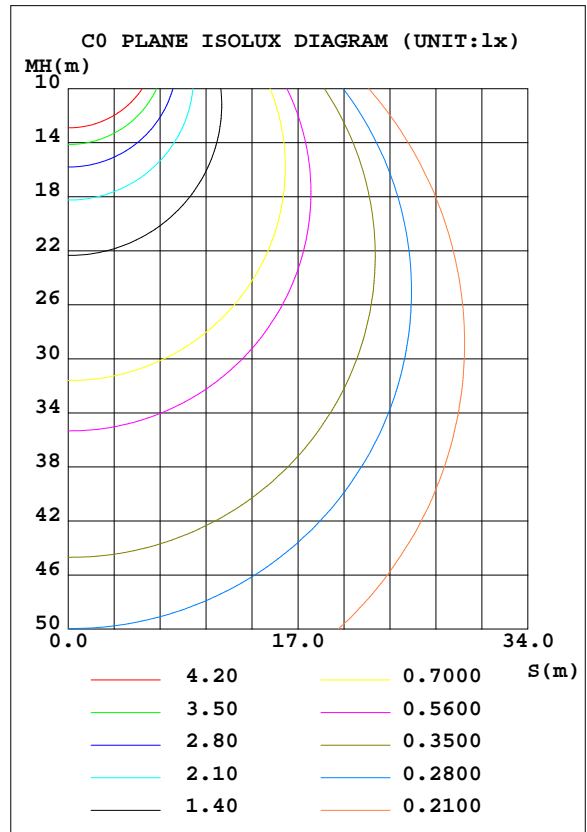
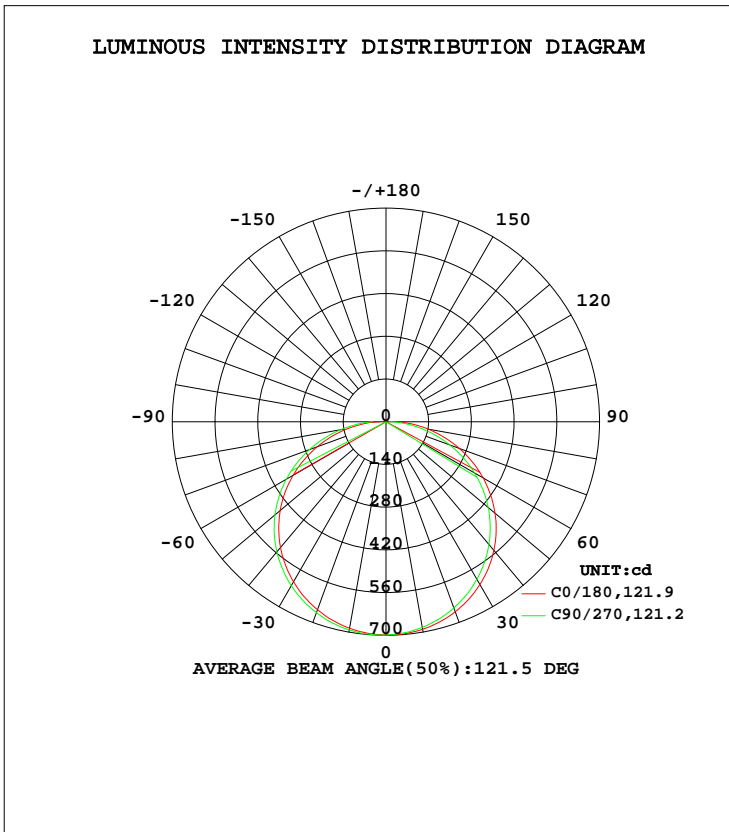


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.00 lm/W			
MODEL	LNOVO-18W-SW-N-R	Imax(cd)	699.4	S/MH(C0/180)	1.29
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	220V	TOTAL FLUX(lm)	2250.0	η UP, DN(C0-180)	0.0,48.8
NOMINAL FLUX(lm)	2250	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	690.8	687.4	684.3	684.5	687.4	690.4	692.7	693.1	0- 10	66.24	66.24	2.94,2.94
20	662.7	656.3	649.3	650.4	655.9	661.5	666.1	666.9	10- 20	191.0	257.2	11.4,11.4
30	615.6	605.7	595.8	597.6	605.9	614.0	620.5	621.8	20- 30	293.5	550.8	24.5,24.5
40	550.4	537.5	525.1	527.0	538.0	548.2	556.6	558.3	30- 40	362.0	912.7	40.6,40.6
50	466.6	451.8	437.4	439.5	452.6	464.7	475.0	476.8	40- 50	387.6	1300	57.8,57.8
60	367.6	351.6	335.3	337.8	351.8	365.7	377.4	379.5	50- 60	366.3	1667	74.1,74.1
70	256.1	238.8	222.6	224.1	239.7	253.3	266.9	268.0	60- 70	300.0	1967	87.4,87.4
80	141.2	123.1	109.3	109.1	124.7	138.2	151.4	152.5	70- 80	199.0	2166	96.2,96.2
90	34.75	20.91	12.31	11.30	20.42	32.36	43.08	44.21	80- 90	84.42	2250	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1106.2 lm

%lum = 49.2%
 %lamp = 49.2%

Conical surface Flux(120deg): 1666.6 lm

%lum = 74.1%
 %lamp = 74.1%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

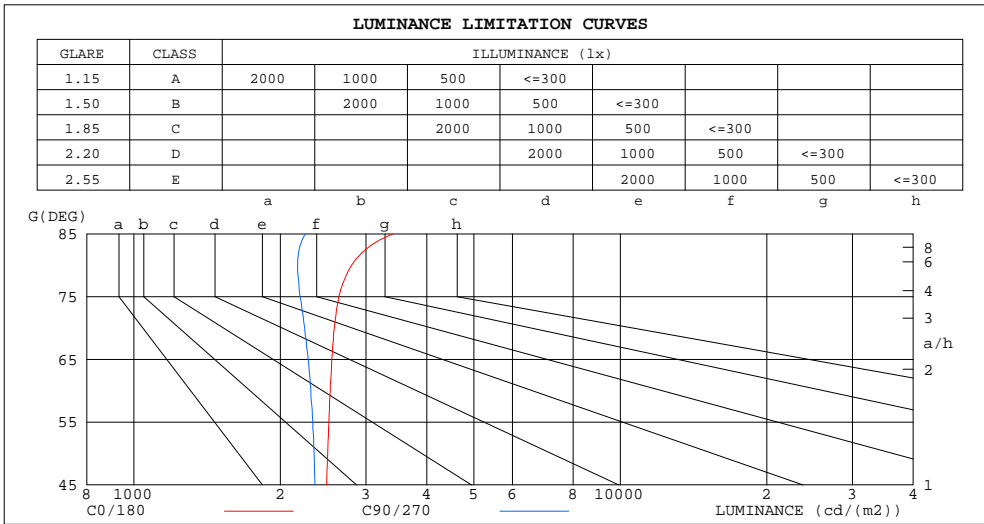
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

LUMINANCE LIMITATION CURVES

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3408	2249
80	2803	2171
75	2639	2196
70	2582	2244
65	2551	2282
60	2534	2313
55	2519	2333
50	2503	2347
45	2489	2356

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

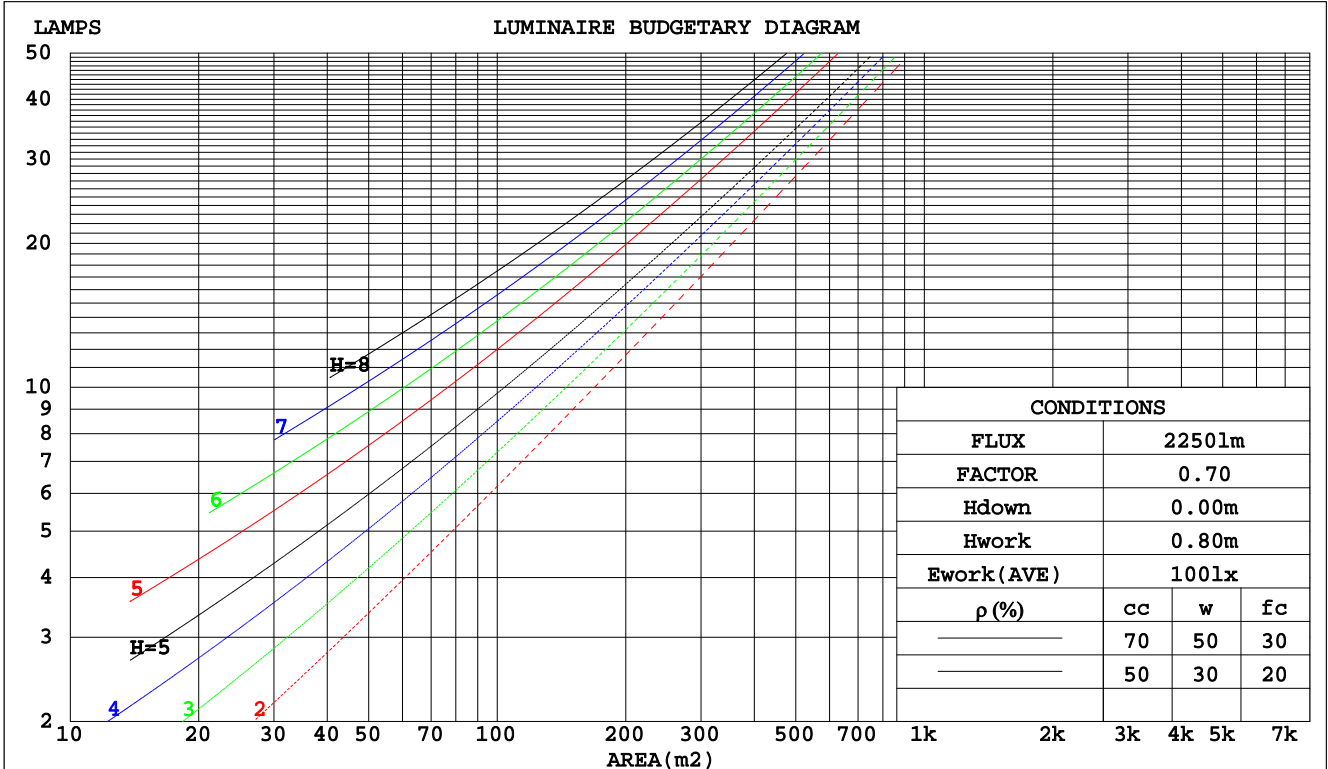
Checker: DENNY

Assessor: JOE

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	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
1.0	1.02	.97	.93	.90	.96	.92	.96	.92	.89	.92	.89	.86	.88	.86	.83	.81
2.0	.88	.81	.75	.86	.79	.74	.83	.77	.72	.79	.75	.70	.76	.72	.69	.66
3.0	.77	.68	.61	.75	.67	.61	.72	.65	.60	.69	.64	.59	.67	.62	.57	.55
4.0	.68	.59	.51	.66	.58	.51	.64	.56	.50	.61	.55	.50	.59	.54	.49	.47
5.0	.60	.51	.44	.59	.50	.44	.57	.49	.43	.55	.48	.43	.53	.47	.42	.40
6.0	.54	.45	.38	.53	.44	.38	.51	.43	.38	.50	.43	.37	.48	.42	.37	.35
7.0	.49	.40	.34	.48	.40	.33	.47	.39	.33	.45	.38	.33	.44	.37	.33	.31
8.0	.45	.36	.30	.44	.36	.30	.43	.35	.30	.41	.34	.29	.40	.34	.29	.27
9.0	.41	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.26	.37	.31	.26	.24
10.0	.38	.30	.24	.37	.29	.24	.36	.29	.24	.35	.29	.24	.34	.28	.24	.22



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

WEC AND CCEC

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.342	.195	.062	.335	.191	.061	.322	.185	.059	.309	.178	.057	.298	.173	.056	
2.0	.313	.172	.053	.307	.169	.052	.295	.164	.051	.284	.159	.050	.274	.155	.049	
3.0	.286	.152	.046	.280	.150	.045	.269	.146	.044	.260	.142	.044	.251	.139	.043	
4.0	.261	.136	.040	.256	.134	.040	.247	.131	.039	.238	.128	.039	.230	.125	.038	
5.0	.240	.122	.035	.235	.121	.035	.227	.118	.035	.219	.116	.034	.212	.113	.034	
6.0	.221	.111	.032	.217	.110	.032	.210	.107	.031	.203	.105	.031	.196	.103	.031	
7.0	.205	.101	.029	.201	.100	.029	.195	.098	.028	.189	.097	.028	.183	.095	.028	
8.0	.191	.093	.026	.188	.092	.026	.182	.091	.026	.176	.089	.026	.171	.088	.026	
9.0	.178	.086	.024	.175	.086	.024	.170	.084	.024	.165	.083	.024	.160	.082	.024	
10.0	.167	.080	.022	.165	.080	.022	.160	.078	.022	.155	.077	.022	.151	.076	.022	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.183	.156	.132	.156	.134	.113	.107	.092	.078	.061	.053	.046	.020	.017	.015	
2.0	.175	.132	.095	.150	.113	.082	.103	.078	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.072	.144	.099	.063	.099	.069	.044	.057	.040	.026	.018	.013	.008	
4.0	.160	.101	.057	.137	.087	.049	.094	.061	.035	.055	.036	.020	.018	.012	.007	
5.0	.152	.091	.046	.131	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.145	.083	.038	.124	.072	.033	.086	.050	.023	.050	.029	.014	.016	.010	.005	
7.0	.138	.076	.032	.118	.066	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004	
8.0	.131	.070	.028	.113	.061	.024	.078	.043	.017	.045	.025	.010	.015	.008	.003	
9.0	.125	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.119	.061	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

UGR(Unified Glare Rating) Table

NAME: LED PANEL LIGHT					TYPE:LNOVO-18W-SW-N-R					WEIGHT:				
SPEC.:18W 4000K					DIM.: 595*595					SERIAL No.:				
MFR.: DIMON Technology Limited					SUR.:					Shielding Angle:				
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3				
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3				
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2				
Room dimensions	Viewed crosswise					Viewed endwise								
x = 2H y = 2H	13.3	14.9	13.6	15.1	15.3	13.0	14.5	13.2	14.7	15.0				
3H	15.1	16.6	15.4	16.9	17.1	14.7	16.1	15.0	16.4	16.6				
4H	16.0	17.4	16.3	17.6	17.9	15.4	16.8	15.7	17.0	17.3				
6H	16.7	18.1	17.1	18.3	18.6	16.0	17.3	16.3	17.6	17.9				
8H	17.1	18.4	17.4	18.6	18.9	16.2	17.5	16.6	17.8	18.1				
12H	17.4	18.6	17.7	18.9	19.2	16.4	17.6	16.7	17.9	18.2				
4H 2H	13.9	15.3	14.3	15.6	15.9	13.7	15.1	14.0	15.3	15.6				
3H	16.0	17.2	16.3	17.5	17.8	15.6	16.8	15.9	17.1	17.4				
4H	17.0	18.1	17.4	18.4	18.8	16.5	17.6	16.8	17.9	18.3				
6H	17.9	18.9	18.3	19.2	19.6	17.2	18.2	17.6	18.6	18.9				
8H	18.3	19.2	18.7	19.6	20.0	17.5	18.4	17.9	18.8	19.2				
12H	18.7	19.6	19.1	19.9	20.3	17.7	18.6	18.2	19.0	19.4				
8H 4H	17.3	18.2	17.7	18.6	19.0	16.9	17.8	17.3	18.2	18.6				
6H	18.4	19.2	18.8	19.6	20.0	17.8	18.6	18.2	19.0	19.4				
8H	18.9	19.6	19.4	20.1	20.5	18.2	18.9	18.7	19.3	19.8				
12H	19.5	20.1	19.9	20.5	21.0	18.6	19.2	19.1	19.6	20.1				
12H 4H	17.3	18.2	17.8	18.6	19.0	16.9	17.8	17.3	18.2	18.6				
6H	18.5	19.2	19.0	19.6	20.1	17.9	18.6	18.4	19.1	19.5				
8H	19.1	19.7	19.6	20.2	20.6	18.4	19.0	18.9	19.5	19.9				
Variations with the observer position at spacings:														
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2								
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3								
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.4								

CIE Pub.117, 2250 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.8)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

UTILIZATION FACTORS TABLE

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	43	36	55	43	36	53	43	36	29
0.80	65	53	45	64	53	45	62	52	45	38
1.00	74	62	54	72	61	54	70	63	53	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	74	67	81	72	66	58
2.00	93	84	77	91	82	76	87	80	74	66
2.50	97	89	82	95	87	81	91	84	79	71
3.00	100	93	87	98	91	86	94	88	84	75
4.00	105	98	93	102	97	92	98	93	89	80
5.00	107	102	98	105	100	96	100	96	93	83
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

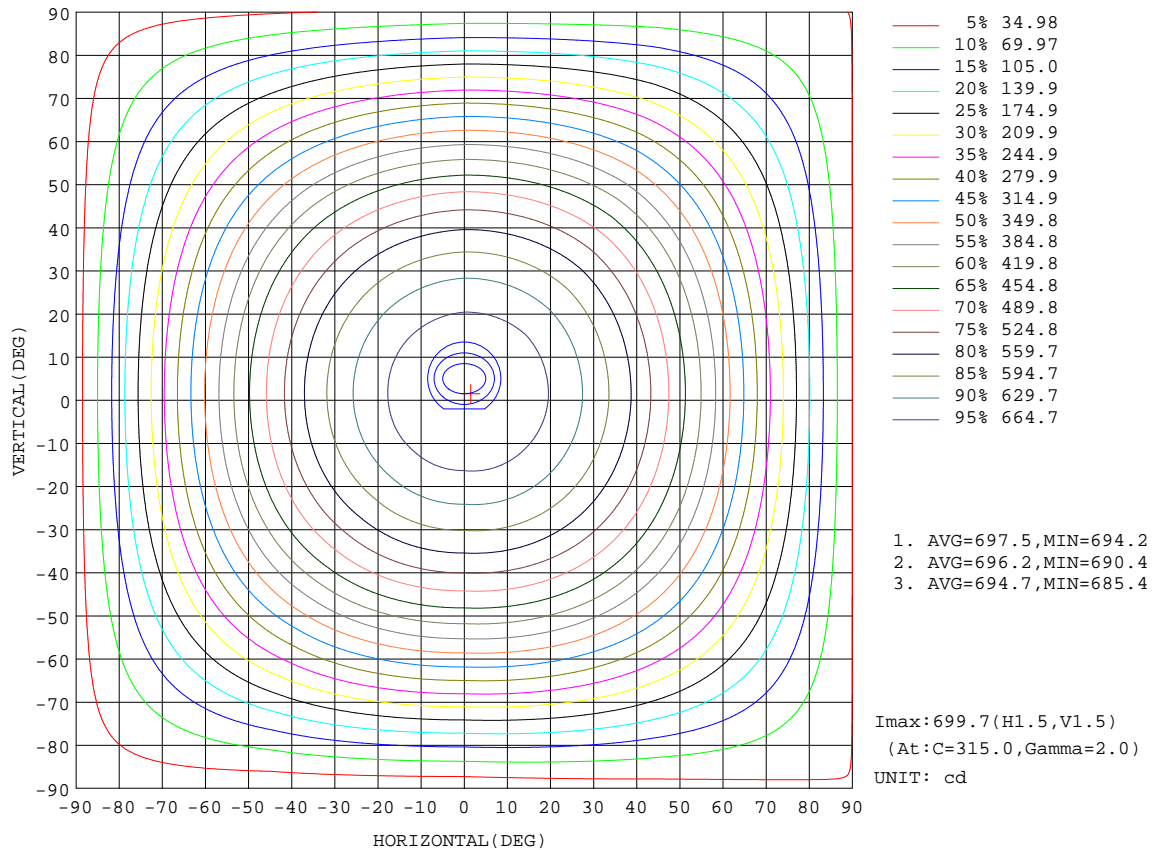
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

ISOCANDELA DIAGRAM

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2018-11-19

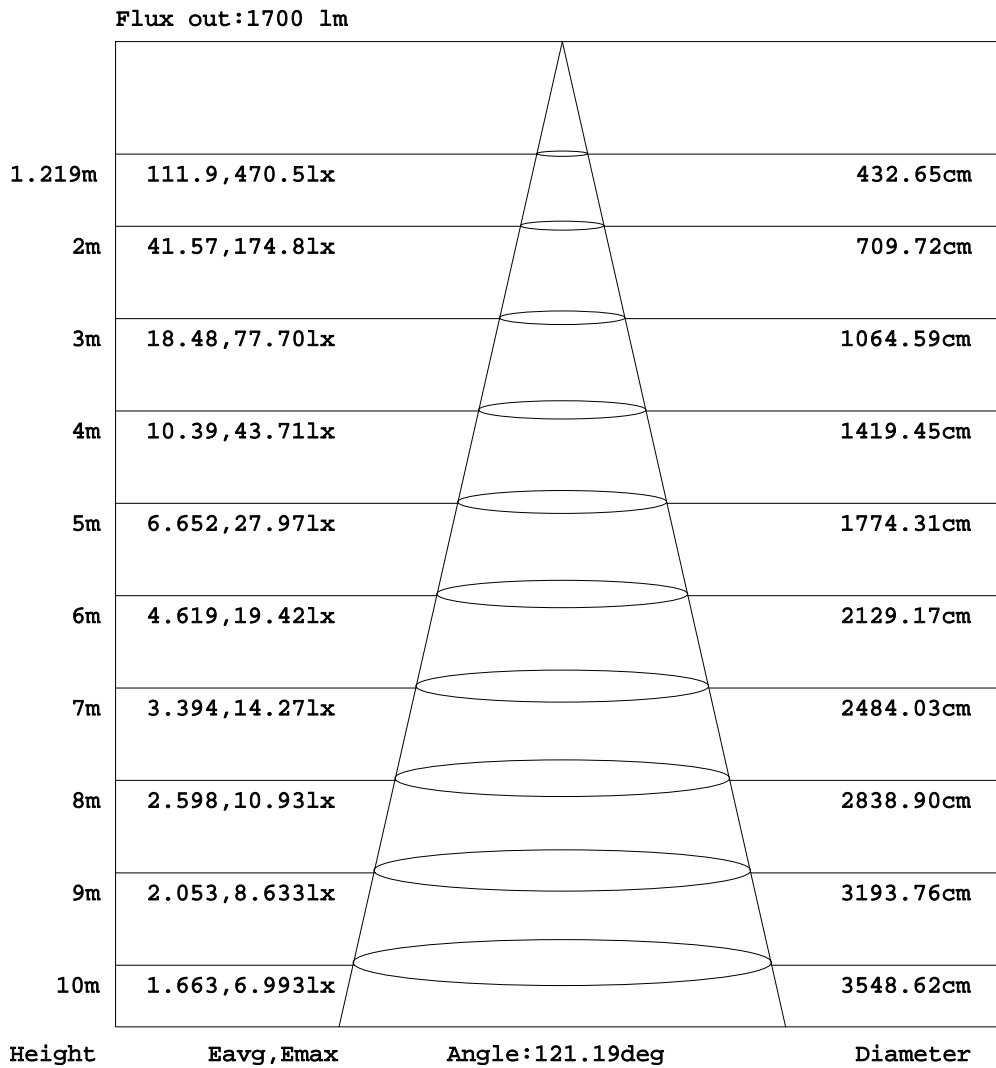
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity: 65%
 Test Distance: 7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

AAI Figure

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:



Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

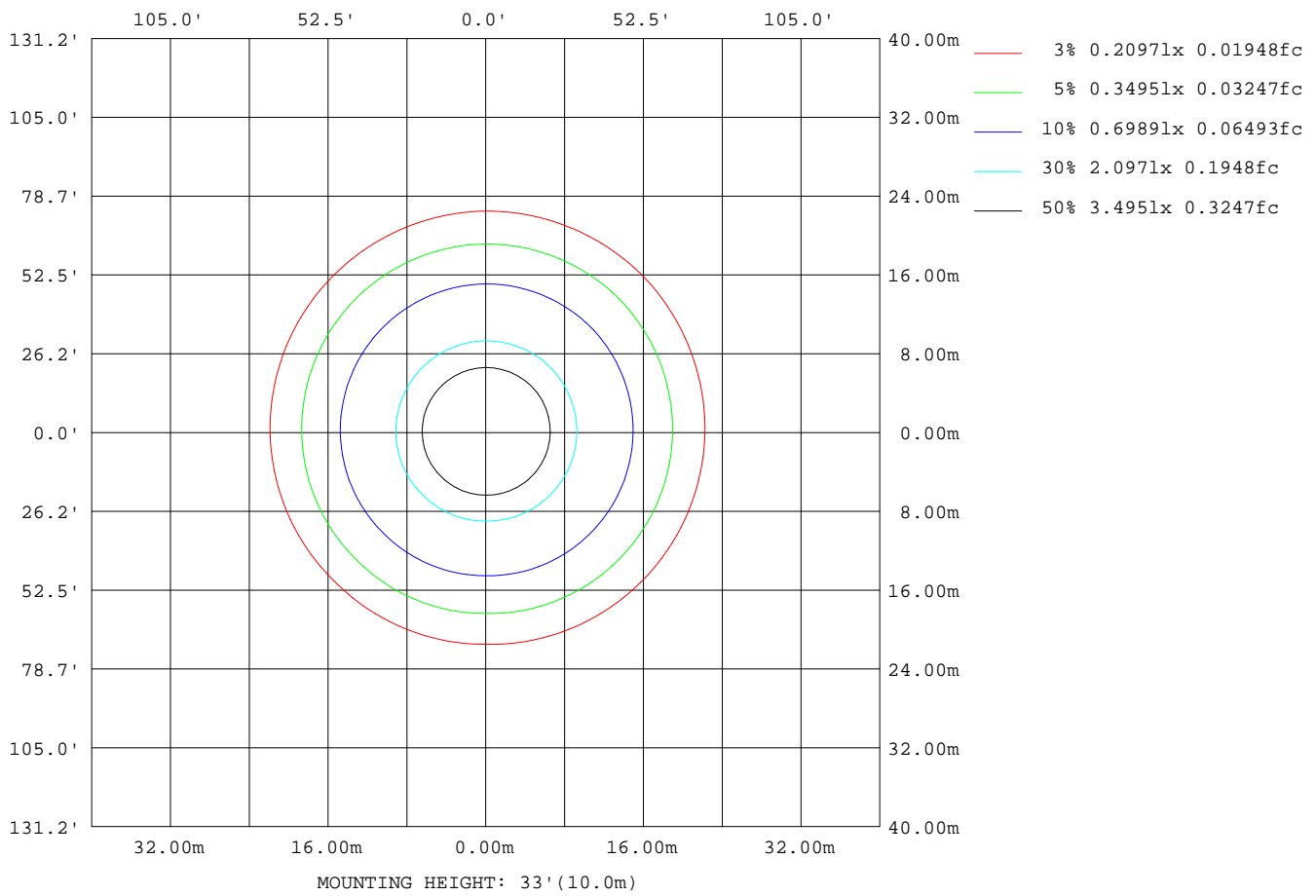
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

ISOLUX DIAGRAM

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

LED Avg.L Report

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	2486
L_0~180(75)av	2533
L_0~180(85)av	3092
L_90~270(65)av	2460
L_90~270(75)av	2491
L_90~270(85)av	3004
L_45(65)av	2476
L_45(75)av	2507
L_45(85)av	3015

Standard: GB/T 29293-2012

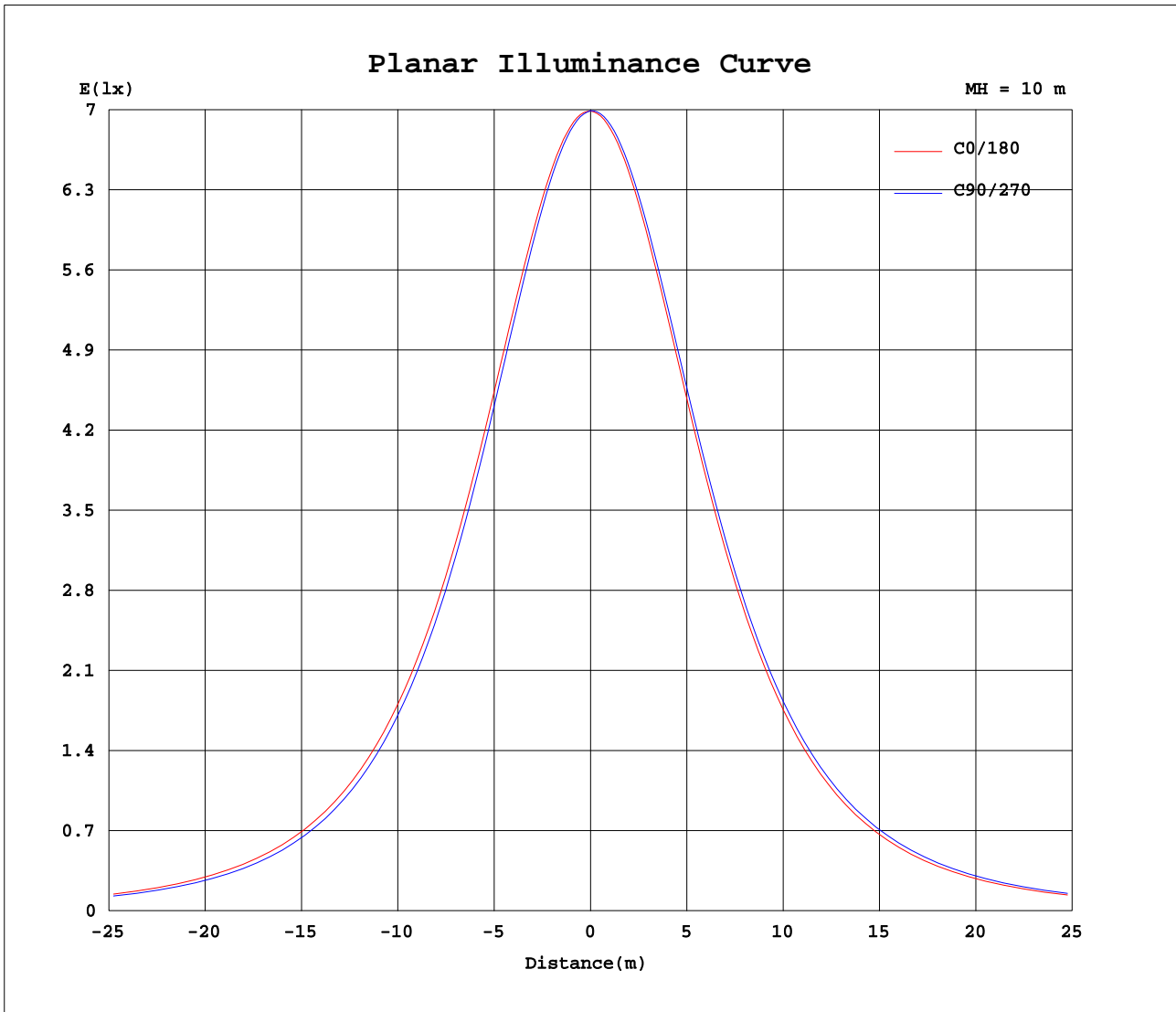
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity: 65%
 Test Distance: 7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: LED PANEL LIGHT	TYPE:LNOVO-18W-SW-N-R	WEIGHT:
SPEC.:18W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	45	90	135	180	225	270	315											
0	699	699	699	699	699	699	699	699											
5	698	696	694	694	695	697	698	699											
10	691	687	684	684	687	690	693	693											
15	679	674	669	670	674	679	682	683											
20	663	656	649	650	656	662	666	667											
25	642	633	625	626	633	640	646	647											
30	616	606	596	598	606	614	620	622											
35	585	574	563	564	574	583	590	592											
40	550	537	525	527	538	548	557	558											
45	511	497	483	485	497	508	518	520											
50	467	452	437	439	453	465	475	477											
55	419	403	388	390	404	417	428	430											
60	368	352	335	338	352	366	377	379											
65	313	296	280	282	297	311	323	325											
70	256	239	223	224	240	253	267	268											
75	198	181	165	166	182	195	209	210											
80	141	123	109	109	125	138	151	152											
85	86.1	69.2	56.8	56.3	70.2	83.0	95.0	96.3											
90	34.7	20.9	12.3	11.3	20.4	32.4	43.1	44.2											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE