

Report No.: C712.06.65.30

Test Time: 2024/8/29 11:10

Luminaire Property

Luminaire Manufacturer: DUVA / GAMA
Luminaire Category: LED LIGHTING
Number of Lamps: 1
Luminous Width (mm): -40 Current:
0.034 A
Power Factor: 0.803

Luminaire Description: C712.06.65.30
Luminous Length (mm): -40 Voltage:
228.8 V
Power: 6.30 W

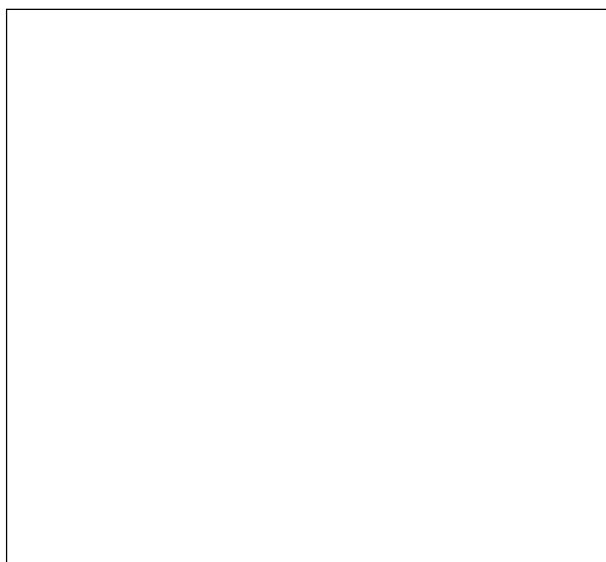
Photometric Results

CIE Class: Direct
Measurement Flux: 457 lm
Downward Ratio: 100%
Horizontal Diffuse Angle(50%): H53.2
Vertical Diffuse Angle(50%): V53.1
Luminaire Efficacy Rating (LER): 72.59
Max. Intensity: 464.62 cd
S/MH(C0/C180): 0.77

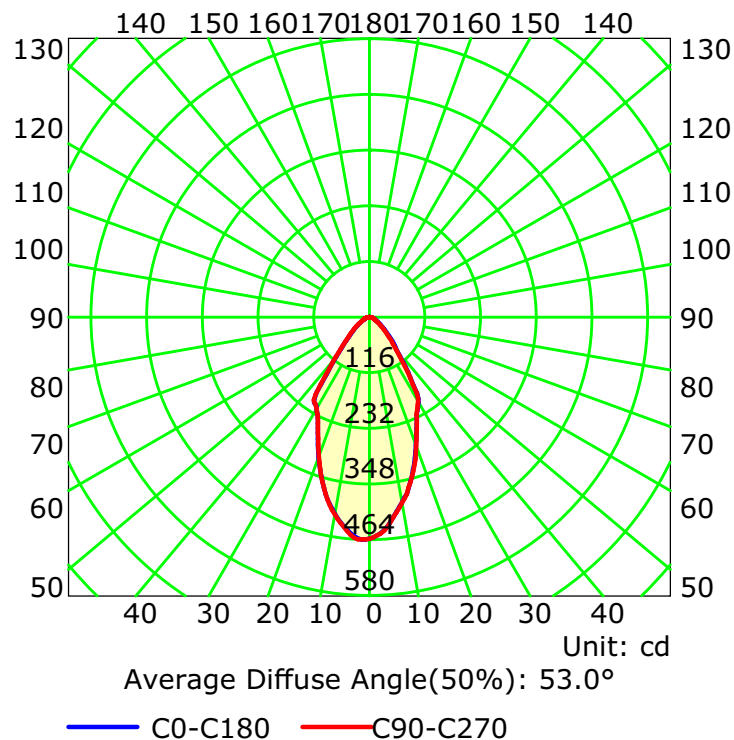
Total Rated Lamp Lumens: 457.0 lm
Efficiency: 100%
Upward Ratio: 0%

Central Intensity: 462.19 cd
Pos of Max. Intensity: H180 V2
S/MH(C90/C270): 0.77

Picture Of Luminaire



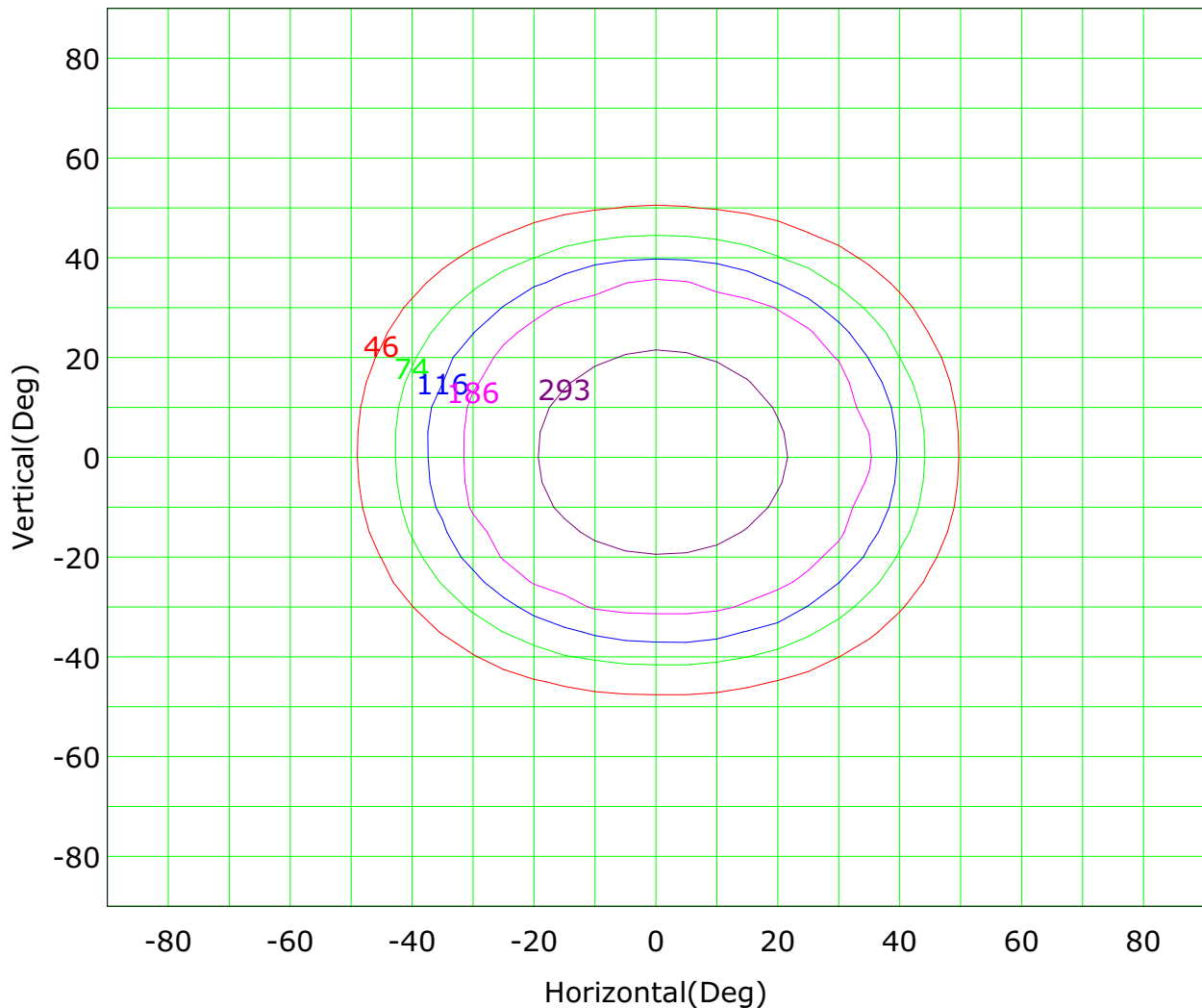
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 90.0
Test Lab: GAMA
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-2000
Distance: 6.125 m
Humidity:
Inspector:

Isocandela (rectangle)



Imax (100%): 465 cd

— (10%):	46 cd	— (16%):	74 cd
— (25%):	116 cd	— (40%):	186 cd
— (63%):	293 cd	— (100%):	465 cd

C Plane (°):0.0-360.0: 90.0

Test Lab: DUVA

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

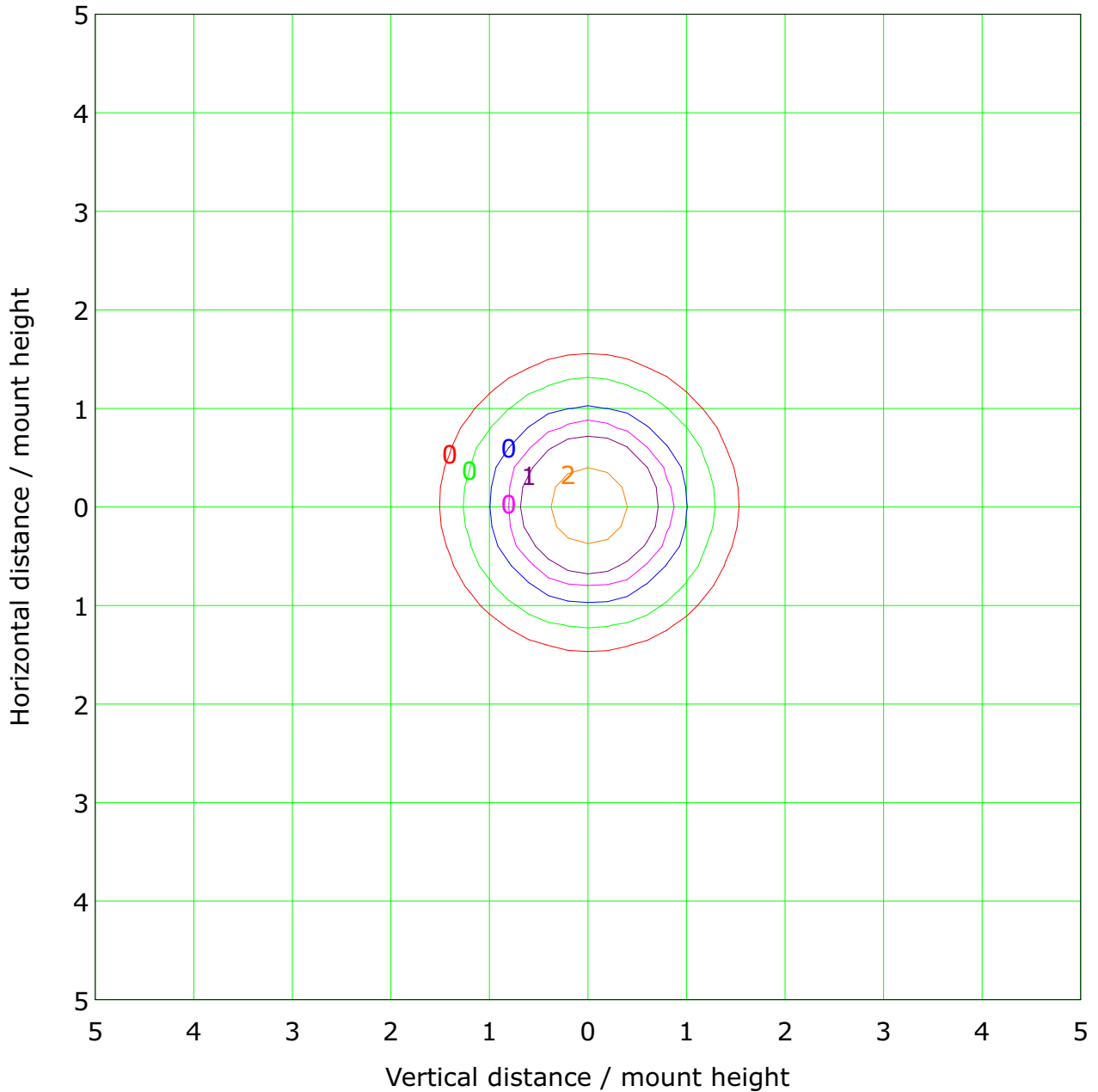
Test Device: GPM-2000

Distance: 6.125 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 4.6 lx

— (1%): 0.0 lx	— (2%): 0.1 lx
— (5%): 0.2 lx	— (10%): 0.5 lx
— (20%): 0.9 lx	— (50%): 2.3 lx
— (100%): 4.6 lx	

C Plane (°):0.0-360.0: 90.0

Test Lab: DUVA

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

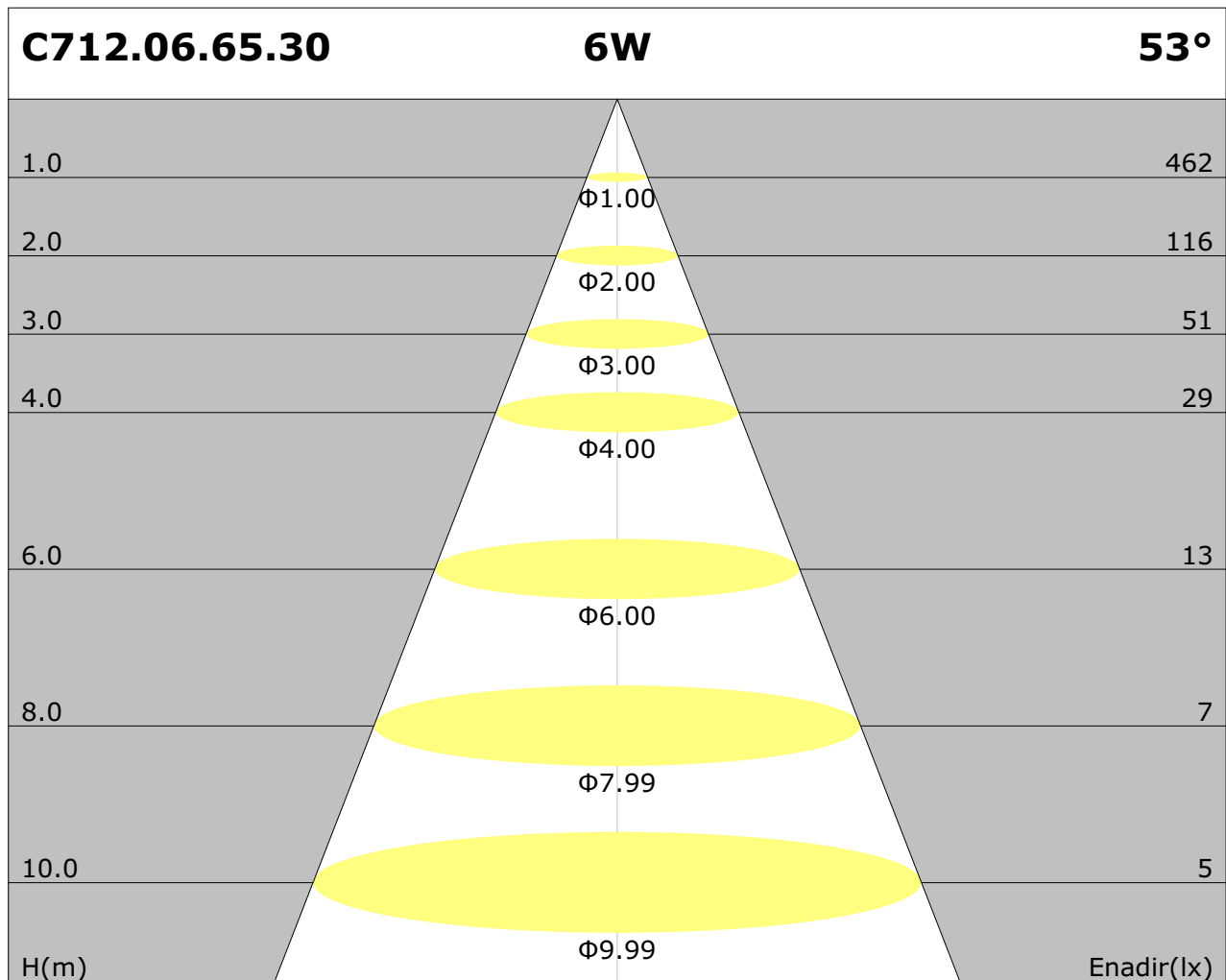
Test Device: GPM-2000

Distance: 6.125 m

Humidity:

Inspector:

Illuminance at a Distance



C Plane (°):0.0-360.0: 90.0

Test Lab: DUVA

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

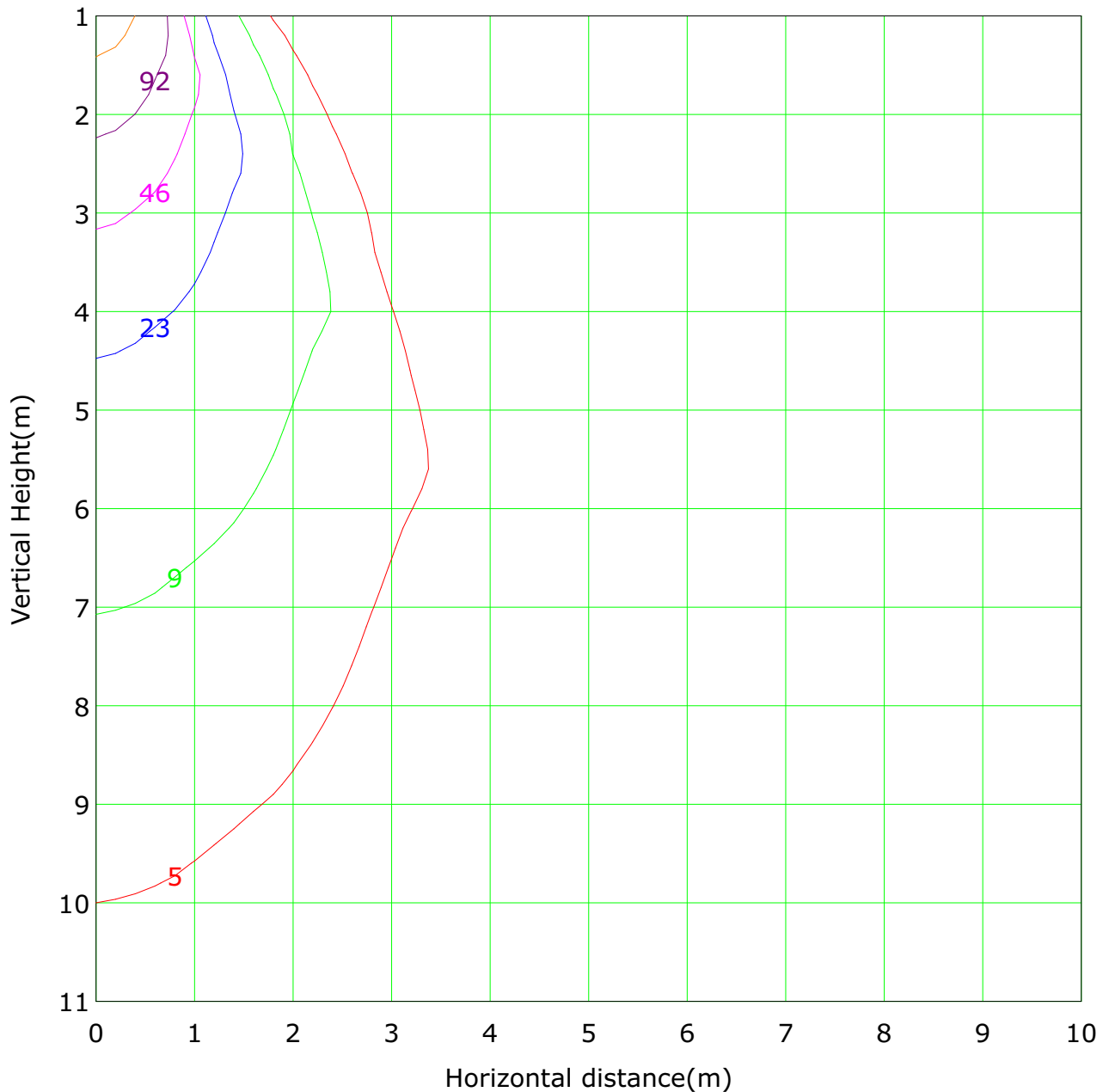
Test Device: GPM-2000

Distance: 6.125 m

Humidity:

Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 462.2 lx
— (1%): 4.6 lx	— (2%): 9.2 lx	— (10%): 46.2 lx
— (5%): 23.1 lx	— (20%): 92.4 lx	— (50%): 231.1 lx
— (100%): 462.2 lx		

Area Flux Table

Unit: lm

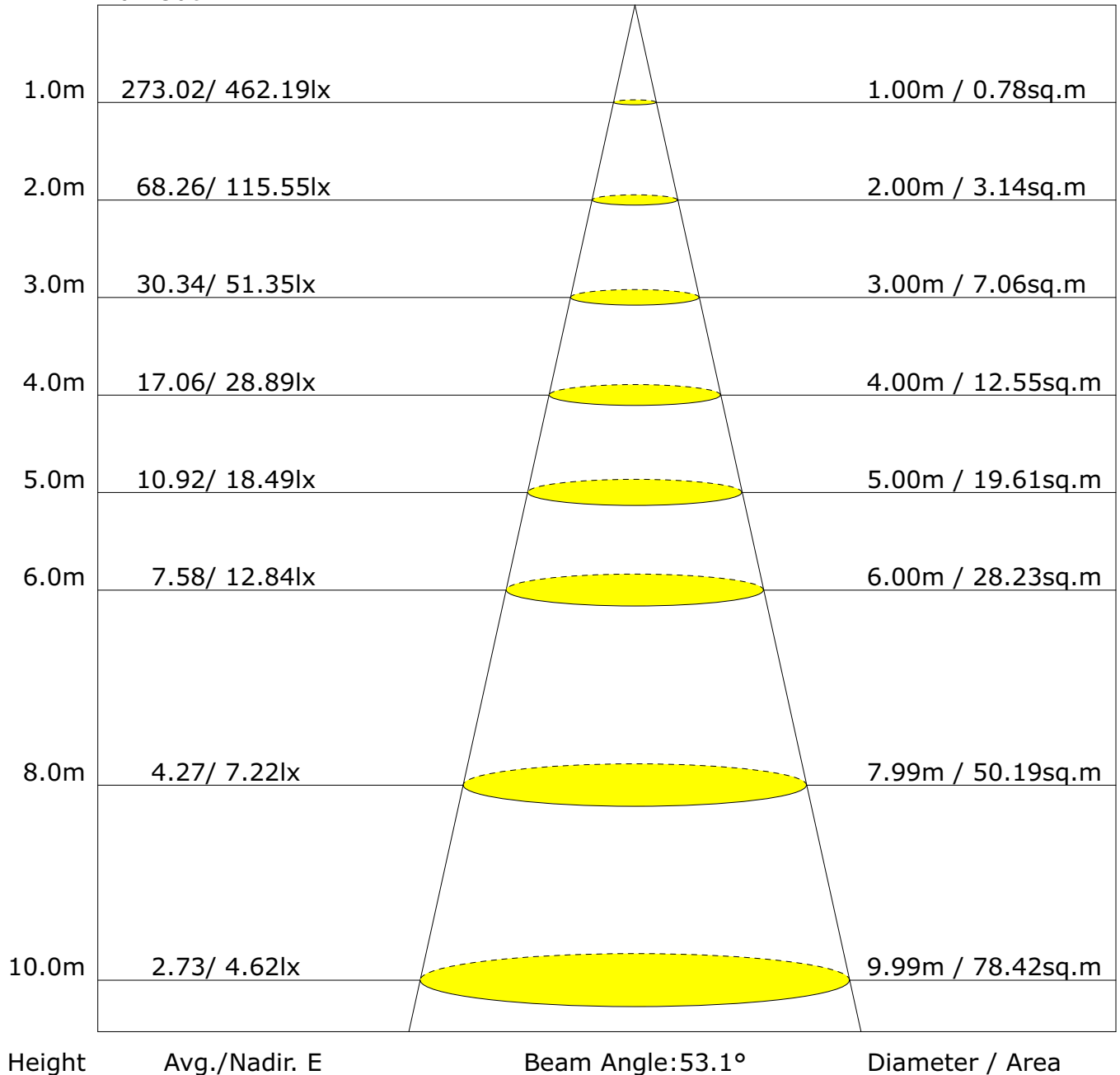
		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	-80	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.7	0.0
	-70	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	2.0	0.0
	-60	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0
	-50	0.0	0.1	0.2	0.3	0.5	0.7	1.0	1.3	1.5	1.5	1.3	0.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0	11.1	6.1
	-40	0.1	0.2	0.3	0.5	0.8	1.3	2.3	3.6	4.4	4.4	3.6	1.3	0.7	0.4	0.2	0.1	0.0	0.0	0.0	26.2	22.2
	-30	0.1	0.2	0.4	0.7	1.3	2.6	5.0	6.3	7.0	7.0	6.3	2.2	1.1	0.8	0.6	0.3	0.2	0.1	0.0	45.6	41.9
	-20	0.1	0.2	0.4	0.7	1.5	3.0	6.7	8.7	10.5	10.8	8.7	3.5	1.5	1.1	0.7	0.4	0.3	0.2	0.1	65.0	61.3
	-10	0.1	0.2	0.4	0.7	1.5	3.0	7.7	10.8	13.1	12.8	10.8	4.2	2.2	1.7	1.0	0.7	0.4	0.3	0.2	78.6	74.8
	0	0.1	0.2	0.4	0.7	1.5	3.0	7.6	10.6	12.8	12.5	10.6	4.1	2.2	1.7	1.0	0.7	0.4	0.3	0.2	77.2	73.5
	10	0.1	0.2	0.4	0.7	1.5	3.0	6.5	8.3	9.9	9.7	8.3	3.2	2.1	1.5	0.8	0.5	0.4	0.3	0.2	62.0	58.3
	20	0.1	0.2	0.4	0.7	1.5	3.0	5.9	7.3	8.5	8.0	6.5	2.1	1.5	1.1	0.7	0.4	0.3	0.2	0.1	42.4	38.6
	30	0.1	0.2	0.4	0.7	1.5	3.0	5.2	6.3	7.0	6.4	5.5	1.9	1.2	0.8	0.5	0.3	0.2	0.1	0.0	22.9	18.8
	40	0.1	0.2	0.4	0.7	1.5	3.0	4.5	5.4	6.0	5.4	4.5	1.4	0.9	0.7	0.4	0.3	0.2	0.1	0.0	10.5	5.2
	50	0.1	0.2	0.4	0.7	1.5	3.0	3.8	4.5	5.0	4.6	3.8	1.2	0.8	0.6	0.4	0.3	0.2	0.1	0.0	4.7	0.0
	60	0.1	0.2	0.4	0.7	1.5	3.0	3.1	3.7	4.0	3.6	2.9	1.0	0.7	0.5	0.3	0.2	0.1	0.0	0.0	2.0	0.0
	70	0.1	0.2	0.4	0.7	1.5	3.0	2.4	2.9	3.1	2.7	2.1	0.8	0.5	0.3	0.2	0.1	0.0	0.0	0.0	0.7	0.0
	80	0.1	0.2	0.4	0.7	1.5	3.0	1.7	2.1	2.2	1.9	1.4	0.6	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.1	0.0
90	0.1	0.2	0.4	0.7	1.5	3.0	1.0	1.3	1.4	1.2	0.9	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	
																					457	401

C Plane (°):0.0-360.0: 90.0
 Test Lab: DUVA
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 6.125 m
 Humidity:
 Inspector:

The Average Illuminance Effective Figure

Flux Out: 214.11lm



C Plane (°):0.0-360.0: 90.0
 Test Lab: DUVA
 Test Type: TYPE C
 Temperature:
 Operator:

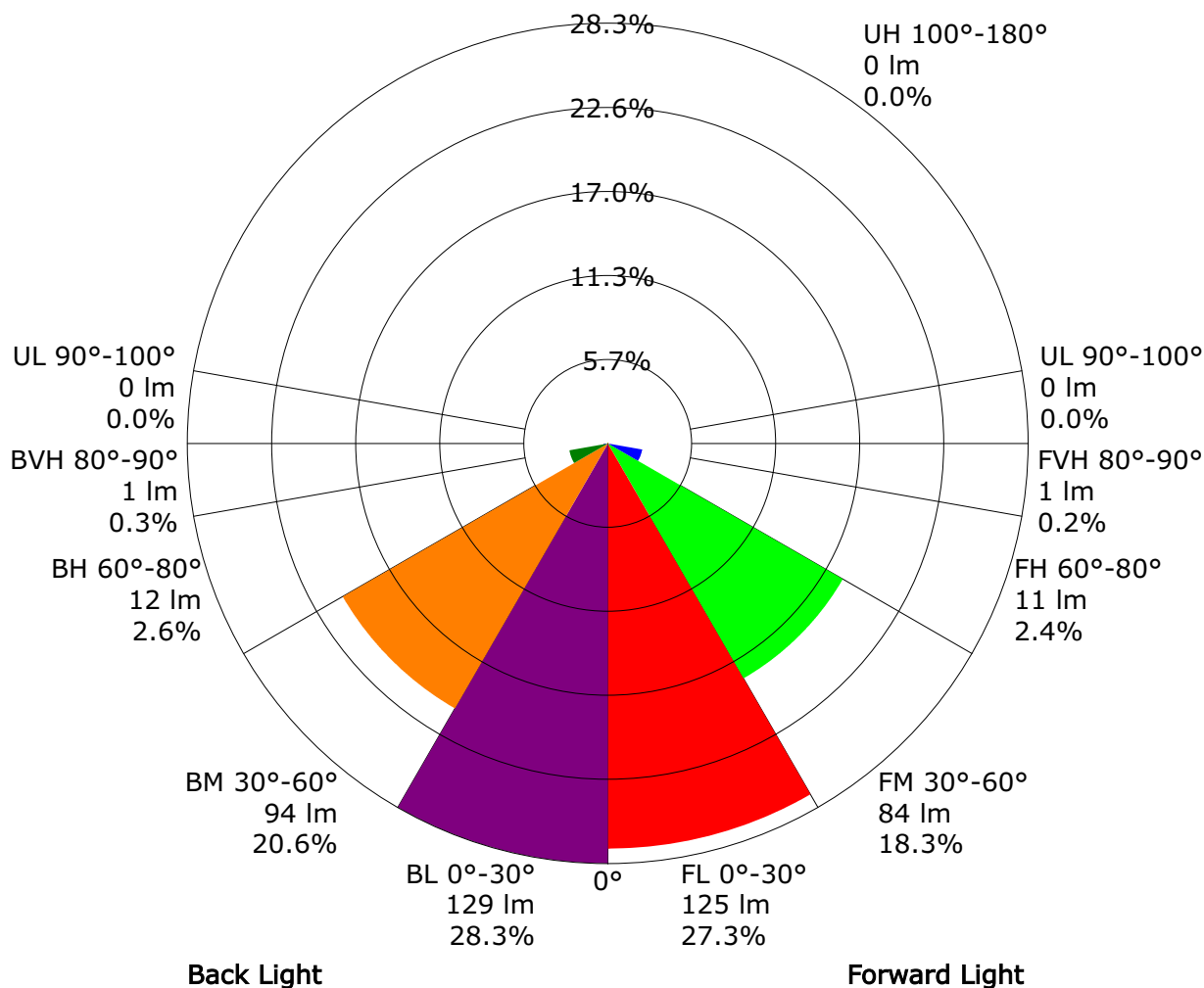
Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 6.125 m
 Humidity:
 Inspector:

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	23.7	24.7	24.0	24.9	25.2	23.9	24.9	24.2	25.2	25.4
3H	24.1	25.1	24.5	25.3	25.6	24.4	25.3	24.7	25.5	25.8
4H	24.4	25.3	24.8	25.6	25.8	24.6	25.5	25.0	25.8	26.0
6H	24.7	25.5	25.0	25.8	26.1	24.9	25.7	25.2	26.0	26.3
8H	24.8	25.5	25.1	25.8	26.2	24.9	25.7	25.3	26.0	26.3
12H	24.8	25.5	25.2	25.9	26.2	25.0	25.7	25.3	26.0	26.4
X=4H Y=2H	23.8	24.7	24.2	25.0	25.2	24.0	24.9	24.4	25.2	25.4
3H	24.5	25.2	24.8	25.5	25.9	24.7	25.4	25.0	25.7	26.0
4H	24.9	25.6	25.3	25.9	26.3	25.1	25.7	25.5	26.1	26.4
6H	25.3	25.9	25.7	26.2	26.6	25.4	26.0	25.8	26.4	26.8
8H	25.4	25.9	25.8	26.3	26.8	25.6	26.1	26.0	26.5	26.9
12H	25.5	26.0	25.9	26.4	26.8	25.6	26.1	26.1	26.5	27.0
X=8H Y=4H	25.1	25.6	25.5	26.0	26.4	25.2	25.7	25.6	26.1	26.5
6H	25.6	26.0	26.0	26.4	26.9	25.7	26.1	26.2	26.5	27.0
8H	25.8	26.1	26.2	26.6	27.1	25.9	26.3	26.4	26.7	27.2
12H	25.9	26.2	26.4	26.7	27.2	26.0	26.3	26.5	26.8	27.3
X=12H Y=4H	25.1	25.5	25.5	25.9	26.4	25.2	25.7	25.6	26.1	26.5
6H	25.6	26.0	26.1	26.4	26.9	25.7	26.1	26.2	26.5	27.0
8H	25.8	26.1	26.3	26.6	27.1	25.9	26.3	26.4	26.7	27.2
Variations with the observer position at spacings:										
S=1.0H	+1.2/-1.0					+1.4/-1.1				
S=1.5H	+2.5/-1.7					+2.9/-1.9				
S=2.0H	+4.0/-2.3					+4.4/-2.5				

Calculate in accordance with CIE Pub.117. The table is revised with 457lm ($8\log(F/F_0) = -2.7$).

LCS Graph



Back Light

Forward Light

Scale= MAX LCS%

Trapped Light:NA,NA



Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	462.2	462.2	462.2	462.2	462.2					
G1.0	459.6	459.6	463.7	463.5	459.6					
G2.0	455.9	456.0	464.6	464.1	455.9					
G3.0	451.2	452.0	462.4	464.3	451.2					
G4.0	445.2	446.4	458.3	461.2	445.2					
G5.0	437.9	438.7	452.9	455.7	437.9					
G6.0	428.0	428.5	446.3	448.8	428.0					
G7.0	418.7	419.1	439.5	440.7	418.7					
G8.0	409.5	410.7	432.7	433.8	409.5					
G9.0	401.1	401.9	425.2	426.5	401.1					
G10.0	392.4	393.0	416.7	417.9	392.4					
G11.0	384.1	385.0	407.7	409.5	384.1					
G12.0	376.9	376.8	399.0	400.9	376.9					
G13.0	365.1	364.8	390.1	391.0	365.1					
G14.0	353.4	355.3	380.1	379.9	353.4					
G15.0	343.4	344.1	368.4	368.7	343.4					
G16.0	331.3	334.1	356.5	357.3	331.3					
G17.0	320.2	322.3	345.4	345.6	320.2					
G18.0	308.5	311.1	333.9	333.0	308.5					
G19.0	296.2	298.4	322.4	321.4	296.2					
G20.0	283.8	286.4	311.0	309.0	283.8					
G21.0	272.6	274.3	299.0	297.9	272.6					
G22.0	262.4	263.4	287.9	286.2	262.4					
G23.0	252.5	253.3	276.4	275.0	252.5					
G24.0	244.0	244.0	265.6	265.2	244.0					
G25.0	235.2	234.0	255.3	255.5	235.2					
G26.0	226.8	225.2	246.2	246.6	226.8					
G27.0	219.8	219.3	237.1	237.3	219.8					
G28.0	215.1	214.0	230.7	230.7	215.1					
G29.0	209.4	208.5	226.1	226.0	209.4					
G30.0	204.6	204.1	220.5	220.9	204.6					
G31.0	199.4	197.5	216.4	216.8	199.4					
G32.0	188.1	185.5	214.0	214.1	188.1					
G33.0	169.1	166.5	212.7	212.0	169.1					
G34.0	154.8	152.0	206.4	208.6	154.8					
G35.0	141.0	138.8	192.1	196.5	141.0					
G36.0	128.5	125.8	169.0	174.7	128.5					

C Plane (°):0.0-360.0: 90.0
 Test Lab: DUVA
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 6.125 m
 Humidity:
 Inspector:



Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	116.5	113.0	148.0	150.9	116.5					
G38.0	104.7	101.4	133.8	135.9	104.7					
G39.0	95.3	91.7	121.1	123.2	95.3					
G40.0	88.0	83.4	108.8	111.3	88.0					
G41.0	84.4	76.6	98.3	100.3	84.4					
G42.0	79.2	71.7	88.6	91.2	79.2					
G43.0	74.3	68.7	80.5	83.6	74.3					
G44.0	68.5	60.8	73.3	76.4	68.5					
G45.0	62.8	55.4	67.4	70.3	62.8					
G46.0	57.9	51.4	62.0	64.9	57.9					
G47.0	53.4	47.6	56.9	59.8	53.4					
G48.0	49.2	44.3	52.7	55.9	49.2					
G49.0	45.6	41.2	48.9	51.6	45.6					
G50.0	42.1	38.2	45.3	48.1	42.1					
G51.0	39.0	35.5	42.2	44.7	39.0					
G52.0	36.2	33.0	39.2	41.7	36.2					
G53.0	33.7	30.7	36.4	38.8	33.7					
G54.0	31.3	28.5	33.9	36.2	31.3					
G55.0	29.0	26.6	31.5	33.5	29.0					
G56.0	27.0	24.5	29.2	31.1	27.0					
G57.0	24.9	22.7	27.1	28.9	24.9					
G58.0	23.1	20.9	25.1	26.9	23.1					
G59.0	21.4	19.3	23.2	24.9	21.4					
G60.0	19.8	17.8	21.5	23.0	19.8					
G61.0	18.2	16.4	19.8	21.2	18.2					
G62.0	16.8	15.2	18.2	19.6	16.8					
G63.0	15.7	13.9	16.7	18.0	15.7					
G64.0	14.5	12.9	15.4	16.7	14.5					
G65.0	13.4	12.4	14.1	15.4	13.4					
G66.0	12.6	12.0	12.9	14.3	12.6					
G67.0	12.2	11.6	12.1	13.1	12.2					
G68.0	11.7	11.3	11.6	12.5	11.7					
G69.0	11.3	10.9	11.1	12.1	11.3					
G70.0	10.9	10.4	10.8	11.7	10.9					
G71.0	10.5	9.9	10.4	11.4	10.5					
G72.0	10.0	9.3	9.9	10.9	10.0					
G73.0	9.5	8.8	9.4	10.4	9.5					

C Plane (°):0.0-360.0: 90.0
 Test Lab: DUVA
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 6.125 m
 Humidity:
 Inspector:



Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G74.0	8.9	8.1	8.8	9.9	8.9					
G75.0	8.3	7.6	8.2	9.2	8.3					
G76.0	7.7	6.9	7.6	8.6	7.7					
G77.0	7.0	6.2	6.9	8.1	7.0					
G78.0	6.4	5.6	6.3	7.4	6.4					
G79.0	5.8	4.9	5.7	6.7	5.8					
G80.0	5.1	4.3	5.1	6.0	5.1					
G81.0	4.6	3.6	4.5	5.3	4.6					
G82.0	3.9	3.0	3.9	4.7	3.9					
G83.0	3.3	2.4	3.3	4.0	3.3					
G84.0	2.8	1.8	2.7	3.4	2.8					
G85.0	2.3	1.4	2.2	2.8	2.3					
G86.0	1.8	0.8	1.7	2.2	1.8					
G87.0	1.3	0.0	1.3	1.6	1.3					
G88.0	0.8	0.0	0.8	1.1	0.8					
G89.0	0.4	0.0	0.0	0.6	0.4					
G90.0	0.0	0.0	0.0	0.0	0.0					
G91.0	0.0	0.0	0.0	0.0	0.0					
G92.0	0.0	0.0	0.0	0.0	0.0					
G93.0	0.0	0.0	0.0	0.0	0.0					
G94.0	0.0	0.0	0.0	0.0	0.0					
G95.0	0.0	0.0	0.0	0.0	0.0					
G96.0	0.0	0.0	0.0	0.0	0.0					
G97.0	0.0	0.0	0.0	0.0	0.0					
G98.0	0.0	0.0	0.0	0.0	0.0					
G99.0	0.0	0.0	0.0	0.0	0.0					
G100.0	0.0	0.0	0.0	0.0	0.0					
G101.0	0.0	0.0	0.0	0.0	0.0					
G102.0	0.0	0.0	0.0	0.0	0.0					
G103.0	0.0	0.0	0.0	0.0	0.0					
G104.0	0.0	0.0	0.0	0.0	0.0					
G105.0	0.0	0.0	0.0	0.0	0.0					
G106.0	0.0	0.0	0.0	0.0	0.0					
G107.0	0.0	0.0	0.0	0.0	0.0					
G108.0	0.0	0.0	0.0	0.0	0.0					
G109.0	0.0	0.0	0.0	0.0	0.0					
G110.0	0.0	0.0	0.0	0.0	0.0					

C Plane (°):0.0-360.0: 90.0
 Test Lab: DUVA
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 6.125 m
 Humidity:
 Inspector:



Candlepower Table (Continue 3)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G111.0	0.0	0.0	0.0	0.0	0.0					
G112.0	0.0	0.0	0.0	0.0	0.0					
G113.0	0.0	0.0	0.0	0.0	0.0					
G114.0	0.0	0.0	0.0	0.0	0.0					
G115.0	0.0	0.0	0.0	0.0	0.0					
G116.0	0.0	0.0	0.0	0.0	0.0					
G117.0	0.0	0.0	0.0	0.0	0.0					
G118.0	0.0	0.0	0.0	0.0	0.0					
G119.0	0.0	0.0	0.0	0.0	0.0					
G120.0	0.0	0.0	0.0	0.0	0.0					
G121.0	0.0	0.0	0.0	0.0	0.0					
G122.0	0.0	0.0	0.0	0.0	0.0					
G123.0	0.0	0.0	0.0	0.0	0.0					
G124.0	0.0	0.0	0.0	0.0	0.0					
G125.0	0.0	0.0	0.0	0.0	0.0					
G126.0	0.0	0.0	0.0	0.0	0.0					
G127.0	0.0	0.0	0.0	0.0	0.0					
G128.0	0.0	0.0	0.0	0.0	0.0					
G129.0	0.0	0.0	0.0	0.0	0.0					
G130.0	0.0	0.0	0.0	0.0	0.0					
G131.0	0.0	0.0	0.0	0.0	0.0					
G132.0	0.0	0.0	0.0	0.0	0.0					
G133.0	0.0	0.0	0.0	0.0	0.0					
G134.0	0.0	0.0	0.0	0.0	0.0					
G135.0	0.0	0.0	0.0	0.0	0.0					
G136.0	0.0	0.0	0.0	0.0	0.0					
G137.0	0.0	0.0	0.0	0.0	0.0					
G138.0	0.0	0.0	0.0	0.0	0.0					
G139.0	0.0	0.0	0.0	0.0	0.0					
G140.0	0.0	0.0	0.0	0.0	0.0					
G141.0	0.0	0.0	0.0	0.0	0.0					
G142.0	0.0	0.0	0.0	0.0	0.0					
G143.0	0.0	0.0	0.0	0.0	0.0					
G144.0	0.0	0.0	0.0	0.0	0.0					
G145.0	0.0	0.0	0.0	0.0	0.0					
G146.0	0.0	0.0	0.0	0.0	0.0					
G147.0	0.0	0.0	0.0	0.0	0.0					

C Plane (°):0.0-360.0: 90.0
 Test Lab: DUVA
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 6.125 m
 Humidity:
 Inspector:



Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G148.0	0.0	0.0	0.0	0.0	0.0					
G149.0	0.0	0.0	0.0	0.0	0.0					
G150.0	0.0	0.0	0.0	0.0	0.0					
G151.0	0.0	0.0	0.0	0.0	0.0					
G152.0	0.0	0.0	0.0	0.0	0.0					
G153.0	0.0	0.0	0.0	0.0	0.0					
G154.0	0.0	0.0	0.0	0.0	0.0					
G155.0	0.0	0.0	0.0	0.0	0.0					
G156.0	0.0	0.0	0.0	0.0	0.0					
G157.0	0.0	0.0	0.0	0.0	0.0					
G158.0	0.0	0.0	0.0	0.0	0.0					
G159.0	0.0	0.0	0.0	0.0	0.0					
G160.0	0.0	0.0	0.0	0.0	0.0					
G161.0	0.0	0.0	0.0	0.0	0.0					
G162.0	0.0	0.0	0.0	0.0	0.0					
G163.0	0.0	0.0	0.0	0.0	0.0					
G164.0	0.0	0.0	0.0	0.0	0.0					
G165.0	0.0	0.0	0.0	0.0	0.0					
G166.0	0.0	0.0	0.0	0.0	0.0					
G167.0	0.0	0.0	0.0	0.0	0.0					
G168.0	0.0	0.0	0.0	0.0	0.0					
G169.0	0.0	0.0	0.0	0.0	0.0					
G170.0	0.0	0.0	0.0	0.0	0.0					
G171.0	0.0	0.0	0.0	0.0	0.0					
G172.0	0.0	0.0	0.0	0.0	0.0					
G173.0	0.0	0.0	0.0	0.0	0.0					
G174.0	0.0	0.0	0.0	0.0	0.0					
G175.0	0.0	0.0	0.0	0.0	0.0					
G176.0	0.0	0.0	0.0	0.0	0.0					
G177.0	0.0	0.0	0.0	0.0	0.0					
G178.0	0.0	0.0	0.0	0.0	0.0					
G179.0	0.0	0.0	0.0	0.0	0.0					
G180.0	0.0	0.0	0.0	0.0	0.0					

C Plane (°):0.0-360.0: 90.0
 Test Lab: DUVA
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 6.125 m
 Humidity:
 Inspector: