乐达凯

Client:
LumCAT: RYNW0648LAJUDBK
Luminaire: LED lamp
Report No:
Ballast type:

Test No:	Voltage(V): 120.040
LampCAT:	Current(A): 0.324
Lamp flux(lm): 788.3	Power (W): 38.510
Number of Lamps: 1	PF: 0.991
Length(mm): 30	Width(mm): 20
Phm Type: C	Height(mm): 1160

Photometric Results

Lumens(lm): 788.32, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 20.47
Central intensity(cd): 2.747, Maximum intensity(cd): 195.953
Angle of maximum intensity: C=30.0 γ=85.0
Beam Angle(50%Imax): [C0/180]Total=292.4
[C90/270]Total=114.6
Field angle(10%Imax): [C0/180]Total=346.4
[C90/270]Total=317.6
Maximum s/h(1/2): C0_180=7.21 C90_270=6.20
Maximum s/h(1/4): C0_180=6.75 C90_270=5.68
Up flux rate of lamp(%): 48.87%
Down flux rate of lamp(%): 51.13%
Up flux rate of LUM(%): 48.87%
Down flux rate of LUM(%): 51.13%
CIE Type : General diffuse lighting
Output flux ratio in π solid angle : 19.559%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6.715	0.000	0	0.00%	0.00%
5.0	10.378	0.204	0.204	0.03%	0.03%
10.0	14.613	0.894	1.098	0.11%	0.14%
15.0	19.191	2.005	3.104	0.25%	0.39%
20.0	25.601	3.691	6.795	0.47%	0.86%
25.0	32.544	6.098	12.893	0.77%	1.64%
30.0	38.763	9.024	21.917	1.14%	2.78%
35.0	45.135	12.355	34.272	1.57%	4.35%
40.0	51.048	16.047	50.319	2.04%	6.38%
45.0	56.657	19.943	70.262	2.53%	8.91%
50.0	62.075	23.991	94.253	3.04%	11.96%
55.0	66.806	28.023	122.276	3.55%	15.51%
60.0	71.269	31.916	154.192	4.05%	19.56%
65.0	74.894	35.533	189.724	4.51%	24.07%
70.0	77.984	38.710	228.434	4.91%	28.98%
75.0	80.235	41.356	269.79	5.25%	34.22%
80.0	81.800	43.356	313.146	5.50%	39.72%
85.0	82.639	44.682	357.828	5.67%	45.39%
90.0	82.715	45.275	403.104	5.74%	51.13%
95.0	81.914	45.077	448.18	5.72%	56.85%
100.0	80.541	44.143	492.323	5.60%	62.45%
105.0	78.251	42.488	534.812	5.39%	67.84%
110.0	75.428	40.169	574.981	5.10%	72.94%
115.0	71.956	37.319	612.3	4.73%	77.67%
120.0	68.179	34.067	646.367	4.32%	81.99%
125.0	63.257	30.381	676.748	3.85%	85.85%
130.0	58.298	26.430	703.178	3.35%	89.20%
135.0	52.765	22.442	725.62	2.85%	92.05%
140.0	47.538	18.572	744.192	2.36%	94.40%
145.0	41.167	14.800	758.992	1.88%	96.28%
150.0	34.681	11.169	770.161	1.42%	97.70%
155.0	28.424	7.986	778.147	1.01%	98.71%
160.0	21.976	5.286	783.433	0.67%	99.38%
165.0	14.918	3.041	786.473	0.39%	99.77%
170.0	8.623	1.396	787.87	0.18%	99.94%
175.0	2.900	0.412	788.282	0.05%	99.99%
180.0	0.496	0.041	788.323	0.01%	100.00%

Zonal flux distribution table

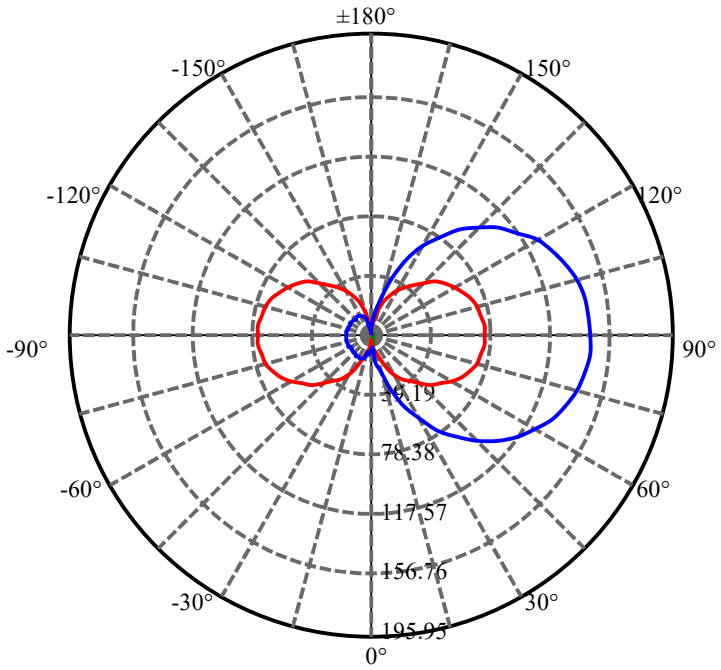
ZONAL LUMEN SUMMARY

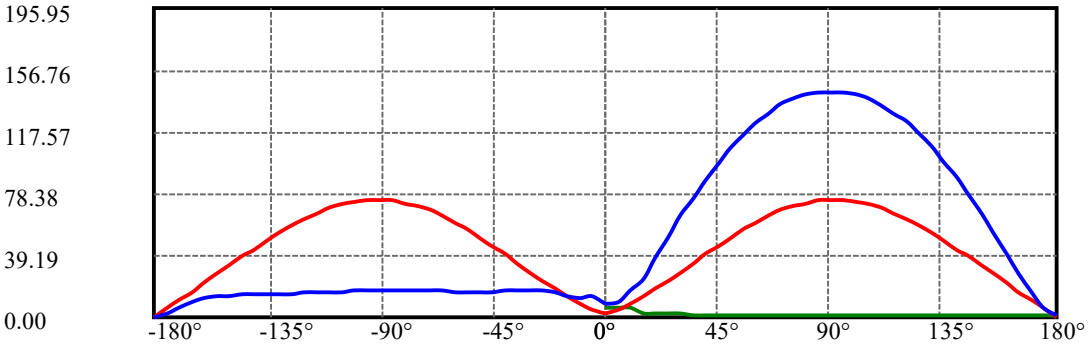
Zone	Lumens	%Lamp	%Fixt
0-30	21.92	2.78%	2.78%
0-40	50.32	6.38%	6.38%
0-60	154.19	19.56%	19.56%
0-90	403.10	51.13%	51.13%
0-120	646.37	81.99%	81.99%
0-180	788.32	100.00%	100.00%
60-90	248.91	31.57%	31.57%
90-120	243.26	30.86%	30.86%
90-130	300.07	38.07%	38.06%
90-150	367.06	46.56%	46.56%
90-180	385.18	48.86%	48.86%
0-117.69	630.66	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	1.10
10-20	5.70
20-30	15.12
30-40	28.40
40-50	43.93
50-60	59.94
60-70	74.24
70-80	84.71
80-90	89.96
90-100	89.22
100-110	82.66
110-120	71.39
120-130	56.81
130-140	41.01
140-150	25.97
150-160	13.27
160-170	4.44
170-180	0.41

Light Distribution Curve [Unit:cd]





C30(Max):

C0/C180:

C90/C270:

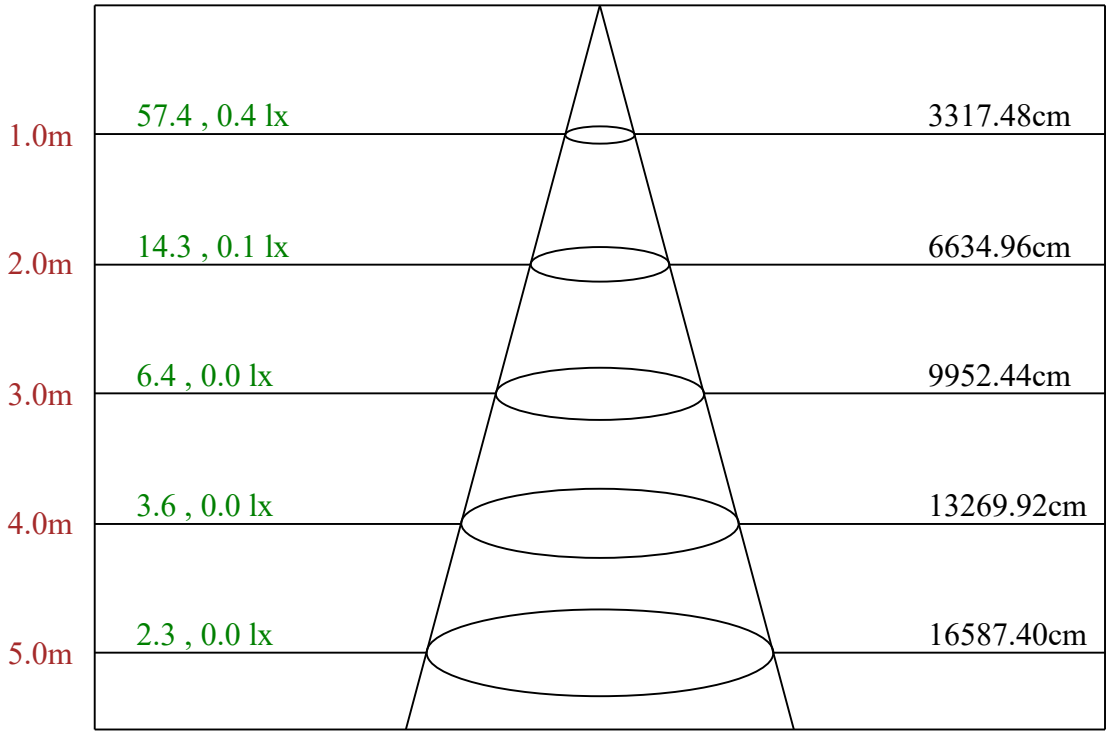
Field angle(10%Imax):C0/180Left:268.3 Right:78.3

:C90/270Left:237.0 Right:80.6

Beam Angle(50%Imax):C0/180Left:241.3 Right:51.3

:C90/270Left:56.9 Right:57.7

Lux distance Curve



Max , Ave

Beam angle of C30 plane 173.10

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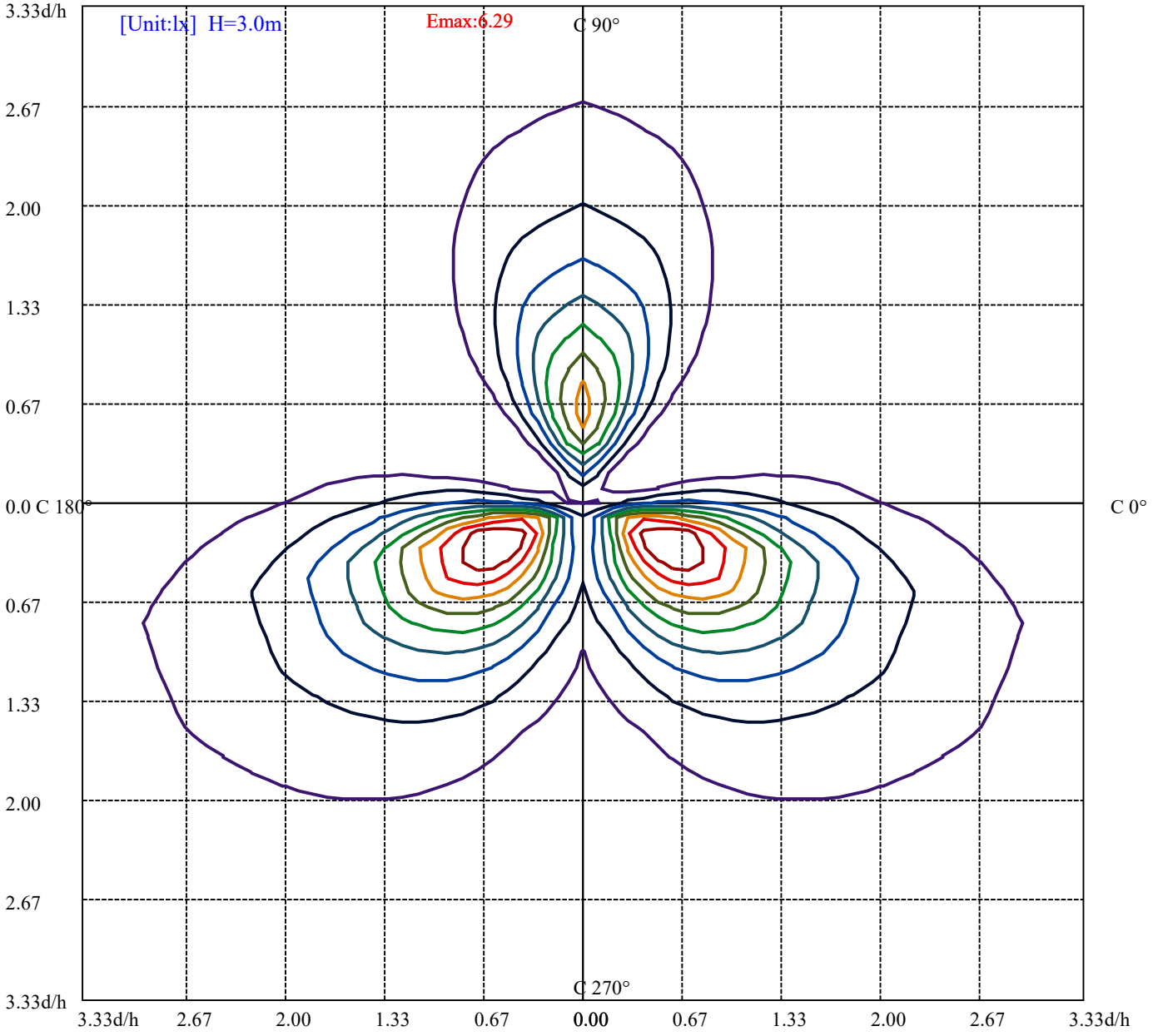
ISO illuminance diagram



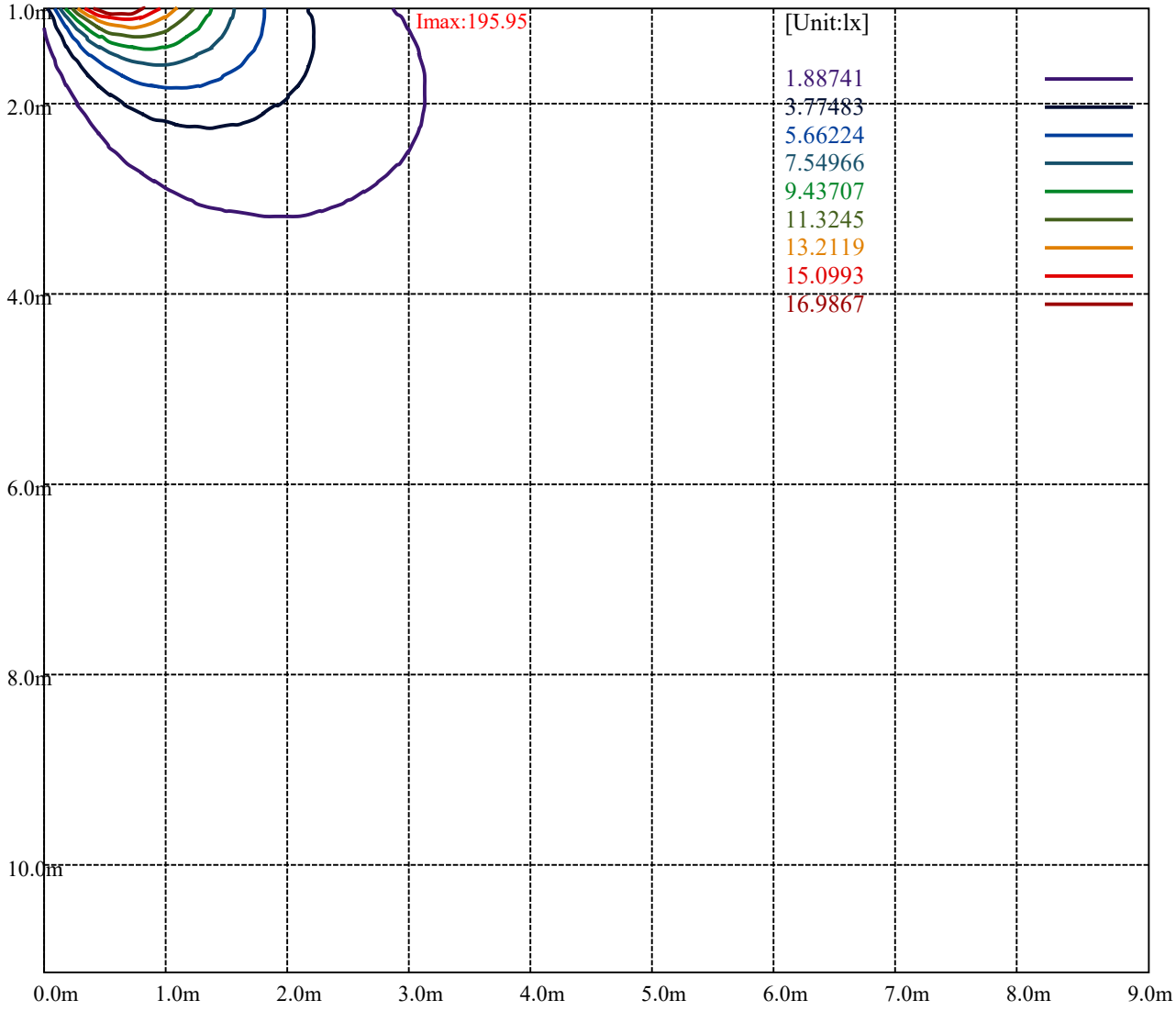
(10%Emax) 0.6291222
(20%Emax) 1.258244
(30%Emax) 1.887367
(40%Emax) 2.516489
(50%Emax) 3.145611
(60%Emax) 3.774733
(70%Emax) 4.403856
(80%Emax) 5.032978
(90%Emax) 5.6621

Equipment: LC-I-902 GMS-2000
Temperature(°C): 25.1

Date: 2024/11/30
Humidity(%): 62.1%

Operator: JUN WANG
Distance(m): 30.26

Space ISO Lux diagram



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Humidity(%): 62.1%

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Distance(m): 30.26

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Luminance Limitting Curve(no luminous side)

Luminance Table

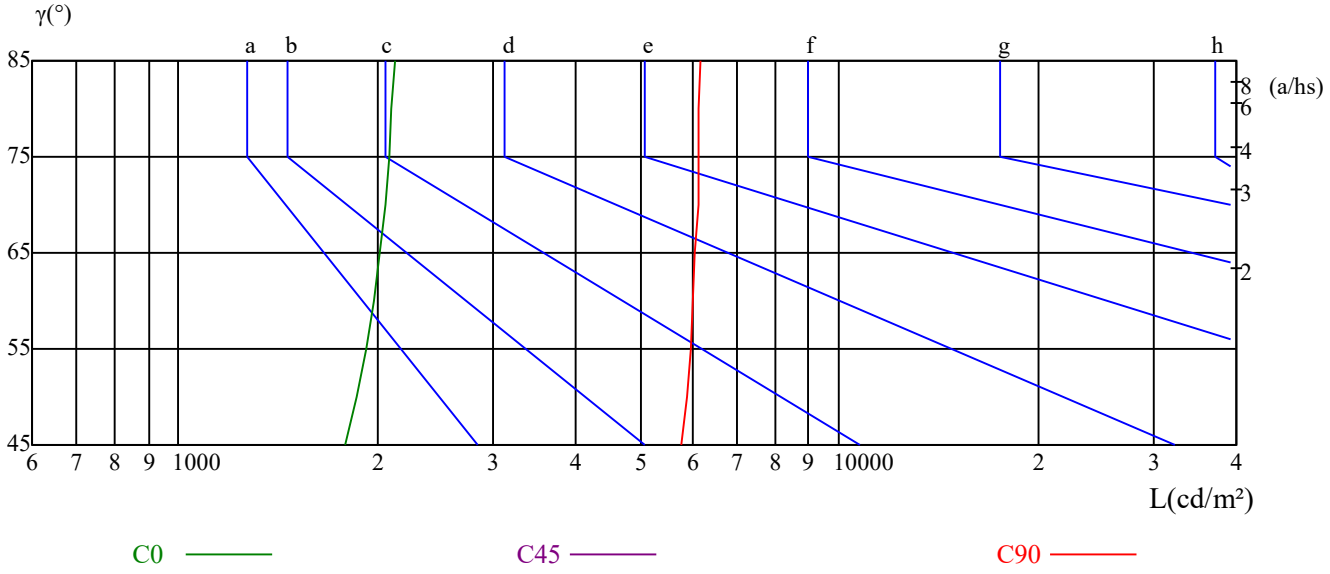
γ	45	50	55	60	65	70	75	80	85
C0	1792	1862	1920	1970	2016	2059	2088	2104	2123
C45	140	144	135	128	135	130	127	124	123
C90	5767	5900	5963	6017	6067	6117	6128	6144	6167

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
252776	287082	270832	454026	498250	470242	1409569	1523385	1431457

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 Limitting Curve



Utilization factor table for indoor luminaire

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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.07	1.07	1.07	0.99	0.99	0.99	0.84	0.84	0.84	0.70	0.70	0.70	0.57	0.57	0.57	0.51
1	0.85	0.79	0.74	0.78	0.73	0.68	0.65	0.61	0.57	0.53	0.49	0.46	0.41	0.39	0.37	0.31
2	0.71	0.63	0.56	0.65	0.58	0.51	0.54	0.48	0.42	0.43	0.38	0.34	0.33	0.30	0.26	0.21
3	0.61	0.51	0.44	0.55	0.47	0.40	0.45	0.39	0.33	0.36	0.31	0.26	0.27	0.23	0.20	0.16
4	0.53	0.43	0.35	0.48	0.39	0.32	0.39	0.32	0.27	0.31	0.26	0.21	0.23	0.19	0.16	0.12
5	0.46	0.36	0.29	0.42	0.33	0.27	0.34	0.27	0.22	0.27	0.22	0.17	0.20	0.16	0.13	0.09
6	0.41	0.31	0.24	0.37	0.29	0.22	0.30	0.23	0.18	0.24	0.19	0.14	0.18	0.14	0.10	0.07
7	0.36	0.27	0.21	0.33	0.25	0.19	0.27	0.20	0.16	0.22	0.16	0.12	0.16	0.12	0.09	0.06
8	0.33	0.24	0.18	0.30	0.22	0.16	0.24	0.18	0.13	0.19	0.14	0.10	0.15	0.11	0.08	0.05
9	0.30	0.21	0.16	0.27	0.19	0.14	0.22	0.16	0.12	0.18	0.13	0.09	0.13	0.09	0.06	0.04
10	0.27	0.19	0.14	0.25	0.17	0.12	0.20	0.14	0.10	0.16	0.11	0.08	0.12	0.08	0.06	0.04

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	2.75	4.58	9.16	15.57	21.98	29.30	36.63	44.87	52.19
15.0	4.58	4.58	4.58	3.66	3.66	2.75	2.75	2.75	2.75
30.0	7.33	6.41	7.33	2.75	2.75	1.83	1.83	0.92	0.92
45.0	9.16	9.16	10.07	2.75	2.75	1.83	1.83	0.92	0.92
60.0	12.82	12.82	15.57	8.24	10.99	14.65	17.40	20.14	21.98
75.0	13.74	14.65	20.14	18.31	27.47	36.63	44.87	53.11	61.35
90.0	8.24	9.16	17.40	24.72	37.54	51.28	64.10	76.00	86.99
105.0	2.75	3.66	11.90	21.98	33.88	44.87	55.86	65.93	75.08
120.0	2.75	2.75	8.24	13.74	20.14	25.64	31.13	36.63	41.21
135.0	1.83	2.75	3.66	4.58	5.49	6.41	6.41	7.33	7.33
150.0	5.49	4.58	4.58	2.75	2.75	2.75	1.83	1.83	0.92
165.0	9.16	7.33	8.24	2.75	2.75	2.75	1.83	1.83	1.83
180.0	2.75	5.49	8.24	10.99	13.74	17.40	20.14	23.81	27.47
195.0	4.58	12.82	21.98	33.88	45.78	59.52	73.25	86.99	100.72
210.0	7.33	17.40	28.39	43.04	59.52	75.08	90.65	108.05	122.70
225.0	9.16	17.40	21.98	34.80	46.70	59.52	71.42	84.24	96.15
240.0	12.82	17.40	17.40	26.55	33.88	43.04	50.36	58.60	65.93
255.0	13.74	18.31	14.65	19.23	24.72	28.39	31.13	34.80	37.54
270.0	8.24	12.82	11.90	13.74	15.57	16.48	16.48	16.48	16.48
285.0	2.75	8.24	13.74	17.40	21.06	22.89	24.72	25.64	25.64
300.0	2.75	9.16	17.40	23.81	25.64	38.46	43.95	50.36	54.94
315.0	1.83	11.90	21.06	32.05	42.12	54.02	65.01	75.08	85.16
330.0	5.49	16.48	26.55	41.21	55.86	71.42	86.07	99.81	115.37
345.0	9.16	19.23	26.55	42.12	57.69	74.17	90.65	107.13	123.62
360.0	2.75	4.58	9.16	15.57	21.98	29.30	36.63	44.87	52.19

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	59.52	66.84	74.17	80.58	86.99	91.57	96.15	98.89	100.72
15.0	2.75	3.66	3.66	3.66	3.66	3.66	3.66	3.66	4.58
30.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
45.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
60.0	24.72	27.47	29.30	31.13	32.05	32.96	34.80	34.80	34.80
75.0	68.68	75.08	81.49	86.99	90.65	94.31	97.06	98.89	99.81
90.0	97.06	107.13	115.37	122.70	129.11	134.60	138.27	141.01	142.84
105.0	84.24	92.48	99.81	106.22	111.71	116.29	119.04	121.78	122.70
120.0	45.78	49.45	53.11	56.77	59.52	61.35	63.18	64.10	65.01
135.0	7.33	8.24	8.24	8.24	9.16	9.16	9.16	9.16	9.16
150.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
165.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
180.0	30.22	33.88	36.63	39.37	41.21	43.95	44.87	45.78	46.70
195.0	113.54	126.36	136.43	148.34	157.49	164.82	171.23	175.81	177.64
210.0	137.35	151.09	163.90	174.89	184.05	193.21	197.78	203.28	204.19
225.0	106.22	117.21	125.45	133.69	141.01	146.51	150.17	152.92	154.75
240.0	72.34	78.75	84.24	89.74	93.40	96.15	98.89	100.72	100.72
255.0	40.29	42.12	44.87	45.78	47.61	49.45	50.36	50.36	51.28
270.0	15.57	15.57	15.57	15.57	16.48	16.48	16.48	16.48	16.48
285.0	27.47	28.39	29.30	30.22	30.22	31.13	31.13	32.05	32.05
300.0	60.43	65.01	68.68	72.34	75.08	77.83	79.66	80.58	81.49
315.0	95.23	103.47	110.80	118.12	123.62	128.19	131.86	133.69	134.60
330.0	128.19	140.10	152.00	162.07	170.31	177.64	182.22	185.88	187.71
345.0	139.18	153.83	166.65	180.39	190.46	198.70	206.03	209.69	212.43
360.0	59.52	66.84	74.17	80.58	86.99	91.57	96.15	98.89	100.72

Intensity data(cd)

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	101.64	101.64	99.81	97.98	94.31	90.65	85.16	79.66	73.25
15.0	4.58	4.58	4.58	4.58	4.58	4.58	4.58	3.66	3.66
30.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
45.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
60.0	35.71	34.80	34.80	33.88	32.96	32.05	30.22	28.39	26.55
75.0	100.72	99.81	98.89	97.06	94.31	90.65	86.07	81.49	75.08
90.0	142.84	141.93	141.01	138.27	133.69	129.11	123.62	116.29	108.05
105.0	123.62	122.70	120.87	118.12	115.37	110.80	105.30	99.81	92.48
120.0	65.01	65.01	64.10	62.27	60.43	58.60	55.86	52.19	48.53
135.0	9.16	9.16	9.16	9.16	8.24	8.24	7.33	7.33	6.41
150.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
165.0	1.83	0.92	0.92	1.83	0.92	0.92	0.92	0.92	0.92
180.0	46.70	46.70	45.78	44.87	43.95	41.21	39.37	36.63	33.88
195.0	176.72	175.81	171.23	165.74	158.41	149.25	139.18	128.19	116.29
210.0	204.19	201.45	197.78	191.37	183.13	173.06	162.07	150.17	137.35
225.0	153.83	152.92	149.25	144.68	139.18	132.77	130.94	115.37	105.30
240.0	100.72	99.81	99.81	95.23	92.48	87.90	83.33	77.83	72.34
255.0	51.28	50.36	49.45	48.53	47.61	45.78	43.95	41.21	39.37
270.0	16.48	16.48	16.48	15.57	15.57	15.57	15.57	14.65	14.65
285.0	32.05	31.13	31.13	30.22	29.30	29.30	28.39	26.55	25.64
300.0	81.49	80.58	78.75	76.92	74.17	71.42	67.76	63.18	58.60
315.0	134.60	132.77	130.94	126.36	121.78	116.29	108.96	101.64	93.40
330.0	186.80	184.96	180.39	174.89	168.48	158.41	149.25	138.27	125.45
345.0	212.43	209.69	205.11	197.78	188.63	177.64	165.74	152.00	139.18
360.0	101.64	101.64	99.81	97.98	94.31	90.65	85.16	79.66	73.25

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	66.84	58.60	52.19	44.87	37.54	30.22	22.89	15.57	9.16
15.0	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	2.75
30.0	0.92	0.92	0.92	0.92	0.92	0.92	1.83	1.83	1.83
45.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
60.0	23.81	21.98	19.23	15.57	12.82	9.16	6.41	3.66	1.83
75.0	69.59	62.27	54.02	45.78	37.54	28.39	19.23	10.99	3.66
90.0	98.89	88.82	77.83	65.93	54.02	40.29	27.47	15.57	5.49
105.0	84.24	76.00	65.93	55.86	45.78	34.80	23.81	12.82	4.58
120.0	43.95	39.37	34.80	29.30	23.81	17.40	11.90	6.41	1.83
135.0	5.49	5.49	4.58	3.66	2.75	2.75	1.83	0.92	0.92
150.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
165.0	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
180.0	30.22	27.47	24.72	21.06	17.40	13.74	9.16	6.41	1.83
195.0	103.47	90.65	77.83	65.93	52.19	48.53	25.64	14.65	3.66
210.0	121.78	119.04	93.40	76.00	61.35	44.87	29.30	15.57	4.58
225.0	95.23	84.24	72.34	60.43	48.53	34.80	23.81	12.82	2.75
240.0	65.01	58.60	51.28	43.04	34.80	26.55	17.40	10.07	1.83
255.0	36.63	32.96	30.22	26.55	22.89	18.31	12.82	7.33	1.83
270.0	14.65	14.65	14.65	13.74	13.74	11.90	9.16	5.49	1.83
285.0	24.72	22.89	21.98	20.14	18.31	15.57	11.90	7.33	2.75
300.0	54.02	48.53	43.04	37.54	31.13	23.81	16.48	9.16	2.75
315.0	84.24	74.17	64.10	53.11	43.04	32.05	21.98	11.90	2.75
330.0	112.63	99.81	85.16	70.51	55.86	41.21	28.39	15.57	3.66
345.0	123.62	108.05	93.40	76.00	61.35	45.78	30.22	16.48	4.58
360.0	66.84	58.60	52.19	44.87	37.54	30.22	22.89	15.57	9.16

Intensity data(cd)

C/γ(°)	180.0
0.0	0.92
15.0	1.83
30.0	0.92
45.0	0.92
60.0	0.92
75.0	0.92
90.0	0.92
105.0	0.92
120.0	0.92
135.0	0.92
150.0	0.92
165.0	0.92
180.0	0.00
195.0	0.00
210.0	0.00
225.0	0.00
240.0	0.00
255.0	0.00
270.0	0.00
285.0	0.00
300.0	0.00
315.0	0.00
330.0	0.00
345.0	0.00
360.0	0.92