
革星

Client:

LumCAT: DKT-240801D-D-5

Luminaire: LED lamp

Report No:

Ballast type:

Test No: LCZP24110191

Voltage(V): 120.060

LampCAT:

Current(A): 0.198

Lamp flux(lm): 1124.8

Power (W): 23.130

Number of Lamps: 1

PF: 0.976

Length(mm): 185

Width(mm): 35

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1124.82, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 48.63

Central intensity(cd): 646.440, Maximum intensity(cd): 646.440

Angle of maximum intensity: C=30.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=87.2

[C90/270]Total=67.4

Field angle(10%Imax): [C0/180]Total=146.2

[C90/270]Total=129.0

Maximum s/h(1/2): C0_180=1.11 C90_270=0.93

Maximum s/h(1/4): C0_180=1.19 C90_270=1.00

Up flux rate of lamp(%): 0.34%

Down flux rate of lamp(%): 99.66%

Up flux rate of LUM(%): 0.34%

Down flux rate of LUM(%): 99.66%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 87.385%

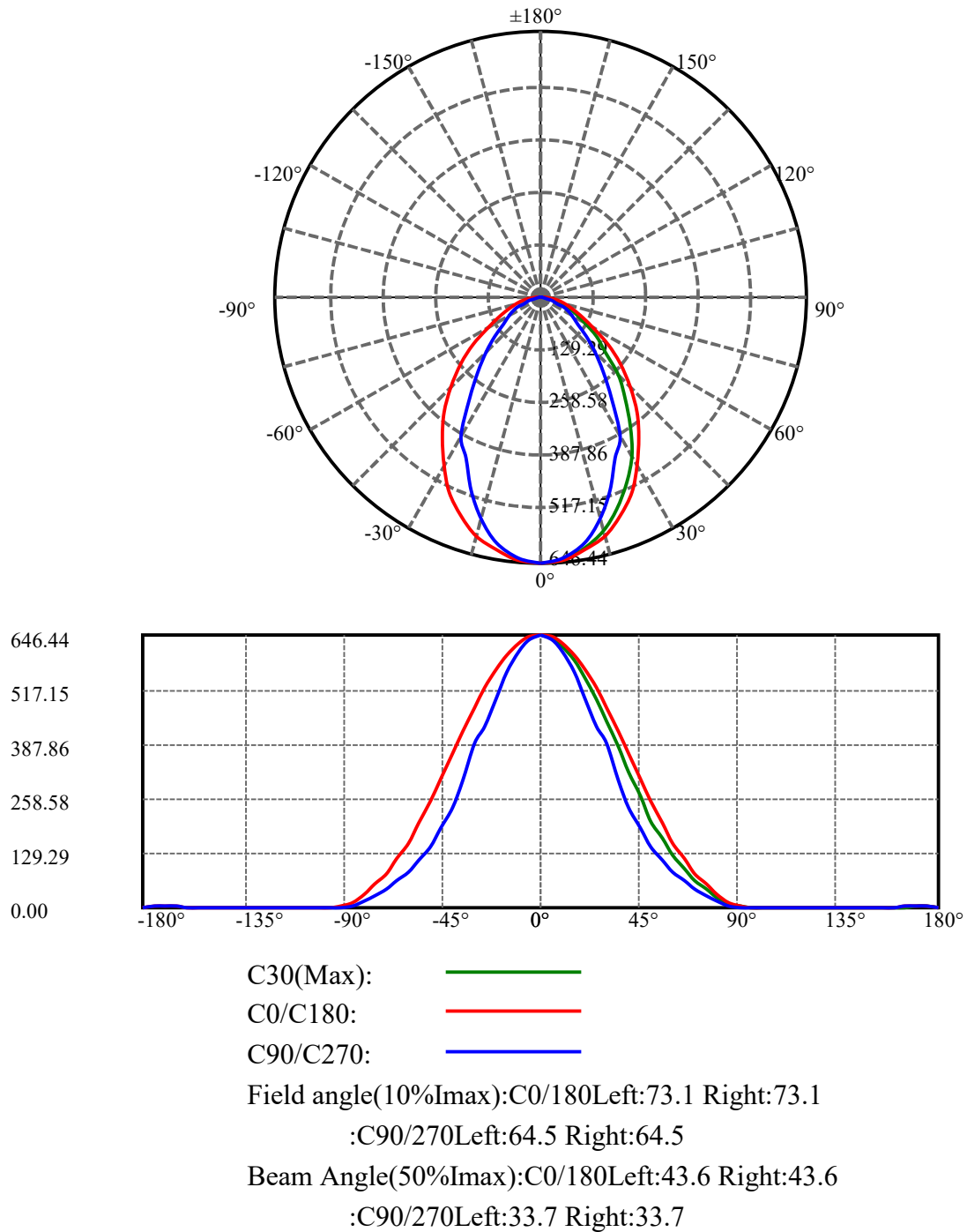
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	646.440	0.000	0	0.00%	0.00%
5.0	638.458	15.361	15.361	1.37%	1.37%
10.0	614.704	44.830	60.19	3.99%	5.35%
15.0	578.359	70.772	130.962	6.29%	11.64%
20.0	530.508	91.386	222.348	8.12%	19.77%
25.0	474.696	105.427	327.776	9.37%	29.14%
30.0	415.520	112.658	440.433	10.02%	39.16%
35.0	354.200	113.347	553.78	10.08%	49.23%
40.0	295.485	108.395	662.175	9.64%	58.87%
45.0	240.807	99.299	761.474	8.83%	67.70%
50.0	190.167	87.085	848.558	7.74%	75.44%
55.0	149.132	73.775	922.333	6.56%	82.00%
60.0	112.996	60.590	982.923	5.39%	87.38%
65.0	83.541	47.778	1030.702	4.25%	91.63%
70.0	59.210	36.145	1066.847	3.21%	94.85%
75.0	39.549	25.814	1092.661	2.29%	97.14%
80.0	23.017	16.741	1109.402	1.49%	98.63%
85.0	8.725	8.625	1118.027	0.77%	99.40%
90.0	2.090	2.961	1120.988	0.26%	99.66%
95.0	0.716	0.768	1121.756	0.07%	99.73%
100.0	0.479	0.325	1122.081	0.03%	99.76%
105.0	0.352	0.222	1122.303	0.02%	99.78%
110.0	0.295	0.169	1122.472	0.02%	99.79%
115.0	0.237	0.135	1122.607	0.01%	99.80%
120.0	0.230	0.114	1122.721	0.01%	99.81%
125.0	0.226	0.105	1122.826	0.01%	99.82%
130.0	0.241	0.102	1122.928	0.01%	99.83%
135.0	0.211	0.091	1123.019	0.01%	99.84%
140.0	0.337	0.101	1123.121	0.01%	99.85%
145.0	0.556	0.149	1123.27	0.01%	99.86%
150.0	0.866	0.209	1123.479	0.02%	99.88%
155.0	1.265	0.270	1123.749	0.02%	99.90%
160.0	1.675	0.308	1124.057	0.03%	99.93%
165.0	2.024	0.305	1124.362	0.03%	99.96%
170.0	2.265	0.254	1124.617	0.02%	99.98%
175.0	2.308	0.164	1124.78	0.01%	100.00%
180.0	1.184	0.042	1124.822	0.00%	100.00%

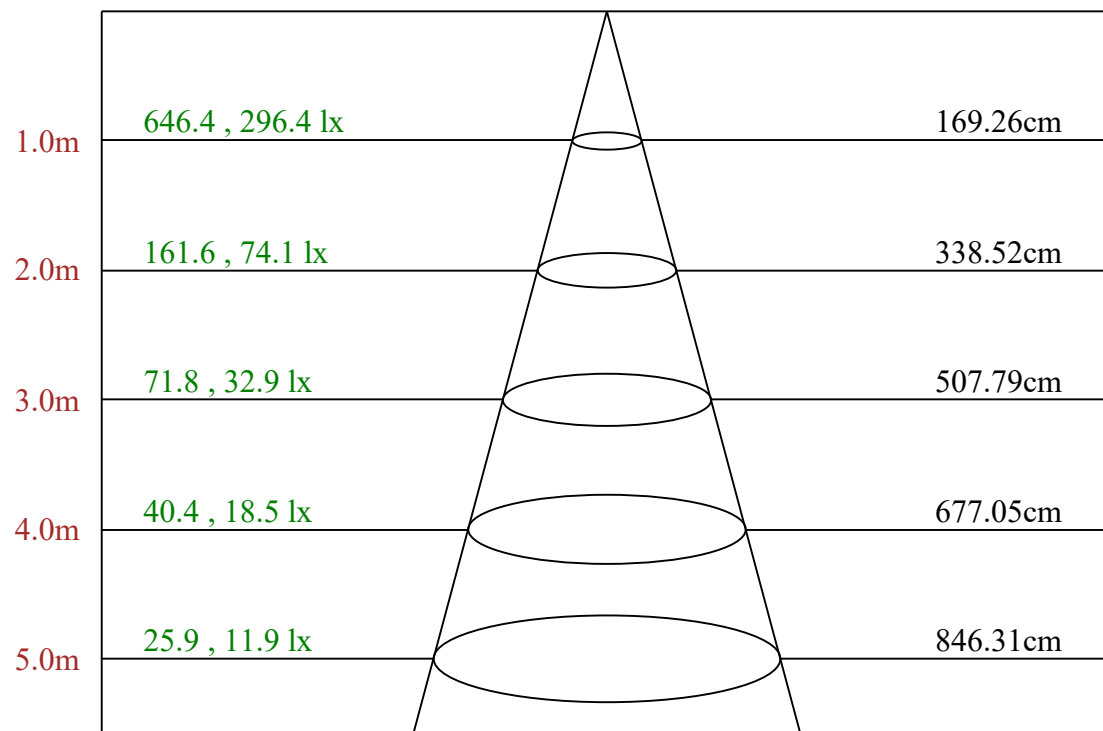
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	440.43	39.16%	39.16%
0-40	662.17	58.87%	58.87%
0-60	982.92	87.38%	87.38%
0-90	1120.99	99.66%	99.66%
0-120	1122.72	99.81%	99.81%
0-180	1124.82	100.00%	100.00%
60-90	138.06	12.27%	12.27%
90-120	1.73	0.15%	0.15%
90-130	1.94	0.17%	0.17%
90-150	2.49	0.22%	0.22%
90-180	3.79	0.34%	0.34%
0-53.48	899.86	80.00%	80.00%

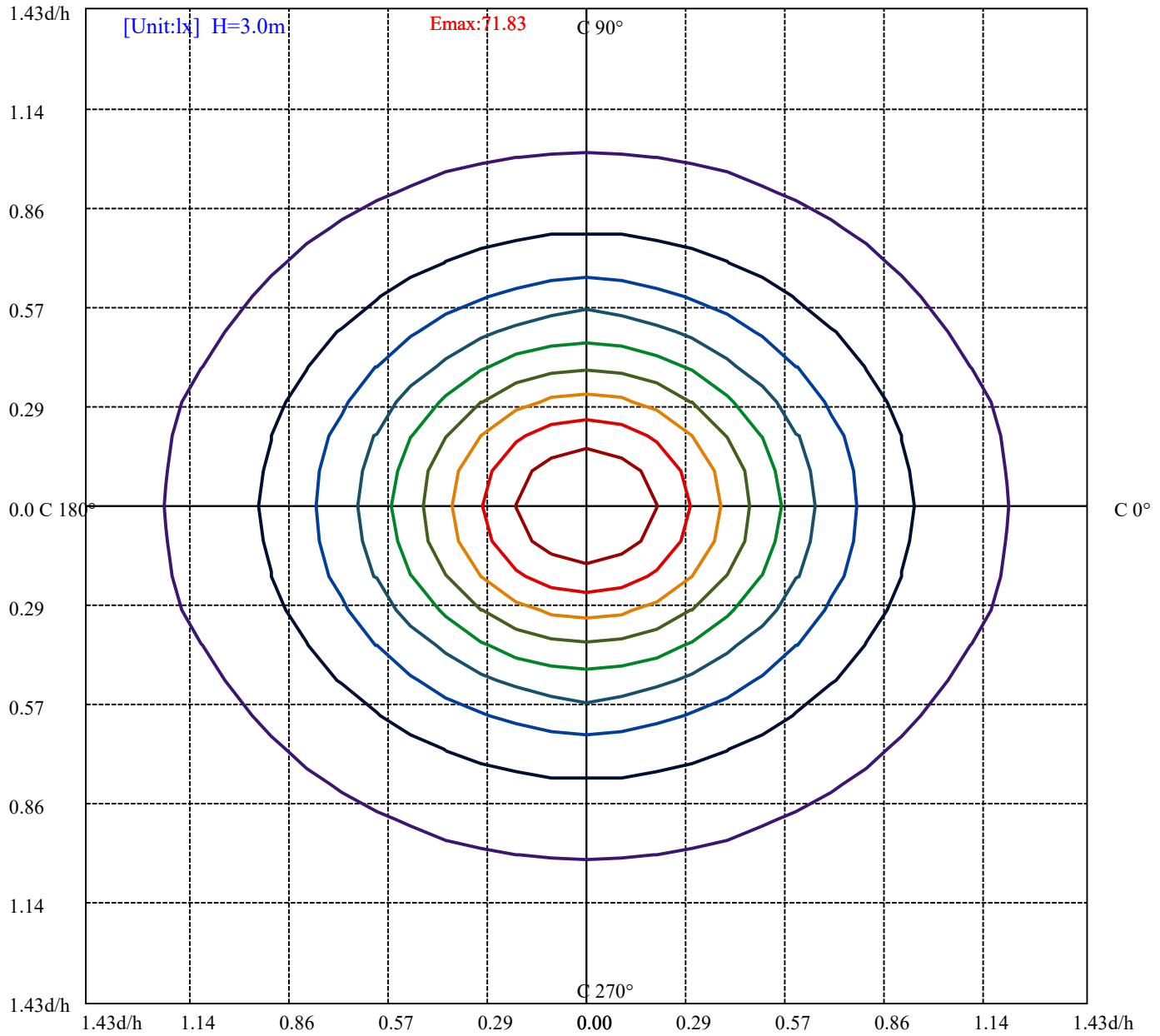
ZONAL LUMEN SUMMARY

0-10	60.19
10-20	162.16
20-30	218.09
30-40	221.74
40-50	186.38
50-60	134.37
60-70	83.92
70-80	42.56
80-90	11.59
90-100	1.09
100-110	0.39
110-120	0.25
120-130	0.21
130-140	0.19
140-150	0.36
150-160	0.58
160-170	0.56
170-180	0.16

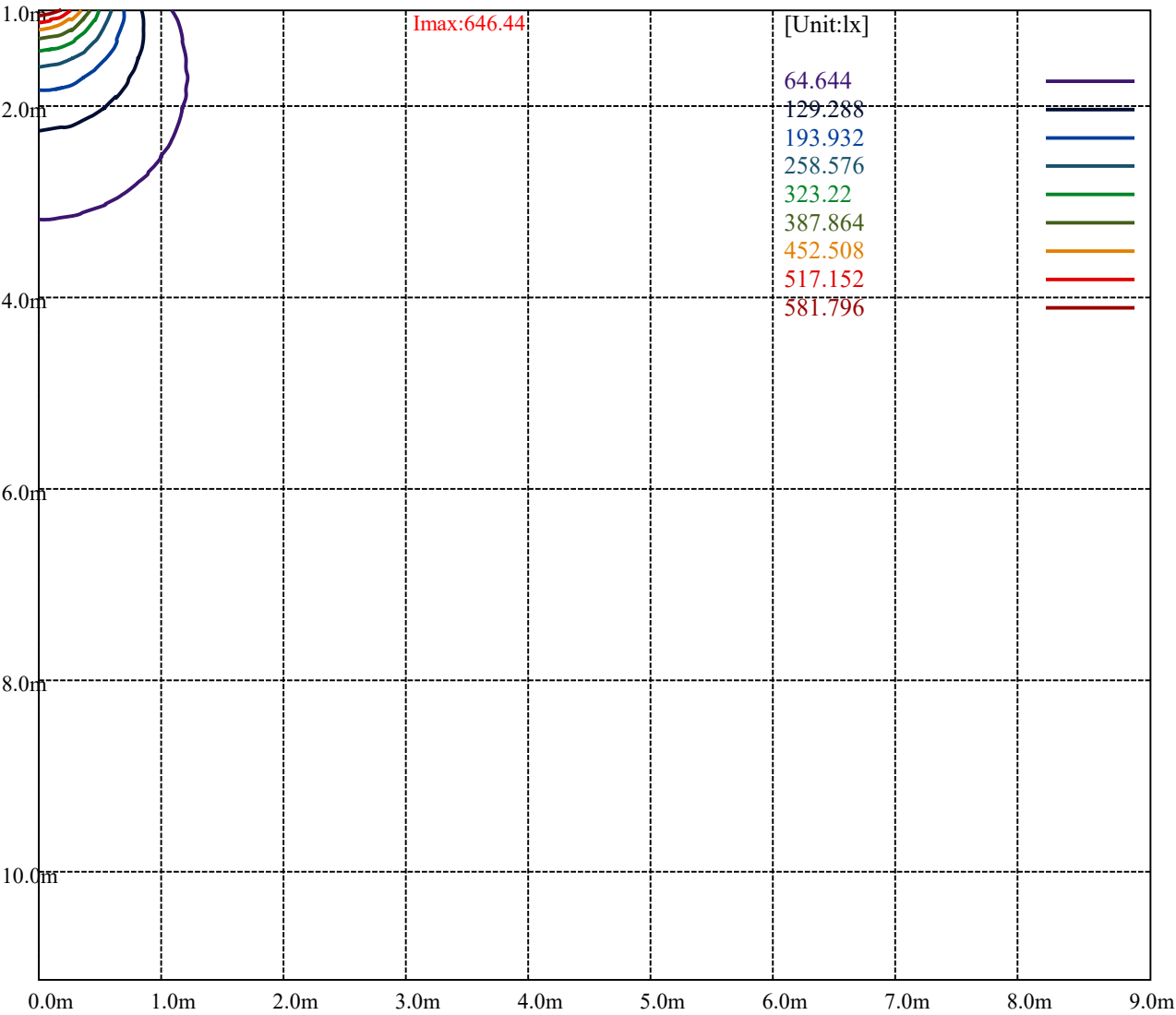




Max , Ave Beam angle of C30 plane 80.48



(10%Emax)	7.182655	
(20%Emax)	14.36533	
(30%Emax)	21.548	
(40%Emax)	28.73067	
(50%Emax)	35.91333	
(60%Emax)	43.096	
(70%Emax)	50.27867	
(80%Emax)	57.46122	
(90%Emax)	64.64389	



Luminance Table

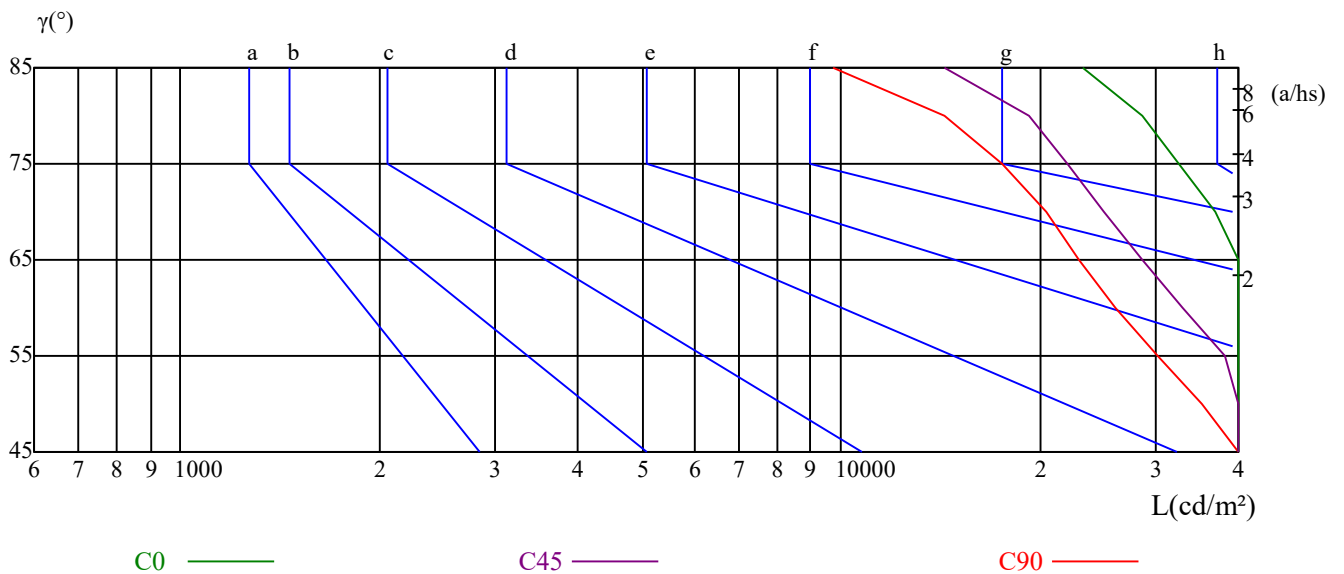
γ	45	50	55	60	65	70	75	80	85
C0	67034	60532	54249	47577	42237	36972	32481	28633	23305
C45	51085	44322	38159	32966	28662	24949	22034	19328	14401
C90	41269	35143	30136	26084	22877	20513	17598	14377	9738

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
42237	22877	28662	32481	17598	22034	23305	9738	14401

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



RHOC	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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.06	1.03	0.99	1.04	1.01	0.98	1.00	0.97	0.95	0.96	0.94	0.92	0.92	0.91	0.89	0.87
2	0.95	0.89	0.84	0.93	0.88	0.83	0.90	0.85	0.81	0.86	0.83	0.79	0.83	0.80	0.77	0.75
3	0.85	0.78	0.72	0.83	0.77	0.72	0.81	0.75	0.70	0.78	0.73	0.69	0.75	0.71	0.68	0.66
4	0.77	0.69	0.63	0.75	0.68	0.63	0.73	0.67	0.62	0.71	0.65	0.61	0.69	0.64	0.60	0.58
5	0.70	0.62	0.56	0.68	0.61	0.55	0.66	0.60	0.55	0.65	0.59	0.54	0.63	0.58	0.54	0.52
6	0.63	0.55	0.50	0.63	0.55	0.49	0.61	0.54	0.49	0.59	0.53	0.49	0.58	0.52	0.48	0.46
7	0.58	0.50	0.45	0.57	0.50	0.45	0.56	0.49	0.44	0.55	0.48	0.44	0.53	0.48	0.44	0.42
8	0.54	0.46	0.41	0.53	0.46	0.40	0.52	0.45	0.40	0.51	0.44	0.40	0.49	0.44	0.40	0.38
9	0.50	0.42	0.37	0.49	0.42	0.37	0.48	0.41	0.37	0.47	0.41	0.37	0.46	0.40	0.36	0.35
10	0.46	0.39	0.34	0.46	0.39	0.34	0.45	0.38	0.34	0.44	0.38	0.34	0.43	0.38	0.34	0.32

革星 DKT-240801D-D-5

Intensity data(cd)										Appendix Page: 10 Total:12	
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0		
0.0	646.44	642.60	627.99	603.33	569.54	528.07	480.03	429.44	374.09		
15.0	646.44	638.81	620.41	593.00	554.18	511.32	460.55	406.19	350.08		
30.0	646.44	635.12	612.75	578.05	534.14	483.33	430.78	370.67	316.27		
45.0	646.44	632.74	604.53	562.52	514.45	460.59	397.35	338.16	282.00		
60.0	646.44	631.32	598.41	551.21	494.29	432.52	370.47	314.47	260.12		
75.0	646.44	629.14	593.36	545.40	480.87	420.10	356.49	298.00	245.84		
90.0	646.44	629.59	593.23	540.93	479.93	414.53	351.15	295.83	241.34		
105.0	646.44	629.83	594.67	543.55	486.37	419.00	358.88	300.14	247.73		
120.0	646.44	632.23	567.43	553.41	499.60	438.13	375.64	318.61	261.38		
135.0	646.44	635.65	608.71	570.33	520.69	463.68	359.15	346.15	288.95		
150.0	646.44	639.13	618.04	585.01	544.31	491.40	438.39	380.67	323.50		
165.0	646.44	641.78	627.26	601.28	565.34	521.40	470.84	416.09	362.37		
180.0	646.44	639.13	621.78	595.66	559.13	514.47	464.14	409.44	352.81		
195.0	646.44	642.21	626.57	599.90	564.30	521.25	467.54	414.10	355.69		
210.0	646.44	642.76	627.94	597.29	560.10	510.76	454.25	393.50	331.18		
225.0	646.44	644.23	626.49	593.86	548.09	491.47	431.73	361.96	300.29		
240.0	646.44	644.97	623.53	586.86	534.71	471.75	402.73	332.71	266.44		
255.0	646.44	643.88	620.17	578.62	521.05	452.86	383.86	311.64	245.19		
270.0	646.44	642.50	617.22	575.37	516.84	447.42	430.20	302.80	236.39		
285.0	646.44	642.03	639.56	575.21	517.39	449.75	376.96	305.37	242.40		
300.0	646.44	642.01	619.40	582.20	525.53	465.08	395.67	325.99	260.00		
315.0	646.44	641.09	620.24	584.90	536.93	479.82	416.08	350.11	285.90		
330.0	646.44	641.17	622.20	590.66	550.79	496.76	442.00	380.67	319.06		
345.0	646.44	639.08	621.02	592.07	553.61	507.25	457.62	398.12	342.63		
360.0	646.44	642.60	627.99	603.33	569.54	528.07	480.03	429.44	374.09		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	317.74	262.48	210.15	162.75	123.30	88.50	60.00	36.99	17.54		
15.0	294.52	243.29	191.32	149.10	110.65	79.01	52.98	31.73	14.44		
30.0	261.78	211.15	165.96	126.75	95.08	66.37	44.92	26.05	10.03		
45.0	230.34	184.47	146.42	112.04	83.00	58.83	38.60	22.34	7.17		
60.0	212.09	169.84	133.82	102.93	76.53	55.27	36.11	19.61	5.87		
75.0	202.64	161.63	129.69	100.59	75.32	53.45	34.41	18.12	4.30		
90.0	199.02	160.74	127.86	99.37	74.46	53.85	33.80	18.13	4.03		
105.0	202.20	163.01	130.98	101.70	76.36	54.24	34.97	18.45	5.14		
120.0	215.14	172.69	136.32	105.12	78.64	55.84	37.38	20.49	6.55		
135.0	236.73	191.99	148.72	115.41	85.52	60.80	40.13	22.88	8.76		
150.0	268.64	182.52	172.71	132.47	98.15	69.94	47.46	27.01	11.38		
165.0	302.97	251.95	201.30	155.86	116.38	81.75	56.80	34.36	15.36		
180.0	296.09	241.39	192.80	145.31	107.86	75.26	48.86	27.40	8.77		
195.0	297.01	240.90	189.20	143.67	104.86	74.69	49.12	28.24	10.30		
210.0	274.11	215.11	168.17	125.83	91.40	63.88	42.25	24.21	7.92		
225.0	239.26	184.84	139.25	102.30	75.28	52.02	35.66	21.23	8.46		
240.0	206.77	158.29	115.12	85.15	61.78	43.99	30.06	17.51	8.07		
255.0	186.99	138.84	101.32	73.59	54.46	38.26	26.63	23.25	7.41		
270.0	178.87	131.80	95.99	69.52	50.74	37.00	25.19	14.20	6.96		
285.0	184.67	134.83	99.77	72.42	52.68	38.00	26.25	14.87	7.71		
300.0	201.20	151.37	111.59	81.22	58.79	42.92	29.81	17.44	8.12		
315.0	229.26	176.58	132.48	97.15	69.93	49.36	33.30	20.48	8.12		
330.0	259.48	204.81	159.11	116.56	85.57	59.67	39.13	22.76	8.23		
345.0	281.83	229.51	179.14	135.10	98.23	68.15	45.34	24.67	8.75		
360.0	317.74	262.48	210.15	162.75	123.30	88.50	60.00	36.99	17.54		

革星 DKT-240801D-D-5

Intensity data(cd)										Appendix Page: 11 Total:12	
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0		
0.0	2.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.27	
15.0	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.18	
30.0	1.84	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.18	
45.0	1.47	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	
60.0	0.82	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	
75.0	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	
105.0	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	
120.0	0.83	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	
135.0	1.48	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	
150.0	1.85	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	
165.0	2.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	
180.0	1.19	0.00	0.09	0.09	0.18	0.09	0.18	0.18	0.18	0.18	
195.0	1.38	0.09	0.18	0.09	0.09	0.18	0.28	0.28	0.28	0.18	
210.0	2.85	0.64	0.55	0.55	0.37	0.37	0.37	0.28	0.28	0.18	
225.0	3.40	1.29	0.92	0.74	0.74	0.46	0.55	0.46	0.46	0.37	
240.0	3.30	1.56	1.47	0.92	0.82	0.55	0.46	0.46	0.46	0.46	
255.0	3.11	2.20	1.56	1.19	0.92	0.73	0.64	0.55	0.55	0.37	
270.0	3.39	2.56	2.01	1.37	1.19	0.92	0.82	0.73	0.73	0.55	
285.0	3.67	2.75	1.65	1.19	0.92	0.73	0.64	0.55	0.55	0.46	
300.0	3.69	2.22	1.48	0.92	0.74	0.55	0.55	0.46	0.46	0.46	
315.0	3.60	1.48	0.92	0.65	0.55	0.46	0.37	0.37	0.37	0.28	
330.0	2.78	0.83	0.46	0.46	0.37	0.46	0.37	0.37	0.37	0.37	
345.0	1.30	0.19	0.19	0.28	0.19	0.19	0.28	0.37	0.37	0.28	
360.0	2.92	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.27	
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	0.37	0.37	0.73	1.19	1.64	2.01	2.37	2.56	2.37		
15.0	0.37	0.46	0.74	1.20	1.66	2.12	2.48	2.58	2.48		
30.0	0.18	0.46	0.74	1.10	1.66	2.12	2.39	2.58	2.58		
45.0	0.18	0.37	0.64	1.19	1.65	2.11	2.39	2.67	2.48		
60.0	0.18	0.37	0.64	1.10	1.56	2.11	2.47	2.57	2.47		
75.0	0.09	0.27	0.55	1.10	1.56	2.11	2.38	2.47	2.47		
90.0	0.09	0.18	0.55	1.01	1.47	2.01	2.29	2.56	2.47		
105.0	0.09	0.28	0.64	1.01	1.56	2.02	2.39	2.48	2.39		
120.0	0.09	0.37	0.65	1.11	1.57	2.03	2.40	2.49	2.49		
135.0	0.18	0.37	0.65	1.11	1.66	2.03	2.40	2.49	2.40		
150.0	0.09	0.46	0.74	1.11	1.57	2.04	2.31	2.50	2.41		
165.0	0.28	0.47	0.74	1.21	1.58	2.14	2.33	2.42	2.42		
180.0	0.18	0.18	0.37	0.55	0.91	1.28	1.64	2.01	2.19		
195.0	0.18	0.28	0.46	0.64	0.92	1.01	1.66	2.02	2.30		
210.0	0.18	0.28	0.46	0.64	0.83	1.20	1.66	2.03	2.21		
225.0	0.18	0.28	0.46	0.55	0.92	1.29	1.65	2.02	2.21		
240.0	0.27	0.27	0.46	0.55	0.82	1.37	1.65	2.02	2.20		
255.0	0.37	0.37	0.46	0.55	0.92	1.28	1.65	1.92	2.11		
270.0	0.46	0.46	0.55	0.92	1.19	1.56	2.01	2.11	2.11		
285.0	0.28	0.37	0.46	0.55	0.92	1.28	1.56	1.93	2.11		
300.0	0.18	0.28	0.37	0.55	1.02	1.20	1.57	2.03	2.12		
315.0	0.18	0.28	0.37	0.55	0.92	1.29	1.57	1.94	2.12		
330.0	0.19	0.37	0.46	0.65	0.93	1.30	1.67	1.94	2.13		
345.0	0.19	0.28	0.47	0.65	0.93	1.30	1.68	2.05	2.14		
360.0	0.37	0.37	0.73	1.19	1.64	2.01	2.37	2.56	2.37		

Intensity data(cd)

C/ $\gamma(^{\circ})$	180.0
0.0	2.19
15.0	2.48
30.0	2.39
45.0	2.39
60.0	2.38
75.0	2.38
90.0	2.38
105.0	2.48
120.0	2.31
135.0	2.40
150.0	2.31
165.0	2.33
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	2.19