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AFX

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Client:

LumCAT: ARNC17LAJD4BKLB

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 119.990

LampCAT:

Current(A): 0.239

Lamp flux(lm): 2589.9

Power (W): 28.020

Number of Lamps: 1

PF: 0.978

Length(mm): 400

Width(mm): 360

Phm Type: C

Height(mm): 360

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Photometric Results

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Lumens(lm): 2589.88, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 92.43

Central intensity(cd): 247.622, Maximum intensity(cd): 247.622

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

Beam Angle(50%Imax): [C0/180]Total=N.A.

[C90/270]Total=N.A.

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

[C90/270]Total=N.A.

Maximum s/h(1/2): C0\_180=1.38 C90\_270=1.49

Maximum s/h(1/4): C0\_180=1.56 C90\_270=1.66

Up flux rate of lamp(%): 48.48%

Down flux rate of lamp(%): 51.52%

Up flux rate of LUM(%): 48.48%

Down flux rate of LUM(%): 51.52%

CIE Type : General diffuse lighting

Output flux ratio in  $\pi$  solid angle : 27.162%

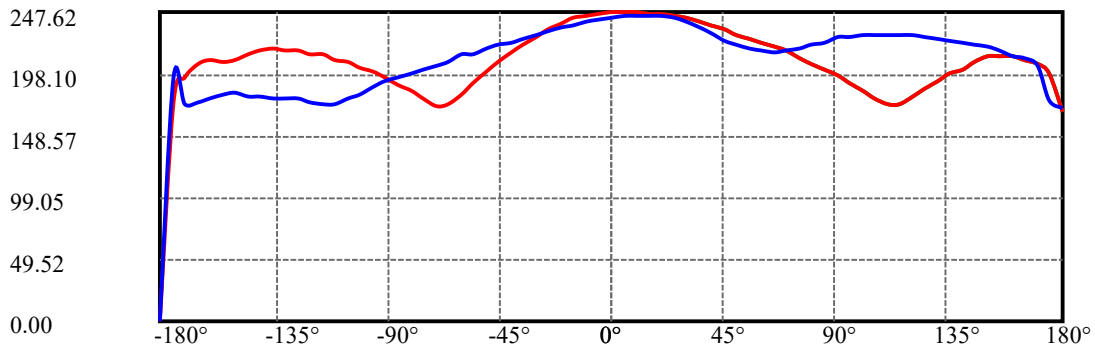
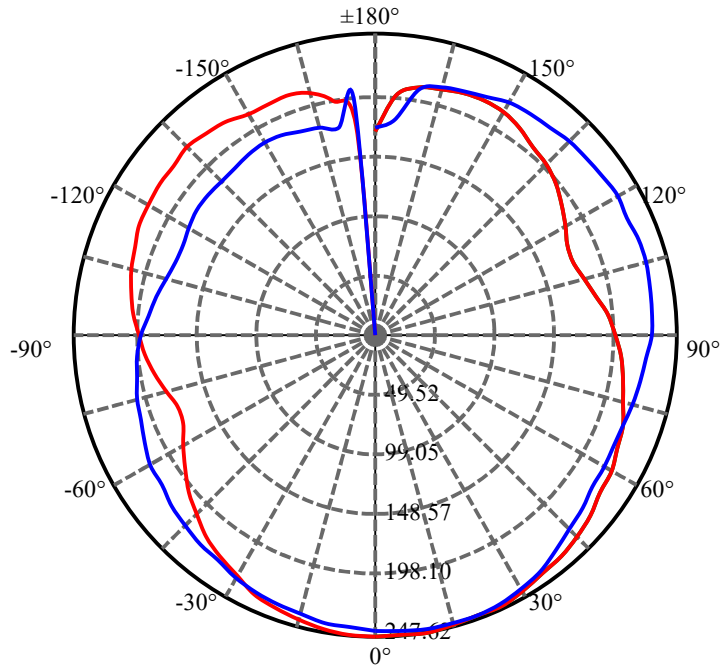
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	243.809	0.000	0	0.00%	0.00%
5.0	243.697	5.828	5.828	0.23%	0.23%
10.0	243.136	17.416	23.244	0.67%	0.90%
15.0	241.791	28.766	52.009	1.11%	2.01%
20.0	239.959	39.703	91.712	1.53%	3.54%
25.0	237.342	50.060	141.772	1.93%	5.47%
30.0	233.716	59.613	201.385	2.30%	7.78%
35.0	229.417	68.200	269.584	2.63%	10.41%
40.0	224.744	75.773	345.358	2.93%	13.33%
45.0	219.398	82.237	427.594	3.18%	16.51%
50.0	214.389	87.653	515.247	3.38%	19.89%
55.0	209.604	92.190	607.438	3.56%	23.45%
60.0	205.791	96.017	703.455	3.71%	27.16%
65.0	202.389	99.229	802.685	3.83%	30.99%
70.0	200.221	101.944	904.628	3.94%	34.93%
75.0	199.436	104.464	1009.092	4.03%	38.96%
80.0	199.959	106.867	1115.959	4.13%	43.09%
85.0	200.184	108.729	1224.688	4.20%	47.29%
90.0	200.184	109.624	1334.312	4.23%	51.52%
95.0	199.548	109.450	1443.761	4.23%	55.75%
100.0	198.464	108.150	1551.911	4.18%	59.92%
105.0	197.380	105.917	1657.828	4.09%	64.01%
110.0	197.231	103.145	1760.973	3.98%	67.99%
115.0	198.277	100.145	1861.118	3.87%	71.86%
120.0	199.511	96.703	1957.821	3.73%	75.60%
125.0	201.230	92.630	2050.451	3.58%	79.17%
130.0	202.502	87.785	2138.236	3.39%	82.56%
135.0	203.735	82.086	2220.322	3.17%	85.73%
140.0	204.707	75.626	2295.948	2.92%	88.65%
145.0	205.193	68.389	2364.337	2.64%	91.29%
150.0	204.632	60.350	2424.687	2.33%	93.62%
155.0	202.277	51.495	2476.181	1.99%	95.61%
160.0	200.109	42.203	2518.384	1.63%	97.24%
165.0	196.894	32.719	2551.103	1.26%	98.50%
170.0	184.334	22.614	2573.717	0.87%	99.38%
175.0	177.268	12.936	2586.653	0.50%	99.88%
180.0	92.709	3.227	2589.88	0.12%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	201.38	7.78%	7.78%
0-40	345.36	13.33%	13.33%
0-60	703.46	27.16%	27.16%
0-90	1334.31	51.52%	51.52%
0-120	1957.82	75.60%	75.60%
0-180	2589.88	100.00%	100.00%
60-90	630.86	24.36%	24.36%
90-120	623.51	24.07%	24.07%
90-130	803.92	31.04%	31.04%
90-150	1090.38	42.10%	42.10%
90-180	1252.34	48.36%	48.36%
0-126.22	2071.90	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	23.24
10-20	68.47
20-30	109.67
30-40	143.97
40-50	169.89
50-60	188.21
60-70	201.17
70-80	211.33
80-90	218.35
90-100	217.60
100-110	209.06
110-120	196.85
120-130	180.42
130-140	157.71
140-150	128.74
150-160	93.70
160-170	55.33
170-180	12.94



C0(Max): —————

C0/C180: —————

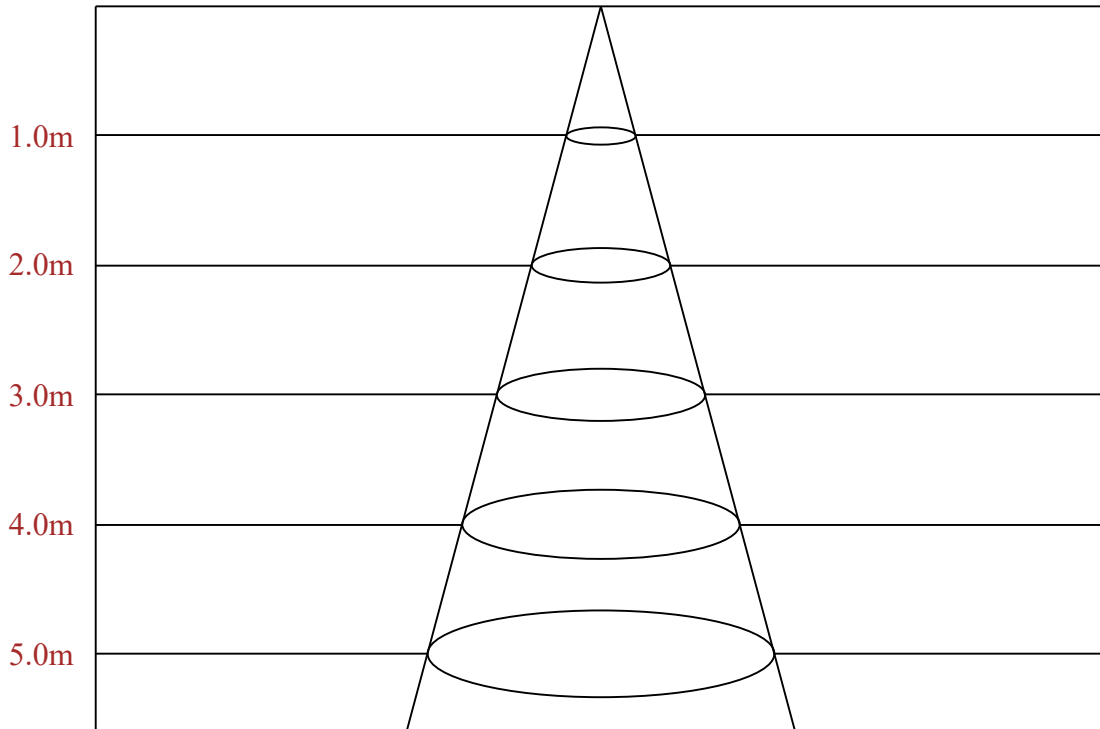
C90/C270: —————

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

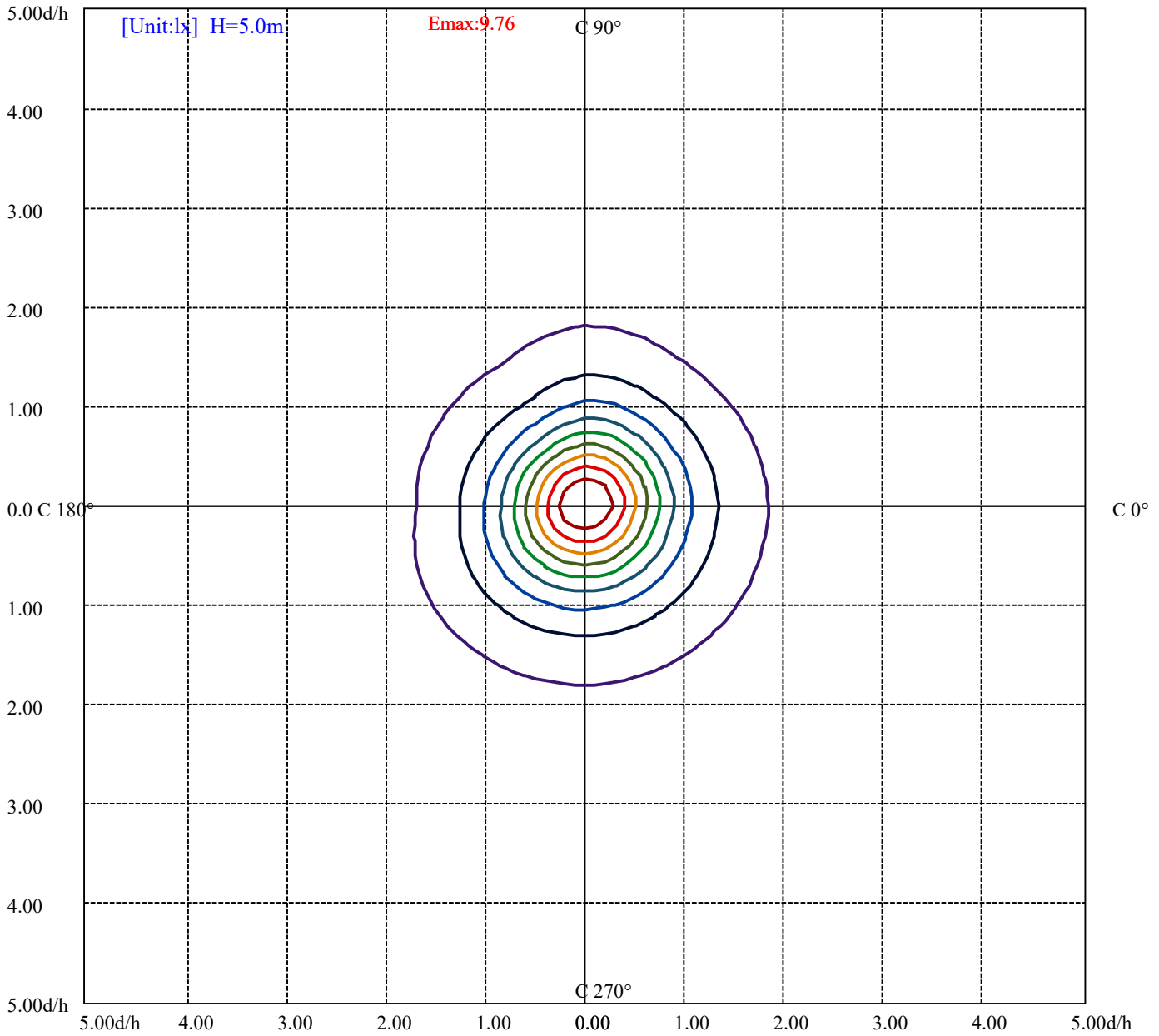
:C90/270Left:0.0 Right:0.0

Beam Angle(50%Imax):C0/180Left:0.0 Right:0.0

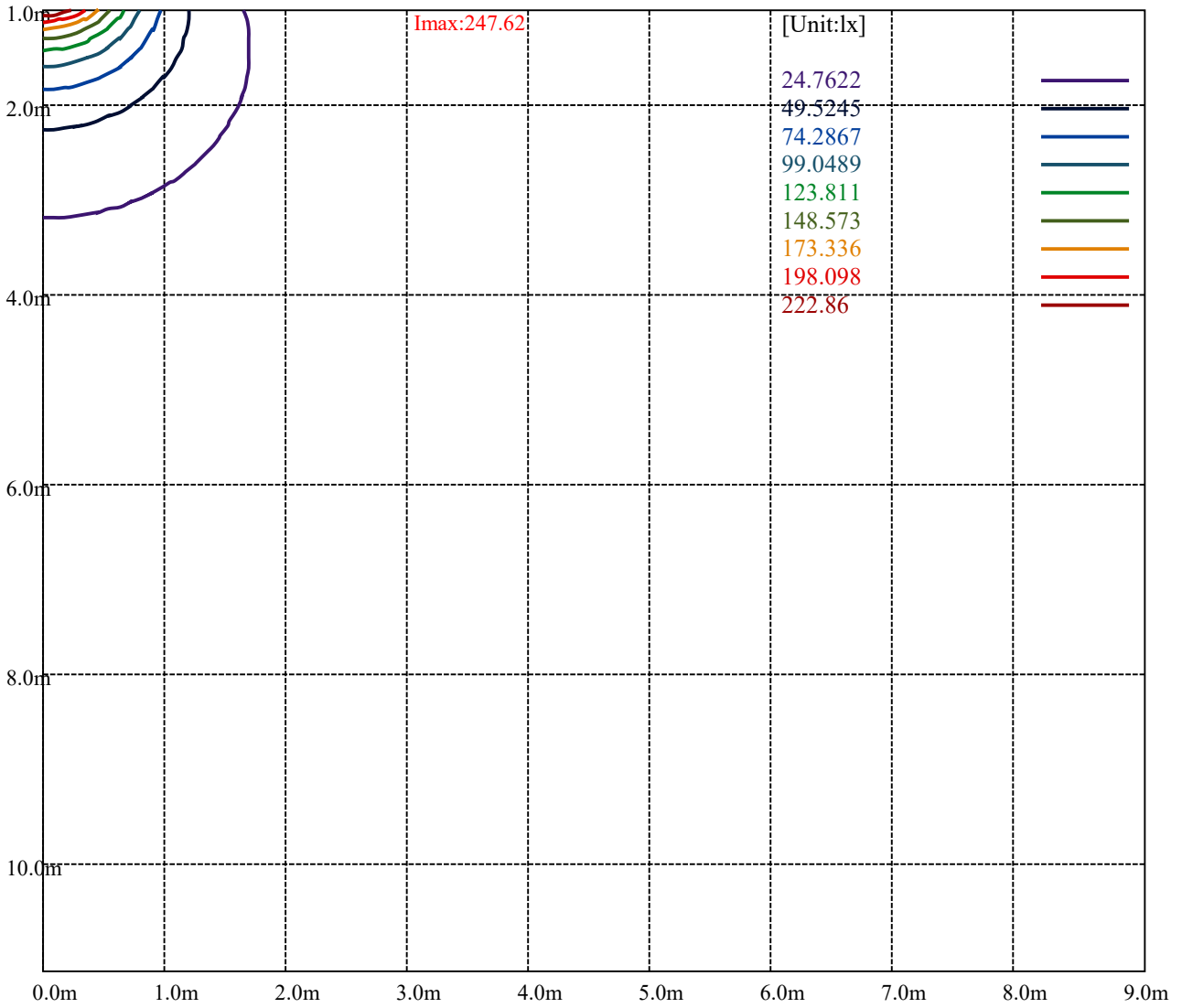
:C90/270Left:0.0 Right:0.0



Max , Ave      Beam angle of C0 plane 180.00



(10%Emax) 0.976136	—
(20%Emax) 1.952268	—
(30%Emax) 2.928404	—
(40%Emax) 3.904536	—
(50%Emax) 4.88068	—
(60%Emax) 5.8568	—
(70%Emax) 6.83296	—
(80%Emax) 7.80908	—
(90%Emax) 8.7852	—



Luminance Table

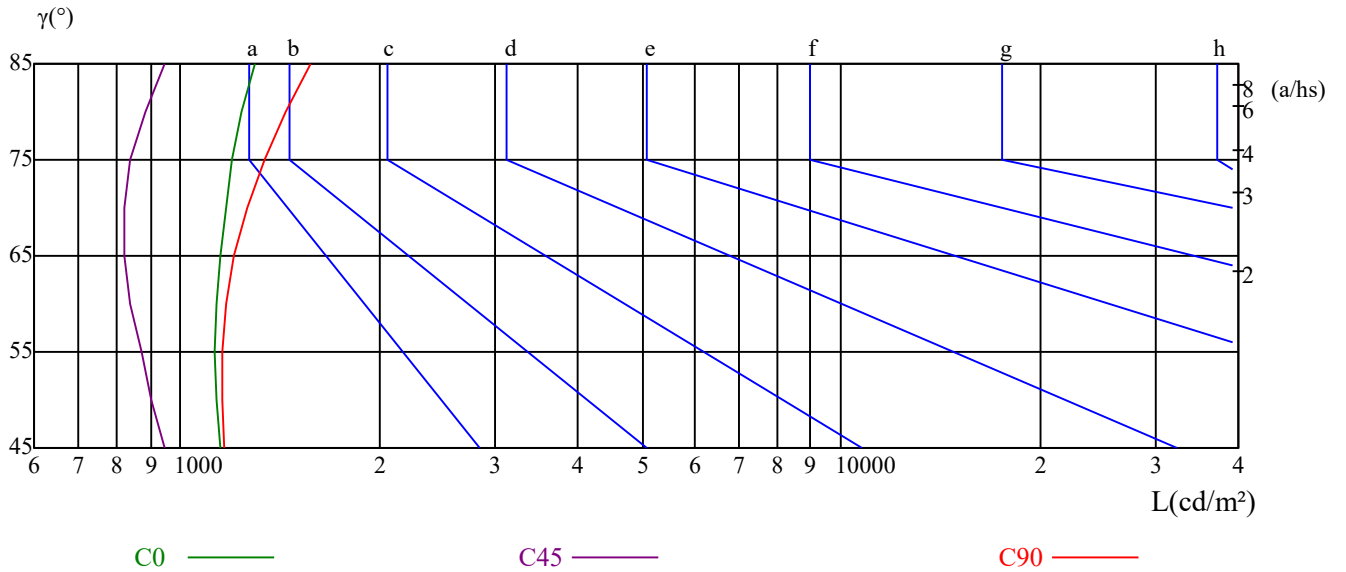
$\gamma$	45	50	55	60	65	70	75	80	85
C0	1145	1132	1127	1136	1149	1172	1195	1237	1294
C45	947	906	871	839	824	819	837	882	944
C90	1164	1155	1155	1174	1208	1264	1342	1446	1577

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3229	3479	3302	5224	5633	5314	15584	16692	15959

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	1.08	1.08	1.08	0.99	0.99	0.99	0.84	0.84	0.84	0.70	0.70	0.70	0.58	0.58	0.58	0.52
1	0.88	0.83	0.78	0.81	0.76	0.72	0.68	0.64	0.61	0.56	0.53	0.50	0.45	0.42	0.41	0.35
2	0.75	0.67	0.61	0.69	0.62	0.56	0.57	0.52	0.48	0.47	0.43	0.39	0.37	0.34	0.31	0.27
3	0.65	0.56	0.49	0.59	0.52	0.45	0.49	0.43	0.38	0.40	0.36	0.32	0.32	0.28	0.25	0.21
4	0.57	0.47	0.40	0.52	0.44	0.38	0.43	0.37	0.32	0.35	0.30	0.26	0.28	0.24	0.21	0.17
5	0.50	0.41	0.34	0.46	0.38	0.32	0.38	0.32	0.27	0.31	0.26	0.22	0.25	0.21	0.18	0.14
6	0.45	0.36	0.29	0.41	0.33	0.27	0.34	0.28	0.23	0.28	0.23	0.19	0.22	0.18	0.15	0.12
7	0.40	0.31	0.25	0.37	0.29	0.23	0.31	0.25	0.20	0.25	0.20	0.17	0.20	0.16	0.13	0.11
8	0.36	0.28	0.22	0.33	0.26	0.20	0.28	0.22	0.18	0.23	0.18	0.15	0.18	0.15	0.12	0.09
9	0.33	0.25	0.19	0.30	0.23	0.18	0.26	0.20	0.15	0.21	0.16	0.13	0.17	0.13	0.10	0.08
10	0.30	0.22	0.17	0.28	0.21	0.16	0.24	0.18	0.14	0.20	0.15	0.12	0.16	0.12	0.09	0.07

AFX ARNC17LAJD4BKLB

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	247.62	247.62	247.62	246.73	245.83	244.93	242.24	239.55	236.86
15.0	245.83	246.73	246.73	246.73	246.73	244.93	243.14	239.55	235.96
30.0	245.83	246.73	246.73	246.73	246.73	244.93	242.24	238.65	234.16
45.0	244.03	245.83	246.73	246.73	246.73	244.93	242.24	238.65	233.27
60.0	244.03	244.93	245.83	245.83	245.83	245.83	243.14	239.55	234.16
75.0	243.14	244.93	244.93	245.83	245.83	244.93	243.14	240.44	236.86
90.0	242.24	244.03	244.93	244.93	244.93	243.14	240.44	235.96	231.47
105.0	242.24	244.03	244.03	244.03	242.24	237.75	231.47	225.19	217.12
120.0	243.14	243.14	244.03	242.24	239.55	234.16	226.09	216.22	205.45
135.0	243.14	243.14	243.14	241.34	238.65	232.37	224.30	214.43	203.66
150.0	242.24	243.14	243.14	240.44	234.16	232.37	225.19	216.22	207.25
165.0	242.24	242.24	242.24	240.44	237.75	234.16	227.88	220.71	211.74
180.0	247.62	246.73	244.93	242.24	238.65	234.16	226.99	221.60	215.32
195.0	245.83	244.93	244.03	241.34	238.65	235.96	232.37	228.78	224.30
210.0	245.83	244.03	242.24	240.44	238.65	236.86	235.06	231.47	228.78
225.0	244.03	243.14	241.34	239.55	237.75	235.96	233.27	231.47	228.78
240.0	244.03	242.24	240.44	238.65	235.96	234.16	231.47	229.68	226.99
255.0	243.14	241.34	239.55	237.75	235.06	232.37	230.58	227.88	224.30
270.0	242.24	241.34	239.55	236.86	235.06	232.37	228.78	226.09	223.40
285.0	242.24	241.34	239.55	237.75	235.06	231.47	229.68	226.09	226.09
300.0	243.14	241.34	240.44	237.75	236.86	233.27	230.58	227.88	224.30
315.0	243.14	241.34	240.44	238.65	235.96	234.16	231.47	228.78	226.09
330.0	242.24	242.24	241.34	239.55	237.75	235.06	233.27	230.58	228.78
345.0	242.24	242.24	241.34	240.44	238.65	235.96	234.16	230.58	228.78
360.0	247.62	247.62	247.62	246.73	245.83	244.93	242.24	239.55	236.86
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	233.27	229.68	226.09	223.40	219.81	216.22	210.84	206.35	201.87
15.0	231.47	226.09	221.60	217.12	214.43	209.94	206.35	202.76	200.07
30.0	227.88	221.60	215.32	209.94	203.66	200.07	198.28	197.38	197.38
45.0	226.09	218.02	209.94	200.97	194.69	189.31	187.51	190.20	193.79
60.0	226.99	218.91	210.84	200.97	191.10	182.13	183.03	190.20	196.48
75.0	231.47	226.09	219.81	214.43	209.94	207.25	207.25	209.04	211.74
90.0	225.19	221.60	218.02	216.22	215.32	216.22	218.02	220.71	223.40
105.0	209.04	201.87	197.38	196.48	198.28	202.76	206.35	212.63	217.12
120.0	193.79	182.13	173.16	174.05	178.54	184.82	190.20	197.38	202.76
135.0	193.79	185.72	179.44	177.64	177.64	179.44	183.03	189.31	195.59
150.0	197.38	190.20	184.82	180.33	176.74	176.74	179.44	183.92	189.31
165.0	204.56	198.28	190.20	183.03	177.64	173.16	171.36	173.16	175.85
180.0	208.15	200.07	190.20	181.23	173.16	172.26	178.54	183.92	189.31
195.0	218.91	212.63	206.35	200.97	197.38	196.48	197.38	200.07	202.76
210.0	226.09	222.50	219.81	217.12	214.43	212.63	209.94	209.04	208.15
225.0	226.99	225.19	223.40	220.71	217.12	212.63	209.04	205.45	200.97
240.0	225.19	222.50	220.71	217.12	212.63	207.25	201.87	196.48	190.20
255.0	221.60	219.81	217.12	213.53	209.04	204.56	199.17	197.38	189.31
270.0	220.71	218.02	213.53	213.53	208.15	204.56	201.87	198.28	195.59
285.0	219.81	217.12	213.53	210.84	208.15	206.35	204.56	202.76	200.97
300.0	221.60	218.02	216.22	213.53	210.84	209.04	207.25	206.35	203.66
315.0	223.40	220.71	218.91	216.22	214.43	213.53	212.63	211.74	210.84
330.0	226.09	224.30	221.60	219.81	218.02	215.32	213.53	210.84	208.15
345.0	226.09	224.30	222.50	219.81	216.22	212.63	209.04	203.66	199.17
360.0	233.27	229.68	226.09	223.40	219.81	216.22	210.84	206.35	201.87

AFX ARNC17LAJD4BKLB

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	196.48	191.10	184.82	178.54	173.16	174.05	180.33	186.61	192.89
15.0	197.38	193.79	192.00	189.31	187.51	187.51	187.51	188.41	189.31
30.0	197.38	198.28	199.17	200.97	202.76	201.87	199.17	196.48	193.79
45.0	198.28	201.87	205.45	209.94	213.53	215.32	214.43	209.94	206.35
60.0	202.76	208.15	213.53	218.02	221.60	225.19	225.19	223.40	219.81
75.0	215.32	218.91	223.40	226.09	228.78	231.47	232.37	230.58	227.88
90.0	226.99	227.88	228.78	229.68	229.68	228.78	228.78	226.99	226.09
105.0	220.71	223.40	222.50	222.50	221.60	219.81	218.91	218.02	218.02
120.0	207.25	210.84	210.84	209.04	208.15	207.25	205.45	205.45	204.56
135.0	200.97	201.87	199.17	195.59	193.79	192.89	192.89	192.89	191.10
150.0	191.10	191.10	189.31	188.41	188.41	188.41	189.31	191.10	191.10
165.0	179.44	183.03	185.72	187.51	191.10	193.79	197.38	198.28	199.17
180.0	194.69	199.17	202.76	207.25	209.94	213.53	214.43	216.22	216.22
195.0	205.45	208.15	210.84	213.53	216.22	218.91	219.81	220.71	220.71
210.0	208.15	208.15	208.15	209.04	209.94	211.74	215.32	217.12	219.81
225.0	196.48	192.89	189.31	187.51	188.41	192.89	193.79	205.45	211.74
240.0	184.82	179.44	177.64	167.77	168.67	176.74	185.72	193.79	199.17
255.0	184.82	181.23	177.64	174.95	174.05	176.74	180.33	185.72	187.51
270.0	192.00	187.51	182.13	177.64	174.05	174.05	175.85	178.54	178.54
285.0	195.59	189.31	183.03	178.54	174.05	170.46	169.57	170.46	174.05
300.0	200.07	194.69	189.31	184.82	179.44	174.05	170.46	170.46	177.64
315.0	208.15	204.56	200.97	197.38	194.69	193.79	193.79	195.59	199.17
330.0	205.45	203.66	200.97	199.17	199.17	200.07	202.76	207.25	209.94
345.0	194.69	190.20	185.72	183.92	184.82	189.31	194.69	200.07	205.45
360.0	196.48	191.10	184.82	178.54	173.16	174.05	180.33	186.61	192.89
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	198.28	201.87	207.25	211.74	212.63	211.74	209.04	206.35	198.28
15.0	190.20	192.89	195.59	198.28	198.28	196.48	194.69	192.00	189.31
30.0	192.00	192.00	194.69	195.59	192.00	187.51	184.82	180.33	176.74
45.0	203.66	201.87	201.87	200.97	197.38	191.10	186.61	177.64	169.57
60.0	217.12	215.32	213.53	212.63	207.25	201.87	199.17	186.61	169.57
75.0	224.30	220.71	219.81	218.02	216.22	211.74	208.15	196.48	171.36
90.0	224.30	222.50	221.60	219.81	216.22	212.63	210.84	204.56	176.74
105.0	217.12	218.02	218.02	212.63	209.04	207.25	208.15	203.66	180.33
120.0	204.56	205.45	203.66	200.07	195.59	195.59	196.48	192.00	178.54
135.0	192.00	193.79	191.10	186.61	181.23	180.33	180.33	175.85	174.95
150.0	192.89	193.79	191.10	185.72	179.44	175.85	174.05	164.18	163.29
165.0	200.07	200.97	199.17	195.59	190.20	191.10	187.51	168.67	158.80
180.0	218.02	217.12	213.53	209.04	208.15	209.04	206.35	195.59	173.16
195.0	222.50	223.40	223.40	218.02	215.32	213.53	212.63	191.10	163.29
210.0	220.71	220.71	219.81	218.91	216.22	214.43	210.84	183.03	171.36
225.0	214.43	213.53	211.74	210.84	209.04	207.25	200.07	174.05	185.72
240.0	200.97	201.87	201.87	200.97	195.59	193.79	185.72	165.98	193.79
255.0	188.41	188.41	188.41	187.51	185.72	179.44	173.16	164.18	198.28
270.0	178.54	179.44	180.33	183.03	181.23	177.64	175.85	173.16	193.79
285.0	177.64	180.33	183.92	187.51	189.31	190.20	189.31	186.61	184.82
300.0	184.82	191.10	196.48	201.87	203.66	204.56	203.66	192.00	173.16
315.0	204.56	208.15	210.84	214.43	216.22	215.32	212.63	191.10	162.39
330.0	213.53	217.12	219.81	221.60	221.60	219.81	211.74	183.03	165.08
345.0	209.04	212.63	217.12	219.81	217.12	214.43	203.66	175.85	182.13
360.0	198.28	201.87	207.25	211.74	212.63	211.74	209.04	206.35	198.28

Intensity data(cd)

C/ $\gamma$ (°)	180.0
0.0	167.77
15.0	190.20
30.0	199.17
45.0	201.87
60.0	198.28
75.0	185.72
90.0	170.46
105.0	163.29
120.0	171.36
135.0	184.82
150.0	193.79
165.0	198.28
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	167.77