正奇事

Client:
LumCAT: ZS-FL2*2-K40-3065
Luminaire: LED 灯具
Report No:
Ballast type:

Test No:	Voltage(V): 120.010
LampCAT:	Current(A): 0.311
Lamp flux(lm): 4868.6	Power (W): 37.060
Number of Lamps: 1	PF: 0.994
Length(mm): 580	Width(mm): 580
Phm Type: C	Height(mm): 8

Photometric Results

Lumens(lm): 4868.57, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 131.37
Central intensity(cd): 1895.204, Maximum intensity(cd): 1895.204
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=97.8
[C90/270]Total=96.8
Field angle(10%Imax): [C0/180]Total=161.8
[C90/270]Total=162.0
Maximum s/h(1/2): C0_180=1.17 C90_270=1.16
Maximum s/h(1/4): C0_180=1.28 C90_270=1.26
Up flux rate of lamp(%): 2.23%
Down flux rate of lamp(%): 97.77%
Up flux rate of LUM(%): 2.23%
Down flux rate of LUM(%): 97.77%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 77.248%

正奇事 ZS-FL2*2-K40-3065

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1895.204	0.000	0	0.00%	0.00%
5.0	1882.479	45.161	45.161	0.93%	0.93%
10.0	1846.176	133.386	178.547	2.74%	3.67%
15.0	1786.781	215.505	394.051	4.43%	8.09%
20.0	1703.918	287.683	681.734	5.91%	14.00%
25.0	1599.502	346.468	1028.202	7.12%	21.12%
30.0	1479.593	389.662	1417.864	8.00%	29.12%
35.0	1339.209	415.088	1832.952	8.53%	37.65%
40.0	1195.529	422.902	2255.854	8.69%	46.34%
45.0	1054.030	416.524	2672.378	8.56%	54.89%
50.0	907.617	396.379	3068.758	8.14%	63.03%
55.0	771.919	365.187	3433.945	7.50%	70.53%
60.0	642.557	326.952	3760.897	6.72%	77.25%
65.0	518.336	282.215	4043.112	5.80%	83.05%
70.0	406.591	234.197	4277.309	4.81%	87.86%
75.0	307.122	186.553	4463.862	3.83%	91.69%
80.0	217.123	140.273	4604.136	2.88%	94.57%
85.0	143.889	98.096	4702.232	2.01%	96.58%
90.0	67.235	57.807	4760.039	1.19%	97.77%
95.0	25.592	25.417	4785.456	0.52%	98.29%
100.0	17.995	11.844	4797.299	0.24%	98.54%
105.0	19.723	10.092	4807.392	0.21%	98.74%
110.0	17.965	9.851	4817.243	0.20%	98.95%
115.0	17.179	8.899	4826.142	0.18%	99.13%
120.0	16.206	8.116	4834.258	0.17%	99.30%
125.0	14.295	7.050	4841.308	0.14%	99.44%
130.0	12.685	5.866	4847.174	0.12%	99.56%
135.0	10.662	4.718	4851.892	0.10%	99.66%
140.0	8.229	3.498	4855.39	0.07%	99.73%
145.0	7.635	2.647	4858.036	0.05%	99.78%
150.0	8.608	2.392	4860.428	0.05%	99.83%
155.0	9.057	2.236	4862.664	0.05%	99.88%
160.0	9.506	1.947	4864.611	0.04%	99.92%
165.0	10.292	1.632	4866.242	0.03%	99.95%
170.0	11.153	1.272	4867.514	0.03%	99.98%
175.0	12.200	0.835	4868.35	0.02%	100.00%
180.0	6.287	0.221	4868.571	0.00%	100.00%

Zonal flux distribution table

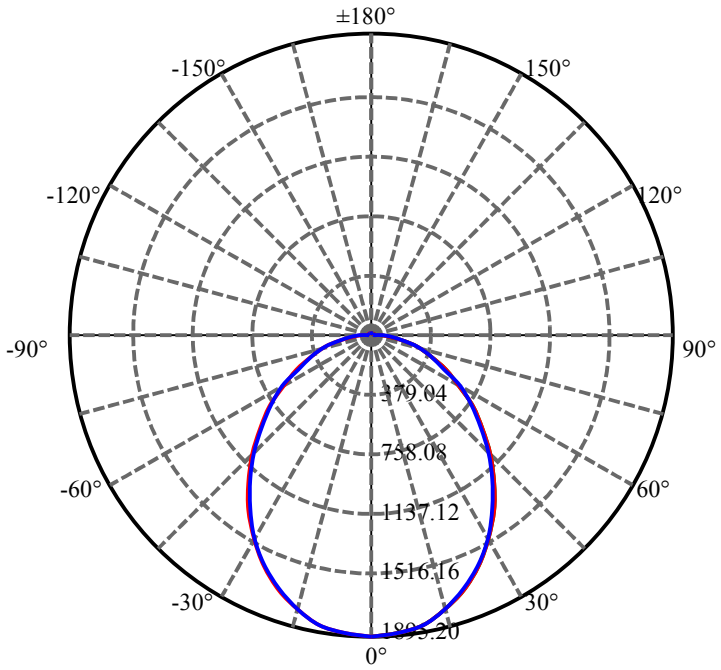
ZONAL LUMEN SUMMARY

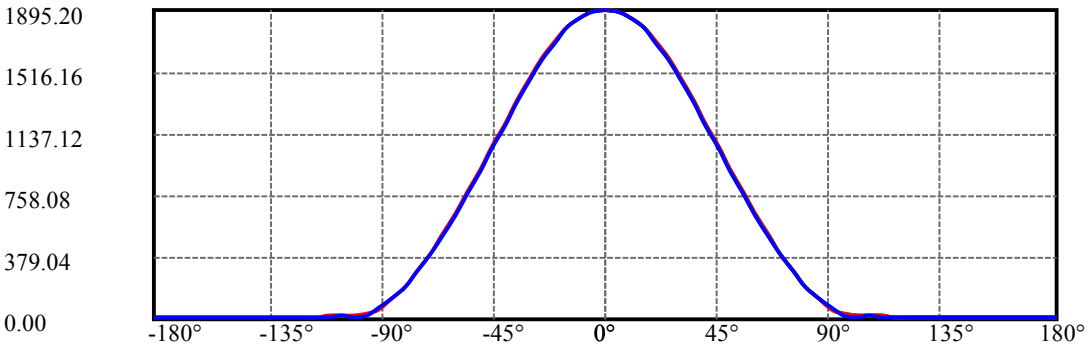
Zone	Lumens	%Lamp	%Fixt
0-30	1417.86	29.12%	29.12%
0-40	2255.85	46.34%	46.34%
0-60	3760.90	77.25%	77.25%
0-90	4760.04	97.77%	97.77%
0-120	4834.26	99.30%	99.30%
0-180	4868.57	100.00%	100.00%
60-90	999.14	20.52%	20.52%
90-120	74.22	1.52%	1.52%
90-130	87.14	1.79%	1.79%
90-150	100.39	2.06%	2.06%
90-180	108.31	2.22%	2.22%
0-62.37	3894.86	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	178.55
10-20	503.19
20-30	736.13
30-40	837.99
40-50	812.90
50-60	692.14
60-70	516.41
70-80	326.83
80-90	155.90
90-100	37.26
100-110	19.94
110-120	17.01
120-130	12.92
130-140	8.22
140-150	5.04
150-160	4.18
160-170	2.90
170-180	0.84

Light Distribution Curve [Unit:cd]





C0(Max):

C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:80.9 Right:80.9
:C90/270Left:81.0 Right:81.0

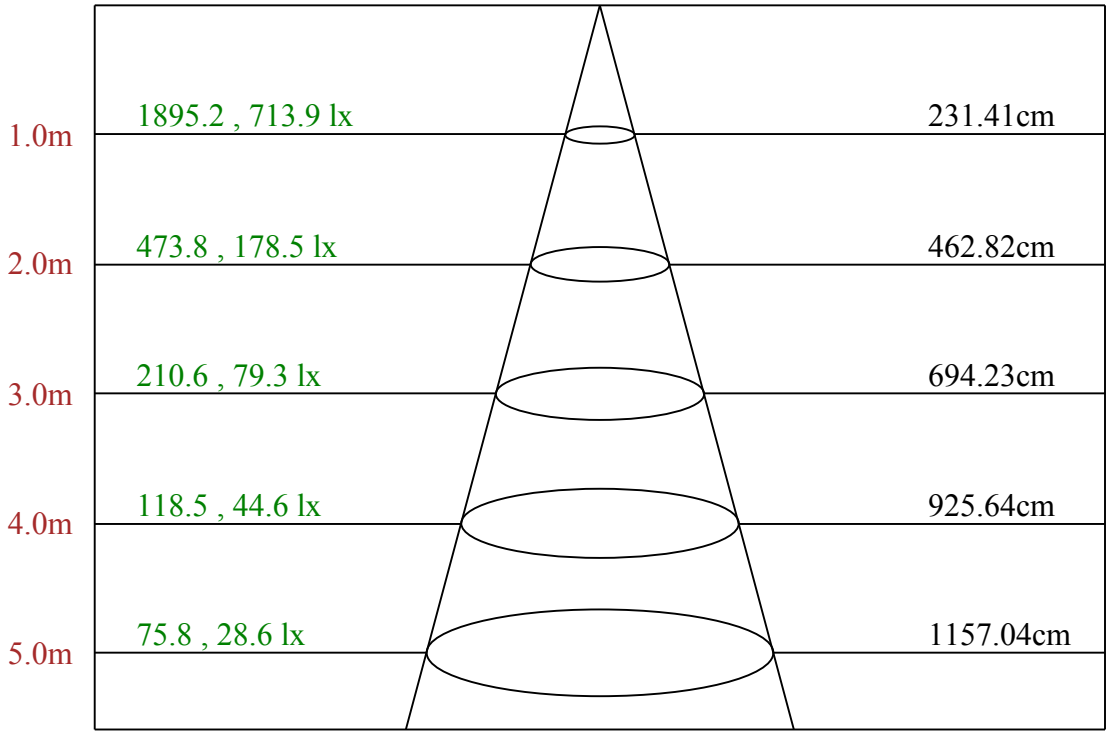
Beam Angle(50%Imax):C0/180Left:48.9 Right:48.9
:C90/270Left:48.4 Right:48.4

Equipment: LC-I-902 GMS-2000
Temperature(°C): 25.2

Date: 2023/5/11
Humidity(%): 62.1%

Operator: JUN WANG
Distance(m): 29.97

Lux distance Curve

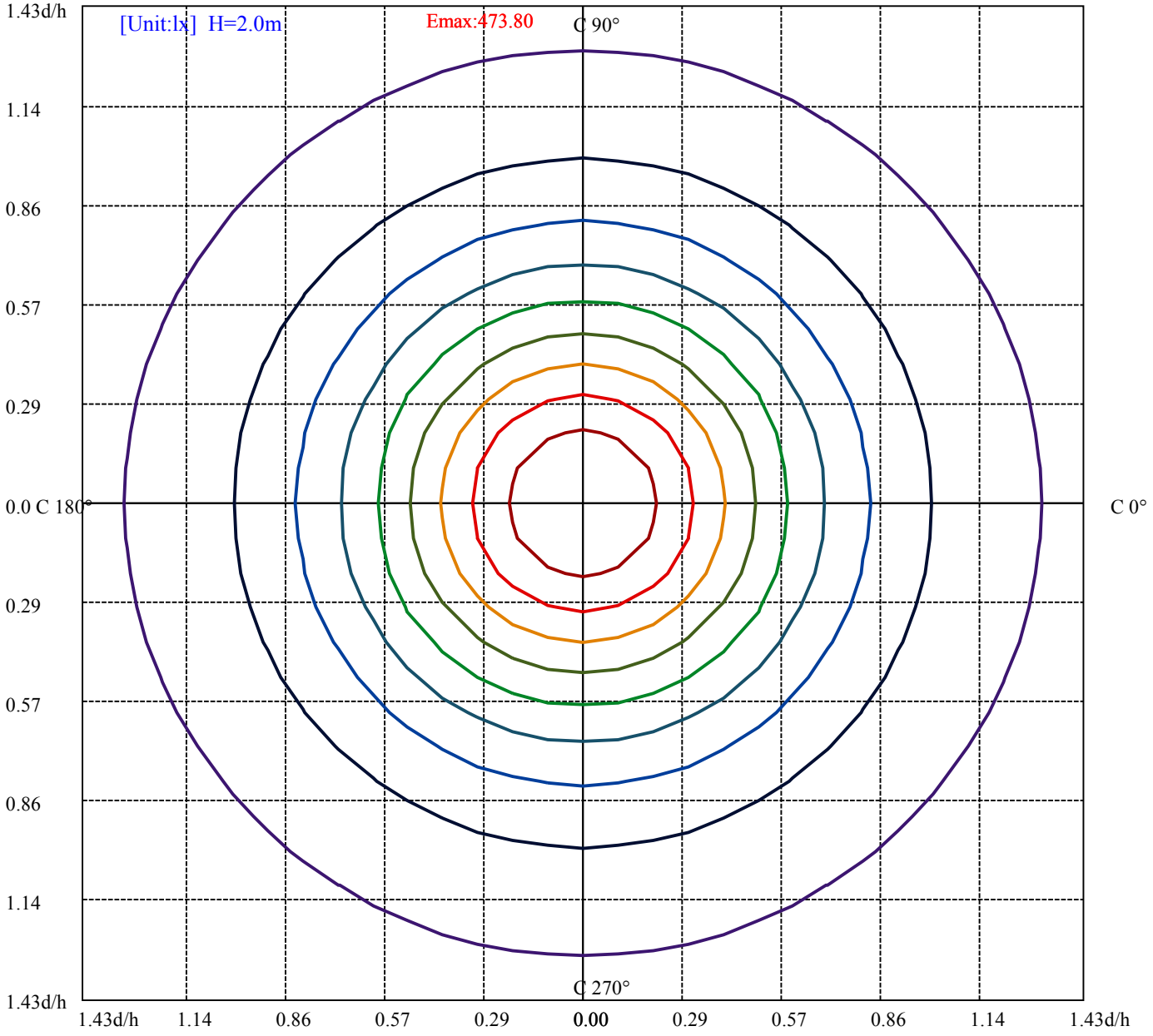


Max , Ave

Beam angle of C0 plane 98.33

正奇事 ZS-FL2*2-K40-3065

ISO illuminance diagram



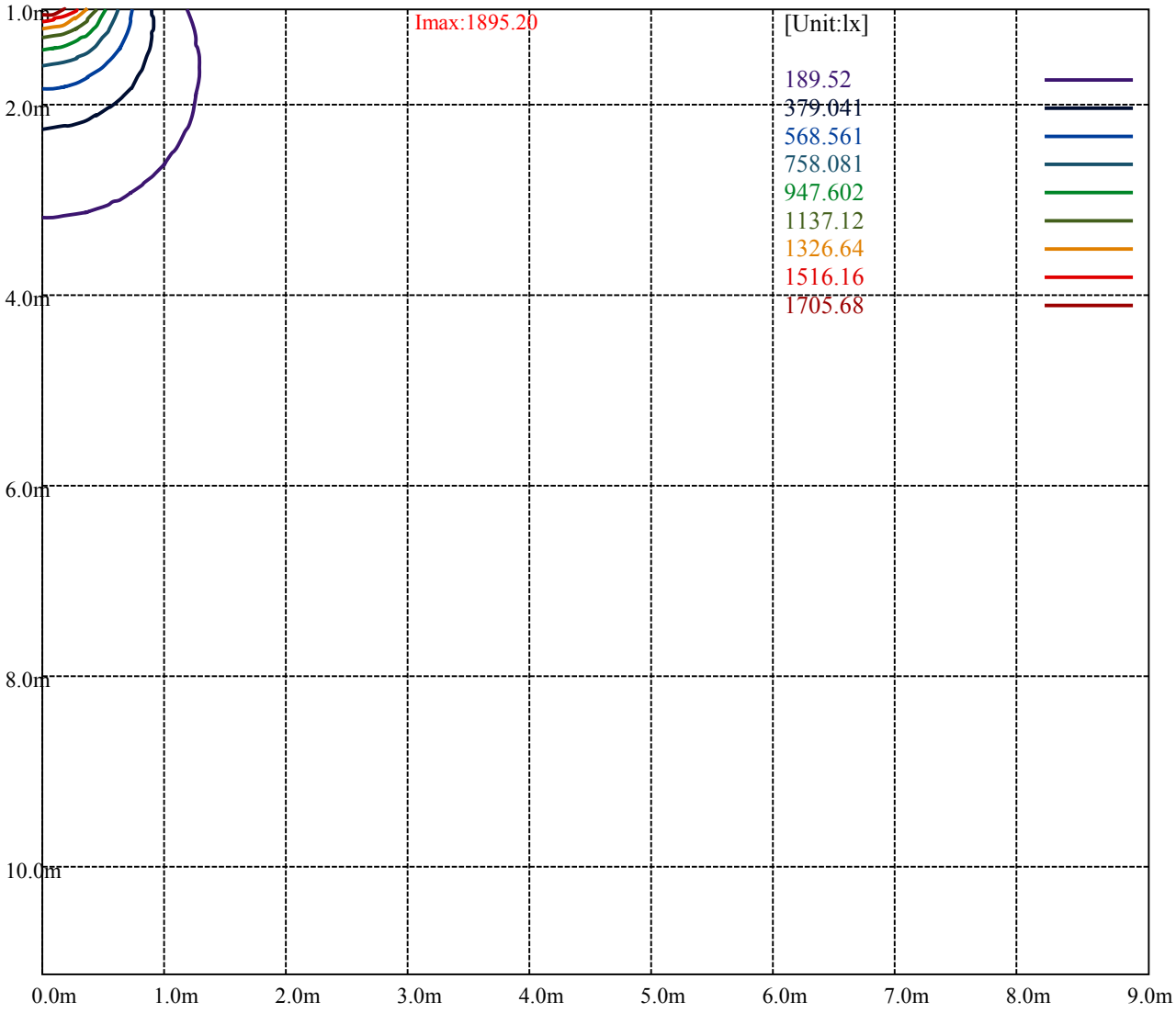
(10%Emax) 47.38
(20%Emax) 94.76025
(30%Emax) 142.1402
(40%Emax) 189.5202
(50%Emax) 236.9005
(60%Emax) 284.28
(70%Emax) 331.66
(80%Emax) 379.04
(90%Emax) 426.42

Equipment: LC-I-902 GMS-2000
Temperature(°C): 25.2

Date: 2023/5/11
Humidity(%): 62.1%

Operator: JUN WANG
Distance(m): 29.97

Space ISO Lux diagram



Equipment: LC-I-902 GMS-2000
Temperature(°C): 25.2

Date: 2023/5/11
Humidity(%): 62.1%

Operator: JUN WANG
Distance(m): 29.97

正奇事 ZS-FL2*2-K40-3065

Luminance Limitting Curve(no luminous side)

Luminance Table

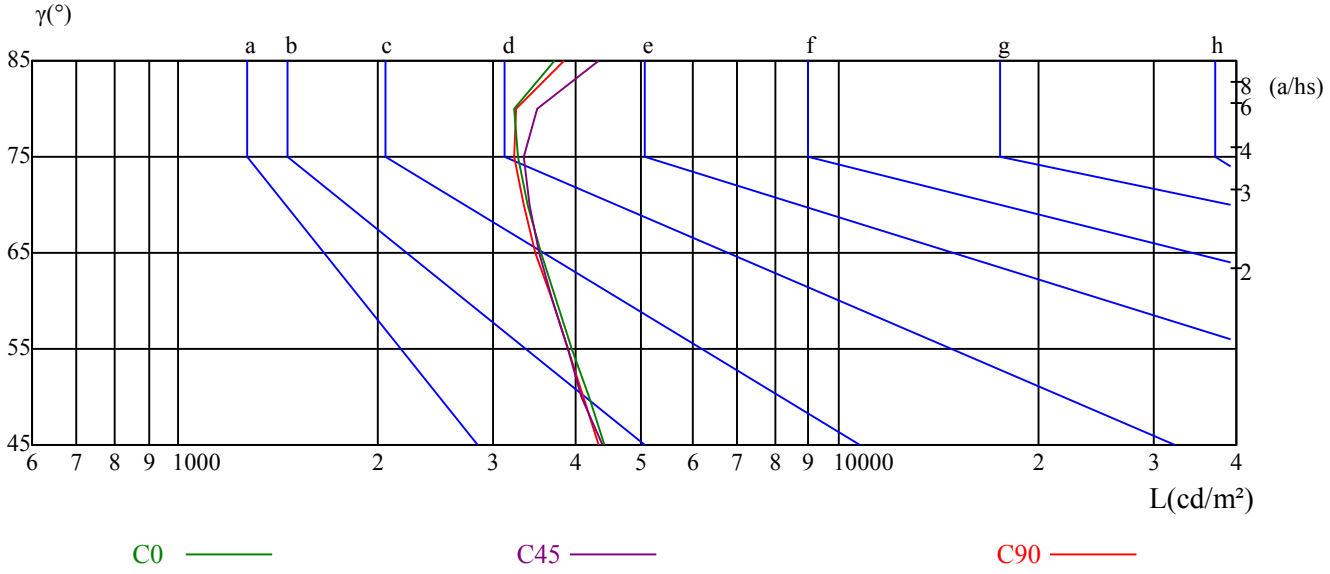
γ	45	50	55	60	65	70	75	80	85
C0	4403	4172	3954	3735	3548	3382	3276	3230	3717
C45	4384	4075	3888	3695	3514	3393	3342	3500	4337
C90	4336	4105	3896	3686	3481	3330	3220	3239	3826

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3653	3584	3661	3444	3385	3585	4303	4429	5304

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	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	0.98
1	1.03	0.99	0.95	1.01	0.97	0.93	0.96	0.93	0.90	0.92	0.89	0.86	0.88	0.86	0.84	0.81
2	0.90	0.83	0.78	0.88	0.82	0.76	0.84	0.79	0.74	0.80	0.76	0.72	0.77	0.74	0.70	0.68
3	0.79	0.71	0.65	0.78	0.70	0.64	0.74	0.68	0.63	0.71	0.66	0.61	0.69	0.64	0.60	0.58
4	0.71	0.62	0.55	0.69	0.61	0.55	0.66	0.59	0.54	0.64	0.58	0.53	0.61	0.56	0.52	0.50
5	0.63	0.55	0.48	0.62	0.54	0.48	0.60	0.52	0.47	0.58	0.51	0.46	0.55	0.50	0.45	0.43
6	0.57	0.48	0.42	0.56	0.48	0.42	0.54	0.47	0.41	0.52	0.46	0.41	0.51	0.45	0.40	0.38
7	0.52	0.43	0.37	0.51	0.43	0.37	0.49	0.42	0.37	0.48	0.41	0.36	0.46	0.40	0.36	0.34
8	0.48	0.39	0.33	0.47	0.39	0.33	0.45	0.38	0.33	0.44	0.37	0.33	0.43	0.37	0.32	0.30
9	0.44	0.36	0.30	0.43	0.35	0.30	0.42	0.35	0.30	0.41	0.34	0.30	0.39	0.34	0.29	0.27
10	0.41	0.33	0.28	0.40	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.27	0.37	0.31	0.27	0.25

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	1895.20	1883.65	1852.56	1798.36	1716.61	1617.10	1496.26	1359.43	1224.37
15.0	1895.20	1886.25	1852.21	1797.58	1720.55	1617.55	1497.53	1364.98	1225.25
30.0	1895.20	1884.41	1853.81	1801.61	1720.62	1620.73	1500.14	1363.36	1219.37
45.0	1895.20	1887.11	1851.13	1795.36	1718.91	1619.96	1500.33	1361.81	1219.69
60.0	1895.20	1888.01	1855.63	1798.96	1718.91	1619.96	1499.43	1364.51	1217.00
75.0	1895.20	1888.02	1854.78	1798.20	1717.36	1617.66	1497.30	1363.47	1213.47
90.0	1895.20	1888.91	1858.36	1805.34	1719.97	1622.02	1498.01	1363.22	1213.15
105.0	1895.20	1888.91	1860.12	1804.36	1725.20	1622.66	1503.03	1363.61	1216.10
120.0	1895.20	1891.59	1861.81	1810.37	1736.37	1634.39	1513.46	1380.79	1230.98
135.0	1895.20	1890.70	1862.78	1810.53	1736.67	1638.49	1522.29	1388.07	1241.25
150.0	1895.20	1891.61	1862.84	1812.49	1738.77	1643.47	1524.79	1392.63	1248.78
165.0	1895.20	1889.82	1863.81	1813.58	1739.14	1644.06	1527.46	1393.82	1253.90
180.0	1895.20	1880.99	1841.00	1777.92	1703.28	1592.22	1472.27	1330.11	1187.95
195.0	1895.20	1881.77	1842.36	1778.77	1693.68	1589.79	1464.39	1322.88	1177.78
210.0	1895.20	1879.01	1841.21	1777.32	1692.72	1587.44	1465.95	1321.96	1178.88
225.0	1895.20	1879.01	1836.74	1774.67	1684.73	1579.49	1456.26	1318.64	1168.42
240.0	1895.20	1877.21	1836.74	1772.87	1686.52	1574.99	1451.76	1311.44	1171.12
255.0	1895.20	1877.24	1833.23	1765.86	1676.94	1568.26	1440.71	1304.19	1164.97
270.0	1895.20	1874.54	1832.30	1767.60	1676.84	1557.32	1434.21	1294.02	1154.74
285.0	1895.20	1873.62	1829.54	1762.98	1669.43	1558.80	1427.47	1288.05	1147.74
300.0	1895.20	1875.35	1831.13	1762.54	1675.90	1563.09	1437.65	1293.25	1156.07
315.0	1895.20	1874.49	1832.15	1764.59	1673.62	1563.72	1439.42	1298.90	1152.98
330.0	1895.20	1874.53	1831.37	1764.84	1674.94	1566.15	1501.42	1297.33	1155.28
345.0	1895.20	1872.78	1830.63	1766.05	1676.35	1568.72	1438.67	1300.54	1153.45
360.0	1895.20	1883.65	1852.56	1798.36	1716.61	1617.10	1496.26	1359.43	1224.37

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	1077.77	931.16	793.44	653.06	532.22	414.05	310.09	209.69	132.39
15.0	1082.85	936.85	792.65	660.99	538.29	420.96	312.58	221.23	145.10
30.0	1077.19	930.50	793.72	656.93	537.24	424.76	322.17	233.08	158.38
45.0	1068.58	921.07	787.94	657.52	534.29	425.45	322.91	236.56	163.71
60.0	1067.68	921.07	784.35	653.92	536.99	423.65	322.01	234.76	160.11
75.0	1067.96	922.45	785.03	657.48	538.02	422.15	317.06	227.24	150.90
90.0	1068.47	922.89	789.89	661.39	536.48	422.35	316.32	223.76	142.88
105.0	1073.98	930.06	797.84	663.82	544.19	429.05	326.51	233.86	157.41
120.0	1082.97	940.38	799.60	666.93	548.71	436.80	335.72	246.38	172.37
135.0	1091.72	943.10	805.28	675.57	558.47	444.98	344.09	253.11	177.45
150.0	1105.84	953.00	818.14	680.58	558.31	445.03	343.44	251.73	172.62
165.0	1111.29	964.20	827.86	689.74	558.78	443.98	339.93	244.86	161.45
180.0	1045.78	902.73	762.35	633.51	506.45	393.61	289.66	197.25	119.95
195.0	1035.38	897.45	762.20	626.06	500.67	392.30	293.77	203.31	129.87
210.0	1033.99	889.11	754.12	629.03	512.95	401.36	298.77	215.08	143.09
225.0	1020.91	878.79	753.76	626.04	501.01	395.77	297.73	215.88	144.82
240.0	1024.51	888.69	750.17	618.84	497.41	388.58	290.53	206.88	140.32
255.0	1024.85	888.32	748.20	611.67	487.72	377.24	281.14	195.81	124.85
270.0	1022.64	881.55	743.16	608.37	482.56	372.93	273.18	184.22	116.82
285.0	1014.61	875.19	738.47	602.65	484.82	375.98	318.42	191.59	123.23
300.0	1007.17	871.79	738.23	666.93	484.63	378.14	280.67	198.55	133.57
315.0	1071.91	863.83	737.72	610.72	488.21	379.22	283.74	202.67	136.02
330.0	1008.74	862.19	730.93	605.06	490.88	377.60	276.91	197.79	129.46
345.0	1009.94	866.43	730.99	604.53	480.75	372.22	273.56	185.66	116.60
360.0	1077.77	931.16	793.44	653.06	532.22	414.05	310.09	209.69	132.39

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	70.19	31.10	23.10	19.55	17.77	16.88	15.99	15.10	14.22
15.0	77.03	32.24	23.29	19.70	17.02	16.12	15.23	14.33	13.43
30.0	80.09	28.80	21.60	19.80	18.90	18.00	16.20	13.50	11.70
45.0	81.85	25.19	17.09	18.89	18.89	17.09	16.19	15.29	13.49
60.0	78.25	26.08	12.59	17.09	16.19	15.29	15.29	11.69	10.79
75.0	68.26	32.34	8.08	15.27	13.47	13.47	13.47	13.47	12.57
90.0	68.30	31.45	5.39	16.18	15.28	14.38	14.38	14.38	13.48
105.0	83.65	34.18	8.10	15.29	13.49	12.59	13.49	13.49	12.59
120.0	104.69	31.59	12.63	18.05	17.15	16.24	15.34	11.73	10.83
135.0	109.89	26.12	17.11	18.92	18.92	18.02	17.11	15.31	13.51
150.0	106.09	30.57	21.58	19.78	18.88	17.98	16.18	12.59	11.69
165.0	95.07	31.39	23.32	19.73	17.04	16.14	15.25	14.35	13.45
180.0	39.09	28.43	23.10	20.44	18.66	17.77	15.99	15.10	13.33
195.0	44.78	28.66	23.29	20.60	17.91	17.02	16.12	14.33	12.54
210.0	49.49	27.90	21.60	22.50	21.60	20.70	18.90	12.60	11.70
225.0	53.07	23.39	21.59	22.49	21.59	19.79	18.89	17.09	11.69
240.0	49.47	16.19	22.49	21.59	18.89	17.99	17.09	12.59	12.59
255.0	44.91	9.88	8.98	19.76	15.27	16.17	16.17	15.27	14.37
270.0	77.28	8.99	8.09	19.77	17.07	17.07	17.07	16.18	15.28
285.0	44.97	11.69	15.29	18.89	15.29	16.19	16.19	15.29	14.39
300.0	47.83	18.05	23.46	21.66	19.85	18.95	17.15	13.54	12.63
315.0	49.54	23.42	23.42	23.42	21.62	20.72	18.92	17.11	9.01
330.0	47.65	27.87	23.38	23.38	21.58	20.68	16.18	13.49	11.69
345.0	42.16	28.70	23.32	20.63	18.84	17.04	16.14	15.25	13.45
360.0	70.19	31.10	23.10	19.55	17.77	16.88	15.99	15.10	14.22

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	13.33	12.44	8.00	8.89	8.89	9.77	10.66	11.55	12.44
15.0	12.54	11.64	8.06	8.96	8.96	9.85	10.75	10.75	12.54
30.0	10.80	6.30	8.10	9.00	9.00	9.90	10.80	10.80	11.70
45.0	5.40	6.30	8.10	8.99	8.99	9.89	10.79	11.69	11.69
60.0	9.89	7.20	8.10	8.99	8.99	9.89	10.79	11.69	12.59
75.0	11.68	11.68	8.08	8.98	8.98	9.88	10.78	10.78	12.57
90.0	12.58	11.68	8.09	8.99	9.88	10.78	10.78	10.78	12.58
105.0	11.69	11.69	8.10	8.99	9.89	10.79	10.79	10.79	12.59
120.0	9.93	6.32	8.12	9.02	9.02	9.93	10.83	11.73	11.73
135.0	5.40	6.31	8.11	9.01	9.01	9.91	10.81	11.71	12.61
150.0	10.79	6.29	7.19	8.99	8.99	9.89	10.79	11.69	12.59
165.0	12.56	11.66	7.18	8.97	8.97	9.87	10.76	11.66	12.56
180.0	11.55	9.77	7.11	8.00	8.89	8.89	9.77	10.66	12.44
195.0	11.64	6.27	7.17	8.06	8.96	8.96	8.96	10.75	11.64
210.0	9.90	6.30	7.20	8.10	9.00	9.00	9.90	10.80	11.70
225.0	6.30	6.30	7.20	8.10	8.99	8.99	9.89	10.79	11.69
240.0	11.69	6.30	7.20	8.10	8.99	8.99	9.89	10.79	11.69
255.0	13.47	8.98	7.19	8.08	8.98	8.98	9.88	10.78	11.68
270.0	14.38	9.88	8.09	8.99	8.99	8.99	9.88	11.68	12.58
285.0	13.49	8.99	8.10	8.99	8.99	8.99	9.89	11.69	12.59
300.0	9.93	6.32	7.22	8.12	9.02	9.02	9.93	11.73	12.63
315.0	5.40	6.31	7.21	8.11	9.01	9.01	9.91	10.81	11.71
330.0	9.89	6.29	7.19	8.09	8.99	8.99	9.89	10.79	11.69
345.0	11.66	6.28	7.18	8.07	8.97	8.97	9.87	10.76	12.56
360.0	13.33	12.44	8.00	8.89	8.89	9.77	10.66	11.55	12.44

Intensity data(cd)

C/γ(°)	180.0
0.0	12.44
15.0	12.54
30.0	12.60
45.0	12.59
60.0	12.59
75.0	12.57
90.0	12.58
105.0	12.59
120.0	12.63
135.0	12.61
150.0	12.59
165.0	12.56
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	12.44