
AFX

Client:

LumCAT: BAYF12LAJUDSN

Luminaire: LED Lamp

Report No:

Ballast type:

Test No:

Voltage(V): 120.060

LampCAT:

Current(A): 0.182

Lamp flux(lm): 1437.2

Power (W): 21.630

Number of Lamps: 1

PF: 0.991

Length(mm): -280

Width(mm): -280

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1437.15, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 66.44

Central intensity(cd): 525.397, Maximum intensity(cd): 525.397

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=107.4

[C90/270]Total=107.4

Field angle(10%Imax): [C0/180]Total=161.0

[C90/270]Total=161.4

Maximum s/h(1/2): C0_180=1.22 C90_270=1.22

Maximum s/h(1/4): C0_180=1.34 C90_270=1.34

Up flux rate of lamp(%): 0.49%

Down flux rate of lamp(%): 99.51%

Up flux rate of LUM(%): 0.49%

Down flux rate of LUM(%): 99.51%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 78.752%

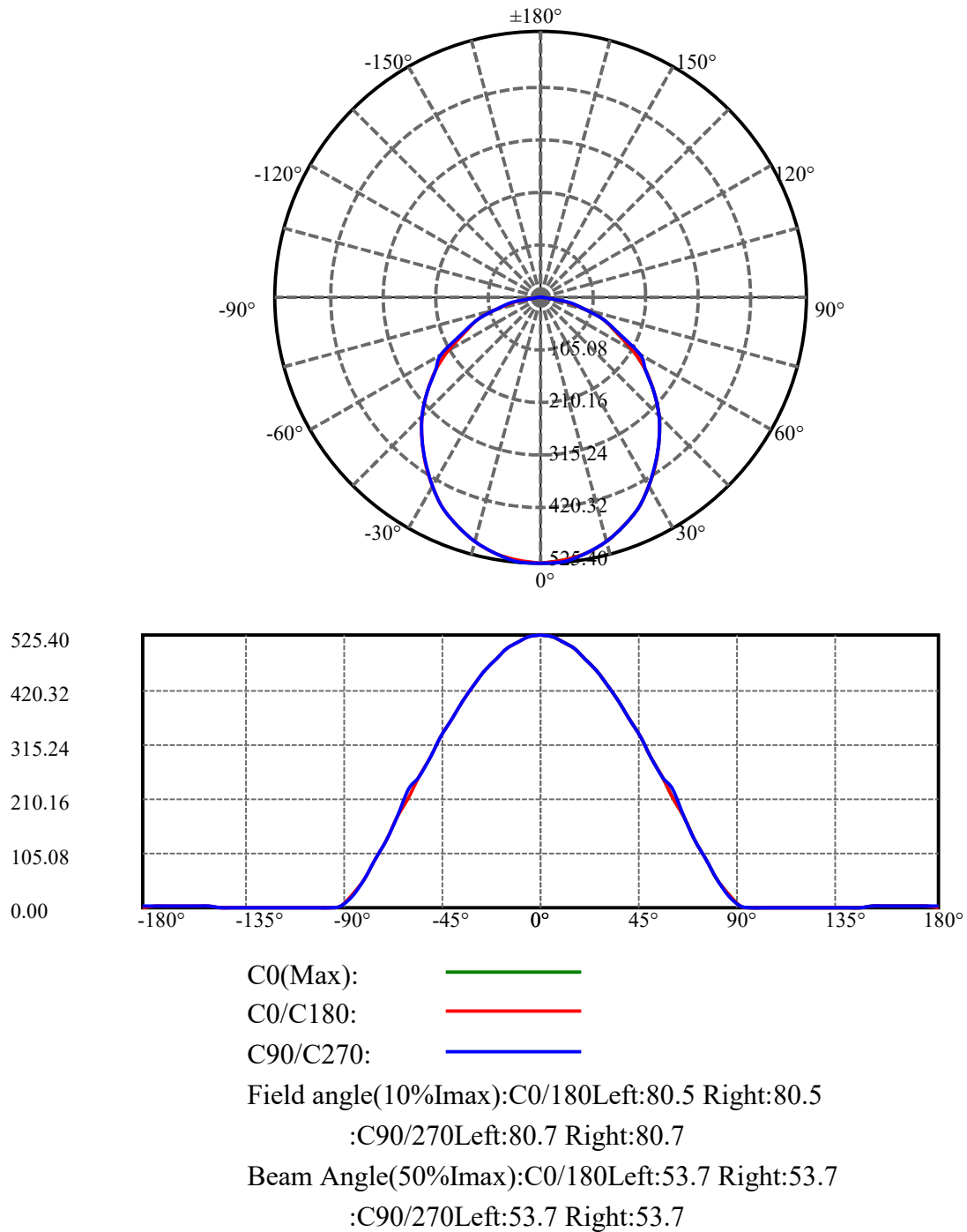
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	525.397	0.000	0	0.00%	0.00%
5.0	522.542	12.528	12.528	0.87%	0.87%
10.0	513.914	37.077	49.605	2.58%	3.45%
15.0	499.877	60.137	109.742	4.18%	7.64%
20.0	480.817	80.823	190.565	5.62%	13.26%
25.0	457.220	98.383	288.948	6.85%	20.11%
30.0	429.798	112.253	401.201	7.81%	27.92%
35.0	398.985	122.044	523.245	8.49%	36.41%
40.0	366.588	127.730	650.975	8.89%	45.30%
45.0	329.661	128.916	779.891	8.97%	54.27%
50.0	291.768	125.569	905.46	8.74%	63.00%
55.0	252.967	118.444	1023.904	8.24%	71.25%
60.0	213.732	107.876	1131.78	7.51%	78.75%
65.0	172.217	93.825	1225.605	6.53%	85.28%
70.0	130.937	76.760	1302.366	5.34%	90.62%
75.0	92.230	58.332	1360.698	4.06%	94.68%
80.0	57.229	39.991	1400.689	2.78%	97.46%
85.0	23.904	22.046	1422.735	1.53%	99.00%
90.0	3.145	7.406	1430.141	0.52%	99.51%
95.0	0.587	1.022	1431.163	0.07%	99.58%
100.0	0.546	0.308	1431.471	0.02%	99.60%
105.0	0.594	0.305	1431.776	0.02%	99.63%
110.0	0.606	0.314	1432.09	0.02%	99.65%
115.0	0.621	0.311	1432.4	0.02%	99.67%
120.0	0.673	0.315	1432.715	0.02%	99.69%
125.0	0.763	0.332	1433.047	0.02%	99.71%
130.0	0.838	0.348	1433.395	0.02%	99.74%
135.0	0.875	0.346	1433.741	0.02%	99.76%
140.0	1.066	0.359	1434.1	0.03%	99.79%
145.0	1.391	0.410	1434.51	0.03%	99.82%
150.0	1.821	0.473	1434.983	0.03%	99.85%
155.0	2.314	0.523	1435.506	0.04%	99.89%
160.0	2.621	0.518	1436.024	0.04%	99.92%
165.0	2.976	0.461	1436.485	0.03%	99.95%
170.0	3.196	0.366	1436.851	0.03%	99.98%
175.0	3.406	0.236	1437.087	0.02%	100.00%
180.0	1.735	0.061	1437.149	0.00%	100.00%

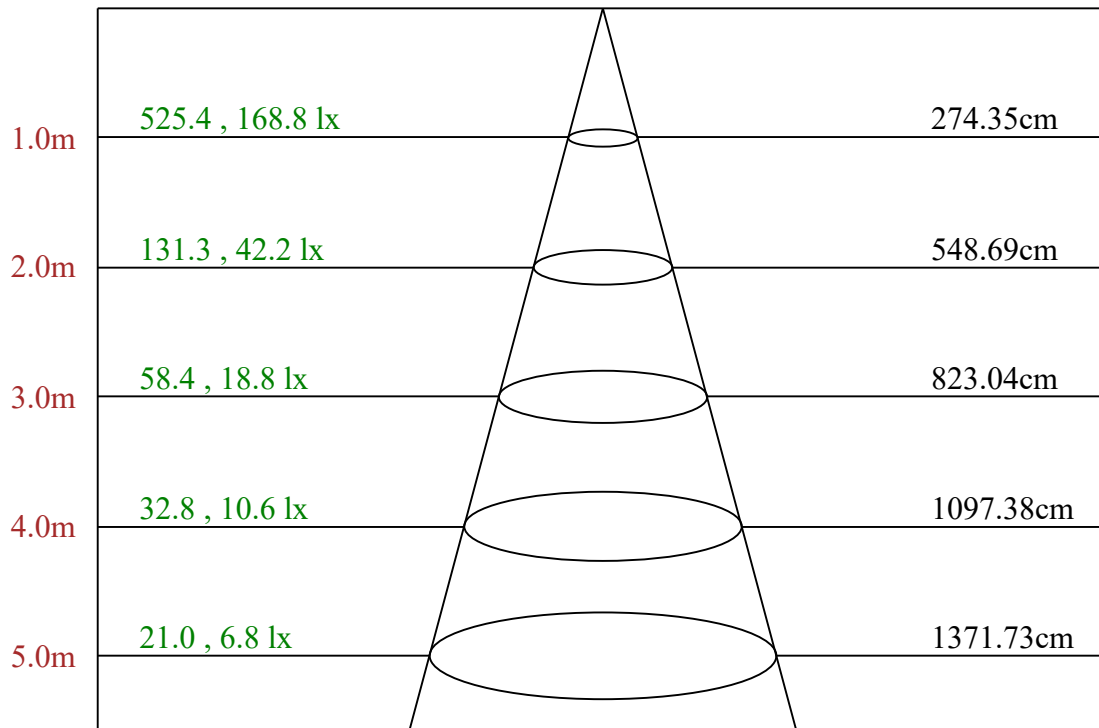
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	401.20	27.92%	27.92%
0-40	650.98	45.30%	45.30%
0-60	1131.78	78.75%	78.75%
0-90	1430.14	99.51%	99.51%
0-120	1432.71	99.69%	99.69%
0-180	1437.15	100.00%	100.00%
60-90	298.36	20.76%	20.76%
90-120	2.57	0.18%	0.18%
90-130	3.25	0.23%	0.23%
90-150	4.84	0.34%	0.34%
90-180	6.95	0.48%	0.48%
0-60.96	1149.72	80.00%	80.00%

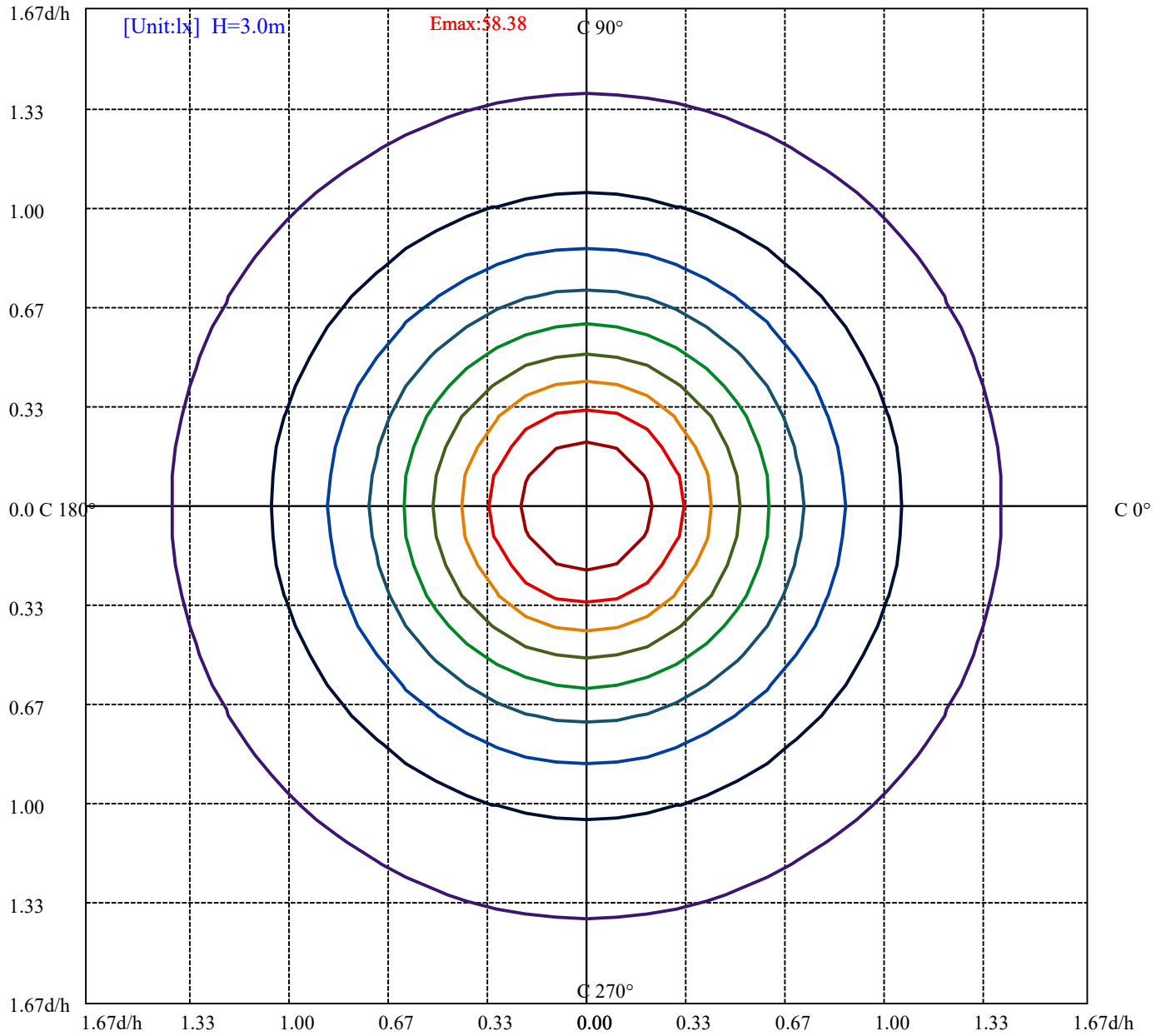
ZONAL LUMEN SUMMARY

0-10	49.61
10-20	140.96
20-30	210.64
30-40	249.77
40-50	254.49
50-60	226.32
60-70	170.59
70-80	98.32
80-90	29.45
90-100	1.33
100-110	0.62
110-120	0.63
120-130	0.68
130-140	0.71
140-150	0.88
150-160	1.04
160-170	0.83
170-180	0.24

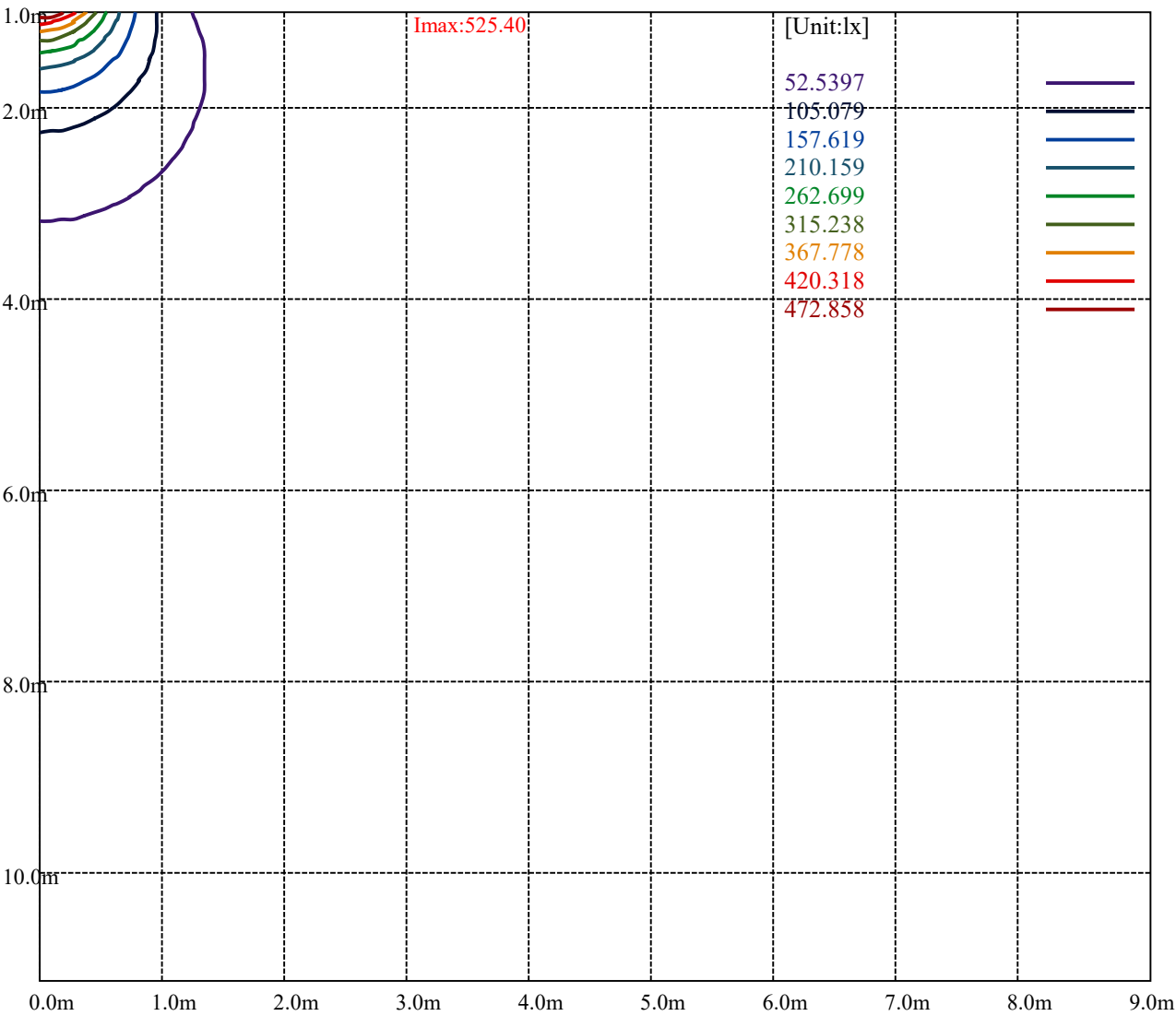




Max , Ave Beam angle of C0 plane 107.82



(10%Emax) 5.837744	—
(20%Emax) 11.67544	—
(30%Emax) 17.51322	—
(40%Emax) 23.351	—
(50%Emax) 29.18878	—
(60%Emax) 35.02644	—
(70%Emax) 40.86422	—
(80%Emax) 46.702	—
(90%Emax) 52.53978	—



Luminance Table

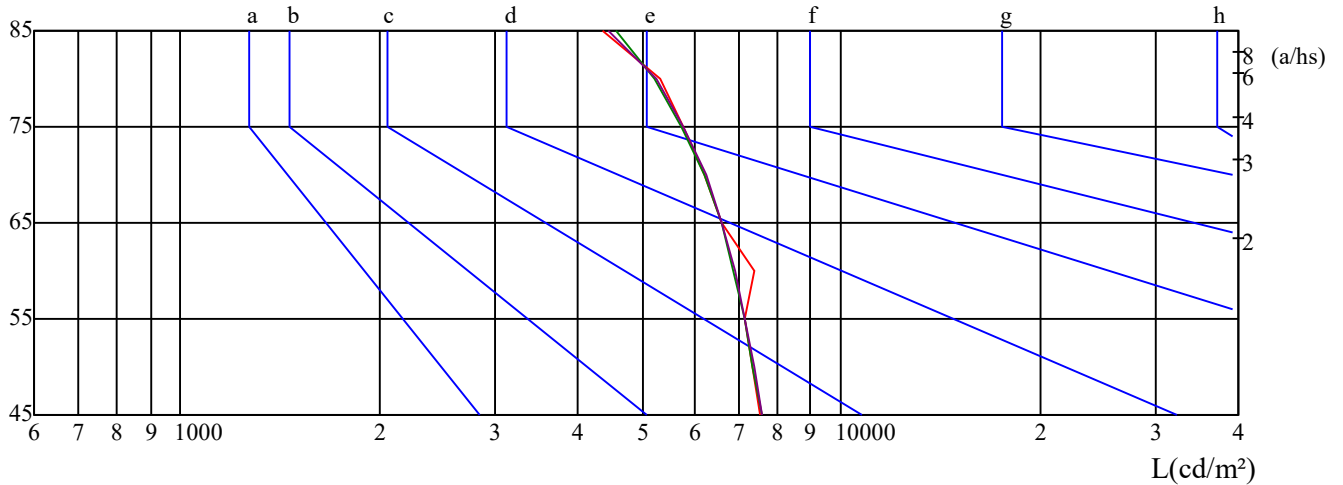
γ	45	50	55	60	65	70	75	80	85
C0	7579	7358	7157	6866	6584	6202	5738	5219	4562
C45	7590	7379	7165	6922	6608	6250	5785	5244	4459
C90	7565	7364	7161	7408	6600	6227	5755	5332	4356

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6584	6600	6608	5738	5755	5785	4562	4356	4459

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

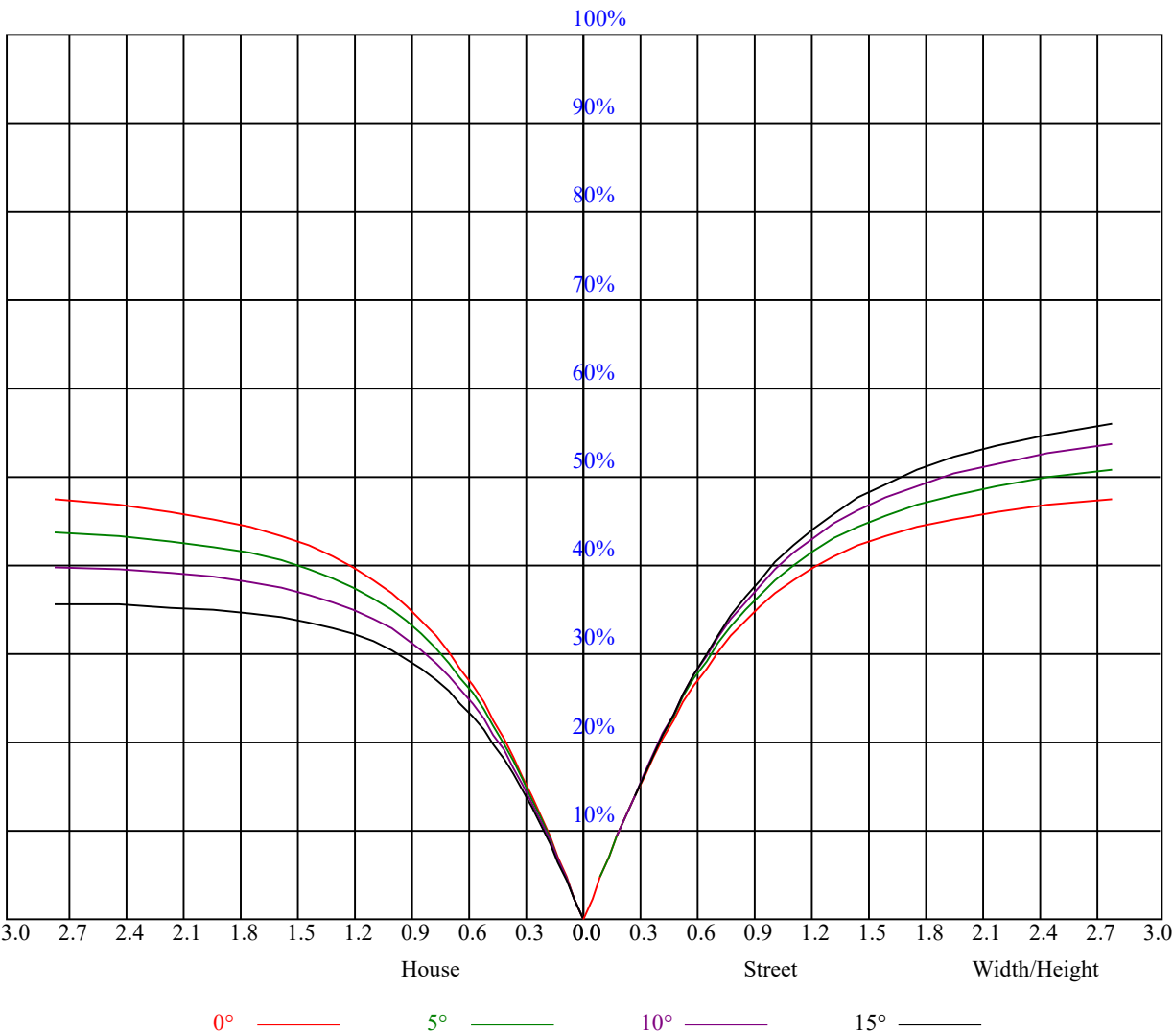
 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———

RHOC	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	1.04	1.00	0.96	1.01	0.98	0.94	0.97	0.94	0.91	0.93	0.91	0.88	0.89	0.87	0.85	0.83
2	0.91	0.84	0.78	0.89	0.82	0.77	0.85	0.80	0.75	0.82	0.77	0.73	0.78	0.75	0.72	0.69
3	0.80	0.71	0.65	0.78	0.70	0.64	0.75	0.68	0.63	0.72	0.67	0.62	0.69	0.65	0.61	0.59
4	0.71	0.62	0.55	0.69	0.61	0.55	0.67	0.59	0.54	0.64	0.58	0.53	0.62	0.57	0.52	0.50
5	0.63	0.54	0.47	0.62	0.53	0.47	0.60	0.52	0.47	0.58	0.51	0.46	0.56	0.50	0.45	0.43
6	0.57	0.48	0.41	0.56	0.47	0.41	0.54	0.46	0.41	0.52	0.46	0.40	0.51	0.45	0.40	0.38
7	0.52	0.43	0.37	0.51	0.42	0.36	0.49	0.42	0.36	0.48	0.41	0.36	0.46	0.40	0.36	0.34
8	0.47	0.39	0.33	0.46	0.38	0.33	0.45	0.38	0.32	0.44	0.37	0.32	0.42	0.36	0.32	0.30
9	0.43	0.35	0.29	0.43	0.35	0.29	0.41	0.34	0.29	0.40	0.34	0.29	0.39	0.33	0.29	0.27
10	0.40	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.27	0.37	0.31	0.26	0.36	0.31	0.26	0.24



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Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	525.40	523.63	516.57	503.16	485.87	463.28	436.64	406.47	373.38
15.0	525.40	524.15	517.05	504.53	486.59	464.04	437.40	408.63	375.78
30.0	525.40	524.33	517.37	505.59	488.10	465.79	439.29	409.40	376.38
45.0	525.40	524.41	517.88	505.62	488.16	465.88	439.38	409.49	376.64
60.0	525.40	524.41	517.68	505.49	488.00	467.28	440.82	411.04	378.13
75.0	525.40	524.77	518.03	506.18	488.75	466.48	439.99	411.61	378.91
90.0	525.40	524.50	517.75	505.44	488.80	466.68	440.42	410.57	377.66
105.0	525.40	524.23	518.10	505.76	488.29	465.95	439.38	409.29	377.68
120.0	525.40	524.41	517.55	505.10	487.24	465.69	439.17	408.95	375.85
135.0	525.40	525.04	517.71	505.41	487.50	464.80	437.76	407.55	375.80
150.0	525.40	523.86	516.72	503.89	469.18	462.67	436.91	406.45	373.01
165.0	525.40	523.77	516.00	502.80	484.36	462.84	433.91	404.99	368.10
180.0	525.40	521.07	511.10	495.66	475.37	450.49	423.32	391.64	357.06
195.0	525.40	521.14	510.39	495.74	475.23	450.37	421.69	389.63	356.69
210.0	525.40	520.76	510.50	494.79	474.09	448.84	421.71	387.89	355.14
225.0	525.40	520.56	510.63	493.89	473.84	448.78	419.69	388.01	353.19
240.0	525.40	520.46	509.79	494.01	473.02	447.73	420.01	386.65	353.46
255.0	525.40	520.46	509.32	494.05	473.22	447.89	418.97	387.00	353.95
270.0	525.40	520.36	509.57	493.66	473.51	447.17	419.56	386.02	353.20
285.0	525.40	520.26	510.27	494.32	473.52	448.11	419.38	389.03	379.39
300.0	525.40	520.53	510.06	494.19	489.59	448.46	419.78	388.03	355.56
315.0	525.40	521.33	510.84	495.19	474.57	451.14	422.47	390.81	356.54
330.0	525.40	521.06	511.39	495.93	475.60	451.10	422.63	392.90	357.01
345.0	525.40	521.51	511.66	496.65	477.21	451.81	424.87	393.60	359.61
360.0	525.40	523.63	516.57	503.16	485.87	463.28	436.64	406.47	373.38
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	339.59	300.59	263.63	221.81	182.90	142.14	102.43	64.94	33.09
15.0	340.53	303.23	264.52	224.56	185.76	142.87	105.04	67.31	33.56
30.0	341.13	303.92	267.16	227.10	186.23	145.27	105.29	69.51	33.82
45.0	343.34	306.11	267.26	227.17	188.32	145.27	107.14	69.28	35.27
60.0	342.88	305.48	268.62	228.62	187.72	146.73	106.46	70.50	34.71
75.0	343.71	306.44	267.55	227.49	188.42	145.40	107.15	69.15	35.12
90.0	342.23	304.92	267.60	227.68	186.58	145.58	105.39	69.33	33.72
105.0	342.28	304.90	265.90	225.63	186.54	143.40	105.12	65.57	33.51
120.0	340.40	302.88	265.63	225.31	184.09	142.87	102.64	66.84	31.48
135.0	340.07	302.45	263.02	222.59	181.16	142.00	99.76	64.13	30.48
150.0	337.13	299.44	262.11	219.36	180.13	138.83	98.70	61.37	28.29
165.0	334.48	298.77	259.26	218.58	177.27	135.96	98.17	59.03	27.66
180.0	320.36	281.89	241.92	200.98	159.78	119.11	80.46	46.67	15.88
195.0	318.24	279.61	241.61	198.63	159.48	118.81	80.18	44.75	14.30
210.0	318.29	279.65	239.59	198.54	159.55	116.80	80.13	44.71	14.28
225.0	318.46	277.83	239.70	198.88	157.62	117.07	78.50	43.23	13.07
240.0	316.60	278.13	238.21	197.23	158.12	115.70	79.02	43.77	13.54
255.0	315.60	278.86	238.90	198.03	156.99	116.58	78.05	69.42	13.38
270.0	316.52	278.03	238.20	228.48	156.91	116.72	78.05	44.69	13.04
285.0	316.88	278.42	238.60	198.07	158.89	116.55	80.08	44.77	14.50
300.0	317.04	280.87	238.93	200.69	159.65	119.15	80.55	45.19	16.33
315.0	320.09	281.92	242.21	203.86	160.72	122.19	83.39	47.66	16.91
330.0	322.67	282.72	245.03	204.63	163.59	123.19	84.42	50.34	17.81
345.0	323.36	285.39	246.07	205.66	166.79	124.30	87.42	51.35	19.98
360.0	339.59	300.59	263.63	221.81	182.90	142.14	102.43	64.94	33.09

Intensity data(cd)

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C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	5.29	0.35	0.26	0.35	0.26	0.18	0.35	0.62	0.88
15.0	5.59	0.44	0.27	0.44	0.44	0.18	0.44	0.62	0.80
30.0	6.96	0.45	0.36	0.36	0.45	0.36	0.45	0.62	0.80
45.0	6.80	0.45	0.36	0.36	0.45	0.45	0.54	0.63	0.81
60.0	7.62	0.45	0.36	0.36	0.45	0.36	0.54	0.81	0.90
75.0	6.83	0.45	0.36	0.36	0.45	0.54	0.63	0.81	0.90
90.0	6.83	0.36	0.45	0.45	0.45	0.54	0.81	0.90	0.99
105.0	5.58	0.36	0.36	0.36	0.36	0.45	0.72	0.90	1.17
120.0	5.32	0.36	0.27	0.27	0.36	0.54	0.63	0.90	1.17
135.0	3.53	0.27	0.18	0.27	0.36	0.45	0.72	0.90	0.99
150.0	2.89	0.36	0.27	0.36	0.36	0.54	0.54	0.81	0.81
165.0	1.36	0.36	0.36	0.18	0.27	0.36	0.45	0.72	0.81
180.0	0.88	0.71	0.71	0.71	0.79	0.79	0.79	0.79	0.79
195.0	0.89	0.71	0.80	0.89	0.71	0.71	0.71	0.71	0.71
210.0	0.89	0.80	0.71	0.80	0.62	0.71	0.80	0.71	0.80
225.0	0.90	0.81	0.72	0.81	0.81	0.81	0.72	0.72	0.81
240.0	0.90	0.90	0.81	0.90	0.90	0.90	0.81	0.81	0.81
255.0	0.99	0.90	0.81	0.90	0.99	0.90	0.72	0.72	0.72
270.0	0.90	0.81	0.90	0.90	0.99	0.81	0.81	0.81	0.72
285.0	0.90	0.72	0.72	0.90	0.99	0.90	0.90	0.81	0.72
300.0	0.90	0.81	0.81	0.81	0.90	0.99	0.81	0.81	0.72
315.0	0.90	0.72	0.72	0.90	0.81	0.90	0.72	0.72	0.72
330.0	0.90	0.72	0.81	0.90	0.72	0.81	0.81	0.72	0.81
345.0	0.90	0.81	0.72	0.72	0.63	0.72	0.72	0.72	0.72
360.0	5.29	0.35	0.26	0.35	0.26	0.18	0.35	0.62	0.88
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.88	1.24	1.59	2.12	2.56	3.00	3.26	3.44	3.53
15.0	0.89	1.24	1.69	2.13	2.58	3.02	3.29	3.46	3.55
30.0	0.98	1.34	1.70	2.14	2.59	3.03	3.48	3.57	3.57
45.0	0.98	1.34	1.79	2.15	2.69	3.04	3.40	3.58	3.58
60.0	0.90	1.26	1.70	2.15	2.69	3.05	3.41	3.50	3.50
75.0	0.99	1.26	1.62	2.25	2.60	3.05	3.41	3.50	3.59
90.0	0.99	1.26	1.71	2.07	2.70	3.06	3.42	3.51	3.51
105.0	0.99	1.26	1.62	2.16	2.70	2.97	3.33	3.51	3.51
120.0	1.08	1.17	1.71	2.16	2.71	3.07	3.34	3.43	3.52
135.0	1.09	1.27	1.72	2.08	2.62	3.08	3.35	3.44	3.53
150.0	0.99	1.27	1.54	2.08	2.62	2.98	3.25	3.34	3.43
165.0	0.90	1.27	1.63	2.08	2.62	2.98	3.16	3.44	3.34
180.0	0.71	0.79	1.06	1.50	1.94	2.21	2.56	2.82	3.26
195.0	0.71	0.80	1.07	1.42	1.95	2.04	2.58	2.93	3.20
210.0	0.80	0.71	1.07	1.43	1.96	2.14	2.59	2.86	3.21
225.0	0.72	0.90	1.07	1.52	1.97	2.24	2.60	2.86	3.22
240.0	0.72	0.99	1.17	1.52	1.88	2.24	2.60	2.87	3.23
255.0	0.81	0.90	1.08	1.44	2.07	2.16	2.60	2.87	3.32
270.0	0.81	0.81	1.08	1.44	1.98	2.25	2.61	2.97	3.33
285.0	0.81	0.90	1.08	1.53	1.98	2.25	2.61	2.88	3.24
300.0	0.81	0.90	1.17	1.44	2.07	2.25	2.62	2.89	3.43
315.0	0.81	0.90	1.18	1.63	1.99	2.26	2.71	2.98	3.44
330.0	0.81	0.90	1.17	1.63	2.08	2.26	2.62	2.98	3.34
345.0	0.81	0.90	1.18	1.63	1.99	2.26	2.62	3.07	3.34
360.0	0.88	1.24	1.59	2.12	2.56	3.00	3.26	3.44	3.53

Intensity data(cd)

C/ γ (°)	180.0
0.0	3.18
15.0	3.37
30.0	3.48
45.0	3.40
60.0	3.50
75.0	3.50
90.0	3.51
105.0	3.60
120.0	3.52
135.0	3.53
150.0	3.52
165.0	3.53
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	3.18