
乐达凯

Client:

LumCAT: FTNW0424LAJUDBK-2700K

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.080

LampCAT:

Current(A): 0.198

Lamp flux(lm): 1126.8

Power (W): 23.570

Number of Lamps: 1

PF: 0.993

Length(mm): 70

Width(mm): 45

Phm Type: C

Height(mm): 530

Photometric Results

Lumens(lm): 1126.81, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 47.81

Central intensity(cd): 0.897, Maximum intensity(cd): 200.520

Angle of maximum intensity: C=15.0 γ =95.0

Beam Angle(50%Imax): [C0/180]Total=295.2

[C90/270]Total=114.5

Field angle(10%Imax): [C0/180]Total=345.6

[C90/270]Total=163.0

Maximum s/h(1/2): C0_180=16.38 C90_270=12.65

Maximum s/h(1/4): C0_180=14.39 C90_270=12.18

Up flux rate of lamp(%): 51.30%

Down flux rate of lamp(%): 48.70%

Up flux rate of LUM(%): 51.30%

Down flux rate of LUM(%): 48.70%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 17.888%

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Zonal flux distribution table

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$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1.121	0.000	0	0.00%	0.00%
5.0	3.925	0.060	0.06	0.01%	0.01%
10.0	12.187	0.576	0.637	0.05%	0.06%
15.0	21.271	1.985	2.621	0.18%	0.23%
20.0	30.990	4.307	6.928	0.38%	0.61%
25.0	39.887	7.434	14.362	0.66%	1.27%
30.0	48.934	11.240	25.603	1.00%	2.27%
35.0	58.018	15.749	41.352	1.40%	3.67%
40.0	66.915	20.844	62.196	1.85%	5.52%
45.0	75.176	26.309	88.505	2.33%	7.85%
50.0	83.064	31.975	120.48	2.84%	10.69%
55.0	90.503	37.739	158.219	3.35%	14.04%
60.0	97.008	43.343	201.562	3.85%	17.89%
65.0	102.802	48.574	250.136	4.31%	22.20%
70.0	107.774	53.319	303.455	4.73%	26.93%
75.0	111.774	57.386	360.842	5.09%	32.02%
80.0	114.839	60.635	421.477	5.38%	37.40%
85.0	116.858	62.958	484.435	5.59%	42.99%
90.0	117.905	64.280	548.715	5.70%	48.70%
95.0	117.755	64.526	613.24	5.73%	54.42%
100.0	116.671	63.699	676.939	5.65%	60.08%
105.0	114.465	61.846	738.785	5.49%	65.56%
110.0	111.251	58.999	797.784	5.24%	70.80%
115.0	106.989	55.260	853.043	4.90%	75.70%
120.0	101.905	50.783	903.826	4.51%	80.21%
125.0	95.961	45.736	949.562	4.06%	84.27%
130.0	89.344	40.292	989.854	3.58%	87.85%
135.0	81.943	34.611	1024.465	3.07%	90.92%
140.0	74.317	28.933	1053.397	2.57%	93.49%
145.0	65.719	23.364	1076.761	2.07%	95.56%
150.0	56.896	18.056	1094.817	1.60%	97.16%
155.0	47.924	13.265	1108.082	1.18%	98.34%
160.0	38.915	9.108	1117.19	0.81%	99.15%
165.0	29.084	5.604	1122.794	0.50%	99.64%
170.0	18.953	2.850	1125.644	0.25%	99.90%
175.0	9.495	1.018	1126.661	0.09%	99.99%
180.0	2.579	0.144	1126.806	0.01%	100.00%

Equipment: LC-I-902 GMS-2000
Temperature($^{\circ}\text{C}$): 25.3

Date: 2025/12/15
Humidity(%): 62.2%

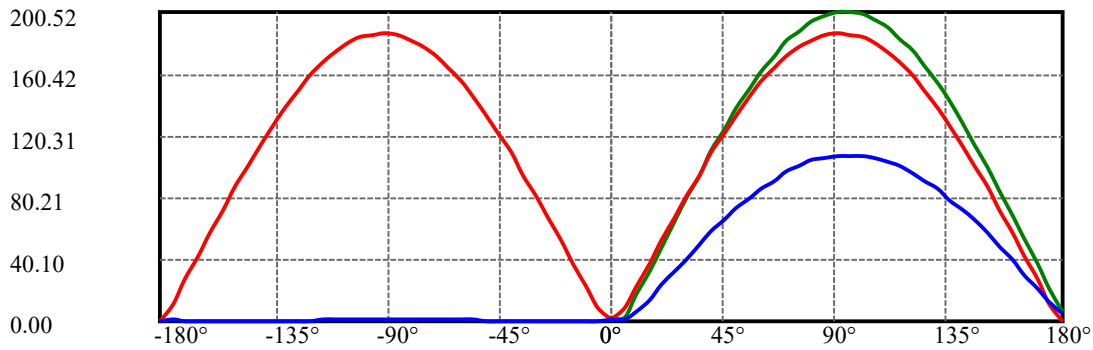
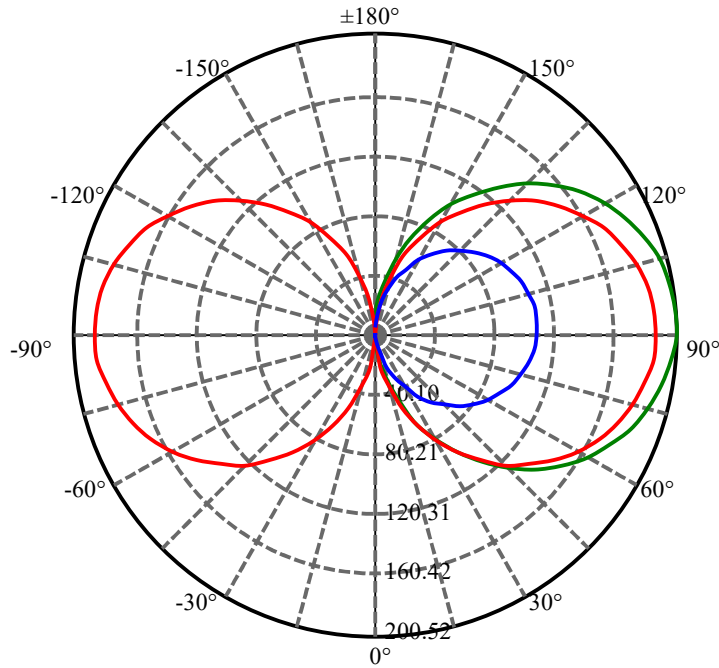
Operator: JUN WANG
Distance(m): 29.95

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	25.60	2.27%	2.27%
0-40	62.20	5.52%	5.52%
0-60	201.56	17.89%	17.89%
0-90	548.71	48.70%	48.70%
0-120	903.83	80.21%	80.21%
0-180	1126.81	100.00%	100.00%
60-90	347.15	30.81%	30.81%
90-120	355.11	31.51%	31.51%
90-130	441.14	39.15%	39.15%
90-150	546.10	48.46%	48.46%
90-180	577.95	51.29%	51.29%
0-119.77	901.44	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	0.64
10-20	6.29
20-30	18.67
30-40	36.59
40-50	58.28
50-60	81.08
60-70	101.89
70-80	118.02
80-90	127.24
90-100	128.22
100-110	120.84
110-120	106.04
120-130	86.03
130-140	63.54
140-150	41.42
150-160	22.37
160-170	8.45
170-180	1.02



C15(Max): —————

C0/C180: —————

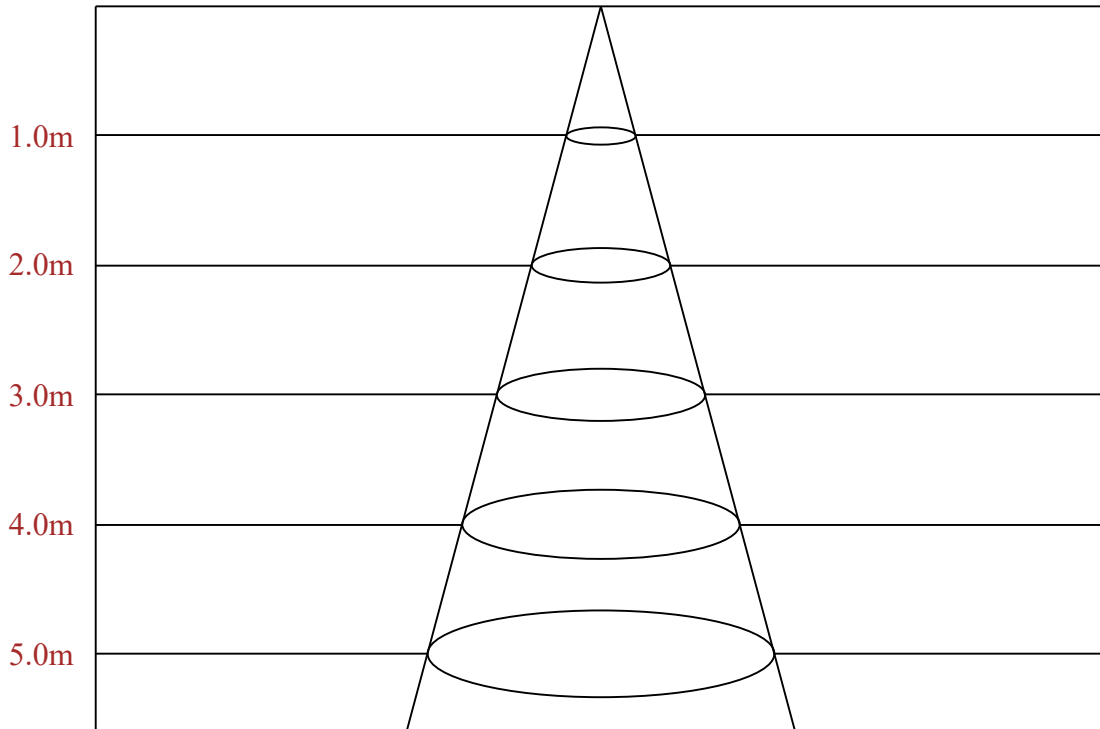
C90/C270: —————

Field angle(10%Imax):C0/180Left:262.8 Right:82.8

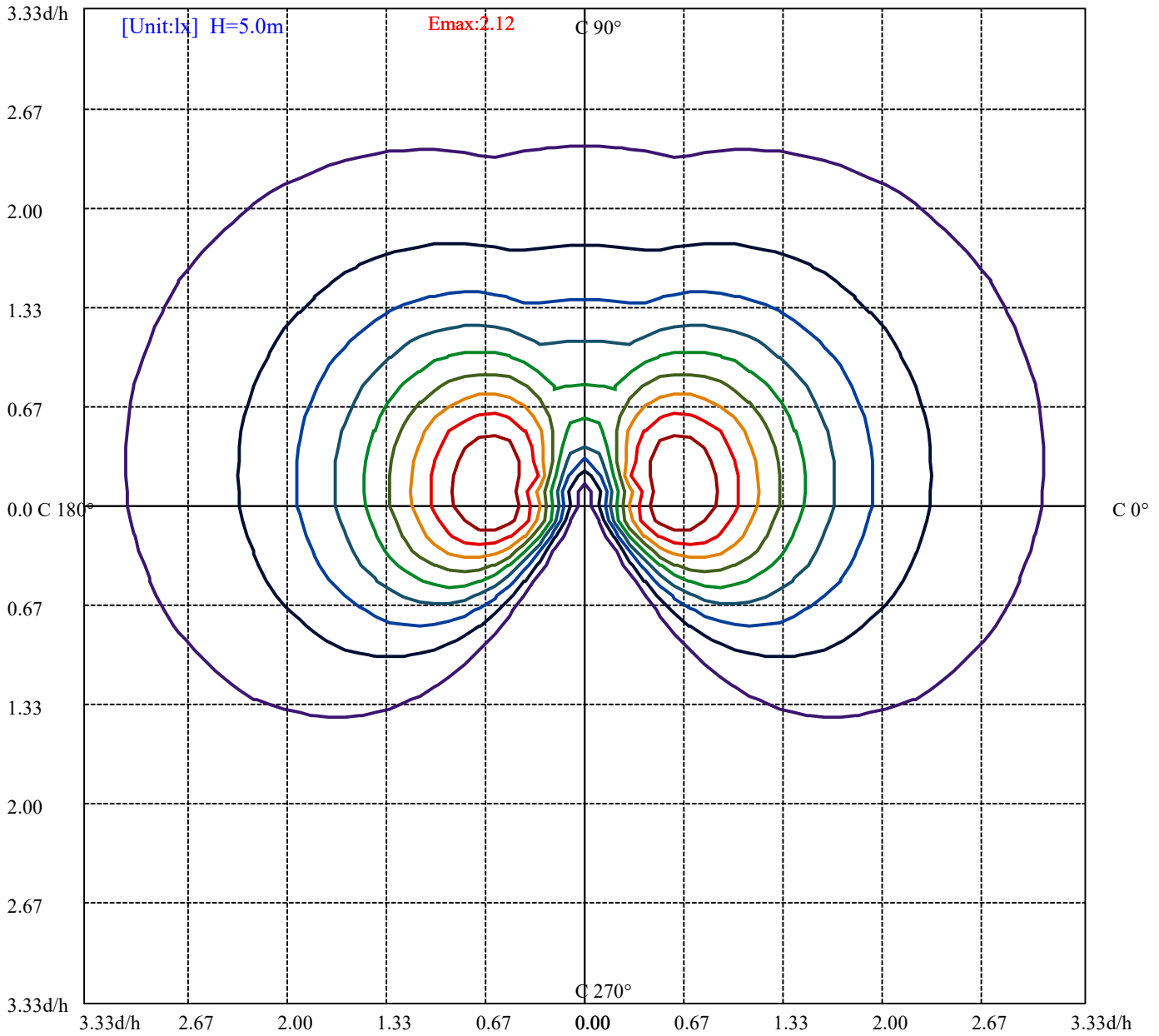
:C90/270Left:86.9 Right:76.1

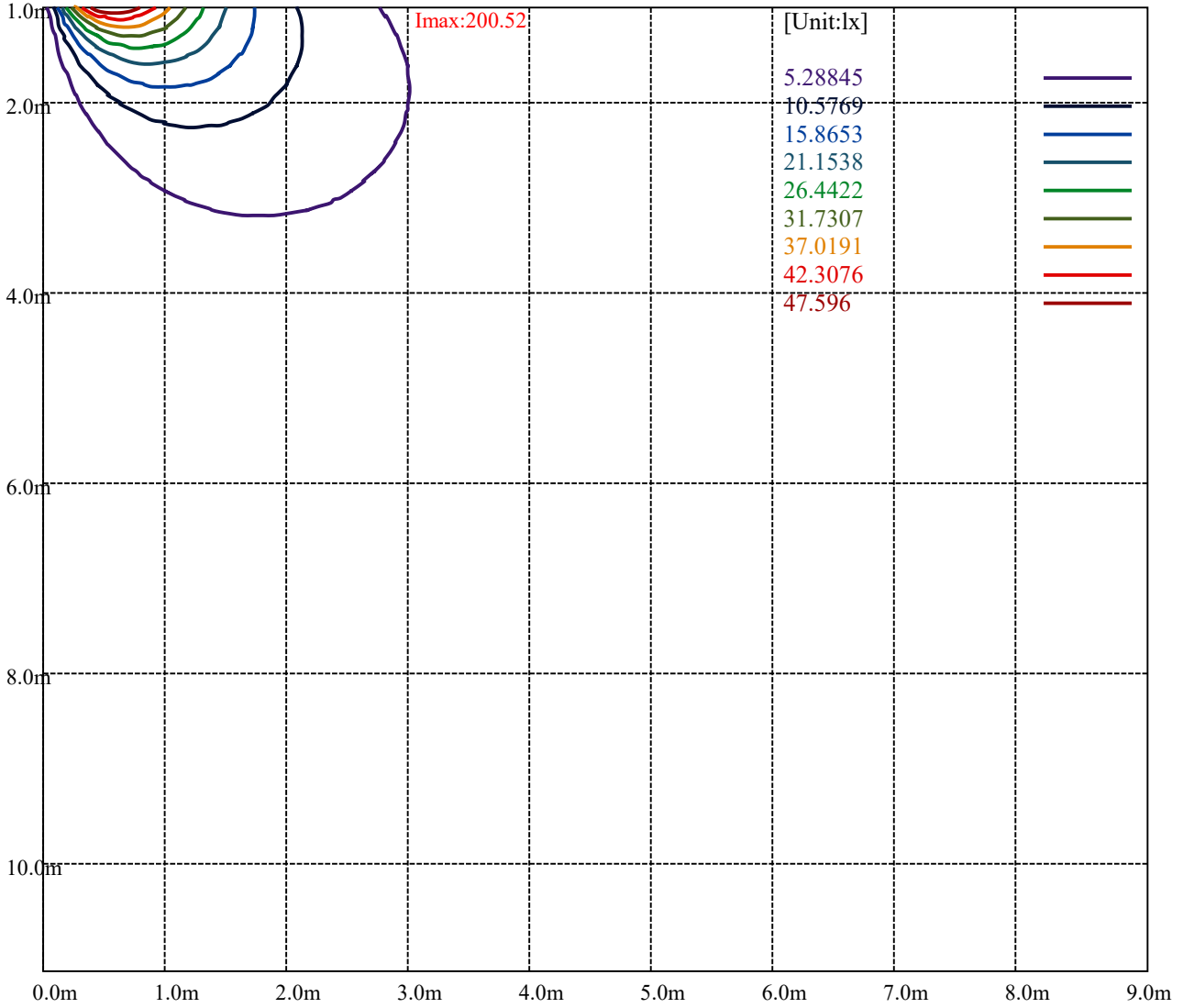
Beam Angle(50%Imax):C0/180Left:237.6 Right:57.6

:C90/270Left:62.5 Right:52.0



Max , Ave Beam angle of C15 plane 353.14





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Luminance Limiting Curve(no luminous side)

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Luminance Table

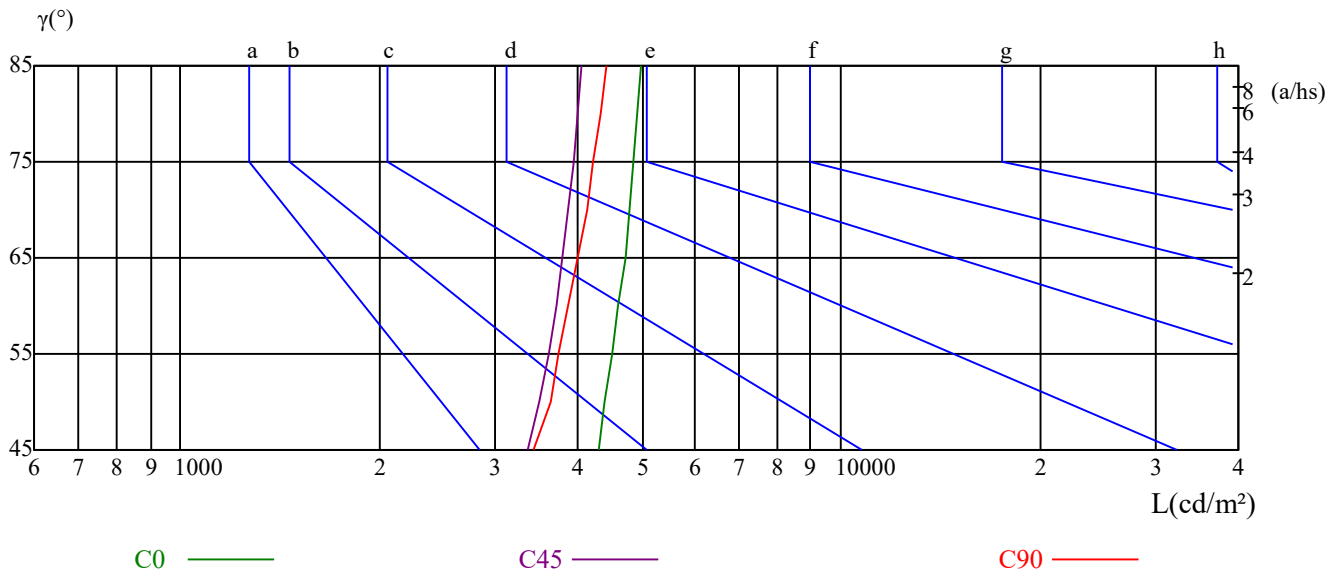
γ	45	50	55	60	65	70	75	80	85
C0	4287	4391	4514	4605	4710	4780	4847	4911	4976
C45	3361	3482	3614	3702	3787	3863	3942	4007	4059
C90	3430	3625	3741	3875	3988	4125	4213	4330	4405

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
123668	34708	79020	217891	62176	140584	674829	194442	436270

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



Equipment: LC-I-902 GMS-2000
Temperature($^{\circ}\text{C}$): 25.3

Date: 2025/12/15
Humidity(%): 62.2%

Operator: JUN WANG
Distance(m): 29.95

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	1.07	1.07	1.07	0.98	0.98	0.98	0.83	0.83	0.83	0.68	0.68	0.68	0.55	0.55	0.55	0.49
1	0.85	0.79	0.73	0.78	0.72	0.67	0.64	0.60	0.56	0.51	0.48	0.45	0.39	0.37	0.35	0.29
2	0.71	0.62	0.55	0.65	0.57	0.51	0.53	0.47	0.42	0.42	0.37	0.33	0.31	0.28	0.25	0.20
3	0.60	0.51	0.43	0.55	0.47	0.40	0.45	0.38	0.33	0.35	0.30	0.26	0.26	0.22	0.19	0.14
4	0.52	0.43	0.35	0.48	0.39	0.32	0.38	0.32	0.26	0.30	0.25	0.20	0.22	0.18	0.15	0.11
5	0.46	0.36	0.29	0.42	0.33	0.26	0.34	0.27	0.21	0.26	0.21	0.17	0.19	0.15	0.12	0.08
6	0.41	0.31	0.24	0.37	0.28	0.22	0.30	0.23	0.18	0.23	0.18	0.14	0.17	0.13	0.10	0.07
7	0.36	0.27	0.21	0.33	0.25	0.19	0.27	0.20	0.15	0.21	0.16	0.12	0.15	0.11	0.08	0.05
8	0.32	0.24	0.18	0.30	0.22	0.16	0.24	0.18	0.13	0.19	0.14	0.10	0.14	0.10	0.07	0.04
9	0.29	0.21	0.15	0.27	0.19	0.14	0.22	0.16	0.11	0.17	0.12	0.09	0.13	0.09	0.06	0.04
10	0.27	0.19	0.13	0.24	0.17	0.12	0.20	0.14	0.10	0.16	0.11	0.08	0.12	0.08	0.05	0.03

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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	0.90	5.38	19.74	34.09	49.35	64.60	78.95	93.31	107.66
15.0	0.90	5.38	20.64	36.78	52.04	68.19	83.44	98.69	113.94
30.0	0.90	6.28	20.64	35.89	52.04	66.39	81.64	96.90	111.25
45.0	0.90	5.38	18.84	32.30	45.76	60.11	72.67	87.03	99.59
60.0	0.90	3.59	15.25	26.02	37.68	48.45	60.11	70.88	81.64
75.0	0.90	2.69	10.77	18.84	26.92	34.99	42.17	51.14	58.32
90.0	0.90	1.79	6.28	13.46	23.33	32.30	40.37	49.35	58.32
105.0	0.00	0.90	5.38	14.35	22.43	31.40	40.37	48.45	57.42
120.0	0.00	0.00	8.07	19.74	31.40	42.17	53.83	65.49	77.16
135.0	0.00	0.00	10.77	25.12	39.48	52.93	66.39	81.64	94.20
150.0	2.69	0.00	12.56	27.81	54.73	58.32	74.47	89.72	106.76
165.0	4.49	0.00	13.46	28.71	43.06	60.11	75.36	90.62	107.66
180.0	0.90	12.56	26.02	40.37	54.73	69.08	83.44	96.90	110.35
195.0	0.90	8.97	21.53	33.20	44.86	58.32	69.98	81.64	92.41
210.0	0.90	3.59	13.46	23.33	32.30	42.17	51.14	59.21	67.29
225.0	0.90	0.90	1.79	6.28	11.66	16.15	20.64	26.02	30.50
240.0	0.90	0.00	0.90	0.00	0.00	0.00	0.00	0.00	0.90
255.0	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
285.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.0	0.00	0.90	0.90	1.79	1.79	2.69	2.69	2.69	3.59
315.0	0.00	6.28	12.56	17.94	23.33	29.61	34.99	40.37	44.86
330.0	2.69	12.56	23.33	32.30	42.17	52.04	61.91	70.88	78.95
345.0	4.49	17.05	29.61	42.17	54.73	67.29	79.85	91.51	103.18
360.0	0.90	5.38	19.74	34.09	49.35	64.60	78.95	93.31	107.66
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	121.12	132.78	145.34	155.21	165.08	173.16	178.54	183.92	187.51
15.0	128.30	141.75	154.32	165.98	174.95	183.92	190.20	195.59	199.17
30.0	125.61	138.17	150.73	161.49	171.36	179.44	186.61	191.10	194.69
45.0	112.15	123.81	135.47	145.34	153.42	160.60	166.88	171.36	174.05
60.0	91.51	100.48	109.46	116.63	123.81	130.09	134.58	138.17	139.96
75.0	66.39	74.47	81.64	87.92	92.41	97.79	102.28	104.97	107.66
90.0	65.49	73.57	79.85	86.13	91.51	96.90	100.48	104.07	105.87
105.0	64.60	72.67	79.85	86.13	91.51	96.00	100.48	104.07	106.76
120.0	87.92	97.79	107.66	115.74	123.81	130.99	136.37	140.86	144.45
135.0	107.66	120.22	132.78	142.65	152.52	160.60	167.77	173.16	176.74
150.0	120.22	133.68	146.24	157.90	168.67	177.64	185.72	191.10	195.59
165.0	120.22	134.58	147.14	158.80	169.57	178.54	186.61	192.00	196.48
180.0	122.91	134.58	145.34	155.21	164.18	170.46	176.74	180.33	183.03
195.0	103.18	113.04	122.02	130.99	137.27	143.55	148.04	151.62	154.32
210.0	76.26	83.44	89.72	96.00	101.38	105.87	109.46	112.15	113.94
225.0	34.99	39.48	43.06	46.65	50.24	52.93	55.63	57.42	58.32
240.0	0.90	0.90	0.90	0.90	1.79	1.79	1.79	1.79	1.79
255.0	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
270.0	0.00	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90
285.0	0.00	0.00	0.90	0.90	0.90	0.90	0.90	1.79	1.79
300.0	3.59	4.49	4.49	5.38	5.38	5.38	5.38	5.38	5.38
315.0	49.35	53.83	57.42	61.91	64.60	67.29	68.19	69.98	69.98
330.0	87.92	95.10	102.28	107.66	113.04	117.53	120.22	122.91	123.81
345.0	113.94	123.81	133.68	140.86	148.04	153.42	157.90	160.60	161.49
360.0	121.12	132.78	145.34	155.21	165.08	173.16	178.54	183.92	187.51

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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	189.31	188.41	187.51	183.92	178.54	172.26	163.29	154.32	143.55
15.0	200.97	200.97	199.17	195.59	190.20	182.13	174.05	164.18	152.52
30.0	196.48	196.48	194.69	191.10	185.72	178.54	169.57	159.70	148.04
45.0	175.85	175.85	174.05	170.46	165.98	159.70	151.62	143.55	133.68
60.0	141.75	141.75	139.96	137.27	133.68	128.30	122.02	114.84	106.76
75.0	108.56	108.56	108.56	106.76	104.07	100.48	96.90	91.51	86.13
90.0	107.66	107.66	107.66	105.87	103.18	100.48	96.00	91.51	86.13
105.0	107.66	108.56	107.66	106.76	104.07	100.48	96.90	91.51	86.13
120.0	146.24	147.14	146.24	144.45	141.75	137.27	130.99	124.71	116.63
135.0	179.44	180.33	179.44	176.74	173.16	166.88	159.70	151.62	141.75
150.0	198.28	199.17	198.28	195.59	190.20	183.92	176.74	166.88	156.11
165.0	199.17	200.07	198.28	195.59	191.10	184.82	176.74	167.77	157.01
180.0	183.92	183.03	180.33	176.74	170.46	163.29	154.32	145.34	133.68
195.0	154.32	154.32	151.62	148.04	143.55	138.17	130.09	122.02	113.94
210.0	114.84	113.94	113.04	110.35	106.76	102.28	97.79	91.51	85.23
225.0	59.21	59.21	59.21	58.32	57.42	55.63	54.73	50.24	47.55
240.0	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79
255.0	1.79	0.90	0.90	0.90	0.90	0.90	0.90	0.00	0.00
270.0	0.90	0.90	0.90	0.90	0.90	0.90	0.00	0.00	0.00
285.0	0.90	0.90	0.90	0.90	0.90	0.90	0.00	0.00	0.00
300.0	5.38	5.38	5.38	4.49	4.49	3.59	3.59	2.69	2.69
315.0	69.98	69.08	68.19	65.49	63.70	60.11	56.52	52.93	48.45
330.0	123.81	122.02	119.33	116.63	111.25	105.87	100.48	92.41	85.23
345.0	161.49	159.70	157.01	152.52	146.24	139.06	130.99	122.02	111.25
360.0	189.31	188.41	187.51	183.92	178.54	172.26	163.29	154.32	143.55

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	131.89	118.43	104.97	90.62	76.26	61.91	46.65	31.40	16.15
15.0	139.96	125.61	111.25	96.90	81.64	65.49	49.35	33.20	17.94
30.0	136.37	122.91	108.56	94.20	79.85	62.80	48.45	32.30	17.05
45.0	122.02	110.35	97.79	84.34	70.88	57.42	43.06	28.71	15.25
60.0	98.69	88.82	78.95	68.19	57.42	45.76	34.99	23.33	11.66
75.0	78.95	71.77	64.60	56.52	48.45	39.48	30.50	21.53	11.66
90.0	78.95	72.67	65.49	57.42	48.45	40.37	30.50	21.53	12.56
105.0	79.85	72.67	65.49	57.42	50.24	41.27	33.20	24.22	15.25
120.0	107.66	98.69	88.82	78.05	66.39	54.73	43.06	31.40	19.74
135.0	130.99	119.33	106.76	94.20	79.85	65.49	51.14	37.68	22.43
150.0	143.55	130.99	117.53	102.28	87.03	71.77	56.52	40.37	25.12
165.0	145.34	131.89	117.53	102.28	87.92	71.77	56.52	40.37	25.12
180.0	122.02	109.46	96.00	82.54	67.29	52.93	38.58	24.22	7.18
195.0	103.18	92.41	81.64	69.98	58.32	54.73	33.20	20.64	0.90
210.0	77.16	76.26	61.91	52.93	43.96	34.99	25.12	11.66	0.90
225.0	43.96	40.37	35.89	31.40	26.92	22.43	16.15	3.59	0.90
240.0	2.69	2.69	3.59	3.59	4.49	4.49	3.59	0.90	0.90
255.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
285.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
300.0	1.79	1.79	1.79	0.90	0.90	0.90	0.00	0.00	0.90
315.0	43.96	38.58	33.20	27.81	22.43	16.15	10.77	4.49	0.90
330.0	76.26	68.19	58.32	49.35	39.48	29.61	19.74	9.87	0.90
345.0	101.38	89.72	77.16	64.60	52.04	39.48	26.92	13.46	1.79
360.0	131.89	118.43	104.97	90.62	76.26	61.91	46.65	31.40	16.15

Intensity data(cd)

C/γ(°)	180.0
0.0	0.90
15.0	2.69
30.0	2.69
45.0	2.69
60.0	2.69
75.0	3.59
90.0	4.49
105.0	6.28
120.0	8.07
135.0	8.97
150.0	9.87
165.0	8.97
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	0.90