Client:
LumCAT:
Luminaire:
Report No:
Ballast type:

Test No:	Voltage(V): 220.130
LampCAT:	Current(A): 0.285
Lamp flux(lm): -1.0	Power (W): 57.130
Number of Lamps: 1	PF: 0.911
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2553.21, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 44.69
Central intensity(cd): 5527.578, Maximum intensity(cd): 5780.863
Angle of maximum intensity: C=45.0 γ=5.0
Beam Angle(50%Imax): [C0/180]Total=33.9
[C90/270]Total=33.9
Field angle(10%Imax): [C0/180]Total=58.2
[C90/270]Total=57.8
Maximum s/h(1/2): C0_180=0.57 C90_270=0.59
Maximum s/h(1/4): C0_180=0.55 C90_270=0.56
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 0.00%
Up flux rate of LUM(%): 0.14%
Down flux rate of LUM(%): 99.86%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 94.383%

Zonal flux distribution table

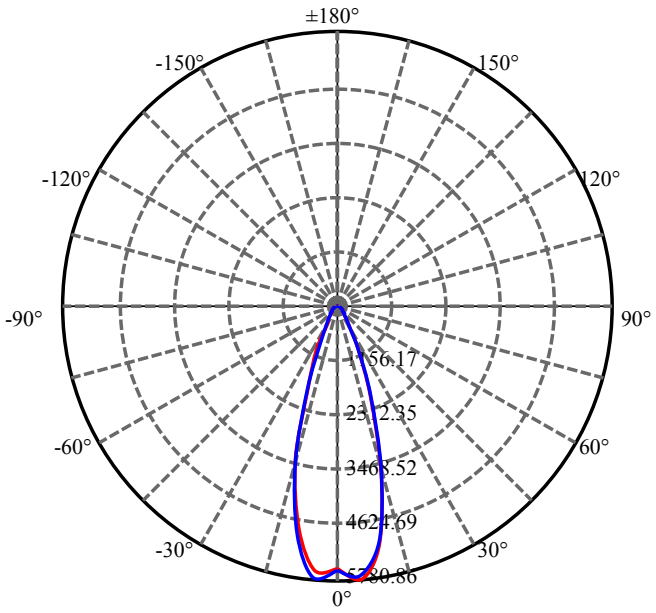
γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5551.774	0.000	0	0.00%	0.00%
5.0	5695.405	134.457	134.457	0.00%	5.27%
10.0	4903.247	379.147	513.604	0.00%	20.12%
15.0	3461.068	496.166	1009.769	0.00%	39.55%
20.0	1936.354	444.823	1454.593	0.00%	56.97%
25.0	988.454	306.758	1761.351	0.00%	68.99%
30.0	468.692	184.403	1945.754	0.00%	76.21%
35.0	307.520	114.303	2060.057	0.00%	80.68%
40.0	235.061	90.525	2150.582	0.00%	84.23%
45.0	187.119	78.170	2228.752	0.00%	87.29%
50.0	152.486	68.622	2297.374	0.00%	89.98%
55.0	125.214	60.381	2357.756	0.00%	92.34%
60.0	99.975	52.052	2409.807	0.00%	94.38%
65.0	80.567	43.890	2453.698	0.00%	96.10%
70.0	64.595	36.756	2490.454	0.00%	97.54%
75.0	47.723	29.358	2519.812	0.00%	98.69%
80.0	25.972	19.719	2539.53	0.00%	99.46%
85.0	5.714	8.610	2548.14	0.00%	99.80%
90.0	0.026	1.572	2549.712	0.00%	99.86%
95.0	0.052	0.021	2549.733	0.00%	99.86%
100.0	0.013	0.017	2549.751	0.00%	99.86%
105.0	0.052	0.017	2549.768	0.00%	99.87%
110.0	0.064	0.030	2549.798	0.00%	99.87%
115.0	0.116	0.046	2549.844	0.00%	99.87%
120.0	0.180	0.072	2549.916	0.00%	99.87%
125.0	0.193	0.086	2550.002	0.00%	99.87%
130.0	0.283	0.104	2550.106	0.00%	99.88%
135.0	0.361	0.130	2550.236	0.00%	99.88%
140.0	0.567	0.172	2550.407	0.00%	99.89%
145.0	0.953	0.253	2550.661	0.00%	99.90%
150.0	1.518	0.364	2551.025	0.00%	99.91%
155.0	2.111	0.459	2551.484	0.00%	99.93%
160.0	2.690	0.503	2551.988	0.00%	99.95%
165.0	3.205	0.486	2552.473	0.00%	99.97%
170.0	3.540	0.400	2552.873	0.00%	99.99%
175.0	3.540	0.253	2553.127	0.00%	100.00%
180.0	3.784	0.088	2553.214	0.00%	100.00%

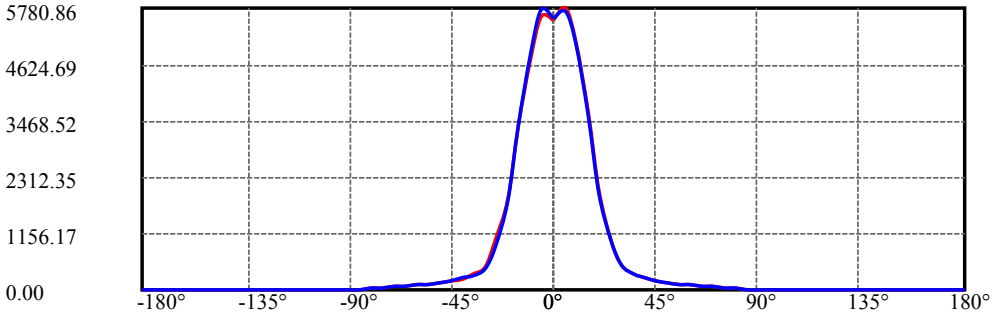
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1945.75	N.A.	76.21%
0-40	2150.58	N.A.	84.23%
0-60	2409.81	N.A.	94.38%
0-90	2549.71	N.A.	99.86%
0-120	2549.92	N.A.	99.87%
0-180	2553.21	N.A.	100.00%
60-90	139.90	N.A.	5.48%
90-120	0.20	N.A.	0.01%
90-130	0.39	N.A.	0.02%
90-150	1.31	N.A.	0.05%
90-180	3.41	N.A.	0.13%
0-34.24	2042.57	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	513.60
10-20	940.99
20-30	491.16
30-40	204.83
40-50	146.79
50-60	112.43
60-70	80.65
70-80	49.08
80-90	10.18
90-100	0.04
100-110	0.05
110-120	0.12
120-130	0.19
130-140	0.30
140-150	0.62
150-160	0.96
160-170	0.89
170-180	0.25



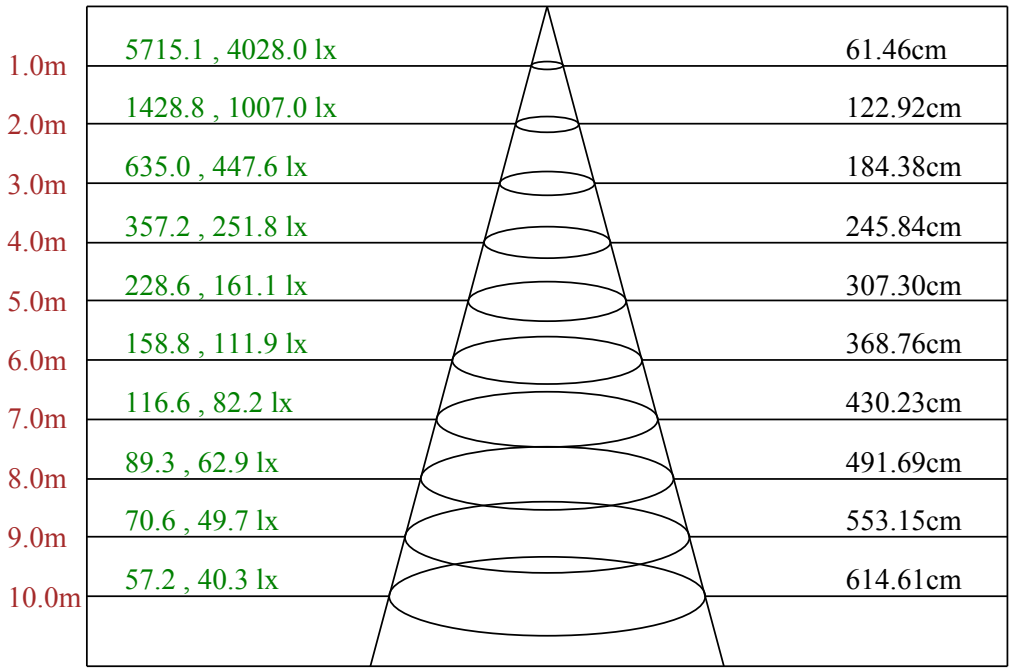


C0/C180:

C90/C270:

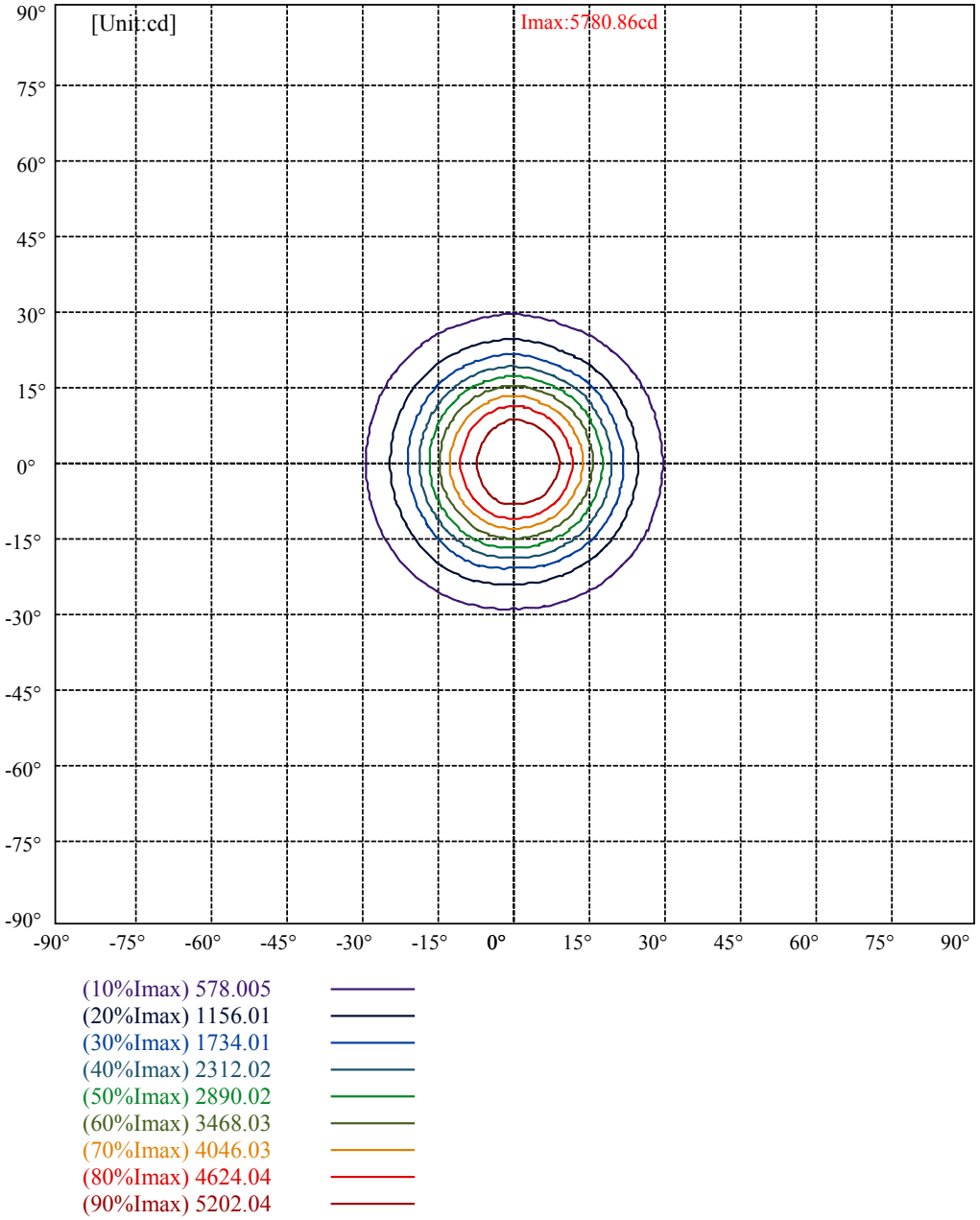
Field angle(10%Imax):C0/180Left:29.0 Right:29.2
:C90/270Left:28.5 Right:29.3

Beam Angle(50%Imax):C0/180Left:16.6 Right:17.3
:C90/270Left:16.7 Right:17.2



Max , Ave

Beam angle of C45 plane 34.16



Equipment: GMS-3000 Date: Operator: Sam
Temperature(°C): 25 Humidity(%): 58%

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	5527.58	5778.80	5072.49	3622.80	2049.75	1013.76	492.36	325.56	235.58
22.5	5552.29	5778.80	5016.89	3593.14	1978.30	991.93	486.18	315.06	240.72
45.0	5562.59	5780.86	4992.18	3576.26	2001.36	968.04	469.30	304.15	231.87
67.5	5585.24	5745.86	4934.52	3457.23	1887.69	933.45	454.06	300.03	230.43
90.0	5552.29	5696.44	5021.01	3538.37	1991.89	1015.82	498.13	306.83	234.75
112.5	5548.17	5653.19	4918.05	3478.65	1989.83	1024.05	477.12	306.41	226.31
135.0	5544.05	5597.59	4827.44	3443.64	1936.29	1017.88	474.86	311.36	237.02
157.5	5541.99	5595.53	4747.13	3359.21	1905.40	1030.23	469.09	303.94	238.87
180.0	5527.58	5585.24	4740.95	3361.27	1876.57	1026.11	467.44	311.56	231.66
202.5	5552.29	5605.83	4747.13	3336.56	1833.33	1017.88	454.47	307.65	241.55
225.0	5562.59	5640.84	4792.44	3348.92	1851.86	1021.99	459.21	303.74	237.22
247.5	5585.24	5686.14	4893.34	3416.87	1961.00	1036.41	453.65	310.12	234.75
270.0	5552.29	5733.50	4852.15	3387.84	1823.24	880.11	443.35	298.38	235.58
292.5	5548.17	5731.44	4913.93	3399.58	1918.79	927.68	454.68	298.38	231.05
315.0	5544.05	5747.92	4979.82	3509.13	1949.26	933.86	462.50	308.88	235.16
337.5	5541.99	5768.51	5002.48	3547.63	2027.10	976.07	482.68	308.27	238.46
360.0	5527.58	5778.80	5072.49	3622.80	2049.75	1013.76	492.36	325.56	235.58

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	185.33	148.88	121.08	96.37	78.05	63.22	46.95	26.36	6.80
22.5	188.63	151.15	119.85	96.37	78.46	63.22	45.92	25.33	6.59
45.0	182.45	149.71	122.11	98.23	80.52	64.66	47.77	25.74	6.18
67.5	187.18	154.03	122.11	99.67	80.52	65.90	46.54	24.09	5.35
90.0	186.57	149.09	121.91	97.40	76.81	62.19	45.92	24.92	5.35
112.5	177.92	146.00	121.91	96.99	77.02	61.78	46.95	25.53	4.94
135.0	191.51	157.33	129.53	103.37	81.96	65.07	48.39	26.98	4.94
157.5	192.74	157.53	129.94	104.20	83.19	64.25	49.42	26.77	4.74
180.0	181.62	146.62	122.32	98.84	80.52	64.04	49.22	26.56	4.74
202.5	190.27	153.82	125.82	100.70	82.37	64.87	48.80	26.56	4.94
225.0	190.07	156.50	129.73	103.99	84.22	65.69	48.19	26.15	5.56
247.5	186.57	154.85	128.50	105.02	84.02	66.51	48.80	27.59	6.18
270.0	188.01	152.80	125.00	96.78	78.46	64.45	45.92	23.27	4.53
292.5	182.45	148.26	123.55	98.23	79.69	66.10	48.39	26.77	6.38
315.0	190.89	157.12	130.76	101.52	81.75	67.13	48.80	26.77	6.80
337.5	191.71	156.09	129.32	101.93	81.55	64.45	47.57	26.15	7.41
360.0	185.33	148.88	121.08	96.37	78.05	63.22	46.95	26.36	6.80

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.21	0.00	0.00	0.00	0.21	0.21	0.41	0.41
22.5	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.21	0.41
45.0	0.00	0.00	0.00	0.21	0.21	0.21	0.21	0.41	0.41
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.41	0.41
90.0	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.21	0.21
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.21
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.21
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
270.0	0.21	0.21	0.21	0.41	0.41	0.62	0.41	0.41	0.82
292.5	0.21	0.21	0.00	0.00	0.00	0.21	0.21	0.21	0.41
315.0	0.00	0.00	0.00	0.00	0.21	0.00	0.41	0.21	0.41
337.5	0.00	0.00	0.00	0.21	0.21	0.21	0.21	0.21	0.41
360.0	0.00	0.21	0.00	0.00	0.00	0.21	0.21	0.41	0.41

Intensity data(cd)

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.41	0.82	1.03	1.44	2.06	2.68	3.09	3.71	3.50
22.5	0.41	0.62	1.24	1.24	2.06	2.88	3.09	3.71	3.50
45.0	0.41	0.62	0.82	1.44	2.06	2.68	3.30	3.71	3.50
67.5	0.41	0.62	1.24	1.65	2.27	2.68	3.30	3.71	3.50
90.0	0.21	0.82	0.62	1.65	2.06	2.68	3.09	3.50	3.50
112.5	0.41	0.62	0.82	1.44	1.85	2.68	3.09	3.50	3.71
135.0	0.00	0.41	1.03	1.44	2.06	2.68	3.09	3.30	3.50
157.5	0.21	0.41	0.82	1.44	2.06	2.47	3.30	3.50	3.50
180.0	0.21	0.41	0.82	1.65	2.06	2.68	3.09	3.50	3.30
202.5	0.21	0.41	0.82	1.65	2.06	2.88	3.09	3.30	3.50
225.0	0.41	0.41	0.62	1.44	2.06	2.68	3.09	3.50	3.71
247.5	0.21	0.41	0.82	1.24	2.06	2.47	3.09	3.71	3.50
270.0	0.82	1.03	1.24	1.85	2.47	2.88	3.91	3.91	3.91
292.5	0.62	0.41	1.24	1.65	2.27	2.68	3.09	3.30	3.50
315.0	0.41	0.62	1.03	1.65	2.27	2.68	3.30	3.50	3.50
337.5	0.41	0.41	1.03	1.44	2.06	2.68	3.30	3.30	3.50
360.0	0.41	0.82	1.03	1.44	2.06	2.68	3.09	3.71	3.50

C/γ(°)	180.0
0.0	3.91
22.5	3.71
45.0	3.50
67.5	3.91
90.0	4.12
112.5	3.71
135.0	3.71
157.5	3.71
180.0	3.91
202.5	3.71
225.0	3.50
247.5	3.91
270.0	4.12
292.5	3.71
315.0	3.71
337.5	3.71
360.0	3.91