
AFX

Client:

LumCAT: JUNP18LAJUDSN-3000K

Luminaire: LED Lamp

Report No:

Ballast type:

Test No: LCZP25080169

Voltage(V): 119.990

LampCAT:

Current(A): 0.245

Lamp flux(lm): 1886.3

Power (W): 29.100

Number of Lamps: 1

PF: 0.992

Length(mm): -450

Width(mm): -450

Phm Type: C

Height(mm): 50

Photometric Results

Lumens(lm): 1886.34, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 64.82

Central intensity(cd): 404.397, Maximum intensity(cd): 404.397

Angle of maximum intensity: C=75.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=125.2

[C90/270]Total=126.6

Field angle(10%Imax): [C0/180]Total=N.A.

[C90/270]Total=N.A.

Maximum s/h(1/2): C0_180=1.29 C90_270=1.29

Maximum s/h(1/4): C0_180=1.42 C90_270=1.43

Up flux rate of lamp(%): 25.64%

Down flux rate of lamp(%): 74.36%

Up flux rate of LUM(%): 25.64%

Down flux rate of LUM(%): 74.36%

CIE Type : Semidirect lighting

Output flux ratio in π solid angle : 51.156%

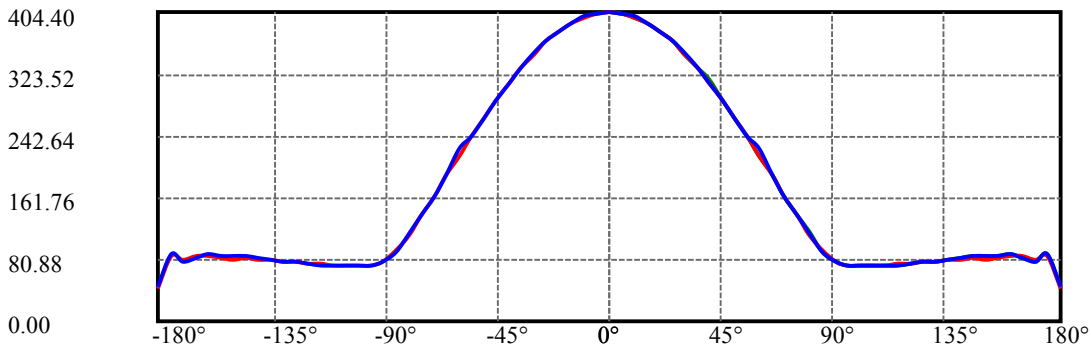
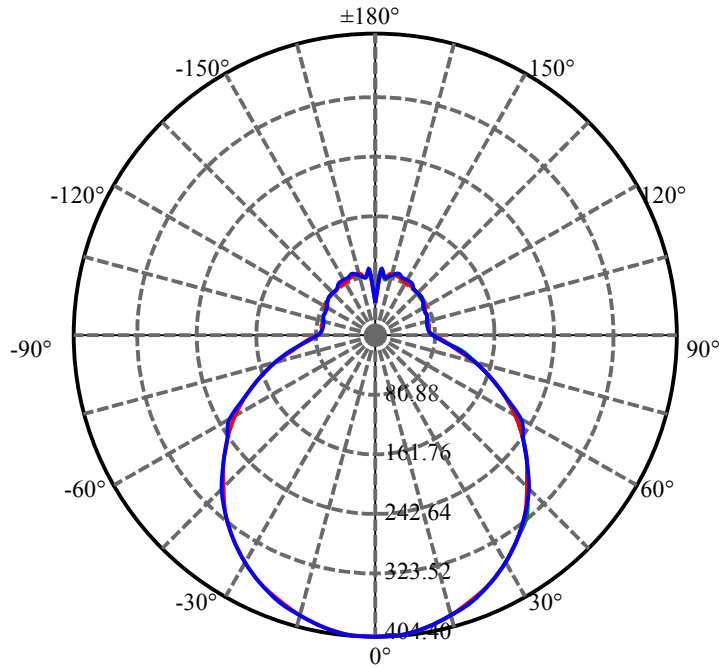
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	404.397	0.000	0	0.00%	0.00%
5.0	402.782	9.650	9.65	0.51%	0.51%
10.0	398.057	28.649	38.298	1.52%	2.03%
15.0	390.158	46.756	85.055	2.48%	4.51%
20.0	379.609	63.440	148.494	3.36%	7.87%
25.0	366.207	78.222	226.717	4.15%	12.02%
30.0	350.230	90.666	317.382	4.81%	16.83%
35.0	331.823	100.437	417.819	5.32%	22.15%
40.0	312.193	107.449	525.269	5.70%	27.85%
45.0	289.487	111.406	636.675	5.91%	33.75%
50.0	265.745	112.193	748.867	5.95%	39.70%
55.0	241.346	110.258	859.126	5.85%	45.54%
60.0	216.599	105.853	964.978	5.61%	51.16%
65.0	190.177	98.888	1063.866	5.24%	56.40%
70.0	164.106	89.707	1153.573	4.76%	61.15%
75.0	138.850	79.188	1232.761	4.20%	65.35%
80.0	114.911	67.899	1300.66	3.60%	68.95%
85.0	91.150	55.992	1356.652	2.97%	71.92%
90.0	76.647	45.944	1402.596	2.44%	74.36%
95.0	72.193	40.754	1443.35	2.16%	76.52%
100.0	72.055	39.196	1482.546	2.08%	78.59%
105.0	72.302	38.626	1521.171	2.05%	80.64%
110.0	72.862	37.944	1559.115	2.01%	82.65%
115.0	74.074	37.205	1596.32	1.97%	84.63%
120.0	75.759	36.425	1632.745	1.93%	86.56%
125.0	77.610	35.451	1668.196	1.88%	88.44%
130.0	79.072	34.068	1702.264	1.81%	90.24%
135.0	80.305	32.204	1734.468	1.71%	91.95%
140.0	81.554	29.970	1764.438	1.59%	93.54%
145.0	83.132	27.477	1791.914	1.46%	94.99%
150.0	83.460	24.532	1816.446	1.30%	96.29%
155.0	84.290	21.229	1837.675	1.13%	97.42%
160.0	85.767	17.836	1855.511	0.95%	98.37%
165.0	82.788	13.891	1869.402	0.74%	99.10%
170.0	78.070	9.542	1878.944	0.51%	99.61%
175.0	85.413	5.848	1884.792	0.31%	99.92%
180.0	44.332	1.551	1886.343	0.08%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	317.38	16.83%	16.83%
0-40	525.27	27.85%	27.85%
0-60	964.98	51.16%	51.16%
0-90	1402.60	74.36%	74.36%
0-120	1632.74	86.56%	86.56%
0-180	1886.34	100.00%	100.00%
60-90	437.62	23.20%	23.20%
90-120	230.15	12.20%	12.20%
90-130	299.67	15.89%	15.89%
90-150	413.85	21.94%	21.94%
90-180	482.20	25.56%	25.56%
0-103.43	1509.08	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	38.30
10-20	110.20
20-30	168.89
30-40	207.89
40-50	223.60
50-60	216.11
60-70	188.59
70-80	147.09
80-90	101.94
90-100	79.95
100-110	76.57
110-120	73.63
120-130	69.52
130-140	62.17
140-150	52.01
150-160	39.06
160-170	23.43
170-180	5.85



C75(Max): ———

C0/C180: ———

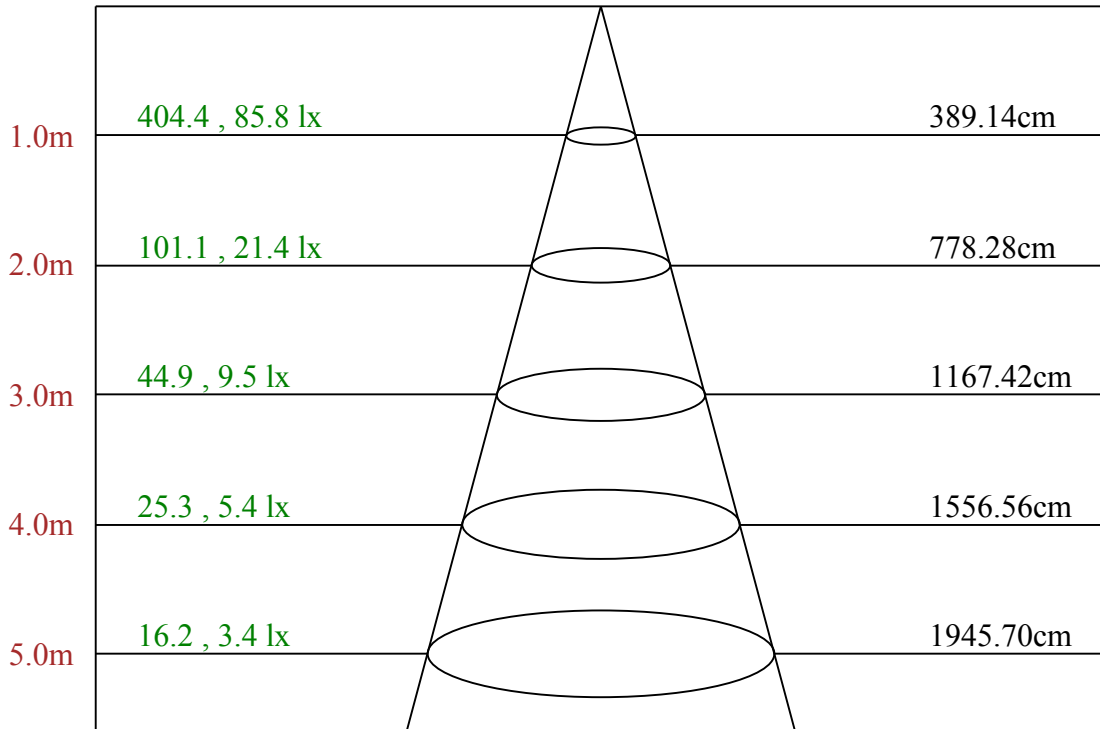
C90/C270: ———

Field angle(10%Imax):C0/180Left:0.0 Right:0.0

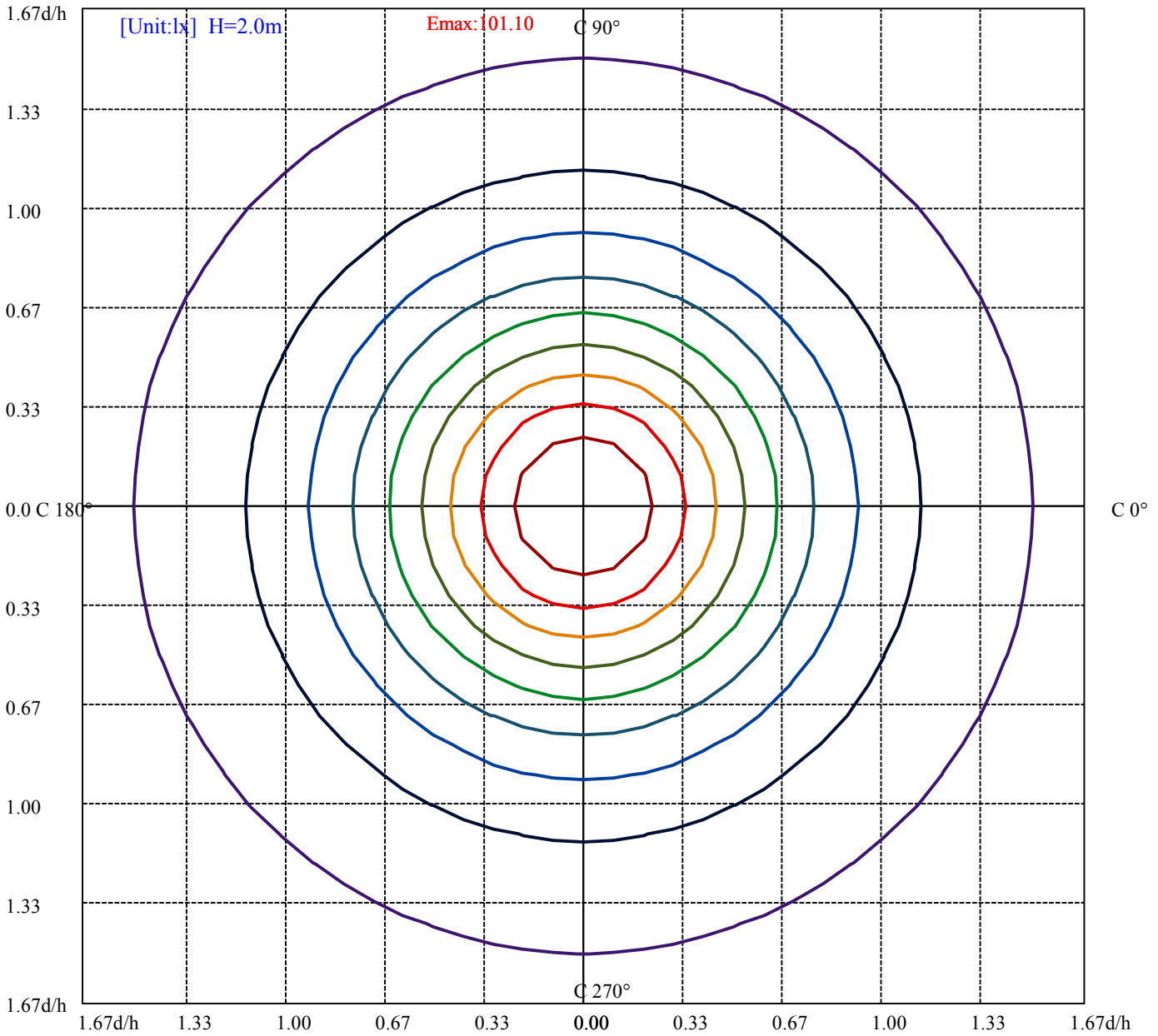
:C90/270Left:0.0 Right:0.0

Beam Angle(50%Imax):C0/180Left:62.6 Right:62.6

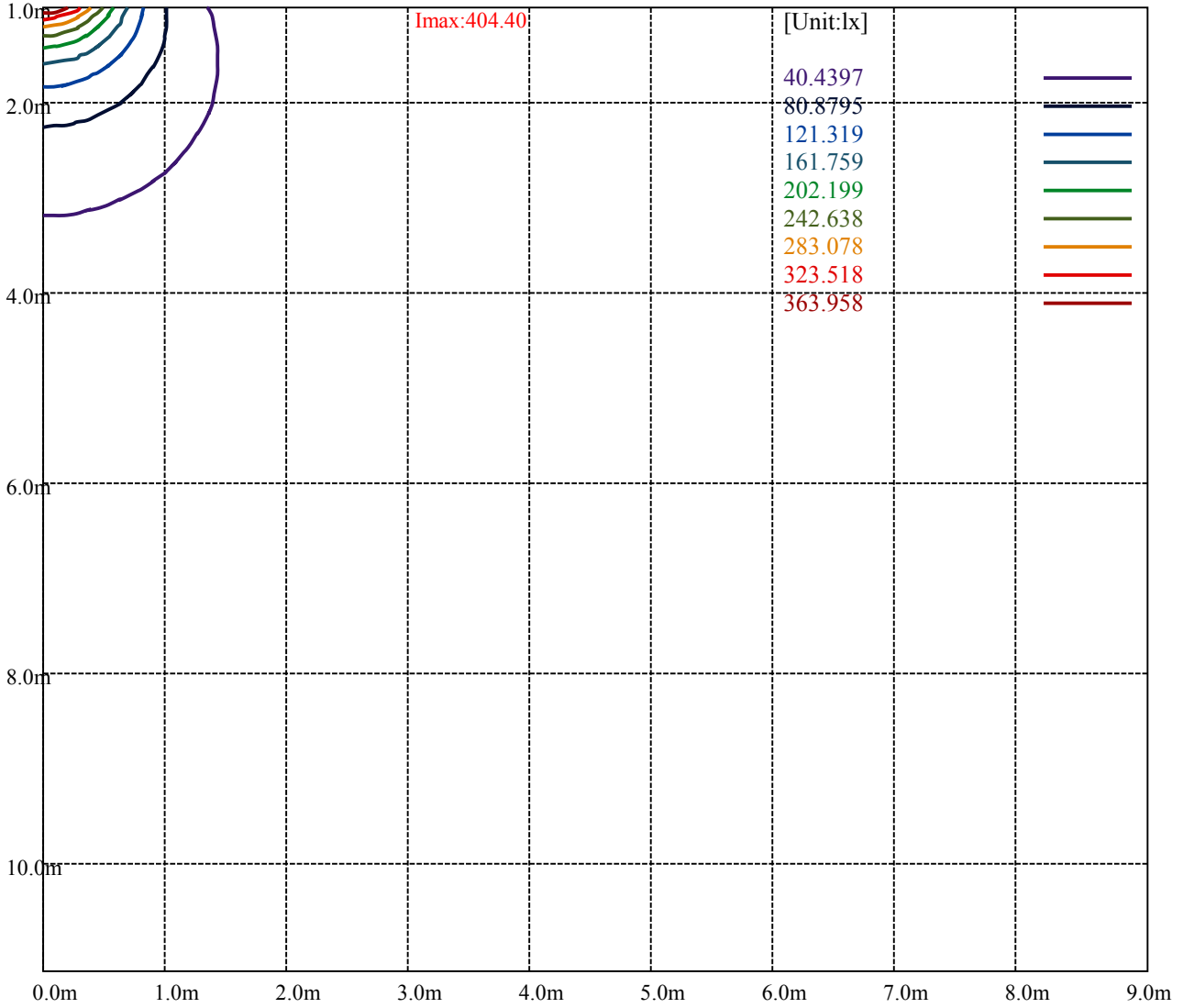
:C90/270Left:63.3 Right:63.3



Max , Ave Beam angle of C75 plane 125.60



(10%Emax) 10.10993	—
(20%Emax) 20.21988	—
(30%Emax) 30.32975	—
(40%Emax) 40.43975	—
(50%Emax) 50.54975	—
(60%Emax) 60.6595	—
(70%Emax) 70.7695	—
(80%Emax) 80.8795	—
(90%Emax) 90.9895	—



Luminance Table

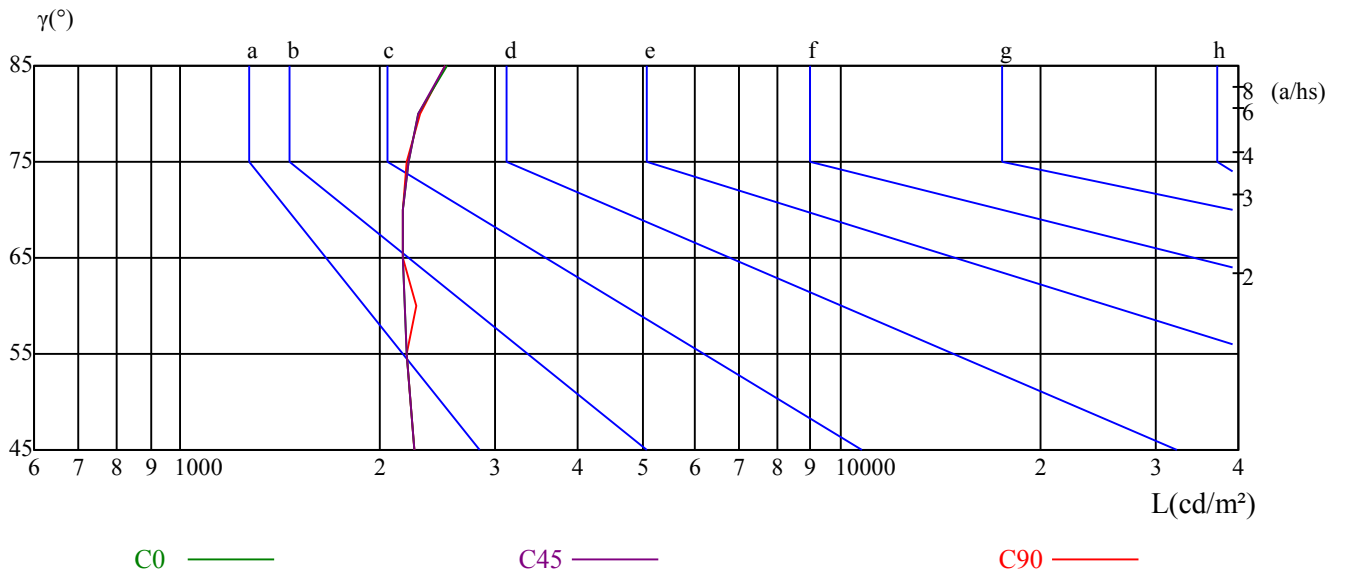
γ	45	50	55	60	65	70	75	80	85
C0	2254	2230	2203	2180	2169	2171	2212	2286	2533
C45	2258	2226	2202	2180	2171	2178	2209	2297	2510
C90	2260	2225	2203	2282	2172	2177	2206	2299	2523

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2827	2831	2829	3380	3371	3375	6629	6604	6569

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



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	1.13	1.13	1.13	1.07	1.07	1.07	0.97	0.97	0.97	0.87	0.87	0.87	0.78	0.78	0.78	0.74
1	0.95	0.91	0.86	0.91	0.86	0.82	0.82	0.78	0.75	0.73	0.71	0.68	0.66	0.64	0.62	0.58
2	0.82	0.75	0.69	0.78	0.71	0.66	0.70	0.65	0.60	0.63	0.59	0.55	0.57	0.53	0.50	0.47
3	0.71	0.63	0.56	0.68	0.60	0.54	0.61	0.55	0.50	0.55	0.50	0.46	0.49	0.45	0.42	0.38
4	0.63	0.54	0.47	0.60	0.52	0.45	0.54	0.47	0.42	0.49	0.43	0.39	0.44	0.39	0.35	0.32
5	0.56	0.47	0.40	0.53	0.45	0.39	0.48	0.41	0.36	0.44	0.38	0.33	0.39	0.34	0.30	0.28
6	0.50	0.41	0.35	0.48	0.39	0.33	0.43	0.36	0.31	0.39	0.33	0.29	0.35	0.30	0.27	0.24
7	0.45	0.36	0.30	0.43	0.35	0.29	0.39	0.32	0.27	0.36	0.30	0.25	0.32	0.27	0.23	0.21
8	0.41	0.33	0.27	0.39	0.31	0.26	0.36	0.29	0.24	0.33	0.27	0.23	0.30	0.25	0.21	0.19
9	0.37	0.29	0.24	0.36	0.28	0.23	0.33	0.26	0.22	0.30	0.24	0.20	0.27	0.22	0.19	0.17
10	0.34	0.27	0.21	0.33	0.26	0.21	0.30	0.24	0.19	0.28	0.22	0.18	0.25	0.20	0.17	0.15

AFX JUNP18LAJUDSN-3000K

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	404.40	405.03	401.88	396.49	387.60	376.01	361.64	344.84	327.06
15.0	404.40	404.94	402.42	396.40	387.87	377.46	361.74	346.47	327.25
30.0	404.40	404.76	401.98	396.86	388.34	376.77	362.41	345.73	327.25
45.0	404.40	405.30	402.96	397.03	388.31	376.90	362.97	346.16	327.29
60.0	404.40	404.94	402.42	396.76	388.05	376.47	362.10	344.95	325.91
75.0	404.40	404.94	401.97	395.78	387.17	375.41	361.95	343.73	325.96
90.0	404.40	404.67	402.15	395.33	387.44	375.50	360.60	343.46	324.07
105.0	404.40	404.67	401.35	395.07	385.75	373.56	358.86	342.18	322.55
120.0	404.40	404.22	400.45	394.00	384.41	372.23	357.17	339.88	319.90
135.0	404.40	404.31	400.09	393.54	383.58	371.20	355.86	339.26	319.43
150.0	404.40	404.04	400.09	393.01	373.47	370.51	355.09	336.71	316.54
165.0	404.40	403.14	398.94	391.33	381.40	368.69	352.76	334.60	313.21
180.0	404.40	400.18	393.71	383.65	371.07	356.88	337.93	319.33	296.16
195.0	404.40	400.00	393.26	383.38	370.54	355.18	337.58	317.64	295.73
210.0	404.40	400.27	392.91	383.05	370.22	354.70	336.94	317.02	295.67
225.0	404.40	400.44	394.24	383.01	371.33	355.87	338.08	317.77	295.75
240.0	404.40	400.54	393.71	383.74	370.81	355.27	339.11	317.46	297.26
255.0	404.40	400.36	394.17	384.02	371.64	356.56	338.88	318.96	297.15
270.0	404.40	401.17	394.62	385.37	372.81	357.73	340.68	320.57	299.48
285.0	404.40	401.08	394.81	386.02	374.10	359.13	341.64	322.37	317.53
300.0	404.40	401.44	395.35	386.03	383.70	359.95	343.02	323.66	302.42
315.0	404.40	401.89	396.32	387.53	376.40	361.42	345.27	326.34	305.16
330.0	404.40	402.34	396.78	388.08	377.14	362.71	346.04	327.12	306.14
345.0	404.40	402.16	396.79	388.29	377.46	362.87	347.21	327.53	307.75
360.0	404.40	405.03	401.88	396.49	387.60	376.01	361.64	344.84	327.06
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	304.42	283.22	258.79	233.55	207.59	181.54	157.02	130.16	106.80
15.0	306.15	283.43	259.09	235.02	209.34	183.29	157.34	131.93	107.23
30.0	305.63	283.56	259.34	234.40	208.84	182.91	156.99	131.60	108.10
45.0	306.26	283.44	259.17	234.37	209.75	182.43	157.98	132.46	107.75
60.0	304.80	282.08	259.18	234.21	208.44	182.31	156.53	132.28	106.42
75.0	304.51	281.71	257.39	232.35	207.85	180.39	155.89	130.49	105.90
90.0	303.79	279.74	256.76	231.37	205.61	179.76	153.83	129.41	104.73
105.0	301.48	278.53	254.15	229.05	202.96	177.95	152.04	126.58	102.38
120.0	298.57	275.63	252.24	226.89	200.90	175.00	150.45	123.75	100.81
135.0	297.62	274.38	249.98	224.23	198.21	173.62	147.69	122.21	97.98
150.0	294.85	271.27	248.23	222.77	196.60	168.98	144.60	119.32	96.37
165.0	292.00	269.72	245.29	219.78	194.46	167.52	142.82	117.68	93.60
180.0	274.33	249.72	224.39	198.07	172.38	146.42	121.27	97.37	76.98
195.0	272.20	247.60	223.62	196.41	171.62	145.85	120.61	96.63	75.62
210.0	272.17	247.59	221.93	196.19	170.26	144.34	119.40	96.43	75.35
225.0	273.28	247.40	223.32	197.35	171.28	145.31	120.06	96.16	74.86
240.0	273.55	248.85	223.26	197.21	172.52	145.22	121.42	97.17	75.80
255.0	274.00	249.23	223.74	199.06	172.94	147.00	121.70	116.13	76.37
270.0	276.33	251.92	226.34	220.51	174.92	149.07	123.67	99.44	78.35
285.0	278.17	253.88	228.60	202.60	176.51	151.59	125.15	101.93	79.52
300.0	281.01	255.11	231.63	204.04	179.48	153.50	128.05	103.50	80.92
315.0	282.37	258.32	233.29	207.54	181.43	156.75	129.92	106.60	83.63
330.0	284.72	259.71	235.68	210.22	184.05	158.23	132.77	108.11	84.90
345.0	285.47	261.84	236.88	211.19	186.31	159.56	135.22	110.52	87.25
360.0	304.42	283.22	258.79	233.55	207.59	181.54	157.02	130.16	106.80

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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	83.81	72.22	71.77	71.77	71.95	72.67	73.93	76.08	77.88
15.0	85.14	72.47	71.84	71.84	72.11	72.83	74.18	76.07	77.77
30.0	85.04	72.30	71.85	71.94	72.03	72.75	74.19	76.16	78.04
45.0	84.74	72.61	72.34	72.25	72.43	73.06	74.50	76.48	78.45
60.0	84.78	72.92	72.29	72.38	72.65	73.28	74.63	76.69	78.58
75.0	83.19	72.78	72.43	72.52	72.60	73.32	74.94	76.64	78.53
90.0	82.12	72.78	72.43	72.60	72.69	73.50	75.03	77.09	78.89
105.0	80.05	72.88	72.52	72.52	72.97	73.78	75.39	77.37	79.16
120.0	78.68	72.76	72.49	72.67	73.12	74.02	75.63	77.69	79.30
135.0	76.63	72.86	72.68	72.77	73.31	74.29	76.00	77.88	79.77
150.0	75.57	72.52	72.35	72.61	73.06	73.96	75.84	77.90	79.34
165.0	73.65	72.13	71.86	71.95	72.49	73.74	75.53	77.59	79.56
180.0	72.85	72.58	72.76	73.12	74.11	75.81	77.88	79.77	80.30
195.0	72.47	72.02	72.38	72.83	73.73	75.62	77.77	79.12	80.47
210.0	72.12	71.77	71.85	72.30	73.29	75.26	77.15	78.76	80.47
225.0	71.89	71.62	71.80	72.25	73.24	75.22	75.76	78.72	79.98
240.0	71.76	71.40	71.49	72.02	73.01	74.90	76.87	78.49	79.66
255.0	71.53	71.26	71.44	71.98	72.78	74.58	76.55	78.35	79.25
270.0	71.71	71.26	71.35	71.80	72.69	74.40	76.10	78.17	79.16
285.0	71.90	71.45	71.45	71.72	72.79	74.14	76.11	77.54	78.89
300.0	72.04	71.51	71.69	72.04	72.94	74.19	76.17	77.60	78.32
315.0	72.41	72.05	71.96	72.41	73.04	74.29	76.18	77.61	78.60
330.0	72.61	72.17	72.17	72.43	72.88	74.14	76.11	77.54	78.98
345.0	72.84	72.31	72.13	72.49	72.75	74.01	75.80	77.32	78.39
360.0	83.81	72.22	71.77	71.77	71.95	72.67	73.93	76.08	77.88

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	79.59	80.04	81.92	81.11	82.64	86.14	85.42	80.12	84.26
15.0	79.39	80.92	81.99	81.72	82.17	84.78	83.43	79.39	84.69
30.0	79.75	81.36	82.98	82.17	82.89	83.97	81.81	78.94	85.13
45.0	80.25	82.32	83.22	83.31	84.02	85.37	81.06	78.27	85.91
60.0	80.29	82.62	83.52	84.15	85.23	86.39	81.72	77.77	85.94
75.0	80.32	82.39	84.54	84.54	86.25	86.70	83.19	77.54	85.98
90.0	80.68	82.48	85.26	85.35	86.07	86.61	84.81	78.71	85.71
105.0	80.86	82.48	85.34	85.61	85.16	85.70	84.00	78.80	85.34
120.0	81.09	82.80	85.13	85.31	83.96	83.96	84.77	79.12	82.89
135.0	81.20	83.27	85.42	83.89	83.00	83.45	85.15	78.96	81.29
150.0	81.31	83.19	84.18	83.46	82.83	83.64	85.07	80.23	77.81
165.0	80.54	81.97	83.13	83.85	83.22	83.58	86.00	80.54	75.98
180.0	81.65	81.83	83.36	82.01	82.28	85.87	83.63	78.15	85.87
195.0	80.65	81.81	82.08	82.62	82.53	83.16	83.88	78.58	86.21
210.0	80.74	80.74	82.26	82.26	83.34	86.39	84.14	77.87	86.30
225.0	80.61	81.24	82.23	82.95	84.92	86.99	84.02	77.91	86.72
240.0	80.56	81.45	82.89	84.69	84.96	87.02	83.34	77.50	87.29
255.0	80.05	81.22	84.54	84.63	85.08	87.41	82.66	77.18	87.41
270.0	79.87	81.22	84.45	84.45	85.08	87.95	81.58	75.75	87.68
285.0	79.88	80.59	83.01	84.27	85.16	88.48	80.95	74.86	87.94
300.0	79.75	80.38	81.27	84.14	85.40	88.17	79.84	74.55	88.08
315.0	79.14	80.57	81.20	83.00	85.96	87.03	78.78	75.19	88.47
330.0	79.43	80.05	81.22	81.94	85.88	85.97	78.98	77.99	88.48
345.0	79.73	80.36	80.00	81.61	84.92	83.67	78.66	79.73	88.50
360.0	79.59	80.04	81.92	81.11	82.64	86.14	85.42	80.12	84.26

Intensity data(cd)

C/γ(°)	180.0
0.0	86.77
15.0	87.92
30.0	88.18
45.0	88.61
60.0	88.91
75.0	89.21
90.0	89.39
105.0	89.11
120.0	88.98
135.0	89.19
150.0	89.11
165.0	88.59
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	86.77