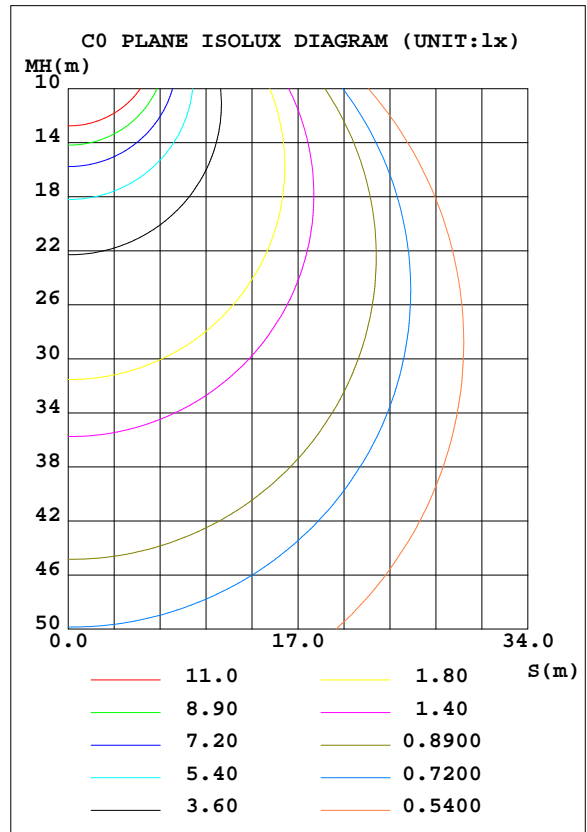
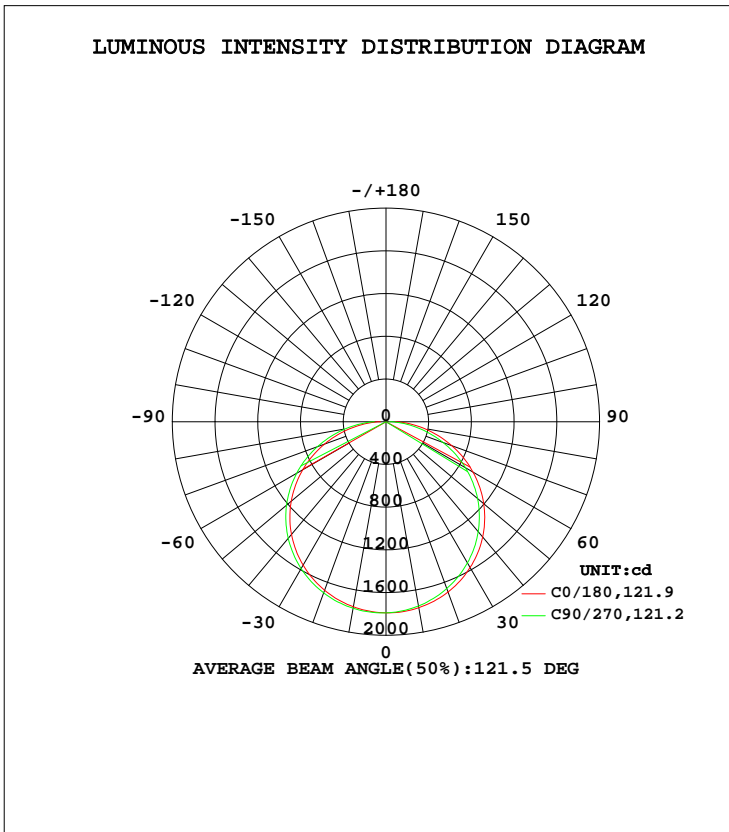


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: LED PANEL LIGHT	TYPE:LNOVO-48W-SW-N-R	WEIGHT:
SPEC.:48W 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-48W-SW-N-R	I _{max} (cd)	1791	S/MH(C0/180)	1.29
NOMINAL POWER(W)	48	LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	5760.0	η UP, DN(C0-180)	0.0,48.8
NOMINAL FLUX(lm)	5760	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	1768	1760	1752	1752	1760	1767	1773	1774	0- 10	169.6	169.6	2.94,2.94
20	1697	1680	1662	1665	1679	1694	1705	1707	10- 20	489.0	658.5	11.4,11.4
30	1576	1551	1525	1530	1551	1572	1588	1592	20- 30	751.5	1410	24.5,24.5
40	1409	1376	1344	1349	1377	1403	1425	1429	30- 40	926.6	2337	40.6,40.6
50	1195	1157	1120	1125	1159	1190	1216	1220	40- 50	992.2	3329	57.8,57.8
60	941.0	900.1	858.4	864.6	900.6	936.2	966.2	971.5	50- 60	937.7	4266	74.1,74.1
70	655.7	611.4	569.8	573.8	613.5	648.3	683.2	686.0	60- 70	768.0	5034	87.4,87.4
80	361.5	315.0	279.9	279.2	319.4	353.7	387.5	390.4	70- 80	509.4	5544	96.2,96.2
90	88.95	53.53	31.51	28.92	52.28	82.85	110.3	113.2	80- 90	216.1	5760	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): 2831.8 lm

%lum = 49.2%
 %lamp = 49.2%

Conical surface Flux(120deg): 4266.5 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

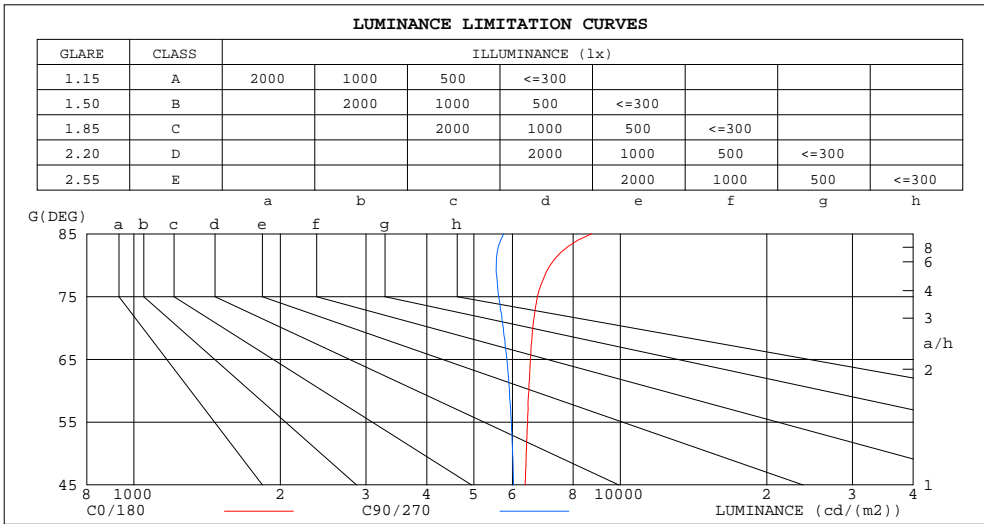
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

LUMINANCE LIMITATION CURVES

NAME: LED PANEL LIGHT	TYPE:LNOVO-48W-SW-N-R	WEIGHT:
SPEC.:48W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	8723	5757
80	7177	5558
75	6756	5621
70	6609	5746
65	6532	5843
60	6488	5920
55	6447	5973
50	6407	6008
45	6373	6032

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:

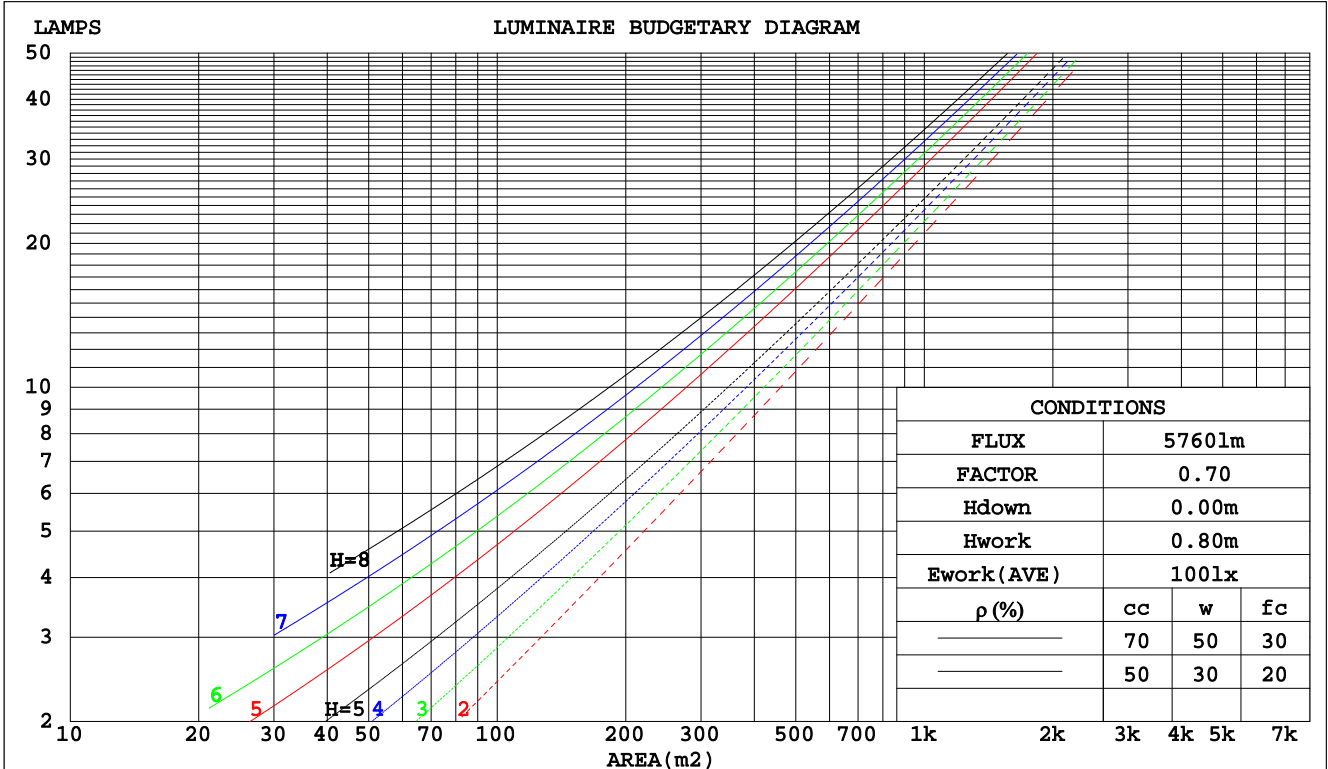
Checker: DENNY

Assessor: JOE

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: LED PANEL LIGHT	TYPE:LNOVO-48W-SW-N-R	WEIGHT:
SPEC.:48W 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-48W-SW-N-R	WEIGHT:
SPEC.:48W 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-48W-SW-N-R					WEIGHT:				
SPEC.:48W 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, 5760 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.1)

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

UTILIZATION FACTORS TABLE

NAME: LED PANEL LIGHT	TYPE:LNOVO-48W-SW-N-R	WEIGHT:
SPEC.:48W 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
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 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

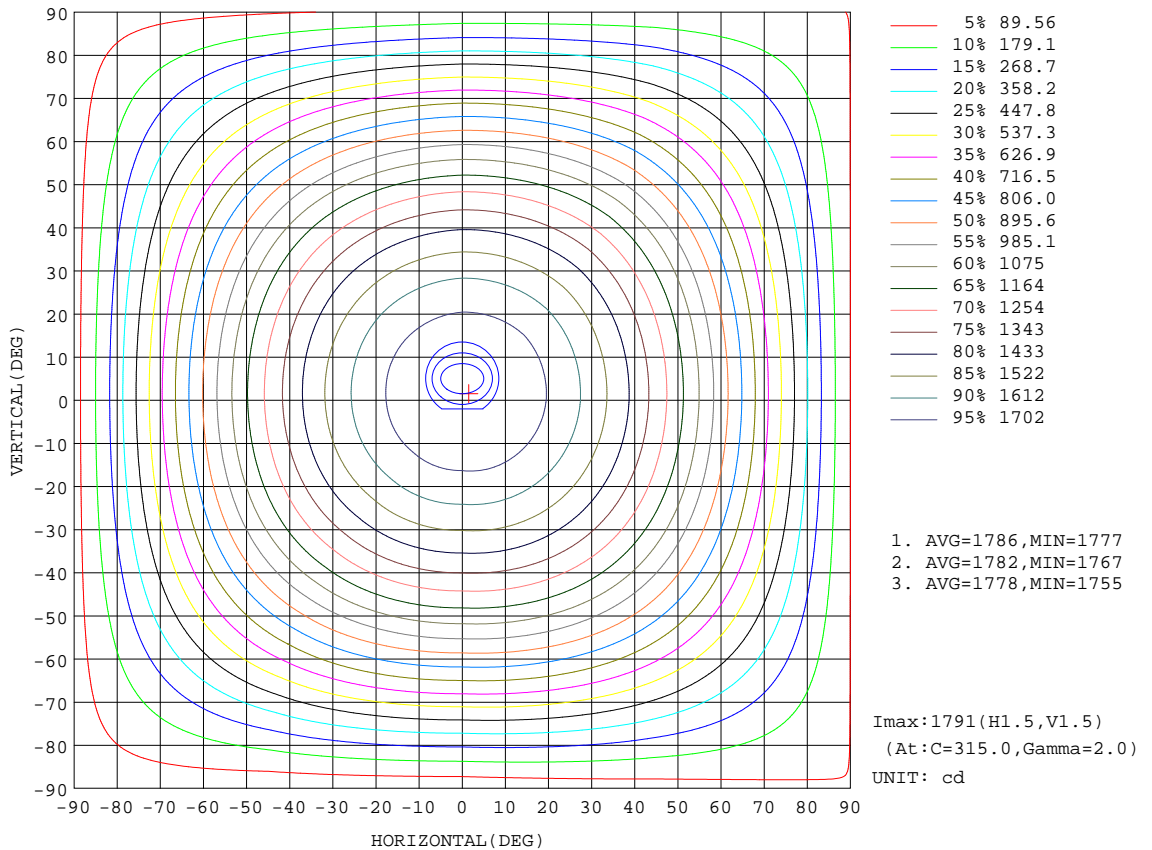
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

ISOCANDELA DIAGRAM

NAME: LED PANEL LIGHT	TYPE:LNOVO-48W-SW-N-R	WEIGHT:
SPEC.:48W 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

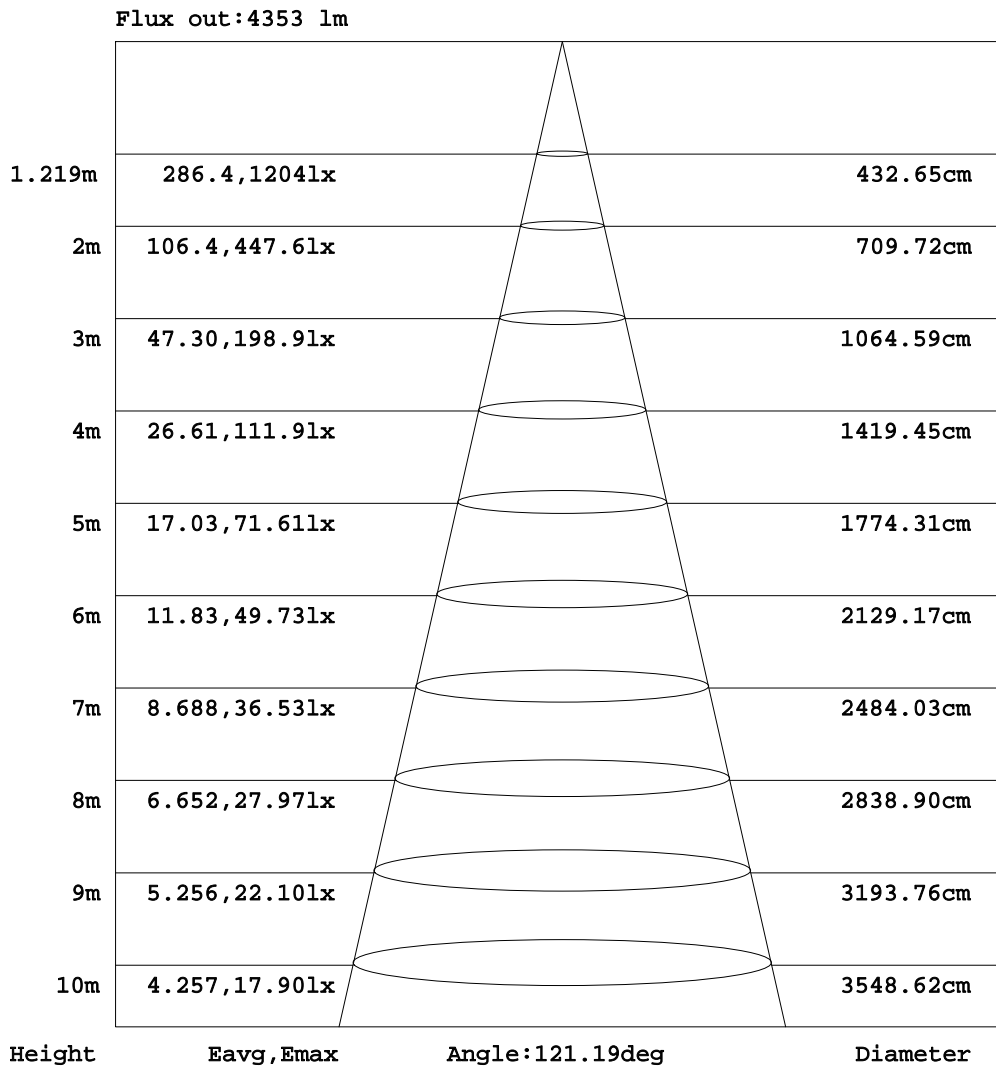
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity: 65%
 Test Distance: 7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

AAI Figure

NAME: LED PANEL LIGHT	TYPE:LNOVO-48W-SW-N-R	WEIGHT:
SPEC.:48W 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

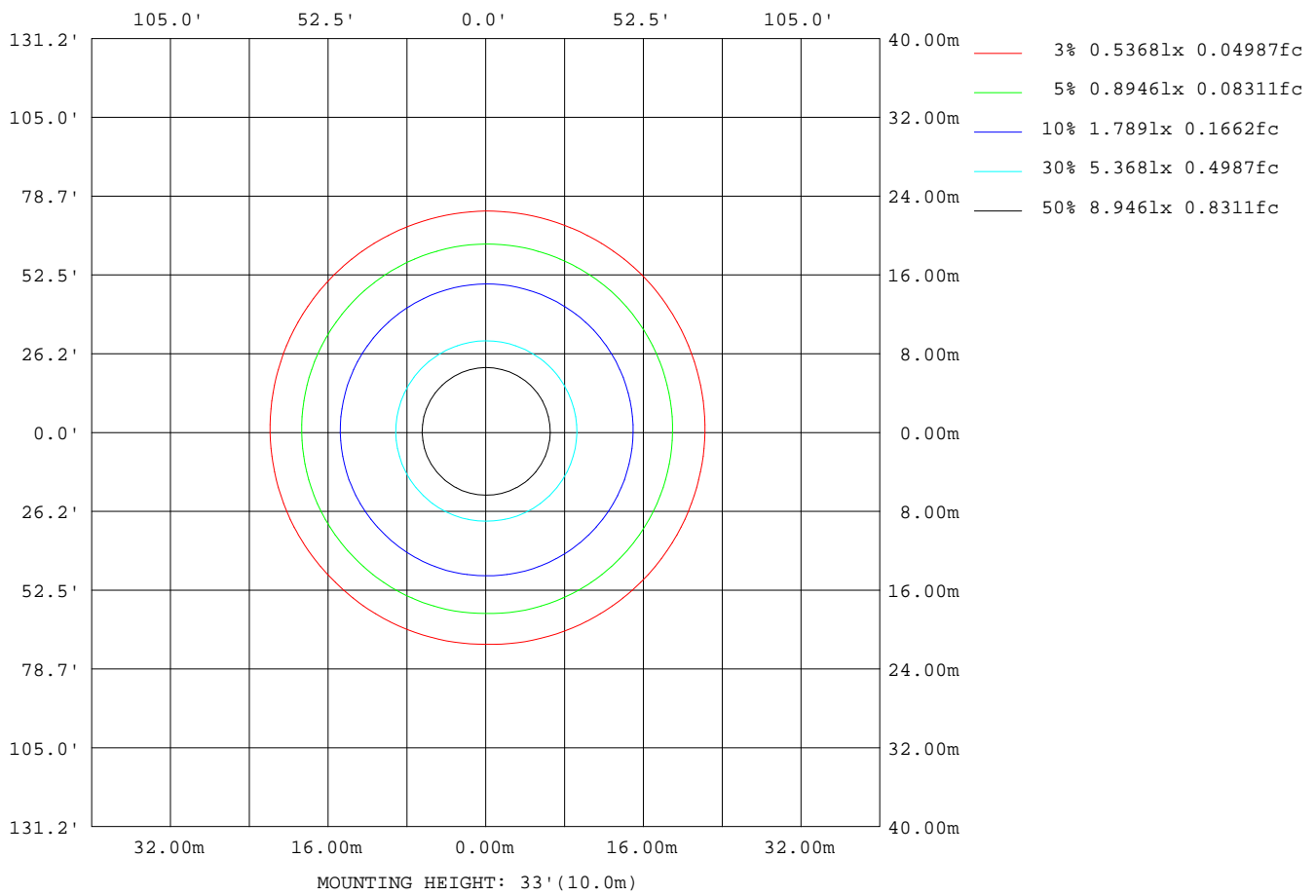
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000 SYSTEM V2.0.353
 Humidity:65%
 Test Distance:7.200m [K=1.0000]
 Remarks:

Checker: DENNY

Assessor: JOE

ISOLUX DIAGRAM

NAME: LED PANEL LIGHT	TYPE:LNOVO-48W-SW-N-R	WEIGHT:
SPEC.:48W 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-48W-SW-N-R	WEIGHT:
SPEC.:48W 4000K	DIM.: 595*595	SERIAL No.:
MFR.: DIMON Technology Limited	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	6364
L_0~180(75)av	6484
L_0~180(85)av	7916
L_90~270(65)av	6296
L_90~270(75)av	6377
L_90~270(85)av	7689
L_45(65)av	6338
L_45(75)av	6418
L_45(85)av	7719

Standard: GB/T 29293-2012

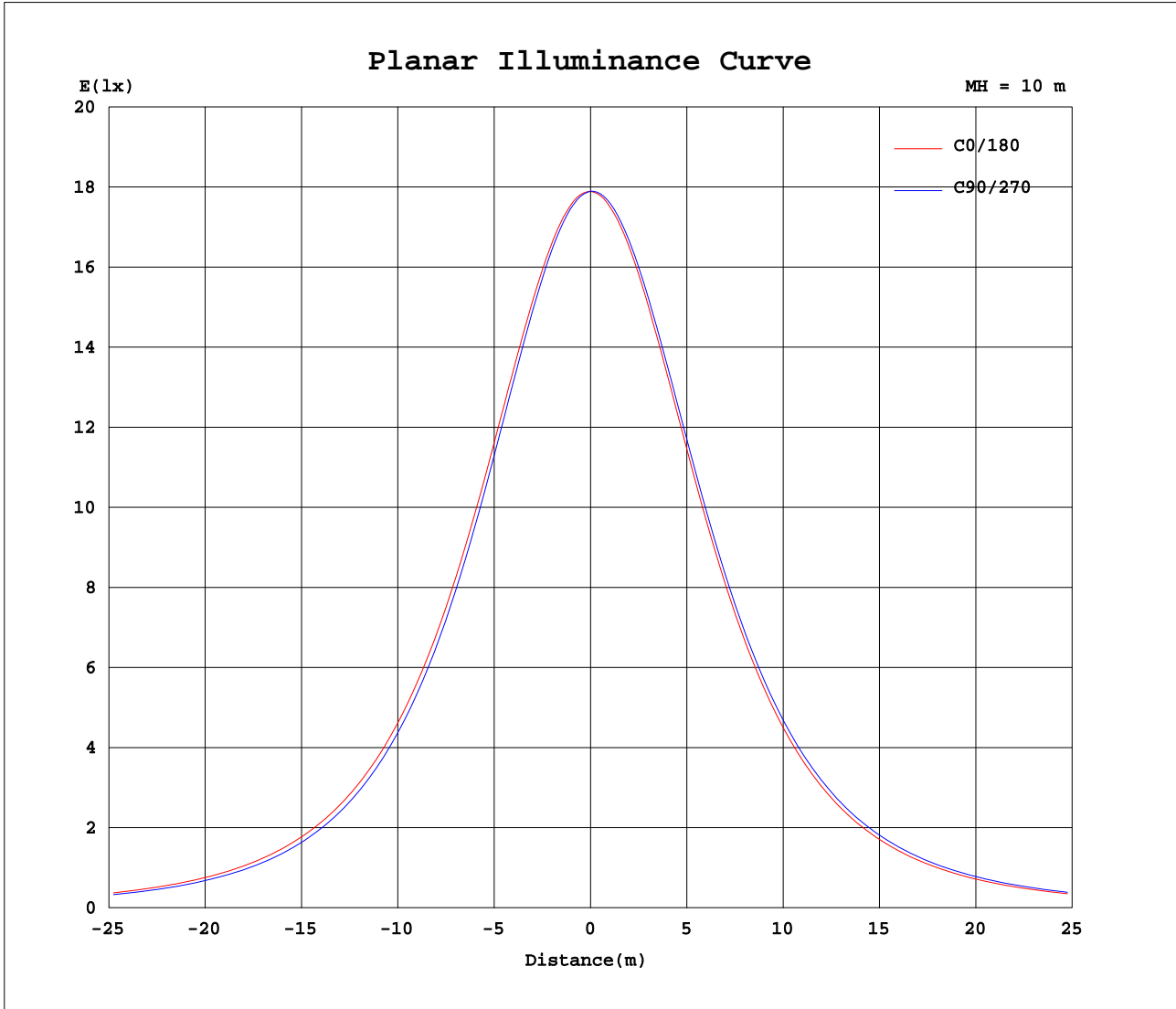
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2018-11-19

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%
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 Remarks:

Checker: DENNY

Assessor: JOE

