
PQL 91310 LED SMD 4'15WT8/40K/PSP/V5

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 15WT8/40K/PSP/V5

Lamp flux(lm): -1.0

Number of Lamps: 6

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 109.7000

PF:

Ballast type:

Width(mm): 475

Height(mm): 100

Photometric Results

Lumens(lm): 11999.97

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 109.39

Central intensity(cd): 4164.329

Maximum intensity(cd): 4164.329

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50% I_{max}): [C0/180]Total=108.4

[C90/270]Total=102.6

Field angle(10% I_{max}): [C0/180]Total=164.0

[C90/270]Total=153.4

Maximum s/h(1/2): C0_180=1.24 C90_270=1.20

Maximum s/h(1/4): C0_180=1.36 C90_270=1.30

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 7.32%

Down flux rate of LUM(%): 92.68%

CIE Type : Direct lighting

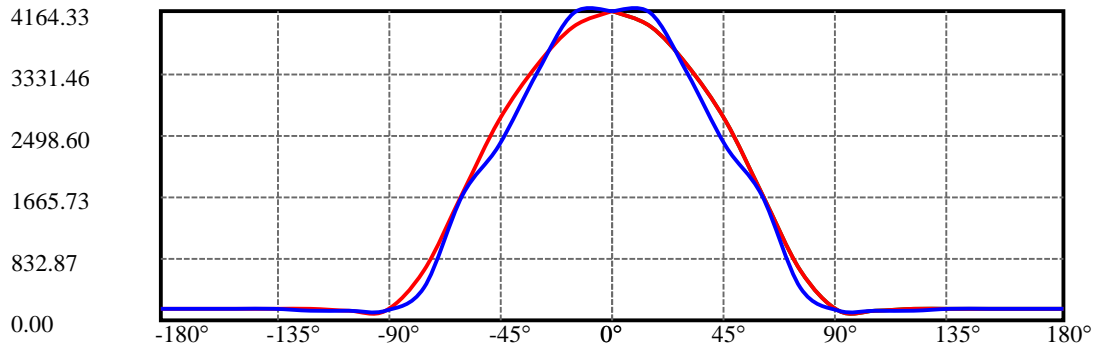
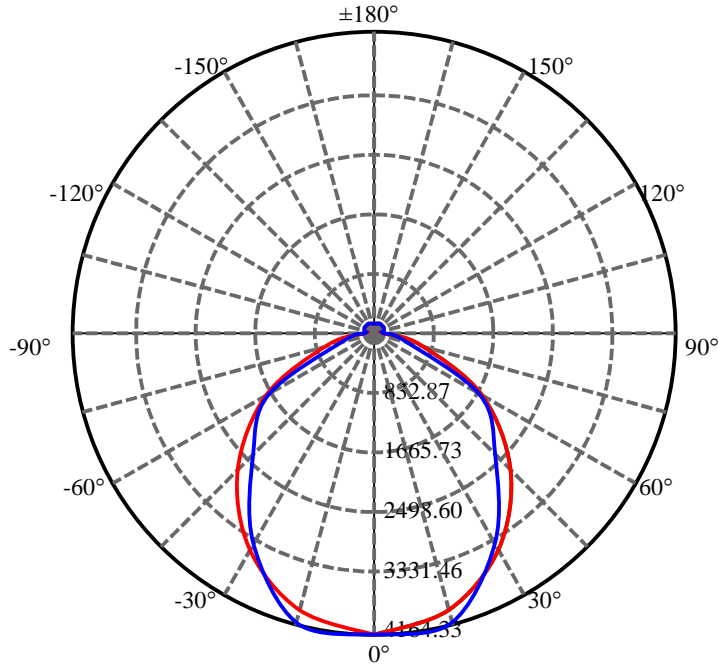
Output flux ratio in π solid angle : 73.360%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4161.688	0.000	0	.000%	.000%
15.0	4012.462	875.020	875.02	.000%	7.292%
30.0	3409.697	2329.418	3204.438	.000%	26.704%
45.0	2466.029	2933.501	6137.939	.000%	51.150%
60.0	1630.215	2665.202	8803.141	.000%	73.360%
75.0	616.682	1702.456	10505.597	.000%	87.547%
90.0	140.280	615.489	11121.086	.000%	92.676%
105.0	135.726	224.422	11345.508	.000%	94.546%
120.0	139.412	208.470	11553.977	.000%	96.283%
135.0	142.723	183.570	11737.547	.000%	97.813%
150.0	142.722	142.511	11880.057	.000%	99.001%
165.0	142.291	89.450	11969.508	.000%	99.746%
180.0	142.289	30.463	11999.971	.000%	100.000%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	3204.44	N.A.	26.70%
0-40	3204.44	N.A.	26.70%
0-60	8803.14	N.A.	73.36%
0-90	11121.09	N.A.	92.68%
0-120	11553.98	N.A.	96.28%
0-180	11999.97	N.A.	100.00%
60-90	4983.15	N.A.	41.53%
90-120	1048.38	N.A.	8.74%
90-130	1048.38	N.A.	8.74%
90-150	1374.46	N.A.	11.45%
90-180	1463.91	N.A.	12.20%
0-67.02	9599.98	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	0.00
10-20	875.02
20-30	2329.42
30-40	0.00
40-50	2933.50
50-60	2665.20
60-70	0.00
70-80	1702.46
80-90	615.49
90-100	0.00
100-110	224.42
110-120	208.47
120-130	0.00
130-140	183.57
140-150	142.51
150-160	0.00
160-170	89.45
170-180	0.00



C0(Max): ——

C0/C180: ——

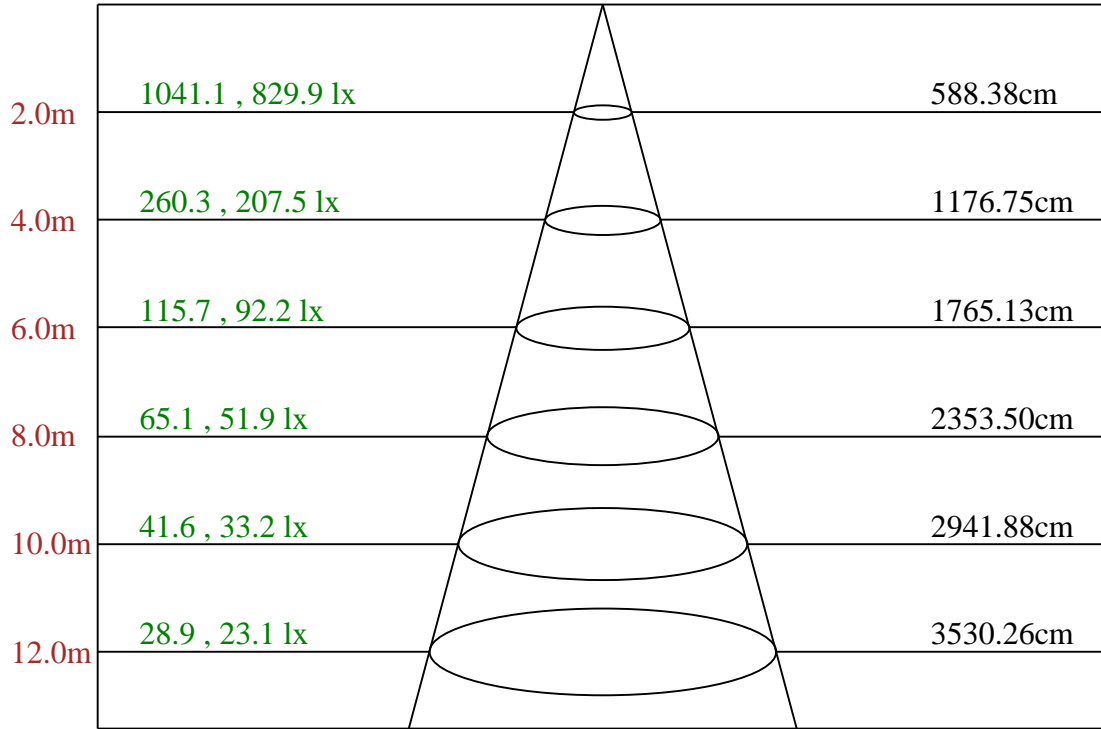
C90/C270: ——

Field angle(10% I_{max}):C0/180Left:82.0 Right:82.0

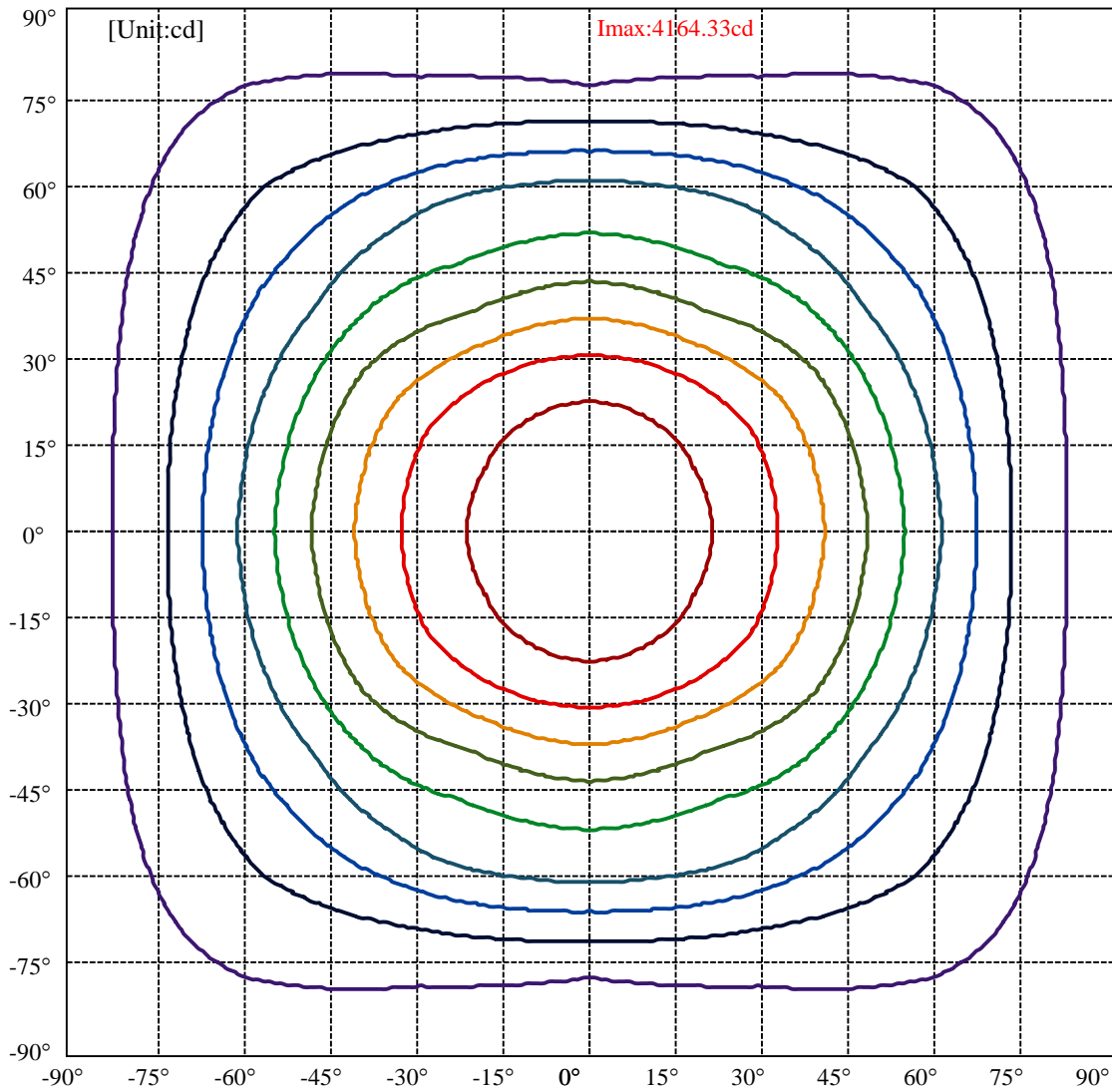
:C90/270Left:76.7 Right:76.7

Beam Angle(50% I_{max}):C0/180Left:54.2 Right:54.2

:C90/270Left:51.3 Right:51.3



Max , Ave Beam angle of C0 plane 111.58

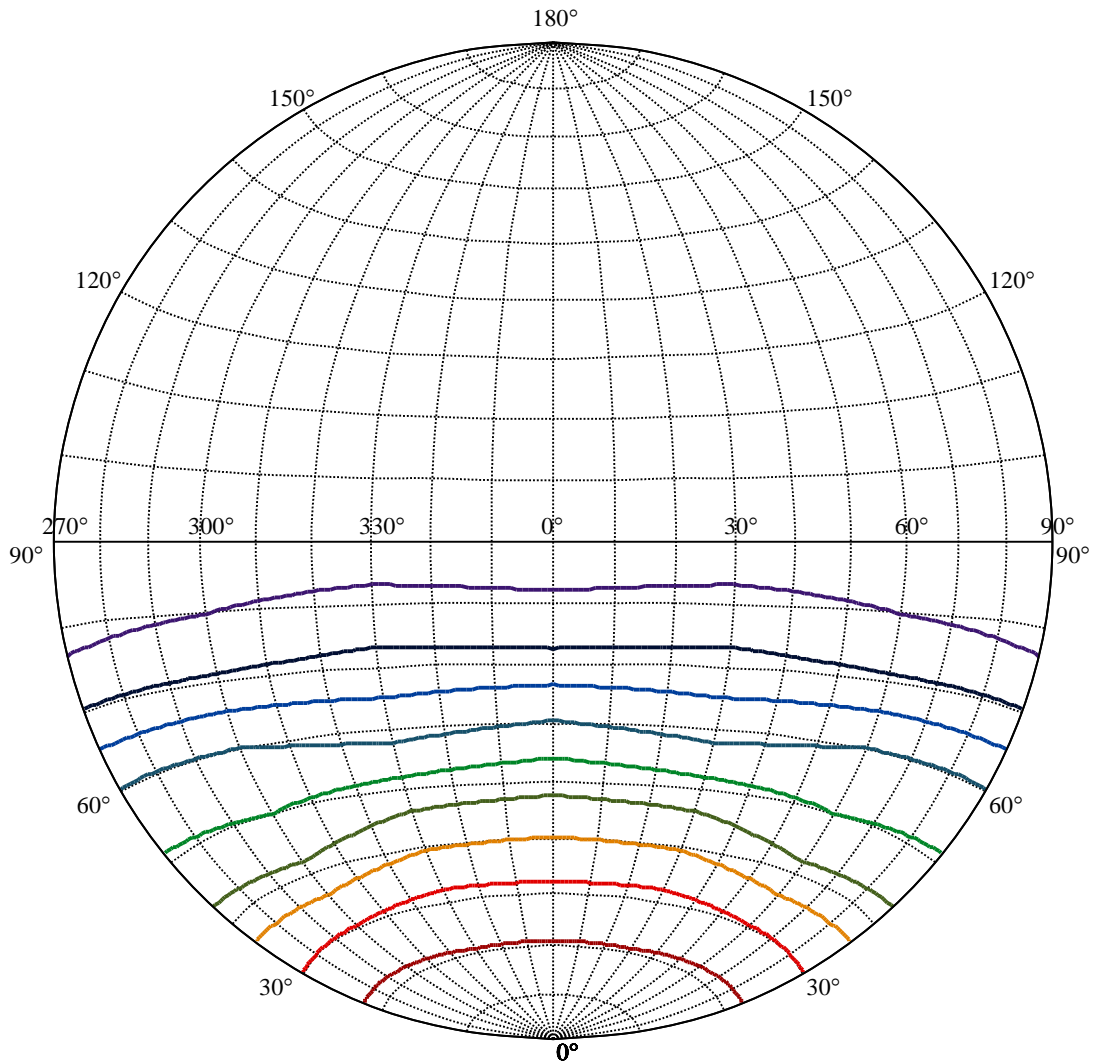


(10% I _{max}) 416.433	—
(20% I _{max}) 832.866	—
(30% I _{max}) 1249.3	—
(40% I _{max}) 1665.73	—
(50% I _{max}) 2082.16	—
(60% I _{max}) 2498.6	—
(70% I _{max}) 2915.03	—
(80% I _{max}) 3331.46	—
(90% I _{max}) 3747.9	—

Equipment: 123
Temperature(°C): 345

Date:
Humidity(%): 456%

Operator: 234












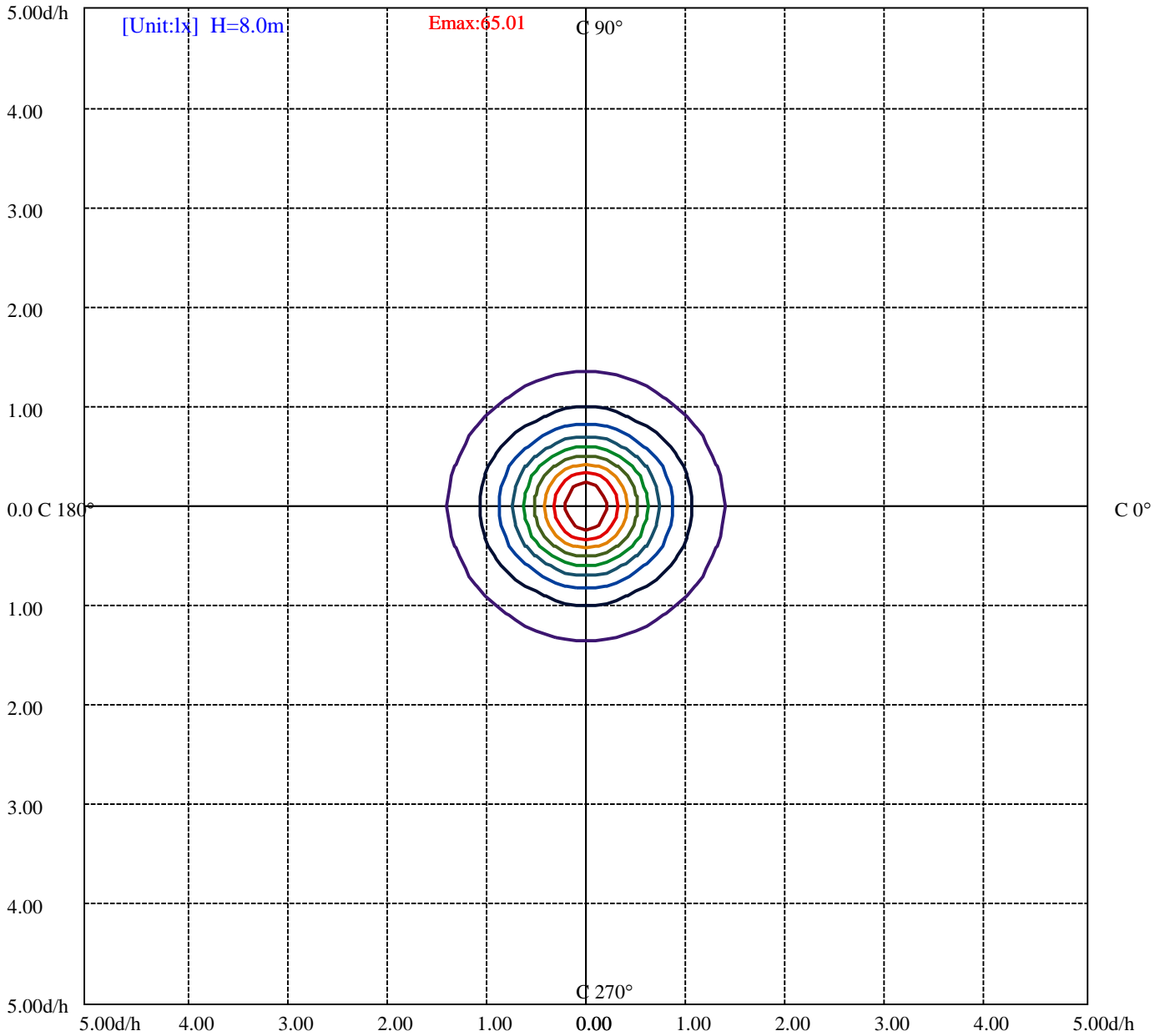
House

[Unit:cd]

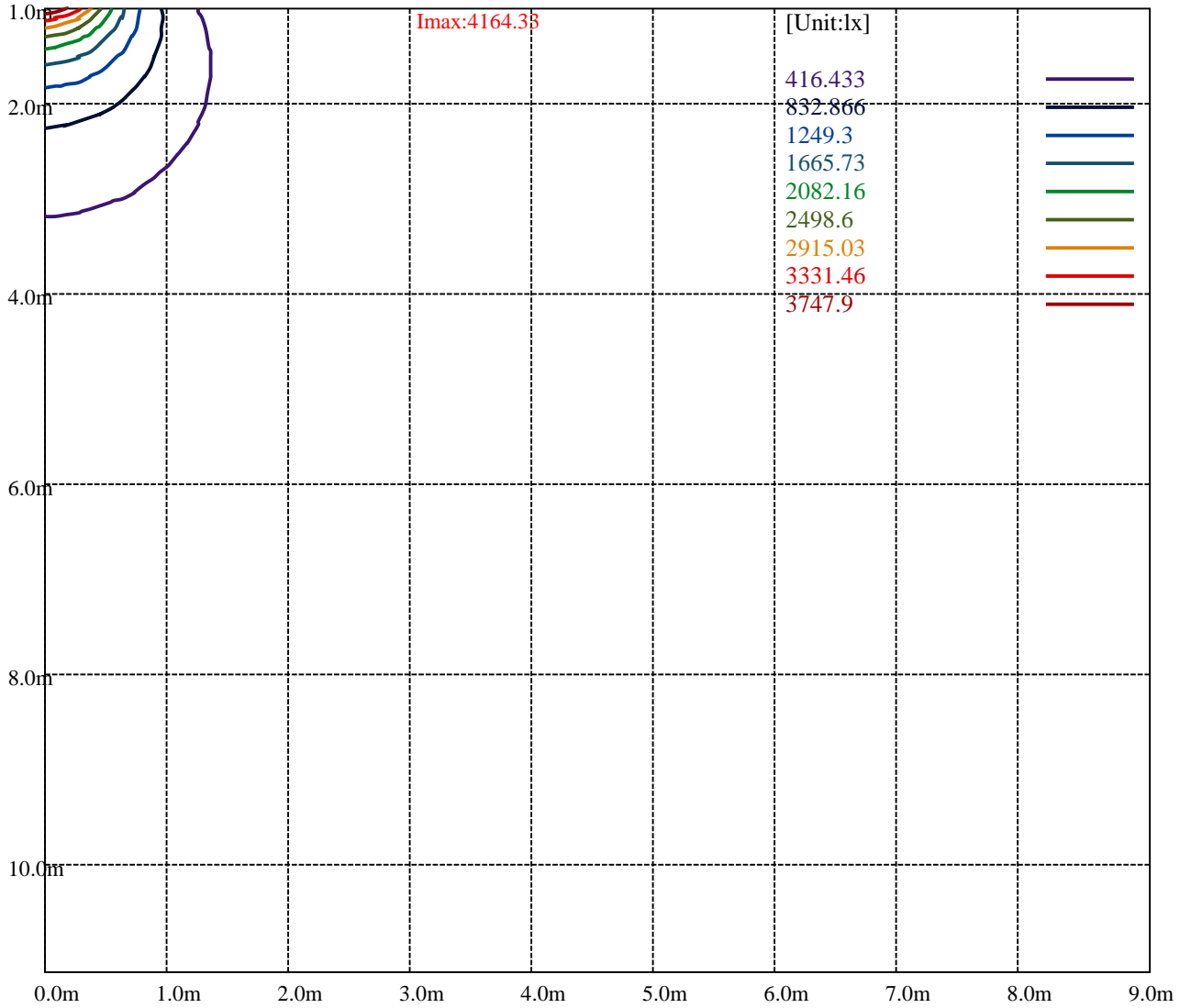
Road

Imax:4164.33

(10% Imax) 416.675	
(20% Imax) 833.35	
(30% Imax) 1250.03	
(40% Imax) 1666.7	
(50% Imax) 2083.38	
(60% Imax) 2500.05	
(70% Imax) 2916.73	
(80% Imax) 3333.4	
(90% Imax) 3750.08	



(10%Emax) 6.501235	—
(20%Emax) 13.00248	—
(30%Emax) 19.50375	—
(40%Emax) 26.005	—
(50%Emax) 32.50625	—
(60%Emax) 39.0075	—
(70%Emax) 45.50875	—
(80%Emax) 52.01	—
(90%Emax) 58.51125	—



Luminance Table

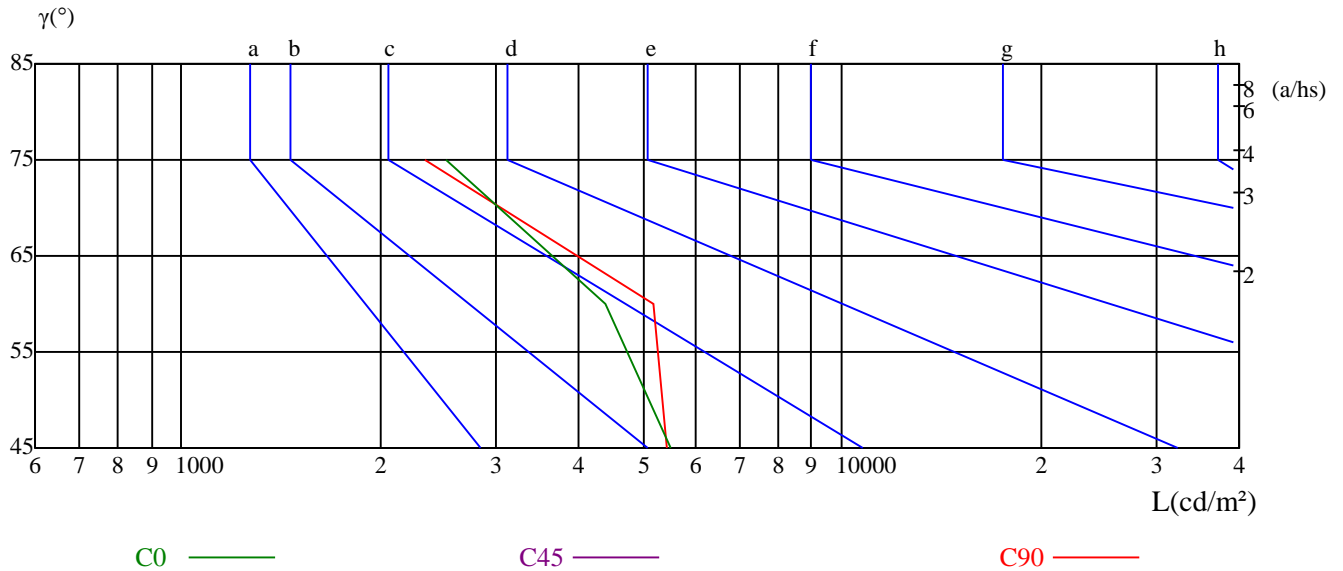
γ	45	50	55	60	65	70	75	80	85
C0	5492	0	0	4379	0	0	2513	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5417	0	0	5174	0	0	2335	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	4487	3061	0	0	0	0

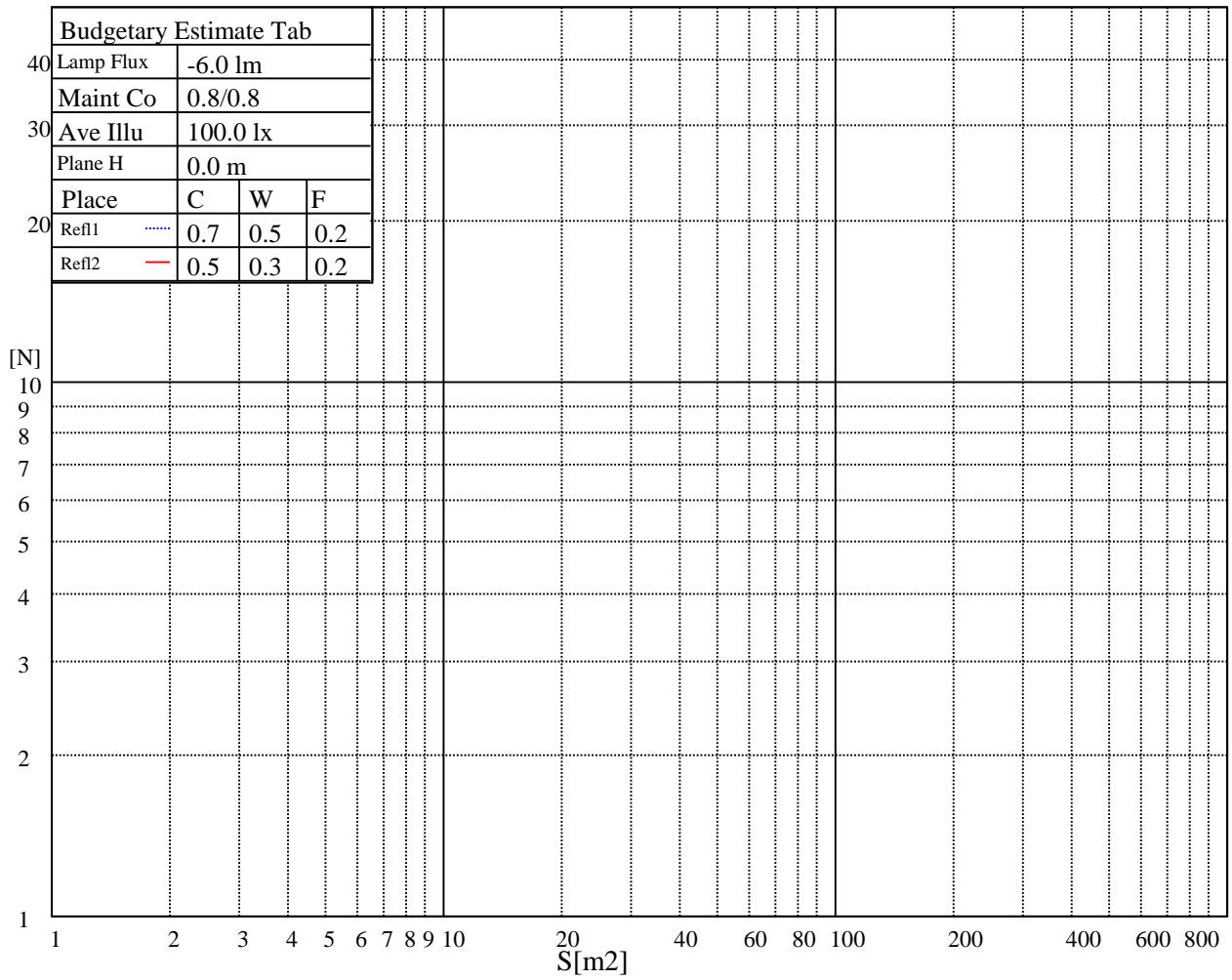
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

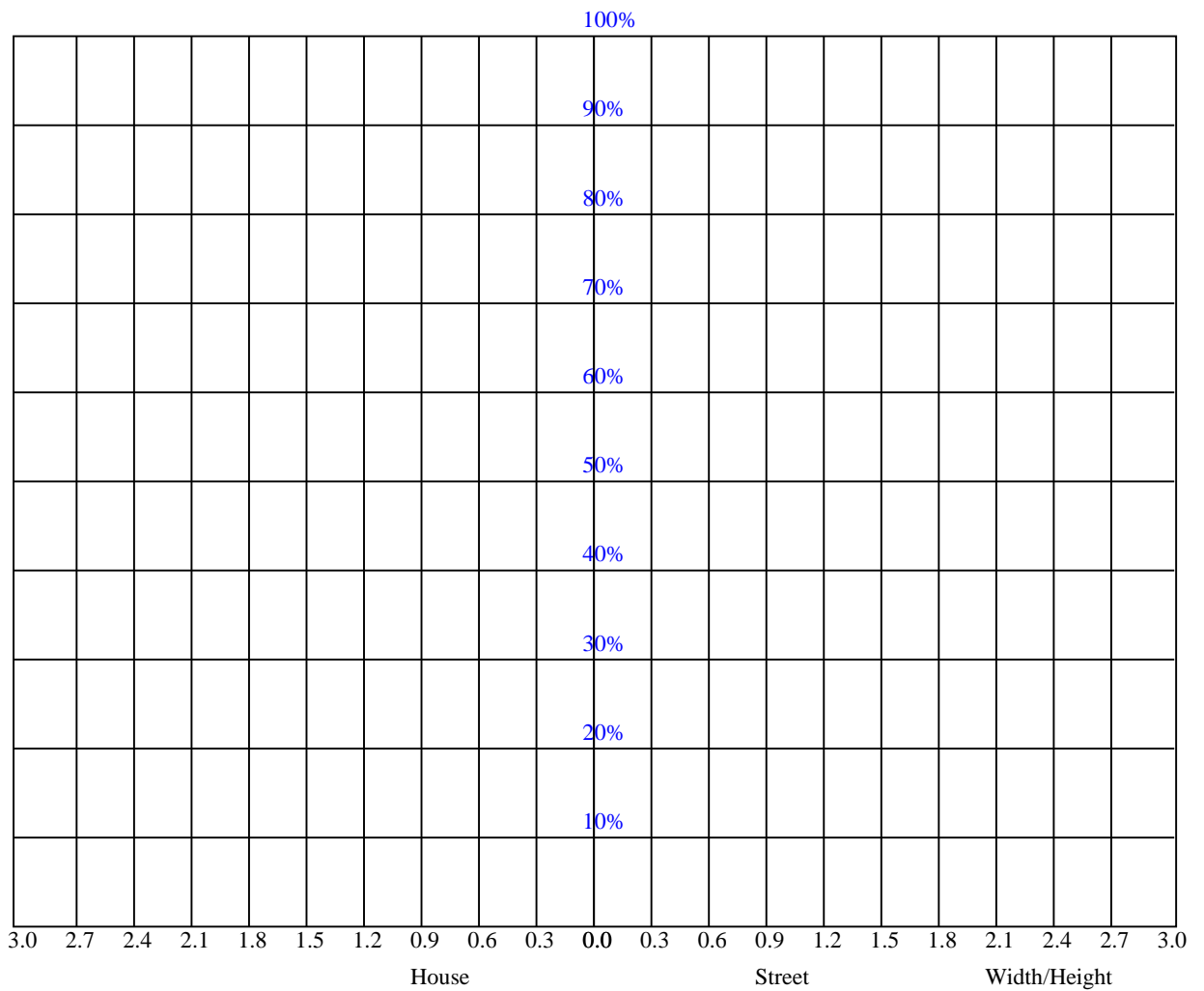
Luminance Limiting Curve



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	8.57	10.03	9.04	10.49	10.98	8.34	9.80	8.81	10.26	10.74
	3H	9.92	11.25	10.41	11.71	12.24	9.78	11.11	10.27	11.58	12.10
	4H	10.22	11.47	10.73	11.95	12.49	10.26	11.51	10.77	11.99	12.54
	6H	10.48	11.63	11.00	12.13	12.69	10.65	11.81	11.17	12.31	12.86
	8H	10.60	11.70	11.13	12.23	12.78	10.80	11.91	11.33	12.43	12.98
4H	12H	10.81	11.87	11.35	12.39	12.98	11.02	12.08	11.56	12.59	13.18
	2H	8.99	10.24	9.50	10.73	11.27	8.80	10.05	9.31	10.54	11.08
	3H	10.53	11.58	11.05	12.10	12.67	10.48	11.53	11.00	12.06	12.62
	4H	10.91	11.86	11.45	12.40	13.00	11.10	12.05	11.64	12.59	13.19
	6H	11.17	12.02	11.75	12.59	13.20	11.50	12.36	12.08	12.92	13.54
8H	8H	11.37	12.15	11.94	12.72	13.34	11.74	12.52	12.31	13.09	13.71
	12H	11.62	12.33	12.21	12.92	13.55	11.99	12.69	12.58	13.29	13.92
	4H	11.12	11.90	11.69	12.47	13.09	11.30	12.08	11.87	12.65	13.27
	6H	11.53	12.73	12.13	12.79	13.42	11.90	13.10	12.50	13.16	13.79
	8H	11.79	12.38	12.40	13.00	13.64	12.21	12.80	12.83	13.42	14.07
12H	12H	12.42	12.94	13.03	13.99	14.26	12.74	13.26	13.35	14.31	14.58
	4H	11.15	11.86	11.74	12.45	13.08	11.31	12.01	11.90	12.61	13.24
	6H	12.52	12.20	12.23	12.78	13.47	12.86	12.54	12.57	13.12	13.81
	8H	11.91	12.44	12.53	13.04	13.75	12.32	12.84	12.94	13.45	14.16
Variation with the observer position at spacings:											
S = 1.0H		0.3/-0.4					0.3/-0.5				
S = 1.5H		0.7/-0.7					0.6/-0.7				
S = 2.0H		0.9/-0.9					0.8/-0.8				
Standard tables:		BK3					BK4				
Uncorrected UGR		2.6					3.3				



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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



PQL 91310 LED SMD 4'15WT8/40K/PSP/V5 /

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Intensity data(cd)

C/γ(°)	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0
0.0	4164.33	3973.33	3482.63	2722.49	1769.77	728.21	141.86	133.35	142.58
30.0	4164.33	3963.90	3376.96	2485.34	1484.32	775.49	141.86	133.35	142.58
60.0	4157.27	4114.90	3291.34	2257.68	1712.68	614.72	151.32	142.87	142.58
90.0	4164.33	4143.22	3271.79	2321.37	1643.27	439.66	141.86	133.35	142.58
120.0	4158.48	4124.34	3288.82	2200.76	1646.07	510.69	141.86	133.35	133.08
150.0	4157.27	3954.46	3614.76	2532.77	1465.29	756.58	141.86	133.35	133.08
180.0	4164.33	3935.58	3407.13	2637.12	1636.56	595.81	132.40	133.35	142.58
210.0	4164.33	3888.40	3310.89	2547.68	1531.89	718.75	132.40	133.35	142.58
240.0	4157.27	3992.21	3400.22	2324.08	1665.10	463.40	132.40	133.35	133.08
270.0	4164.33	4131.42	3407.13	2409.45	1731.71	463.40	141.86	133.35	133.08
300.0	4166.75	4020.52	3497.13	2345.76	1705.97	576.89	141.86	142.87	142.58
330.0	4157.27	3907.27	3567.57	2807.87	1569.95	756.58	141.86	142.87	142.58
360.0	4164.33	3973.33	3482.63	2722.49	1769.77	728.21	141.86	133.35	142.58

C/γ(°)	135.0	150.0	165.0	180.0
0.0	142.72	142.72	142.29	142.29
30.0	142.72	142.72	142.29	142.29
60.0	142.72	142.72	142.29	142.29
90.0	142.72	142.72	142.29	142.29
120.0	142.72	142.72	142.29	142.29
150.0	142.72	142.72	142.29	142.29
180.0	142.72	142.72	142.29	142.29
210.0	142.72	142.72	142.29	142.29
240.0	142.72	142.72	142.29	142.29
270.0	142.72	142.72	142.29	142.29
300.0	142.72	142.72	142.29	142.29
330.0	142.72	142.72	142.29	142.29
360.0	142.72	142.72	142.29	142.29