



高精度旋转灯具双臂卧式分布光度计 (LSG-1800B/LSG-1700B)

Brochure

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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:

- 旋转控制台:
 - 1) LSG-1700B: 采用国际知名电机和角度编码器系统使得旋转角度精度达到 0.01 度
- 双通道&高精度光度计
- A 级恒温探头 (L 级可选)
- 激光系统对准校量
- 中英文软件

B. SLS-150W DC 直流光强标准灯

C. 数字电参数测量仪: LSG-1700B 配备 LS2012 电参数表: 高精度测量 AC 和 DC 电压, 电流, 功率及功率因素。

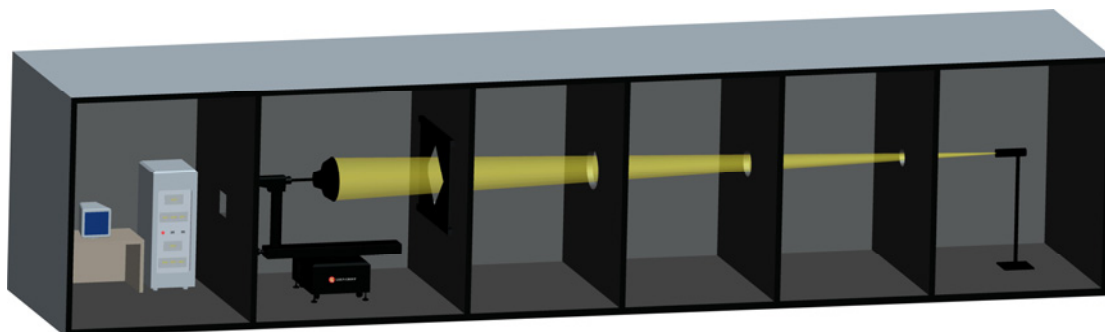
D. DC3010 精密数显直流稳压稳流电源: 30V/10A 恒流恒压源输出

E. 交流电源: LSG-1700B 配备 LSP-500VAS RS232 通讯交流电源

F. CASE-19IN 19 英寸机柜

G. 两套夹具: 两套多功能夹具。按照客户灯具类型定做

H. 包装: 木质包装费用



高精度旋转灯具卧式分布光度计全景图

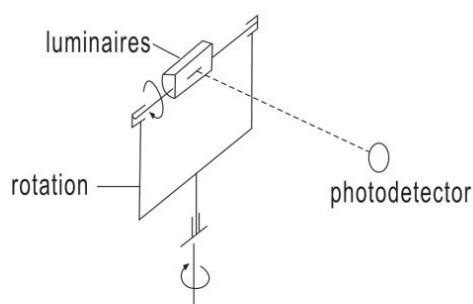
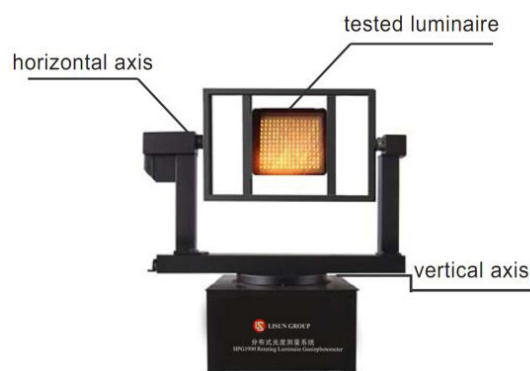
注: 电脑及打印机客户自行准备 (电脑至少有一个 USB 接口)

2. 工作原理

LSG-1800B/LSG-1700B 分布光度计系统采用固定探头旋转灯具方式。光源安装在光度计上，灯具中心应与旋转中心保持在一条线上，可借助激光对准。探头固定来测试在水平方向上的所有光强数据，旋转灯具。仪器允许被测光源绕水平垂直轴旋转。当被测光源绕水平轴旋转时，探头在同同一个旋转平面上来测试这个平面上所有的方向上的光强。当被测光源绕垂直轴旋转时，探头测试的是垂直面上所有方向上的光强。垂直轴水平轴在 $-180^{\circ}\sim+180^{\circ}$ 直接持续旋转。根据测试要求，这套系统可以满足 **B- β** 、**A- α** 和 **C- γ** 坐标系。当获取所有光强数据后，软件将会自动计算出其他光参数。

双臂结构（**B- β** 、**A- α** 坐标系）

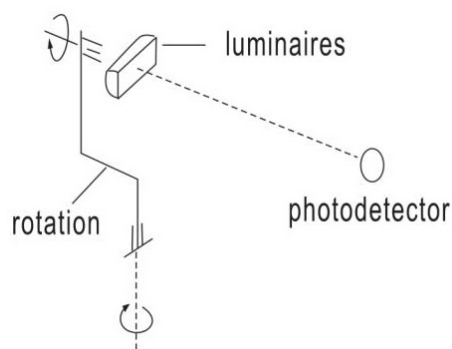
这种结构用于测试格栅灯，在 **B- β** 坐标系中灯具对称轴与水平旋转台需重合，在 **A- α** 二者垂直交叉。



Double pillars structure

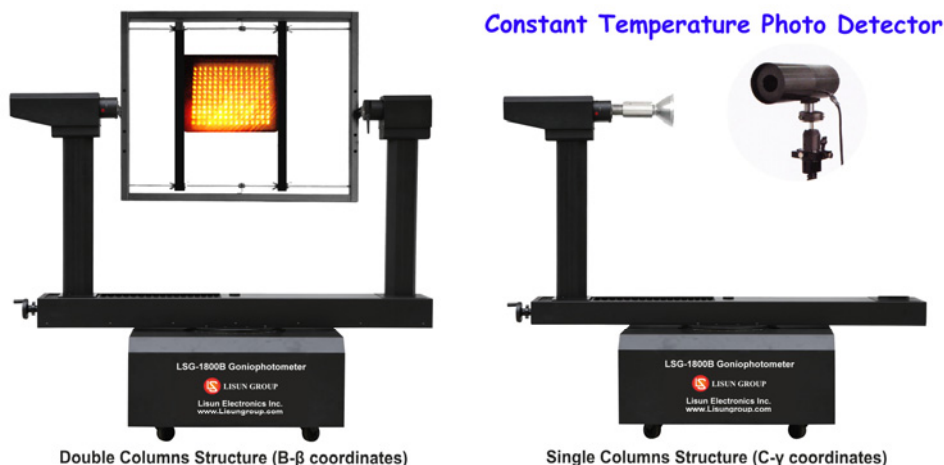
单臂结构（**C- γ** 和极坐标系）

在双臂基础上取下一条辅助臂即变为单臂结构。这种结构用于固定灯管，聚光灯等。灯具发光轴应于旋转台水平轴重合。

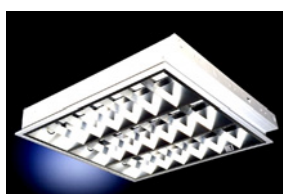


3. 系统功能

LSG-1800B/LSG-1700B 高精度分布光度计用于光强分布的测试，应用于 LED 路灯，室内灯，工矿灯等各类灯具的光参数。LSG-1800B 是 LSG-1800 升级版本，**LSG-1800B 采用恒温探头，日本三菱电机和德国角度编码器系统保持高精度测量。**LSG-1800B/LSG-1700B 应用于工业实验室各类灯具光参数测量。



此套系统被用于测试 LED 路灯，室内灯具以及工程用灯具的空间光强分布，等光强曲线，区域光强分布曲线（用直角坐标系和极坐标系表示），亮度限制曲线，光效，眩光等级，有效光束角，上射光通量，下射光通量，总光通量，有效光通量，利用系数及电参数（电压，电流，功率，功率因素）。测试数据可保存为 IES 格式文件，可直接被照明设计软件调用。这套系统完全满足照明设计工作的要求。



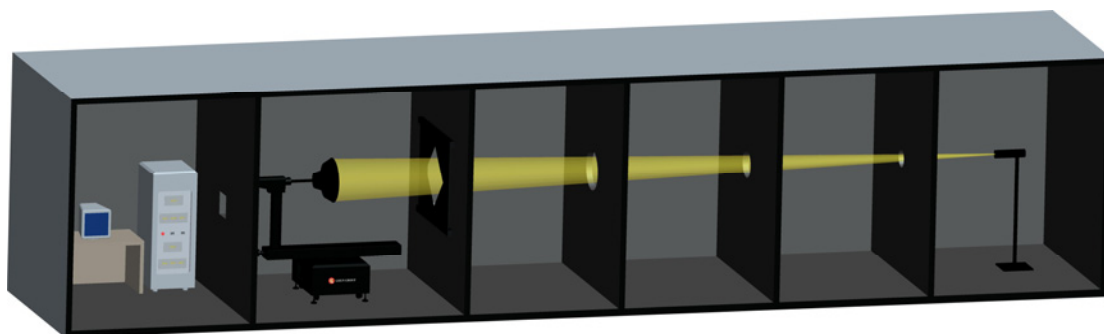
4. 技术参数:

- 满足 CIE、IEC、IES LM-79 和 GB 标准要求
- 满足 B-β 和 C-γ 测试方案
- 灯具旋转角度范围: $(\gamma)\pm 180^\circ$ (或 $0-360^\circ$)，灯具绕自身旋转角度范围: $(C)\pm 180^\circ$ (或 $0-360^\circ$)
- 光度测试范围: 照度范围 $0.001\text{lx}\sim 99,999\text{lx}$ ；光强范围: $1.0\text{cd}\sim 10^7\text{cd}$ (探头)
- 角度精度: 0.0017° (LSG-1800B) 以及 0.01° (LSG-1700B)
- 光度精度: CIE A 级探头(L 级探头可选)
- 测试精度: 2%(标准光源下)；杂散光: 小于 0.1%
- 中英文软件，可在 WinXP，Win7 或 Win8 下运行

最大测试灯具尺寸 (mm)	最大测试灯具尺寸		最大测试重量
	非泛光灯 Diameter (E)*Depth(F)	泛光灯(L*W)	
LSG-1800X	依据客户灯具尺寸定制		50Kg
LSG-1800B	∅1600×550	700*600	50kg
LSG-1700B	∅1600×580	700*600	30kg

5. 实验室要求:

- 暗室最小尺寸要求: W3.5m*H2.5m*L8m (推荐: W5m*H2.5m*15m)
- 操作室尺寸用于放置机柜, 电脑及打印机: 房间尺寸不小于 W3.0m*L3.0m
- 墙壁, 天花板及地板需用哑光漆涂黑, 也可用黑绒布覆盖。
- 放置一台空调在暗室中控制灯具周围的温度以达到 CIE 标准要求的温度。
- 确认采购订单后, LISUN 工程部将会根据客户的实验室尺寸给出暗室设计图纸。



6. 典型海外买家:

请向 LISUN 销售部索要买家信息。

7. 设计标准:

LSG-1800B/LSG-1700B 仪器结构, 技术参数, 测试, 操作步骤以及软件可以满足一下标准要求:

- 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"
- 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. 应用软件:

LSG-1800B/LSG-1700B 分布光度计完全由软件控制, 包括仪器的旋转, 数据采集出路, 实时屏幕显示, 测试报告打印等, 都可由软件操作实现, 使用操作非常方便。

系统可导出如下格式:

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

这些格式文件可以直接被相关照明设计软件调用, 如 DIALUX。

应用软件还可以实现对照明设计要求作为一个工作平面等照度分布曲线, 亮度限制曲线, 灯具效率, 有效光束角, 向上的光通量比, 向下的光通量比, 有效光通量, 利用系数曲线等必要的计算。

The Next Page is the Test Report by software

Report No.: LS1127

Test Time: 2017-08-31 13:12

Luminaire Property

Luminaire Manufacturer: W.K.LIGHTING

Luminaire Category: WK-71-83-8077-85-IP65

Lamp Catalog: LUMINUS

Number of Lamps: 1

Luminous Length (mm): 8.5

Luminous Height (mm): 12

Current: 0.071 A

Power Factor: 0.559

Lamp Description: Philips

Lumens per Lamp: 700

Luminous Width (mm): 8.5

Voltage: 220.6 V

Power: 8.69 W

Photometric Results

CIE Class: Direct

Measurement Flux: 641.8 lm

Downward Ratio: 91.69%

Horizontal Diffuse Angle(50%): H34.6

Vertical Diffuse Angle(50%): V34.1

Luminaire Efficacy Rating (LER): 73.91

Max. Intensity: 1620.79 cd

S/MH(C0/C180): 0.57

Total Rated Lamp Lumens: 700.0 lm

Efficiency: 91.69%

Upward Ratio: 0.00%

Central Intensity: 1617.64 cd

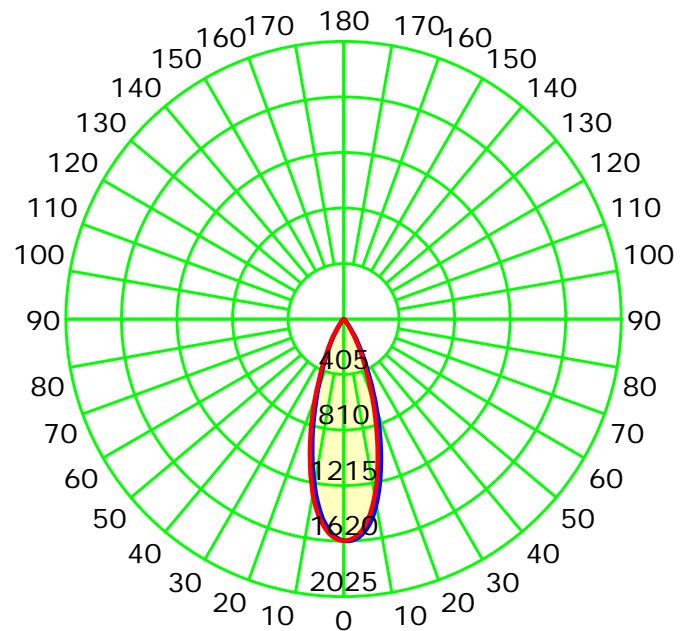
Pos of Max. Intensity: H22.5 V1

S/MH(C90/C270): 0.56

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 34.3°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab: LISUN

Test Type: TYPE C

Temperature: 24.5

Operator: Joye

Gamma Plane (°):0.0-90.0: 1.0

Test Device: LSG-1800B

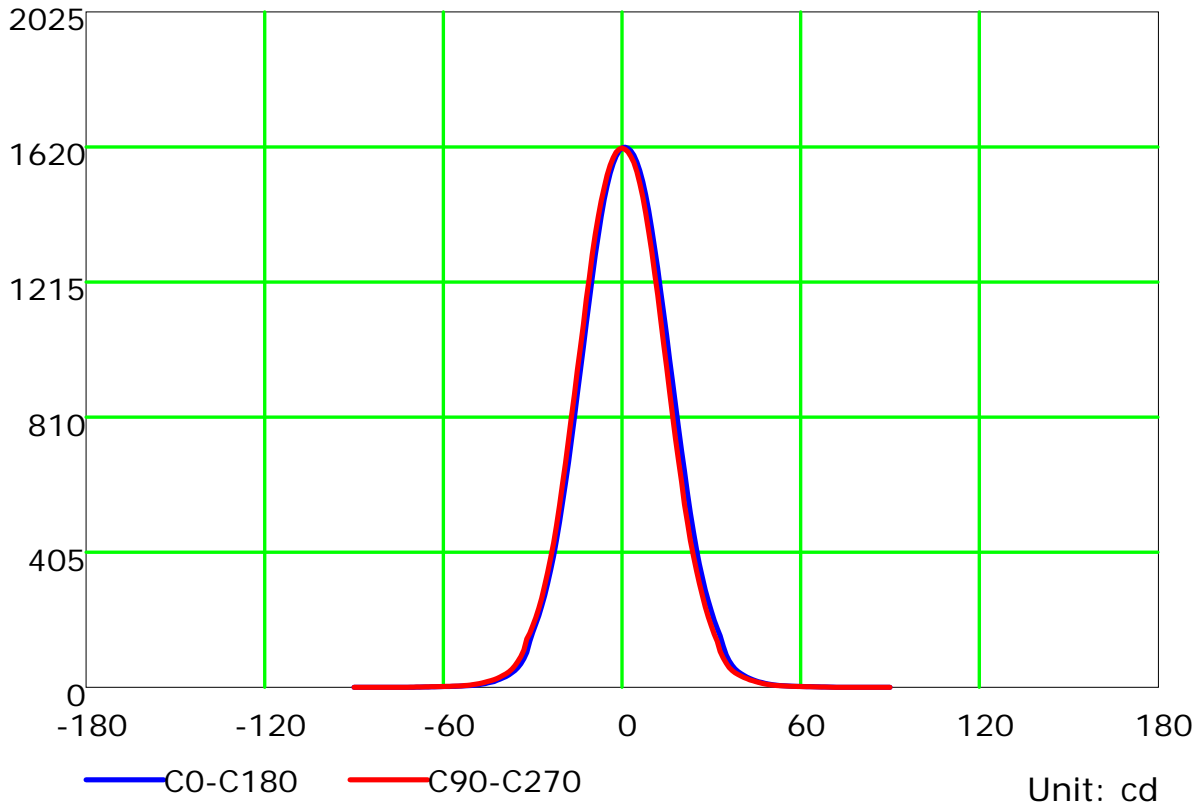
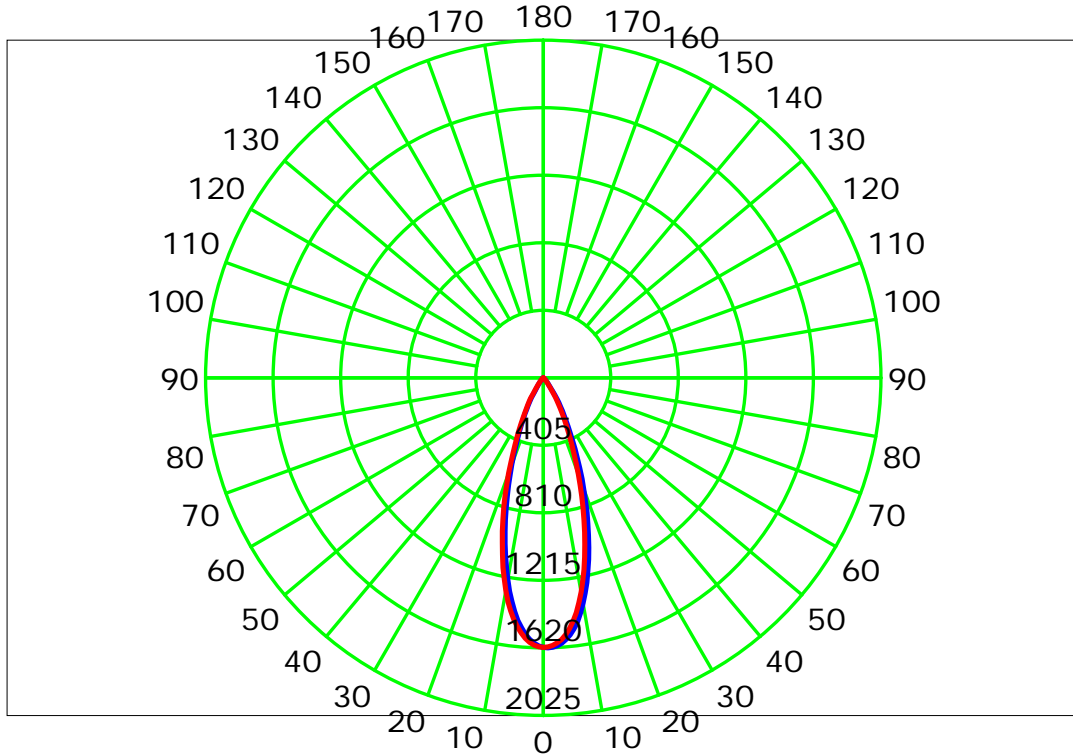
Distance: 8.300 m

Humidity: 60%

Inspector:



Luminous Intensity Distribution Curve

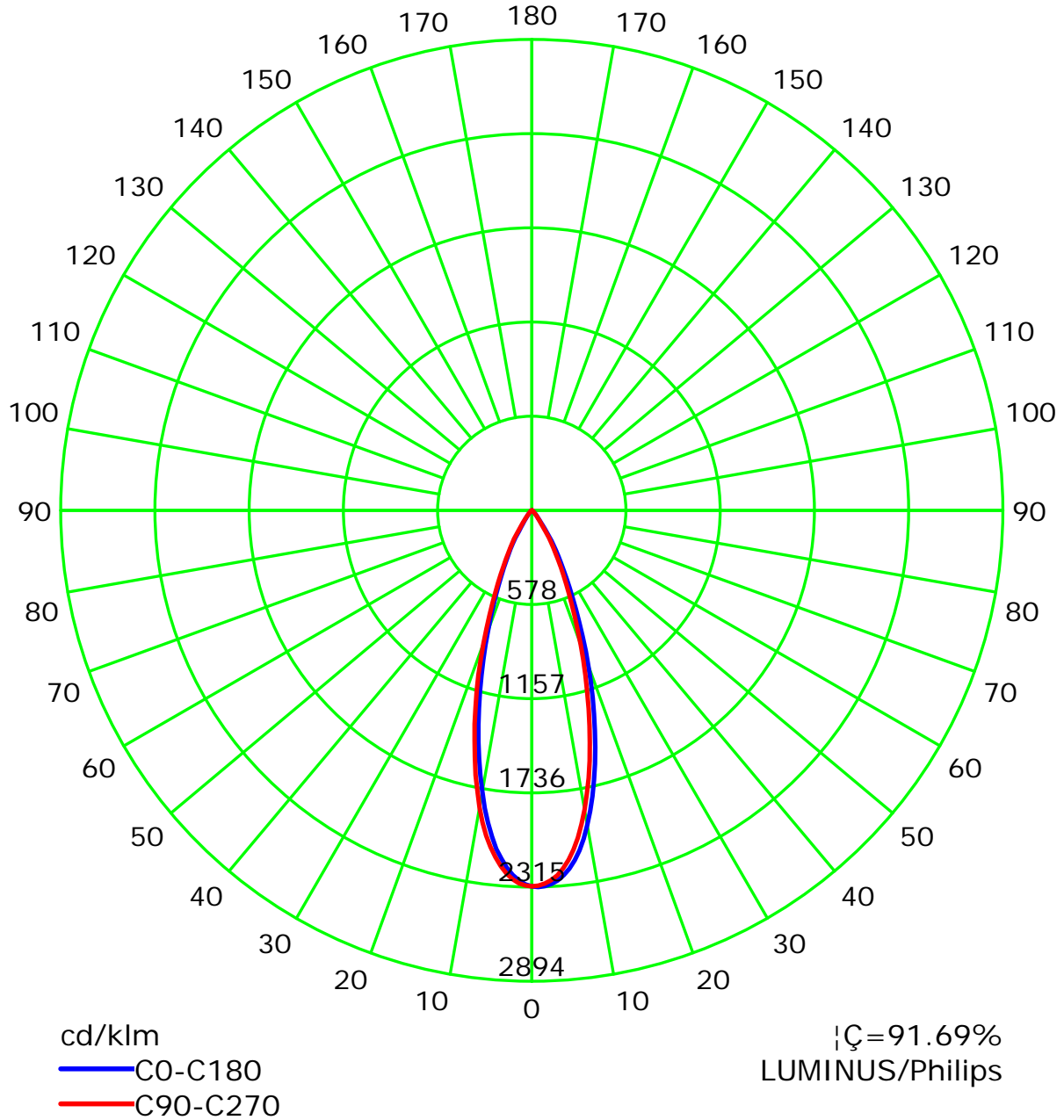


C Plane (°):0.0-360.0: 22.5
Test Lab: LISUN
Test Type: TYPE C
Temperature: 24.5
Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
Test Device: LSG-1800B
Distance: 8.300 m
Humidity: 60%
Inspector:



Luminous Intensity Distribution Curve(cd/klm)



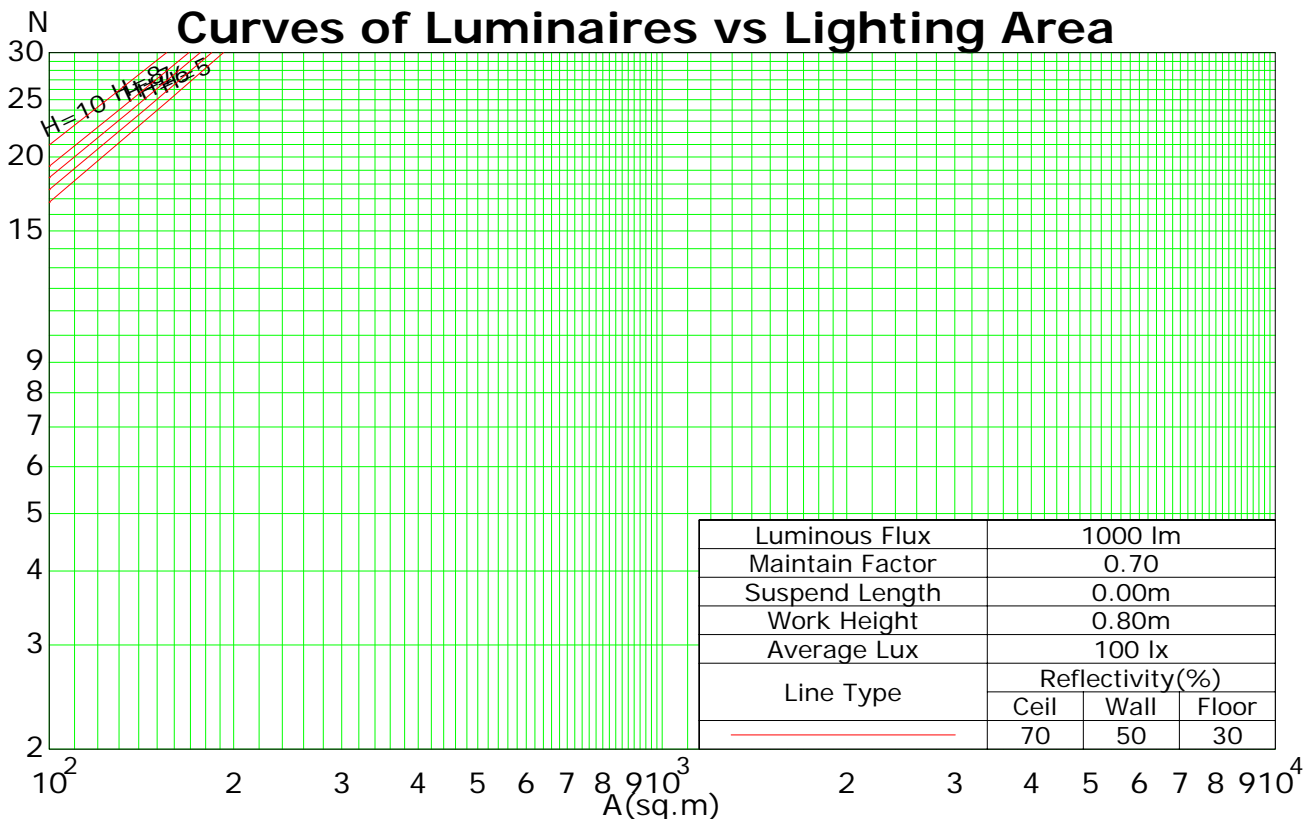
C Plane (°):0.0-360.0: 22.5
Test Lab: LISUN
Test Type: TYPE C
Temperature: 24.5
Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
Test Device: LSG-1800B
Distance: 8.300 m
Humidity: 60%
Inspector:

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	109	109	109	109	107	107	107	107	102	102	102	98	98	98	94	94	94	92
1	105	103	101	99	103	101	99	97	97	96	94	94	93	92	91	90	89	87
2	101	97	94	91	99	95	93	90	93	90	88	90	88	86	87	86	85	83
3	97	92	88	85	95	91	87	84	88	85	83	86	84	82	84	82	80	79
4	93	87	83	80	91	86	82	79	84	81	78	83	80	78	81	79	77	75
5	89	83	79	75	88	82	78	75	81	77	74	79	76	74	78	75	73	72
6	86	79	75	72	85	79	74	71	77	74	71	76	73	70	75	72	70	69
7	83	76	71	68	82	75	71	68	74	70	68	73	70	67	72	69	67	66
8	80	73	68	65	79	72	68	65	71	68	65	71	67	65	70	67	64	63
9	77	70	65	62	76	69	65	62	69	65	62	68	64	62	67	64	62	61
10	74	67	63	60	74	67	63	60	66	62	60	66	62	60	65	62	59	58

Spacing Criteria (0-180): 0.57
 Spacing Criteria (90-270): 0.56
 Spacing Criteria (Diagonal): 0.57

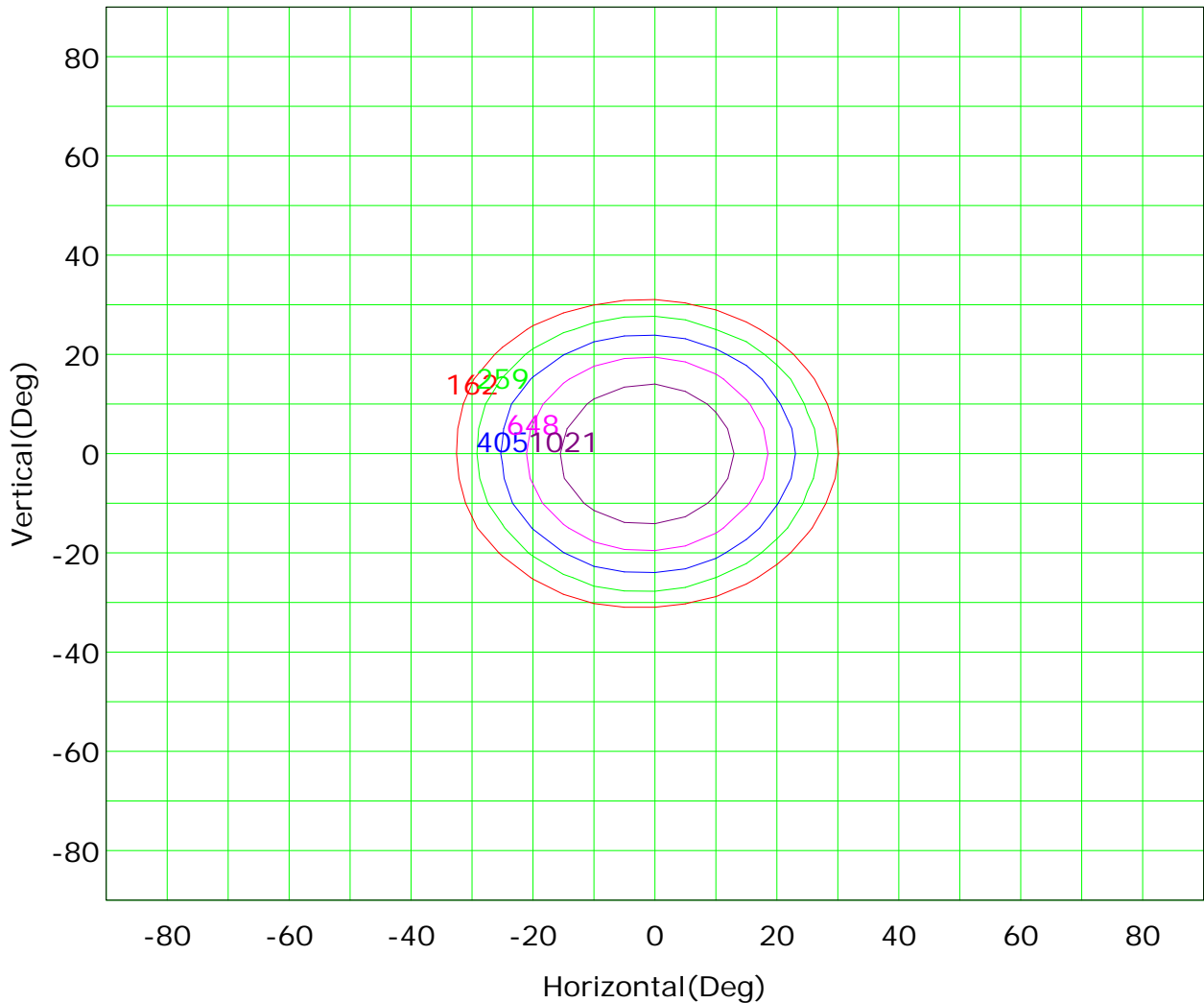


C Plane (°):0.0-360.0: 22.5
 Test Lab: LISUN
 Test Type: TYPE C
 Temperature: 24.5
 Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1800B
 Distance: 8.300 m
 Humidity: 60%
 Inspector:



Isocandela (rectangle)



Imax (100%): 1621 cd

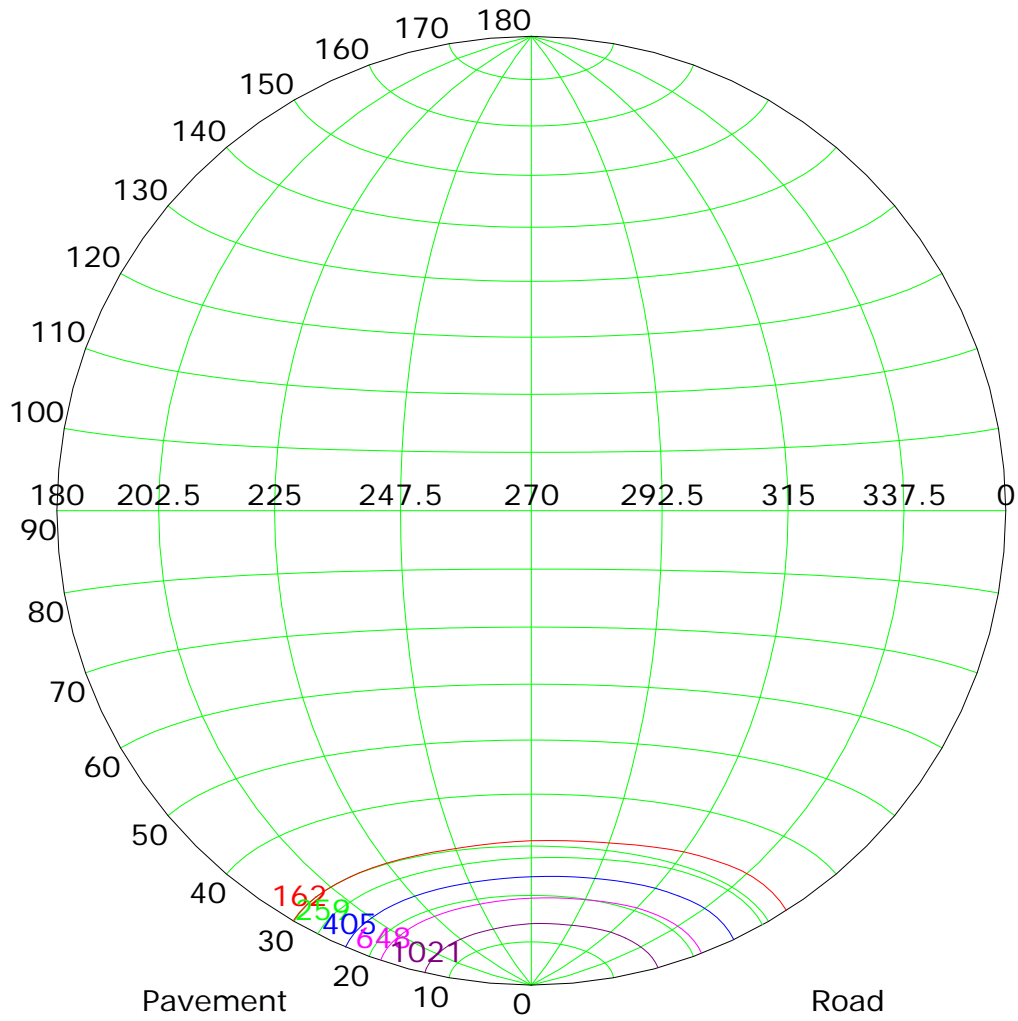
— (10%):	162 cd	— (16%):	259 cd
— (25%):	405 cd	— (40%):	648 cd
— (63%):	1021 cd	— (100%):	1621 cd

C Plane (°):0.0-360.0: 22.5
Test Lab: LISUN
Test Type: TYPE C
Temperature: 24.5
Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
Test Device: LSG-1800B
Distance: 8.300 m
Humidity: 60%
Inspector:



Isocandela (sphere)

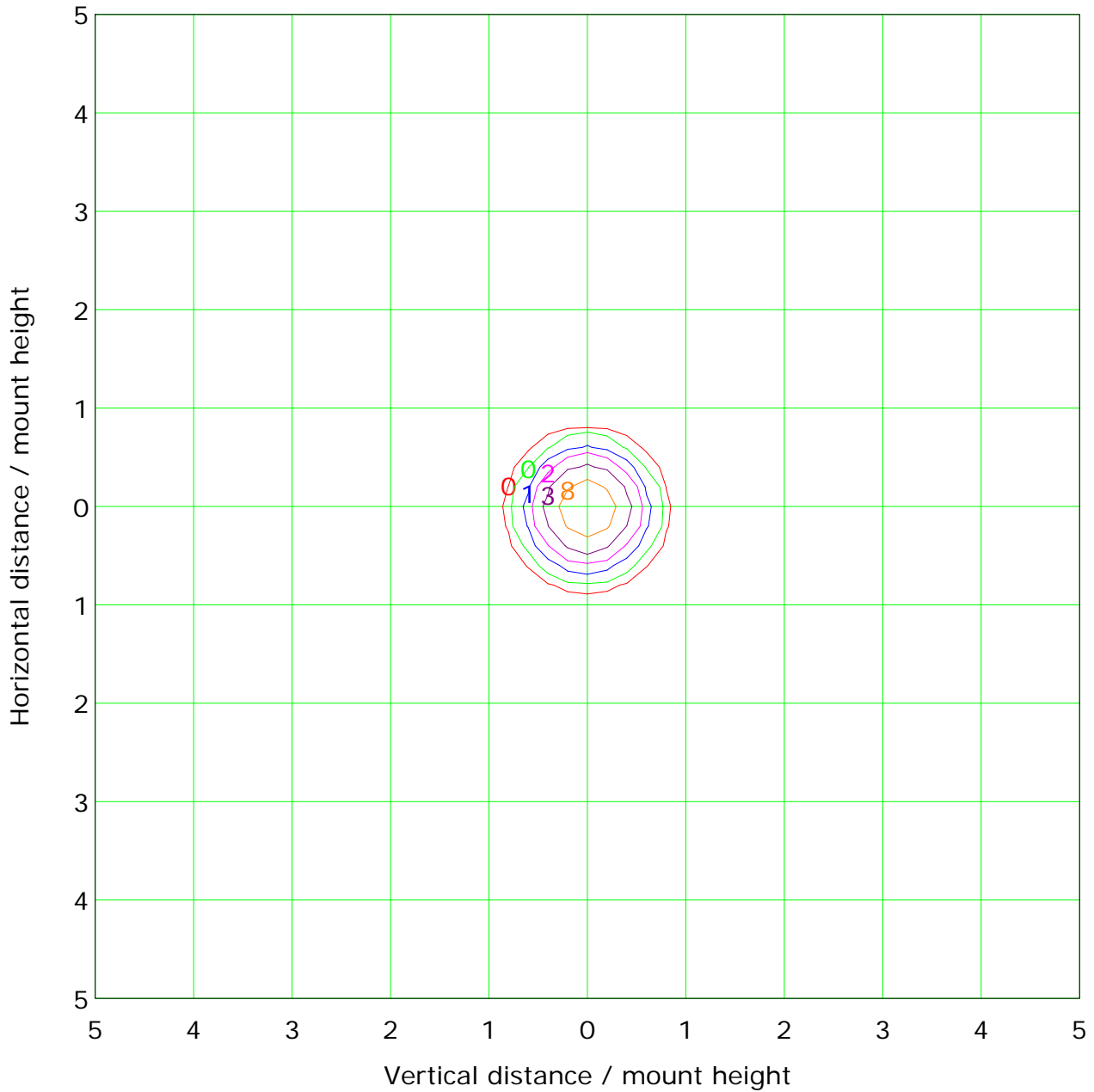


Imax (100%): 1621 cd

- (10%): 162 cd
- (16%): 259 cd
- (25%): 405 cd
- (40%): 648 cd
- (63%): 1021 cd
- (100%): 1621 cd



IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 16.2 lx	
— (1%):	0.2 lx	— (2%):	0.3 lx
— (5%):	0.8 lx	— (10%):	1.6 lx
— (20%):	3.2 lx	— (50%):	8.1 lx
— (100%):	16.2 lx		

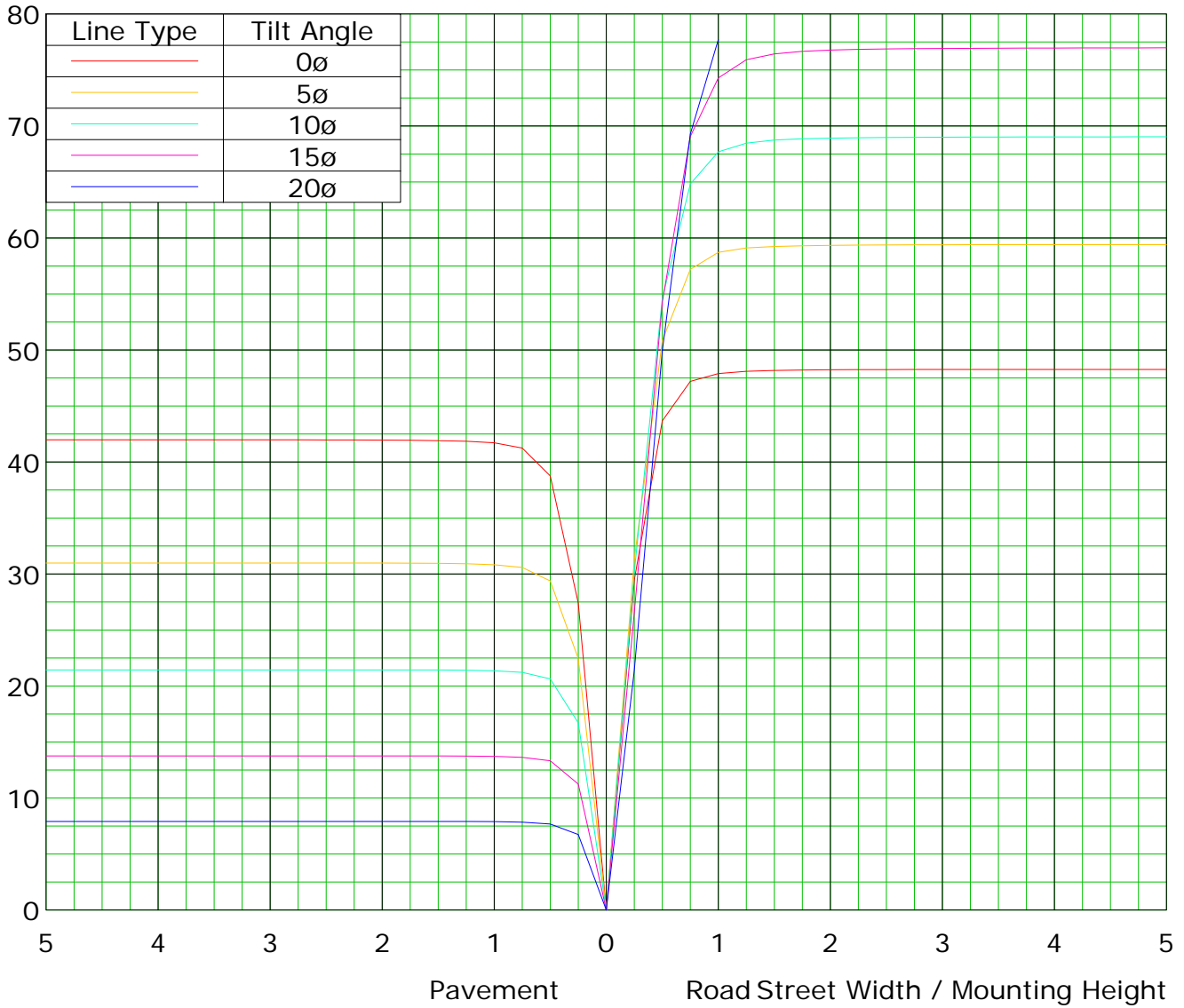
C Plane (°):0.0-360.0: 22.5
 Test Lab: LISUN
 Test Type: TYPE C
 Temperature: 24.5
 Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1800B
 Distance: 8.300 m
 Humidity: 60%
 Inspector:



Roadway CU Curve

Efficiency(%)



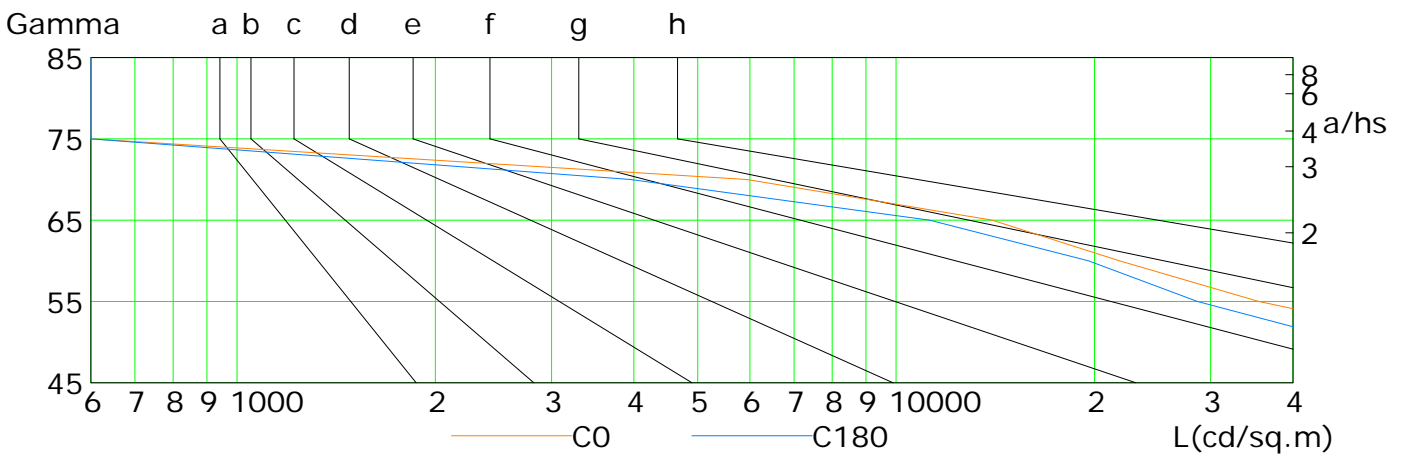
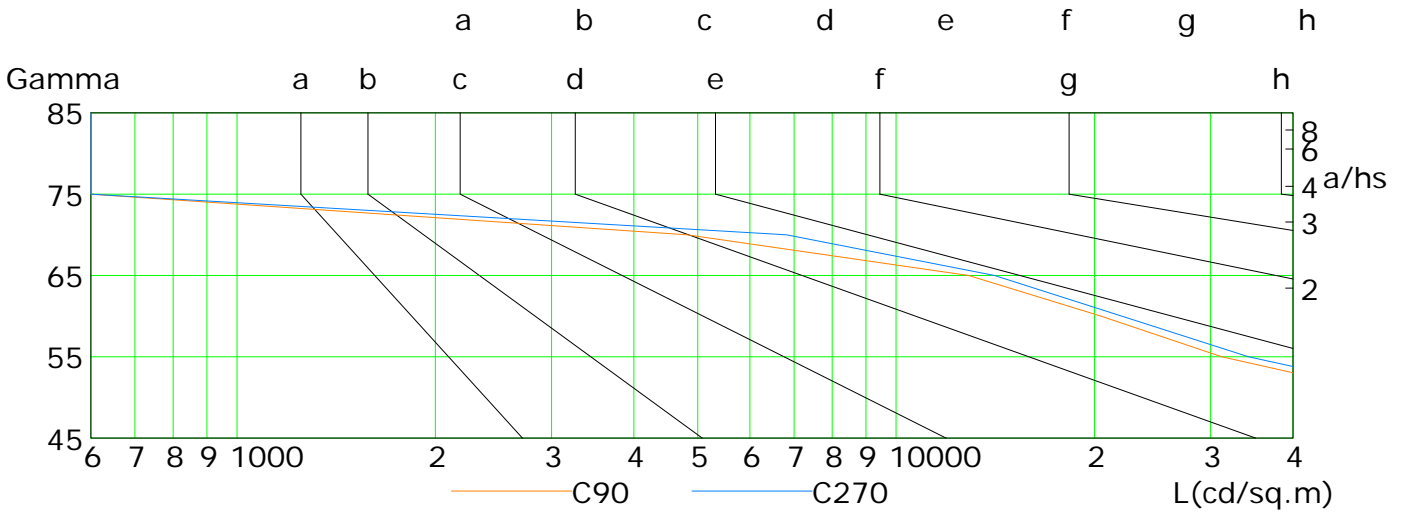
C Plane (°):0.0-360.0: 22.5
Test Lab: LISUN
Test Type: TYPE C
Temperature: 24.5
Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
Test Device: LSG-1800B
Distance: 8.300 m
Humidity: 60%
Inspector:



Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		a	b	c	d	e	f	g	h
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



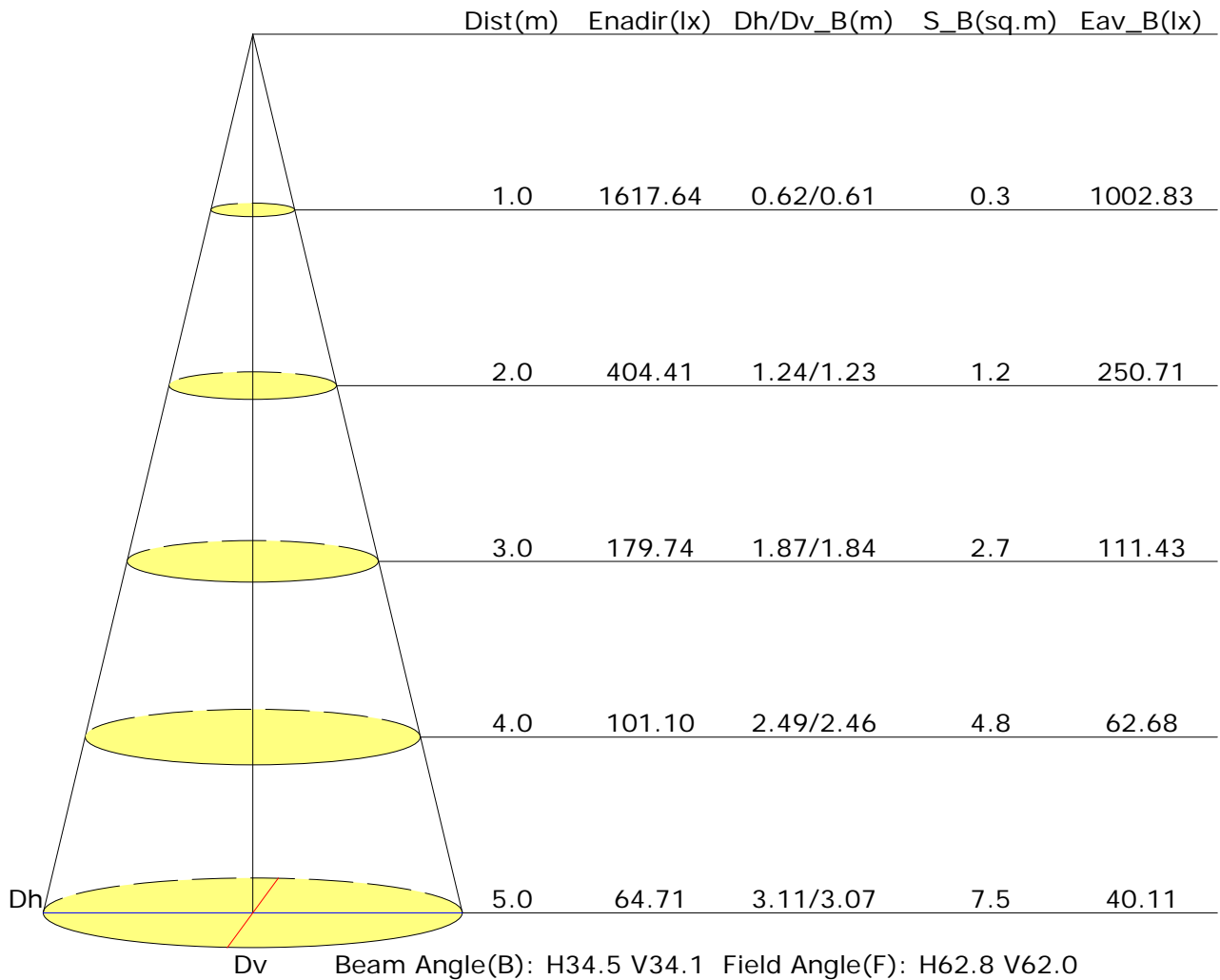
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	159528	70823	35498	21822	13994	5939	0	0	0
C90	139360	59055	31193	20456	12880	4819	0	0	0
C180	109233	49030	28649	19581	11246	3957	0	0	0
C270	145544	65983	34242	21991	14100	6818	0	0	0

C Plane (°):0.0-360.0: 22.5
 Test Lab: LISUN
 Test Type: TYPE C
 Temperature: 24.5
 Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1800B
 Distance: 8.300 m
 Humidity: 60%
 Inspector:

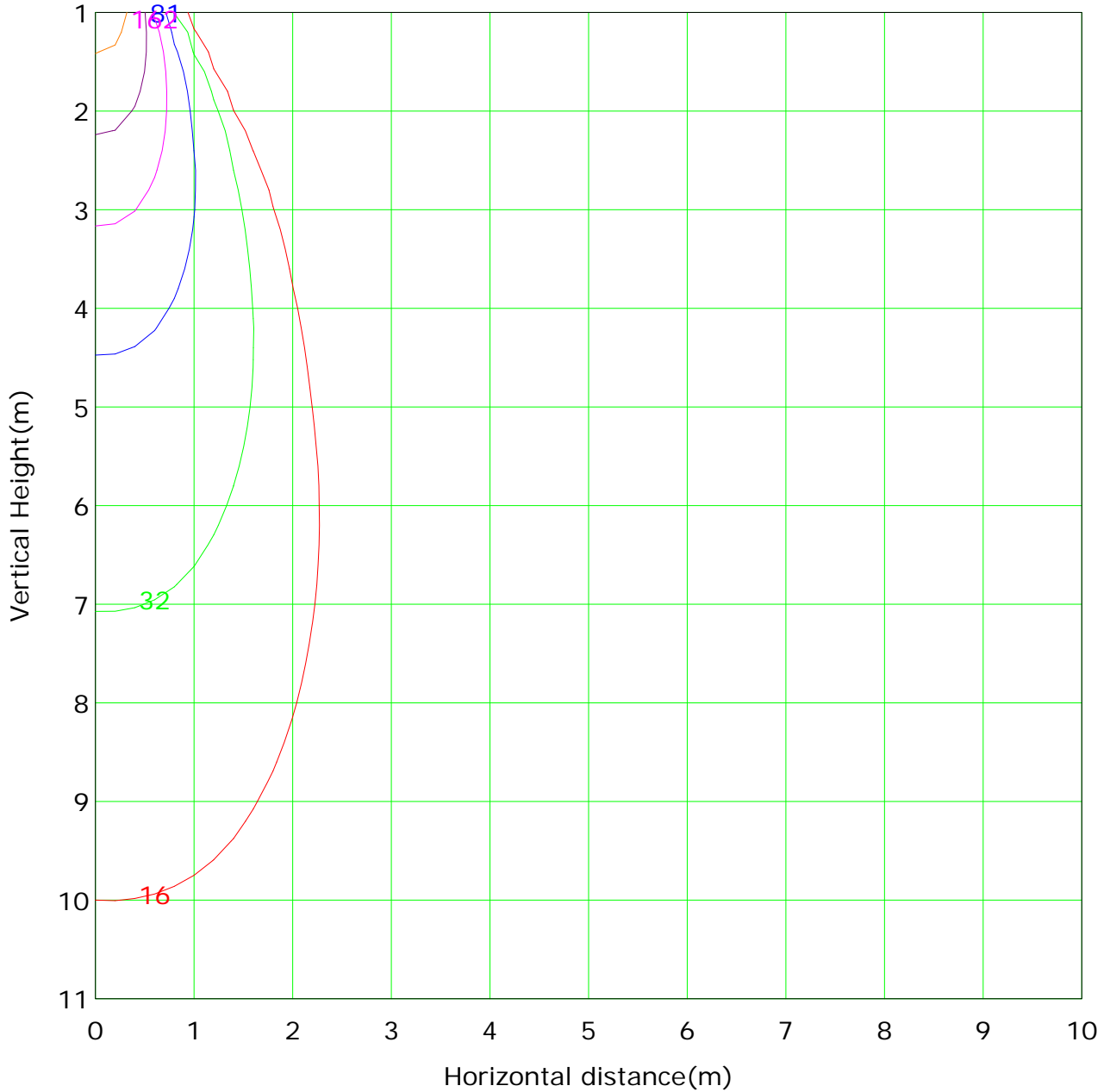


Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 1617.6 lx

— (1%): 16.2 lx	— (2%): 32.4 lx
— (5%): 80.9 lx	— (10%): 161.8 lx
— (20%): 323.5 lx	— (50%): 808.8 lx
— (100%):1617.6 lx	

C Plane (°):0.0-360.0: 22.5
 Test Lab: LISUN
 Test Type: TYPE C
 Temperature: 24.5
 Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1800B
 Distance: 8.300 m
 Humidity: 60%
 Inspector:



Area Flux Table

Unit: lm

		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.5	0.0
	-50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.7	0.0
	-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	7.6	0.0
	-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.1	1.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0	24.4	0.0
	-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.3	2.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	86.1	0.0
	-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	4.1	4.1	9.9	9.9	0.0	0.0	0.0	0.0	0.0	155.1	0.0
	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	4.3	4.3	10.6	10.6	0.0	0.0	0.0	0.0	0.0	165.2	0.0
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.8	2.8	7.3	7.3	0.0	0.0	0.0	0.0	0.0	106.8	0.0
	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8	1.8	3.1	3.1	0.0	0.0	0.0	0.0	0.0	38.4	0.0
	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.7	1.8	1.8	0.0	0.0	0.0	0.0	0.0	2.5	0.0
	40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
																					642	579

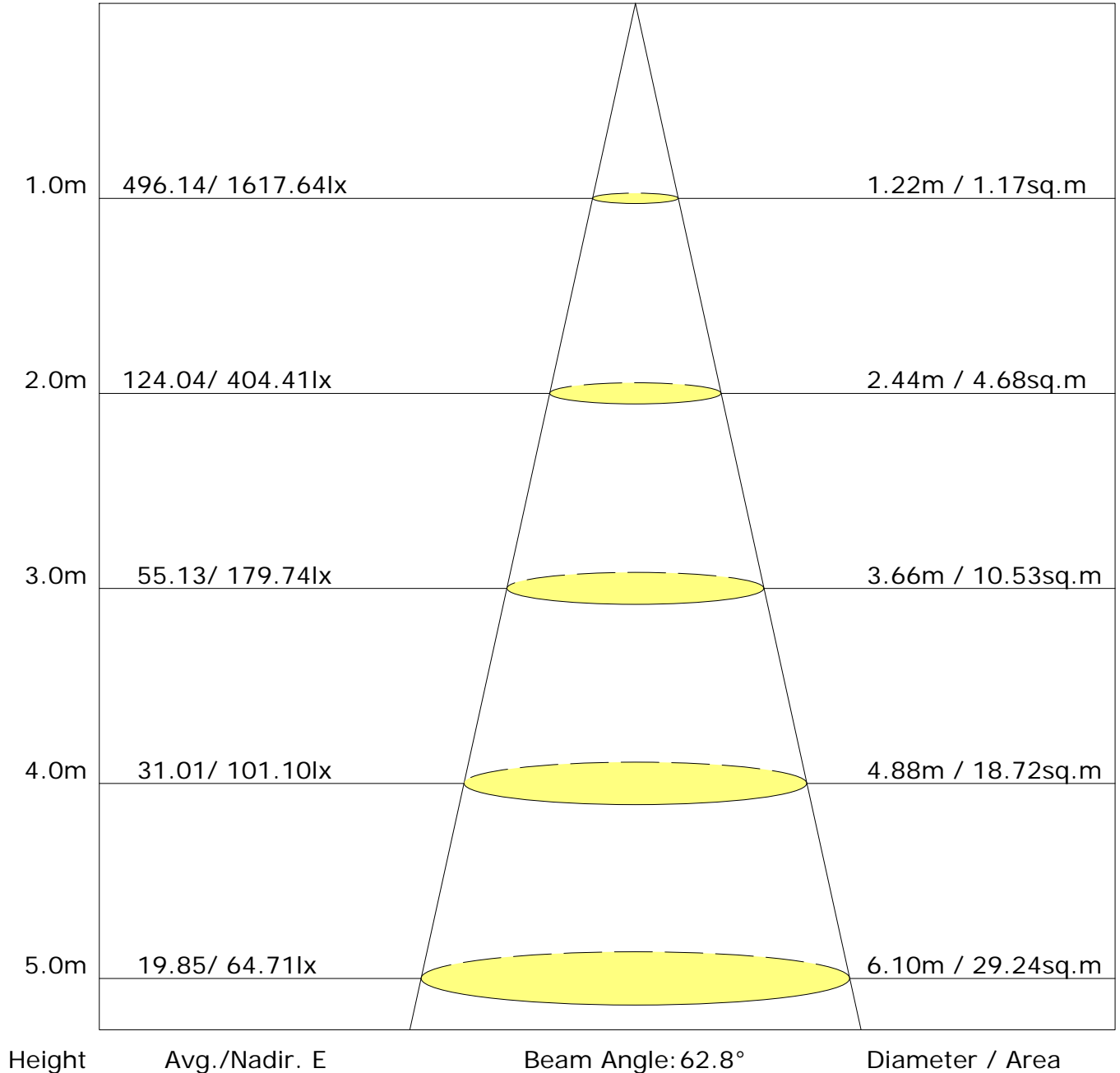
C Plane (°):0.0-360.0: 22.5
 Test Lab: LISUN
 Test Type: TYPE C
 Temperature: 24.5
 Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1800B
 Distance: 8.300 m
 Humidity: 60%
 Inspector:



The Average Illuminance Effective Figure

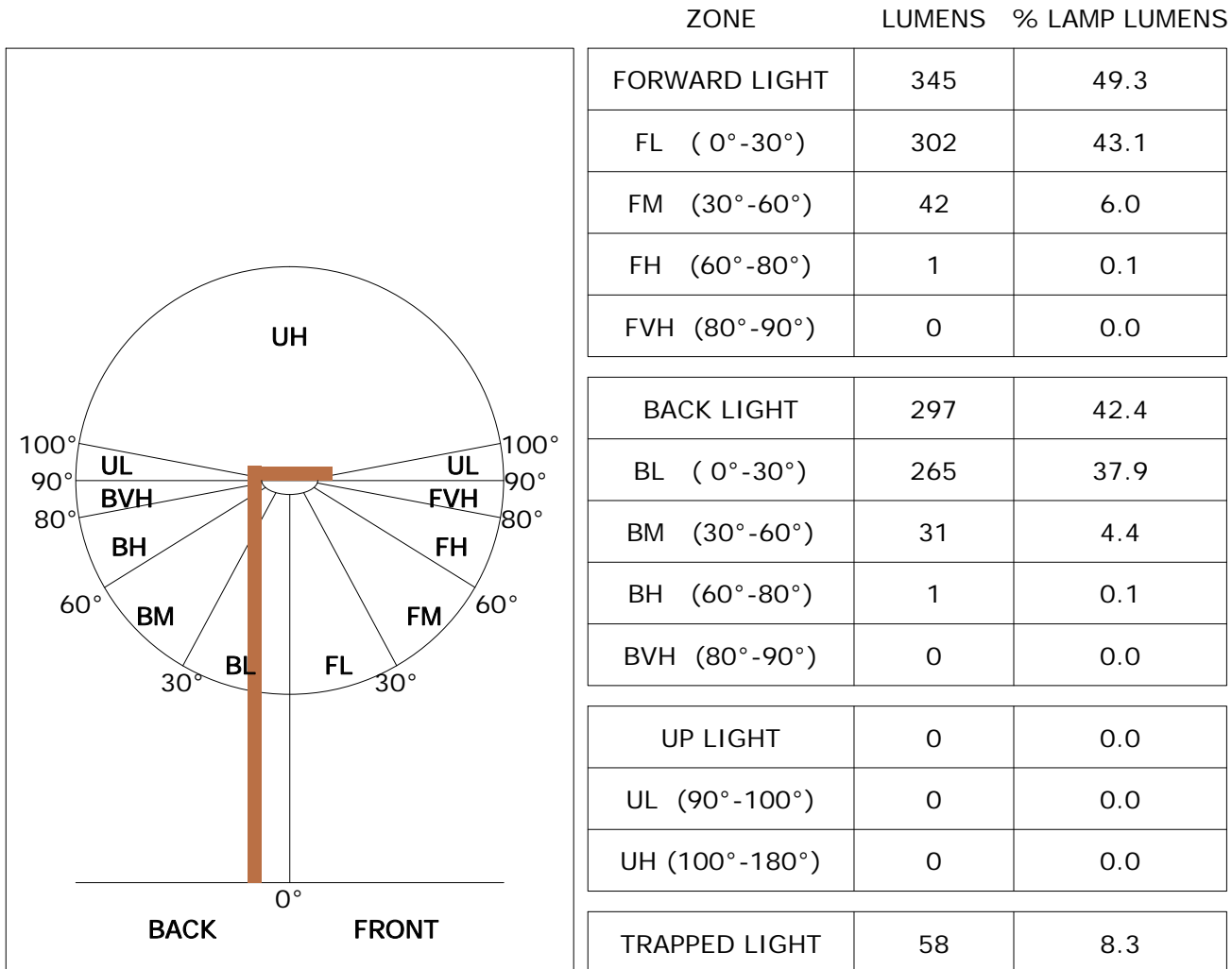
Flux Out: 580.34lm



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	24.7	25.5	25.0	25.7	25.8	23.4	24.2	23.7	24.3	24.5
3H	24.6	25.3	24.9	25.5	25.7	23.3	24.0	23.6	24.2	24.4
4H	24.5	25.1	24.8	25.4	25.7	23.2	23.9	23.5	24.1	24.4
6H	24.5	25.0	24.8	25.3	25.6	23.2	23.7	23.5	24.0	24.3
8H	24.4	25.0	24.8	25.3	25.6	23.1	23.7	23.5	24.0	24.3
12H	24.4	24.9	24.7	25.2	25.5	23.1	23.6	23.4	23.9	24.2
X=4H Y=2H	24.5	25.2	24.9	25.4	25.7	23.2	23.9	23.6	24.1	24.4
3H	24.4	24.9	24.8	25.2	25.5	23.1	23.6	23.5	23.9	24.3
4H	24.3	24.8	24.7	25.1	25.5	23.0	23.5	23.4	23.8	24.2
6H	24.2	24.6	24.6	25.0	25.4	22.9	23.4	23.4	23.7	24.1
8H	24.2	24.6	24.6	25.0	25.4	22.9	23.3	23.3	23.7	24.1
12H	24.1	24.5	24.6	24.9	25.3	22.9	23.2	23.3	23.6	24.0
X=8H Y=4H	24.2	24.6	24.6	25.0	25.4	22.9	23.3	23.3	23.7	24.1
6H	24.1	24.4	24.5	24.8	25.3	22.8	23.1	23.3	23.5	24.0
8H	24.0	24.3	24.5	24.8	25.2	22.8	23.0	23.2	23.5	23.9
12H	24.0	24.2	24.5	24.7	25.2	22.7	22.9	23.2	23.4	23.9
X=12H Y=4H	24.1	24.5	24.6	24.9	25.3	22.9	23.2	23.3	23.6	24.0
6H	24.0	24.3	24.5	24.8	25.2	22.8	23.0	23.2	23.5	23.9
8H	24.0	24.2	24.5	24.7	25.2	22.7	22.9	23.2	23.4	23.9
Variations with the observer position at spacings:										
S=1.0H	+5.9/-11.2					+5.6/-10.1				
S=1.5H	+8.7/-13.5					+8.4/-12.2				
S=2.0H	+10.7/-16.4					+10.4/-14.8				

Calculate in accordance with CIE Pub.117. The table is revised with 700lm ($8\log(F/F_0) = -1.2$).

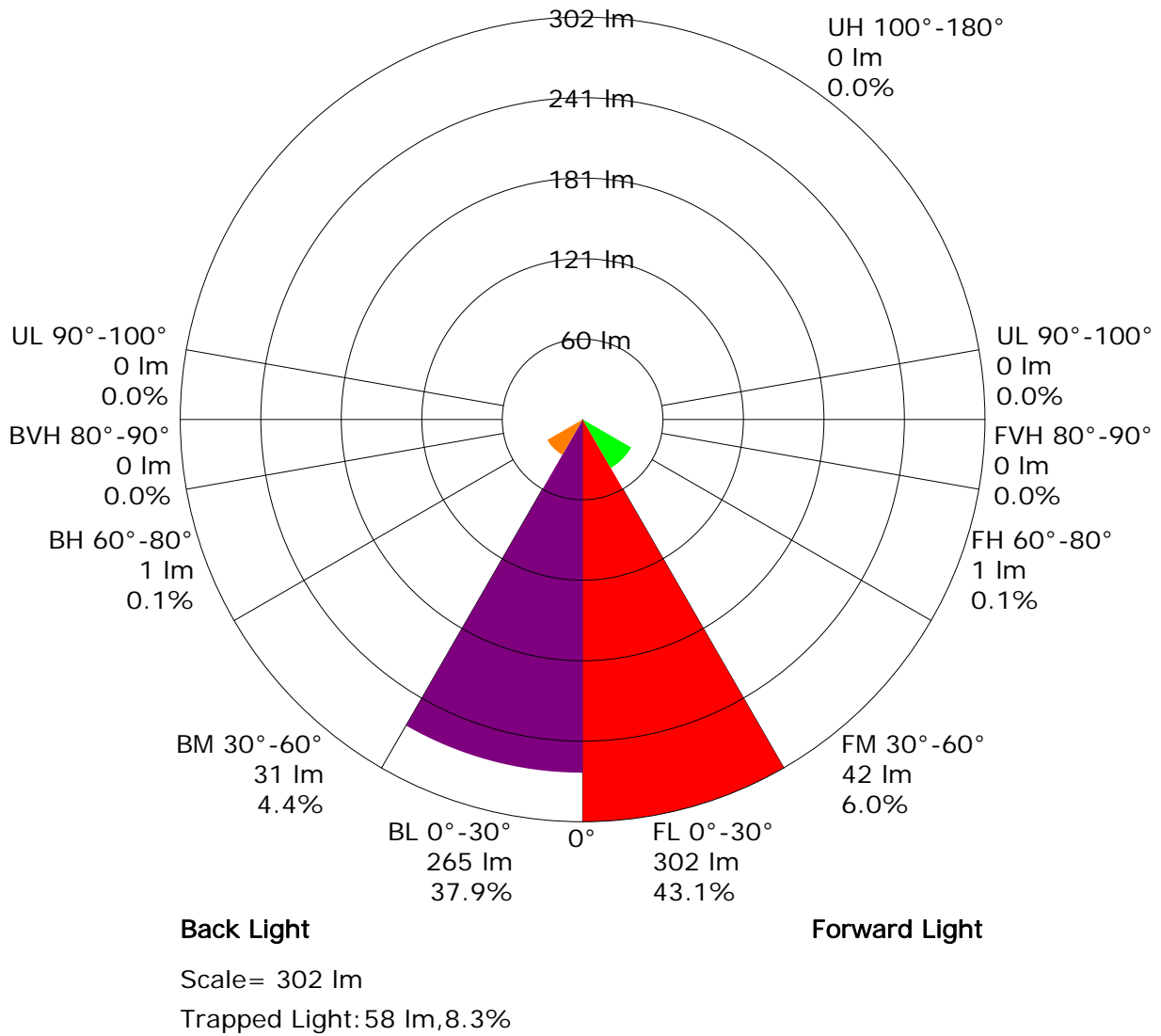
FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM


BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U0 G0

 C Plane (°):0.0-360.0: 22.5
 Test Lab: LISUN
 Test Type: TYPE C
 Temperature: 24.5
 Operator: Joye

 Gamma Plane (°):0.0-90.0: 1.0
 Test Device: LSG-1800B
 Distance: 8.300 m
 Humidity: 60%
 Inspector:

LCS Graph





Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 0.75								
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	0.86	0.90	0.93	0.95	0.98	0.99	1.01	1.02	1.03
	0.30		0.82	0.87	0.90	0.92	0.95	0.97	0.99	1.01	1.02
	0.20		0.80	0.84	0.87	0.90	0.93	0.95	0.97	0.99	1.01
0.50	0.50	0.20	0.85	0.89	0.91	0.93	0.95	0.97	0.98	0.99	1.00
	0.30		0.82	0.86	0.88	0.90	0.93	0.95	0.96	0.97	0.98
	0.20		0.80	0.84	0.86	0.88	0.91	0.93	0.94	0.96	0.97
0.30	0.50	0.20	0.84	0.87	0.89	0.91	0.93	0.94	0.95	0.96	0.96
	0.30		0.81	0.85	0.87	0.89	0.91	0.92	0.93	0.95	0.95
	0.20		0.79	0.83	0.86	0.87	0.90	0.91	0.92	0.94	0.95
0.00	0.00	0.00	0.78	0.81	0.84	0.85	0.87	0.88	0.89	0.90	0.90
<p>Rating: 9W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											



Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 0.75								
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	0.42	0.34	0.29	0.25	0.20	0.16	0.14	0.11	0.09
	0.30		0.35	0.29	0.25	0.22	0.18	0.15	0.13	0.10	0.08
	0.20		0.30	0.25	0.22	0.20	0.16	0.14	0.12	0.10	0.08
0.50	0.50	0.20	0.40	0.32	0.27	0.23	0.18	0.19	0.13	0.10	0.08
	0.30		0.33	0.28	0.24	0.21	0.16	0.14	0.12	0.09	0.08
	0.20		0.29	0.24	0.21	0.19	0.15	0.13	0.11	0.09	0.07
0.30	0.50	0.20	0.38	0.30	0.25	0.21	0.16	0.13	0.11	0.09	0.07
	0.30		0.32	0.26	0.22	0.19	0.15	0.13	0.11	0.08	0.07
	0.20		0.28	0.23	0.20	0.18	0.14	0.12	0.10	0.08	0.07
0.00	0.00	0.00	0.15	0.11	0.09	0.08	0.06	0.05	0.04	0.03	0.02
<p>Rating: 9W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											



Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 0.75								
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	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.18	0.19
	0.30		0.08	0.10	0.11	0.12	0.14	0.15	0.16	0.17	0.18
	0.20		0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.16	0.17
0.50	0.50	0.20	0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.18
	0.30		0.08	0.10	0.11	0.12	0.14	0.15	0.15	0.17	0.17
	0.20		0.06	0.08	0.09	0.10	0.12	0.13	0.14	0.16	0.16
0.30	0.50	0.20	0.10	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.17
	0.30		0.08	0.09	0.11	0.12	0.13	0.14	0.15	0.16	0.17
	0.20		0.06	0.08	0.09	0.10	0.12	0.13	0.14	0.15	0.16
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA

Rating: 9W 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	1616.0	1.5	1.5	0.22	0.22
1.0-2.0	1609.9	4.6	6.2	0.66	0.88
2.0-3.0	1597.9	7.6	13.8	1.09	1.97
3.0-4.0	1579.8	10.6	24.4	1.51	3.48
4.0-5.0	1555.1	13.4	37.8	1.91	5.40
5.0-6.0	1523.4	16.0	53.8	2.29	7.68
6.0-7.0	1485.0	18.4	72.2	2.63	10.32
7.0-8.0	1439.9	20.6	92.8	2.94	13.26
8.0-9.0	1388.2	22.5	115.3	3.21	16.47
9.0-10.0	1330.7	24.1	139.4	3.44	19.92
10.0-11.0	1268.9	25.4	164.8	3.62	23.54
11.0-12.0	1203.9	26.3	191.1	3.76	27.30
12.0-13.0	1135.9	27.0	218.1	3.85	31.15
13.0-14.0	1066.3	27.3	245.3	3.90	35.05
14.0-15.0	996.3	27.4	272.7	3.91	38.96
15.0-16.0	925.7	27.1	299.8	3.88	42.83
16.0-17.0	855.3	26.6	326.5	3.81	46.64
17.0-18.0	785.9	25.9	352.4	3.70	50.34
18.0-19.0	718.0	25.0	377.4	3.57	53.91
19.0-20.0	652.9	23.9	401.3	3.41	57.32
20.0-21.0	590.2	22.7	423.9	3.24	60.56
21.0-22.0	530.1	21.3	445.2	3.04	63.61
22.0-23.0	474.0	19.9	465.1	2.84	66.45
23.0-24.0	423.1	18.5	483.6	2.64	69.09
24.0-25.0	376.5	17.1	500.8	2.45	71.54
25.0-26.0	333.6	15.8	516.5	2.25	73.79
26.0-27.0	295.0	14.4	530.9	2.06	75.85
27.0-28.0	260.1	13.2	544.1	1.88	77.73
28.0-29.0	229.1	12.0	556.1	1.71	79.44
29.0-30.0	201.5	10.9	567.0	1.55	81.00
30.0-31.0	176.1	9.8	576.8	1.40	82.40
31.0-32.0	151.0	8.7	585.4	1.24	83.63
32.0-33.0	127.0	7.5	592.9	1.07	84.70
33.0-34.0	104.6	6.3	599.3	0.90	85.61
34.0-35.0	84.9	5.3	604.5	0.75	86.36
35.0-36.0	70.0	4.5	609.0	0.64	87.00

C Plane (°):0.0-360.0: 22.5
 Test Lab: LISUN
 Test Type: TYPE C
 Temperature: 24.5
 Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1800B
 Distance: 8.300 m
 Humidity: 60%
 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	58.9	3.8	612.8	0.55	87.55
37.0-38.0	50.2	3.4	616.2	0.48	88.03
38.0-39.0	43.3	3.0	619.1	0.42	88.45
39.0-40.0	37.7	2.6	621.8	0.38	88.82
40.0-41.0	32.9	2.3	624.1	0.33	89.16
41.0-42.0	28.7	2.1	626.2	0.30	89.46
42.0-43.0	25.0	1.9	628.0	0.26	89.72
43.0-44.0	21.8	1.6	629.7	0.23	89.96
44.0-45.0	18.9	1.5	631.1	0.21	90.16
45.0-46.0	16.3	1.3	632.4	0.18	90.35
46.0-47.0	14.0	1.1	633.5	0.16	90.50
47.0-48.0	11.9	1.0	634.5	0.14	90.64
48.0-49.0	10.1	0.8	635.3	0.12	90.76
49.0-50.0	8.6	0.7	636.0	0.10	90.86
50.0-51.0	7.3	0.6	636.7	0.09	90.95
51.0-52.0	6.3	0.5	637.2	0.08	91.03
52.0-53.0	5.5	0.5	637.7	0.07	91.10
53.0-54.0	4.9	0.4	638.1	0.06	91.16
54.0-55.0	4.4	0.4	638.5	0.06	91.22
55.0-56.0	3.9	0.4	638.9	0.05	91.27
56.0-57.0	3.6	0.3	639.2	0.05	91.31
57.0-58.0	3.3	0.3	639.5	0.04	91.36
58.0-59.0	3.0	0.3	639.8	0.04	91.40
59.0-60.0	2.8	0.3	640.0	0.04	91.43
60.0-61.0	2.5	0.2	640.3	0.03	91.47
61.0-62.0	2.3	0.2	640.5	0.03	91.50
62.0-63.0	2.1	0.2	640.7	0.03	91.53
63.0-64.0	1.9	0.2	640.9	0.03	91.56
64.0-65.0	1.8	0.2	641.1	0.02	91.58
65.0-66.0	1.6	0.2	641.2	0.02	91.60
66.0-67.0	1.4	0.1	641.4	0.02	91.62
67.0-68.0	1.2	0.1	641.5	0.02	91.64
68.0-69.0	1.0	0.1	641.6	0.01	91.66
69.0-70.0	0.8	0.1	641.7	0.01	91.67
70.0-71.0	0.6	0.1	641.7	0.01	91.68
71.0-72.0	0.4	0.0	641.8	0.01	91.68

C Plane (°):0.0-360.0: 22.5
 Test Lab: LISUN
 Test Type: TYPE C
 Temperature: 24.5
 Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1800B
 Distance: 8.300 m
 Humidity: 60%
 Inspector:



Candlepower Table

Unit: cd

GVC	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5
G0.0	1617.6	1617.6	1617.6	1617.6	1617.6	1617.6	1617.6	1617.6	1617.6	1617.6
G1.0	1620.7	1620.8	1619.6	1618.0	1614.4	1612.5	1609.8	1609.4	1609.1	1607.4
G2.0	1617.3	1620.4	1618.4	1612.9	1606.6	1601.9	1596.2	1593.4	1593.3	1591.4
G3.0	1609.6	1613.9	1609.7	1604.2	1592.8	1584.6	1574.9	1572.7	1571.5	1567.7
G4.0	1596.1	1600.2	1595.7	1587.7	1574.3	1563.3	1549.2	1544.0	1542.2	1539.9
G5.0	1575.2	1581.0	1576.2	1565.7	1546.5	1531.8	1515.4	1509.5	1504.7	1502.0
G6.0	1549.8	1555.0	1548.9	1534.2	1512.0	1494.5	1472.2	1466.9	1464.7	1461.4
G7.0	1516.5	1524.9	1517.1	1498.5	1470.6	1451.1	1425.8	1416.8	1412.4	1411.0
G8.0	1477.2	1484.2	1475.4	1454.2	1422.9	1399.5	1371.5	1362.3	1356.5	1351.9
G9.0	1429.5	1441.8	1428.6	1403.8	1366.2	1342.3	1308.7	1301.5	1297.2	1290.3
G10.0	1373.9	1389.3	1373.7	1347.2	1307.2	1277.7	1245.5	1233.0	1228.7	1225.1
G11.0	1317.0	1332.8	1315.4	1287.8	1242.4	1212.6	1177.9	1162.9	1161.8	1157.0
G12.0	1256.5	1269.7	1251.4	1219.3	1177.3	1145.2	1108.9	1093.6	1092.3	1086.7
G13.0	1190.0	1206.2	1185.1	1151.7	1105.5	1072.3	1035.3	1023.2	1021.9	1015.2
G14.0	1123.8	1139.7	1114.3	1081.6	1030.3	1002.9	965.4	944.1	950.7	945.4
G15.0	1055.6	1071.2	1041.7	1008.3	960.2	933.6	890.3	876.9	880.5	875.2
G16.0	984.2	1001.3	970.1	939.8	887.7	857.7	818.6	803.1	810.6	801.5
G17.0	916.0	928.2	899.9	862.1	814.6	789.1	747.2	734.2	741.4	733.5
G18.0	848.4	850.9	823.2	794.6	746.3	721.3	680.1	663.9	675.4	668.3
G19.0	778.5	784.0	754.1	720.9	680.6	653.6	612.6	599.8	613.3	605.4
G20.0	709.7	716.0	686.5	655.4	617.0	589.7	551.9	539.1	553.4	550.1
G21.0	649.7	646.3	619.3	592.4	549.3	528.7	489.8	480.6	496.5	490.6
G22.0	582.2	579.1	558.2	532.7	494.6	470.4	433.7	425.5	442.6	437.4
G23.0	523.0	515.6	499.1	475.4	440.5	416.7	382.9	377.8	394.7	390.2
G24.0	467.6	461.4	447.8	425.8	394.8	368.4	341.7	333.8	351.8	348.6
G25.0	415.2	405.7	399.5	378.3	351.4	325.4	297.5	294.6	311.4	308.0
G26.0	369.8	361.6	352.5	337.6	312.8	286.5	262.0	258.4	276.0	267.9
G27.0	329.6	318.8	312.3	300.9	275.8	252.6	229.7	227.3	243.5	234.4
G28.0	292.0	281.7	273.4	264.2	241.8	220.1	202.7	198.9	214.7	205.9
G29.0	259.3	246.6	237.3	232.0	210.8	193.5	178.4	174.3	189.8	182.5
G30.0	228.6	216.9	206.8	203.8	183.9	168.1	155.5	154.6	164.9	160.7
G31.0	201.0	192.2	181.7	179.7	159.8	145.0	132.1	126.1	138.6	134.7
G32.0	176.6	170.9	158.7	158.1	138.1	114.9	102.8	100.3	104.9	106.1
G33.0	155.0	151.2	139.3	130.7	107.9	90.1	83.8	83.2	86.1	88.9
G34.0	124.2	123.9	108.2	101.4	88.5	73.7	69.1	68.7	70.9	73.2
G35.0	97.4	98.4	89.7	82.0	72.6	62.1	58.0	56.4	59.4	61.4
G36.0	79.7	82.3	73.6	67.1	59.8	52.9	49.7	48.3	50.7	51.5

C Plane (°):0.0-360.0: 22.5
Test Lab: LISUN
Test Type: TYPE C
Temperature: 24.5
Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
Test Device: LSG-1800B
Distance: 8.300 m
Humidity: 60%
Inspector:



Candlepower Table (Continue 1)

Unit: cd

GVC	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5
G37.0	66.2	68.8	61.8	56.3	50.5	46.1	42.9	41.8	44.1	44.7
G38.0	55.3	57.9	52.6	48.4	44.0	40.7	37.8	36.2	37.9	39.2
G39.0	47.5	49.0	45.7	42.6	38.7	35.7	32.8	31.7	32.5	34.2
G40.0	41.1	42.5	39.8	37.8	34.0	31.5	28.9	27.6	28.4	29.8
G41.0	35.6	37.0	35.1	32.6	29.7	27.4	25.3	23.8	24.8	26.0
G42.0	30.4	32.4	30.5	28.5	26.0	24.0	21.9	20.7	21.2	22.6
G43.0	26.7	28.1	26.6	24.9	22.5	21.1	19.3	17.8	17.8	19.7
G44.0	22.9	24.4	23.0	21.8	19.8	18.3	16.6	15.3	15.7	17.1
G45.0	19.7	21.5	20.3	18.9	17.2	15.8	14.1	12.8	13.5	14.7
G46.0	16.7	18.7	17.5	16.4	14.7	13.3	11.7	10.7	11.4	12.3
G47.0	14.6	16.1	15.0	14.0	12.4	11.1	10.0	9.0	9.7	10.5
G48.0	12.2	13.5	12.6	11.7	10.4	9.4	8.3	7.6	8.3	8.9
G49.0	10.3	11.3	10.6	9.9	8.7	7.9	7.2	6.7	7.2	7.7
G50.0	8.8	9.7	8.9	8.3	7.4	6.7	6.1	5.8	6.1	6.5
G51.0	7.5	8.1	7.6	7.1	6.3	5.9	5.4	5.2	5.4	5.7
G52.0	6.3	6.8	6.2	6.1	5.5	5.1	4.8	4.6	4.9	5.1
G53.0	5.5	5.9	5.5	5.3	4.9	4.6	4.3	4.0	4.4	4.5
G54.0	4.9	5.1	4.8	4.7	4.3	4.1	3.9	3.8	3.9	4.1
G55.0	4.4	4.5	4.3	4.2	3.9	3.8	3.5	3.5	3.6	3.7
G56.0	3.9	4.0	3.8	3.8	3.6	3.4	3.2	3.2	3.2	3.4
G57.0	3.6	3.6	3.5	3.5	3.3	3.1	3.0	3.0	3.0	3.2
G58.0	3.3	3.3	3.2	3.2	2.9	2.9	2.7	2.7	2.8	2.9
G59.0	3.1	3.0	2.9	3.0	2.7	2.7	2.5	2.5	2.6	2.7
G60.0	2.7	2.8	2.6	2.7	2.5	2.5	2.4	2.3	2.4	2.5
G61.0	2.5	2.5	2.4	2.5	2.4	2.3	2.2	2.1	2.2	2.3
G62.0	2.3	2.3	2.2	2.3	2.1	2.1	2.0	1.9	2.0	2.1
G63.0	2.1	2.2	2.0	2.2	1.9	1.9	1.8	1.7	1.9	1.9
G64.0	2.0	1.9	1.8	2.0	1.8	1.7	1.6	1.6	1.5	1.7
G65.0	1.7	1.8	1.6	1.8	1.6	1.5	1.4	1.4	1.4	1.5
G66.0	1.5	1.5	1.5	1.6	1.3	1.4	1.3	1.2	1.3	1.3
G67.0	1.3	1.3	1.3	1.3	1.2	1.2	1.1	0.9	1.1	1.1
G68.0	1.2	1.1	1.1	1.3	1.0	1.0	0.9	0.8	0.9	1.0
G69.0	1.0	1.0	0.9	1.1	0.8	0.8	0.7	0.6	0.7	0.8
G70.0	0.7	0.8	0.7	0.8	0.6	0.6	0.5	0.4	0.5	0.6
G71.0	0.5	0.6	0.6	0.6	0.4	0.4	0.2	0.1	0.2	0.3
G72.0	0.3	0.5	0.4	0.4	0.1	0.1	0.0	0.0	0.0	0.1
G73.0	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0

C Plane (°):0.0-360.0: 22.5

Test Lab: LISUN

Test Type: TYPE C

Temperature: 24.5

Operator: Joye

Gamma Plane (°):0.0-90.0:1.0

Test Device: LSG-1800B

Distance: 8.300 m

Humidity: 60%

Inspector:



Candlepower Table (Continue 3)

Unit: cd

GVC	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5	C360.0			
G0.0	1617.6	1617.6	1617.6	1617.6	1617.6	1617.6	1617.6			
G1.0	1609.5	1610.7	1614.2	1615.9	1618.8	1619.7	1620.7			
G2.0	1594.9	1598.3	1605.0	1608.3	1613.7	1615.0	1617.3			
G3.0	1575.4	1578.7	1588.8	1593.5	1601.9	1604.6	1609.6			
G4.0	1546.0	1554.2	1566.2	1572.6	1586.1	1590.2	1596.1			
G5.0	1512.3	1519.4	1536.4	1546.5	1562.1	1569.7	1575.2			
G6.0	1470.8	1478.5	1499.6	1512.7	1531.9	1540.1	1549.8			
G7.0	1423.5	1433.4	1459.3	1470.7	1492.8	1503.2	1516.5			
G8.0	1366.8	1385.4	1412.6	1423.8	1446.7	1458.7	1477.2			
G9.0	1306.1	1325.5	1359.2	1370.0	1393.2	1409.4	1429.5			
G10.0	1242.7	1262.3	1298.4	1311.2	1338.5	1356.0	1373.9			
G11.0	1175.9	1197.2	1229.2	1247.1	1279.4	1298.6	1317.0			
G12.0	1107.2	1128.7	1164.9	1178.6	1216.2	1233.2	1256.5			
G13.0	1036.3	1055.9	1089.2	1112.6	1150.7	1169.6	1190.0			
G14.0	964.5	986.7	1019.1	1044.2	1084.3	1103.3	1123.8			
G15.0	893.8	914.1	951.6	975.2	1016.7	1034.9	1055.6			
G16.0	824.1	844.7	879.1	906.4	947.2	966.6	984.2			
G17.0	754.1	773.3	811.9	839.9	881.5	898.5	916.0			
G18.0	686.9	707.8	743.9	770.3	810.1	831.0	848.4			
G19.0	622.8	639.5	672.8	703.9	745.2	766.2	778.5			
G20.0	560.9	576.1	609.6	640.8	683.9	700.9	709.7			
G21.0	504.0	516.3	546.4	579.5	618.0	639.1	649.7			
G22.0	452.6	462.4	486.2	521.2	558.8	578.3	582.2			
G23.0	402.5	411.4	433.6	466.8	501.4	521.4	523.0			
G24.0	358.2	367.9	388.0	414.7	449.0	467.9	467.6			
G25.0	317.5	327.1	344.2	369.2	400.6	416.2	415.2			
G26.0	278.3	288.2	306.0	328.4	357.9	370.4	369.8			
G27.0	242.4	252.3	267.3	289.8	317.2	331.6	329.6			
G28.0	212.6	220.6	237.1	255.2	281.7	296.6	292.0			
G29.0	186.8	193.5	208.8	223.5	251.2	265.2	259.3			
G30.0	164.3	169.1	184.4	196.4	222.8	234.8	228.6			
G31.0	142.7	147.6	162.4	172.4	196.0	209.0	201.0			
G32.0	111.4	118.6	145.0	150.4	172.3	182.5	176.6			
G33.0	91.9	94.6	112.3	123.4	151.3	162.0	155.0			
G34.0	75.6	78.9	92.2	94.0	118.6	135.0	124.2			
G35.0	63.5	66.2	77.4	77.4	93.5	105.1	97.4			
G36.0	53.9	56.6	64.9	65.1	76.4	86.6	79.7			

C Plane (°):0.0-360.0: 22.5
Test Lab: LISUN
Test Type: TYPE C
Temperature: 24.5
Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
Test Device: LSG-1800B
Distance: 8.300 m
Humidity: 60%
Inspector:



Candlepower Table (Continue 4)

Unit: cd

GVC	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5	C360.0			
G37.0	46.8	49.1	54.7	56.3	63.0	71.2	66.2			
G38.0	41.1	42.8	46.8	48.6	53.9	59.2	55.3			
G39.0	35.8	37.4	40.8	42.6	46.4	50.3	47.5			
G40.0	31.1	32.3	35.5	37.5	40.9	43.6	41.1			
G41.0	27.1	28.2	30.9	32.7	36.0	38.4	35.6			
G42.0	23.5	24.6	26.9	28.6	31.9	33.3	30.4			
G43.0	20.5	21.6	23.4	25.1	27.9	29.4	26.7			
G44.0	17.9	18.8	20.5	21.9	24.4	25.7	22.9			
G45.0	15.6	16.2	17.9	19.4	21.5	22.4	19.7			
G46.0	13.1	13.7	15.6	17.0	18.9	19.6	16.7			
G47.0	11.1	11.9	13.4	14.8	16.5	17.0	14.6			
G48.0	9.4	10.0	11.3	12.6	14.2	14.5	12.2			
G49.0	8.0	8.5	9.7	10.6	12.0	12.4	10.3			
G50.0	6.9	7.3	8.2	9.1	10.3	10.4	8.8			
G51.0	6.0	6.3	7.0	7.7	8.7	8.9	7.5			
G52.0	5.3	5.6	6.1	6.5	7.5	7.5	6.3			
G53.0	4.8	4.9	5.4	5.8	6.4	6.4	5.5			
G54.0	4.3	4.5	4.8	5.1	5.6	5.6	4.9			
G55.0	4.0	4.0	4.3	4.5	4.9	4.9	4.4			
G56.0	3.5	3.7	3.9	4.0	4.4	4.5	3.9			
G57.0	3.3	3.4	3.5	3.7	3.9	3.9	3.6			
G58.0	3.0	3.1	3.2	3.4	3.6	3.6	3.3			
G59.0	2.8	2.9	3.0	3.1	3.3	3.2	3.1			
G60.0	2.6	2.6	2.7	2.9	3.0	2.9	2.7			
G61.0	2.3	2.5	2.5	2.7	2.8	2.6	2.5			
G62.0	2.2	2.3	2.4	2.5	2.6	2.5	2.3			
G63.0	2.1	2.1	2.2	2.3	2.4	2.3	2.1			
G64.0	1.9	1.9	2.0	2.1	2.2	2.1	2.0			
G65.0	1.6	1.7	1.7	1.9	2.0	1.9	1.7			
G66.0	1.5	1.5	1.5	1.7	1.9	1.6	1.5			
G67.0	1.2	1.3	1.3	1.5	1.7	1.4	1.3			
G68.0	1.1	1.1	1.2	1.3	1.5	1.3	1.2			
G69.0	0.9	0.9	1.0	1.2	1.3	1.1	1.0			
G70.0	0.6	0.7	0.8	1.0	1.2	0.9	0.7			
G71.0	0.5	0.6	0.6	0.8	0.9	0.7	0.5			
G72.0	0.2	0.3	0.4	0.6	0.8	0.5	0.3			
G73.0	0.0	0.1	0.2	0.3	0.5	0.3	0.1			

C Plane (°):0.0-360.0: 22.5
Test Lab: LISUN
Test Type: TYPE C
Temperature: 24.5
Operator: Joye

Gamma Plane (°):0.0-90.0:1.0
Test Device: LSG-1800B
Distance: 8.300 m
Humidity: 60%
Inspector:

