

Report No.:

Test Time: 2018-6-12 11:49

Luminaire Property

Luminaire Manufacturer:

Voltage: 277.2 V

Power: 148.09 W

Current: 0.570 A

Power Factor: 0.9373

Photometric Results

IES Classification: Type II

Total Rated Lamp Lumens: 18292.1 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 7585.31 cd

Pos of Max. Intensity: H157.5 V25

Longitudinal Classification: Very Short

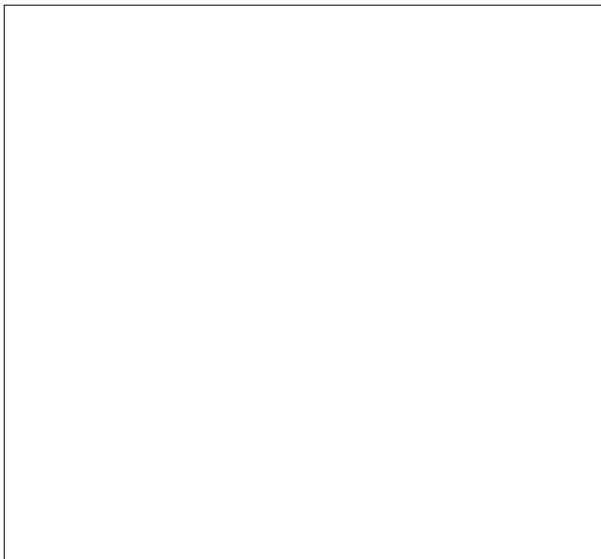
Measurement Flux: 18292.1 lm

Downward Ratio: 99%

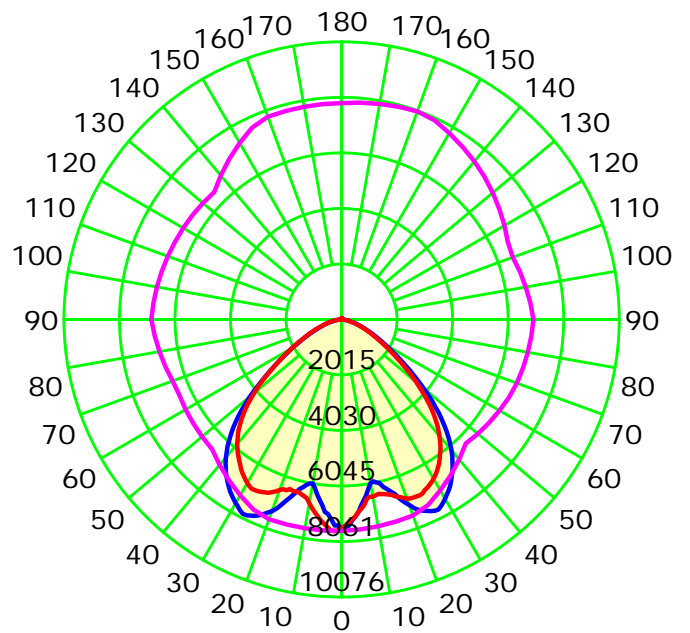
Luminaire Efficacy Rating (LER): 123.52

Max. Intensity: 8061.31 cd

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 100.5°

— C0-C180 — C90-C270 — G25

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature: 27.9 °C

Operator:

Gamma Plane (°):0.0-180.0:1.0

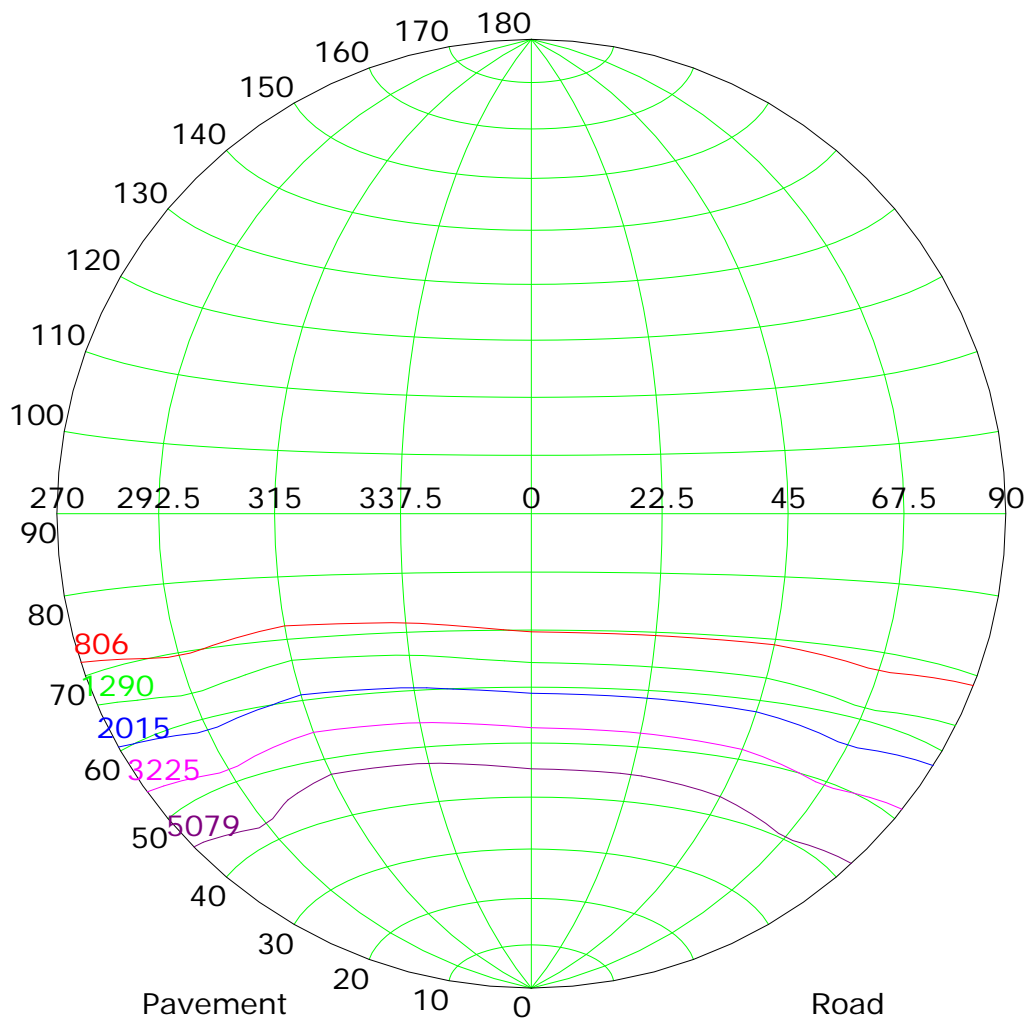
Test Device: GPM-3000

Distance: 17.398 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 8061 cd

- | | |
|-------------------|-------------------|
| — (10%): 806 cd | — (16%): 1290 cd |
| — (25%): 2015 cd | — (40%): 3225 cd |
| — (63%): 5079 cd | — (100%): 8061 cd |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature: 27.9 °C

Operator:

Gamma Plane (°):0.0-180.0:1.0

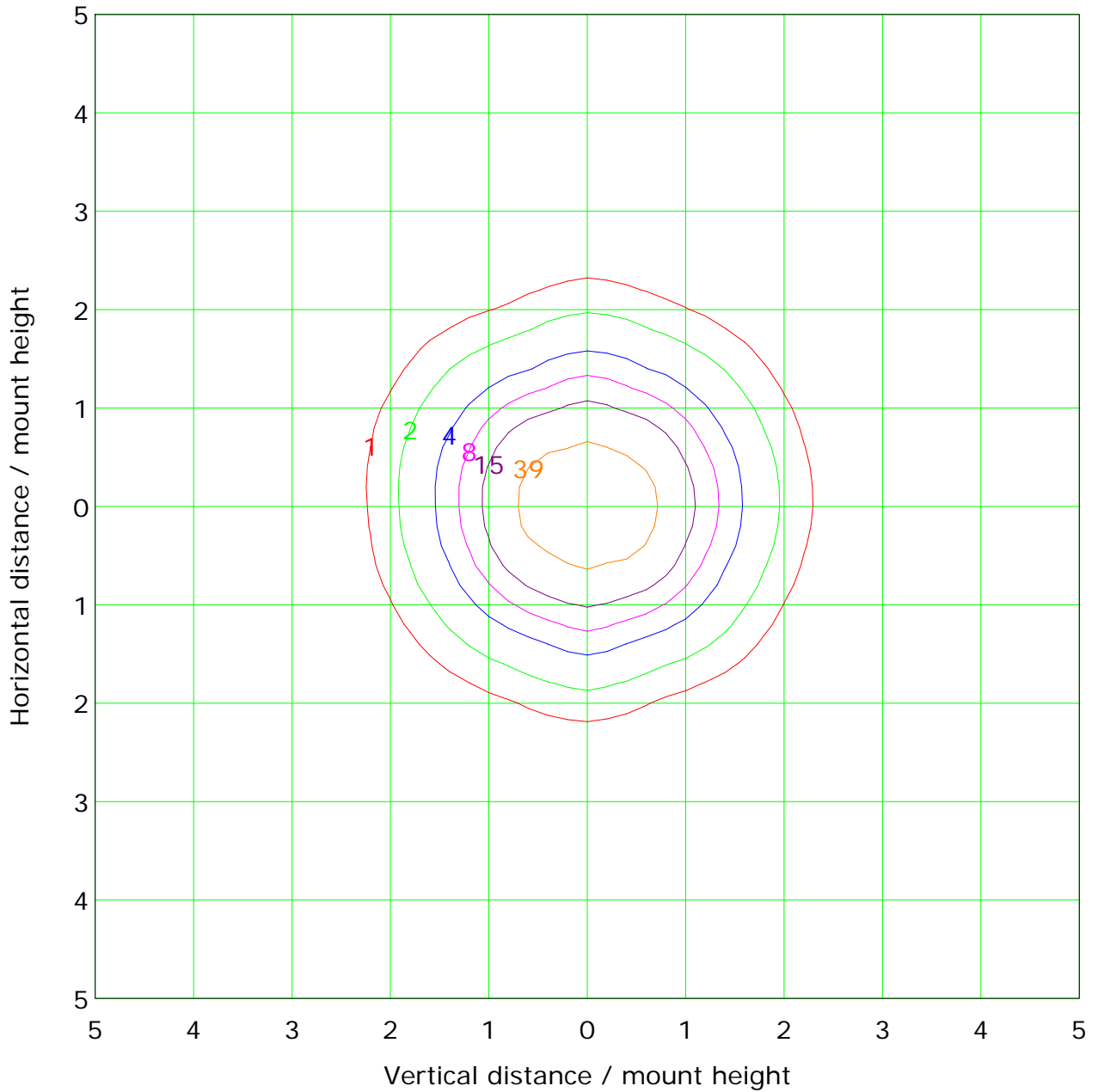
Test Device: GPM-3000

Distance: 17.398 m

Humidity:

Inspector:

IsoLux Plot



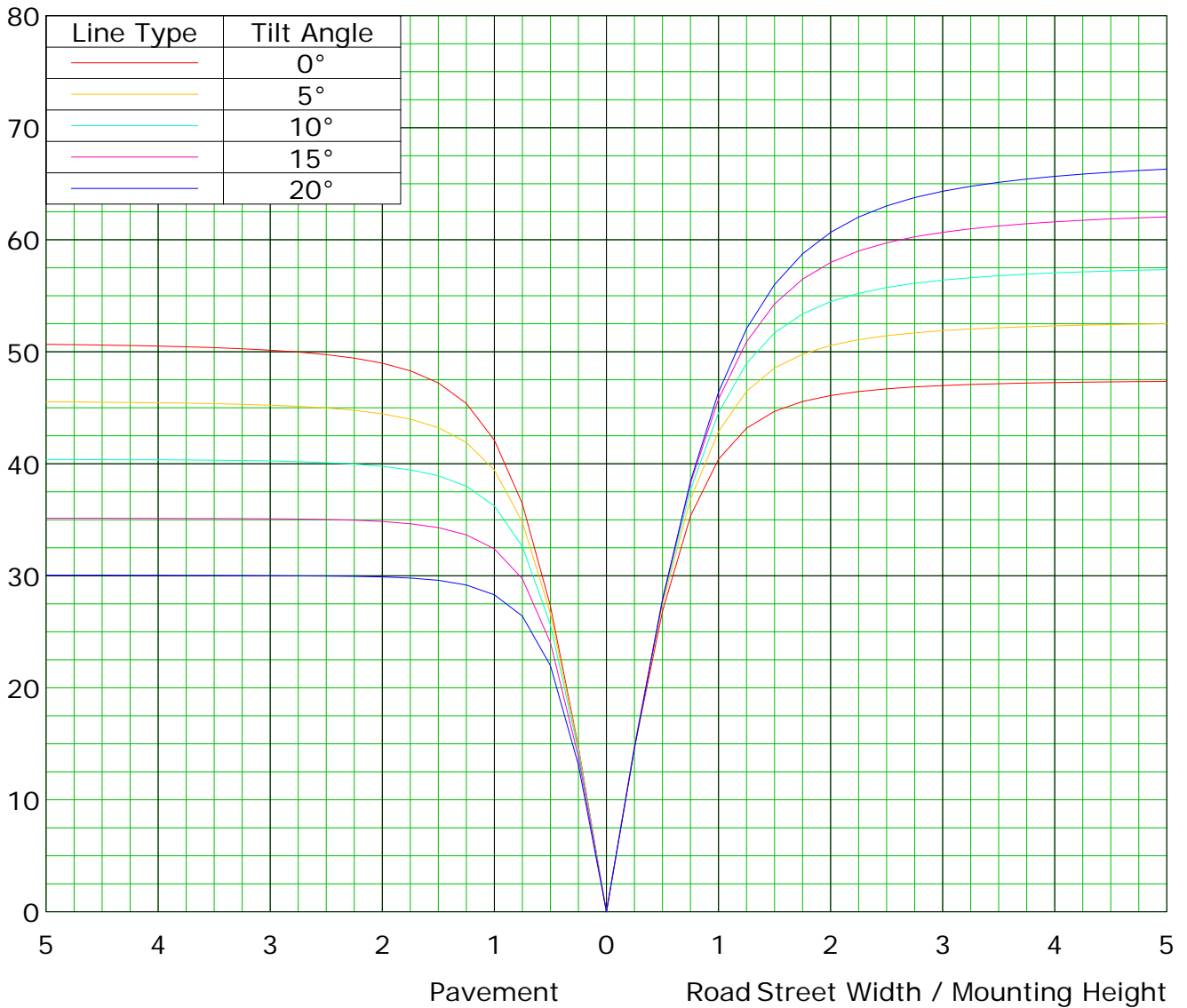
Mounting Height: 10.0m		Max Lux(100%): 77.4 lx	
— (1%):	0.8 lx	— (2%):	1.5 lx
— (5%):	3.9 lx	— (10%):	7.7 lx
— (20%):	15.5 lx	— (50%):	38.7 lx
— (100%):	77.4 lx		

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 m
 Humidity:
 Inspector:

Roadway CU Curve

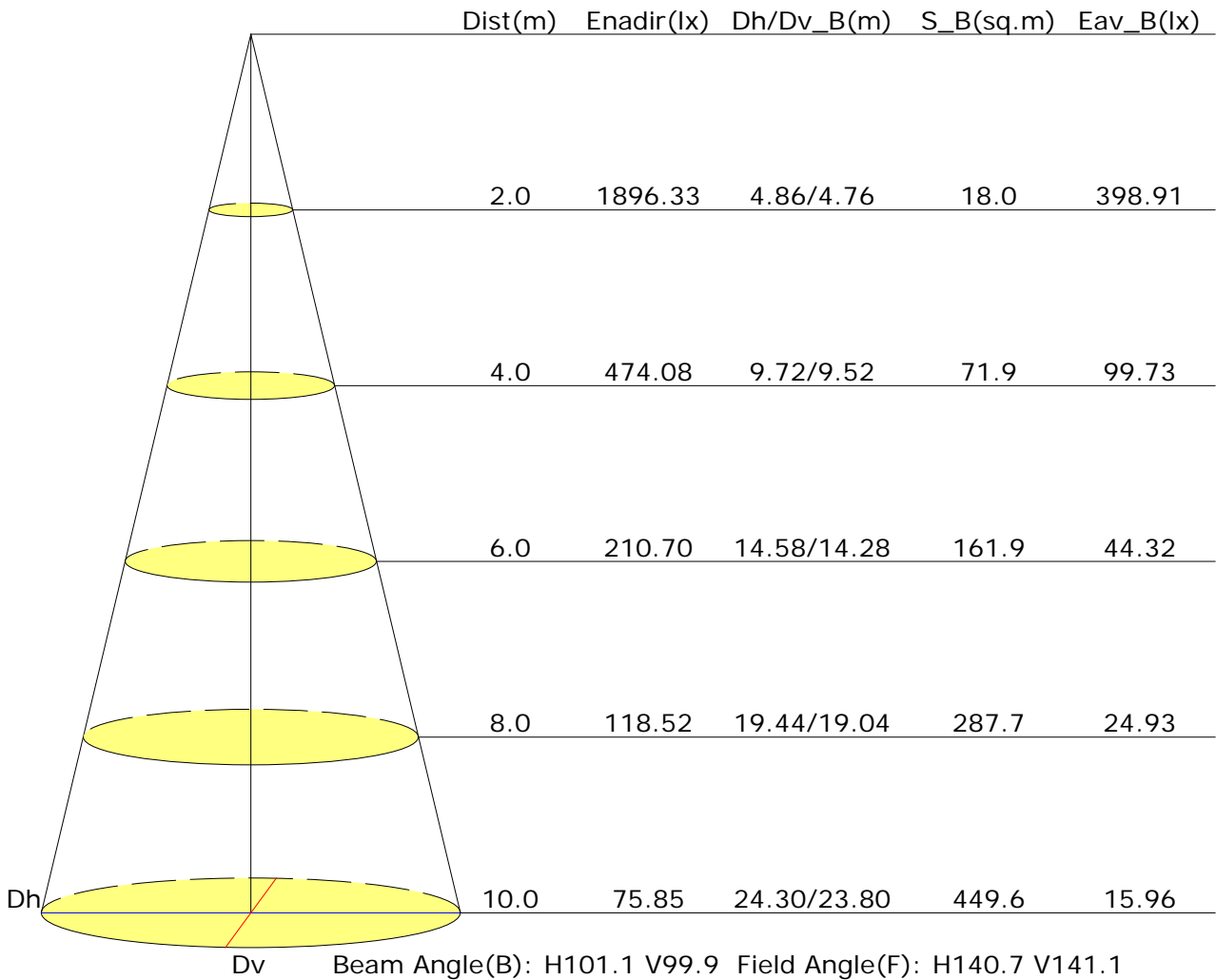
Efficiency(%)



C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

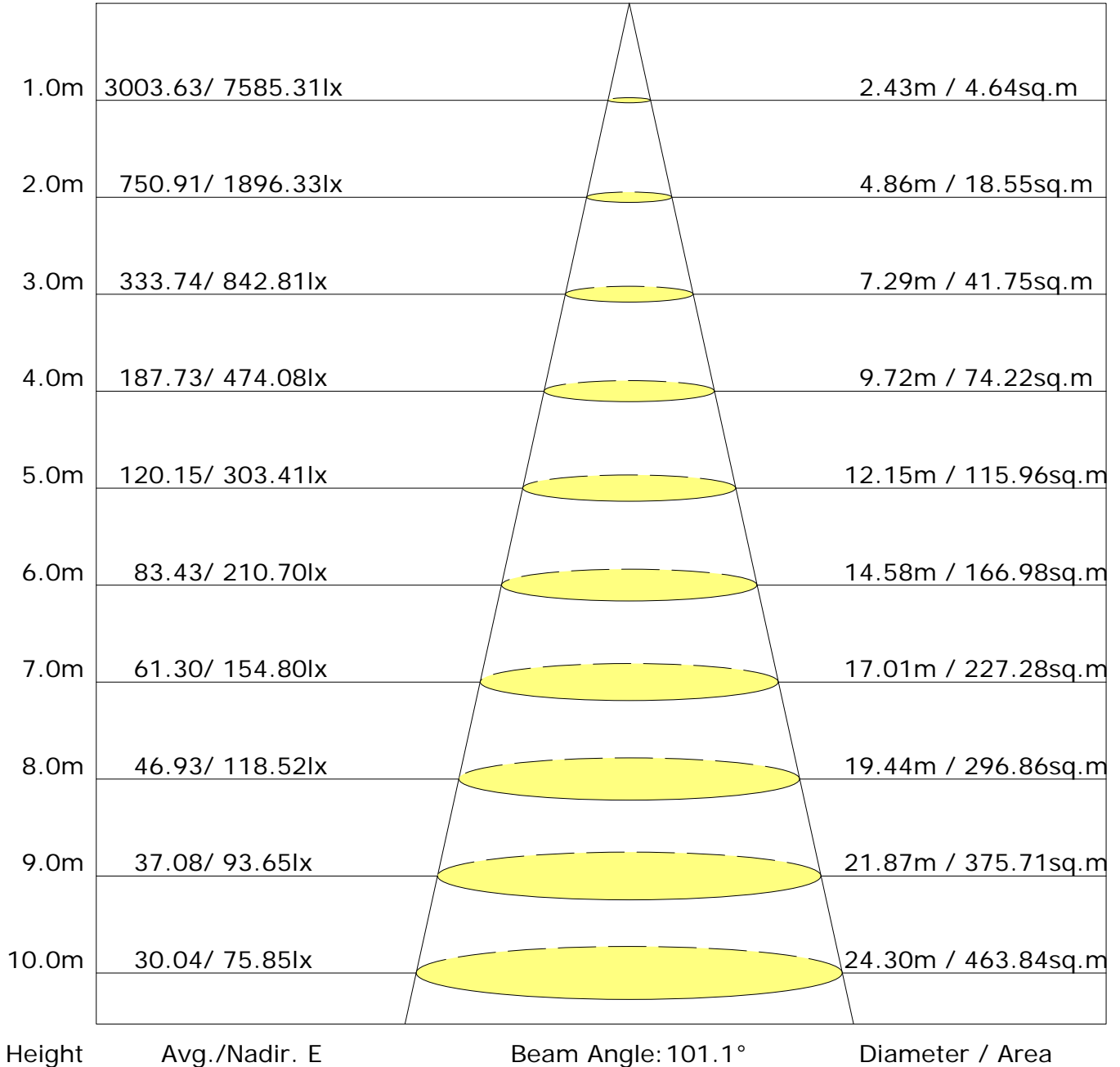
Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 m
 Humidity:
 Inspector:

Illuminance at a Distance



The Average Illuminance Effective Figure

Flux Out: 13932.16lm



C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 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	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=4H Y=2H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=8H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=12H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
Variations with the observer position at spacings:										
S=1.0H	-1.\$/-1.\$					-1.\$/-1.\$				
S=1.5H	-1.\$/-1.\$					-1.\$/-1.\$				
S=2.0H	-1.\$/-1.\$					-1.\$/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 18292lm ($8\log(F/F_0) = 10.1$).

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 m
 Humidity:
 Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	8737	47.8
	FL (0°-30°)	2871	15.7
	FM (30°-60°)	5026	27.5
	FH (60°-80°)	797	4.4
	FVH (80°-90°)	43	0.2
	BACK LIGHT	9373	51.2
	BL (0°-30°)	2873	15.7
	BM (30°-60°)	5459	29.8
	BH (60°-80°)	970	5.3
	BVH (80°-90°)	70	0.4
	UP LIGHT	182	1.0
	UL (90°-100°)	34	0.2
	UH (100°-180°)	148	0.8
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B4 U3 G2
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B4 U3 G1

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 m
 Humidity:
 Inspector:

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	7575.9	7.2	7.2	0.04	0.04
1.0-2.0	7539.3	21.6	28.9	0.12	0.16
2.0-3.0	7456.2	35.7	64.6	0.19	0.35
3.0-4.0	7344.8	49.2	113.7	0.27	0.62
4.0-5.0	7217.7	62.1	175.8	0.34	0.96
5.0-6.0	7067.5	74.3	250.1	0.41	1.37
6.0-7.0	6902.2	85.7	335.8	0.47	1.84
7.0-8.0	6738.4	96.5	432.2	0.53	2.36
8.0-9.0	6589.4	106.8	539.1	0.58	2.95
9.0-10.0	6459.0	116.9	656.0	0.64	3.59
10.0-11.0	6372.0	127.3	783.3	0.70	4.28
11.0-12.0	6325.9	138.3	921.6	0.76	5.04
12.0-13.0	6305.9	149.7	1071.3	0.82	5.86
13.0-14.0	6308.6	161.5	1232.8	0.88	6.74
14.0-15.0	6333.9	173.9	1406.7	0.95	7.69
15.0-16.0	6368.9	186.6	1593.3	1.02	8.71
16.0-17.0	6416.6	199.8	1793.2	1.09	9.80
17.0-18.0	6487.1	213.9	2007.1	1.17	10.97
18.0-19.0	6564.8	228.4	2235.5	1.25	12.22
19.0-20.0	6658.6	243.7	2479.3	1.33	13.55
20.0-21.0	6760.3	259.6	2738.9	1.42	14.97
21.0-22.0	6855.0	275.5	3014.4	1.51	16.48
22.0-23.0	6949.8	291.7	3306.0	1.59	18.07
23.0-24.0	7034.0	307.6	3613.6	1.68	19.76
24.0-25.0	7095.9	322.7	3936.3	1.76	21.52
25.0-26.0	7146.4	337.4	4273.7	1.84	23.36
26.0-27.0	7174.2	351.0	4624.7	1.92	25.28
27.0-28.0	7166.6	362.9	4987.6	1.98	27.27
28.0-29.0	7138.1	373.5	5361.1	2.04	29.31
29.0-30.0	7094.4	383.1	5744.2	2.09	31.40
30.0-31.0	7034.8	391.5	6135.7	2.14	33.54
31.0-32.0	6962.1	398.9	6534.7	2.18	35.72
32.0-33.0	6884.0	405.6	6940.3	2.22	37.94
33.0-34.0	6800.1	411.6	7351.8	2.25	40.19
34.0-35.0	6706.0	416.5	7768.4	2.28	42.47
35.0-36.0	6605.2	420.6	8189.0	2.30	44.77

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature: 27.9 °C

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-3000

Distance: 17.398 m

Humidity:

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	6495.9	423.7	8612.7	2.32	47.08
37.0-38.0	6370.5	425.3	9038.0	2.32	49.41
38.0-39.0	6232.2	425.4	9463.4	2.33	51.74
39.0-40.0	6083.3	424.3	9887.8	2.32	54.05
40.0-41.0	5921.6	421.7	10309.5	2.31	56.36
41.0-42.0	5751.5	417.9	10727.4	2.28	58.65
42.0-43.0	5571.0	412.7	11140.1	2.26	60.90
43.0-44.0	5378.2	406.0	11546.1	2.22	63.12
44.0-45.0	5174.9	397.8	11943.9	2.17	65.30
45.0-46.0	4961.2	388.0	12331.9	2.12	67.42
46.0-47.0	4735.7	376.7	12708.6	2.06	69.48
47.0-48.0	4499.8	363.8	13072.4	1.99	71.46
48.0-49.0	4256.2	349.6	13422.0	1.91	73.38
49.0-50.0	4008.4	334.2	13756.2	1.83	75.20
50.0-51.0	3763.4	318.4	14074.7	1.74	76.94
51.0-52.0	3521.3	302.2	14376.9	1.65	78.60
52.0-53.0	3281.7	285.5	14662.4	1.56	80.16
53.0-54.0	3051.2	269.0	14931.4	1.47	81.63
54.0-55.0	2833.8	253.0	15184.4	1.38	83.01
55.0-56.0	2627.8	237.5	15421.8	1.30	84.31
56.0-57.0	2434.7	222.6	15644.5	1.22	85.53
57.0-58.0	2253.8	208.4	15852.9	1.14	86.67
58.0-59.0	2083.3	194.8	16047.7	1.06	87.73
59.0-60.0	1925.7	182.0	16229.7	0.99	88.73
60.0-61.0	1778.4	169.7	16399.4	0.93	89.65
61.0-62.0	1640.7	158.1	16557.5	0.86	90.52
62.0-63.0	1514.0	147.3	16704.8	0.81	91.32
63.0-64.0	1393.8	136.8	16841.6	0.75	92.07
64.0-65.0	1281.1	126.8	16968.4	0.69	92.76
65.0-66.0	1178.9	117.6	17086.0	0.64	93.41
66.0-67.0	1083.8	109.0	17195.0	0.60	94.00
67.0-68.0	994.4	100.8	17295.8	0.55	94.55
68.0-69.0	910.1	92.9	17388.6	0.51	95.06
69.0-70.0	832.4	85.5	17474.1	0.47	95.53
70.0-71.0	758.7	78.4	17552.6	0.43	95.96
71.0-72.0	690.6	71.8	17624.4	0.39	96.35

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 m
 Humidity:
 Inspector:

Zonal Lumen (Continue 2)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	628.6	65.7	17690.1	0.36	96.71
73.0-74.0	568.7	59.8	17749.9	0.33	97.04
74.0-75.0	512.1	54.1	17804.0	0.30	97.33
75.0-76.0	457.9	48.6	17852.6	0.27	97.60
76.0-77.0	406.8	43.4	17896.0	0.24	97.83
77.0-78.0	358.7	38.4	17934.4	0.21	98.04
78.0-79.0	313.6	33.7	17968.1	0.18	98.23
79.0-80.0	269.9	29.1	17997.2	0.16	98.39
80.0-81.0	227.8	24.6	18021.9	0.13	98.52
81.0-82.0	189.9	20.6	18042.5	0.11	98.64
82.0-83.0	153.8	16.7	18059.2	0.09	98.73
83.0-84.0	120.6	13.1	18072.3	0.07	98.80
84.0-85.0	94.7	10.3	18082.7	0.06	98.86
85.0-86.0	73.0	8.0	18090.6	0.04	98.90
86.0-87.0	56.4	6.2	18096.8	0.03	98.93
87.0-88.0	45.5	5.0	18101.8	0.03	98.96
88.0-89.0	38.2	4.2	18106.0	0.02	98.98
89.0-90.0	36.3	4.0	18110.0	0.02	99.00
90.0-91.0	34.3	3.8	18113.7	0.02	99.03
91.0-92.0	33.2	3.6	18117.4	0.02	99.04
92.0-93.0	33.2	3.6	18121.0	0.02	99.06
93.0-94.0	31.8	3.5	18124.5	0.02	99.08
94.0-95.0	30.8	3.4	18127.8	0.02	99.10
95.0-96.0	29.5	3.2	18131.1	0.02	99.12
96.0-97.0	28.3	3.1	18134.2	0.02	99.14
97.0-98.0	28.5	3.1	18137.3	0.02	99.15
98.0-99.0	29.7	3.2	18140.5	0.02	99.17
99.0-100.0	30.0	3.2	18143.7	0.02	99.19
100.0-101.0	29.3	3.2	18146.9	0.02	99.21
101.0-102.0	28.2	3.0	18149.9	0.02	99.22
102.0-103.0	27.4	2.9	18152.8	0.02	99.24
103.0-104.0	27.1	2.9	18155.7	0.02	99.25
104.0-105.0	26.9	2.9	18158.6	0.02	99.27
105.0-106.0	26.9	2.8	18161.4	0.02	99.29
106.0-107.0	26.4	2.8	18164.2	0.02	99.30
107.0-108.0	26.7	2.8	18167.0	0.02	99.32

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 m
 Humidity:
 Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	27.7	2.9	18169.9	0.02	99.33
109.0-110.0	26.8	2.8	18172.7	0.02	99.35
110.0-111.0	26.5	2.7	18175.4	0.01	99.36
111.0-112.0	27.6	2.8	18178.2	0.02	99.38
112.0-113.0	27.9	2.8	18181.0	0.02	99.39
113.0-114.0	28.4	2.9	18183.9	0.02	99.41
114.0-115.0	28.1	2.8	18186.7	0.02	99.42
115.0-116.0	28.0	2.8	18189.5	0.02	99.44
116.0-117.0	27.5	2.7	18192.2	0.01	99.45
117.0-118.0	27.1	2.6	18194.8	0.01	99.47
118.0-119.0	27.5	2.7	18197.4	0.01	99.48
119.0-120.0	27.6	2.6	18200.1	0.01	99.50
120.0-121.0	28.0	2.6	18202.7	0.01	99.51
121.0-122.0	28.2	2.6	18205.4	0.01	99.53
122.0-123.0	27.9	2.6	18207.9	0.01	99.54
123.0-124.0	27.4	2.5	18210.4	0.01	99.55
124.0-125.0	28.5	2.6	18213.0	0.01	99.57
125.0-126.0	29.6	2.6	18215.7	0.01	99.58
126.0-127.0	28.7	2.5	18218.2	0.01	99.60
127.0-128.0	27.8	2.4	18220.6	0.01	99.61
128.0-129.0	29.1	2.5	18223.1	0.01	99.62
129.0-130.0	30.2	2.6	18225.7	0.01	99.64
130.0-131.0	30.2	2.5	18228.2	0.01	99.65
131.0-132.0	29.7	2.4	18230.6	0.01	99.66
132.0-133.0	29.7	2.4	18233.0	0.01	99.68
133.0-134.0	30.9	2.5	18235.5	0.01	99.69
134.0-135.0	31.2	2.4	18237.9	0.01	99.70
135.0-136.0	30.7	2.4	18240.3	0.01	99.72
136.0-137.0	32.0	2.4	18242.7	0.01	99.73
137.0-138.0	33.0	2.4	18245.1	0.01	99.74
138.0-139.0	32.3	2.3	18247.5	0.01	99.76
139.0-140.0	32.3	2.3	18249.8	0.01	99.77
140.0-141.0	33.2	2.3	18252.1	0.01	99.78
141.0-142.0	32.5	2.2	18254.3	0.01	99.79
142.0-143.0	32.9	2.2	18256.5	0.01	99.81
143.0-144.0	34.0	2.2	18258.7	0.01	99.82

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 m
 Humidity:
 Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	33.2	2.1	18260.9	0.01	99.83
145.0-146.0	32.5	2.0	18262.9	0.01	99.84
146.0-147.0	31.9	1.9	18264.8	0.01	99.85
147.0-148.0	31.1	1.8	18266.6	0.01	99.86
148.0-149.0	31.5	1.8	18268.4	0.01	99.87
149.0-150.0	30.8	1.7	18270.2	0.01	99.88
150.0-151.0	29.0	1.6	18271.7	0.01	99.89
151.0-152.0	29.1	1.5	18273.3	0.01	99.90
152.0-153.0	28.6	1.4	18274.7	0.01	99.90
153.0-154.0	26.6	1.3	18276.0	0.01	99.91
154.0-155.0	25.9	1.2	18277.2	0.01	99.92
155.0-156.0	26.3	1.2	18278.4	0.01	99.93
156.0-157.0	25.9	1.1	18279.5	0.01	99.93
157.0-158.0	25.3	1.1	18280.6	0.01	99.94
158.0-159.0	25.7	1.0	18281.6	0.01	99.94
159.0-160.0	26.1	1.0	18282.6	0.01	99.95
160.0-161.0	25.3	0.9	18283.6	0.01	99.95
161.0-162.0	23.8	0.8	18284.4	0.00	99.96
162.0-163.0	23.3	0.8	18285.2	0.00	99.96
163.0-164.0	24.0	0.7	18285.9	0.00	99.97
164.0-165.0	24.7	0.7	18286.6	0.00	99.97
165.0-166.0	25.9	0.7	18287.3	0.00	99.97
166.0-167.0	26.9	0.7	18288.0	0.00	99.98
167.0-168.0	25.7	0.6	18288.6	0.00	99.98
168.0-169.0	25.3	0.6	18289.2	0.00	99.98
169.0-170.0	24.9	0.5	18289.7	0.00	99.99
170.0-171.0	24.5	0.4	18290.1	0.00	99.99
171.0-172.0	26.0	0.4	18290.6	0.00	99.99
172.0-173.0	25.7	0.4	18290.9	0.00	99.99
173.0-174.0	24.9	0.3	18291.2	0.00	100.00
174.0-175.0	24.8	0.3	18291.5	0.00	100.00
175.0-176.0	24.8	0.2	18291.7	0.00	100.00
176.0-177.0	24.4	0.2	18291.9	0.00	100.00
177.0-178.0	23.5	0.1	18292.0	0.00	100.00
178.0-179.0	24.0	0.1	18292.1	0.00	100.00
179.0-180.0	25.0	0.0	18292.1	0.00	100.00

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature: 27.9 °C
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-3000
 Distance: 17.398 m
 Humidity:
 Inspector: