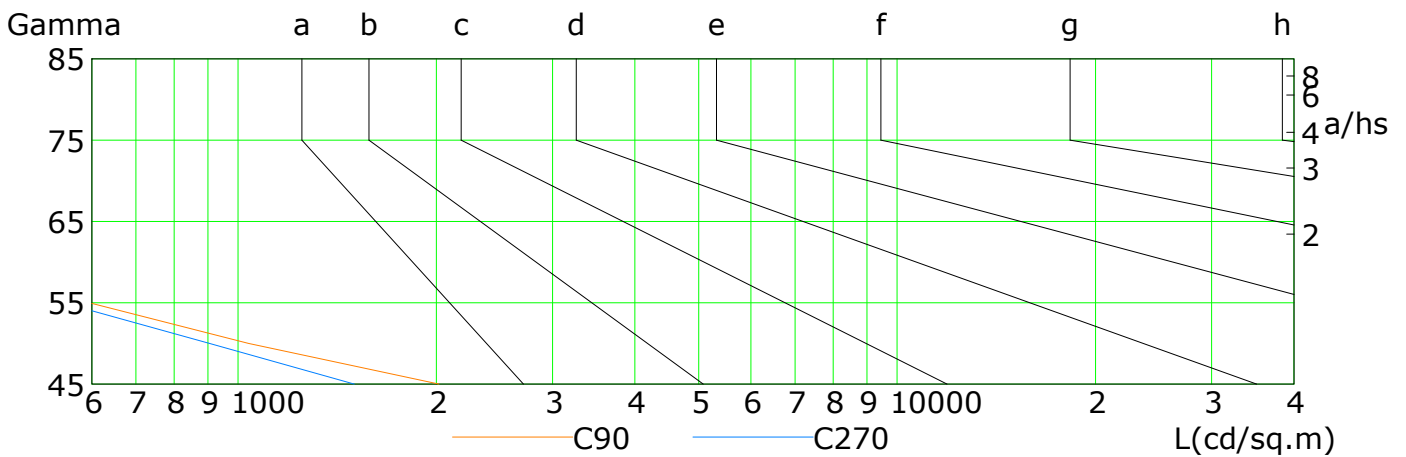
C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
1.15	A								
1.50	B								
1.85	C								
2.20	D								
2.55	E								

a b c d e f g h

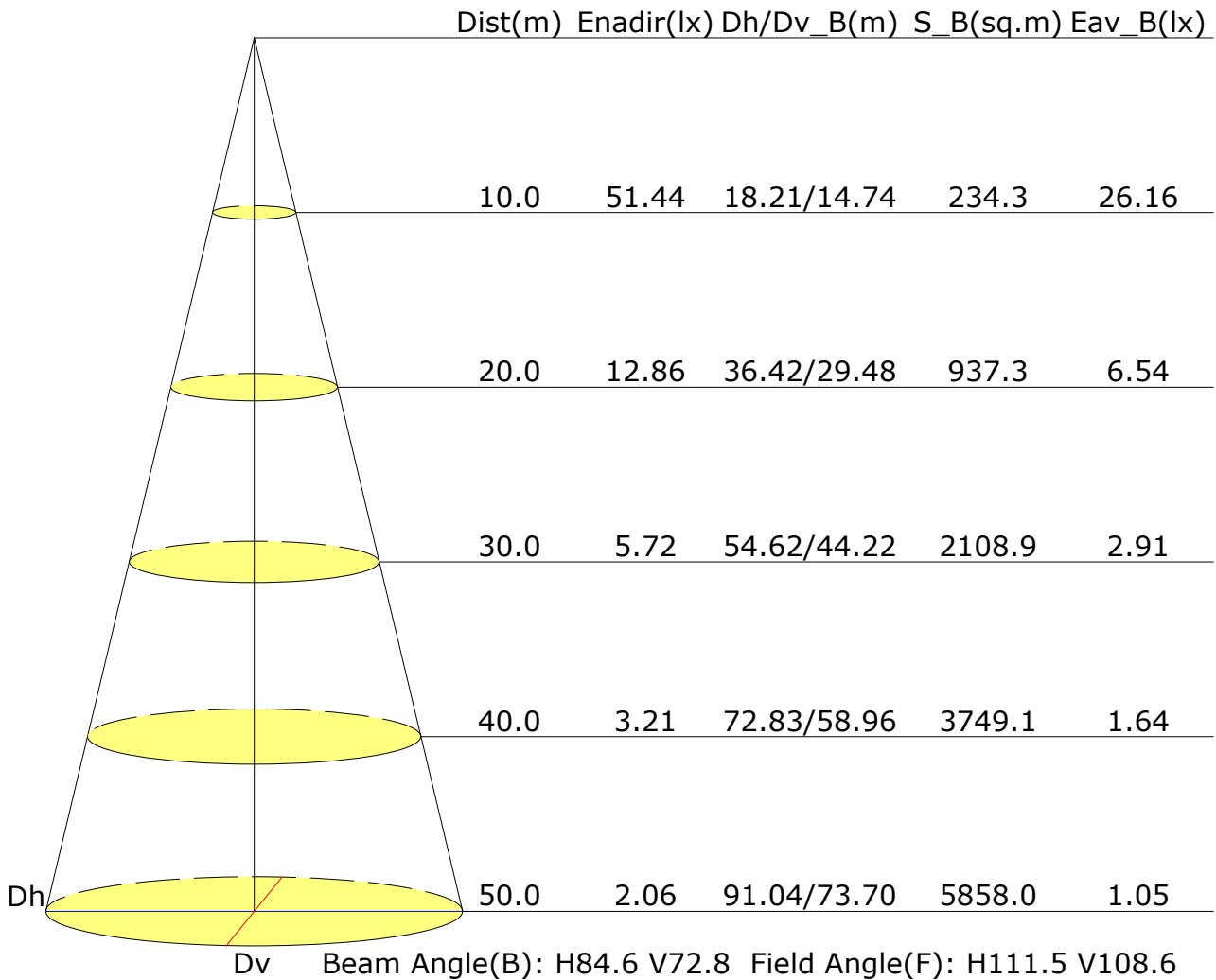


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2113	1155	715	421	277	187	119	70	33
C90	2017	1038	596	344	228	156	103	59	24
C180	1653	893	444	255	167	113	71	38	12
C270	1501	905	543	339	228	155	99	56	22

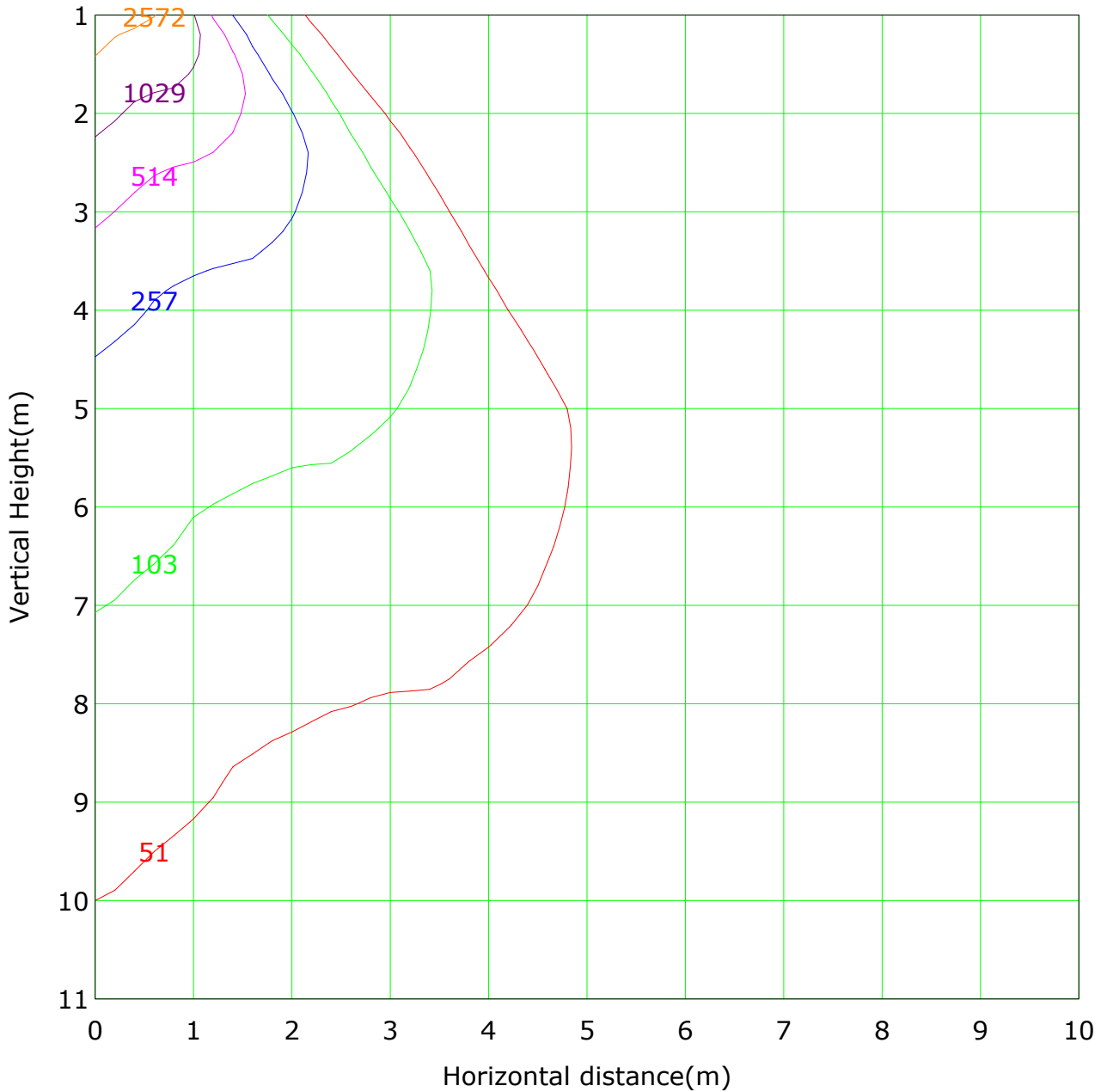
C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 5143.9 lx

— (1%): 51.4 lx	— (2%): 102.9 lx
— (5%): 257.2 lx	— (10%): 514.4 lx
— (20%): 1028.8 lx	— (50%): 2572.0 lx
— (100%): 5143.9 lx	

Area Flux Table

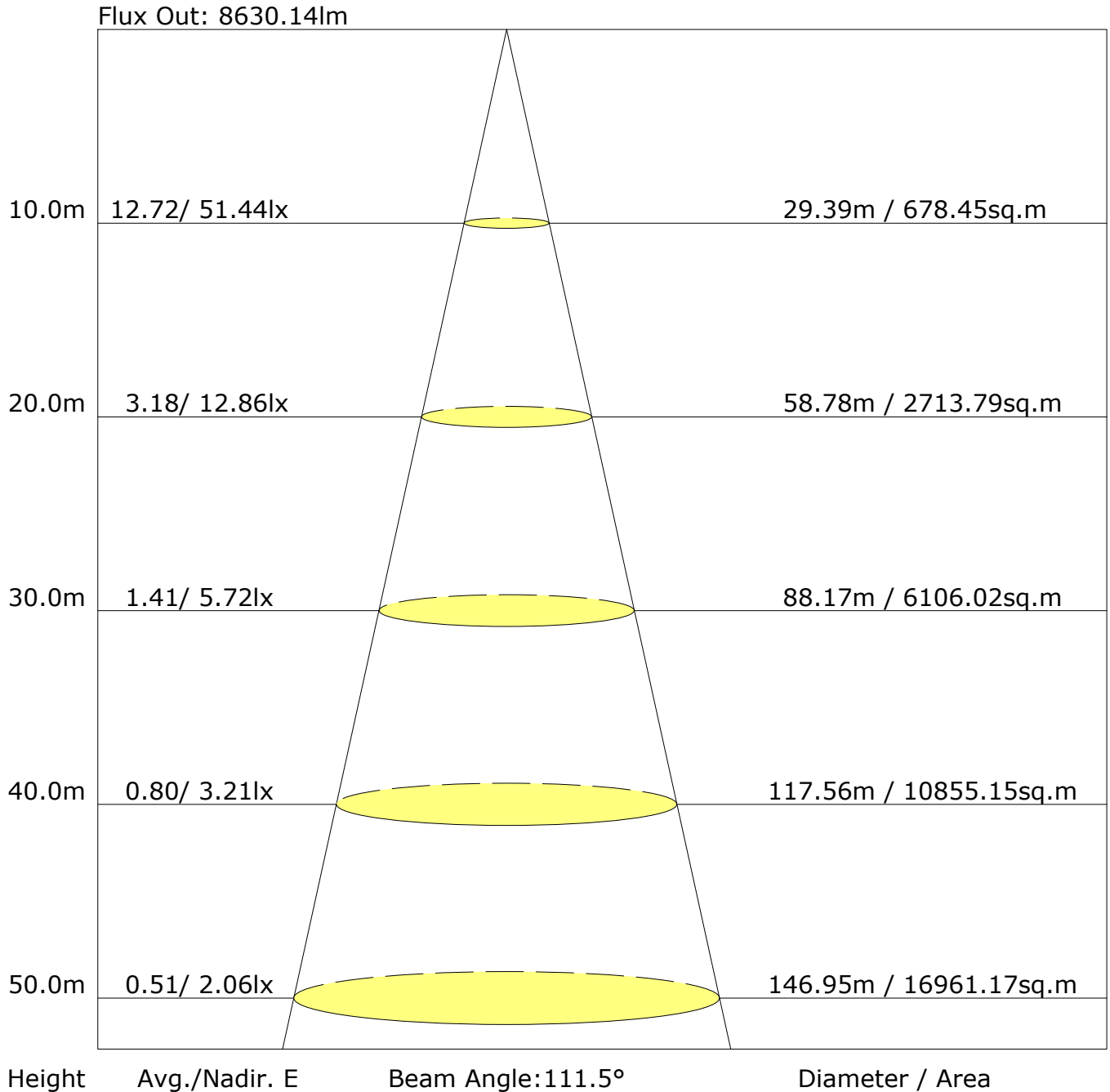
Unit: lm

Vertical plane	-90	0.0	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4	0.2	0.1	0.0	0.0	5.9	0.0
	-80	0.0	0.1	0.3	0.7	1.2	1.7	2.3	2.9	3.1	3.1	2.9	2.6	2.1	1.5	0.9	0.5	0.2	0.0	25.9	0.0	
	-70	0.0	0.2	0.6	1.4	2.4	3.7	5.1	6.4	7.1	7.1	6.7	5.8	4.5	3.2	1.9	0.9	0.3	0.0	57.3	0.0	
	-60	0.0	0.3	0.9	2.2	4.1	6.8	10.6	14.9	17.3	17.2	15.3	12.1	8.5	5.5	3.1	1.4	0.5	0.1	120.8	13.3	
	-50	0.0	0.4	1.3	3.1	6.7	14.6	27.0	41.4	48.4	47.9	40.6	28.9	17.3	9.2	4.6	2.0	0.6	0.1	294.2	238.2	
	-40	0.0	0.5	1.6	4.2	12.5	32.8	68.9	93.8	97.3	96.1	93.4	69.9	35.1	15.7	6.6	2.6	0.8	0.1	631.9	597.9	
	-30	0.0	0.5	1.9	5.7	20.8	64.6	107.5	128.5	128.5	123.9	125.6	106.5	66.1	25.1	8.8	3.1	0.9	0.1	918.4	892.5	
	-20	0.1	0.6	2.1	7.5	31.0	85.3	133.1	148.5	136.1	128.3	130.7	120.4	87.8	35.6	11.1	3.6	1.0	0.1	1062.8	804.7	
	-10	0.1	0.6	2.3	8.7	38.4	94.4	142.2	151.2	148.4	140.9	123.2	116.4	88.2	43.5	12.7	3.8	1.0	0.1	1116.0	95.4	
	0	0.1	0.6	2.4	10.2	47.7	116.8	180.8	198.2	193.9	145.8	112.0	102.3	80.7	43.7	12.6	3.7	1.0	0.1	1252.9	233.3	
10	0.1	0.7	2.6	10.8	47.7	118.1	185.5	212.8	177.9	149.0	127.5	107.7	77.9	37.0	11.0	3.4	0.9	0.1	1270.9	250.2		
20	0.1	0.7	2.5	8.1	31.4	91.5	148.0	176.8	154.6	145.4	127.3	99.2	64.8	25.3	8.7	3.0	0.9	0.1	1088.3	1064.2		
30	0.1	0.6	2.0	5.5	17.6	49.3	96.1	117.8	111.2	110.6	100.6	74.0	37.8	15.6	6.3	2.5	0.7	0.1	748.4	716.9		
40	0.0	0.5	1.6	3.8	8.6	20.3	38.0	55.1	59.3	60.1	50.8	32.2	18.2	9.0	4.3	1.9	0.6	0.1	364.4	316.0		
50	0.0	0.4	1.2	2.5	4.7	8.1	12.7	17.0	18.8	19.3	17.2	12.6	8.5	5.2	2.9	1.4	0.5	0.1	133.1	29.7		
60	0.0	0.2	0.8	1.6	2.7	4.1	5.4	6.5	7.1	7.2	6.8	5.7	4.4	3.1	1.8	0.9	0.3	0.1	58.8	0.0		
70	0.0	0.1	0.4	0.8	1.3	1.9	2.5	2.9	3.1	3.2	3.1	2.7	2.2	1.6	1.0	0.5	0.2	0.0	27.5	0.0		
80	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.8	0.7	0.6	0.5	0.3	0.2	0.1	0.0	7.3	0.0		
90	0.6	6.8	24.6	77.1	279.4	714.9	1166.9	1376.2	1313.3	1206.6	1085.3	900.5	605.3	280.5	99.0	35.5	10.5	1.4	9185			
Flux(E)	0.0	0.0	0.0	11.8	227.3	668.9	1222.6	3332.1	268.8	161.1	1039.3	555.6	224.1	23.2	0.0	0.0	0.0	0.0			8488	
Flux(T)	0.6	6.8	24.6	77.1	279.4	714.9	1166.9	1376.2	1313.3	1206.6	1085.3	900.5	605.3	280.5	99.0	35.5	10.5	1.4	9185			
Flux(E)	0.0	0.0	0.0	11.8	227.3	668.9	1222.6	3332.1	268.8	161.1	1039.3	555.6	224.1	23.2	0.0	0.0	0.0	0.0			8488	
Flux(T)	0.6	6.8	24.6	77.1	279.4	714.9	1166.9	1376.2	1313.3	1206.6	1085.3	900.5	605.3	280.5	99.0	35.5	10.5	1.4	9185			

 C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

 Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

The Average Illuminance Effective Figure



UGR Table

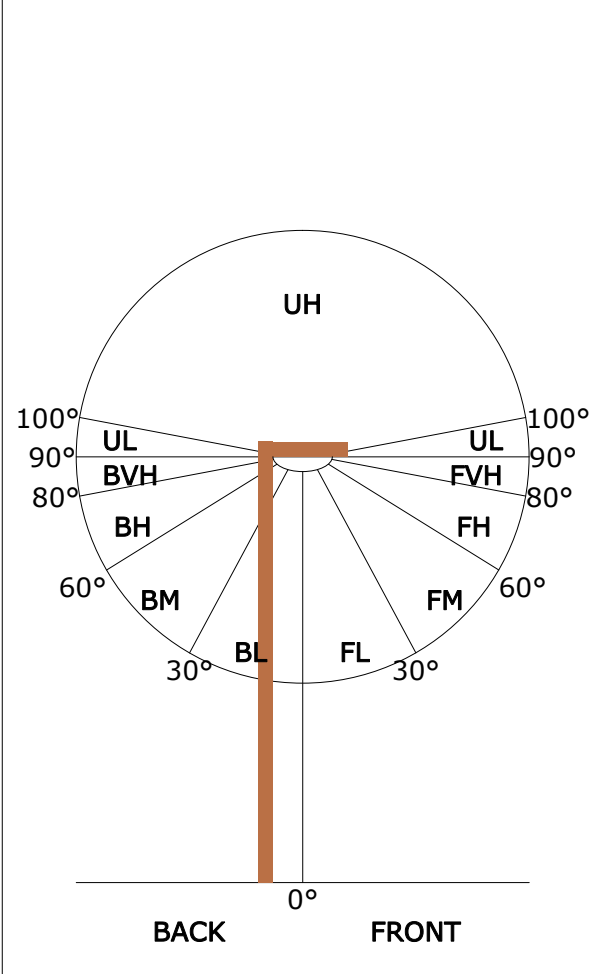
Reflectance:											
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions	Viewed crosswise					Viewed endwise					
X=2H Y=2H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
3H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=4H Y=2H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
3H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=8H Y=4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=12H Y=4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

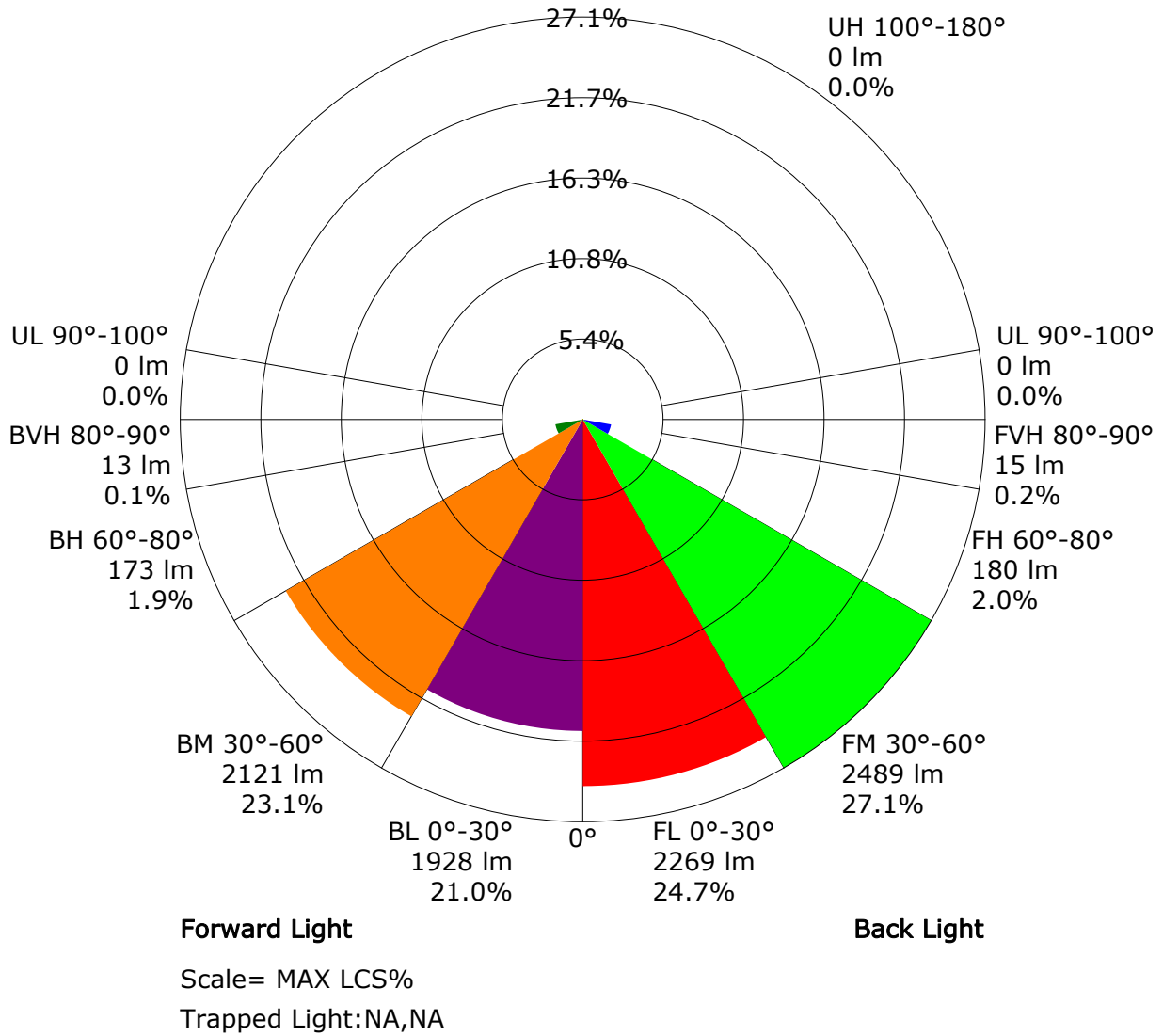
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	4953	53.9
	FL (0°-30°)	2269	24.7
	FM (30°-60°)	2489	27.1
	FH (60°-80°)	180	2.0
	FVH (80°-90°)	15	0.2
	BACK LIGHT	4234	46.1
	BL (0°-30°)	1928	21.0
	BM (30°-60°)	2121	23.1
	BH (60°-80°)	173	1.9
	BVH (80°-90°)	13	0.1
	UP LIGHT	0	0.0
	UL (90°-100°)	0	0.0
	UH (100°-180°)	0	0.0
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B3 U1 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B3 U1 G1

 C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

 Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

LCS Graph



Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.76	0.84	0.90	0.93	0.98	1.02	1.04	1.07	1.09	
	0.30		0.70	0.79	0.85	0.89	0.94	0.98	1.01	1.04	1.06	
	0.20		0.66	0.75	0.81	0.85	0.91	0.95	0.98	1.02	1.04	
0.50	0.50	0.20	0.74	0.82	0.87	0.91	0.95	0.98	1.00	1.03	1.04	
	0.30		0.69	0.78	0.83	0.87	0.92	0.95	0.98	1.01	1.03	
	0.20		0.66	0.74	0.80	0.84	0.89	0.93	0.95	0.99	1.01	
0.30	0.50	0.20	0.73	0.81	0.85	0.89	0.93	0.95	0.97	0.99	1.01	
	0.30		0.69	0.77	0.82	0.85	0.90	0.93	0.95	0.98	0.99	
	0.20		0.65	0.73	0.79	0.83	0.88	0.91	0.93	0.96	0.98	
0.00	0.00	0.00	0.63	0.71	0.76	0.80	0.84	0.87	0.89	0.92	0.93	
Rating:187W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.71	0.56	0.47	0.40	0.32	0.26	0.22	0.17	0.14	
	0.30		0.59	0.48	0.41	0.36	0.29	0.24	0.21	0.16	0.13	
	0.20		0.51	0.42	0.36	0.32	0.26	0.22	0.19	0.15	0.13	
0.50	0.50	0.20	0.68	0.54	0.45	0.38	0.30	0.28	0.21	0.16	0.13	
	0.30		0.57	0.47	0.39	0.34	0.27	0.23	0.19	0.15	0.12	
	0.20		0.50	0.41	0.35	0.31	0.25	0.21	0.18	0.14	0.12	
0.30	0.50	0.20	0.65	0.51	0.42	0.36	0.28	0.23	0.19	0.15	0.12	
	0.30		0.56	0.45	0.38	0.33	0.26	0.21	0.18	0.14	0.12	
	0.20		0.49	0.40	0.34	0.30	0.24	0.20	0.17	0.13	0.11	
0.00	0.00	0.00	0.37	0.29	0.24	0.20	0.16	0.13	0.11	0.08	0.07	
Rating:187W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.19	0.19
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.13	0.15	0.16	0.16	0.18	0.18	0.19	0.20	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17
0.30	0.50	0.20	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.19
	0.30		0.09	0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA
Rating:187W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	5787.0	5.5	5.5	0.06	0.06
1.0-2.0	5737.9	16.5	22.0	0.18	0.24
2.0-3.0	5650.5	27.0	49.0	0.29	0.53
3.0-4.0	5542.2	37.1	86.1	0.40	0.94
4.0-5.0	5435.7	46.8	132.9	0.51	1.45
5.0-6.0	5336.1	56.1	189.0	0.61	2.06
6.0-7.0	5240.0	65.0	254.0	0.71	2.77
7.0-8.0	5146.4	73.7	327.7	0.80	3.57
8.0-9.0	5061.8	82.0	409.8	0.89	4.46
9.0-10.0	4999.7	90.5	500.2	0.98	5.44
10.0-11.0	4955.7	99.0	599.3	1.08	6.52
11.0-12.0	4925.5	107.7	707.0	1.17	7.69
12.0-13.0	4907.7	116.5	823.4	1.27	8.96
13.0-14.0	4902.0	125.5	948.9	1.37	10.33
14.0-15.0	4906.4	134.7	1083.7	1.47	11.80
15.0-16.0	4922.7	144.3	1227.9	1.57	13.37
16.0-17.0	4953.8	154.3	1382.2	1.68	15.04
17.0-18.0	4987.9	164.5	1546.7	1.79	16.83
18.0-19.0	5019.8	174.7	1721.3	1.90	18.74
19.0-20.0	5047.1	184.8	1906.1	2.01	20.75
20.0-21.0	5073.5	194.8	2100.9	2.12	22.87
21.0-22.0	5094.9	204.8	2305.7	2.23	25.10
22.0-23.0	5101.4	214.1	2519.8	2.33	27.43
23.0-24.0	5088.7	222.5	2742.3	2.42	29.85
24.0-25.0	5053.3	229.8	2972.1	2.50	32.35
25.0-26.0	4997.7	235.9	3208.1	2.57	34.92
26.0-27.0	4931.9	241.3	3449.4	2.63	37.54
27.0-28.0	4859.2	246.0	3695.4	2.68	40.22
28.0-29.0	4773.1	249.8	3945.2	2.72	42.94
29.0-30.0	4670.1	252.2	4197.4	2.74	45.69
30.0-31.0	4555.1	253.5	4450.9	2.76	48.45
31.0-32.0	4428.9	253.8	4704.6	2.76	51.21
32.0-33.0	4293.8	253.0	4957.6	2.75	53.96
33.0-34.0	4151.0	251.2	5208.9	2.73	56.70
34.0-35.0	4002.6	248.6	5457.5	2.71	59.40
35.0-36.0	3856.0	245.6	5703.0	2.67	62.07

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Zonal Lumen (Continue 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	3706.3	241.8	5944.8	2.63	64.71
37.0-38.0	3555.1	237.3	6182.1	2.58	67.29
38.0-39.0	3403.8	232.4	6414.5	2.53	69.82
39.0-40.0	3251.0	226.8	6641.3	2.47	72.29
40.0-41.0	3099.9	220.8	6862.0	2.40	74.69
41.0-42.0	2928.1	212.8	7074.8	2.32	77.01
42.0-43.0	2706.4	200.5	7275.3	2.18	79.19
43.0-44.0	2451.7	185.1	7460.4	2.01	81.20
44.0-45.0	2171.1	166.9	7627.2	1.82	83.02
45.0-46.0	1880.8	147.1	7774.3	1.60	84.62
46.0-47.0	1629.3	129.6	7903.9	1.41	86.03
47.0-48.0	1433.9	115.9	8019.9	1.26	87.29
48.0-49.0	1279.5	105.1	8125.0	1.14	88.44
49.0-50.0	1150.9	96.0	8220.9	1.04	89.48
50.0-51.0	1040.8	88.1	8309.0	0.96	90.44
51.0-52.0	940.8	80.7	8389.8	0.88	91.32
52.0-53.0	846.5	73.6	8463.4	0.80	92.12
53.0-54.0	753.3	66.4	8529.8	0.72	92.84
54.0-55.0	663.9	59.3	8589.1	0.65	93.49
55.0-56.0	584.9	52.9	8641.9	0.58	94.06
56.0-57.0	517.9	47.4	8689.3	0.52	94.58
57.0-58.0	462.0	42.7	8732.0	0.47	95.04
58.0-59.0	416.6	39.0	8771.0	0.42	95.47
59.0-60.0	379.1	35.8	8806.8	0.39	95.86
60.0-61.0	346.9	33.1	8839.9	0.36	96.22
61.0-62.0	318.3	30.7	8870.6	0.33	96.55
62.0-63.0	292.4	28.4	8899.0	0.31	96.86
63.0-64.0	269.1	26.4	8925.4	0.29	97.15
64.0-65.0	247.9	24.5	8950.0	0.27	97.42
65.0-66.0	228.6	22.8	8972.8	0.25	97.66
66.0-67.0	211.1	21.2	8994.0	0.23	97.90
67.0-68.0	194.8	19.7	9013.8	0.21	98.11
68.0-69.0	179.9	18.4	9032.1	0.20	98.31
69.0-70.0	166.1	17.1	9049.2	0.19	98.50
70.0-71.0	153.0	15.8	9065.0	0.17	98.67
71.0-72.0	140.7	14.6	9079.6	0.16	98.83

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Zonal Lumen (Continue 2)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	129.2	13.5	9093.1	0.15	98.97
73.0-74.0	118.2	12.4	9105.6	0.14	99.11
74.0-75.0	107.8	11.4	9117.0	0.12	99.23
75.0-76.0	98.0	10.4	9127.4	0.11	99.35
76.0-77.0	88.6	9.4	9136.8	0.10	99.45
77.0-78.0	79.5	8.5	9145.3	0.09	99.54
78.0-79.0	71.0	7.6	9153.0	0.08	99.63
79.0-80.0	62.7	6.8	9159.7	0.07	99.70
80.0-81.0	54.8	5.9	9165.6	0.06	99.76
81.0-82.0	47.2	5.1	9170.8	0.06	99.82
82.0-83.0	39.9	4.3	9175.1	0.05	99.87
83.0-84.0	33.0	3.6	9178.7	0.04	99.91
84.0-85.0	26.6	2.9	9181.6	0.03	99.94
85.0-86.0	20.5	2.2	9183.8	0.02	99.96
86.0-87.0	14.8	1.6	9185.5	0.02	99.98
87.0-88.0	9.6	1.1	9186.5	0.01	99.99
88.0-89.0	5.3	0.6	9187.1	0.01	100.00
89.0-90.0	2.6	0.3	9187.4	0.00	100.00

Color Properties

Average Color Nonuniformity: $\Delta u' = -0.0000, \Delta v' = 0.0000, \Delta u'v' = 0.0000$

Maximum Color Nonuniformity: $\Delta u' = 0.0001, \Delta v' = 0.0001, \Delta u'v' = 0.0002$

Color Distribution Datas: Tc(K)

Average Color(Tc):3995

G\C	0.0	10.0	90.0	180.0	270.0	350.0		
0.0	3994	3994	3994	3994	3994	3994		
30.0	3987	3994	3987	4001	3994	3996		

Candlepower Table

Unit: cd

G\C	C0.0	C10.0	C20.0	C30.0	C40.0	C50.0	C60.0	C70.0	C80.0	C90.0
G0.0	5143.9	5182.2	5233.2	5420.6	5587.7	5806.1	5939.1	6176.9	6194.8	6083.3
G1.0	5062.6	5116.1	5185.9	5320.4	5560.2	5806.9	5968.6	6196.5	6253.5	6237.4
G2.0	4909.3	4948.1	5032.5	5183.3	5439.8	5645.2	5889.3	6126.2	6268.1	6273.5
G3.0	4741.5	4805.9	4889.8	5004.0	5265.0	5511.9	5749.6	6005.4	6210.1	6225.8
G4.0	4612.5	4655.4	4747.6	4896.4	5092.7	5326.2	5574.0	5857.2	6025.2	6143.4
G5.0	4509.5	4573.6	4648.0	4746.1	4970.2	5164.8	5406.6	5735.3	5913.9	5955.7
G6.0	4405.6	4426.2	4516.6	4620.3	4818.2	5010.2	5230.0	5559.0	5696.7	5851.6
G7.0	4276.6	4283.2	4374.1	4443.9	4694.1	4863.4	5108.5	5445.5	5633.1	5754.5
G8.0	4151.5	4158.4	4237.4	4289.8	4502.1	4698.6	4989.1	5353.9	5525.1	5648.0
G9.0	3953.0	3945.0	4029.7	4152.9	4357.5	4625.1	4902.4	5274.3	5440.6	5540.8
G10.0	3892.0	3903.1	3970.2	4133.3	4316.1	4550.8	4815.4	5126.9	5326.4	5428.6
G11.0	3838.0	3821.7	3913.5	4044.3	4255.1	4476.0	4745.6	5061.2	5232.6	5374.6
G12.0	3780.2	3808.4	3866.6	4021.0	4205.0	4464.3	4690.6	5007.9	5181.0	5325.6
G13.0	3741.6	3738.3	3838.0	3973.9	4156.2	4406.8	4668.1	4971.7	5140.5	5279.8
G14.0	3733.6	3735.2	3803.4	3972.2	4158.5	4417.7	4647.2	4949.5	5098.0	5204.0
G15.0	3693.8	3673.5	3772.2	3970.2	4139.6	4373.0	4636.5	4937.1	5072.1	5173.7
G16.0	3663.2	3672.8	3757.6	3949.0	4127.8	4380.1	4635.1	4944.7	5052.3	5136.5
G17.0	3645.1	3620.0	3747.5	3908.1	4158.9	4379.4	4597.9	4930.7	5068.1	5096.3
G18.0	3663.2	3635.0	3733.8	3941.6	4119.2	4383.3	4628.8	4942.8	5072.0	5063.4
G19.0	3653.7	3618.7	3747.8	3953.9	4171.6	4421.1	4654.6	4972.8	5104.1	5026.8
G20.0	3632.0	3646.5	3758.1	3992.2	4178.5	4461.5	4716.9	5015.4	5138.5	5004.6
G21.0	3666.8	3648.5	3766.4	4040.2	4247.7	4519.9	4740.1	5042.9	5137.0	4973.1
G22.0	3705.2	3673.2	3823.7	4076.1	4279.8	4548.8	4747.3	5014.2	5108.5	4914.7
G23.0	3757.2	3728.0	3877.2	4135.8	4341.0	4533.8	4726.7	4991.4	5045.5	4875.0
G24.0	3781.0	3726.7	3893.4	4108.6	4291.0	4530.9	4674.6	4962.0	5013.9	4805.0
G25.0	3753.6	3714.3	3865.7	4139.0	4295.5	4490.3	4649.5	4909.2	4972.4	4714.3
G26.0	3712.7	3645.9	3833.4	4087.4	4253.9	4449.9	4598.8	4858.8	4898.1	4613.1
G27.0	3676.3	3628.4	3819.1	4053.2	4240.0	4400.5	4508.1	4766.1	4819.4	4528.7
G28.0	3667.7	3607.0	3805.3	4005.6	4188.7	4349.3	4426.5	4720.1	4727.0	4402.4
G29.0	3638.3	3584.5	3765.9	3964.7	4131.8	4277.1	4365.9	4653.4	4609.6	4300.4
G30.0	3602.1	3525.7	3732.1	3903.7	4049.1	4193.7	4267.7	4550.8	4497.0	4176.1
G31.0	3571.5	3512.4	3682.5	3846.5	3961.8	4105.8	4181.0	4451.7	4387.9	4041.3
G32.0	3520.3	3439.3	3617.7	3750.1	3876.6	4022.5	4073.4	4307.0	4234.8	3904.7
G33.0	3452.8	3420.5	3552.7	3691.4	3804.7	3893.8	3964.4	4172.5	4086.4	3770.2
G34.0	3390.2	3318.3	3491.7	3559.5	3686.6	3806.1	3839.4	4031.4	3928.6	3635.4
G35.0	3301.2	3261.7	3407.4	3467.9	3581.9	3678.9	3728.0	3883.7	3776.8	3492.1
G36.0	3236.7	3163.0	3303.8	3369.0	3451.9	3555.6	3593.0	3745.3	3634.3	3370.6

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C10.0	C20.0	C30.0	C40.0	C50.0	C60.0	C70.0	C80.0	C90.0
G37.0	3141.5	3094.0	3209.1	3241.0	3353.2	3442.6	3470.6	3588.2	3460.2	3213.0
G38.0	3071.7	3010.8	3115.2	3161.6	3214.7	3318.6	3333.5	3466.6	3300.6	3086.2
G39.0	2979.3	2919.2	3021.4	3028.7	3110.8	3197.1	3226.2	3314.9	3175.0	2947.0
G40.0	2889.1	2824.5	2922.0	2922.1	2987.8	3070.3	3097.4	3167.0	3023.1	2818.5
G41.0	2789.9	2757.5	2820.2	2812.1	2891.2	2967.3	2969.8	3025.1	2889.1	2690.3
G42.0	2698.8	2648.1	2725.8	2718.4	2757.2	2833.9	2832.8	2886.8	2744.6	2567.2
G43.0	2588.7	2548.1	2612.2	2587.8	2654.4	2698.2	2689.6	2737.2	2597.0	2432.7
G44.0	2444.8	2402.4	2453.1	2358.3	2427.0	2444.4	2423.1	2494.0	2412.5	2279.4
G45.0	2112.6	2068.4	2134.6	2004.7	2094.0	2084.0	2071.9	2148.1	2124.5	2017.2
G46.0	1810.1	1736.2	1794.3	1715.7	1760.1	1766.6	1747.8	1798.1	1788.0	1701.1
G47.0	1600.3	1547.8	1582.6	1519.6	1563.8	1572.0	1566.9	1599.3	1548.0	1466.5
G48.0	1414.1	1372.0	1395.0	1347.7	1385.8	1394.4	1387.1	1406.3	1370.4	1284.1
G49.0	1262.8	1229.6	1249.2	1208.4	1250.5	1254.4	1245.0	1255.0	1222.9	1144.2
G50.0	1154.6	1126.5	1140.0	1097.1	1126.0	1132.0	1118.2	1130.2	1099.7	1037.6
G51.0	1043.5	1012.0	1033.5	993.1	1023.5	1019.8	1014.0	1022.7	995.8	941.9
G52.0	948.3	923.9	931.4	909.4	925.9	932.3	922.7	937.9	897.1	852.4
G53.0	867.3	843.6	855.9	826.4	853.6	852.3	842.9	847.8	813.3	771.5
G54.0	788.9	773.2	776.2	750.2	768.5	769.5	745.9	748.3	719.6	676.7
G55.0	715.1	688.4	702.5	670.4	685.2	683.0	652.6	655.3	631.7	595.8
G56.0	632.1	615.8	624.3	593.2	610.3	597.2	574.8	583.1	554.6	523.9
G57.0	565.5	552.9	558.8	533.9	544.0	533.4	509.0	516.4	487.5	464.5
G58.0	508.1	493.9	503.1	477.6	487.0	476.9	458.4	460.6	433.4	416.4
G59.0	463.2	452.1	458.1	437.8	442.1	430.4	413.7	414.3	393.1	376.3
G60.0	420.7	407.2	416.3	396.1	400.9	392.1	375.4	379.5	357.4	343.6
G61.0	386.1	377.1	381.5	364.8	368.3	360.6	344.0	346.2	327.1	316.7
G62.0	355.4	345.6	348.8	334.8	337.4	330.8	316.2	317.1	299.5	291.9
G63.0	327.7	318.7	322.7	307.0	311.1	304.7	289.5	291.9	274.9	269.0
G64.0	304.1	293.0	297.1	283.2	285.0	277.9	266.3	268.7	253.8	248.0
G65.0	277.5	271.0	272.9	260.0	260.0	257.8	245.5	247.8	234.3	228.0
G66.0	258.1	248.3	251.3	240.4	240.7	237.0	226.4	228.0	215.4	211.1
G67.0	237.2	229.2	231.5	221.1	220.8	219.4	210.0	210.8	200.5	195.8
G68.0	218.6	212.1	212.3	202.3	202.9	201.4	192.9	196.0	184.3	181.6
G69.0	200.9	194.9	194.8	186.6	188.5	186.8	179.2	181.7	172.3	168.3
G70.0	186.8	180.9	181.1	173.1	173.4	173.1	167.1	168.2	158.5	156.5
G71.0	170.5	165.7	165.7	158.0	161.1	159.1	153.9	155.3	147.4	144.2
G72.0	157.4	153.9	153.3	146.6	147.7	147.3	141.7	143.7	135.7	133.4
G73.0	143.3	140.4	140.5	134.2	135.6	135.7	130.4	132.2	125.3	121.9

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C10.0	C20.0	C30.0	C40.0	C50.0	C60.0	C70.0	C80.0	C90.0
G74.0	130.2	128.4	128.5	123.3	125.1	125.3	119.6	121.1	114.5	112.4
G75.0	118.7	116.4	117.4	111.8	113.1	114.4	109.8	110.7	104.7	102.7
G76.0	108.8	106.4	107.4	102.4	104.1	104.1	99.8	100.4	95.2	93.3
G77.0	98.1	96.1	97.0	92.4	94.5	93.9	90.1	91.0	86.2	83.8
G78.0	88.2	86.7	87.8	83.6	84.7	85.3	81.6	81.8	77.2	75.3
G79.0	79.2	78.3	78.3	75.2	75.5	75.8	72.3	73.0	68.9	67.5
G80.0	70.4	69.5	70.1	66.3	67.5	67.5	64.3	64.6	60.7	58.9
G81.0	62.0	61.5	61.8	58.4	59.2	59.2	56.3	56.6	53.0	51.5
G82.0	54.9	53.8	54.1	50.7	52.0	51.5	48.3	48.3	45.3	43.8
G83.0	47.0	46.3	46.7	43.8	43.8	44.0	41.0	40.7	38.3	37.0
G84.0	40.3	39.2	39.8	36.7	36.9	36.9	33.8	33.7	31.7	30.4
G85.0	33.2	32.7	32.4	30.1	30.7	29.5	27.5	26.9	25.4	24.3
G86.0	26.9	27.1	26.6	24.3	23.8	23.5	21.4	21.1	19.5	18.9
G87.0	21.1	20.8	20.1	18.3	18.3	17.2	15.5	15.1	14.1	13.5
G88.0	15.4	15.2	14.9	12.6	12.8	11.5	9.8	9.5	8.6	8.3
G89.0	9.5	9.7	9.1	7.5	7.1	6.5	5.2	4.8	4.6	4.2
G90.0	5.2	5.1	4.5	3.1	2.6	2.3	1.4	1.4	1.5	1.4

Candlepower Table (Continue 3)

Unit: cd

G\C	C100.0	C110.0	C120.0	C130.0	C140.0	C150.0	C160.0	C170.0	C180.0	C190.0
G0.0	6026.6	6113.0	6078.5	6097.1	5948.0	5880.9	5757.9	5743.1	5143.9	5182.2
G1.0	6243.2	6377.7	6368.6	6377.1	6210.3	6155.9	5988.3	5935.0	5168.8	5188.2
G2.0	6324.7	6513.1	6572.2	6638.6	6476.5	6356.2	6202.0	6063.3	5132.7	5125.6
G3.0	6381.1	6614.7	6732.0	6810.0	6643.0	6469.2	6278.4	6123.8	5010.0	5009.4
G4.0	6331.0	6551.7	6730.8	6825.6	6705.4	6545.3	6316.7	6134.8	4988.5	4951.1
G5.0	6184.2	6497.5	6701.6	6864.9	6793.5	6640.7	6397.8	6151.9	4938.7	4936.8
G6.0	6093.5	6418.3	6711.3	6872.7	6842.9	6696.5	6408.9	6179.2	4939.0	4867.5
G7.0	5957.6	6329.4	6621.0	6845.6	6866.7	6677.6	6437.5	6197.5	4921.0	4856.5
G8.0	5842.6	6212.6	6575.4	6816.4	6871.1	6707.7	6419.4	6188.2	4901.6	4838.8
G9.0	5726.5	6128.7	6490.5	6796.6	6845.9	6747.1	6477.9	6228.1	4907.3	4866.4
G10.0	5616.8	6048.7	6453.8	6786.6	6860.7	6764.2	6497.5	6236.9	4937.1	4852.0
G11.0	5540.7	5991.5	6414.7	6783.4	6885.9	6834.0	6556.8	6263.9	4942.2	4889.2
G12.0	5472.7	5933.3	6387.5	6783.1	6913.9	6874.8	6617.8	6330.4	4997.3	4897.6
G13.0	5396.8	5888.7	6377.4	6787.2	6943.3	6926.3	6683.1	6406.3	5043.1	4972.0
G14.0	5328.8	5885.5	6374.5	6839.0	7030.3	7024.7	6752.3	6484.5	5109.5	5017.5
G15.0	5277.3	5847.4	6385.7	6866.7	7068.8	7118.2	6877.8	6600.0	5172.7	5094.4
G16.0	5267.0	5897.3	6431.8	6986.4	7181.2	7248.4	7007.4	6709.7	5279.2	5196.6
G17.0	5244.0	5903.6	6527.6	7058.4	7295.4	7364.0	7145.1	6870.5	5370.2	5306.4
G18.0	5250.9	5976.0	6592.9	7157.5	7335.9	7443.0	7215.2	6946.9	5441.7	5361.4
G19.0	5227.7	5975.9	6604.9	7204.1	7409.0	7502.0	7264.1	7007.5	5471.6	5391.4
G20.0	5198.5	5972.9	6581.8	7226.3	7453.3	7557.2	7340.2	7055.6	5471.5	5395.9
G21.0	5115.9	5965.1	6598.8	7246.5	7520.9	7612.3	7420.7	7120.8	5462.1	5413.2
G22.0	5086.1	5951.1	6589.2	7265.8	7469.3	7620.9	7424.4	7143.4	5462.3	5404.9
G23.0	5010.5	5923.0	6576.0	7257.8	7490.5	7578.4	7400.7	7116.3	5444.9	5359.3
G24.0	4956.8	5879.9	6528.2	7174.6	7437.0	7523.4	7363.2	7124.6	5416.5	5313.5
G25.0	4878.3	5840.1	6418.4	7124.8	7365.8	7450.1	7303.3	7022.7	5331.1	5269.8
G26.0	4802.0	5753.4	6359.9	6984.0	7263.6	7332.3	7197.4	6968.9	5247.8	5182.5
G27.0	4721.8	5636.8	6220.3	6900.4	7135.4	7197.7	7113.6	6837.5	5131.8	5090.7
G28.0	4603.9	5580.6	6125.6	6737.9	6967.8	7032.4	6914.8	6707.6	4985.9	4945.8
G29.0	4493.8	5442.6	5956.3	6578.8	6786.8	6852.4	6770.8	6524.4	4844.9	4814.0
G30.0	4384.5	5287.0	5782.2	6367.1	6568.9	6641.2	6533.4	6324.7	4694.6	4661.8
G31.0	4235.9	5112.1	5572.6	6162.6	6339.9	6420.0	6333.3	6119.9	4533.8	4498.7
G32.0	4111.2	4921.6	5370.6	5929.3	6077.2	6186.5	6113.1	5918.8	4353.8	4353.3
G33.0	3972.4	4753.8	5183.3	5727.9	5830.1	5946.2	5885.0	5681.5	4196.7	4178.2
G34.0	3824.8	4558.2	4970.4	5464.1	5608.2	5691.2	5618.3	5445.4	4017.9	3996.5
G35.0	3687.4	4360.7	4758.4	5247.2	5377.4	5467.6	5379.4	5217.7	3866.2	3817.0
G36.0	3537.6	4176.1	4570.7	5002.6	5137.0	5212.3	5175.3	5002.0	3692.4	3662.0

 C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

 Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Candlepower Table (Continue 4)

Unit: cd

G\C	C100.0	C110.0	C120.0	C130.0	C140.0	C150.0	C160.0	C170.0	C180.0	C190.0
G37.0	3378.5	3993.6	4354.7	4764.8	4891.2	4982.4	4922.5	4789.0	3520.7	3499.2
G38.0	3235.3	3803.4	4151.5	4539.6	4656.6	4740.9	4695.0	4554.2	3340.6	3329.0
G39.0	3084.8	3605.4	3948.9	4286.4	4426.8	4481.4	4436.0	4311.6	3155.9	3154.9
G40.0	2930.4	3411.1	3714.4	4061.7	4161.3	4207.6	4180.8	4070.5	2999.1	2988.7
G41.0	2790.6	3227.9	3511.1	3837.4	3954.2	3980.4	3948.2	3843.1	2834.1	2822.5
G42.0	2647.3	3042.4	3313.2	3612.7	3714.1	3761.5	3742.1	3633.6	2642.8	2655.4
G43.0	2511.2	2874.2	3133.2	3410.4	3519.7	3557.0	3537.3	3437.9	2314.8	2317.5
G44.0	2367.5	2694.0	2949.8	3208.8	3290.9	3321.7	3298.1	3137.7	1959.2	1989.7
G45.0	2106.9	2384.4	2614.4	2831.9	2913.2	2884.0	2853.0	2718.1	1653.2	1668.7
G46.0	1802.1	2037.3	2253.1	2386.7	2457.9	2428.1	2395.0	2270.5	1430.3	1441.0
G47.0	1493.7	1693.3	1850.5	1985.5	2020.1	2023.9	1997.0	1922.2	1227.3	1240.7
G48.0	1316.9	1486.8	1619.9	1734.6	1759.5	1768.1	1736.3	1670.2	1106.5	1113.4
G49.0	1152.5	1306.2	1423.2	1531.2	1549.1	1547.1	1515.7	1461.8	1004.4	1007.5
G50.0	1042.9	1183.2	1279.8	1375.7	1385.7	1399.2	1354.5	1321.1	892.7	901.7
G51.0	947.9	1070.5	1151.6	1237.5	1250.5	1253.8	1220.6	1184.9	799.2	807.4
G52.0	858.4	965.1	1037.5	1108.3	1121.1	1122.9	1089.1	1052.2	697.8	707.6
G53.0	771.8	863.5	930.5	982.5	992.9	989.7	959.2	925.0	601.1	610.9
G54.0	683.0	756.0	806.0	850.1	857.3	851.2	829.2	803.5	517.0	525.7
G55.0	598.6	654.7	698.2	731.9	729.7	728.3	707.0	686.8	444.1	455.2
G56.0	528.5	569.7	601.4	629.0	620.4	621.8	603.8	589.8	389.7	395.2
G57.0	467.2	499.3	519.4	542.8	535.1	538.0	517.9	507.6	345.0	351.0
G58.0	416.9	441.0	458.4	473.0	464.4	468.2	452.3	444.7	309.9	315.4
G59.0	378.2	396.8	407.7	420.6	412.9	416.4	400.8	393.4	280.5	287.0
G60.0	347.0	361.4	368.8	383.4	373.1	375.1	359.6	356.5	255.2	261.8
G61.0	317.8	331.0	337.4	347.1	337.6	340.0	325.3	323.3	233.4	239.4
G62.0	292.1	302.8	309.6	316.4	306.5	309.0	295.9	293.6	213.8	218.1
G63.0	270.9	278.2	283.2	288.4	280.4	281.9	268.9	268.3	195.8	200.0
G64.0	248.1	256.3	258.7	264.3	256.3	257.2	245.2	245.0	181.4	184.2
G65.0	229.7	234.6	236.3	240.7	233.2	234.1	225.4	225.2	167.1	170.8
G66.0	211.8	216.0	217.4	219.8	213.1	214.8	205.7	207.1	154.3	157.4
G67.0	195.8	199.7	198.5	202.0	194.1	195.8	189.7	191.5	142.8	146.0
G68.0	179.9	183.1	183.6	184.9	178.6	180.3	174.5	176.0	132.1	135.9
G69.0	165.6	169.6	169.3	170.6	164.8	167.6	161.1	163.4	123.1	125.0
G70.0	154.3	156.5	155.7	157.6	151.7	153.0	148.2	150.3	112.5	115.4
G71.0	141.7	144.4	143.4	145.0	139.1	140.7	136.8	139.4	103.8	106.1
G72.0	130.8	132.5	132.2	133.6	128.4	129.3	125.4	128.1	95.0	97.0
G73.0	120.1	121.9	120.8	122.4	117.9	118.7	115.0	117.0	86.6	89.6

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Candlepower Table (Continue 5)

Unit: cd

G\C	C100.0	C110.0	C120.0	C130.0	C140.0	C150.0	C160.0	C170.0	C180.0	C190.0
G74.0	109.9	111.4	110.7	112.5	107.9	109.1	105.4	107.9	78.6	80.7
G75.0	100.7	101.6	100.7	102.4	98.7	99.5	96.5	98.1	71.2	73.2
G76.0	91.0	92.8	92.1	93.3	89.8	90.4	87.3	89.5	64.3	65.9
G77.0	82.6	83.8	82.9	83.8	81.0	81.5	79.3	80.6	57.5	59.2
G78.0	73.9	75.5	74.3	75.6	72.1	73.0	71.2	72.4	50.9	52.9
G79.0	65.6	66.6	65.8	67.0	64.7	64.9	63.0	64.4	44.9	45.7
G80.0	57.7	58.3	58.3	58.7	56.7	56.9	56.3	56.9	38.3	39.3
G81.0	50.4	50.7	50.6	50.7	49.0	50.4	48.7	49.3	32.3	34.0
G82.0	43.2	43.0	43.0	43.3	41.5	42.1	41.2	42.0	26.4	27.5
G83.0	36.1	36.1	36.0	36.1	34.7	34.9	34.3	34.6	21.1	22.0
G84.0	29.4	29.5	29.5	29.2	28.3	28.0	27.8	28.0	16.1	16.9
G85.0	23.7	23.4	23.4	23.2	22.3	22.4	22.0	22.0	11.5	12.1
G86.0	18.1	18.1	18.1	17.7	16.9	16.8	16.5	16.3	7.1	7.5
G87.0	13.1	12.8	13.1	12.1	11.7	11.4	11.1	10.9	3.5	4.0
G88.0	8.6	7.7	7.5	7.2	6.8	7.2	6.3	6.2	1.4	1.4
G89.0	4.0	3.8	3.4	3.4	3.2	2.9	2.8	2.6	1.4	1.4
G90.0	1.5	1.4	1.2	1.2	1.4	1.2	1.4	1.4	1.4	1.2

Candlepower Table (Continue 6)

Unit: cd

G\C	C200.0	C210.0	C220.0	C230.0	C240.0	C250.0	C260.0	C270.0	C280.0	C290.0
G0.0	5233.2	5420.6	5587.7	5806.1	5939.1	6176.9	6194.8	6083.3	6026.6	6113.0
G1.0	5230.3	5371.9	5523.8	5732.5	5818.5	5986.8	5935.9	5848.6	5788.2	5856.7
G2.0	5173.3	5343.6	5415.5	5587.1	5651.0	5834.9	5724.8	5623.8	5531.1	5585.9
G3.0	5012.3	5195.9	5271.5	5435.8	5472.9	5593.5	5507.2	5355.0	5313.9	5354.0
G4.0	4973.7	5061.7	5134.8	5214.2	5260.7	5389.3	5312.5	5140.2	5136.8	5146.1
G5.0	4897.5	5013.4	5033.4	5104.4	5112.9	5154.2	5080.4	4949.0	4941.8	4985.3
G6.0	4874.1	4929.6	4976.8	4995.9	4992.2	5026.6	4938.1	4797.6	4786.0	4811.9
G7.0	4826.0	4895.0	4880.0	4932.2	4895.6	4902.7	4826.2	4666.4	4669.1	4693.2
G8.0	4809.6	4860.6	4848.5	4814.9	4805.9	4796.0	4745.9	4591.6	4567.1	4591.3
G9.0	4800.6	4866.9	4786.4	4783.6	4741.9	4702.6	4644.8	4504.6	4481.4	4502.1
G10.0	4862.0	4834.2	4808.2	4732.7	4669.4	4643.1	4581.3	4393.7	4371.8	4434.9
G11.0	4850.0	4830.8	4763.0	4709.3	4640.2	4577.4	4531.2	4301.0	4285.4	4338.9
G12.0	4870.7	4874.4	4793.7	4669.8	4591.0	4540.2	4465.2	4250.6	4230.0	4290.0
G13.0	4912.7	4886.4	4785.6	4655.2	4581.0	4512.1	4424.8	4207.7	4203.3	4260.0
G14.0	4986.3	4922.2	4841.1	4653.5	4570.7	4480.9	4398.7	4168.5	4147.6	4207.7
G15.0	5068.6	4982.2	4890.7	4680.7	4577.1	4487.0	4362.1	4139.3	4120.7	4194.4
G16.0	5157.0	5035.1	4984.6	4737.2	4590.5	4456.5	4343.8	4129.5	4108.0	4179.9
G17.0	5246.3	5165.9	5076.1	4792.6	4631.7	4488.0	4364.8	4126.6	4104.6	4176.1
G18.0	5322.8	5227.8	5162.8	4875.8	4699.5	4514.4	4376.8	4142.7	4112.4	4179.8
G19.0	5364.8	5284.6	5239.8	4930.1	4741.1	4574.7	4406.2	4148.1	4131.5	4207.6
G20.0	5381.4	5295.8	5262.4	4936.8	4745.0	4619.6	4414.8	4164.2	4154.2	4255.4
G21.0	5384.8	5334.4	5260.9	4928.1	4746.5	4599.4	4404.2	4219.3	4204.4	4312.0
G22.0	5391.3	5345.9	5280.9	4905.8	4711.0	4565.1	4379.6	4197.9	4270.8	4368.8
G23.0	5372.3	5305.0	5298.9	4925.9	4693.6	4538.1	4343.3	4122.9	4158.7	4385.4
G24.0	5345.0	5310.9	5262.4	4902.1	4676.1	4536.1	4316.9	4102.0	4112.0	4312.0
G25.0	5260.4	5288.4	5244.3	4863.5	4643.2	4490.6	4295.5	4052.2	4068.1	4254.5
G26.0	5191.4	5215.5	5165.0	4806.3	4570.2	4443.5	4238.3	3990.4	4011.4	4217.1
G27.0	5095.6	5103.2	5125.5	4755.8	4534.2	4392.4	4153.8	3924.1	3967.5	4179.3
G28.0	4987.4	5056.0	5016.5	4668.0	4436.3	4345.0	4098.6	3856.5	3903.1	4121.5
G29.0	4872.6	4895.6	4882.4	4577.0	4342.5	4258.6	4015.1	3784.8	3843.1	4060.0
G30.0	4702.7	4767.9	4748.1	4464.8	4255.5	4178.7	3913.8	3697.7	3757.3	3981.6
G31.0	4544.4	4599.3	4605.7	4347.0	4147.3	4058.2	3802.7	3594.7	3683.5	3912.4
G32.0	4369.8	4472.6	4431.9	4203.7	4014.5	3944.1	3669.9	3487.4	3580.7	3809.6
G33.0	4215.1	4283.2	4274.6	4071.2	3871.8	3784.1	3563.5	3331.5	3470.0	3717.8
G34.0	4030.9	4155.2	4084.1	3916.7	3750.4	3678.1	3424.4	3205.8	3349.6	3577.3
G35.0	3900.7	3969.8	3923.8	3783.3	3617.0	3534.9	3297.2	3060.8	3231.0	3441.7
G36.0	3718.7	3798.8	3766.9	3632.5	3498.4	3397.3	3165.0	2952.6	3125.8	3329.4

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Candlepower Table (Continue 7)

Unit: cd

G\C	C200.0	C210.0	C220.0	C230.0	C240.0	C250.0	C260.0	C270.0	C280.0	C290.0
G37.0	3540.1	3623.0	3587.3	3479.4	3374.1	3272.5	3032.1	2812.1	3010.4	3193.1
G38.0	3372.4	3444.6	3416.8	3334.1	3222.7	3146.7	2896.0	2673.7	2890.3	3082.9
G39.0	3198.2	3285.4	3252.3	3171.3	3089.1	3012.4	2771.0	2550.0	2767.9	2951.4
G40.0	3027.4	3118.6	3075.9	3034.7	2956.1	2885.1	2635.9	2430.1	2666.3	2841.0
G41.0	2868.0	2974.6	2920.4	2881.6	2802.5	2754.4	2500.2	2314.8	2534.6	2709.8
G42.0	2666.2	2800.2	2731.8	2718.9	2642.1	2573.5	2282.8	2139.2	2277.4	2409.0
G43.0	2337.2	2496.6	2427.4	2413.8	2285.1	2234.2	1980.7	1901.1	1961.7	2044.8
G44.0	1992.1	2151.4	2059.0	2052.2	1923.7	1882.8	1732.8	1681.1	1700.3	1781.5
G45.0	1674.5	1811.6	1735.5	1728.9	1647.9	1624.3	1551.8	1501.0	1507.4	1578.4
G46.0	1464.4	1562.6	1523.4	1521.9	1452.8	1453.9	1391.4	1343.2	1345.4	1404.1
G47.0	1262.1	1356.3	1331.1	1332.5	1287.4	1297.1	1255.2	1223.3	1227.2	1275.3
G48.0	1137.3	1199.8	1191.1	1192.3	1163.2	1176.9	1144.6	1109.1	1114.2	1166.5
G49.0	1028.3	1091.6	1079.1	1077.8	1053.5	1061.0	1034.1	1009.8	1009.8	1053.8
G50.0	917.6	980.8	971.2	981.4	953.2	964.9	936.2	905.3	918.5	955.5
G51.0	827.0	882.7	873.8	882.5	865.8	879.6	855.2	829.5	833.5	870.2
G52.0	725.6	789.7	780.2	792.8	784.5	802.9	782.5	759.4	761.1	792.0
G53.0	633.0	688.2	679.9	696.4	692.4	716.5	698.7	680.7	688.1	715.7
G54.0	542.8	595.7	594.5	611.2	607.1	631.2	618.0	605.1	610.4	635.8
G55.0	471.3	518.4	517.0	533.9	534.3	556.3	551.0	542.8	545.9	567.4
G56.0	412.1	451.6	456.6	470.2	473.0	495.8	494.2	486.8	494.4	513.8
G57.0	365.3	399.8	406.8	418.7	424.9	445.3	445.5	442.0	446.1	463.3
G58.0	327.0	358.0	366.6	378.3	385.9	403.7	406.0	400.9	406.8	423.7
G59.0	297.5	324.7	333.7	346.8	352.8	366.8	372.0	368.0	375.4	388.0
G60.0	270.7	296.8	304.4	315.8	323.7	339.4	342.2	339.4	345.1	357.6
G61.0	248.1	270.3	280.1	291.0	298.2	312.5	319.0	312.5	318.2	330.2
G62.0	226.1	248.7	258.1	267.6	274.5	287.3	293.6	287.5	293.9	304.4
G63.0	207.4	227.8	236.0	246.3	252.7	264.1	270.4	265.0	272.5	281.9
G64.0	191.1	210.0	217.5	227.4	234.1	244.1	248.6	245.8	252.6	260.0
G65.0	177.4	193.4	201.2	210.8	216.6	227.2	231.5	228.3	234.4	242.1
G66.0	163.4	179.7	186.8	194.8	201.4	210.6	214.3	211.8	216.4	223.8
G67.0	151.9	166.6	172.2	181.7	186.8	195.2	198.9	196.6	200.5	206.9
G68.0	141.0	154.5	159.4	166.6	172.8	181.2	184.5	182.0	185.9	191.5
G69.0	130.8	142.2	147.6	154.8	160.2	167.3	171.4	167.7	171.7	176.0
G70.0	119.6	131.3	135.7	142.0	147.6	154.8	158.0	155.1	157.9	162.8
G71.0	110.4	120.2	125.3	131.3	136.7	142.5	145.6	142.0	144.5	149.4
G72.0	101.5	110.1	115.3	120.7	125.4	130.7	134.2	130.5	133.0	136.5
G73.0	92.4	101.9	105.3	111.1	114.5	120.1	121.9	119.0	121.0	125.3

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Candlepower Table (Continue 8)

Unit: cd

G\C	C200.0	C210.0	C220.0	C230.0	C240.0	C250.0	C260.0	C270.0	C280.0	C290.0
G74.0	84.7	92.5	96.2	101.0	104.5	108.8	112.1	108.8	111.3	113.8
G75.0	76.6	84.2	87.2	93.2	94.5	99.6	102.1	98.8	100.7	103.3
G76.0	69.3	75.9	78.4	83.5	85.6	90.4	92.1	89.6	91.3	93.6
G77.0	61.6	68.1	69.9	74.6	76.6	80.9	83.0	80.2	82.1	84.4
G78.0	54.7	60.9	63.0	65.8	68.4	72.6	73.5	71.8	73.0	75.3
G79.0	48.0	53.5	55.2	59.3	60.3	64.0	65.3	63.6	65.0	66.9
G80.0	41.3	46.6	47.7	51.0	52.6	56.0	57.2	56.0	56.9	58.6
G81.0	34.9	39.5	40.4	43.7	45.0	48.4	49.5	48.4	49.2	50.9
G82.0	28.6	32.6	33.8	36.4	38.1	41.0	41.7	40.9	41.8	43.2
G83.0	22.9	26.6	27.5	30.3	31.2	33.8	34.7	34.1	34.9	36.0
G84.0	17.2	20.9	21.8	23.7	24.8	27.4	28.0	27.5	28.3	29.4
G85.0	12.6	15.5	16.1	17.8	18.8	20.9	21.5	21.5	22.0	22.8
G86.0	7.8	10.4	10.8	12.3	13.2	15.1	15.5	15.4	15.7	16.6
G87.0	4.0	5.8	6.0	7.4	7.7	9.5	9.7	9.5	9.7	10.4
G88.0	1.2	2.5	2.3	3.1	3.5	4.6	4.8	4.8	4.9	5.4
G89.0	1.4	1.2	1.2	1.4	1.2	1.4	1.4	1.5	1.4	1.5
G90.0	1.4	1.2	1.5	1.2	1.1	1.4	1.4	1.2	1.2	1.2

Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C310.0	C320.0	C330.0	C340.0	C350.0	C360.0			
G0.0	6078.5	6097.1	5948.0	5880.9	5757.9	5743.1	5143.9			
G1.0	5830.1	5786.6	5689.9	5623.8	5527.3	5562.6	5062.6			
G2.0	5575.3	5556.4	5467.6	5412.3	5328.7	5362.5	4909.3			
G3.0	5345.9	5362.2	5244.1	5214.0	5182.6	5198.9	4741.5			
G4.0	5163.0	5167.3	5103.5	5091.5	5092.0	5098.6	4612.5			
G5.0	4974.8	5042.9	4970.5	4951.6	4959.6	4972.4	4509.5			
G6.0	4851.4	4857.7	4826.3	4824.0	4828.2	4846.5	4405.6			
G7.0	4723.6	4728.4	4681.0	4668.9	4687.0	4693.5	4276.6			
G8.0	4603.6	4553.1	4526.5	4507.6	4508.7	4526.9	4151.5			
G9.0	4513.6	4474.3	4427.4	4392.7	4403.6	4397.9	3953.0			
G10.0	4442.6	4419.9	4371.6	4333.0	4345.2	4356.5	3892.0			
G11.0	4403.6	4370.8	4328.4	4278.4	4311.5	4307.8	3838.0			
G12.0	4353.9	4341.2	4296.6	4255.7	4278.9	4282.0	3780.2			
G13.0	4324.3	4294.3	4278.0	4228.9	4266.6	4253.2	3741.6			
G14.0	4294.0	4279.4	4266.1	4231.6	4279.5	4238.2	3733.6			
G15.0	4272.1	4262.1	4257.8	4211.3	4264.5	4207.7	3693.8			
G16.0	4273.1	4261.8	4251.7	4217.6	4260.5	4193.1	3663.2			
G17.0	4297.4	4287.7	4270.3	4217.4	4277.8	4206.2	3645.1			
G18.0	4303.8	4280.4	4300.7	4244.5	4297.4	4215.4	3663.2			
G19.0	4336.4	4335.3	4332.4	4278.9	4340.2	4226.3	3653.7			
G20.0	4391.3	4379.8	4377.0	4308.7	4383.4	4260.6	3632.0			
G21.0	4468.3	4451.5	4426.3	4380.8	4471.2	4312.9	3666.8			
G22.0	4564.2	4510.1	4523.9	4447.9	4527.6	4369.0	3705.2			
G23.0	4617.6	4622.8	4576.0	4511.2	4585.6	4407.4	3757.2			
G24.0	4545.8	4646.1	4634.9	4536.1	4614.0	4395.0	3781.0			
G25.0	4474.3	4609.0	4581.0	4512.3	4586.2	4351.3	3753.6			
G26.0	4454.1	4534.2	4541.6	4467.2	4543.6	4315.8	3712.7			
G27.0	4414.2	4516.3	4509.3	4440.0	4510.7	4300.6	3676.3			
G28.0	4368.1	4496.1	4473.4	4420.3	4498.6	4265.1	3667.7			
G29.0	4304.4	4439.1	4438.8	4389.9	4457.2	4232.3	3638.3			
G30.0	4241.1	4385.1	4368.4	4325.3	4420.2	4143.5	3602.1			
G31.0	4150.1	4331.2	4303.6	4260.3	4363.6	4096.3	3571.5			
G32.0	4069.5	4212.0	4214.3	4183.6	4256.3	4004.4	3520.3			
G33.0	3956.6	4139.2	4108.1	4094.7	4174.4	3924.1	3452.8			
G34.0	3828.8	3995.9	3983.1	3989.6	4070.5	3807.1	3390.2			
G35.0	3686.0	3853.4	3875.1	3860.9	3940.6	3725.6	3301.2			
G36.0	3560.4	3729.2	3751.2	3737.2	3813.4	3603.9	3236.7			

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Candlepower Table (Continue 10)

Unit: cd

G\C	C300.0	C310.0	C320.0	C330.0	C340.0	C350.0	C360.0			
G37.0	3436.6	3587.6	3623.0	3610.8	3686.9	3499.7	3141.5			
G38.0	3290.5	3467.2	3487.5	3499.2	3555.6	3379.0	3071.7			
G39.0	3160.7	3336.9	3361.2	3372.9	3427.6	3268.6	2979.3			
G40.0	3039.7	3184.7	3232.4	3239.7	3308.1	3157.9	2889.1			
G41.0	2874.0	3025.3	3085.6	3108.6	3158.7	3036.8	2789.9			
G42.0	2526.6	2683.6	2722.4	2820.7	2882.9	2855.4	2698.8			
G43.0	2132.1	2280.5	2327.4	2411.5	2483.9	2475.3	2588.7			
G44.0	1895.7	1995.8	2035.6	2090.6	2130.8	2107.7	2444.8			
G45.0	1679.0	1766.1	1809.5	1864.2	1910.5	1868.8	2112.6			
G46.0	1507.7	1574.0	1608.3	1649.6	1686.3	1661.0	1810.1			
G47.0	1360.5	1423.0	1463.0	1495.4	1532.3	1496.5	1600.3			
G48.0	1236.9	1284.5	1323.1	1347.8	1384.7	1362.2	1414.1			
G49.0	1117.9	1169.2	1198.0	1224.7	1257.8	1234.4	1262.8			
G50.0	1017.3	1061.5	1095.1	1115.0	1145.2	1123.1	1154.6			
G51.0	925.6	962.2	994.4	1015.7	1044.3	1031.6	1043.5			
G52.0	842.0	871.3	905.6	923.6	951.1	938.8	948.3			
G53.0	754.5	788.1	817.5	837.3	862.8	850.7	867.3			
G54.0	676.1	703.9	726.5	747.7	768.8	763.1	788.9			
G55.0	605.4	630.3	649.9	665.0	683.9	679.2	715.1			
G56.0	546.6	565.7	588.3	603.2	621.2	615.7	632.1			
G57.0	493.0	511.3	529.6	544.3	560.6	556.0	565.5			
G58.0	450.6	464.1	484.1	495.5	508.7	504.8	508.1			
G59.0	413.5	427.4	444.9	454.6	468.5	461.6	463.2			
G60.0	381.7	393.5	410.4	417.5	431.0	425.0	420.7			
G61.0	351.6	362.2	377.5	385.1	398.5	392.6	386.1			
G62.0	325.6	332.5	349.9	354.5	366.2	362.9	355.4			
G63.0	299.6	307.3	321.9	327.4	338.2	334.7	327.7			
G64.0	277.6	283.2	297.5	302.2	312.1	309.3	304.1			
G65.0	256.7	262.3	275.5	279.8	288.4	285.3	277.5			
G66.0	236.9	241.5	254.9	258.9	266.4	264.6	258.1			
G67.0	219.8	224.0	235.0	237.4	246.0	244.7	237.2			
G68.0	202.3	206.8	218.0	219.5	226.7	225.4	218.6			
G69.0	186.8	190.8	200.6	202.1	209.7	208.8	200.9			
G70.0	171.6	175.7	184.8	185.2	192.3	190.9	186.8			
G71.0	156.9	160.9	169.4	170.2	175.9	175.1	170.5			
G72.0	144.4	147.7	155.6	156.2	161.1	160.2	157.4			
G73.0	131.4	135.6	141.9	143.4	146.8	145.4	143.3			

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector:

Candlepower Table (Continue 11)

Unit: cd

G\C	C300.0	C310.0	C320.0	C330.0	C340.0	C350.0	C360.0			
G74.0	119.8	123.0	129.4	130.4	133.6	132.5	130.2			
G75.0	108.5	111.6	117.1	118.2	121.1	119.9	118.7			
G76.0	97.9	100.2	105.4	106.4	109.1	108.5	108.8			
G77.0	88.1	90.4	94.4	95.3	97.9	97.6	98.1			
G78.0	78.4	80.4	84.6	85.0	87.8	87.0	88.2			
G79.0	69.6	71.3	74.4	75.2	77.3	77.6	79.2			
G80.0	61.0	62.6	65.2	66.6	68.4	67.9	70.4			
G81.0	52.7	54.1	56.9	57.3	58.7	59.3	62.0			
G82.0	44.9	46.3	48.4	48.7	50.3	50.7	54.9			
G83.0	37.3	38.7	40.3	40.9	42.0	42.4	47.0			
G84.0	30.3	31.5	33.0	33.5	34.4	34.7	40.3			
G85.0	23.8	24.8	26.0	26.4	27.1	27.7	33.2			
G86.0	17.5	18.5	19.1	19.7	20.5	20.9	26.9			
G87.0	10.9	11.7	12.4	13.2	13.4	14.3	21.1			
G88.0	5.7	6.2	6.6	7.2	7.4	8.1	15.4			
G89.0	0.9	1.7	1.8	2.3	2.3	2.9	9.5			
G90.0	1.4	1.5	1.4	1.2	1.4	1.4	5.2			

C Plane (°):0.0-360.0: 10.0
 Test Lab: LISUN GROUP
 Test Type: TYPE C
 Temperature: 25C
 Operator: Jacky

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-2000CCD
 Distance: 6.435 m
 Humidity: 65%
 Inspector: