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## NATA

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Client:

LumCAT: 2-2639-L

Luminaire: 92.70.411.00

Report No: 20231023-B017

Ballast type: AC

Test No: 20231023-C017

Voltage(V): 36.640

LampCAT: NICHIA NFDWJ130B-V3

Current(A): 0.576

Lamp flux(lm): 2810.0

Power (W): 21.104

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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## Photometric Results

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Lumens(lm): 2652.57, Efficiency(%): 94.40% , Luminous Efficacy(lm/W): 125.69

Central intensity(cd): 10594.540, Maximum intensity(cd): 10594.540

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=21.2

[C90/270]Total=21.2

Field angle(10%Imax): [C0/180]Total=55.8

[C90/270]Total=55.8

Beam angle of C0 plane : 21.28

Average BeamAngle(IEC 61341):21.28

Maximum s/h(1/2): C0\_180=0.36 C90\_270=0.36

Maximum s/h(1/4): C0\_180=0.40 C90\_270=0.40

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.40%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 97.907%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10594.541	0.000	0	0.00%	0.00%
1.0	10512.825	10.099	10.099	0.36%	0.38%
2.0	10319.779	29.901	40	1.06%	1.51%
3.0	9999.905	48.598	88.598	1.73%	3.34%
4.0	9516.322	65.327	153.925	2.32%	5.80%
5.0	8993.715	79.629	233.555	2.83%	8.80%
6.0	8314.387	90.959	324.513	3.24%	12.23%
7.0	7687.854	99.326	423.839	3.53%	15.98%
8.0	6984.725	105.009	528.848	3.74%	19.94%
9.0	6290.591	107.589	636.437	3.83%	23.99%
10.0	5662.051	108.167	744.604	3.85%	28.07%
11.0	5093.569	107.471	852.075	3.82%	32.12%
12.0	4534.982	105.254	957.329	3.75%	36.09%
13.0	4055.482	101.947	1059.276	3.63%	39.93%
14.0	3617.980	98.220	1157.495	3.50%	43.64%
15.0	3252.923	94.327	1251.822	3.36%	47.19%
16.0	2924.192	90.512	1342.334	3.22%	50.61%
17.0	2621.201	86.357	1428.691	3.07%	53.86%
18.0	2371.556	82.320	1511.011	2.93%	56.96%
19.0	2156.161	78.773	1589.784	2.80%	59.93%
20.0	1973.010	75.575	1665.359	2.69%	62.78%
21.0	1813.522	72.709	1738.068	2.59%	65.52%
22.0	1675.761	70.119	1808.187	2.50%	68.17%
23.0	1560.003	67.895	1876.082	2.42%	70.73%
24.0	1441.339	65.620	1941.702	2.34%	73.20%
25.0	1320.453	62.797	2004.499	2.23%	75.57%
26.0	1248.424	60.639	2065.138	2.16%	77.85%
27.0	1130.577	58.203	2123.34	2.07%	80.05%
28.0	1052.390	55.268	2178.608	1.97%	82.13%
29.0	950.753	52.408	2231.016	1.87%	84.11%
30.0	838.856	48.319	2279.335	1.72%	85.93%
31.0	734.349	43.780	2323.115	1.56%	87.58%
32.0	634.802	39.225	2362.34	1.40%	89.06%
33.0	533.796	34.427	2396.767	1.23%	90.36%
34.0	435.764	29.342	2426.109	1.04%	91.46%
35.0	353.730	24.519	2450.628	0.87%	92.39%
36.0	284.490	20.321	2470.949	0.72%	93.15%
37.0	222.570	16.537	2487.486	0.59%	93.78%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	168.912	13.067	2500.553	0.47%	94.27%
39.0	128.573	10.154	2510.707	0.36%	94.65%
40.0	93.935	7.760	2518.468	0.28%	94.94%
41.0	80.408	6.208	2524.676	0.22%	95.18%
42.0	72.278	5.547	2530.223	0.20%	95.39%
43.0	65.124	5.090	2535.313	0.18%	95.58%
44.0	59.533	4.705	2540.018	0.17%	95.76%
45.0	54.592	4.386	2544.404	0.16%	95.92%
46.0	50.939	4.127	2548.531	0.15%	96.08%
47.0	47.680	3.922	2552.453	0.14%	96.23%
48.0	45.106	3.751	2556.204	0.13%	96.37%
49.0	42.982	3.617	2559.822	0.13%	96.50%
50.0	41.128	3.507	2563.328	0.12%	96.64%
51.0	39.716	3.420	2566.749	0.12%	96.76%
52.0	38.554	3.359	2570.107	0.12%	96.89%
53.0	37.634	3.314	2573.422	0.12%	97.02%
54.0	37.080	3.293	2576.715	0.12%	97.14%
55.0	36.838	3.300	2580.014	0.12%	97.26%
56.0	36.831	3.329	2583.343	0.12%	97.39%
57.0	37.011	3.376	2586.719	0.12%	97.52%
58.0	37.101	3.427	2590.147	0.12%	97.65%
59.0	36.893	3.459	2593.606	0.12%	97.78%
60.0	36.104	3.449	2597.054	0.12%	97.91%
61.0	34.451	3.367	2600.421	0.12%	98.03%
62.0	32.243	3.214	2603.635	0.11%	98.16%
63.0	29.469	3.001	2606.637	0.11%	98.27%
64.0	26.411	2.742	2609.379	0.10%	98.37%
65.0	23.996	2.495	2611.873	0.09%	98.47%
66.0	22.079	2.299	2614.172	0.08%	98.55%
67.0	20.758	2.154	2616.326	0.08%	98.63%
68.0	19.844	2.057	2618.383	0.07%	98.71%
69.0	19.083	1.986	2620.369	0.07%	98.79%
70.0	18.447	1.927	2622.296	0.07%	98.86%
71.0	17.893	1.878	2624.174	0.07%	98.93%
72.0	17.353	1.833	2626.007	0.07%	99.00%
73.0	16.883	1.790	2627.797	0.06%	99.07%
74.0	16.426	1.751	2629.548	0.06%	99.13%
75.0	15.963	1.711	2631.26	0.06%	99.20%

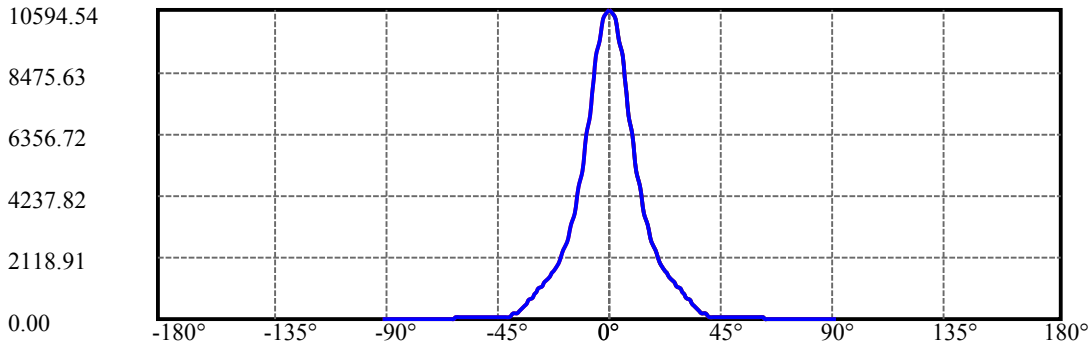
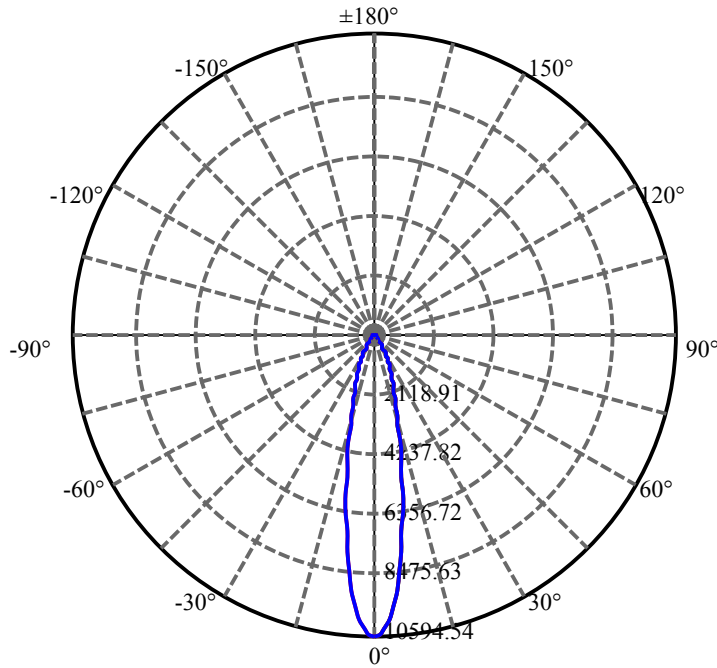
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.554	1.673	2632.933	0.06%	99.26%
77.0	15.160	1.638	2634.57	0.06%	99.32%
78.0	14.738	1.600	2636.171	0.06%	99.38%
79.0	14.371	1.564	2637.735	0.06%	99.44%
80.0	13.949	1.527	2639.262	0.05%	99.50%
81.0	13.575	1.488	2640.75	0.05%	99.55%
82.0	13.160	1.450	2642.2	0.05%	99.61%
83.0	12.752	1.409	2643.609	0.05%	99.66%
84.0	12.385	1.369	2644.978	0.05%	99.71%
85.0	12.081	1.335	2646.313	0.05%	99.76%
86.0	11.818	1.306	2647.62	0.05%	99.81%
87.0	11.514	1.277	2648.897	0.05%	99.86%
88.0	11.237	1.246	2650.143	0.04%	99.91%
89.0	11.029	1.220	2651.363	0.04%	99.95%
90.0	10.918	1.203	2652.567	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2279.34	81.12%	85.93%
0-40	2518.47	89.63%	94.94%
0-60	2597.05	92.42%	97.91%
0-90	2651.36	94.35%	99.95%
0-120	2651.36	94.35%	99.95%
0-180	2652.57	94.40%	100.00%
60-90	54.31	1.93%	2.05%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.98	2122.05	75.52%	80.00%

ZONAL LUMEN SUMMARY

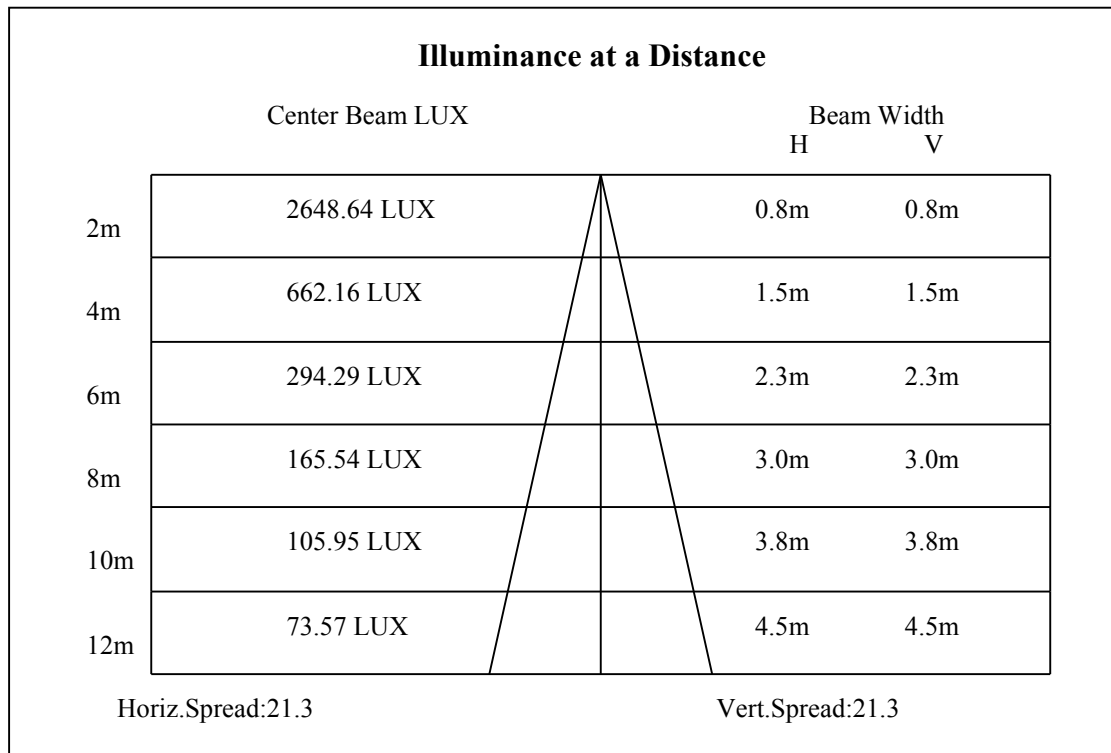
0-10	744.60
10-20	920.75
20-30	613.98
30-40	239.13
40-50	44.86
50-60	33.73
60-70	25.24
70-80	16.97
80-90	12.10
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

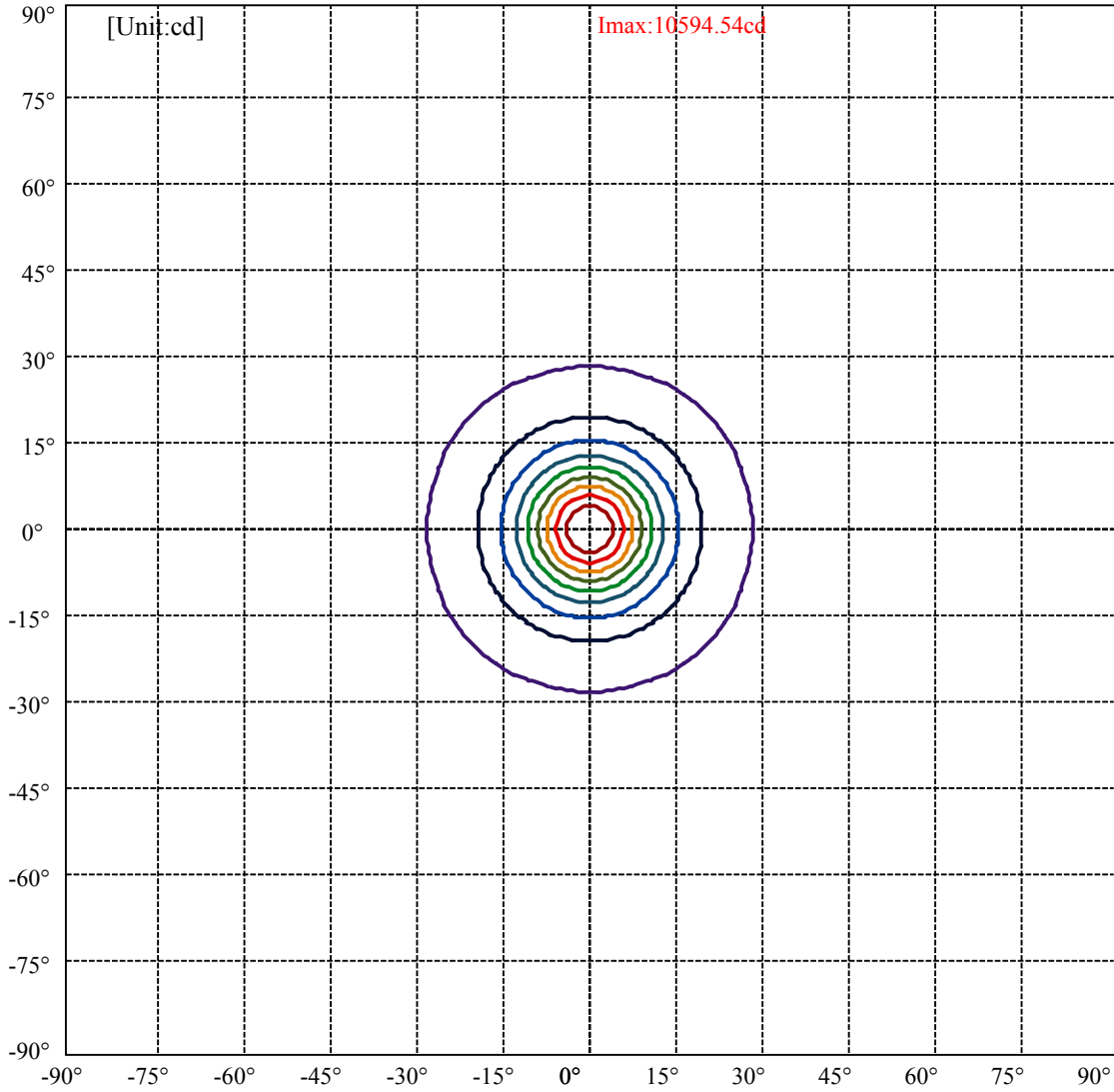


C0(Max): —————  
C0/C180: —————  
C90/C270: —————

Field angle(10%Imax):C0/180Left:27.9 Right:27.9  
:C90/270Left:27.9 Right:27.9

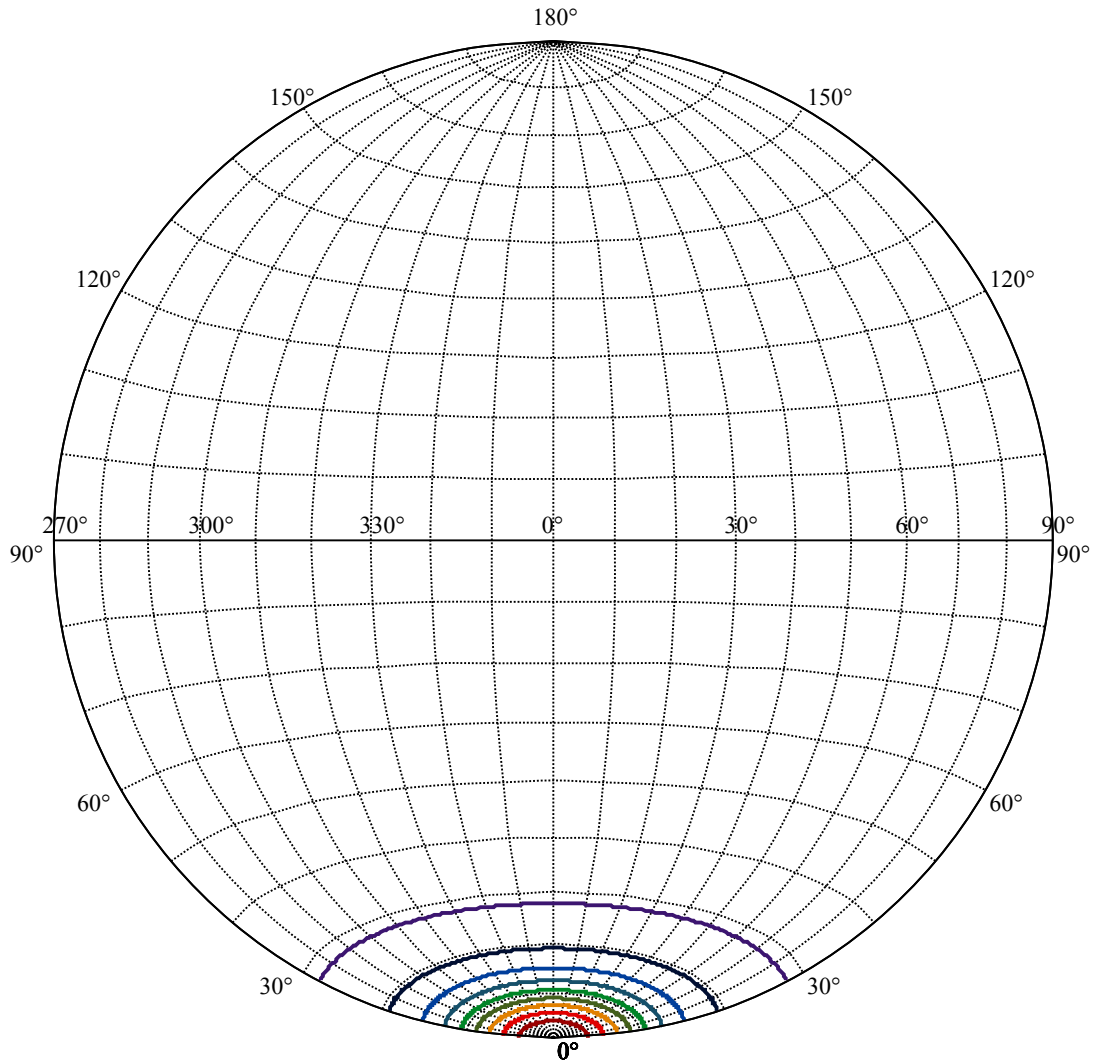
Beam Angle(50%Imax):C0/180Left:10.6 Right:10.6  
:C90/270Left:10.6 Right:10.6





(10%Imax) 1059.45	—
(20%Imax) 2118.91	—
(30%Imax) 3178.36	—
(40%Imax) 4237.82	—
(50%Imax) 5297.27	—
(60%Imax) 6356.72	—
(70%Imax) 7416.18	—
(80%Imax) 8475.63	—
(90%Imax) 9535.09	—





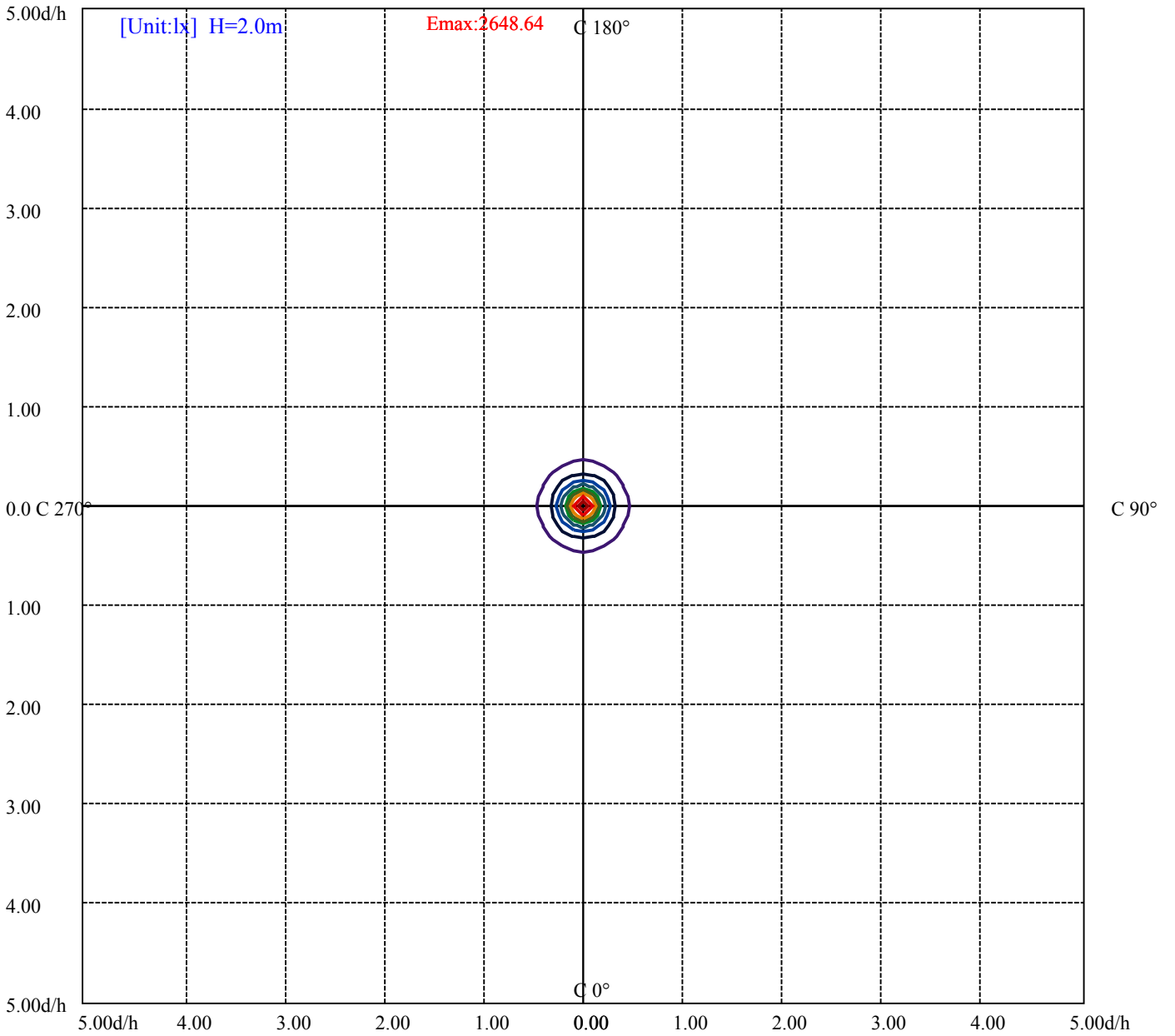
House

[Unit:cd]

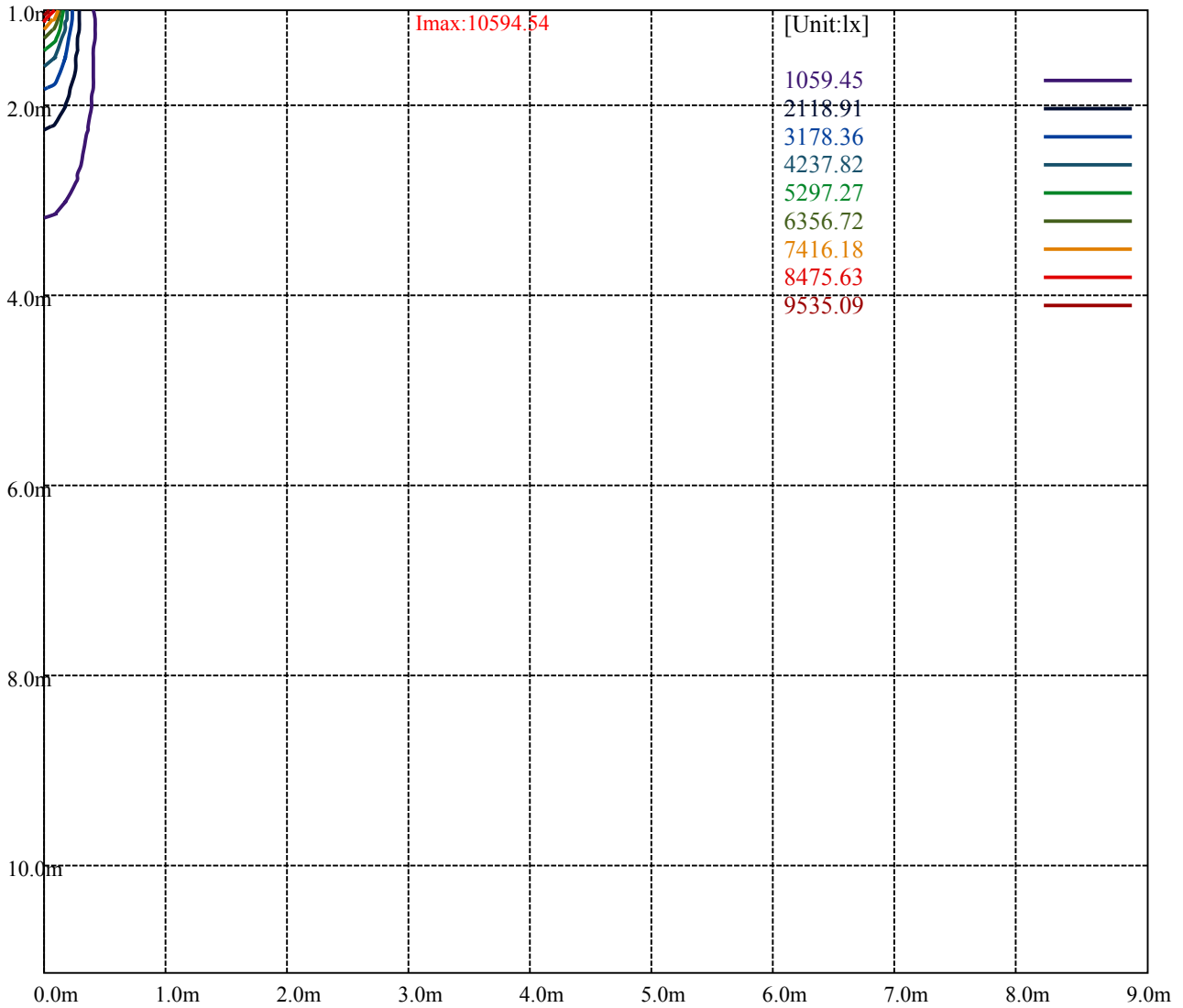
Road

**Imax:10594.54**

(10%Imax)	1059.45	—
(20%Imax)	2118.91	—
(30%Imax)	3178.36	—
(40%Imax)	4237.82	—
(50%Imax)	5297.27	—
(60%Imax)	6356.72	—
(70%Imax)	7416.18	—
(80%Imax)	8475.63	—
(90%Imax)	9535.09	—



(10%Emax) 264.8625	—
(20%Emax) 529.7275	—
(30%Emax) 794.59	—
(40%Emax) 1059.453	—
(50%Emax) 1324.315	—
(60%Emax) 1589.18	—
(70%Emax) 1854.042	—
(80%Emax) 2118.905	—
(90%Emax) 2383.768	—



Luminance Table

$\gamma$	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

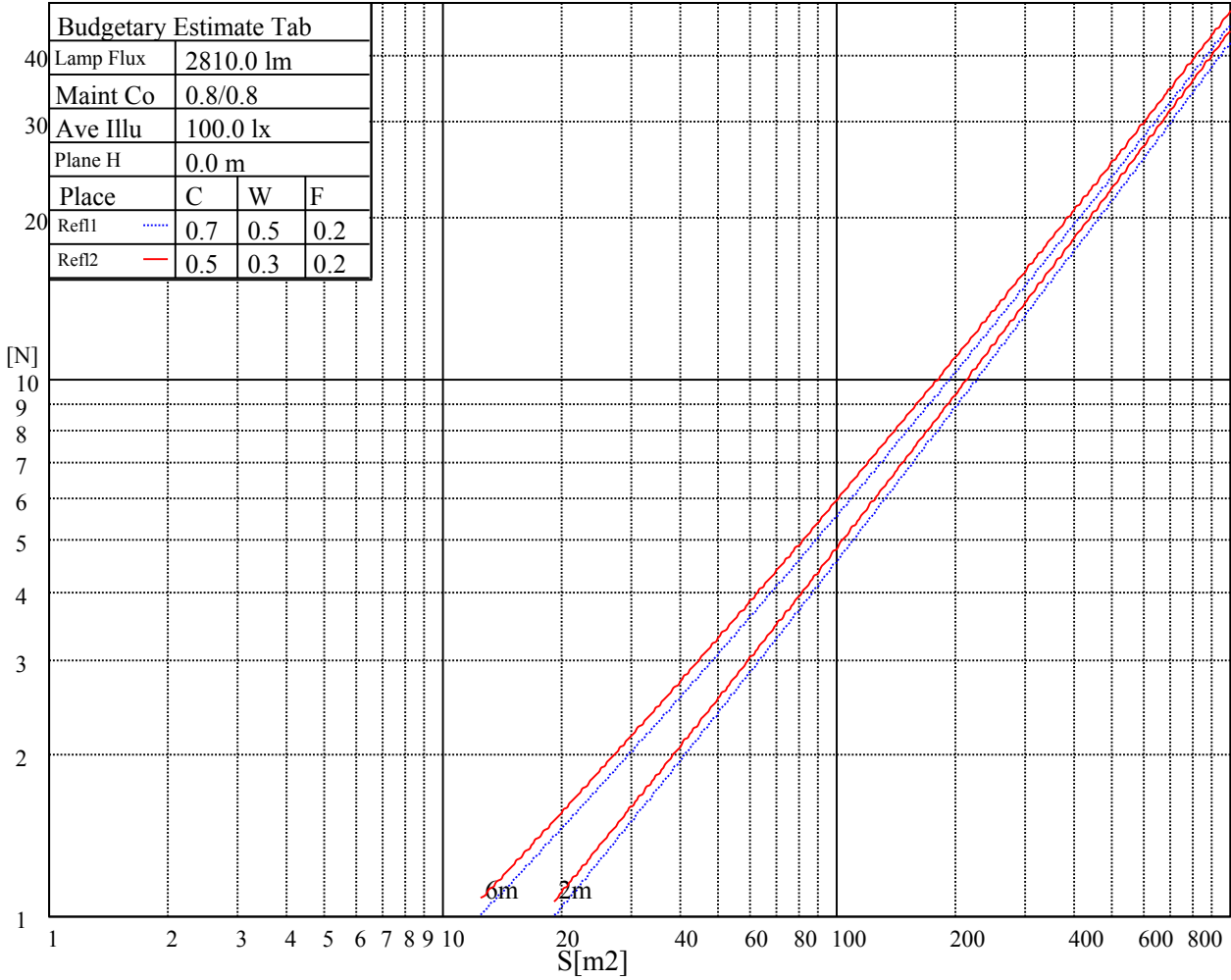
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

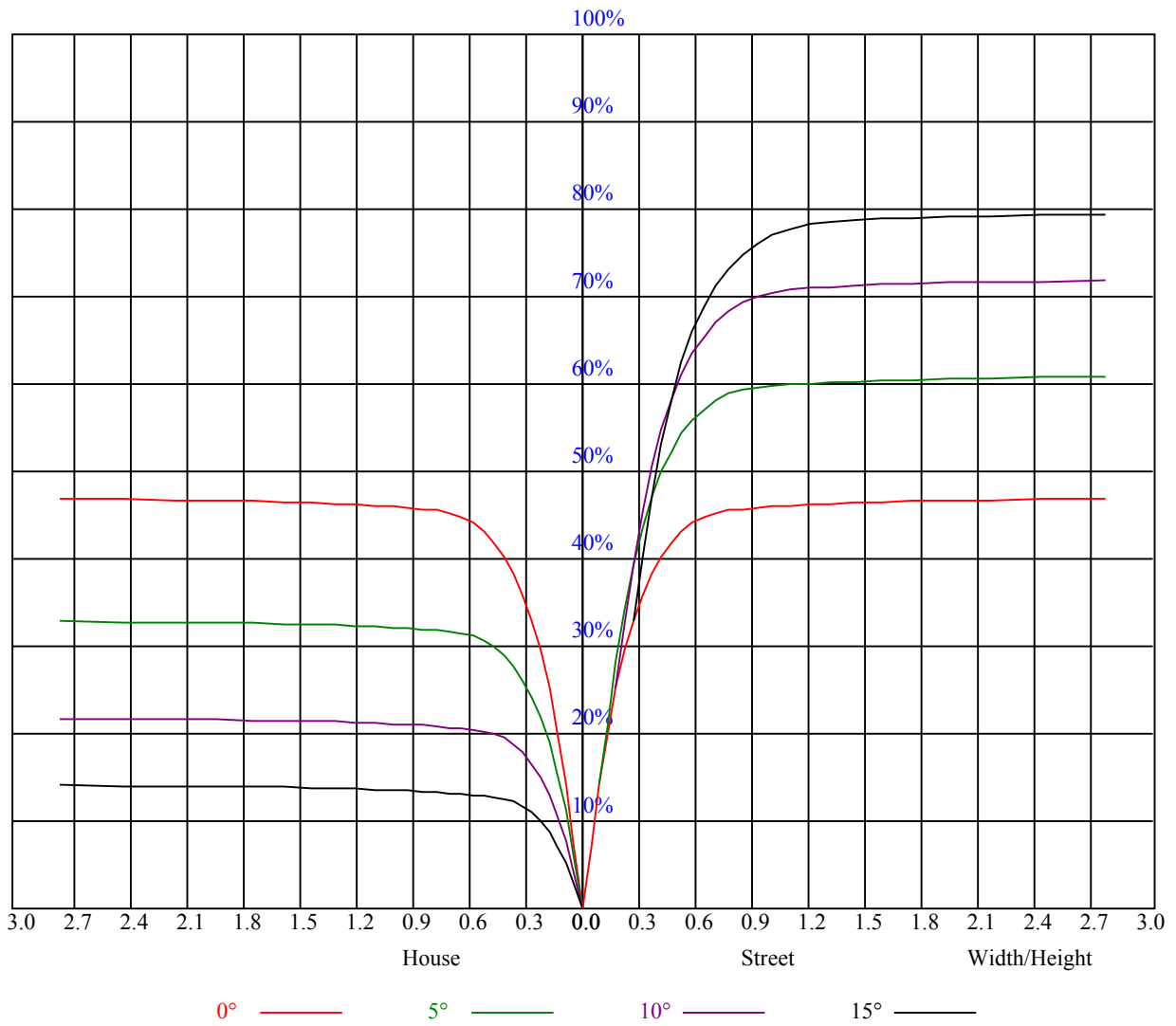


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
4H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
8H	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
12H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字		
Variation with the observer position at spacings:											
S = 1.0H	非数字/非数字					非数字/非数字					
S = 1.5H	非数字/非数字					非数字/非数字					
S = 2.0H	非数字/非数字					非数字/非数字					
Standard tables:	BK0					BK0					
Uncorrected UGR	负无穷大					负无穷大					

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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 RHOF=20 CU															
0	1.12	1.12	1.12	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.03	1.01	1.03	1.01	1.00	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.89
2	0.99	0.96	0.93	0.98	0.95	0.92	0.95	0.92	0.90	0.92	0.90	0.88	0.89	0.88	0.86	0.85
3	0.94	0.90	0.87	0.93	0.89	0.86	0.90	0.87	0.85	0.88	0.86	0.84	0.86	0.84	0.82	0.81
4	0.90	0.85	0.82	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.81	0.79	0.77
5	0.85	0.81	0.77	0.85	0.80	0.77	0.83	0.79	0.76	0.82	0.78	0.76	0.80	0.77	0.75	0.74
6	0.82	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
7	0.78	0.74	0.71	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
8	0.75	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.66
9	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
10	0.70	0.66	0.63	0.70	0.65	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.61





Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	10470.13	10136.90	9755.52	9271.17	8568.74	7973.69	7360.92	6734.32	5967.67
45.0	10638.41	10523.83	10295.77	9954.79	9375.79	8796.79	8180.71	7557.43	6737.09
90.0	10605.75	10357.77	10036.16	9581.15	8890.34	8248.79	7438.97	6775.28	6132.63
135.0	10663.87	10657.78	10531.58	10199.45	9786.52	9242.39	8465.23	7805.96	7136.19
180.0	10470.13	10602.43	10630.66	10507.77	10271.97	9927.11	9307.15	8698.26	8051.18
225.0	10638.41	10606.30	10415.33	10126.39	9703.49	9195.34	8455.82	7805.96	7148.92
270.0	10605.75	10660.55	10608.52	10426.96	10054.98	9625.99	9100.69	8540.51	7766.11
315.0	10663.87	10557.04	10284.70	9931.54	9478.75	8939.61	8205.62	7585.10	6938.02
360.0	10470.13	10136.90	9755.52	9271.17	8568.74	7973.69	7360.92	6734.32	5967.67
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5383.14	4856.72	4375.70	3834.34	3454.62	3049.43	2758.82	2511.39	2256.77
45.0	6122.66	5533.15	5000.64	4408.36	3969.96	3573.63	3130.80	2816.39	2553.46
90.0	5537.57	4874.99	4401.16	3963.87	3566.99	3128.59	2820.27	2532.98	2297.73
135.0	6306.99	5689.24	5142.90	4532.35	4088.42	3679.35	3319.00	2900.53	2619.89
180.0	7211.47	6545.56	5906.23	5311.73	4665.75	4225.69	3824.38	3433.58	3032.27
225.0	6322.49	5709.17	5143.46	4645.83	4200.23	3695.96	3330.07	3015.66	2668.04
270.0	7126.78	6510.14	5755.67	5172.24	4519.07	4083.99	3673.82	3309.04	2928.76
315.0	6313.63	5577.43	5022.79	4411.13	3978.82	3507.20	3166.23	2873.96	2612.69
360.0	5383.14	4856.72	4375.70	3834.34	3454.62	3049.43	2758.82	2511.39	2256.77
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2082.40	1930.73	1793.46	1642.89	1534.96	1441.96	1355.61	1079.51	1079.51
45.0	2270.05	2077.42	1879.25	1737.55	1613.56	1506.72	1387.16	1302.47	1212.24
90.0	2050.30	1882.02	1741.42	1591.42	1486.24	1390.48	1217.23	1096.39	1096.39
135.0	2374.12	2172.08	1944.57	1801.21	1640.13	1528.31	1425.91	1315.76	1226.08
180.0	2748.86	2430.02	2205.29	2016.53	1868.74	1698.80	1572.04	1474.62	1352.29
225.0	2428.92	2172.08	2002.14	1856.56	1699.91	1585.88	1481.26	1392.70	1307.45
270.0	2678.01	2435.00	2227.98	2014.32	1868.18	1743.08	1604.70	1504.51	1417.05
315.0	2339.80	2149.93	1989.96	1847.70	1694.37	1584.77	1486.80	1397.68	1296.38
360.0	2082.40	1930.73	1793.46	1642.89	1534.96	1441.96	1355.61	1079.51	1079.51
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1054.60	926.40	826.10	726.90	605.13	509.75	419.58	318.34	246.05
45.0	1120.91	1001.35	903.37	806.50	711.29	592.28	502.06	394.12	314.96
90.0	973.73	874.42	777.99	659.43	566.77	480.30	397.60	301.95	234.87
135.0	1125.89	1025.70	901.16	803.18	707.97	612.21	502.61	419.03	340.98
180.0	1275.90	1187.33	1091.57	966.47	867.39	769.97	671.44	548.00	464.42
225.0	1100.76	1100.76	1000.63	872.87	769.58	669.28	552.26	463.75	380.33
270.0	1313.54	1223.87	1127.00	1000.24	896.73	793.77	667.01	571.80	481.58
315.0	1079.28	1079.28	978.21	875.25	749.93	650.85	557.80	469.12	366.66
360.0	1054.60	926.40	826.10	726.90	605.13	509.75	419.58	318.34	246.05
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	185.82	130.41	103.62	90.50	81.31	72.24	65.87	60.45	55.91
45.0	296.70	211.28	122.33	97.26	85.02	74.62	68.08	62.60	57.68
90.0	177.46	130.86	95.15	83.92	73.79	67.09	61.89	55.96	52.03
135.0	285.62	285.62	135.45	96.87	84.14	75.83	67.09	61.61	56.79
180.0	359.80	280.64	280.64	146.91	112.48	92.16	81.65	72.02	65.43
225.0	285.07	218.81	164.40	114.64	93.05	82.26	74.01	65.87	60.17
270.0	395.22	298.36	280.64	280.64	125.54	93.66	82.86	74.45	66.20
315.0	290.22	224.57	169.05	117.85	96.15	85.41	76.78	68.03	62.05
360.0	185.82	130.41	103.62	90.50	81.31	72.24	65.87	60.45	55.91

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	51.37	48.43	45.89	43.34	41.52	39.69	38.58	37.86	37.36
45.0	52.59	49.38	46.77	44.01	42.12	40.52	38.91	37.92	37.03
90.0	48.88	46.33	43.62	41.79	40.24	38.97	37.70	37.03	36.48
135.0	51.59	48.32	45.67	43.56	41.18	39.58	38.30	37.31	36.20
180.0	59.78	55.35	50.21	47.16	44.84	42.18	40.68	39.19	37.81
225.0	55.58	51.81	47.99	45.61	43.12	41.46	40.08	38.64	37.81
270.0	60.50	55.24	51.64	48.82	46.39	43.95	42.29	40.91	39.74
315.0	56.46	52.64	49.65	46.55	44.45	42.68	41.18	39.58	38.64
360.0	51.37	48.43	45.89	43.34	41.52	39.69	38.58	37.86	37.36
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	37.31	37.64	37.64	37.75	37.42	36.48	34.60	31.33	28.29
45.0	36.64	36.53	36.70	36.92	37.14	37.09	36.26	34.21	31.55
90.0	36.37	36.59	37.14	37.36	37.31	36.48	34.60	32.33	29.39
135.0	35.76	35.54	35.70	36.09	36.31	36.37	36.04	34.71	32.22
180.0	36.87	36.15	35.81	35.92	36.09	36.26	36.42	36.26	35.43
225.0	37.14	36.70	36.59	36.81	36.98	37.03	36.37	35.37	33.54
270.0	38.58	37.86	37.47	37.53	37.81	37.86	37.75	36.87	35.43
315.0	37.97	37.70	37.59	37.70	37.75	37.59	36.81	34.54	32.11
360.0	37.31	37.64	37.64	37.75	37.42	36.48	34.60	31.33	28.29
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	25.52	22.69	21.20	20.31	19.32	18.76	18.16	17.66	17.05
45.0	28.89	25.24	23.03	21.59	20.31	19.60	18.93	18.21	17.71
90.0	26.63	23.47	21.92	20.70	19.87	19.04	18.38	17.77	17.21
135.0	29.78	26.96	23.91	21.92	20.65	19.87	18.99	18.43	17.88
180.0	33.27	30.72	27.68	24.13	22.36	20.92	19.93	19.21	18.60
225.0	30.00	27.12	24.36	22.20	20.87	20.04	19.21	18.60	18.10
270.0	32.49	29.34	26.51	23.91	21.98	20.76	19.98	19.15	18.60
315.0	29.17	25.74	23.36	21.86	20.70	19.76	19.10	18.54	17.99
360.0	25.52	22.69	21.20	20.31	19.32	18.76	18.16	17.66	17.05
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.61	16.27	15.89	15.39	15.06	14.72	14.23	13.89	13.40
45.0	17.21	16.77	16.22	15.83	15.44	15.11	14.61	14.28	13.95
90.0	16.83	16.22	15.83	15.50	15.00	14.67	14.28	13.95	13.40
135.0	17.33	16.88	16.44	15.94	15.61	15.22	14.78	14.45	14.06
180.0	17.93	17.44	16.99	16.55	16.00	15.61	15.28	14.89	14.39
225.0	17.55	17.05	16.61	16.11	15.67	15.22	14.89	14.50	14.06
270.0	18.05	17.55	16.99	16.50	16.11	15.55	15.17	14.72	14.39
315.0	17.33	16.88	16.44	15.89	15.55	15.17	14.67	14.28	13.95
360.0	16.61	16.27	15.89	15.39	15.06	14.72	14.23	13.89	13.40
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.06	12.73	12.34	12.01	11.79	11.51	11.18	10.96	10.96
45.0	13.40	13.01	12.57	12.23	11.90	11.68	11.40	11.13	10.90
90.0	13.06	12.68	12.34	12.07	11.79	11.51	11.24	10.96	10.90
135.0	13.67	13.17	12.73	12.34	12.01	11.79	11.51	11.18	10.96
180.0	14.12	13.67	13.23	12.79	12.51	12.18	11.85	11.62	11.29
225.0	13.73	13.34	12.90	12.51	12.18	11.96	11.62	11.35	11.07
270.0	14.06	13.56	13.17	12.79	12.40	12.12	11.85	11.51	11.24
315.0	13.51	13.12	12.73	12.34	12.07	11.79	11.46	11.18	10.90
360.0	13.06	12.73	12.34	12.01	11.79	11.51	11.18	10.96	10.96

Intensity data(cd)

C/γ(°)	90.0
0.0	10.96
45.0	10.90
90.0	10.90
135.0	10.90
180.0	11.02
225.0	10.90
270.0	10.90
315.0	10.85
360.0	10.96