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## Hawko Lighting Group Australia Pty Ltd

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LumCAT: CHROMAFLEX-4000K (BLUE)

Luminaire: LED Strip light

Report No: BSR1706080201-9

Test No: S01

LampCAT:

Lamp flux(lm)

Number of Lamps: 60

Length(mm): 1000

Phm Type: C

Voltage(V): 24.0000

Current(A): 0.2150

Power (W): 5.1600

PF: 0.9995

Ballast type:

Width(mm): 12

Height(mm): 2

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## Photometric Results

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Lumens(lm): 85.20

Lumens(lm)/Power(W): 16.51

Central intensity(cd): 25.087

Maximum intensity(cd): 25.207

Angle of maximum intensity: C=90.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=126.4

[C90/270]Total=125.0

Field angle(10%Imax): [C0/180]Total=166.6

[C90/270]Total=167.6

Maximum s/h(1/2): C0\_180=1.40 C90\_270=1.34

Maximum s/h(1/4): C0\_180=1.51 C90\_270=1.47

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 75.383%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	20.35	23.89%
0-40	34.28	40.24%
0-60	64.22	75.38%
0-90	85.20	100.00%
0-120	85.20	100.00%
0-180	85.20	100.00%
60-90	28.08	32.96%
90-120	0.55	0.65%
90-130	0.55	0.65%
90-150	0.55	0.65%
90-180	0.55	0.65%
0-63.08	68.16	80.00%

ZONAL LUMEN SUMMARY

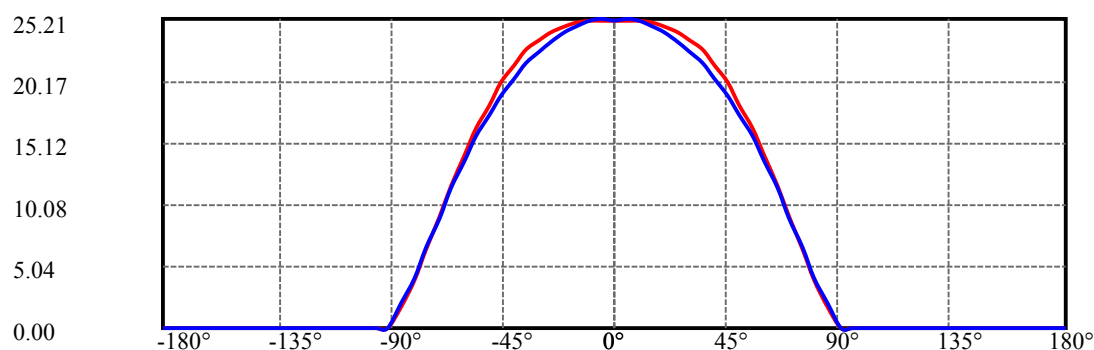
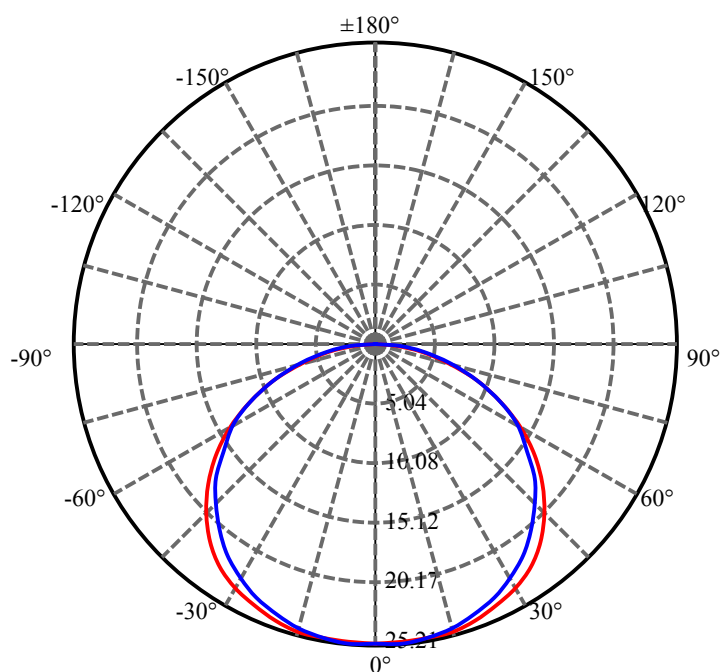
0-10	2.39
10-20	6.98
20-30	10.98
30-40	13.93
40-50	15.31
50-60	14.63
60-70	11.74
70-80	7.03
80-90	2.20
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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70-80	7.03
80-90	2.20
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



C0/C180: —

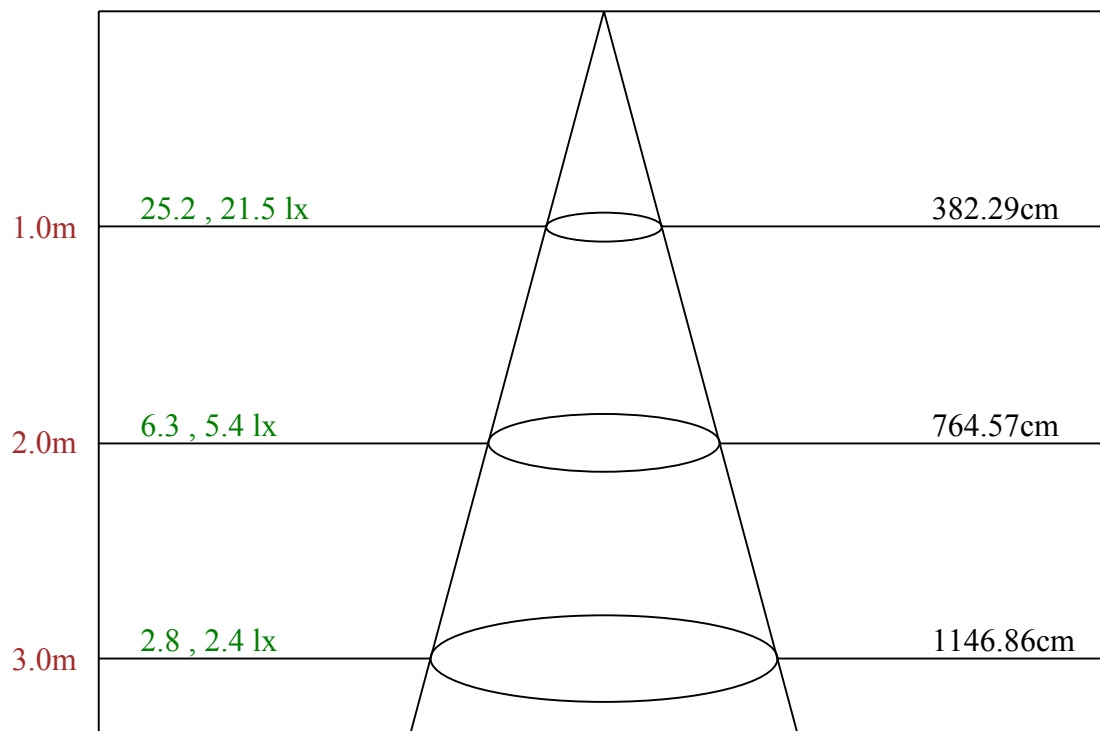
C90/C270: —

Field angle(10%Imax):C0/180Left:83.3 Right:83.3

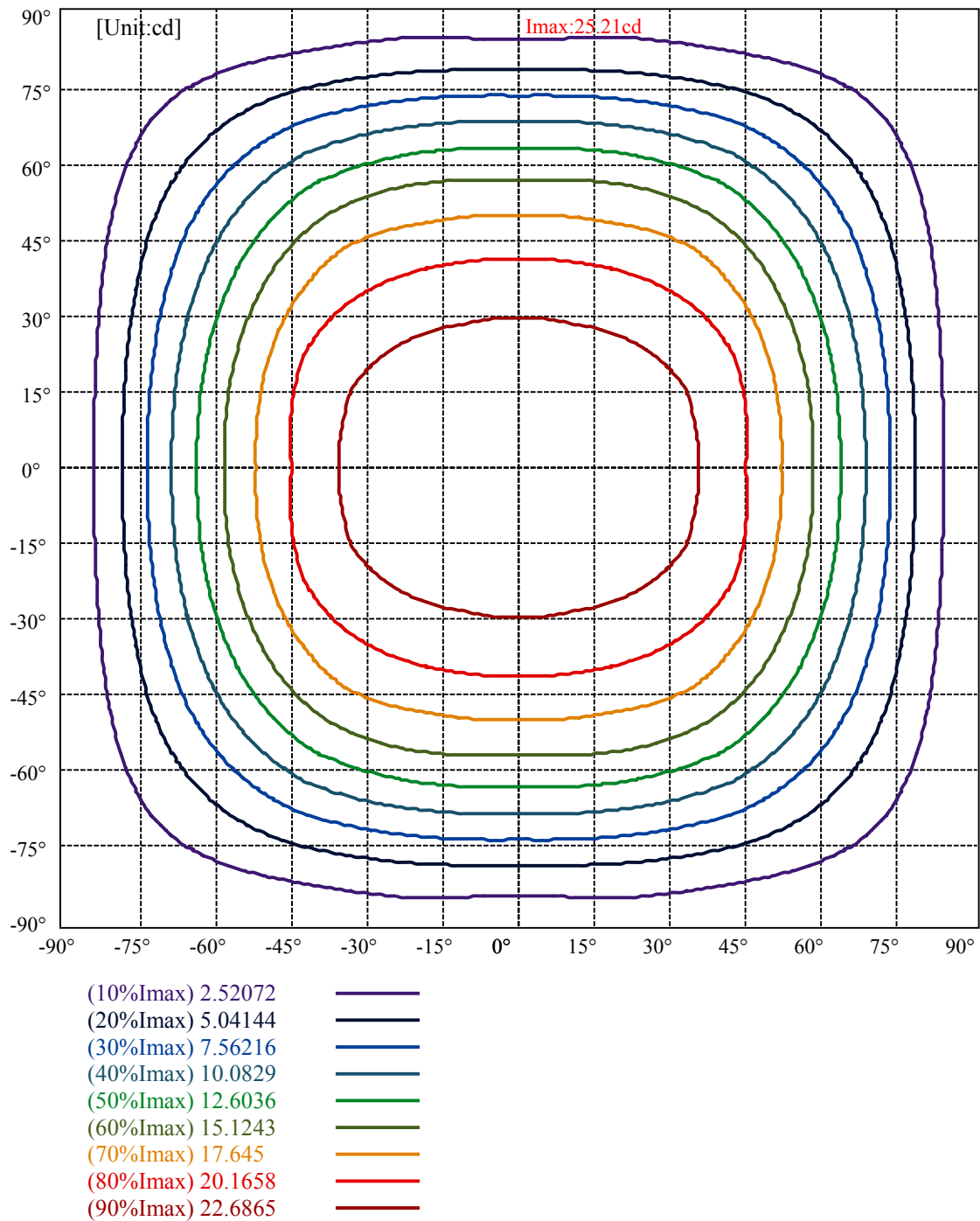
:C90/270Left:83.8 Right:83.8

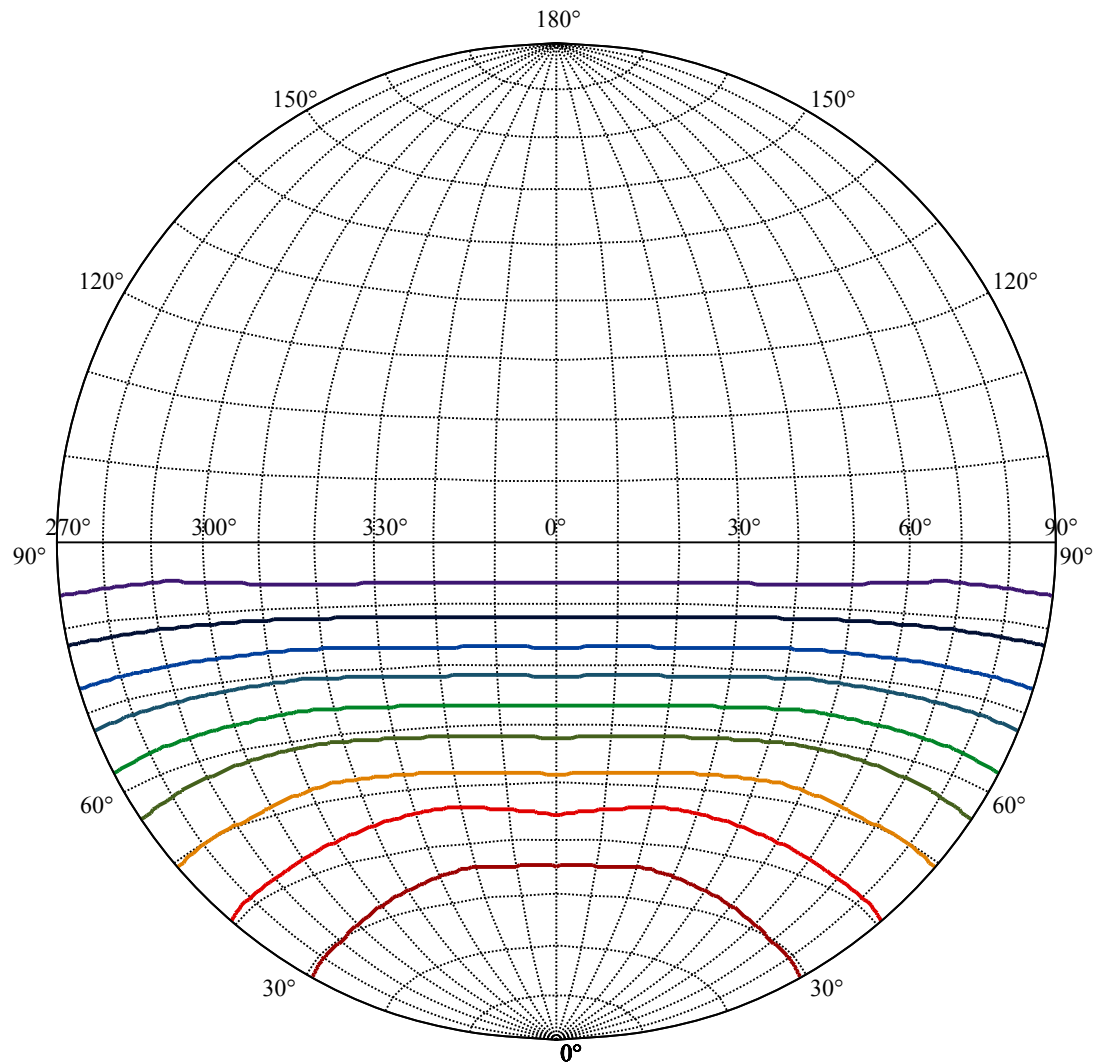
Beam Angle(50%Imax):C0/180Left:63.2 Right:63.2

:C90/270Left:62.5 Right:62.5



Max , Ave      Beam angle of C90plane124.77





House

[Unit:cd]

Road

**Imax:25.21**

(10%Imax) 2.52072

(20%Imax) 5.04144

(30%Imax) 7.56216

(40%Imax) 10.0829

(50%Imax) 12.6036

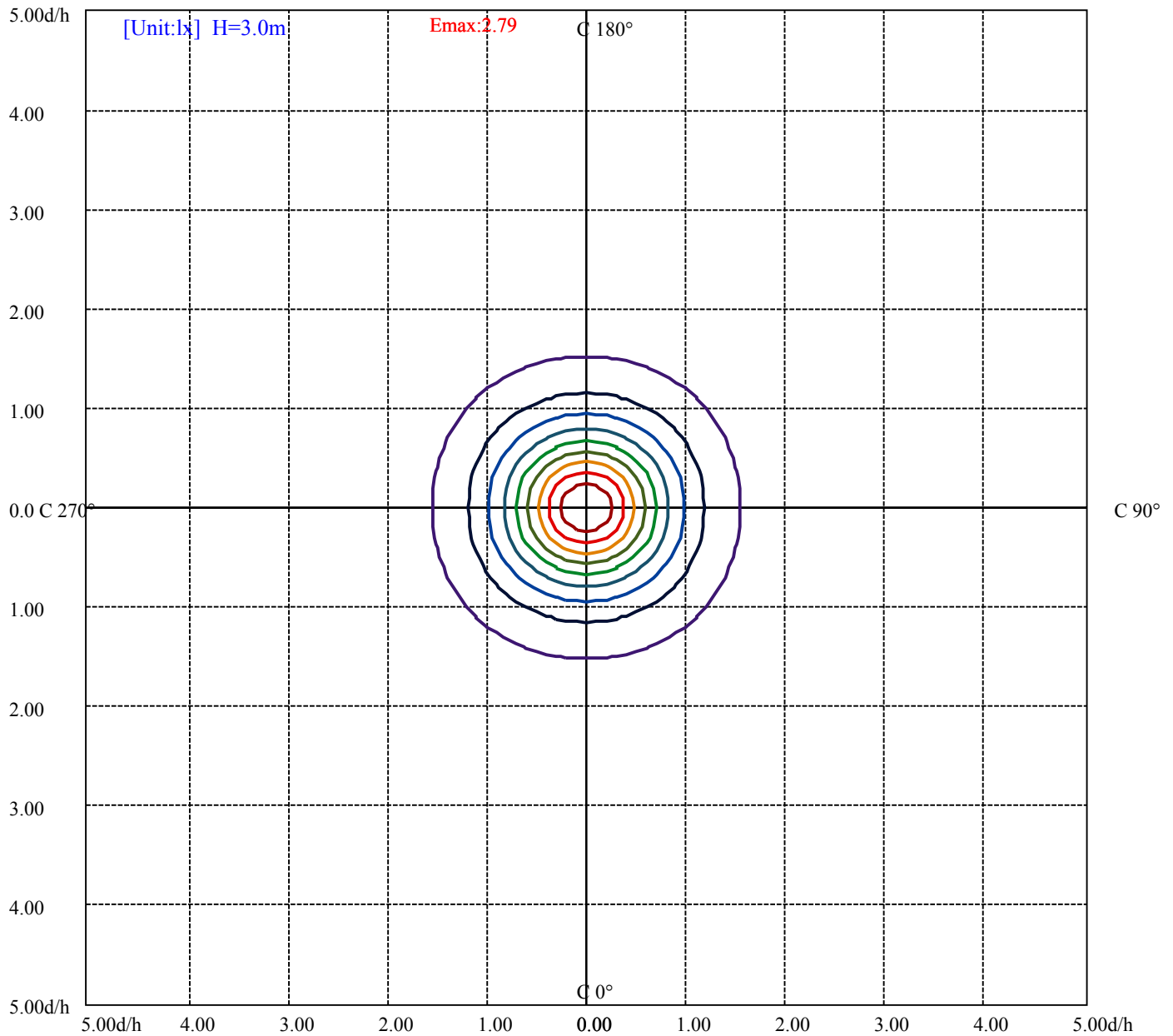
(60%Imax) 15.1243

(70%Imax) 17.645

(80%Imax) 20.1658

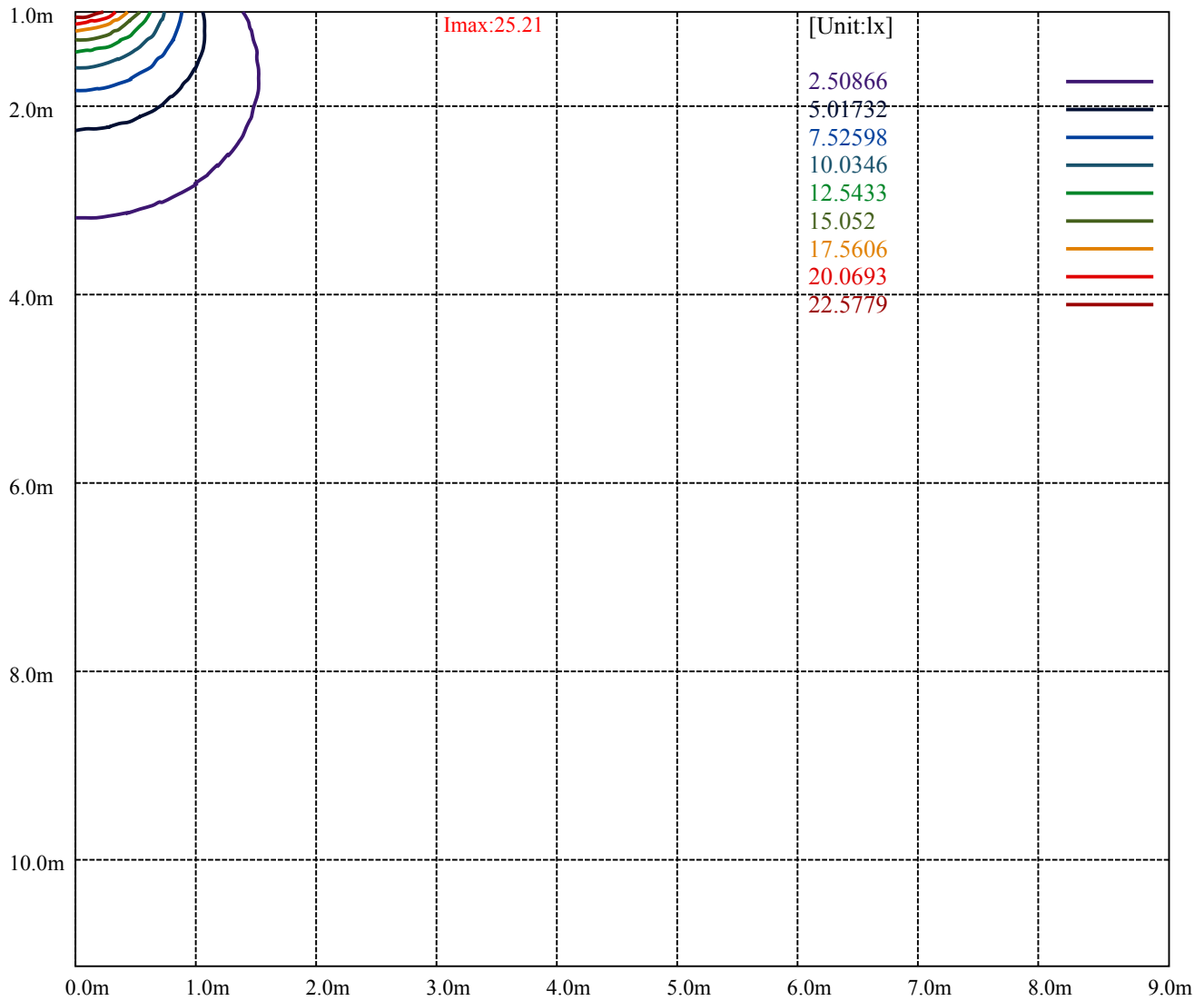
(90%Imax) 22.6865



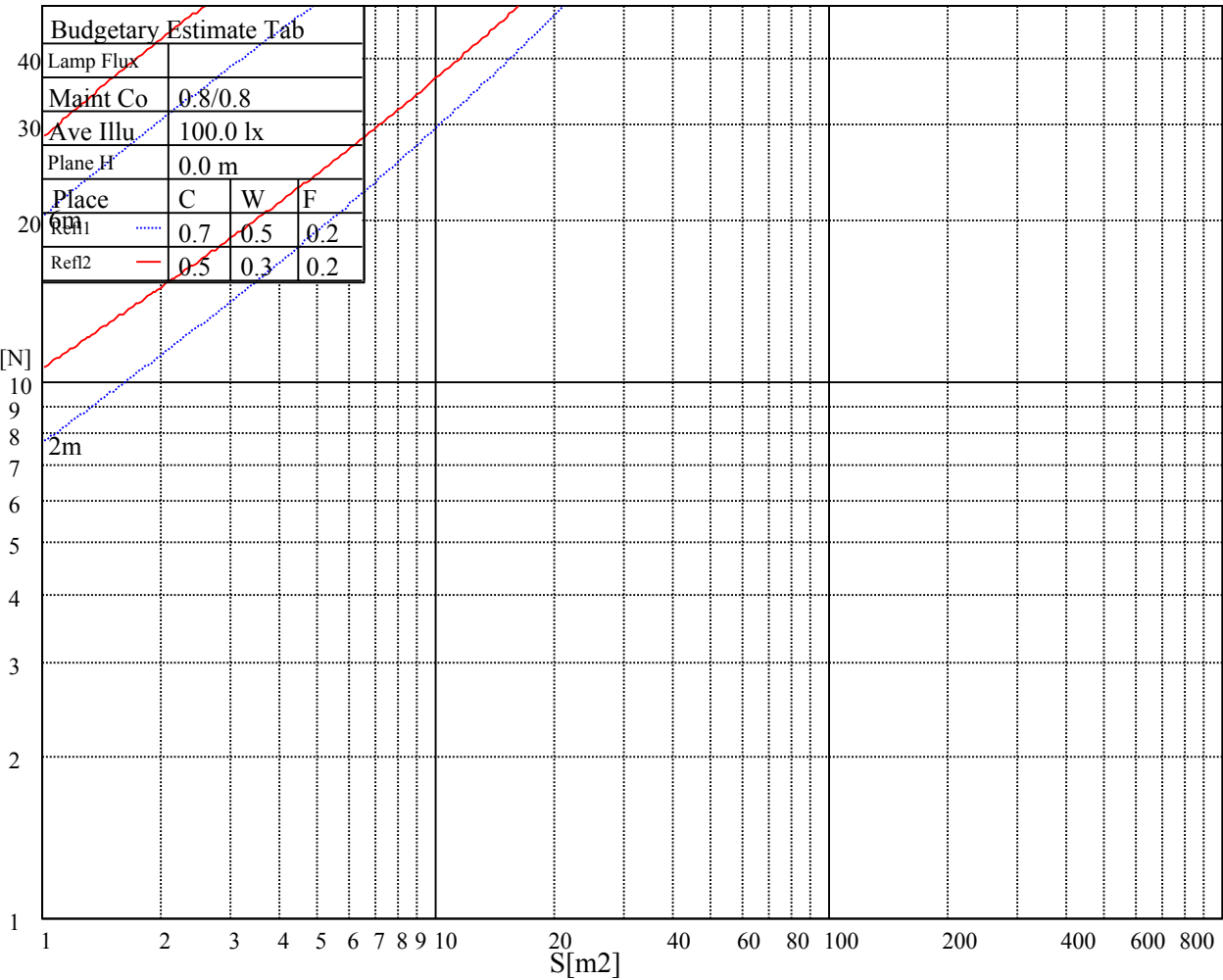


(10%Emax) 0.27874	—
(20%Emax) 0.55748	—
(30%Emax) 0.83622	—
(40%Emax) 1.114956	—
(50%Emax) 1.3937	—
(60%Emax) 1.672444	—
(70%Emax) 1.951178	—
(80%Emax) 2.229922	—
(90%Emax) 2.508656	—





Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	23.48	25.10	23.89	25.48	25.87	23.52	25.14	23.93	25.52	25.91
	3H	25.43	26.91	25.86	27.30	27.73	25.09	26.56	25.52	26.95	27.39
	4H	26.18	27.57	26.63	27.98	28.43	25.64	27.04	26.09	27.44	27.89
	6H	26.75	28.05	27.21	28.47	28.93	26.01	27.30	26.47	27.73	28.19
	8H	26.96	28.20	27.43	28.64	29.11	26.11	27.35	26.58	27.80	28.26
	12H	27.25	28.43	27.72	28.87	29.37	26.23	27.42	26.71	27.86	28.36
4H	2H	24.14	25.53	24.58	25.94	26.38	24.17	25.56	24.61	25.97	26.42
	3H	26.28	27.46	26.74	27.91	28.38	25.97	27.14	26.42	27.59	28.06
	4H	27.15	28.21	27.62	28.68	29.19	26.64	27.70	27.11	28.17	28.67
	6H	27.68	28.63	28.19	29.12	29.64	27.03	27.97	27.53	28.46	28.98
	8H	27.97	28.84	28.47	29.34	29.87	27.18	28.05	27.68	28.55	29.08
	12H	28.28	29.07	28.81	29.60	30.14	27.31	28.10	27.84	28.63	29.16
8H	4H	27.42	28.29	27.93	28.79	29.32	26.96	27.84	27.47	28.33	28.86
	6H	28.10	29.06	28.63	29.37	29.91	27.48	28.44	28.01	28.75	29.29
	8H	28.45	29.10	29.00	29.66	30.21	27.68	28.33	28.23	28.89	29.44
	12H	29.14	29.72	29.69	30.45	30.89	28.11	28.69	28.66	29.42	29.85
12H	4H	27.44	28.23	27.97	28.76	29.29	27.00	27.79	27.53	28.32	28.85
	6H	29.23	28.81	28.71	29.32	29.92	28.64	28.21	28.11	28.72	29.33
	8H	28.54	29.12	29.09	29.66	30.29	27.79	28.37	28.34	28.91	29.54
Variation with the observer position at spacings:											
S = 1.0H		0.2/-0.7					0.3/-0.6				
S = 1.5H		0.6/-0.6					0.6/-0.6				
S = 2.0H		0.8/-0.7					0.8/-0.8				
Standard tables:		BKBF					BK4				
Uncorrected UGR		4.6					1.4				



RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.03	0.98	0.94	1.01	0.96	0.93	0.96	0.93	0.90	0.92	0.89	0.87	0.89	0.86	0.84	0.82
2	0.89	0.82	0.75	0.87	0.80	0.75	0.83	0.78	0.73	0.80	0.75	0.71	0.77	0.73	0.69	0.67
3	0.77	0.69	0.62	0.76	0.68	0.61	0.73	0.66	0.60	0.70	0.64	0.59	0.67	0.62	0.58	0.56
4	0.68	0.59	0.52	0.67	0.58	0.51	0.64	0.57	0.51	0.62	0.55	0.50	0.60	0.54	0.49	0.47
5	0.61	0.51	0.44	0.59	0.51	0.44	0.57	0.49	0.43	0.55	0.48	0.43	0.53	0.47	0.42	0.40
6	0.54	0.45	0.38	0.53	0.44	0.38	0.51	0.44	0.38	0.50	0.43	0.37	0.48	0.42	0.37	0.35
7	0.49	0.40	0.34	0.48	0.40	0.33	0.47	0.39	0.33	0.45	0.38	0.33	0.44	0.37	0.33	0.31
8	0.45	0.36	0.30	0.44	0.35	0.30	0.42	0.35	0.29	0.41	0.34	0.29	0.40	0.34	0.29	0.27
9	0.41	0.32	0.27	0.40	0.32	0.26	0.39	0.32	0.26	0.38	0.31	0.26	0.37	0.31	0.26	0.24
10	0.38	0.29	0.24	0.37	0.29	0.24	0.36	0.29	0.24	0.35	0.28	0.24	0.34	0.28	0.24	0.22



