



Bell-Southcn Testing Laboratory(Shenzhen)
Http://www.bell-southcn.com
Email:Marketing@bell-southcn.com
Tel:+86 755 29405577 Fax:+86 755 29405799
Address:Junxiangda Building, West of Zhongshan Park Road, Nanshan District, Shenzhen, Guangdong, China

HAWKO LIGHTING

LumCAT: POWERFLEX-IP20-4000K

Luminaire: LED Strip Light

Report No: BSR1507070301-9R

Voltage(V): 24.0000

Test No: BSR1507070301-9R

Current(A): 0.7690

LampCAT:

Power (W): 18.4600

Lamp flux(lm)

PF: 1.0000

Number of Lamps: 120

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1458.30

Lumens(lm)/Power(W): 79.00

Central intensity(cd): 486.176

Maximum intensity(cd): 486.176

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=115.0

[C90/270]Total=114.6

Field angle(10%Imax): [C0/180]Total=162.7

[C90/270]Total=167.4

Maximum s/h(1/2): C0_180=1.30 C90_270=1.28

Maximum s/h(1/4): C0_180=2.62 C90_270=2.00

Up flux rate of LUM(%): 1.62%

Down flux rate of LUM(%): 98.38%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 76.140%

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Zonal flux distribution table

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$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	486.176	.000	.000	.000%	.000%
10.0	478.373	46.036	46.036	3.157%	3.157%
20.0	454.271	132.187	178.223	9.064%	12.221%
30.0	414.883	201.150	379.373	13.794%	26.015%
40.0	361.989	244.015	623.388	16.733%	42.748%
50.0	296.128	254.838	878.226	17.475%	60.223%
60.0	221.322	232.118	1110.344	15.917%	76.140%
70.0	138.836	178.750	1289.094	12.257%	88.397%
80.0	60.078	105.217	1394.311	7.215%	95.612%
90.0	13.979	40.401	1434.711	2.770%	98.382%
100.0	2.461	8.969	1443.680	.615%	98.998%
110.0	2.540	2.645	1446.325	.181%	99.179%
120.0	2.742	2.621	1448.947	.180%	99.359%
130.0	2.946	2.551	1451.498	.175%	99.534%
140.0	3.050	2.322	1453.820	.159%	99.693%
150.0	3.043	1.914	1455.734	.131%	99.824%
160.0	3.046	1.409	1457.143	.097%	99.921%
170.0	3.053	.864	1458.007	.059%	99.980%
180.0	3.068	.292	1458.299	.020%	100.000%

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Zonal flux distribution table

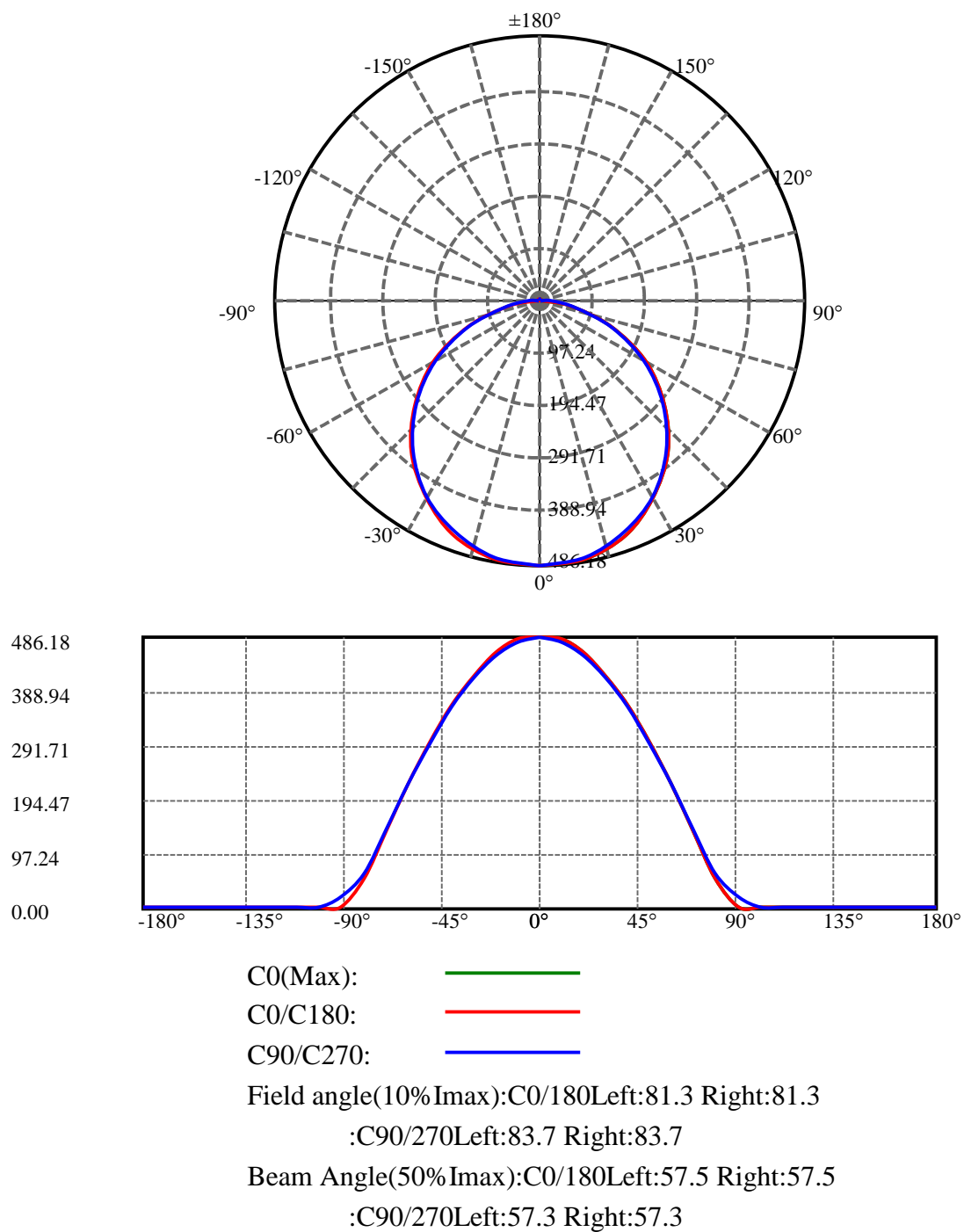
Page: 3 Total:10

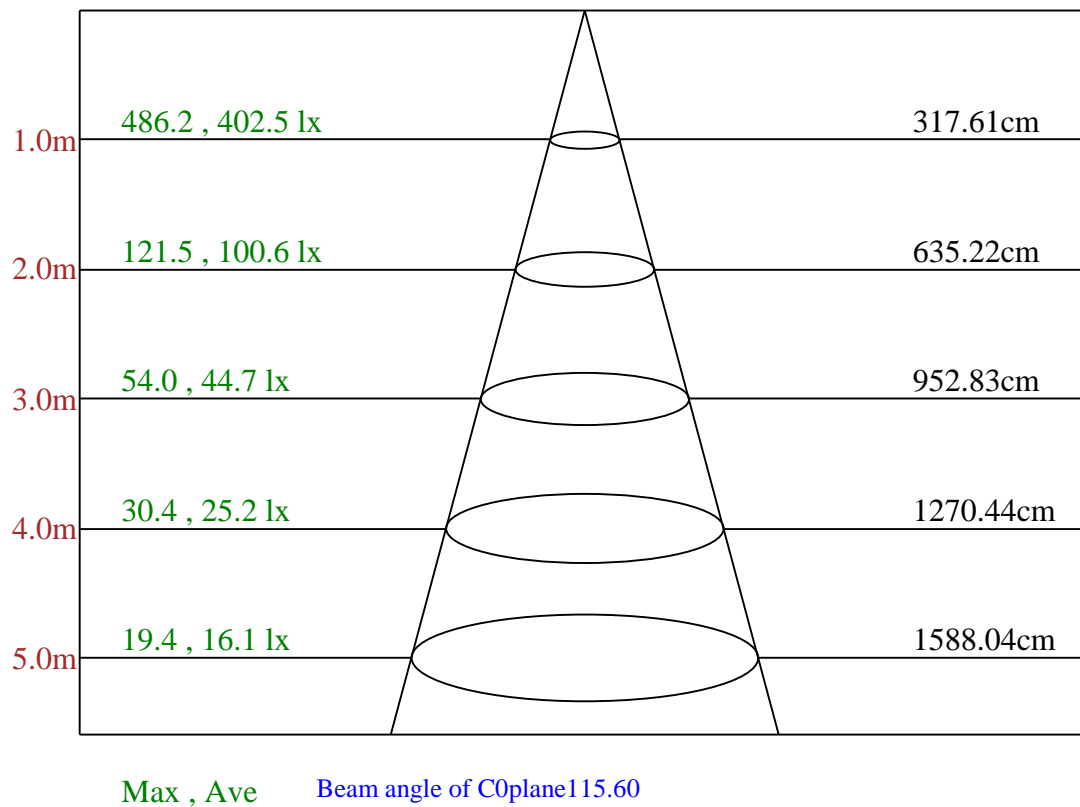
ZONAL LUMEN SUMMARY

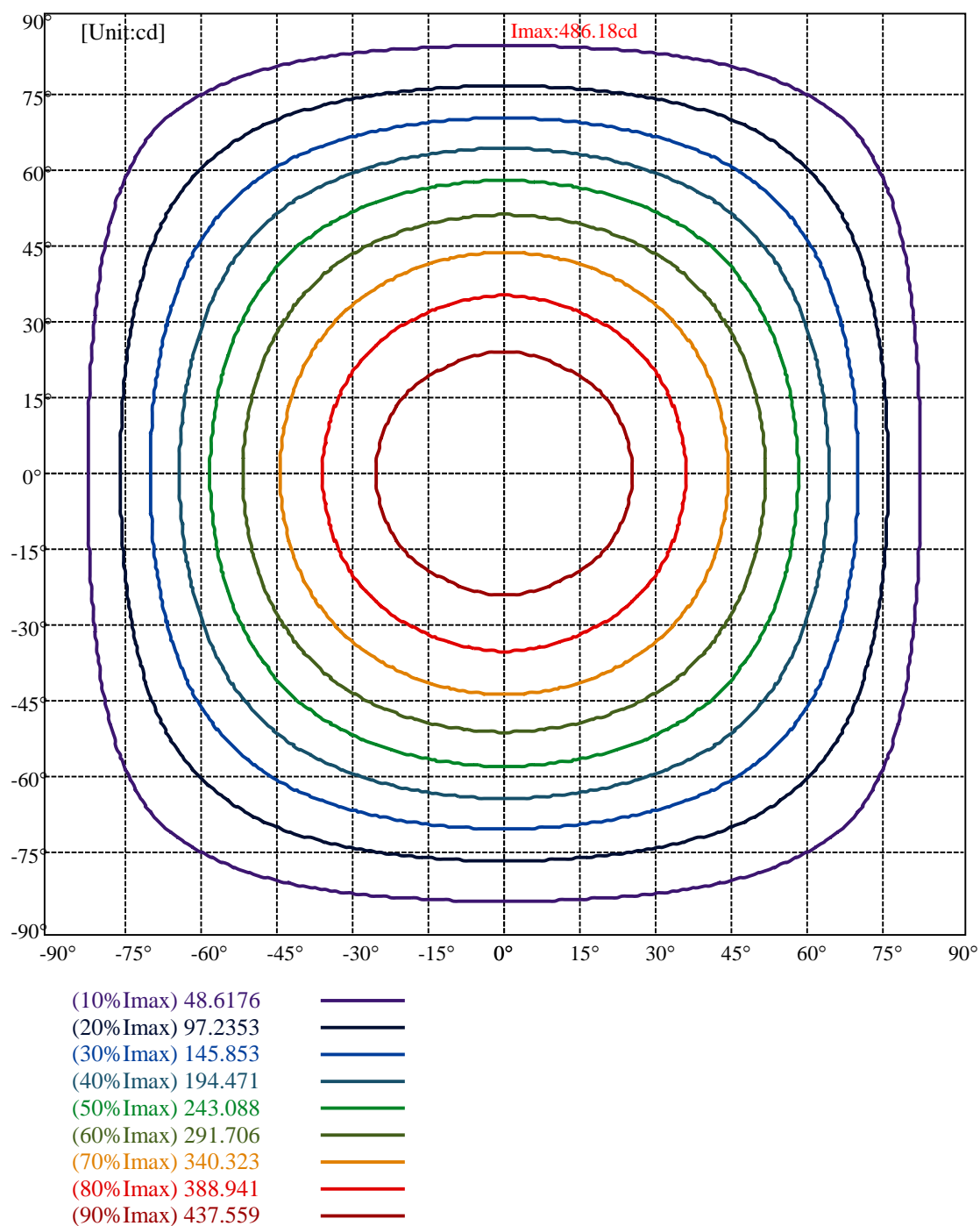
Zone	Lumens	%Fixt
0-30	379.37	26.01%
0-40	623.39	42.75%
0-60	1110.34	76.14%
0-90	1434.71	98.38%
0-120	1448.95	99.36%
0-180	1458.30	100.00%
60-90	556.48	38.16%
90-120	54.64	3.75%
90-130	57.19	3.92%
90-150	61.42	4.21%
90-180	63.70	4.37%
0-63.15	1166.64	80.00%

ZONAL LUMEN SUMMARY

0-10	46.04
10-20	132.19
20-30	201.15
30-40	244.02
40-50	254.84
50-60	232.12
60-70	178.75
70-80	105.22
80-90	40.40
90-100	8.97
100-110	2.65
110-120	2.62
120-130	2.55
130-140	2.32
140-150	1.91
150-160	1.41
160-170	0.86
170-180	0.00



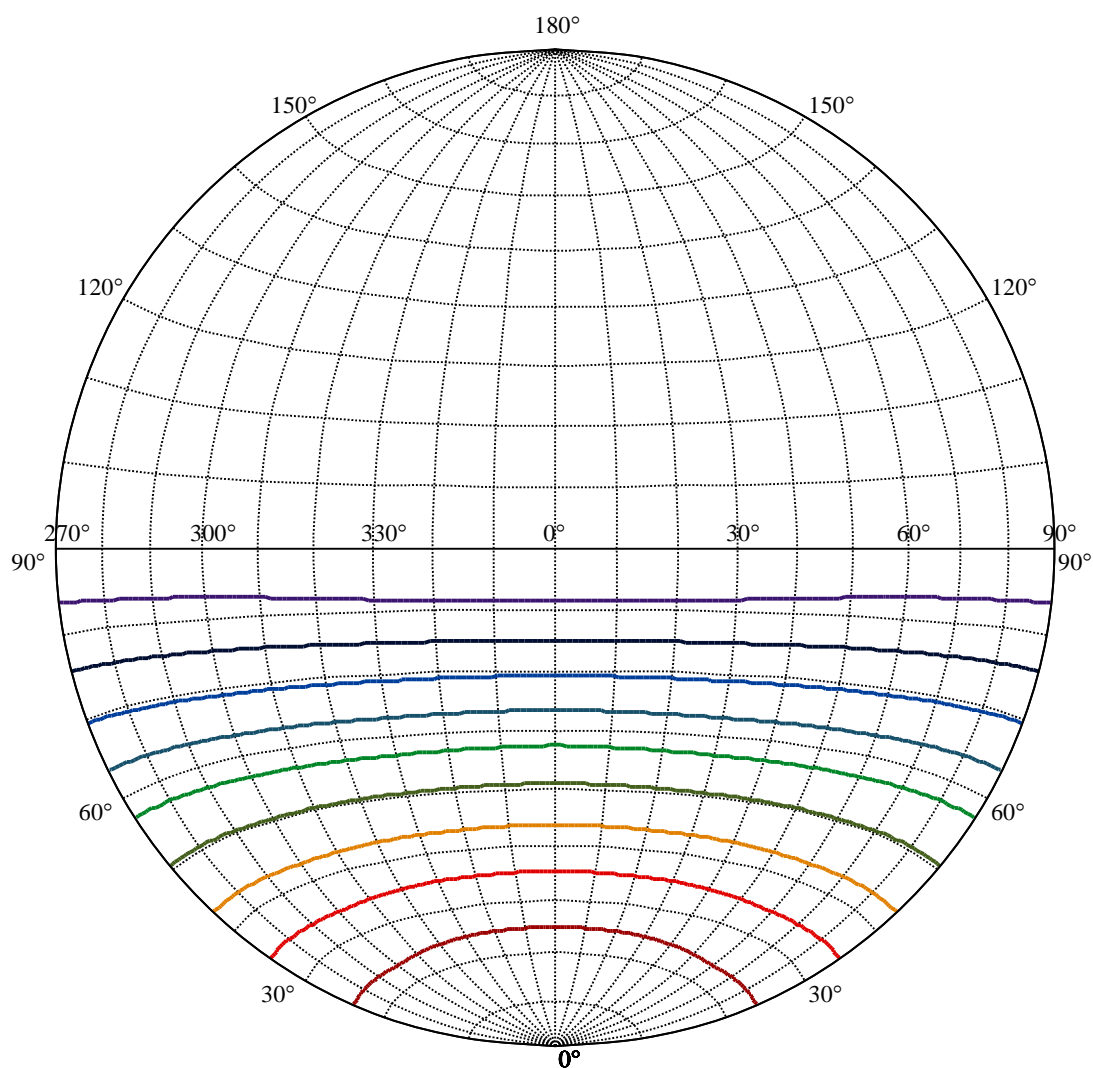




HAWKO LIGHTING POWERFLEX-IP20-4000K

ISO candela diagram on circular web

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House

[Unit:cd]

Road

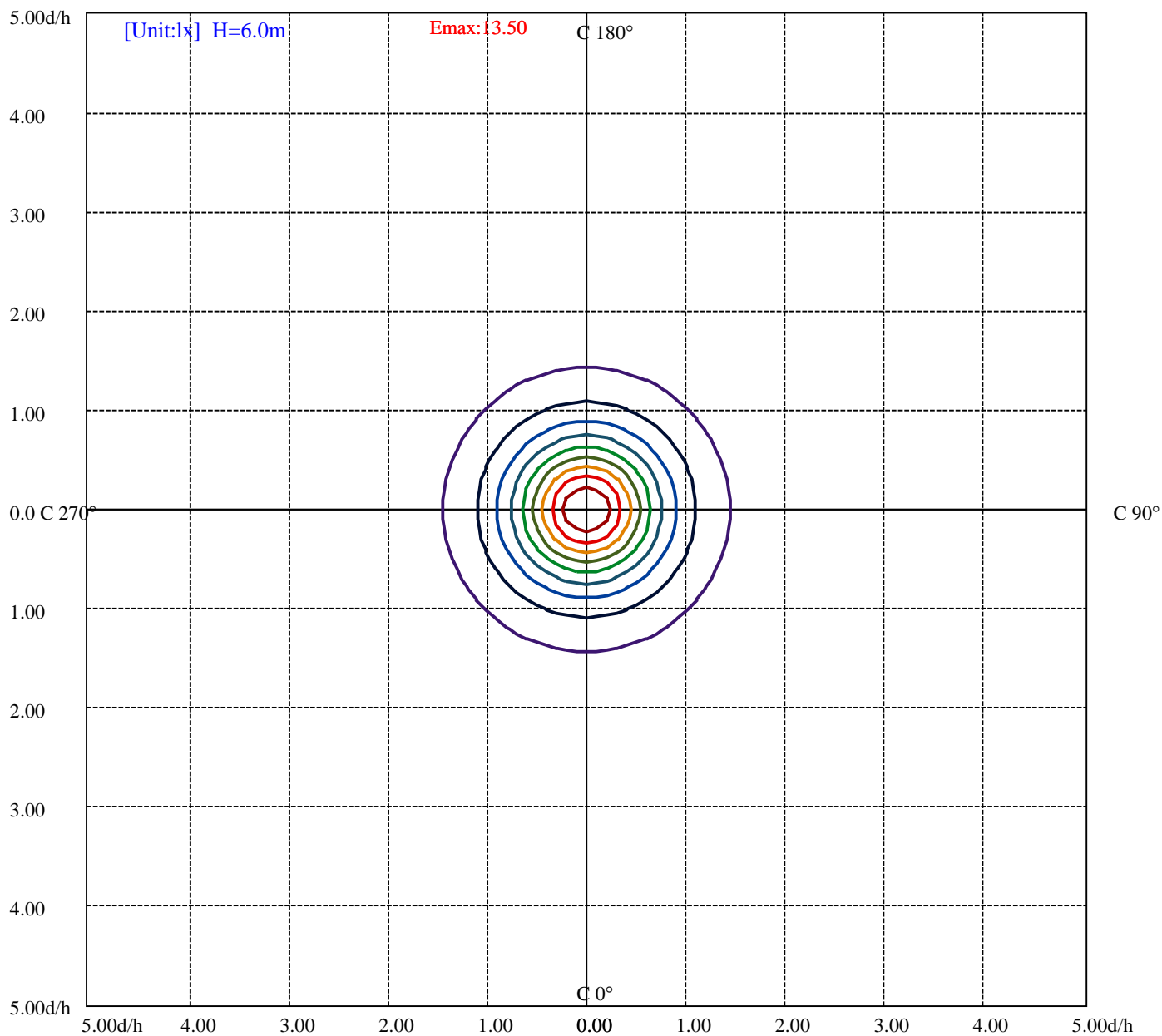
I_{max}:486.18
 (10% I_{max}) 48.6176
 (20% I_{max}) 97.2353
 (30% I_{max}) 145.853
 (40% I_{max}) 194.471
 (50% I_{max}) 243.088
 (60% I_{max}) 291.706
 (70% I_{max}) 340.323
 (80% I_{max}) 388.941
 (90% I_{max}) 437.559



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ISO illuminance diagram

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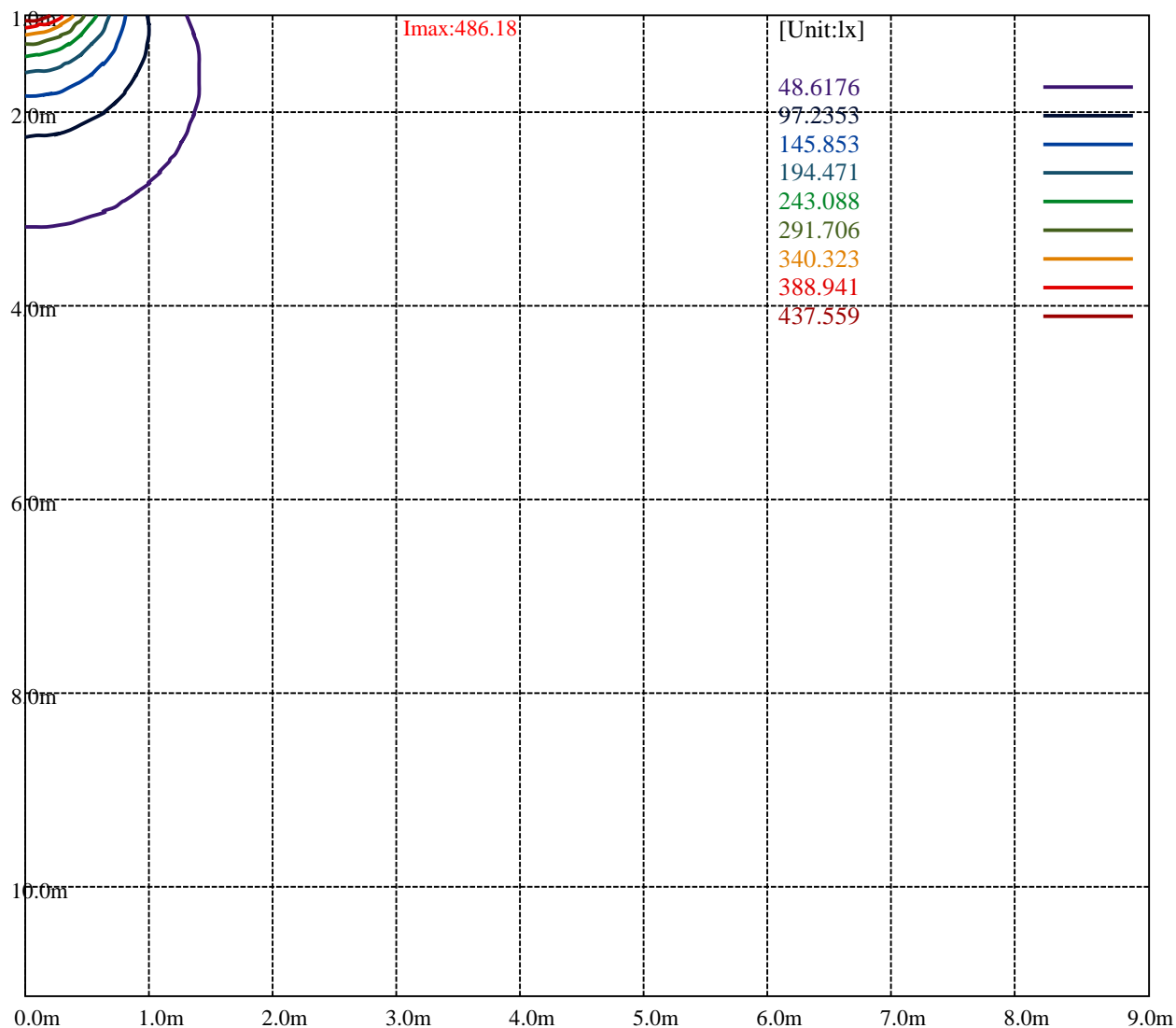


(10%Emax) 1.350489	—
(20%Emax) 2.700978	—
(30%Emax) 4.051472	—
(40%Emax) 5.401945	—
(50%Emax) 6.752444	—
(60%Emax) 8.102944	—
(70%Emax) 9.453417	—
(80%Emax) 10.80392	—
(90%Emax) 12.15442	—

Equipment: GMS2200
Temperature(°C): 25.2

Date: 2015-7-9
Humidity(%): 61.0%

Operator: Jeanne
Distance(m): 12.40



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Intensity data(cd)

C/γ(°)	0.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0
0.0	486.18	481.96	458.05	418.00	365.80	299.98	224.35	139.36	55.55
30.0	486.18	479.15	456.36	416.42	363.10	296.53	219.58	137.38	57.36
60.0	486.18	475.81	451.40	412.23	359.30	294.10	220.47	138.50	62.81
90.0	486.18	478.35	452.05	414.00	361.34	295.53	223.48	141.90	64.56
120.0	486.18	475.81	451.40	412.23	359.30	294.10	220.47	138.50	62.81
150.0	486.18	479.15	456.36	416.42	363.10	296.53	219.58	137.38	57.36
180.0	486.18	481.96	458.05	418.00	365.80	299.98	224.35	139.36	55.55
210.0	486.18	479.15	456.36	416.42	363.10	296.53	219.58	137.38	57.36
240.0	486.18	475.81	451.40	412.23	359.30	294.10	220.47	138.50	62.81
270.0	486.18	478.35	452.05	414.00	361.34	295.53	223.48	141.90	64.56
300.0	486.18	475.81	451.40	412.23	359.30	294.10	220.47	138.50	62.81
330.0	486.18	479.15	456.36	416.42	363.10	296.53	219.58	137.38	57.36
360.0	486.18	481.96	458.05	418.00	365.80	299.98	224.35	139.36	55.55
C/γ(°)	90.0	100.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0
0.0	4.17	2.71	2.87	3.09	3.31	3.38	3.34	3.32	3.32
30.0	11.17	2.44	2.53	2.75	2.96	3.05	3.03	3.02	3.02
60.0	17.88	2.41	2.44	2.63	2.84	2.95	2.96	2.98	2.99
90.0	21.60	2.37	2.41	2.60	2.78	2.91	2.93	2.96	2.98
120.0	17.88	2.41	2.44	2.63	2.84	2.95	2.96	2.98	2.99
150.0	11.17	2.44	2.53	2.75	2.96	3.05	3.03	3.02	3.02
180.0	4.17	2.71	2.87	3.09	3.31	3.38	3.34	3.32	3.32
210.0	11.17	2.44	2.53	2.75	2.96	3.05	3.03	3.02	3.02
240.0	17.88	2.41	2.44	2.63	2.84	2.95	2.96	2.98	2.99
270.0	21.60	2.37	2.41	2.60	2.78	2.91	2.93	2.96	2.98
300.0	17.88	2.41	2.44	2.63	2.84	2.95	2.96	2.98	2.99
330.0	11.17	2.44	2.53	2.75	2.96	3.05	3.03	3.02	3.02
360.0	4.17	2.71	2.87	3.09	3.31	3.38	3.34	3.32	3.32
C/γ(°)	180.0								
0.0	3.07								
30.0	3.07								
60.0	3.07								
90.0	3.07								
120.0	3.07								
150.0	3.07								
180.0	3.07								
210.0	3.07								
240.0	3.07								
270.0	3.07								
300.0	3.07								
330.0	3.07								
360.0	3.07								