



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

LumCAT: 2976-E	
Luminaire: 92.76.233.00	
Report No: NATA0100	Voltage(V): 218.2000
Test No: GC2019022510	Current(A): 0.0360
LampCAT: PL-CORE-AC-800-G2 LES15	Power (W): 7.9000
Lamp flux(lm): 765.0	PF: 0.9850
Number of Lamps: 1	Ballast type: DC
Length(mm): 72	Width(mm): 72
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 693.51
Efficiency(%): 90.65%
Lumens(lm)/Power(W): 87.93
Central intensity(cd): 4904.438
Maximum intensity(cd): 4904.438
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=14.4
[C90/270]Total=14.4
Field angle(10%Imax): [C0/180]Total=31.8
[C90/270]Total=31.8
Maximum s/h(1/2): C0_180=0.25 C90_270=0.25
Maximum s/h(1/4): C0_180=0.27 C90_270=0.27
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.80%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.642%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4904.438	1.173	1.173	.153%	.169%
1.0	4836.305	9.256	10.429	1.210%	1.504%
2.0	4640.836	17.761	28.19	2.322%	4.065%
3.0	4328.086	24.840	53.03	3.247%	7.647%
4.0	3933.703	30.091	83.121	3.933%	11.986%
5.0	3454.383	33.016	116.137	4.316%	16.746%
6.0	3001.430	34.404	150.541	4.497%	21.707%
7.0	2537.719	33.915	184.456	4.433%	26.597%
8.0	2148.961	32.797	217.253	4.287%	31.327%
9.0	1769.667	30.358	247.611	3.968%	35.704%
10.0	1473.715	28.063	275.674	3.668%	39.751%
11.0	1183.275	24.759	300.434	3.236%	43.321%
12.0	990.773	22.589	323.023	2.953%	46.578%
13.0	816.694	20.146	343.169	2.634%	49.483%
14.0	672.771	17.848	361.018	2.333%	52.057%
15.0	567.197	16.098	377.116	2.104%	54.378%
16.0	480.270	14.517	391.633	1.898%	56.471%
17.0	423.563	13.580	405.213	1.775%	58.429%
18.0	380.609	12.898	418.111	1.686%	60.289%
19.0	351.619	12.554	430.664	1.641%	62.099%
20.0	329.681	12.365	443.029	1.616%	63.882%
21.0	313.383	12.316	455.345	1.610%	65.658%
22.0	302.365	12.421	467.766	1.624%	67.449%
23.0	293.604	12.580	480.346	1.644%	69.263%
24.0	286.699	12.788	493.134	1.672%	71.107%
25.0	280.519	13.001	506.135	1.699%	72.982%
26.0	275.660	13.252	519.386	1.732%	74.892%
27.0	271.139	13.499	532.885	1.765%	76.839%
28.0	266.611	13.726	546.611	1.794%	78.818%
29.0	262.238	13.942	560.552	1.822%	80.828%
30.0	258.504	14.174	574.726	1.853%	82.872%
31.0	253.413	14.313	589.039	1.871%	84.936%
32.0	245.602	14.272	603.311	1.866%	86.994%
33.0	234.935	14.032	617.343	1.834%	89.017%
34.0	217.343	13.328	630.671	1.742%	90.939%
35.0	194.126	12.210	642.881	1.596%	92.700%
36.0	163.624	10.547	653.428	1.379%	94.220%
37.0	131.794	8.698	662.126	1.137%	95.474%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	96.616	6.523	668.648	.853%	96.415%
39.0	64.603	4.458	673.107	.583%	97.058%
40.0	41.280	2.910	676.017	.380%	97.478%
41.0	25.446	1.831	677.847	.239%	97.741%
42.0	15.096	1.108	678.955	.145%	97.901%
43.0	9.858	0.737	679.692	.096%	98.008%
44.0	7.699	0.587	680.279	.077%	98.092%
45.0	6.609	0.513	680.791	.067%	98.166%
46.0	5.878	0.464	681.255	.061%	98.233%
47.0	5.245	0.421	681.676	.055%	98.294%
48.0	4.507	0.367	682.043	.048%	98.346%
49.0	3.973	0.329	682.372	.043%	98.394%
50.0	3.059	0.257	682.629	.034%	98.431%
51.0	2.995	0.255	682.884	.033%	98.468%
52.0	2.960	0.256	683.14	.033%	98.505%
53.0	2.939	0.257	683.397	.034%	98.542%
54.0	2.890	0.256	683.654	.034%	98.579%
55.0	2.869	0.258	683.911	.034%	98.616%
56.0	2.869	0.261	684.172	.034%	98.653%
57.0	2.834	0.261	684.433	.034%	98.691%
58.0	2.820	0.262	684.695	.034%	98.729%
59.0	2.805	0.264	684.959	.034%	98.767%
60.0	2.777	0.264	685.222	.034%	98.805%
61.0	2.756	0.264	685.487	.035%	98.843%
62.0	2.756	0.267	685.754	.035%	98.882%
63.0	2.756	0.269	686.023	.035%	98.920%
64.0	2.742	0.270	686.293	.035%	98.959%
65.0	2.728	0.271	686.564	.035%	98.998%
66.0	2.721	0.273	686.837	.036%	99.038%
67.0	2.714	0.274	687.111	.036%	99.077%
68.0	2.707	0.275	687.386	.036%	99.117%
69.0	2.700	0.276	687.663	.036%	99.157%
70.0	2.693	0.278	687.94	.036%	99.197%
71.0	2.693	0.279	688.219	.036%	99.237%
72.0	2.693	0.281	688.5	.037%	99.278%
73.0	2.686	0.282	688.782	.037%	99.318%
74.0	2.700	0.285	689.066	.037%	99.359%
75.0	2.686	0.285	689.351	.037%	99.400%

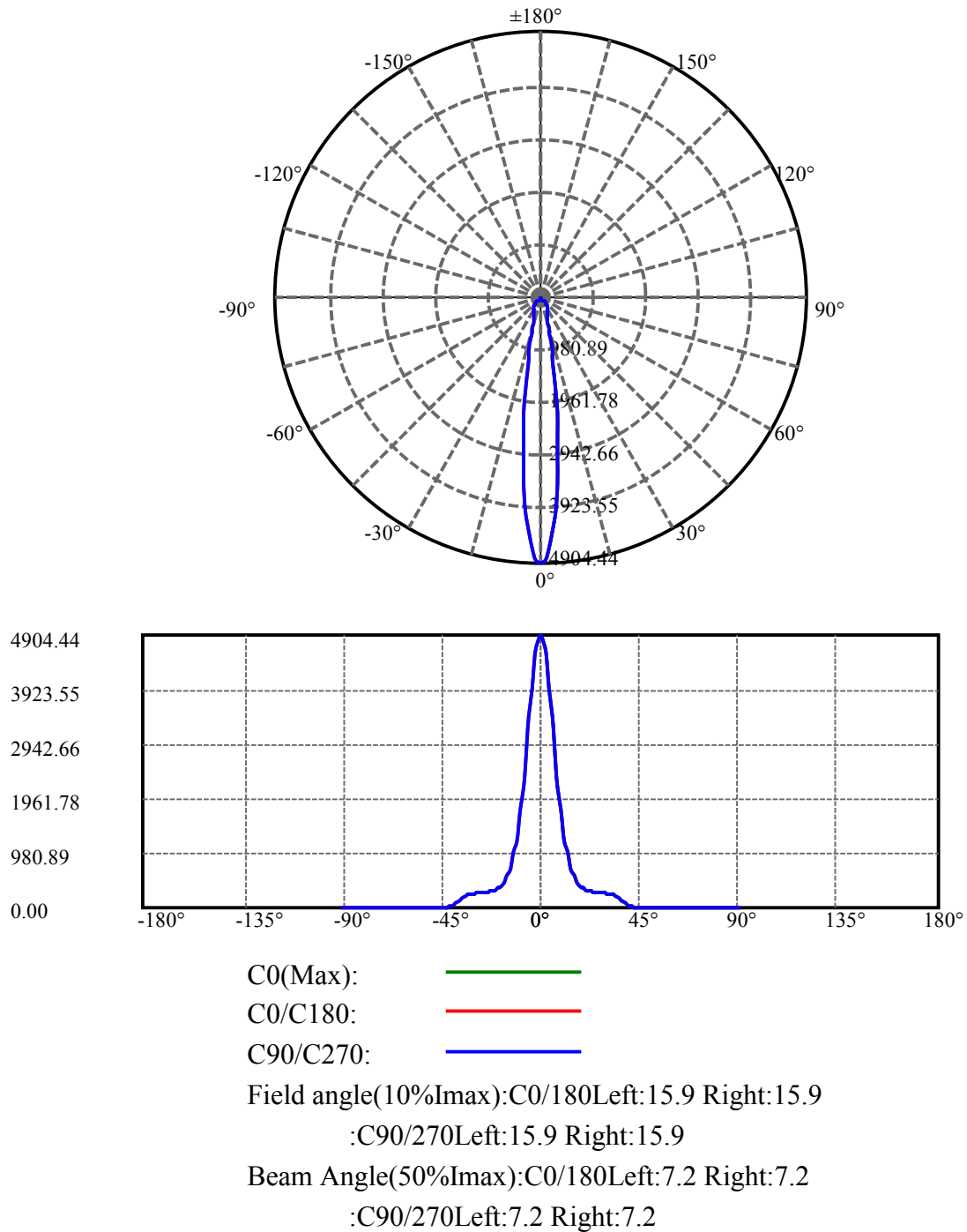
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	2.686	0.286	689.637	.037%	99.441%
77.0	2.672	0.285	689.922	.037%	99.483%
78.0	2.672	0.287	690.209	.037%	99.524%
79.0	2.658	0.286	690.495	.037%	99.565%
80.0	2.679	0.289	690.784	.038%	99.607%
81.0	2.658	0.288	691.072	.038%	99.648%
82.0	2.651	0.288	691.36	.038%	99.690%
83.0	2.651	0.289	691.648	.038%	99.732%
84.0	2.658	0.290	691.938	.038%	99.773%
85.0	2.637	0.288	692.226	.038%	99.815%
86.0	2.644	0.289	692.516	.038%	99.857%
87.0	2.616	0.286	692.802	.037%	99.898%
88.0	2.595	0.284	693.086	.037%	99.939%
89.0	2.580	0.283	693.369	.037%	99.980%
90.0	2.573	0.141	693.51	.018%	100.000%

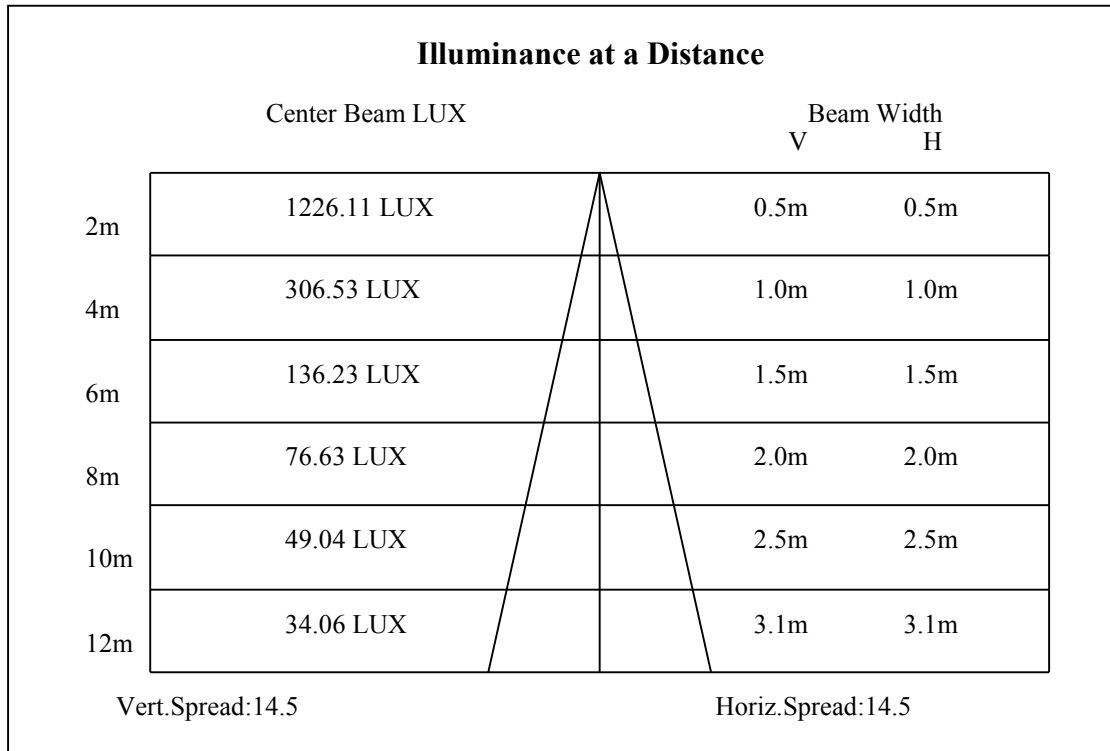
ZONAL LUMEN SUMMARY

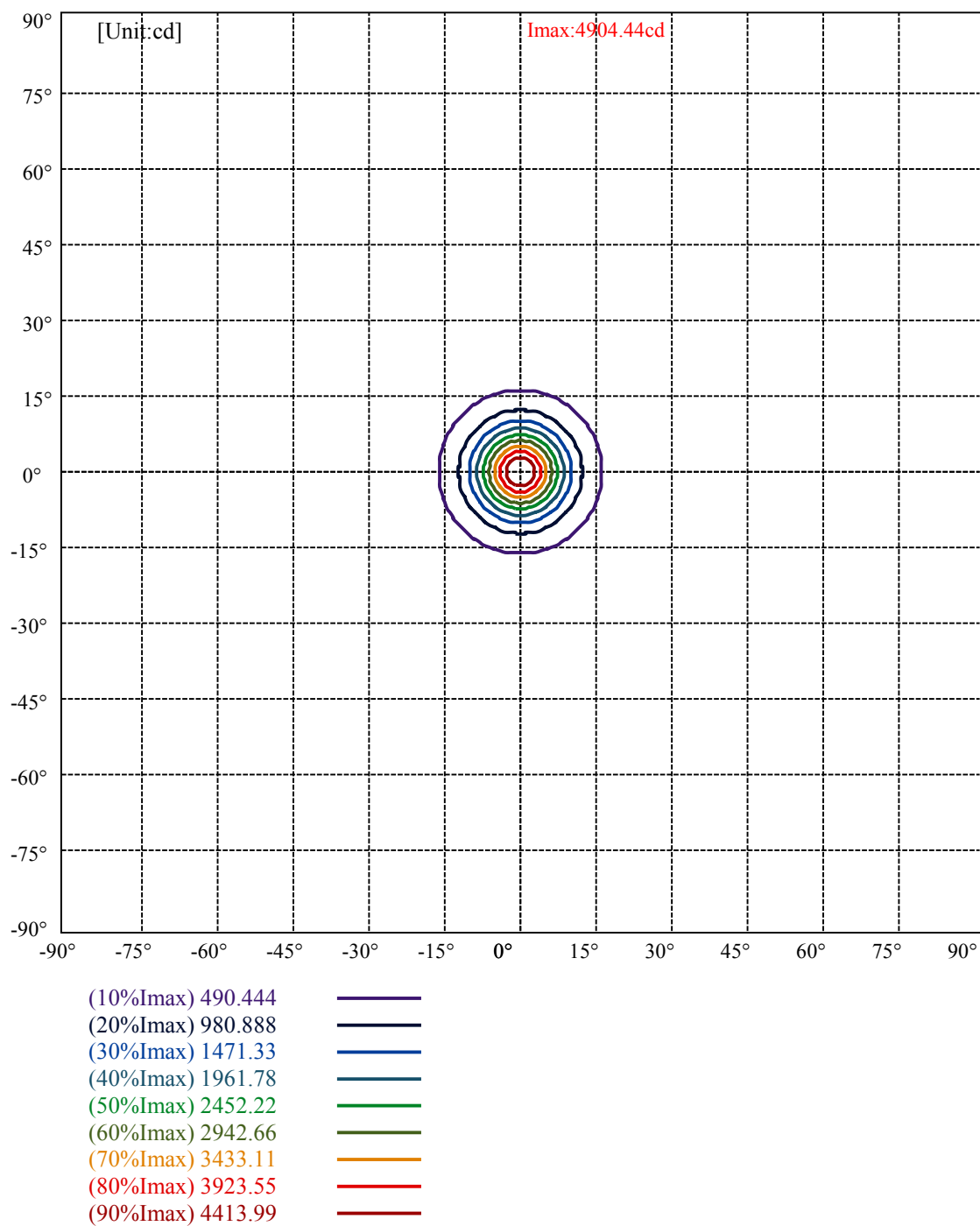
Zone	Lumens	%Lamp	%Fixt
0-30	574.73	75.13%	82.87%
0-40	676.02	88.37%	97.48%
0-60	685.22	89.57%	98.80%
0-90	693.37	90.64%	99.98%
0-120	693.37	90.64%	99.98%
0-180	693.51	90.65%	100.00%
60-90	8.41	1.10%	1.21%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.59	554.81	72.52%	80.00%

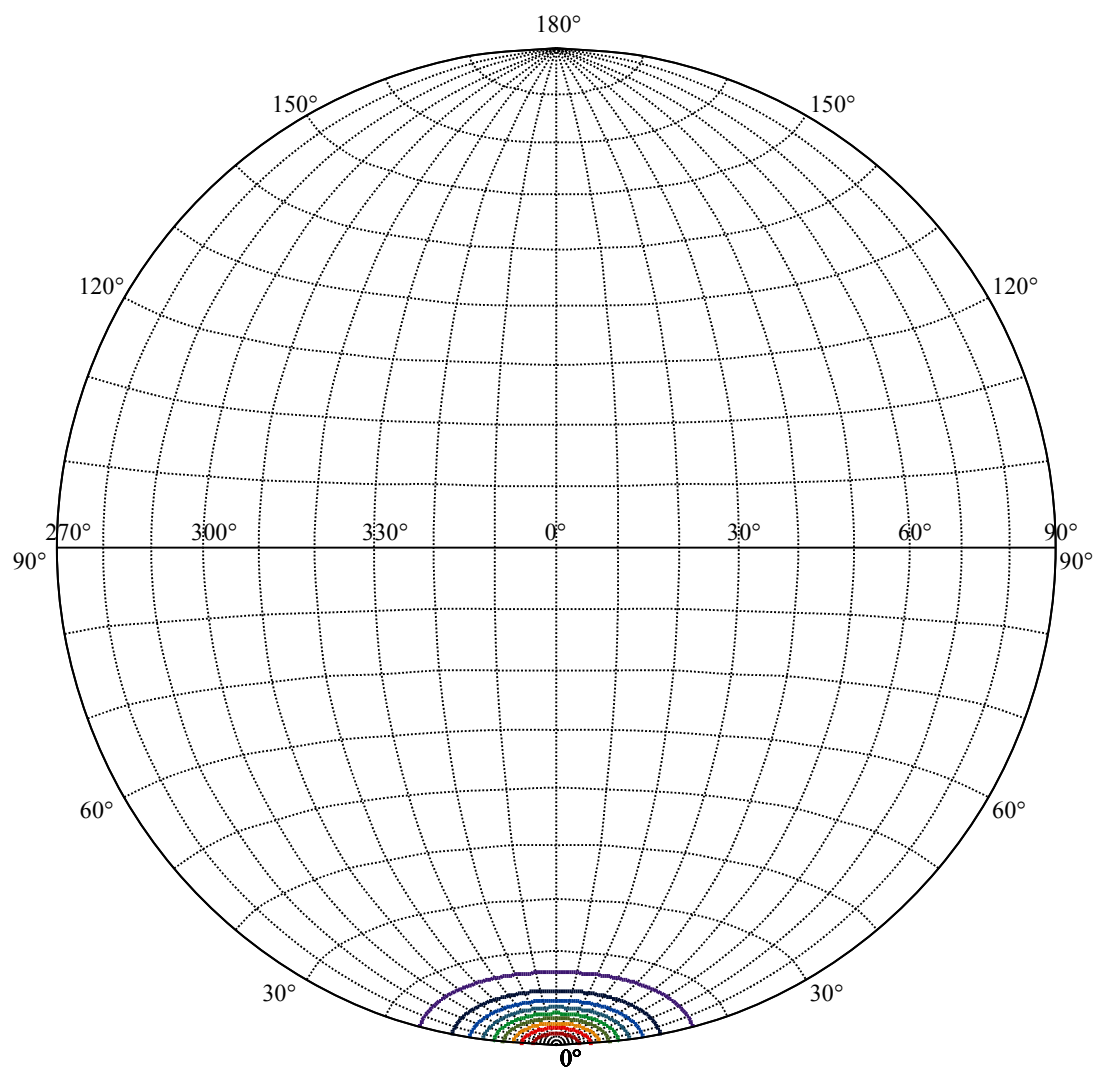
ZONAL LUMEN SUMMARY

0-10	275.67
10-20	167.36
20-30	131.70
30-40	101.29
40-50	6.61
50-60	2.59
60-70	2.72
70-80	2.84
80-90	2.59
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









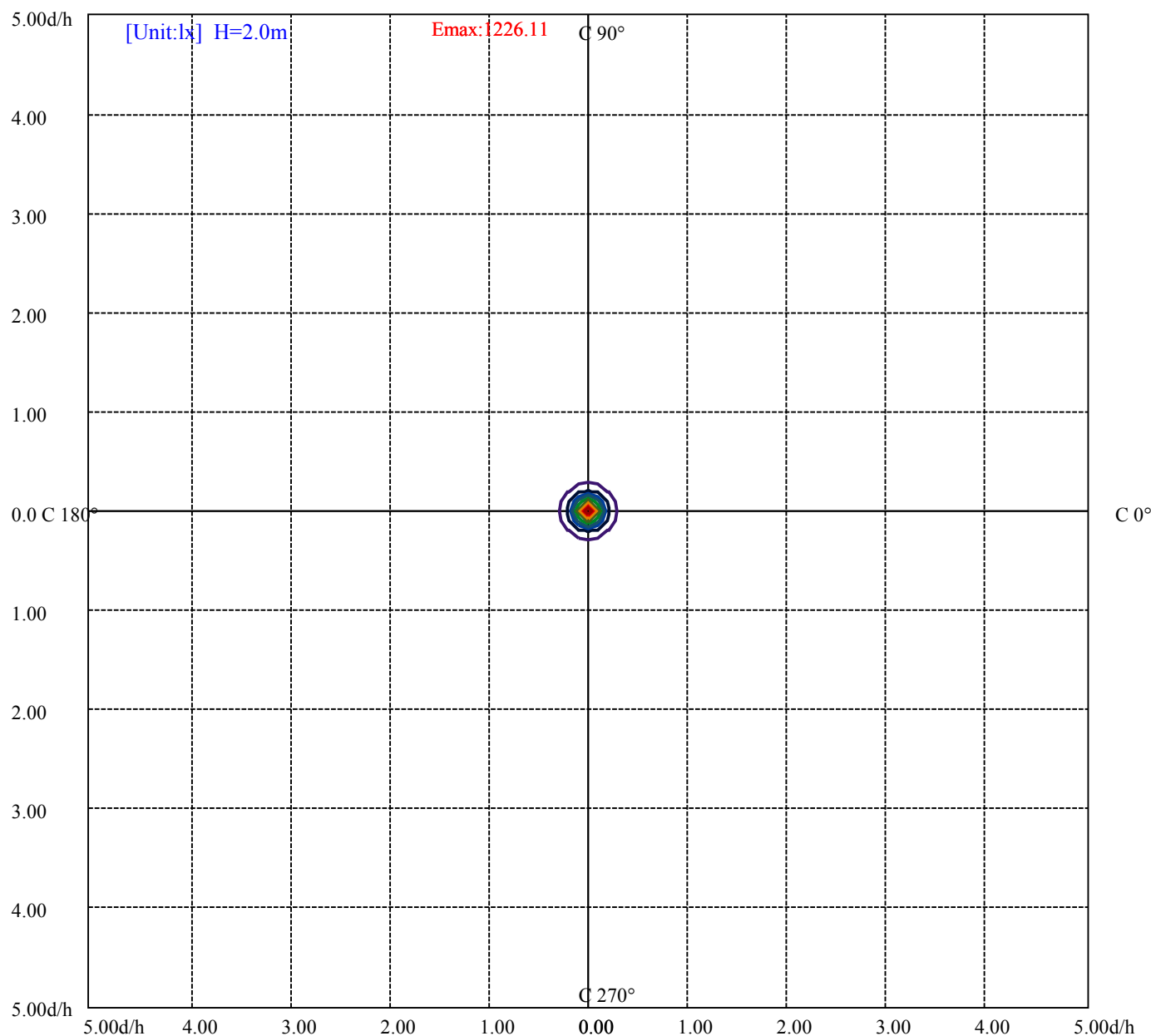
House

[Unit:cd]

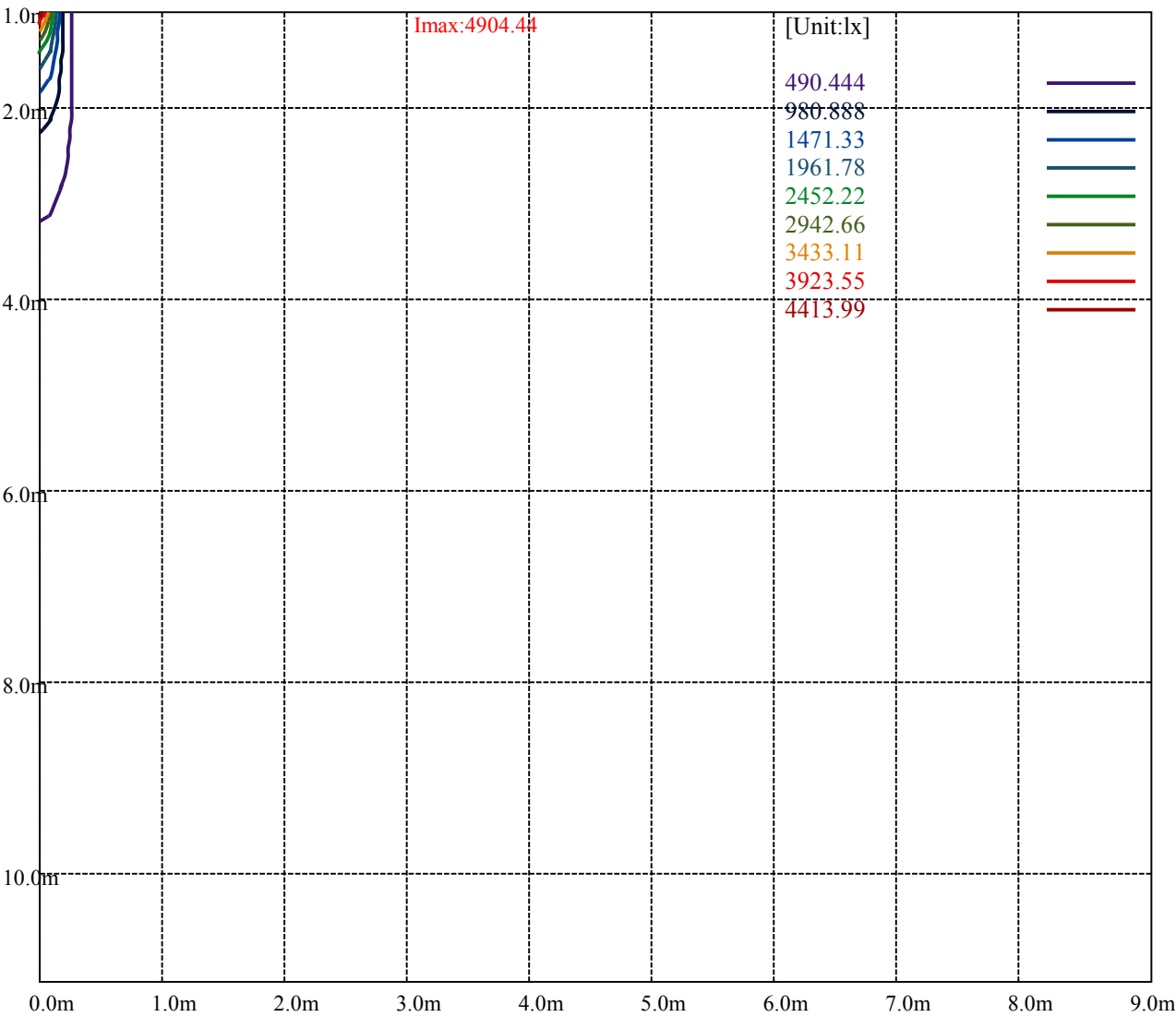
Road

Imax:4904.44

(10%Imax)	490.444	—
(20%Imax)	980.888	—
(30%Imax)	1471.33	—
(40%Imax)	1961.78	—
(50%Imax)	2452.22	—
(60%Imax)	2942.66	—
(70%Imax)	3433.11	—
(80%Imax)	3923.55	—
(90%Imax)	4413.99	—



(10%E _{max}) 122.6107	<div></div>
(20%E _{max}) 245.2213	<div></div>
(30%E _{max}) 367.8325	<div></div>
(40%E _{max}) 490.4425	<div></div>
(50%E _{max}) 613.0525	<div></div>
(60%E _{max}) 735.665	<div></div>
(70%E _{max}) 858.275	<div></div>
(80%E _{max}) 980.885	<div></div>
(90%E _{max}) 1103.495	<div></div>



Luminance Table

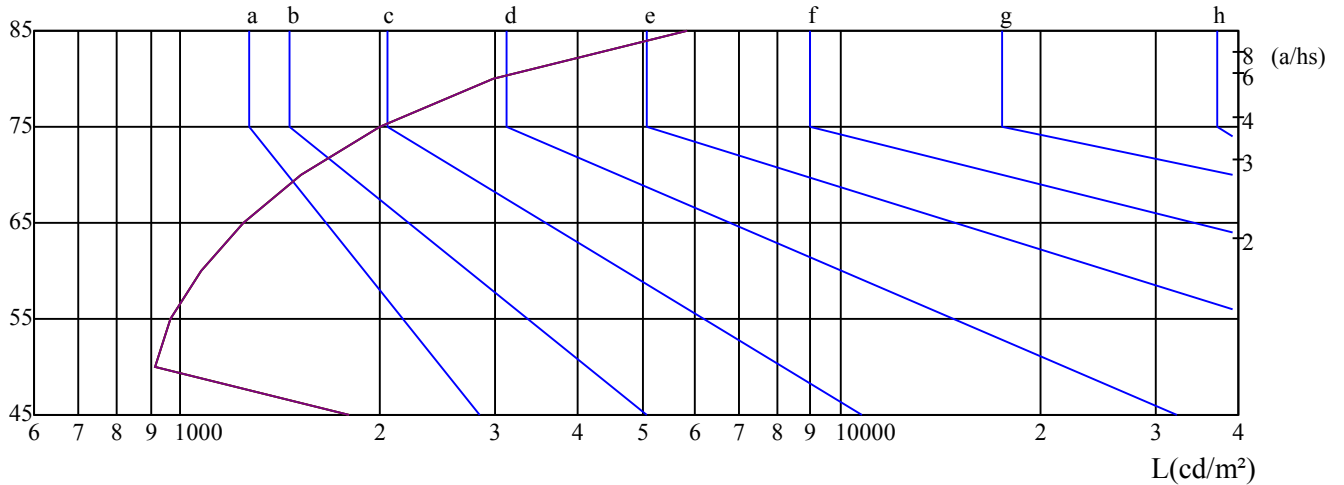
γ	45	50	55	60	65	70	75	80	85
C0	1803	918	965	1072	1245	1519	2002	2976	5836
C45	1803	918	965	1072	1245	1519	2002	2976	5836
C90	1803	918	965	1072	1245	1519	2002	2976	5836

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1245	1245	1245	2002	2002	2002	5836	5836	5836

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

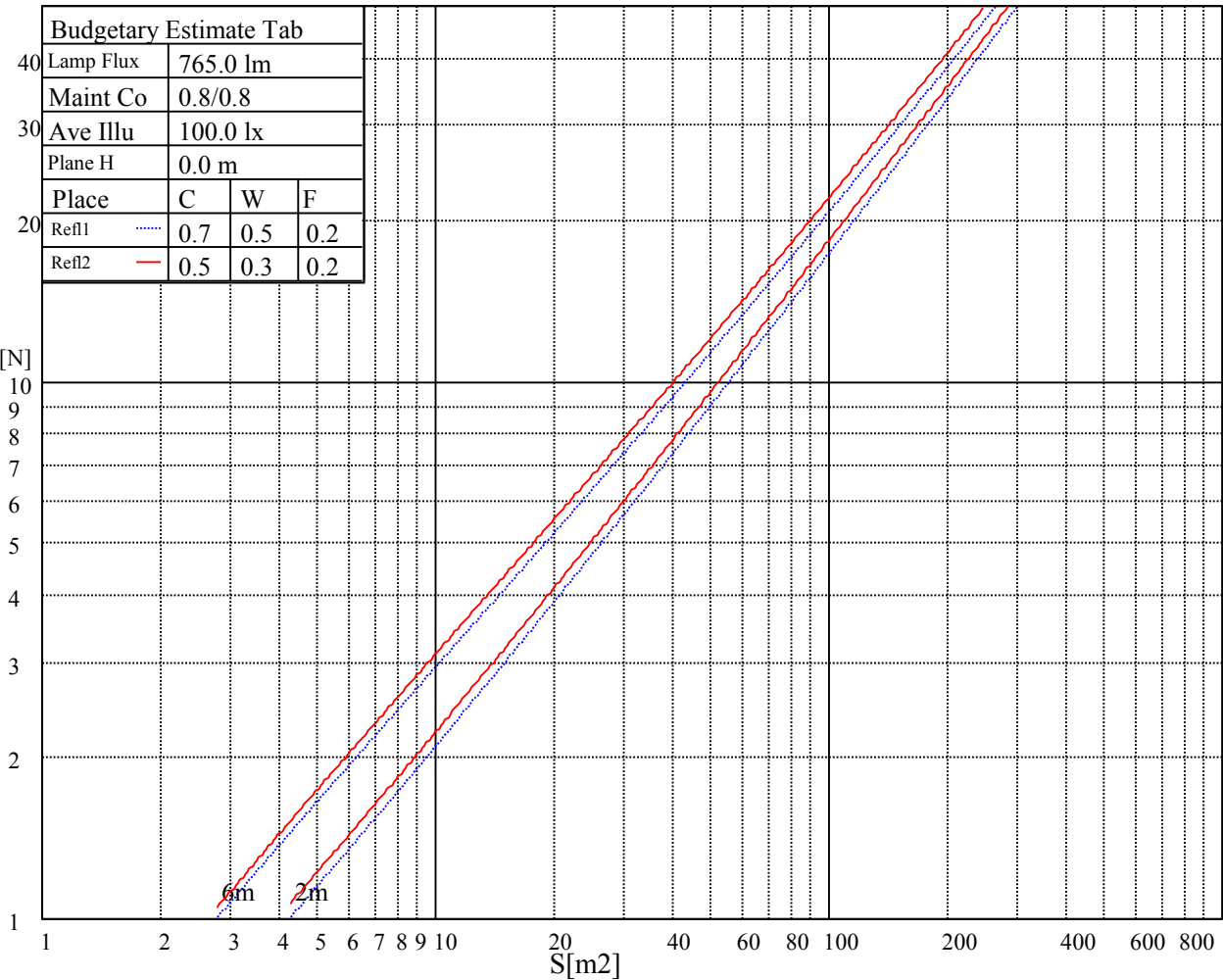
 $\gamma(^{\circ})$ 

C0 ———

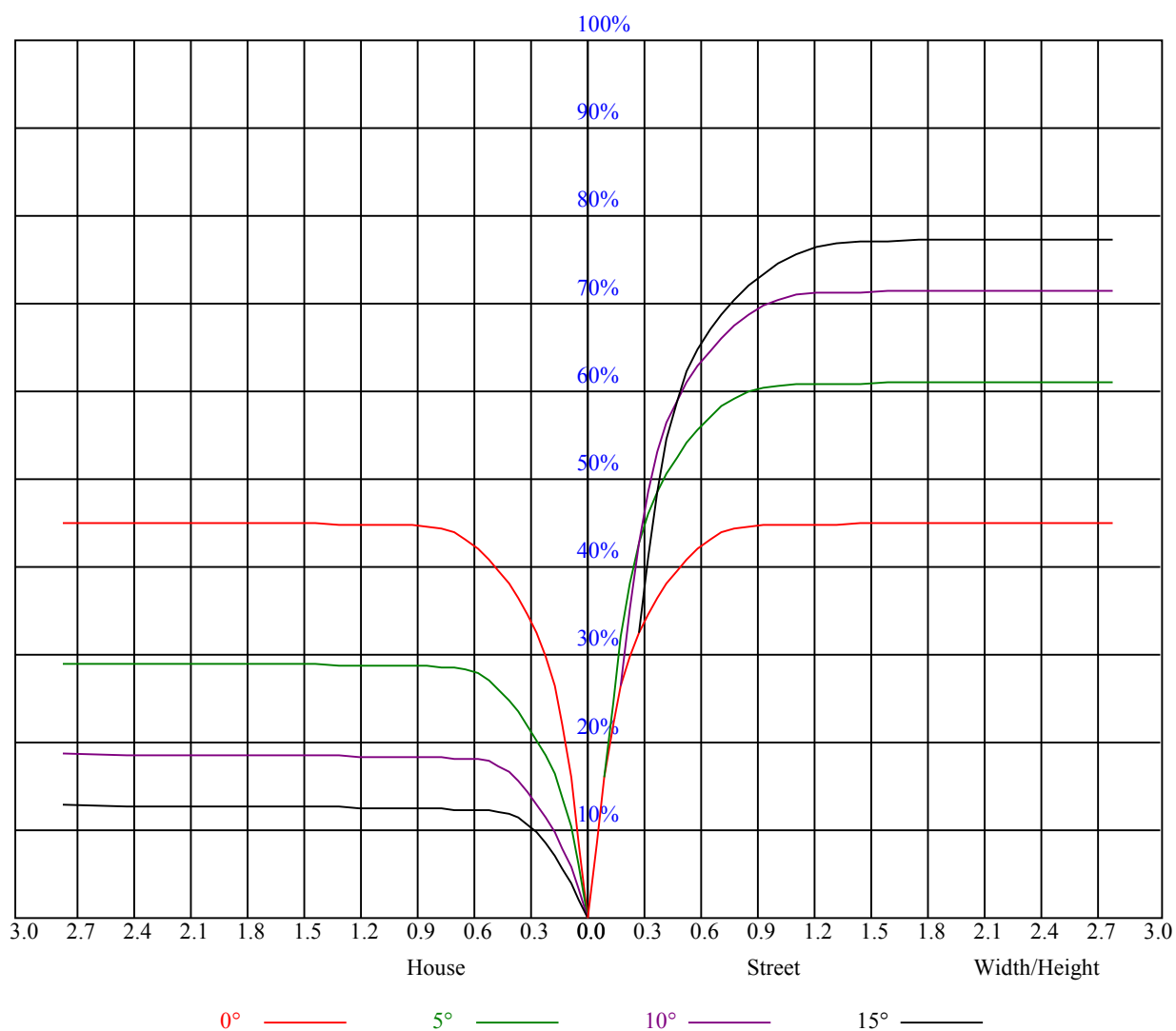
C45 ———

C90 ———

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	1.56	2.47	1.93	2.78	3.10	1.59	2.50	1.96	2.81	3.13
	3H	4.89	5.70	5.28	6.03	6.40	4.91	5.71	5.29	6.04	6.41
	4H	6.70	7.44	7.10	7.79	8.18	6.73	7.47	7.14	7.83	8.22
	6H	8.75	9.43	9.17	9.80	10.20	8.73	9.40	9.15	9.78	10.18
	8H	9.87	10.50	10.31	10.90	11.31	9.83	10.46	10.26	10.85	11.26
	12H	11.65	12.26	12.09	12.64	13.07	11.61	12.22	12.05	12.60	13.03
4H	2H	2.51	3.25	2.92	3.61	4.00	2.53	3.27	2.94	3.63	4.02
	3H	6.07	6.67	6.48	7.08	7.49	6.07	6.68	6.49	7.09	7.50
	4H	8.03	8.58	8.47	9.00	9.45	8.06	8.60	8.50	9.03	9.48
	6H	10.22	10.69	10.70	11.14	11.61	10.20	10.66	10.67	11.12	11.59
	8H	11.44	11.88	11.92	12.33	12.80	11.40	11.83	11.88	12.28	12.76
	12H	13.12	13.49	13.61	13.98	14.46	13.08	13.45	13.57	13.94	14.42
8H	4H	8.79	9.22	9.27	9.67	10.15	8.81	9.24	9.29	9.69	10.17
	6H	11.25	11.59	11.76	12.09	12.58	11.23	11.57	11.74	12.07	12.56
	8H	12.65	12.95	13.18	13.47	13.97	12.61	12.91	13.15	13.44	13.93
	12H	14.45	14.71	14.97	15.21	15.79	14.42	14.68	14.94	15.17	15.76
12H	4H	9.00	9.37	9.50	9.86	10.34	9.02	9.39	9.52	9.88	10.36
	6H	11.76	11.87	12.11	12.34	12.89	11.75	11.86	12.09	12.33	12.88
	8H	13.10	13.36	13.62	13.86	14.44	13.07	13.33	13.59	13.83	14.41
Variation with the observer position at spacings:											
S = 1.0H		5.5/-8.9					5.5/-8.9				
S = 1.5H		7.9/-6.7					7.9/-6.7				
S = 2.0H		9.4/-5.2					9.4/-5.2				
Standard tables:		BK2					BK2				
Uncorrected UGR		-2.5					-2.5				



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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.02	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.86
2	0.96	0.93	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.89	0.87	0.86	0.87	0.85	0.84	0.83
3	0.92	0.88	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.84	0.82	0.81	0.79
4	0.87	0.84	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.76
5	0.84	0.80	0.77	0.83	0.79	0.76	0.82	0.78	0.76	0.80	0.77	0.75	0.79	0.76	0.74	0.73
6	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.73	0.77	0.74	0.72	0.76	0.74	0.72	0.71
7	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.68
8	0.75	0.71	0.68	0.74	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.66
9	0.72	0.68	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.64
10	0.70	0.66	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.62



NATA 2976-E

Appendix Page: 17 Total:19

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	4941.00	4861.13	4588.88	4236.19	3791.81	3194.44	2756.81	2363.06	1975.50
45.0	4925.81	4697.44	4303.13	3794.06	3315.38	2810.25	2354.63	1992.38	1671.19
90.0	4831.88	4485.38	4135.50	3612.94	3027.38	2649.94	2257.88	1779.19	1508.06
135.0	4919.06	4822.88	4537.13	4177.69	3731.63	3140.44	2697.75	2297.81	1947.38
180.0	4941.00	4911.19	4758.19	4455.00	4059.00	3531.94	3047.06	2543.06	2109.94
225.0	4925.81	5032.69	5031.56	4927.50	4670.44	4302.56	3840.75	3223.69	2764.69
270.0	4831.88	4979.25	5023.13	4962.38	4788.00	4433.06	3941.44	3456.00	2990.81
315.0	4919.06	4900.50	4749.19	4458.94	4086.00	3572.44	3115.13	2646.56	2224.13
360.0	4941.00	4861.13	4588.88	4236.19	3791.81	3194.44	2756.81	2363.06	1975.50
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1644.75	1382.06	1122.19	928.69	761.63	630.00	532.69	452.81	402.75
45.0	1321.31	1085.06	895.50	729.00	592.88	505.69	438.19	393.75	364.50
90.0	1121.96	970.03	810.79	673.48	558.17	468.11	415.91	377.10	346.73
135.0	1569.94	1307.25	1055.25	874.13	716.63	598.50	499.50	428.06	388.13
180.0	1779.75	1460.25	1103.96	984.09	821.03	649.29	557.66	477.73	414.90
225.0	2352.94	1917.56	1614.94	1251.00	1056.71	878.57	737.04	575.49	501.24
270.0	2470.50	2095.31	1761.75	1436.06	1158.19	950.63	769.50	636.19	536.63
315.0	1896.19	1572.19	1101.83	1049.74	868.33	701.38	587.08	501.02	433.63
360.0	1644.75	1382.06	1122.19	928.69	761.63	630.00	532.69	452.81	402.75
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	371.25	347.63	325.69	312.19	302.63	294.19	287.44	284.06	277.37
45.0	339.75	322.31	308.25	297.00	289.69	284.06	276.19	271.74	267.98
90.0	324.23	310.05	299.03	289.86	283.73	278.66	274.33	269.44	265.95
135.0	354.38	333.00	315.56	302.63	293.63	286.31	284.06	274.39	270.34
180.0	373.11	345.60	322.54	306.84	296.89	288.17	282.32	277.09	272.53
225.0	435.04	382.67	355.95	332.44	316.01	305.10	296.78	288.06	283.73
270.0	457.31	411.19	374.06	347.06	329.06	315.56	302.63	294.75	288.56
315.0	389.81	360.51	336.38	319.05	307.29	296.78	289.86	284.63	278.83
360.0	371.25	347.63	325.69	312.19	302.63	294.19	287.44	284.06	277.37
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	272.76	269.10	264.43	260.78	257.12	252.73	244.24	225.34	194.57
45.0	263.03	259.43	255.77	252.34	244.91	232.09	213.24	176.68	147.04
90.0	262.01	258.24	253.52	249.13	241.37	219.26	194.12	166.73	134.10
135.0	265.56	261.62	257.23	253.63	248.79	242.89	228.94	205.88	180.62
180.0	267.81	263.87	259.14	255.26	251.44	246.54	239.96	226.58	205.31
225.0	279.00	273.99	269.83	266.01	261.56	257.34	253.24	247.22	232.20
270.0	284.06	275.57	271.69	268.26	263.25	259.82	256.56	250.93	241.65
315.0	274.89	271.07	266.29	262.63	258.86	254.14	249.19	239.40	217.52
360.0	272.76	269.10	264.43	260.78	257.12	252.73	244.24	225.34	194.57
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	162.17	126.39	85.56	50.51	28.13	15.02	9.56	7.59	6.36
45.0	119.31	81.90	51.36	31.78	14.74	10.13	7.82	6.30	5.57
90.0	101.76	73.69	43.99	20.98	11.87	8.27	6.19	5.12	4.28
135.0	142.93	110.42	72.28	42.19	22.33	12.43	8.55	6.81	5.79
180.0	169.09	134.66	100.24	60.98	34.48	16.82	10.35	7.93	6.36
225.0	207.96	181.07	146.81	110.53	75.88	48.04	26.38	13.56	9.62
270.0	220.44	193.73	160.20	126.06	96.08	68.23	37.69	21.21	15.24
315.0	185.34	152.49	112.50	73.80	46.74	24.64	14.23	10.35	8.38
360.0	162.17	126.39	85.56	50.51	28.13	15.02	9.56	7.59	6.36

NATA 2976-E

Intensity data(cd)										Appendix Page: 18 Total:19	
C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0		
0.0	5.57	5.06	4.78	3.15	3.09	3.04	2.98	2.93	2.93		
45.0	5.12	4.50	3.04	3.04	2.93	2.98	2.93	2.93	2.87		
90.0	3.94	3.43	3.09	3.04	2.98	2.93	2.87	2.87	2.87		
135.0	5.01	4.56	4.16	3.09	3.04	3.04	2.98	2.93	2.93		
180.0	5.34	4.67	4.28	3.88	3.15	3.04	3.04	2.98	2.98		
225.0	7.76	6.64	5.68	5.12	4.50	3.15	3.09	3.04	2.98		
270.0	12.77	11.48	11.03	10.18	8.78	3.21	3.09	3.04	3.04		
315.0	7.37	6.69	5.91	4.56	3.32	3.09	2.98	2.98	2.93		
360.0	5.57	5.06	4.78	3.15	3.09	3.04	2.98	2.93	2.93		
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0		
0.0	2.93	2.87	2.87	2.81	2.76	2.81	2.81	2.76	2.76		
45.0	2.87	2.81	2.81	2.81	2.81	2.81	2.76	2.76	2.76		
90.0	2.81	2.81	2.81	2.81	2.76	2.76	2.76	2.76	2.76		
135.0	2.87	2.87	2.87	2.81	2.81	2.81	2.76	2.76	2.76		
180.0	2.93	2.93	2.87	2.87	2.87	2.81	2.81	2.81	2.76		
225.0	2.93	2.87	2.93	2.87	2.87	2.81	2.76	2.76	2.76		
270.0	2.93	2.93	2.93	2.87	2.87	2.87	2.81	2.76	2.76		
315.0	2.87	2.87	2.87	2.81	2.81	2.76	2.76	2.70	2.76		
360.0	2.93	2.87	2.87	2.81	2.76	2.81	2.81	2.76	2.76		
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0		
0.0	2.76	2.70	2.70	2.70	2.76	2.76	2.70	2.70	2.70		
45.0	2.76	2.76	2.70	2.70	2.70	2.70	2.76	2.70	2.70		
90.0	2.76	2.76	2.70	2.70	2.70	2.70	2.70	2.70	2.70		
135.0	2.76	2.76	2.76	2.76	2.70	2.70	2.70	2.70	2.70		
180.0	2.76	2.76	2.76	2.76	2.76	2.70	2.70	2.70	2.70		
225.0	2.81	2.76	2.76	2.76	2.70	2.70	2.70	2.70	2.64		
270.0	2.76	2.76	2.76	2.76	2.70	2.70	2.70	2.70	2.70		
315.0	2.70	2.70	2.70	2.70	2.70	2.70	2.64	2.64	2.70		
360.0	2.76	2.70	2.70	2.70	2.76	2.76	2.70	2.70	2.70		
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0		
0.0	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.64	2.64		
45.0	2.70	2.70	2.70	2.70	2.64	2.64	2.70	2.70	2.70		
90.0	2.70	2.64	2.70	2.70	2.70	2.64	2.64	2.70	2.70		
135.0	2.70	2.70	2.70	2.70	2.70	2.70	2.64	2.64	2.64		
180.0	2.70	2.70	2.70	2.70	2.70	2.70	2.64	2.64	2.64		
225.0	2.70	2.70	2.70	2.70	2.70	2.64	2.64	2.64	2.70		
270.0	2.70	2.64	2.70	2.64	2.70	2.70	2.70	2.64	2.70		
315.0	2.64	2.70	2.70	2.64	2.64	2.64	2.70	2.64	2.70		
360.0	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.64	2.64		
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0		
0.0	2.70	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.59		
45.0	2.64	2.70	2.64	2.64	2.64	2.64	2.59	2.59	2.59		
90.0	2.64	2.64	2.70	2.70	2.64	2.64	2.64	2.59	2.59		
135.0	2.64	2.64	2.64	2.64	2.59	2.64	2.64	2.59	2.59		
180.0	2.70	2.64	2.64	2.64	2.64	2.64	2.59	2.59	2.59		
225.0	2.64	2.64	2.64	2.70	2.64	2.64	2.59	2.59	2.53		
270.0	2.64	2.64	2.64	2.64	2.64	2.64	2.59	2.59	2.59		
315.0	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.59	2.59		
360.0	2.70	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.59		

Intensity data(cd)

Appendix Page: 19 Total:19

C/ γ (°)	90.0
0.0	2.53
45.0	2.59
90.0	2.59
135.0	2.59
180.0	2.53
225.0	2.59
270.0	2.59
315.0	2.59
360.0	2.53