
AFX

Client:

LumCAT: JUNC18LAJUDSN-3000K

Luminaire: LED Lamp

Report No:

Ballast type:

Test No: LCZP25080170

Voltage(V): 120.010

LampCAT:

Current(A): 0.245

Lamp flux(lm): 2075.2

Power (W): 29.100

Number of Lamps: 1

PF: 0.991

Length(mm): -450

Width(mm): -450

Phm Type: C

Height(mm): 50

Photometric Results

Lumens(lm): 2075.19, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 71.31

Central intensity(cd): 465.810, Maximum intensity(cd): 465.810

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=124.4

[C90/270]Total=126.0

Field angle(10%Imax): [C0/180]Total=358.6

[C90/270]Total=358.6

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

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

Up flux rate of lamp(%): 23.01%

Down flux rate of lamp(%): 76.99%

Up flux rate of LUM(%): 23.01%

Down flux rate of LUM(%): 76.99%

CIE Type : Semidirect lighting

Output flux ratio in π solid angle : 53.419%

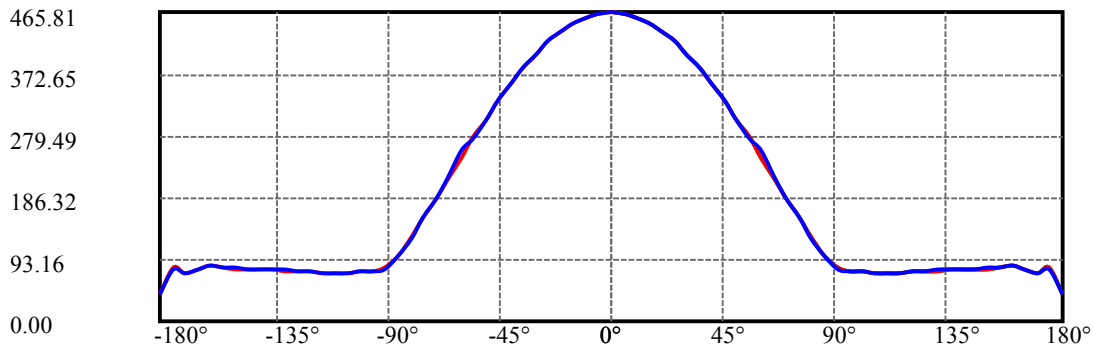
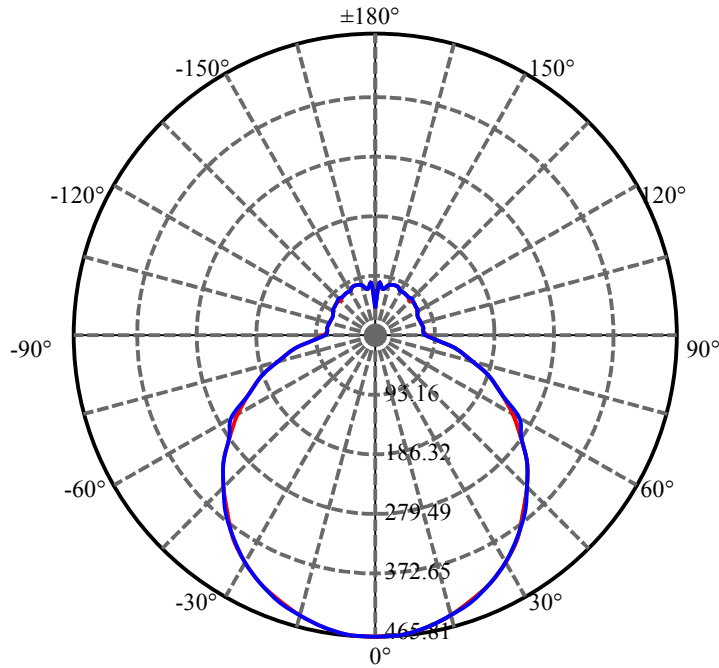
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	465.810	0.000	0	0.00%	0.00%
5.0	464.105	11.117	11.117	0.54%	0.54%
10.0	458.438	33.002	44.119	1.59%	2.13%
15.0	449.526	53.860	97.979	2.60%	4.72%
20.0	437.081	73.069	171.048	3.52%	8.24%
25.0	421.590	90.059	261.106	4.34%	12.58%
30.0	403.190	104.377	365.483	5.03%	17.61%
35.0	381.688	115.579	481.062	5.57%	23.18%
40.0	358.872	123.557	604.619	5.95%	29.14%
45.0	332.216	127.961	732.579	6.17%	35.30%
50.0	304.870	128.732	861.312	6.20%	41.51%
55.0	276.070	126.316	987.627	6.09%	47.59%
60.0	247.006	120.908	1108.535	5.83%	53.42%
65.0	216.060	112.572	1221.107	5.42%	58.84%
70.0	185.537	101.687	1322.795	4.90%	63.74%
75.0	155.841	89.231	1412.025	4.30%	68.04%
80.0	127.255	75.749	1487.774	3.65%	71.69%
85.0	98.582	61.365	1549.139	2.96%	74.65%
90.0	78.683	48.536	1597.675	2.34%	76.99%
95.0	75.087	42.103	1639.779	2.03%	79.02%
100.0	74.130	40.546	1680.324	1.95%	80.97%
105.0	73.408	39.477	1719.801	1.90%	82.87%
110.0	73.158	38.310	1758.111	1.85%	84.72%
115.0	73.513	37.138	1795.249	1.79%	86.51%
120.0	74.418	35.962	1831.212	1.73%	88.24%
125.0	75.434	34.638	1865.849	1.67%	89.91%
130.0	76.560	33.049	1898.898	1.59%	91.50%
135.0	77.647	31.160	1930.058	1.50%	93.01%
140.0	77.924	28.805	1958.863	1.39%	94.39%
145.0	78.406	26.083	1984.946	1.26%	95.65%
150.0	79.547	23.260	2008.205	1.12%	96.77%
155.0	81.617	20.395	2028.601	0.98%	97.75%
160.0	83.255	17.292	2045.893	0.83%	98.59%
165.0	78.776	13.354	2059.246	0.64%	99.23%
170.0	73.438	9.029	2068.276	0.44%	99.67%
175.0	79.487	5.471	2073.746	0.26%	99.93%
180.0	41.196	1.443	2075.189	0.07%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	365.48	17.61%	17.61%
0-40	604.62	29.14%	29.14%
0-60	1108.54	53.42%	53.42%
0-90	1597.68	76.99%	76.99%
0-120	1831.21	88.24%	88.24%
0-180	2075.19	100.00%	100.00%
60-90	489.14	23.57%	23.57%
90-120	233.54	11.25%	11.25%
90-130	301.22	14.52%	14.52%
90-150	410.53	19.78%	19.78%
90-180	476.07	22.94%	22.94%
0-97.51	1660.15	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	44.12
10-20	126.93
20-30	194.44
30-40	239.14
40-50	256.69
50-60	247.22
60-70	214.26
70-80	164.98
80-90	109.90
90-100	82.65
100-110	77.79
110-120	73.10
120-130	67.69
130-140	59.97
140-150	49.34
150-160	37.69
160-170	22.38
170-180	5.47



C0(Max): —————

C0/C180: —————

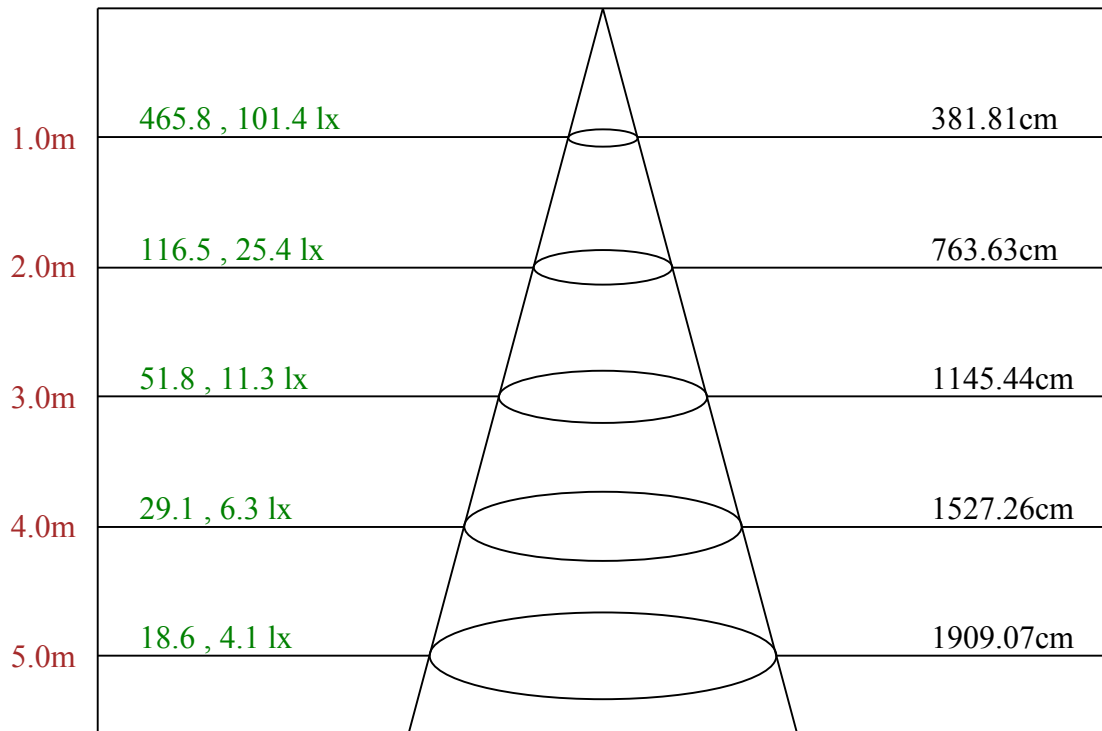
C90/C270: —————

Field angle(10%Imax):C0/180Left:179.3 Right:179.3

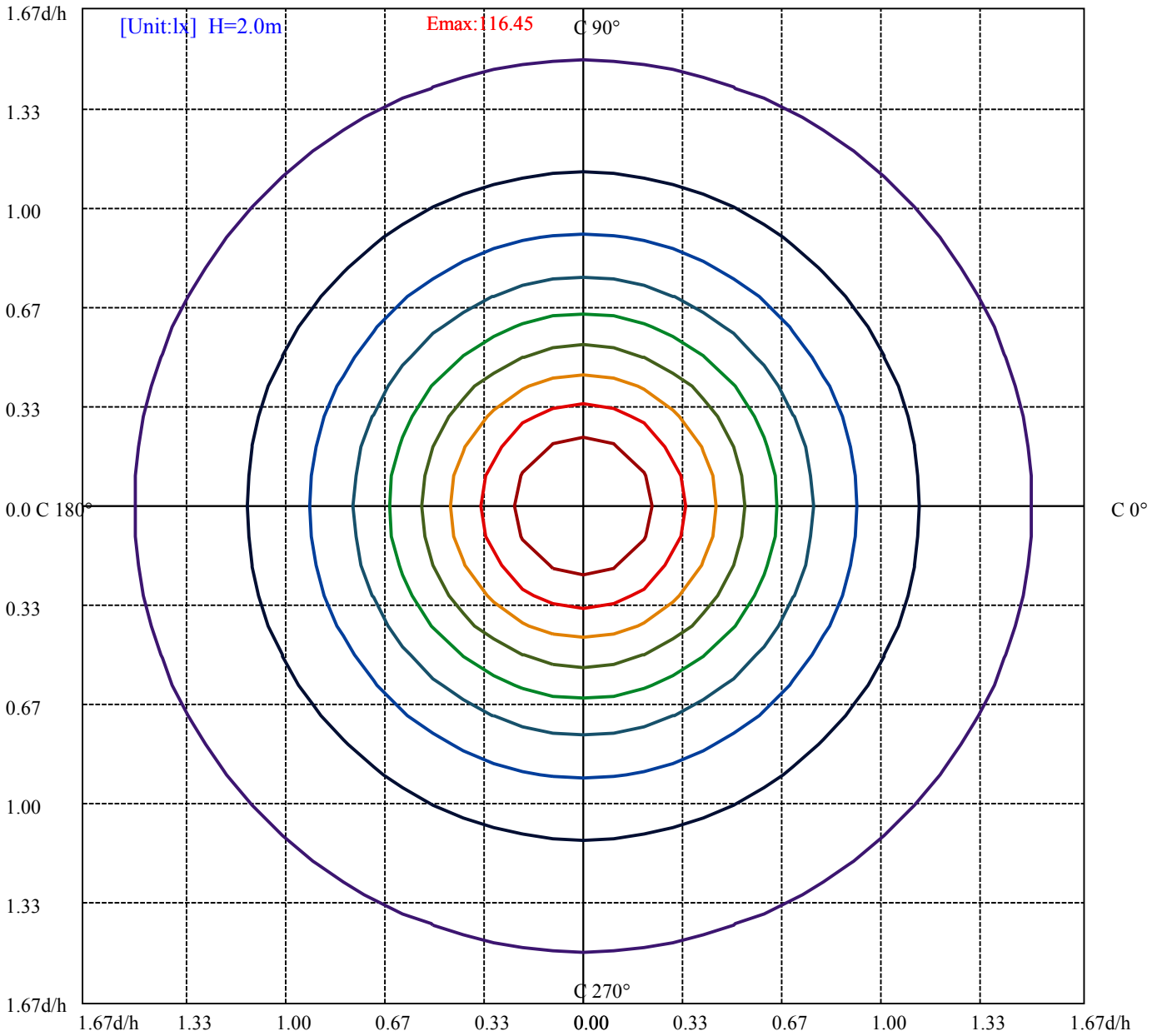
:C90/270Left:179.3 Right:179.3

Beam Angle(50%Imax):C0/180Left:62.2 Right:62.2

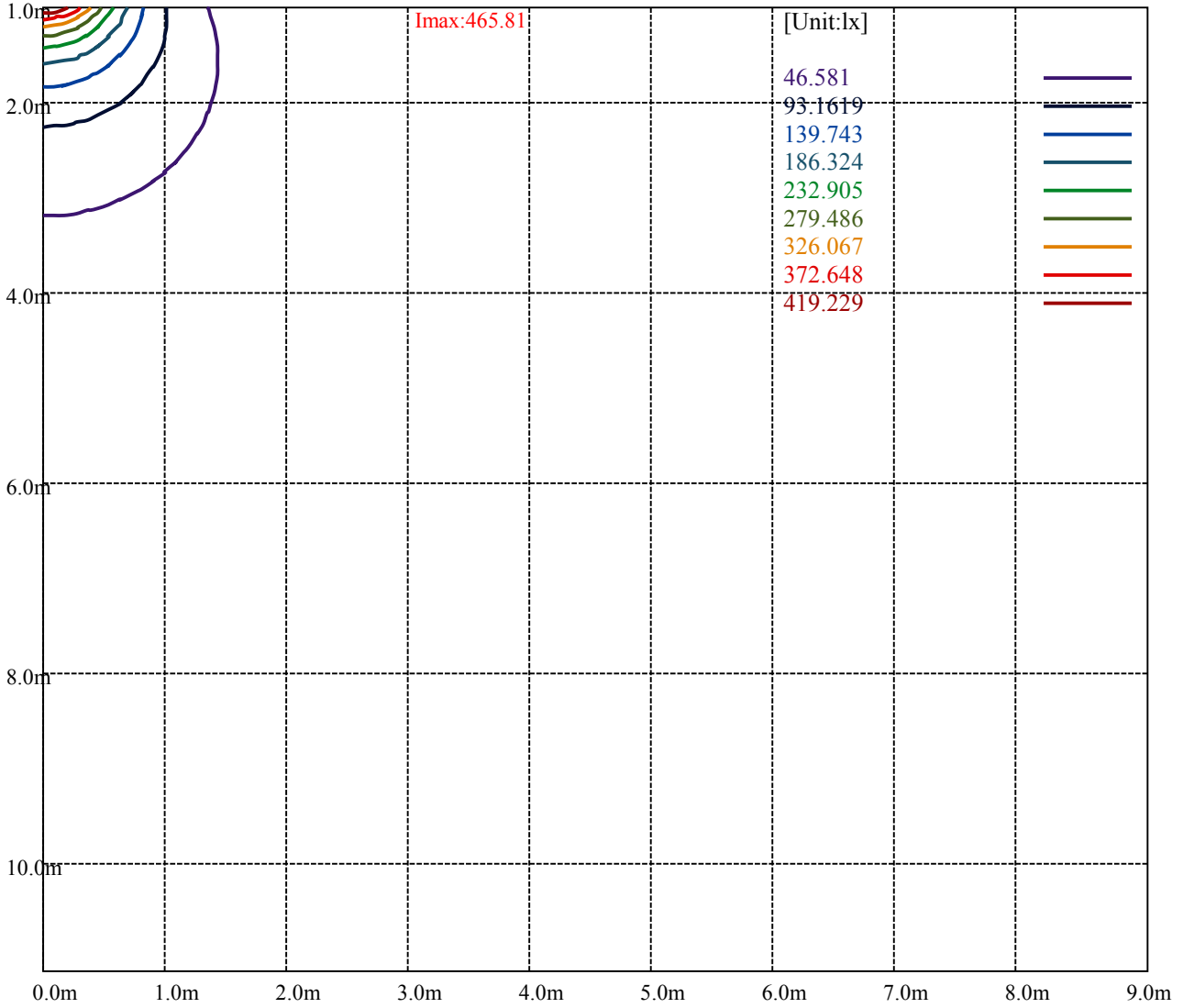
:C90/270Left:63.0 Right:63.0



Max , Ave Beam angle of C0 plane 124.71



(10%Emax) 11.64522	—
(20%Emax) 23.29048	—
(30%Emax) 34.93575	—
(40%Emax) 46.581	—
(50%Emax) 58.22625	—
(60%Emax) 69.8715	—
(70%Emax) 81.51675	—
(80%Emax) 93.162	—
(90%Emax) 104.8073	—



Luminance Table

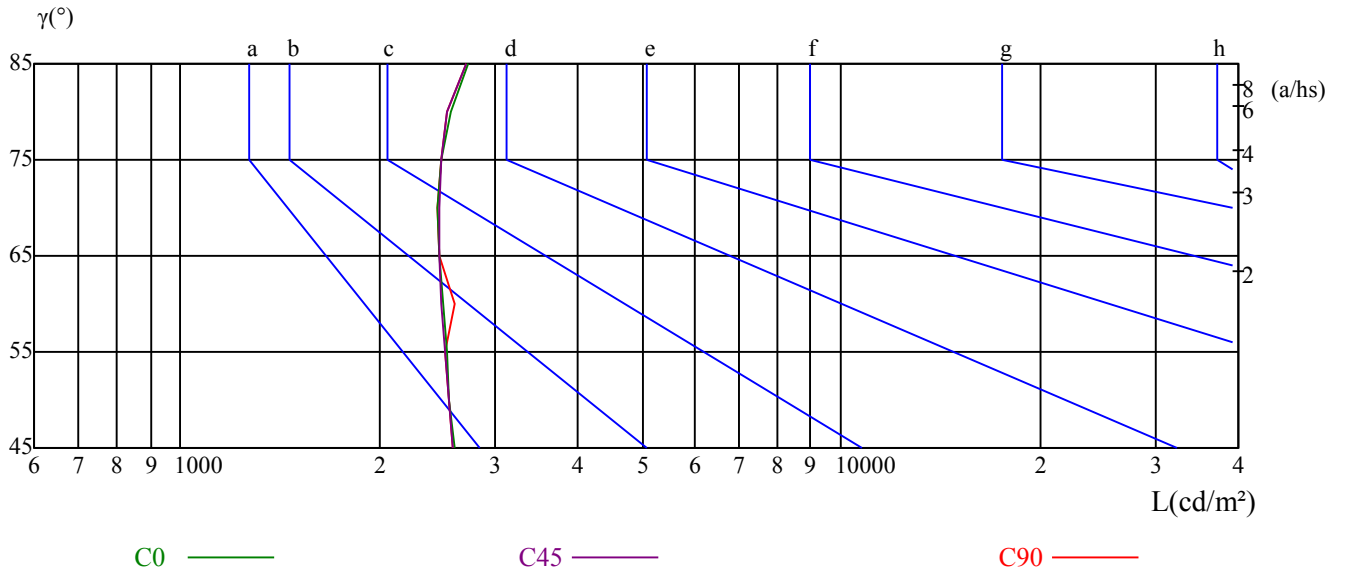
γ	45	50	55	60	65	70	75	80	85
C0	2598	2547	2525	2492	2458	2457	2486	2562	2730
C45	2591	2553	2516	2482	2466	2460	2480	2540	2711
C90	2587	2553	2518	2602	2464	2453	2475	2526	2709

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3204	3211	3214	3798	3782	3790	7144	7089	7095

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	1.14	1.14	1.14	1.08	1.08	1.08	0.98	0.98	0.98	0.89	0.89	0.89	0.81	0.81	0.81	0.77
1	0.96	0.91	0.87	0.92	0.87	0.83	0.83	0.80	0.76	0.75	0.72	0.70	0.68	0.66	0.64	0.60
2	0.83	0.75	0.69	0.79	0.72	0.66	0.71	0.66	0.61	0.65	0.60	0.57	0.59	0.55	0.52	0.49
3	0.72	0.63	0.57	0.69	0.61	0.55	0.62	0.56	0.51	0.57	0.51	0.47	0.51	0.47	0.43	0.40
4	0.63	0.54	0.47	0.60	0.52	0.46	0.55	0.48	0.43	0.50	0.44	0.40	0.45	0.41	0.37	0.34
5	0.56	0.47	0.40	0.54	0.45	0.39	0.49	0.42	0.37	0.45	0.39	0.34	0.41	0.36	0.32	0.29
6	0.50	0.41	0.35	0.48	0.40	0.34	0.44	0.37	0.32	0.40	0.34	0.30	0.37	0.32	0.28	0.25
7	0.46	0.37	0.31	0.44	0.35	0.30	0.40	0.33	0.28	0.37	0.31	0.26	0.33	0.28	0.24	0.22
8	0.41	0.33	0.27	0.40	0.32	0.26	0.36	0.30	0.25	0.33	0.28	0.23	0.31	0.26	0.22	0.20
9	0.38	0.30	0.24	0.36	0.29	0.23	0.33	0.27	0.22	0.31	0.25	0.21	0.28	0.23	0.20	0.17
10	0.35	0.27	0.22	0.33	0.26	0.21	0.31	0.24	0.20	0.28	0.23	0.19	0.26	0.21	0.18	0.16

AFX JUNC18LAJUDSN-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	465.81	465.90	462.13	455.05	444.91	430.74	413.69	393.51	371.00
15.0	465.81	465.54	461.77	454.69	445.19	429.58	413.89	393.45	370.85
30.0	465.81	465.90	461.15	454.60	443.84	429.76	412.54	391.91	370.03
45.0	465.81	465.54	461.42	453.97	442.77	428.24	410.84	390.49	367.63
60.0	465.81	465.45	460.78	453.15	441.76	427.13	409.54	388.89	365.47
75.0	465.81	465.09	460.42	452.43	441.02	425.75	409.49	388.65	365.12
90.0	465.81	464.73	459.88	452.61	441.21	426.12	407.81	386.53	363.18
105.0	465.81	464.64	459.54	451.47	439.37	424.40	406.56	384.51	362.91
120.0	465.81	464.46	459.27	450.57	438.74	423.68	405.48	384.32	361.64
135.0	465.81	465.63	459.88	451.34	439.21	423.93	406.94	385.55	361.74
150.0	465.81	464.82	459.71	451.45	426.42	424.17	405.51	384.24	362.17
165.0	465.81	464.29	459.53	450.48	439.45	424.12	406.09	384.75	359.47
180.0	465.81	461.95	454.51	443.65	429.48	411.99	391.81	370.82	344.18
195.0	465.81	461.77	454.60	443.66	430.03	412.37	392.73	370.41	345.48
210.0	465.81	462.58	455.23	444.73	429.76	413.70	393.97	371.28	347.34
225.0	465.81	462.13	455.23	444.65	431.92	415.15	395.33	372.65	348.17
240.0	465.81	462.58	456.03	445.79	432.06	415.10	395.44	373.01	350.30
255.0	465.81	463.11	456.56	446.50	433.03	417.22	397.55	375.09	350.84
270.0	465.81	463.39	457.01	447.13	433.85	417.50	399.10	376.29	352.68
285.0	465.81	463.03	456.76	446.99	433.63	418.13	399.12	377.25	371.97
300.0	465.81	463.66	457.47	447.88	445.10	419.01	399.92	377.95	354.02
315.0	465.81	464.64	457.90	448.82	435.88	420.87	400.92	379.98	355.99
330.0	465.81	463.93	457.82	448.58	435.84	420.05	401.11	379.40	355.26
345.0	465.81	463.75	457.92	448.41	435.50	419.45	401.16	379.55	355.52
360.0	465.81	465.90	462.13	455.05	444.91	430.74	413.69	393.51	371.00

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	347.68	319.42	292.33	262.55	231.87	201.20	172.40	142.08	112.93
15.0	345.93	319.21	291.86	260.57	231.69	200.94	170.36	140.15	111.18
30.0	344.02	317.92	289.49	259.72	229.32	198.47	167.97	139.28	110.13
45.0	342.43	315.53	286.75	256.98	227.84	197.26	166.60	136.65	107.69
60.0	340.16	314.40	285.77	255.70	227.16	194.58	165.77	135.88	107.07
75.0	339.61	312.31	283.29	253.47	224.73	194.01	163.56	133.56	106.17
90.0	337.68	311.65	282.83	252.75	222.22	191.60	162.42	131.45	104.15
105.0	336.47	309.14	280.18	250.25	221.21	189.21	160.26	130.41	102.18
120.0	335.19	308.93	279.88	249.85	219.46	188.71	160.38	129.18	102.29
135.0	336.30	308.71	279.59	249.40	220.91	189.99	159.61	129.78	101.47
150.0	334.98	309.22	278.44	250.27	219.76	188.89	158.47	129.04	103.10
165.0	335.97	308.63	279.49	249.63	220.40	189.82	159.51	129.92	101.41
180.0	319.24	289.10	261.38	230.98	198.77	170.07	140.29	112.93	85.12
195.0	318.85	290.34	261.10	230.98	201.93	171.62	141.85	112.98	86.26
210.0	319.81	292.45	263.22	232.99	202.50	172.10	143.58	113.45	87.89
225.0	321.90	293.38	263.88	233.58	203.00	174.22	144.45	115.58	88.41
240.0	323.91	293.76	266.38	236.23	205.62	175.19	146.65	116.32	90.56
255.0	324.52	298.38	267.04	238.83	208.02	177.67	147.49	141.02	90.54
270.0	326.46	298.45	269.45	262.53	209.47	178.94	148.95	120.04	92.39
285.0	325.90	299.72	270.86	240.75	210.27	179.71	150.85	121.81	94.11
300.0	327.66	300.23	272.71	240.70	211.84	181.54	151.42	122.19	94.31
315.0	329.83	302.24	273.12	242.93	212.28	181.72	153.32	123.75	95.80
330.0	329.41	301.78	273.69	243.72	213.03	182.61	152.46	123.20	95.30
345.0	329.25	301.99	272.94	242.81	212.15	182.83	151.53	123.47	95.49
360.0	347.68	319.42	292.33	262.55	231.87	201.20	172.40	142.08	112.93

AFX JUNC18LAJUDSN-3000K

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	85.84	74.99	73.73	72.75	72.30	72.39	73.19	74.18	74.72
15.0	85.36	74.60	73.44	72.45	72.00	72.18	72.72	73.35	74.96
30.0	83.23	74.35	73.09	72.37	71.75	71.93	72.73	73.81	75.15
45.0	82.67	74.06	72.99	72.18	71.82	71.82	72.81	73.97	75.23
60.0	80.87	74.13	72.97	72.16	71.89	72.16	73.15	74.22	75.66
75.0	79.22	74.28	73.11	72.49	72.04	72.31	73.38	74.55	75.72
90.0	78.83	74.34	73.27	72.46	72.19	72.37	73.44	74.43	75.78
105.0	77.62	74.30	73.23	72.69	72.24	72.51	73.32	74.66	75.83
120.0	77.55	74.59	73.42	72.53	72.53	72.88	73.78	74.77	75.84
135.0	78.01	74.95	74.14	73.34	72.98	73.25	74.14	75.40	76.12
150.0	77.71	75.29	74.30	73.40	73.22	73.49	74.30	75.47	76.63
165.0	77.47	75.32	74.42	73.53	73.08	73.44	74.42	75.41	76.66
180.0	77.14	75.80	75.17	74.72	74.63	74.90	75.98	76.87	78.04
195.0	77.11	75.86	75.14	74.51	74.78	75.14	76.04	76.93	78.10
210.0	77.22	75.78	75.06	74.53	74.44	75.15	76.05	76.86	78.11
225.0	77.20	75.86	75.05	74.42	74.42	74.96	75.23	76.93	78.01
240.0	77.28	75.75	75.57	74.49	74.31	75.03	75.93	76.83	77.90
255.0	77.16	75.81	74.82	74.19	74.10	74.64	75.81	76.71	77.87
270.0	77.13	75.60	74.70	74.07	73.80	74.43	75.51	76.41	77.66
285.0	76.81	75.47	74.39	73.95	73.59	74.03	75.02	76.01	77.17
300.0	76.92	75.21	74.41	73.87	73.69	74.05	75.04	75.84	77.01
315.0	76.93	75.49	74.32	73.70	73.52	74.06	75.04	75.94	77.02
330.0	76.63	75.20	74.30	73.67	73.31	73.67	74.75	75.65	76.18
345.0	76.48	75.05	74.06	73.35	73.17	73.53	74.24	75.23	76.04
360.0	85.84	74.99	73.73	72.75	72.30	72.39	73.19	74.18	74.72
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	75.80	77.14	78.04	79.56	82.08	83.51	81.45	75.62	77.68
15.0	76.30	77.38	78.37	79.62	81.95	83.39	81.24	75.32	77.29
30.0	76.50	77.31	78.56	79.73	82.06	83.40	81.16	75.33	77.84
45.0	76.75	77.65	78.37	79.62	81.95	83.48	80.88	74.96	77.38
60.0	76.92	77.99	78.53	80.06	81.85	83.83	80.87	74.85	77.81
75.0	77.25	78.23	78.95	79.67	82.10	84.43	80.84	75.00	78.23
90.0	77.31	78.47	78.92	80.27	81.97	84.76	81.17	74.52	77.75
105.0	77.26	78.16	79.05	80.40	82.46	84.70	80.40	74.66	77.98
120.0	77.55	78.17	79.34	80.50	82.83	84.36	80.41	74.77	77.55
135.0	76.57	77.83	79.27	80.62	83.04	84.84	81.07	74.68	77.11
150.0	77.35	77.17	77.62	80.04	82.56	84.53	81.12	74.12	77.44
165.0	78.10	78.28	78.28	78.55	81.95	83.93	80.43	74.33	77.65
180.0	78.85	78.31	78.04	78.67	81.18	82.34	76.15	71.85	81.54
195.0	78.91	78.64	78.64	79.44	80.61	81.24	77.02	72.18	81.51
210.0	79.10	78.83	78.83	79.82	81.07	82.87	77.22	72.37	81.52
225.0	79.08	78.55	79.08	80.07	81.42	83.21	77.02	72.63	81.33
240.0	78.89	78.53	79.07	80.24	81.76	83.56	77.37	72.61	81.40
255.0	78.68	78.32	79.04	80.30	81.47	82.81	77.25	72.49	81.47
270.0	78.20	78.47	78.83	79.73	80.63	82.24	76.86	71.92	81.35
285.0	78.25	78.34	78.34	78.87	80.22	81.74	76.19	71.88	81.21
300.0	78.17	77.90	77.37	78.35	80.15	81.76	75.84	71.72	81.13
315.0	77.56	76.93	77.47	78.64	80.53	82.14	75.67	71.81	81.33
330.0	77.08	77.17	77.26	77.62	81.21	82.65	76.54	71.52	81.03
345.0	77.11	76.39	76.48	78.73	81.77	82.40	76.48	71.37	81.15
360.0	75.80	77.14	78.04	79.56	82.08	83.51	81.45	75.62	77.68

Intensity data(cd)

C/γ(°)	180.0
0.0	82.25
15.0	82.67
30.0	82.33
45.0	82.40
60.0	82.48
75.0	82.63
90.0	82.51
105.0	82.19
120.0	82.30
135.0	82.41
150.0	82.29
165.0	82.22
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	82.25