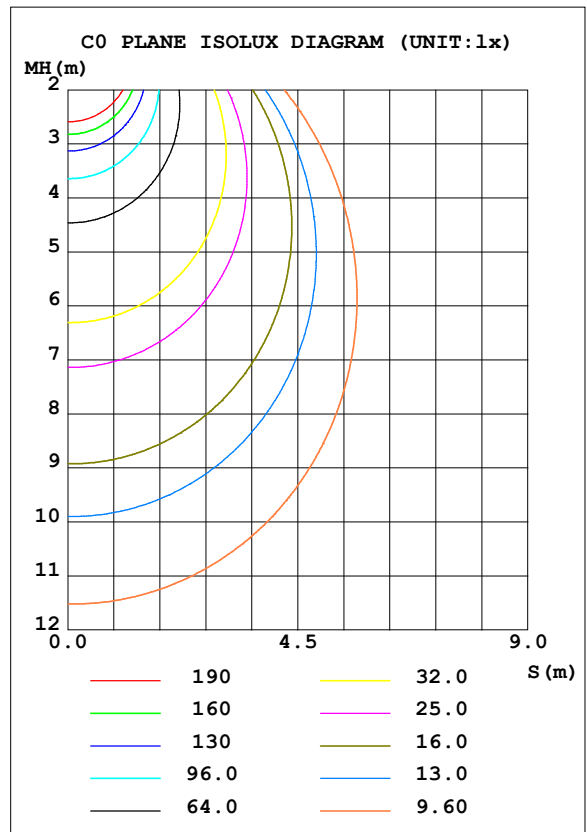
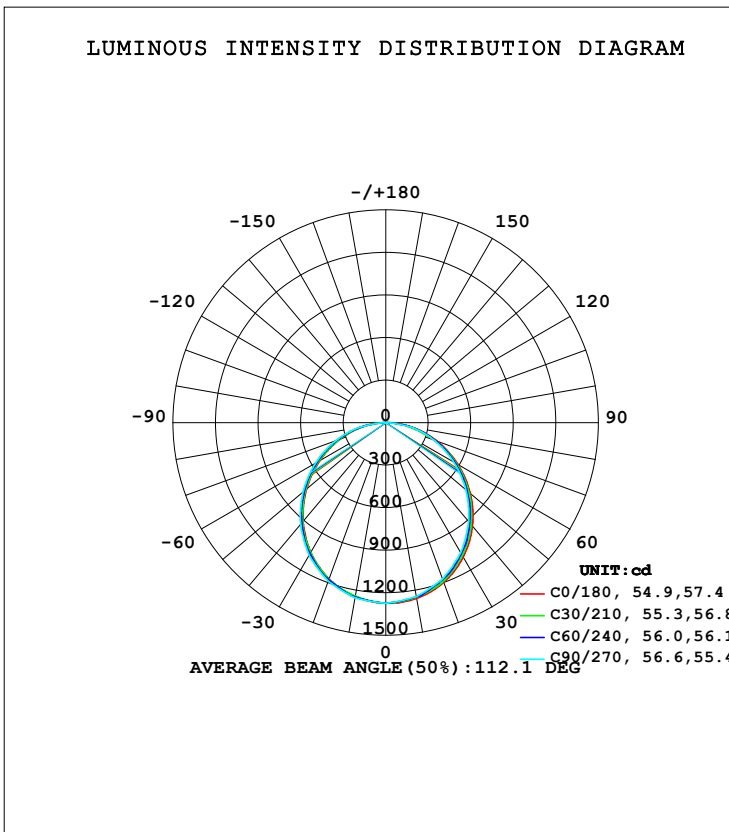


GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEISLP-312-48W-216Q41KR80		Imax (cd)	1274	S/MH (C0/180)	1.24
NOMINAL POWER (W)	48	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	3646.8	η UP, DN (C0-180)	0.0, 49.4
NOMINAL FLUX (lm)	3646.84	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

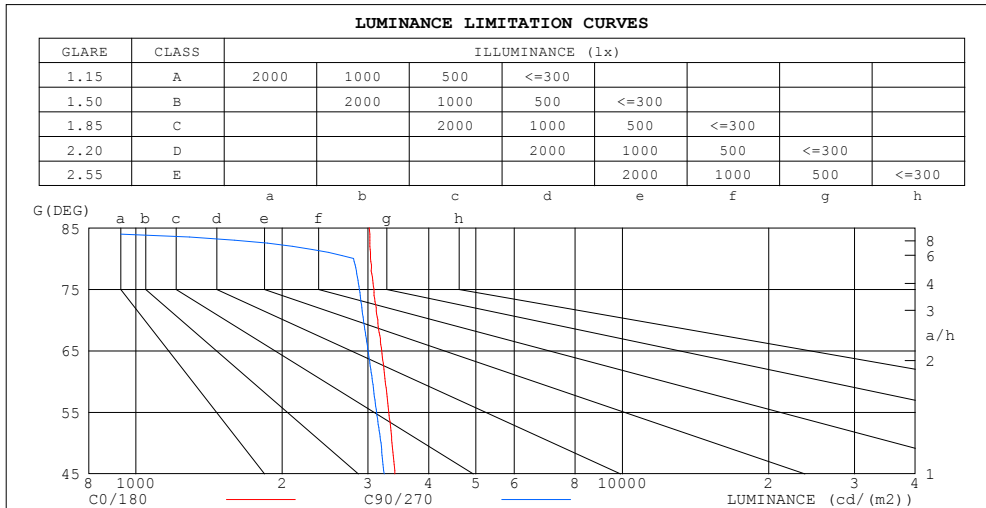
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
5	1272	1263	1260	1259	1265	1262	1264	1266	0- 5	30.30	30.30	0.83,0.83
10	1258	1247	1245	1238	1245	1244	1255	1254	5- 10	89.79	120.1	3.29,3.29
15	1233	1223	1209	1209	1214	1218	1222	1233	10- 15	146.3	266.4	7.3,7.3
20	1198	1181	1173	1162	1172	1174	1190	1193	15- 20	197.6	463.9	12.7,12.7
25	1151	1134	1116	1112	1120	1126	1135	1148	20- 25	242.2	706.1	19.4,19.4
30	1094	1074	1058	1049	1057	1065	1081	1090	25- 30	278.2	984.3	27,27
35	1027	1005	984.4	976.3	986.3	993.6	1008	1023	30- 35	304.9	1289	35.4,35.4
40	951.0	931.5	910.5	900.3	907.2	918.9	935.7	951.0	35- 40	321.0	1610	44.2,44.2
45	868.1	845.3	824.6	813.9	820.5	832.1	849.2	864.5	40- 45	326.5	1937	53.1,53.1
50	778.3	758.3	738.7	728.0	729.2	745.7	762.7	777.1	45- 50	321.3	2258	61.9,61.9
55	683.9	663.8	645.4	632.8	634.6	649.6	668.0	681.6	50- 55	306.1	2564	70.3,70.3
60	586.3	569.9	552.0	538.9	537.7	554.7	573.4	586.6	55- 60	281.6	2846	78,78
65	487.5	470.5	456.8	442.9	440.5	457.8	475.1	486.1	60- 65	249.2	3095	84.9,84.9
70	387.1	372.7	361.6	346.8	343.9	361.4	376.8	386.4	65- 70	208.8	3304	90.6,90.6
75	287.7	276.1	268.4	249.3	248.1	265.0	280.5	287.1	70- 75	162.6	3466	95.1,95.1
80	189.8	176.9	175.2	158.7	154.6	171.4	184.3	187.8	75- 80	114.9	3581	98.2,98.2
85	94.79	48.80	0	44.16	59.96	48.23	0	53.57	80- 85	59.14	3640	99.8,99.8
90	2.610	0	0	0	0.8131	0	0	0	85- 90	6.477	3647	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3021	0
80	3037	2803
75	3088	2881
70	3144	2937
65	3204	3002
60	3257	3067
55	3312	3125
50	3363	3192
45	3410	3239

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:T01
 Test Date:2014-11-21

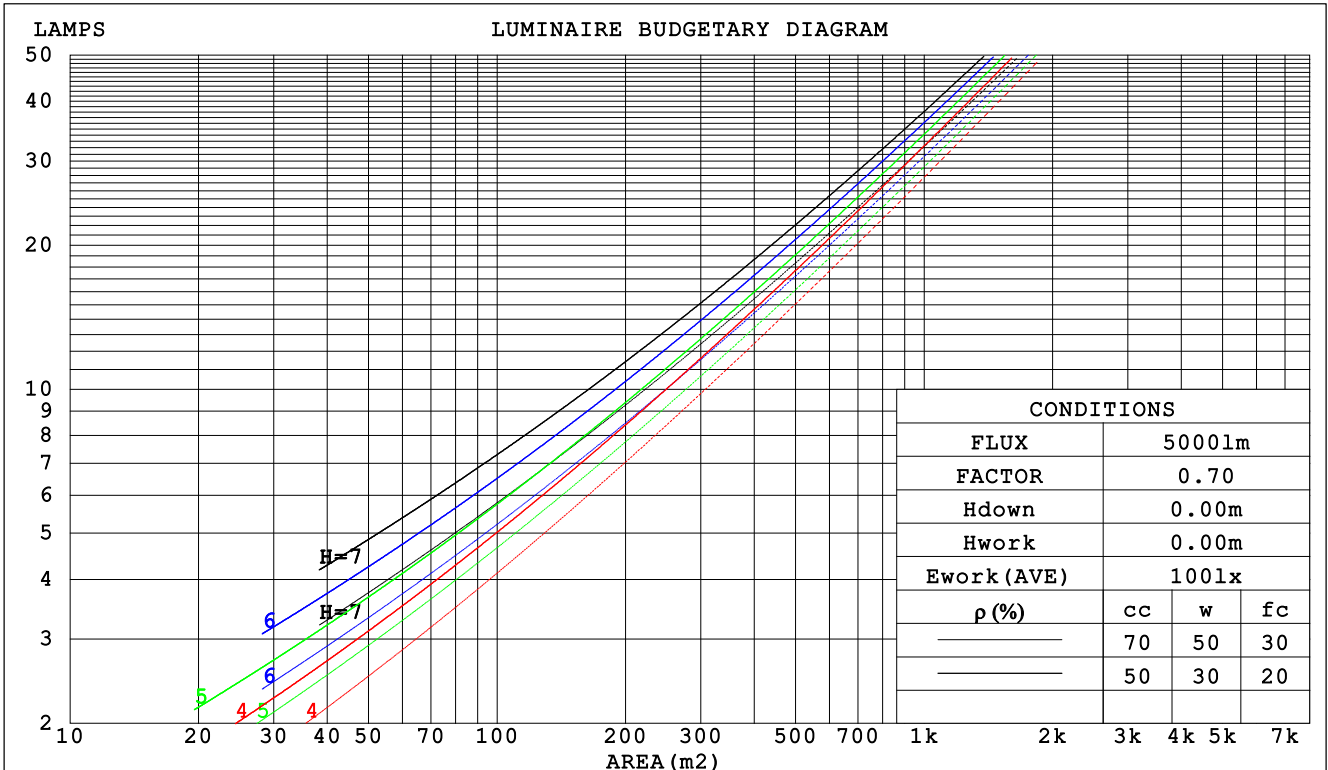
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:E
 Humidity:65.0%
 Test Distance:9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	.00
1.0	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.83
2.0	.90	.83	.77	.88	.82	.76	.85	.79	.75	.81	.77	.73	.78	.75	.71	.69
3.0	.79	.71	.64	.77	.70	.64	.74	.68	.62	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.57	.52	.62	.56	.52	.49
5.0	.62	.53	.47	.61	.53	.46	.59	.52	.46	.57	.51	.45	.55	.49	.45	.43
6.0	.56	.47	.41	.55	.47	.40	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.35	.47	.40	.35	.46	.40	.35	.33
8.0	.46	.38	.32	.46	.38	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.28	.40	.33	.28	.39	.33	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE:Recessed	WEIGHT:4KG
SPEC.:30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.:0.36	PROTECTION 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	.312	.178	.056	.305	.174	.055	.292	.168	.054	.280	.161	.052	.269	.156	.050	
2.0	.294	.161	.049	.288	.159	.049	.276	.154	.048	.265	.149	.047	.255	.144	.046	
3.0	.272	.145	.043	.267	.143	.043	.256	.139	.042	.247	.135	.041	.238	.132	.041	
4.0	.251	.130	.038	.246	.129	.038	.237	.126	.037	.228	.123	.037	.220	.120	.036	
5.0	.232	.118	.034	.227	.117	.034	.219	.114	.034	.211	.112	.033	.204	.109	.033	
6.0	.215	.108	.031	.211	.106	.031	.203	.104	.030	.197	.102	.030	.190	.100	.030	
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.026	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.084	.024	.172	.084	.023	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.022	.148	.075	.021	

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	.180	.156	.134	.154	.134	.115	.106	.092	.080	.061	.053	.046	.019	.017	.015	
2.0	.173	.132	.098	.148	.114	.084	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:T01
 Test Date:2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:E
 Humidity:65.0%
 Test Distance:9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm										
NAME: LED PANEL					TYPE: Recessed			WEIGHT: 4KG		
SPEC.: 30120					DIM.: 295*1195*9			SERIAL No.:		
MFR.:					SUR.: 0.36			PROTECTION 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	17.1	18.6	17.4	18.8	19.0	16.9	18.4	17.1	18.6	18.8
3H	18.7	20.1	19.0	20.3	20.6	18.5	19.9	18.8	20.1	20.4
4H	19.3	20.6	19.6	20.9	21.1	19.2	20.6	19.5	20.8	21.1
6H	19.7	21.0	20.1	21.3	21.6	19.8	21.0	20.1	21.3	21.6
8H	19.9	21.2	20.3	21.4	21.7	19.9	21.1	20.2	21.4	21.7
12H	20.1	21.3	20.4	21.6	21.9	19.9	21.1	20.2	21.3	21.7
4H 2H	17.7	19.1	18.0	19.3	19.6	17.5	18.9	17.9	19.1	19.4
3H	19.5	20.6	19.8	20.9	21.2	19.4	20.6	19.7	20.8	21.2
4H	20.2	21.3	20.6	21.6	21.9	20.2	21.3	20.6	21.6	22.0
6H	20.8	21.7	21.2	22.1	22.5	20.9	21.9	21.3	22.2	22.6
8H	21.0	21.9	21.4	22.3	22.7	21.1	22.0	21.5	22.4	22.7
12H	21.2	22.0	21.6	22.4	22.8	21.1	21.9	21.5	22.3	22.7
8H 4H	20.5	21.4	20.9	21.8	22.1	20.5	21.4	21.0	21.8	22.2
6H	21.3	22.0	21.7	22.4	22.8	21.4	22.2	21.9	22.6	23.0
8H	21.6	22.2	22.0	22.7	23.1	21.7	22.3	22.1	22.8	23.2
12H	21.8	22.4	22.3	22.9	23.3	21.7	22.3	22.2	22.7	23.2
12H 4H	20.5	21.4	21.0	21.7	22.1	20.6	21.4	21.0	21.8	22.2
6H	21.3	22.0	21.8	22.4	22.9	21.5	22.2	22.0	22.6	23.1
8H	21.7	22.3	22.2	22.7	23.2	21.8	22.4	22.3	22.8	23.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 3647 lm Total Lamp Luminous Flux. (8log(F/F0) = 4.5)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: T01
Test Date: 2014-11-21

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:
Humidity: 65.0%
Test Distance: 9.890m [K=1.0000]
Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION 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	57	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	64	54	48	41
1.00	76	64	57	74	64	57	72	65	56	49
1.25	83	72	65	81	71	65	79	70	64	56
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	69
2.50	99	91	85	97	89	84	93	87	82	74
3.00	102	95	90	100	94	88	96	91	86	78
4.00	106	100	96	104	99	94	99	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

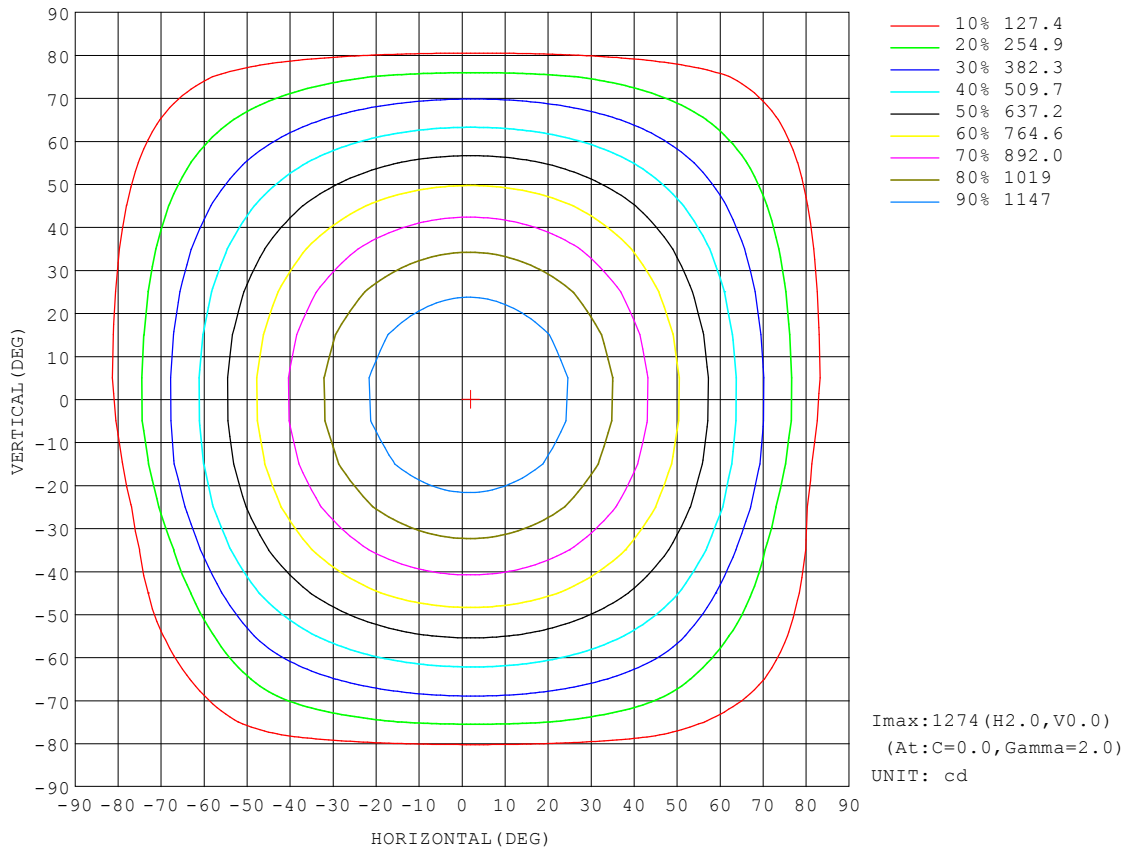
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: E
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:



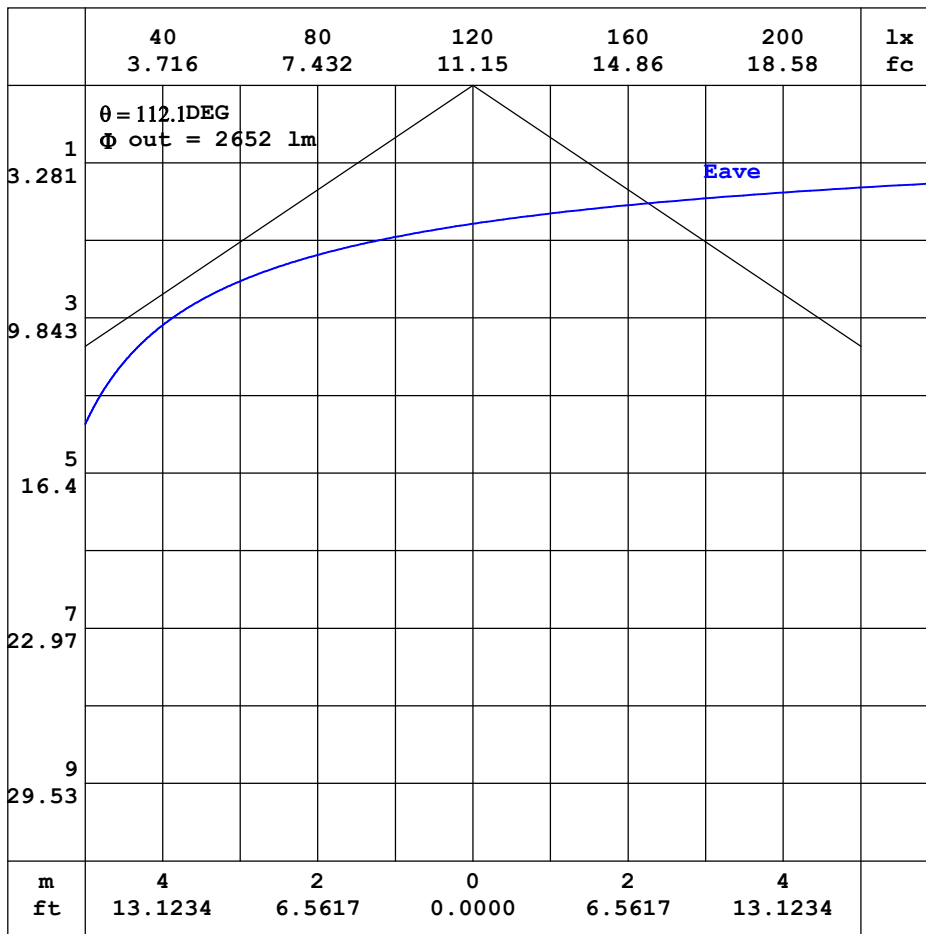
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: T01
Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: E
Humidity: 65.0%
Test Distance: 9.890m [K=1.0000]
Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI CURVES

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:



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

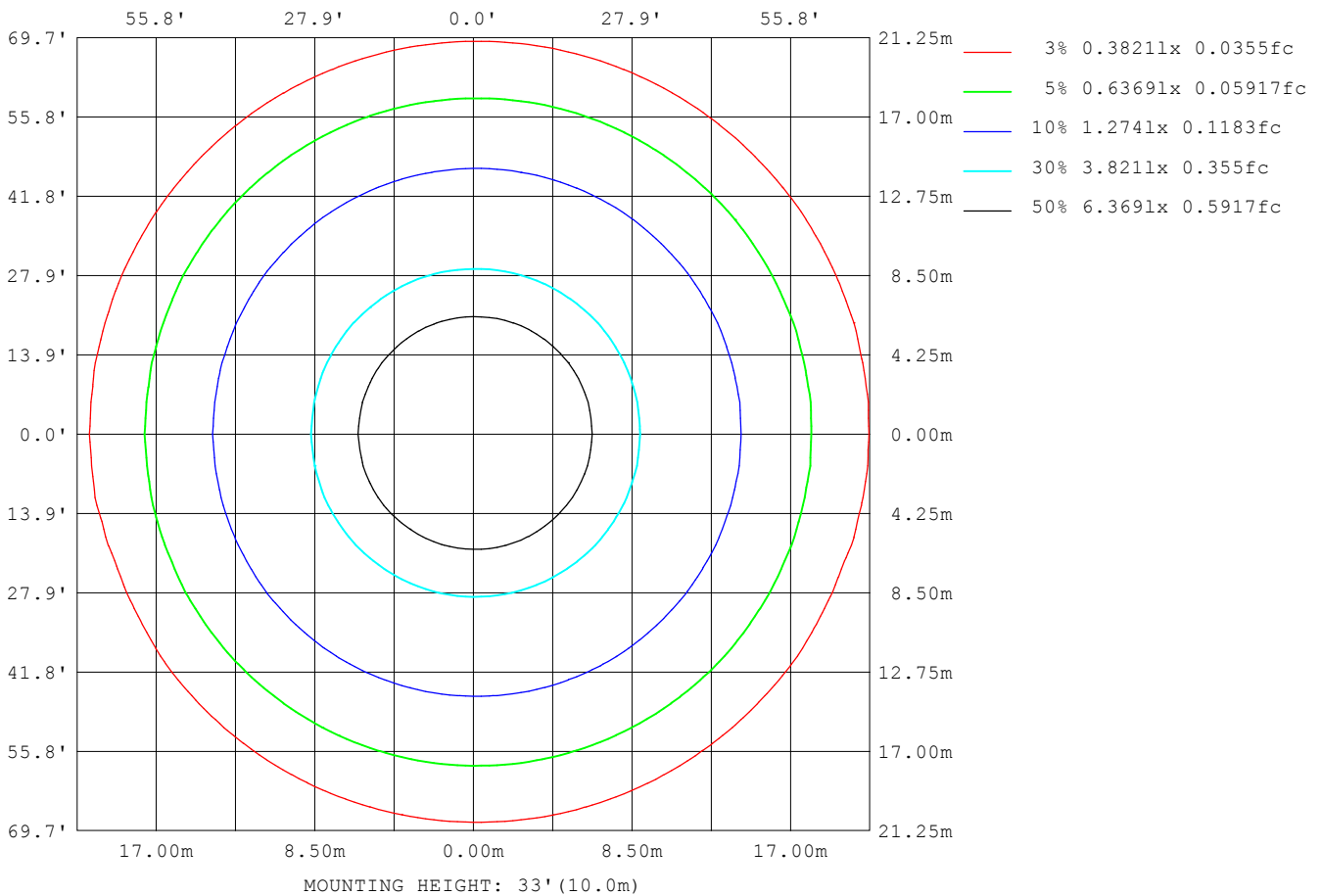
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: T01
Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:
Humidity: 65.0%
Test Distance: 9.890m [K=1.0000]
Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

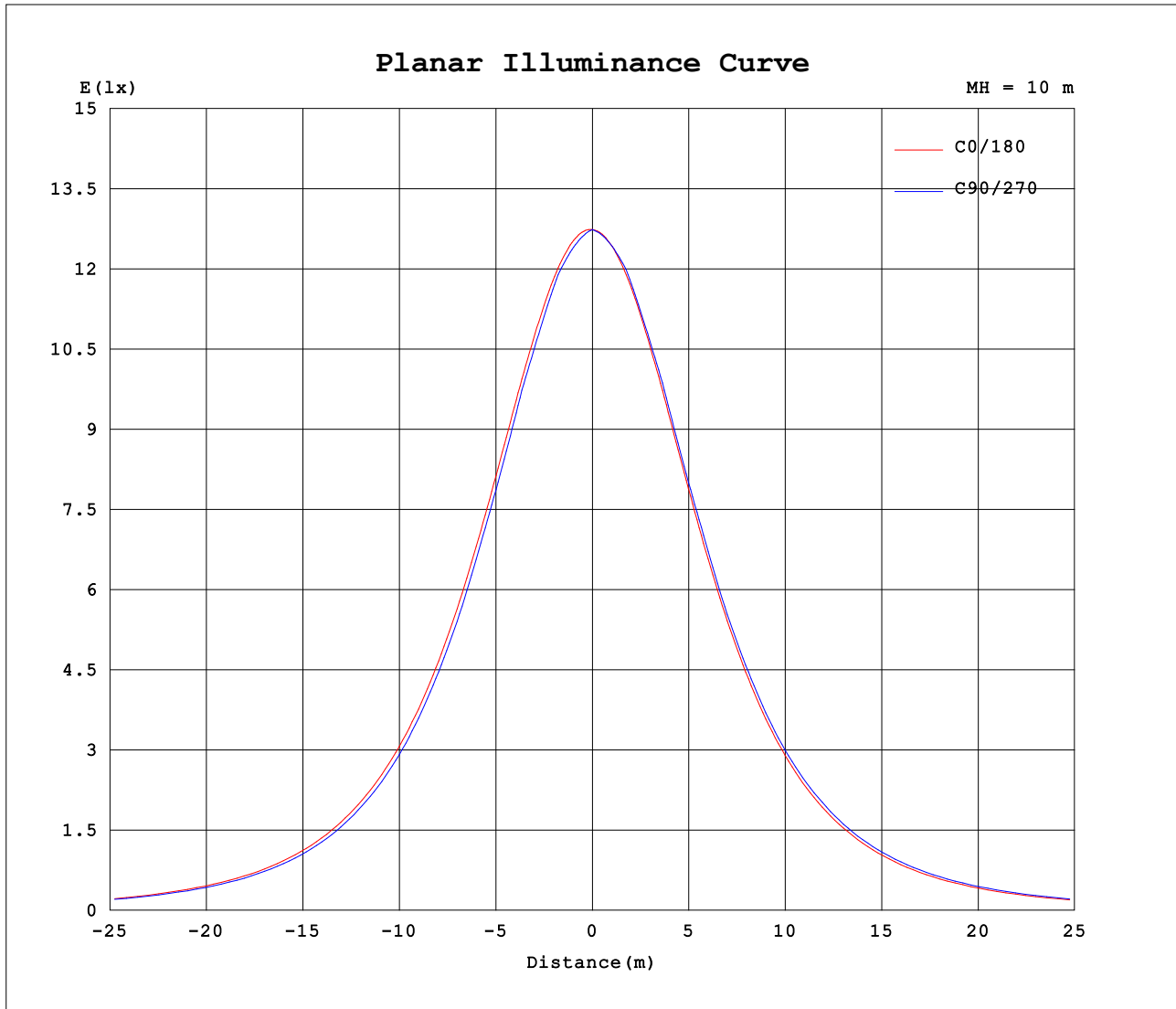
Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100k

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274
5	1272	1270	1269	1268	1267	1266	1266	1265	1264	1263	1263	1262	1262	1261	1261	1260	1260	1260	1260
10	1258	1256	1254	1252	1251	1250	1249	1248	1247	1247	1247	1247	1247	1247	1247	1246	1246	1246	1245
15	1233	1230	1228	1226	1225	1224	1224	1224	1225	1223	1220	1218	1216	1214	1213	1212	1211	1210	1209
20	1198	1194	1191	1190	1189	1190	1190	1186	1183	1181	1179	1178	1177	1176	1176	1175	1174	1173	1173
25	1151	1147	1144	1143	1145	1143	1139	1136	1134	1134	1134	1131	1128	1125	1122	1120	1118	1117	1116
30	1094	1089	1087	1088	1087	1082	1080	1079	1079	1074	1071	1068	1066	1065	1064	1062	1061	1060	1058
35	1027	1022	1021	1023	1017	1014	1015	1011	1007	1005	1004	1003	1000	996	993	991	988	986	984
40	951	946	947	944	941	941	937	934	933	932	927	923	921	919	917	915	914	912	910
45	868	864	866	860	859	856	854	854	849	845	843	842	839	836	833	831	829	827	825
50	778	775	775	771	769	767	767	762	760	758	755	752	750	748	746	744	742	741	739
55	684	682	679	679	675	675	671	669	666	664	662	661	659	656	654	652	649	647	645
60	586	586	582	580	580	576	575	572	571	570	567	564	562	561	559	557	556	554	552
65	487	487	484	482	471	472	473	475	472	471	469	468	466	465	463	462	460	458	457
70	387	384	366	349	345	351	361	369	373	373	372	371	370	369	368	366	365	363	362
75	288	263	236	240	244	245	251	263	273	276	276	275	274	274	273	272	271	270	268
80	190	150	159	159	159	159	160	163	171	177	179	179	179	179	179	178	177	176	175
85	94.8	76.4	73.9	72.4	71.5	69.3	66.4	59.8	54.9	48.8	40.6	31.7	23.6	16.5	10.7	6.02	2.68	0.67	0.00
90	2.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: E
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE:Recessed	WEIGHT:4KG
SPEC.:30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.:0.36	PROTECTION ANGLE:

Table--2

UNIT: cd

C (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274
5	1259	1259	1259	1259	1259	1258	1258	1258	1259	1259	1259	1260	1260	1261	1262	1262	1263	1265	1264
10	1245	1244	1243	1242	1241	1240	1239	1238	1238	1237	1237	1237	1238	1238	1239	1241	1243	1245	1243
15	1208	1207	1207	1206	1206	1206	1207	1207	1209	1210	1208	1207	1206	1206	1207	1208	1211	1214	1212
20	1171	1170	1169	1167	1166	1164	1163	1162	1162	1163	1164	1167	1166	1164	1164	1165	1168	1172	1169
25	1114	1113	1112	1112	1112	1112	1113	1114	1112	1110	1110	1110	1113	1113	1112	1112	1115	1120	1116
30	1057	1055	1053	1051	1050	1048	1048	1048	1049	1052	1050	1048	1048	1051	1051	1050	1052	1057	1054
35	983	982	980	980	979	980	980	978	976	977	979	980	977	977	981	979	980	986	982
40	909	907	905	903	901	900	899	899	900	899	898	899	902	899	899	901	901	907	903
45	823	821	820	819	818	818	818	815	814	814	815	813	814	816	813	816	815	821	817
50	737	735	733	731	729	728	727	727	728	725	724	724	723	724	724	724	724	729	726
55	644	642	641	639	638	637	636	634	633	633	633	630	631	629	632	629	630	635	632
60	550	549	547	546	544	542	541	540	539	537	536	536	533	534	534	534	534	538	536
65	455	454	452	451	449	448	447	445	443	441	437	428	423	419	427	438	437	441	439
70	360	359	357	356	354	353	351	349	347	340	326	311	294	288	290	310	336	344	342
75	267	266	264	263	261	259	258	255	249	239	224	206	192	180	175	177	209	248	248
80	174	173	172	170	169	168	166	164	159	148	136	125	115	111	110	107	96.2	155	155
85	0.66	2.61	5.80	10.2	15.6	22.0	29.2	37.0	44.2	49.3	52.6	54.6	50.9	51.2	52.3	52.8	49.3	60.0	65.2
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:T01
 Test Date:2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:
 Humidity:65.0%
 Test Distance:9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:

Table--3

UNIT: cd

C (DEG) \ γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274
5	1263	1263	1262	1262	1262	1262	1262	1262	1262	1262	1263	1263	1263	1263	1263	1264	1264	1264	1265
10	1242	1241	1241	1241	1241	1242	1243	1244	1245	1247	1248	1249	1251	1252	1253	1254	1255	1255	1255
15	1211	1210	1210	1211	1213	1216	1218	1218	1217	1217	1217	1218	1218	1219	1220	1221	1222	1223	1224
20	1168	1169	1170	1173	1176	1174	1174	1174	1175	1177	1179	1181	1183	1185	1187	1188	1190	1190	1191
25	1116	1117	1121	1121	1121	1121	1123	1126	1130	1130	1130	1130	1131	1132	1132	1134	1135	1137	1138
30	1054	1057	1059	1058	1059	1063	1067	1065	1065	1066	1068	1070	1073	1075	1077	1079	1081	1082	1084
35	983	987	986	988	993	993	992	994	997	1001	1001	1001	1002	1004	1005	1007	1008	1010	1012
40	905	906	907	913	912	913	915	919	918	920	922	924	927	929	932	934	936	937	939
45	821	820	825	825	826	831	830	832	835	838	840	841	842	844	846	847	849	851	853
50	729	731	733	734	738	738	741	746	746	747	749	751	754	756	758	761	763	765	766
55	633	639	637	641	642	647	649	650	652	655	657	659	661	662	664	666	668	670	672
60	538	540	542	543	548	549	552	555	557	559	561	563	566	568	570	572	573	575	577
65	443	442	444	447	449	452	455	458	461	463	465	467	468	470	472	473	475	477	478
70	344	345	348	350	353	356	360	361	363	365	367	369	370	372	374	375	377	378	380
75	249	251	252	256	259	261	263	265	267	269	271	273	274	276	278	279	281	282	283
80	157	158	161	163	165	167	170	171	173	175	176	178	179	181	182	183	184	185	186
85	68.2	69.2	71.5	73.6	74.9	66.5	57.5	48.2	39.3	30.9	23.2	16.4	10.7	6.11	2.75	0.69	0.00	0.70	2.82
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100k

GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.2390A P:50.20W PF:0.9550 Lamp Flux:3646.84x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 4KG
SPEC.: 30120	DIM.: 295*1195*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:

Table--4

UNIT: cd

γ (DEG) \ C (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274	1274				
5	1265	1265	1266	1266	1266	1266	1266	1267	1267	1268	1268	1269	1269	1270	1271				
10	1255	1255	1255	1254	1254	1254	1254	1253	1253	1253	1254	1254	1255	1256	1257				
15	1224	1225	1226	1227	1229	1231	1233	1234	1232	1231	1230	1229	1229	1230	1231				
20	1192	1192	1192	1191	1192	1192	1193	1194	1196	1199	1198	1195	1194	1194	1195				
25	1140	1141	1143	1145	1148	1150	1148	1147	1147	1149	1152	1152	1149	1148	1149				
30	1084	1085	1085	1086	1087	1088	1090	1094	1093	1091	1092	1095	1094	1091	1091				
35	1014	1016	1018	1021	1025	1024	1023	1024	1026	1028	1025	1026	1030	1026	1024				
40	940	941	942	943	945	947	951	951	949	950	953	950	952	952	948				
45	855	857	859	862	863	864	865	867	870	867	868	869	867	871	866				
50	768	769	770	771	773	775	777	777	777	781	779	779	779	780	777				
55	674	676	677	680	681	681	682	683	685	684	687	685	686	684	684				
60	578	579	581	582	583	584	587	587	586	588	587	590	588	587	589				
65	480	481	483	484	485	486	486	487	489	488	488	488	491	488	490				
70	381	382	384	385	385	386	386	387	387	388	389	387	388	388	388				
75	284	285	286	286	287	287	287	287	287	287	287	288	287	289	288				
80	187	188	188	188	188	188	188	188	188	188	188	188	189	189	191				
85	6.34	11.2	17.4	24.8	33.4	43.0	53.6	64.9	76.7	88.9	89.5	89.7	90.4	91.1	93.5				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: E
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100k