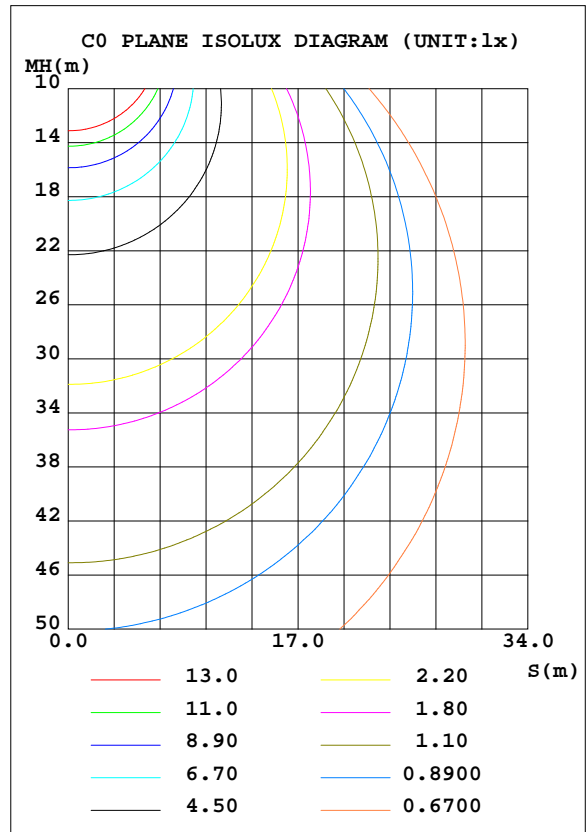
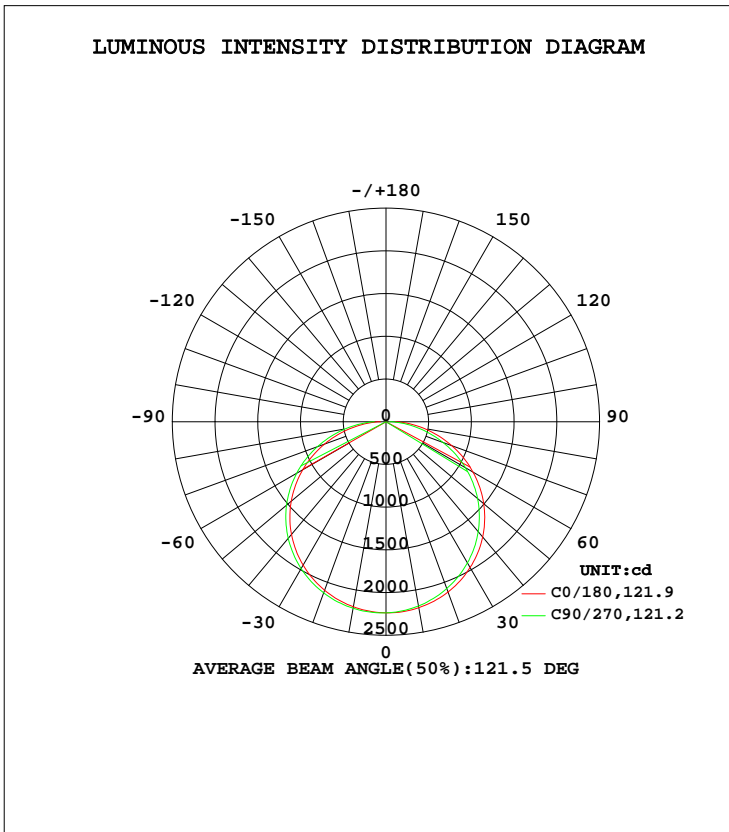


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: LED PANEL LIGHT	TYPE:LNOVO-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.00 lm/W			
MODEL	LNOVO-60W-SW-N-R	I <sub>max</sub> (cd)	2238	S/MH(C0/180)	1.29
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	7200.0	η UP, DN(C0-180)	0.0,48.8
NOMINAL FLUX(lm)	7200	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	2210	2200	2190	2190	2200	2209	2217	2218	0- 10	212.0	212.0	2.94,2.94
20	2121	2100	2078	2081	2099	2117	2132	2134	10- 20	611.2	823.1	11.4,11.4
30	1970	1938	1907	1912	1939	1965	1986	1990	20- 30	939.4	1763	24.5,24.5
40	1761	1720	1680	1686	1721	1754	1781	1787	30- 40	1158	2921	40.6,40.6
50	1493	1446	1400	1406	1448	1487	1520	1526	40- 50	1240	4161	57.8,57.8
60	1176	1125	1073	1081	1126	1170	1208	1214	50- 60	1172	5333	74.1,74.1
70	819.6	764.3	712.3	717.3	766.9	810.4	854.0	857.4	60- 70	960.0	6293	87.4,87.4
80	451.8	393.8	349.8	349.0	399.2	442.2	484.4	488.0	70- 80	636.8	6930	96.2,96.2
90	111.2	66.91	39.39	36.14	65.35	103.6	137.9	141.5	80- 90	270.1	7200	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): 3539.8 lm

%lum = 49.2%  
 %lamp = 49.2%

Conical surface Flux(120deg): 5333.1 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

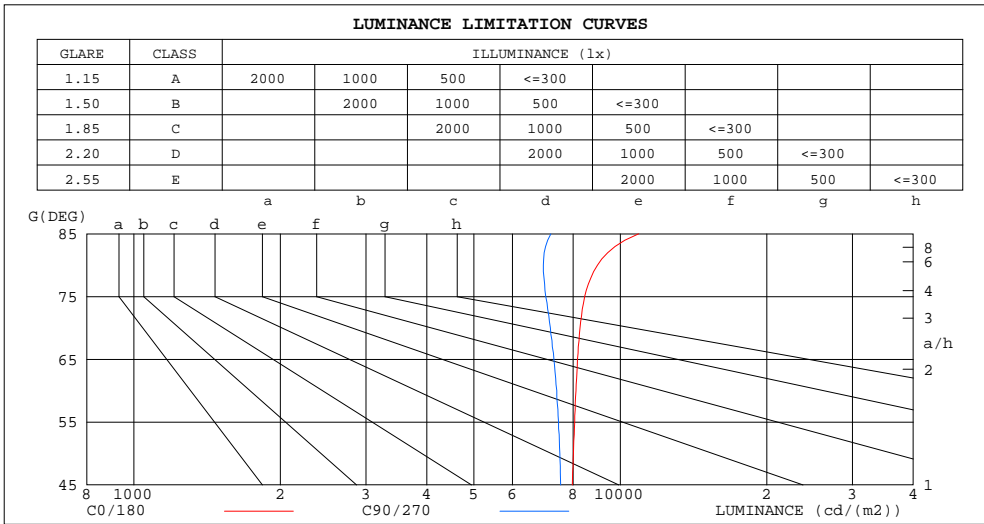
γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353  
 Humidity:65%  
 Test Distance:7.200m [K=1.0000]  
 Remarks:

Checker: DENNY

Assessor: JOE

**LUMINANCE LIMITATION CURVES**

NAME: LED PANEL LIGHT	TYPE:LNOVO-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G( DEG)	C0/180	C90/270
85	10904	7197
80	8971	6948
75	8445	7026
70	8261	7182
65	8165	7303
60	8110	7400
55	8059	7467
50	8009	7510
45	7966	7540

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:

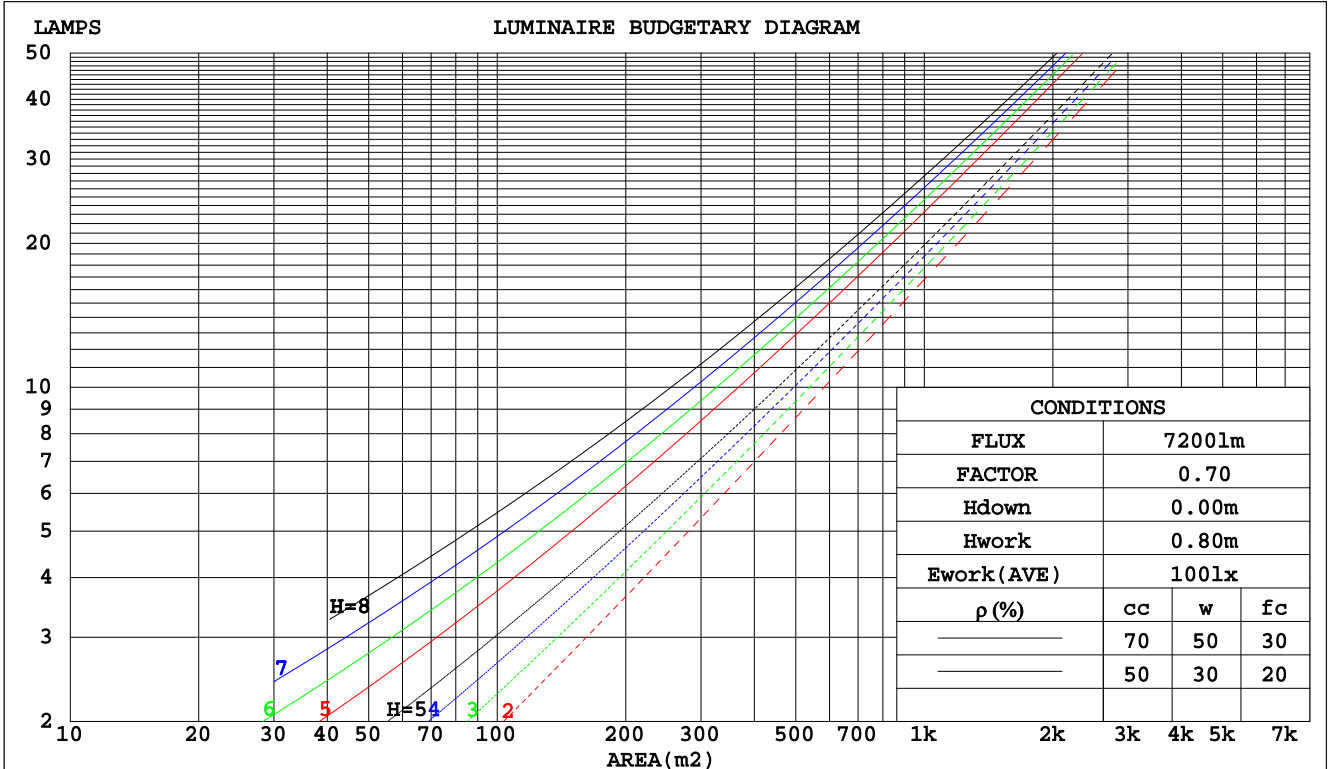
Checker: DENNY

Assessor: JOE

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: LED PANEL LIGHT	TYPE:LNOVO-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc																
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-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*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-60W-SW-N-R					WEIGHT:				
SPEC.:60W 4000K		DIM.: 1195*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, 7200 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.9)

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-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*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

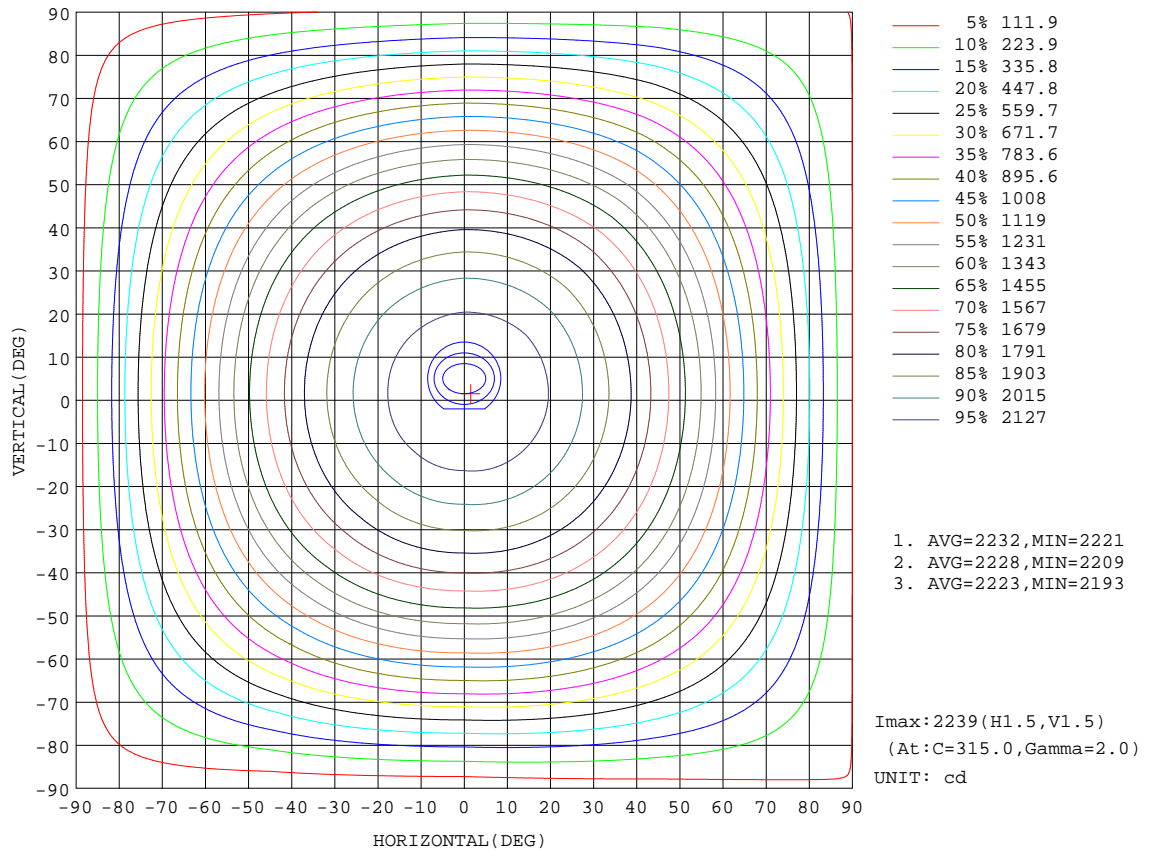
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353  
 Humidity:65%  
 Test Distance:7.200m [K=1.0000]  
 Remarks:

Checker: DENNY

Assessor: JOE

**ISOCANDELA DIAGRAM**

NAME: LED PANEL LIGHT	TYPE:LNOVO-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*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:

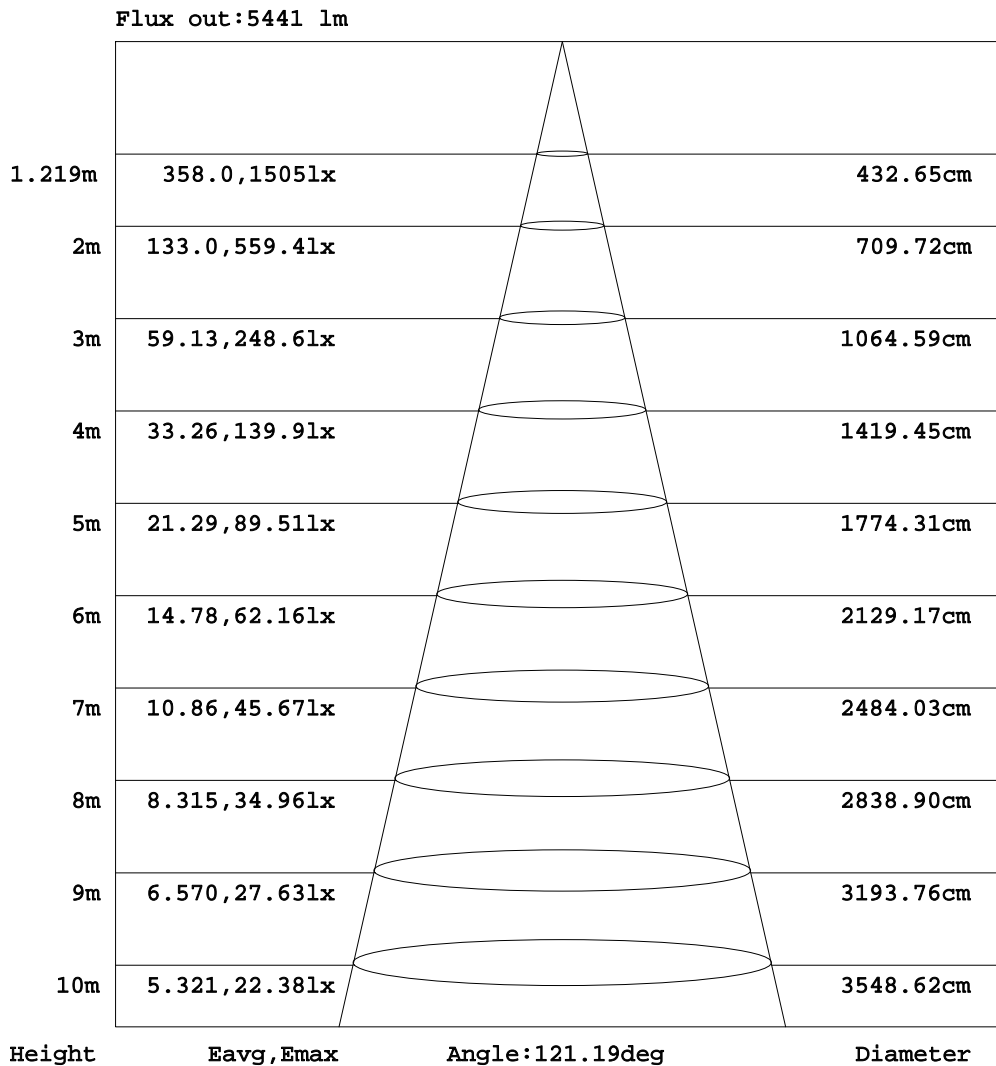
Checker: DENNY

Assessor: JOE



AAI Figure

NAME: LED PANEL LIGHT	TYPE:LNOVO-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*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

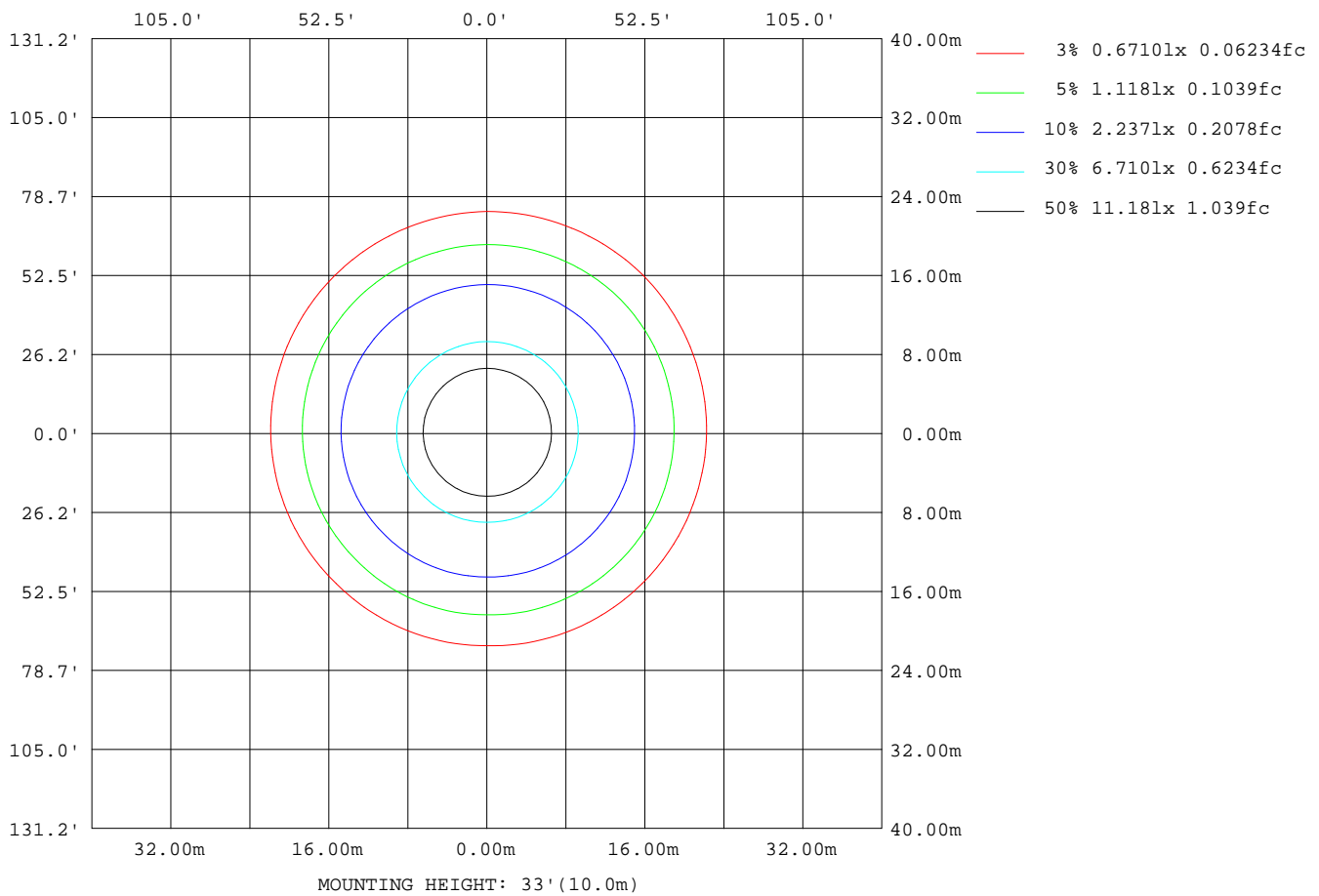
γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353  
 Humidity:65%  
 Test Distance:7.200m [K=1.0000]  
 Remarks:

Checker: DENNY

Assessor: JOE

**ISOLUX DIAGRAM**

NAME: LED PANEL LIGHT	TYPE:LNOVO-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*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-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	7955
L_0~180(75)av	8105
L_0~180(85)av	9895
L_90~270(65)av	7870
L_90~270(75)av	7971
L_90~270(85)av	9612
L_45(65)av	7923
L_45(75)av	8022
L_45(85)av	9648

Standard: GB/T 29293-2012

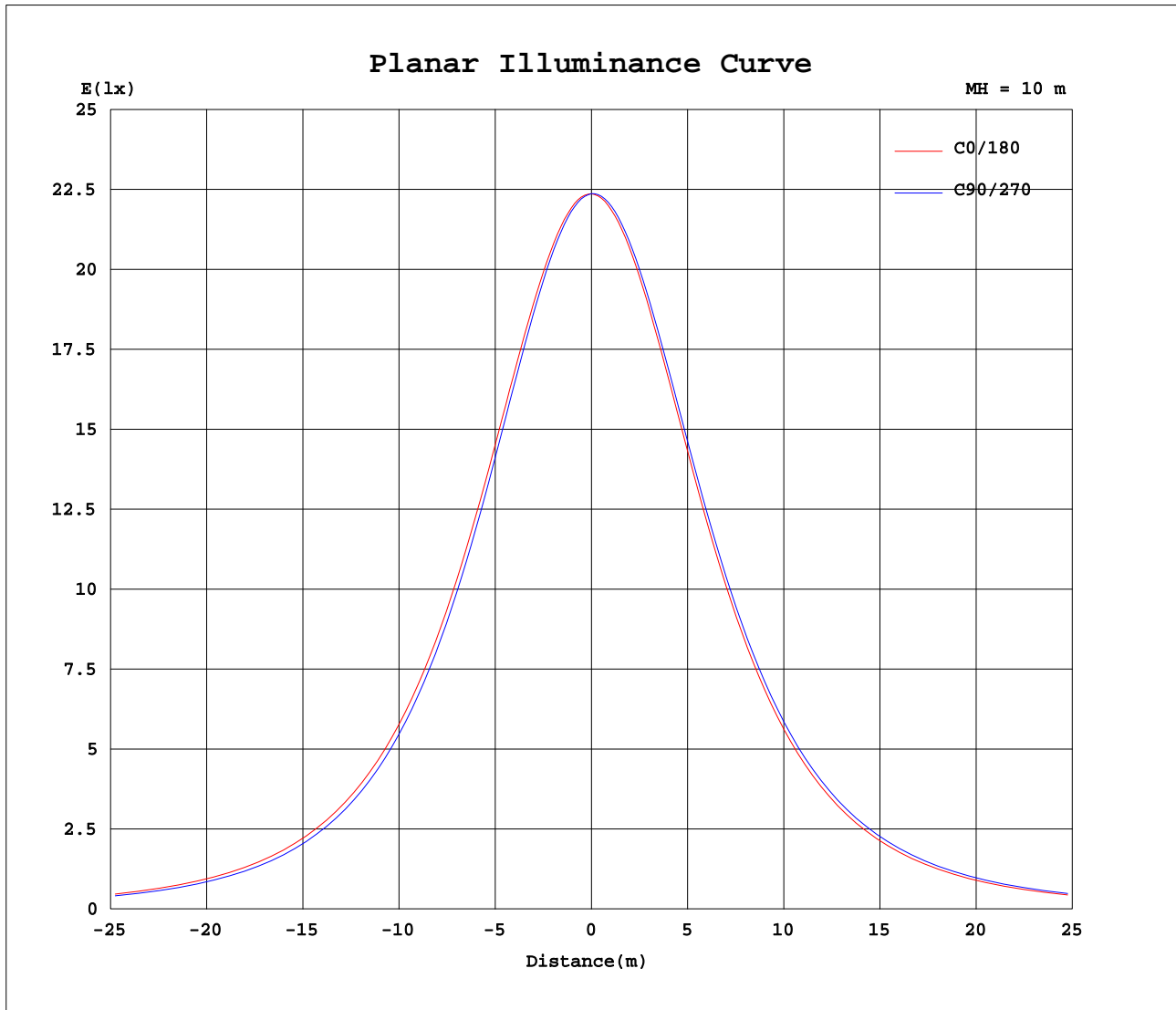
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2018-11-19

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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-60W-SW-N-R	WEIGHT:
SPEC.:60W 4000K	DIM.: 1195*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	2237	2237	2237	2237	2237	2237	2237	2237										
5	2232	2227	2221	2222	2225	2231	2235	2235										
10	2210	2200	2190	2190	2200	2209	2217	2218										
15	2174	2158	2142	2143	2157	2171	2183	2184										
20	2121	2100	2078	2081	2099	2117	2132	2134										
25	2054	2027	2001	2004	2027	2049	2066	2070										
30	1970	1938	1907	1912	1939	1965	1986	1990										
35	1873	1836	1801	1806	1836	1866	1890	1895										
40	1761	1720	1680	1686	1721	1754	1781	1787										
45	1634	1590	1546	1553	1591	1627	1657	1663										
50	1493	1446	1400	1406	1448	1487	1520	1526										
55	1341	1291	1242	1249	1293	1335	1370	1377										
60	1176	1125	1073	1081	1126	1170	1208	1214										
65	1001	948	895	902	949	994	1034	1040										
70	820	764	712	717	767	810	854	857										
75	634	579	527	532	583	625	669	672										
80	452	394	350	349	399	442	484	488										
85	276	221	182	180	225	266	304	308										
90	111	66.9	39.4	36.1	65.3	104	138	141										

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