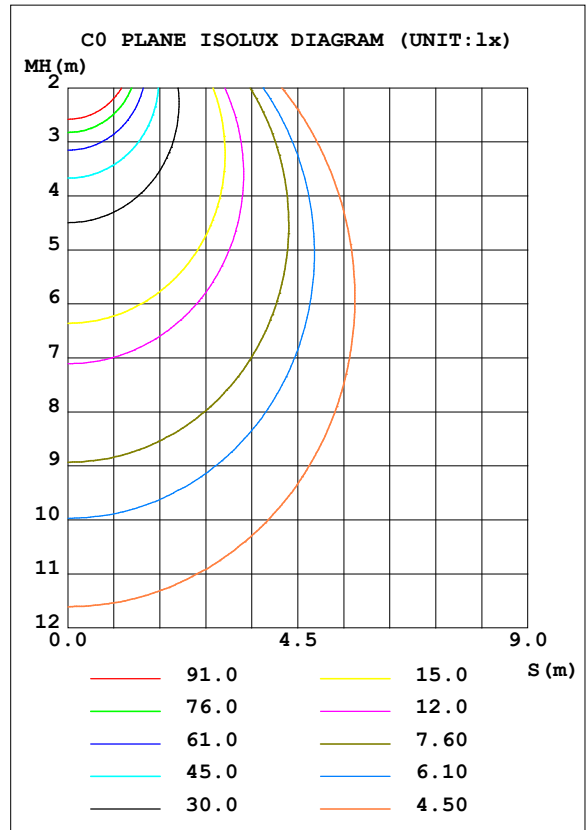
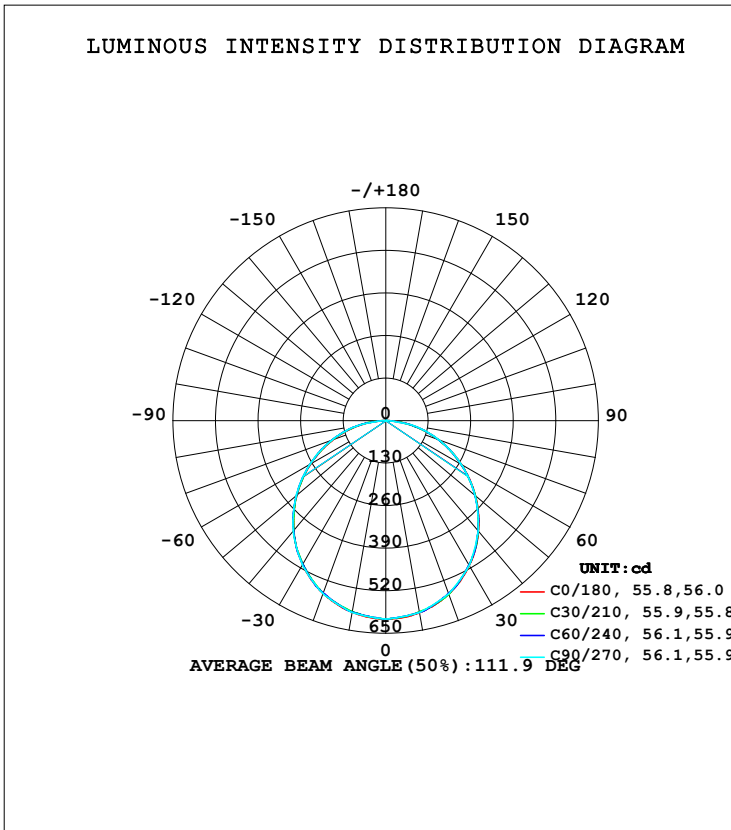


GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.0V I:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL SLP-33-24W-216Q41KR80		Imax (cd)	606.5	S/MH (C0/180)	1.25
NOMINAL POWER (W)	24	LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	1734.2	η UP, DN (C0-180)	0.0, 49.9
NOMINAL FLUX (lm)	1734.24	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	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

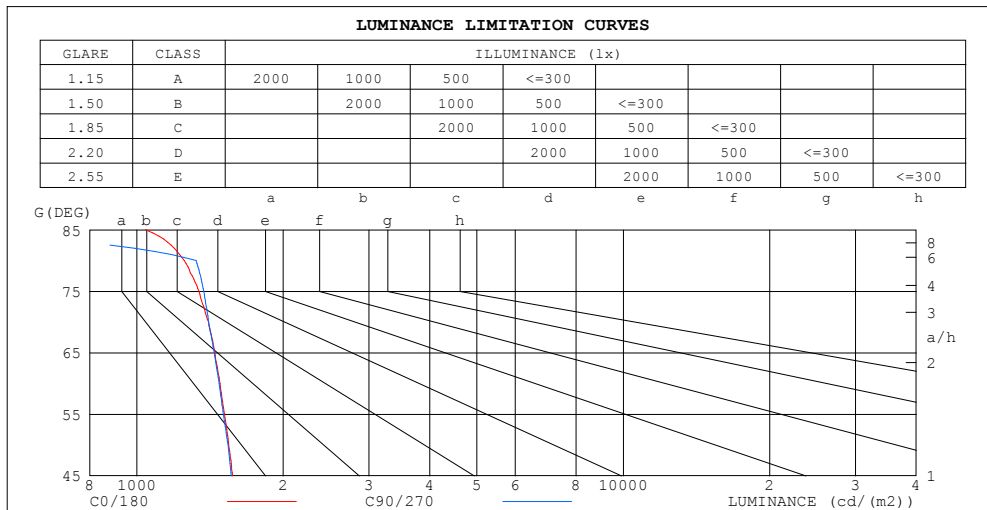
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100K

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	604.2	601.2	600.9	600.8	603.2	600.6	600.9	601.0	0- 5	14.42	14.42	0.83,0.83
10	596.2	594.0	595.3	592.7	594.9	592.1	595.2	593.5	5- 10	42.74	57.16	3.3,3.3
15	582.4	582.2	579.3	580.4	580.5	579.9	578.9	581.4	10- 15	69.62	126.8	7.31,7.31
20	563.8	561.2	563.3	559.7	561.9	558.9	562.7	561.4	15- 20	94.02	220.8	12.7,12.7
25	540.4	538.8	536.8	536.7	537.4	536.7	536.2	538.4	20- 25	115.2	336.0	19.4,19.4
30	511.2	509.8	510.4	507.8	508.0	507.5	509.7	509.8	25- 30	132.3	468.4	27,27
35	478.0	476.2	475.1	473.9	474.7	473.9	475.1	476.3	30- 35	144.9	613.3	35.4,35.4
40	440.6	440.6	439.8	438.0	437.9	438.8	440.4	440.9	35- 40	152.5	765.8	44.2,44.2
45	400.7	398.6	398.1	397.1	397.4	397.9	399.2	399.5	40- 45	155.1	920.9	53.1,53.1
50	357.7	356.6	356.5	356.2	355.6	357.8	358.0	357.9	45- 50	152.5	1073	61.9,61.9
55	312.8	310.8	311.2	310.5	310.8	312.4	313.2	312.6	50- 55	145.2	1219	70.3,70.3
60	266.8	265.7	265.9	265.3	265.0	267.4	268.4	267.8	55- 60	133.5	1352	78,78
65	220.4	218.0	219.5	219.6	218.8	221.9	222.1	220.4	60- 65	118.2	1470	84.8,84.8
70	172.9	171.0	173.0	173.7	171.3	176.2	175.7	173.5	65- 70	99.55	1570	90.5,90.5
75	125.1	124.1	127.9	127.4	124.4	129.7	130.3	126.6	70- 75	78.39	1648	95,95
80	78.20	77.10	82.71	81.98	78.41	83.91	84.82	79.18	75- 80	55.45	1704	98.2,98.2
85	32.70	20.48	0	22.91	26.25	23.66	0	21.25	80- 85	27.85	1732	99.8,99.8
90	0.7358	0	0	0	0.3751	0	0	0	85- 90	2.679	1734	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		



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

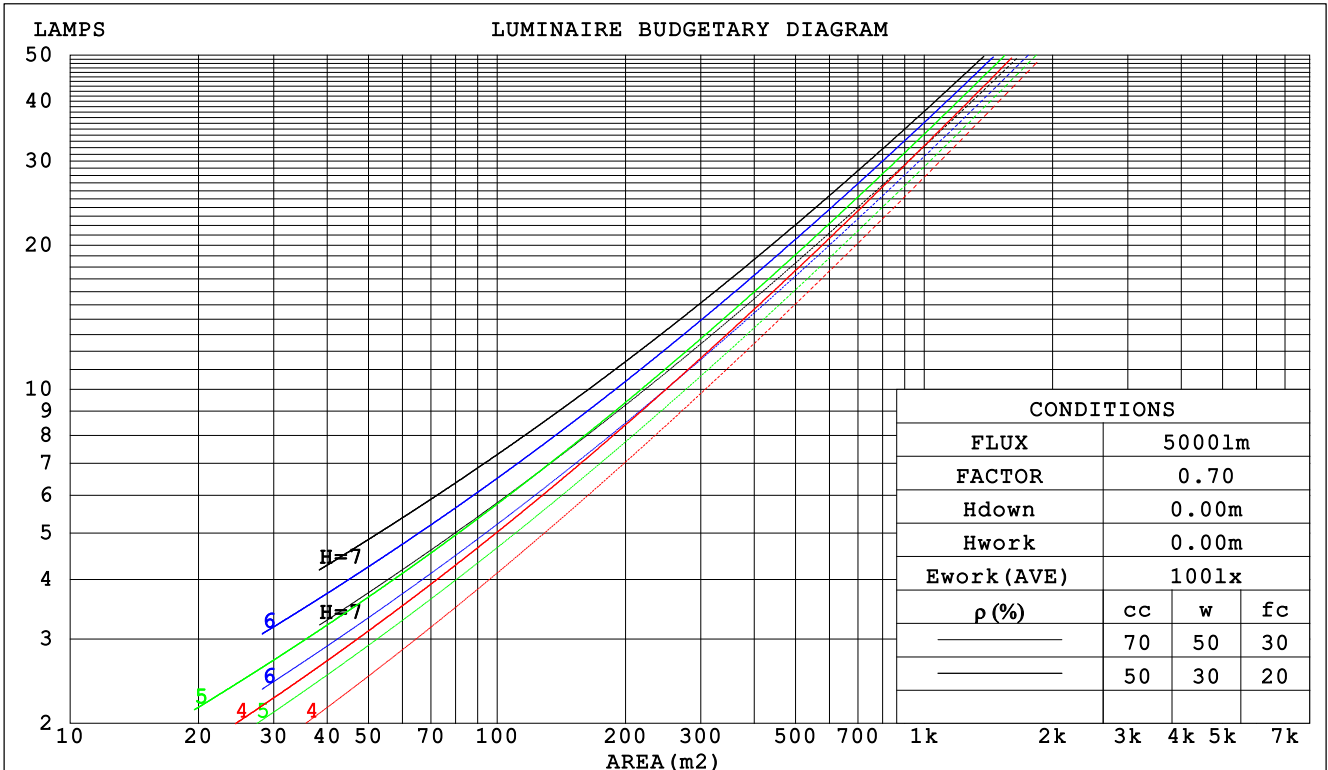
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:
 Humidity: 65.0%
 Test Distance: 9.890m [K=1.0000]
 Remarks: 4100K

GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.0V I:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*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	1.00
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:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE:Recessed	WEIGHT:1.8
SPEC.:3030	DIM.: 295*295*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	.313	.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	.266	.149	.047	.256	.145	.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	.212	.112	.033	.204	.109	.033	
6.0	.215	.108	.031	.211	.106	.031	.204	.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:
 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:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm										
NAME: LED PANEL					TYPE: Recessed			WEIGHT: 1.8		
SPEC.: 3030					DIM.: 295*295*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	14.3	15.8	14.6	16.0	16.2	14.3	15.8	14.6	16.0	16.2
3H	15.9	17.3	16.2	17.6	17.8	15.9	17.3	16.2	17.6	17.8
4H	16.6	17.9	16.9	18.2	18.4	16.6	18.0	16.9	18.2	18.5
6H	17.1	18.4	17.4	18.6	18.9	17.2	18.4	17.5	18.7	19.0
8H	17.2	18.5	17.6	18.8	19.1	17.3	18.5	17.6	18.8	19.1
12H	17.3	18.5	17.7	18.8	19.1	17.3	18.4	17.6	18.7	19.0
4H 2H	14.9	16.3	15.3	16.5	16.8	14.9	16.3	15.2	16.5	16.8
3H	16.7	17.9	17.1	18.2	18.5	16.7	17.9	17.1	18.2	18.5
4H	17.5	18.6	17.9	18.9	19.3	17.6	18.7	17.9	19.0	19.3
6H	18.2	19.1	18.6	19.5	19.8	18.3	19.2	18.7	19.6	19.9
8H	18.4	19.3	18.8	19.6	20.0	18.4	19.3	18.8	19.7	20.1
12H	18.5	19.3	18.9	19.7	20.1	18.4	19.2	18.8	19.6	20.0
8H 4H	17.8	18.7	18.2	19.1	19.5	17.9	18.8	18.3	19.1	19.5
6H	18.6	19.4	19.1	19.8	20.2	18.7	19.5	19.2	19.9	20.3
8H	18.9	19.6	19.4	20.0	20.4	19.0	19.6	19.4	20.0	20.5
12H	19.1	19.7	19.6	20.1	20.6	19.0	19.5	19.4	20.0	20.5
12H 4H	17.8	18.7	18.3	19.1	19.5	17.9	18.7	18.3	19.1	19.5
6H	18.7	19.3	19.1	19.8	20.2	18.8	19.5	19.3	19.9	20.3
8H	19.0	19.6	19.5	20.0	20.5	19.1	19.6	19.5	20.1	20.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.1 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1734 lm Total Lamp Luminous Flux. (8log(F/F0) = 1.9)

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:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*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			

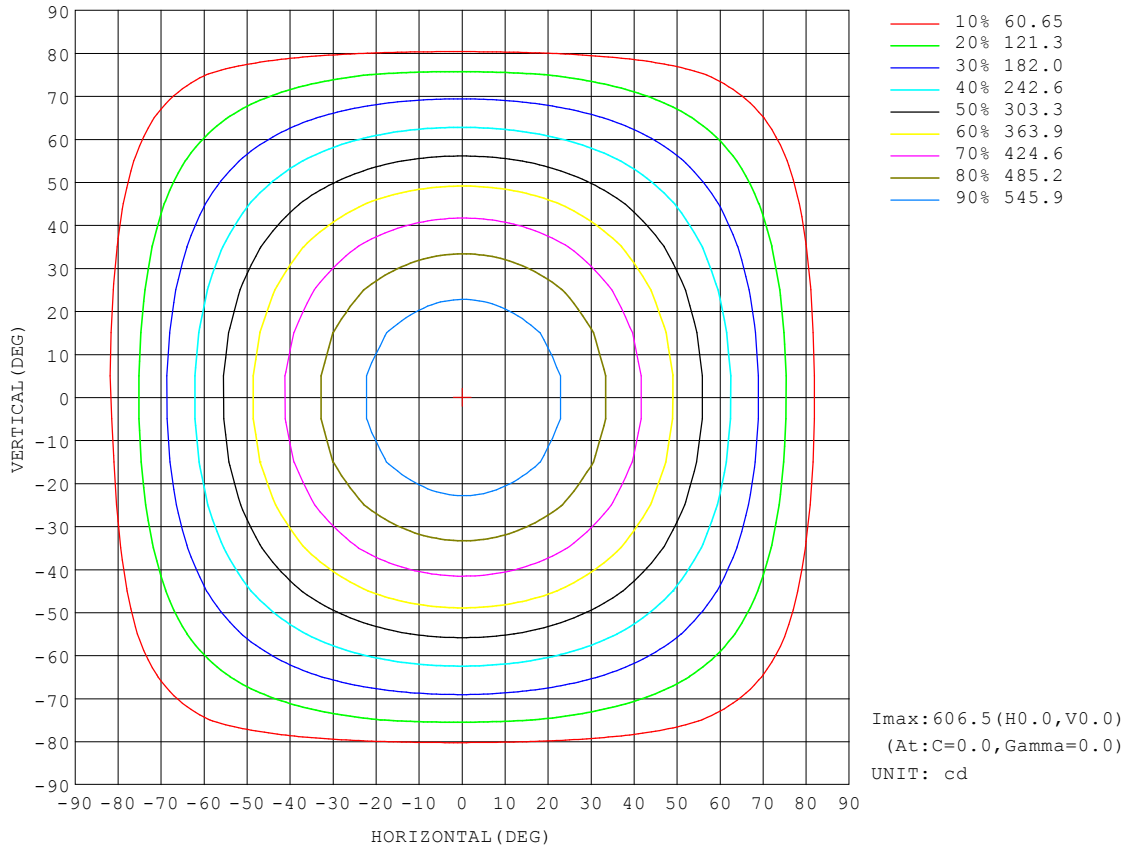
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

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

GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:220.0V I:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:



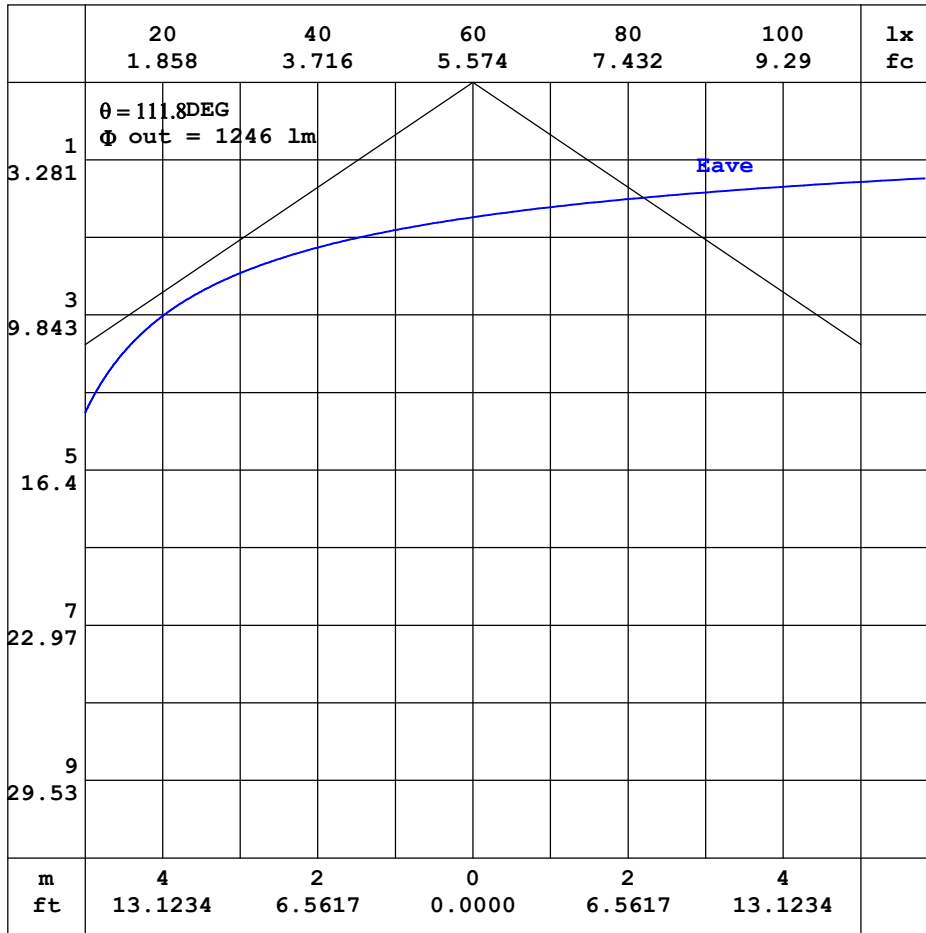
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: T01
Test Date: 2014-11-21

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:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*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.

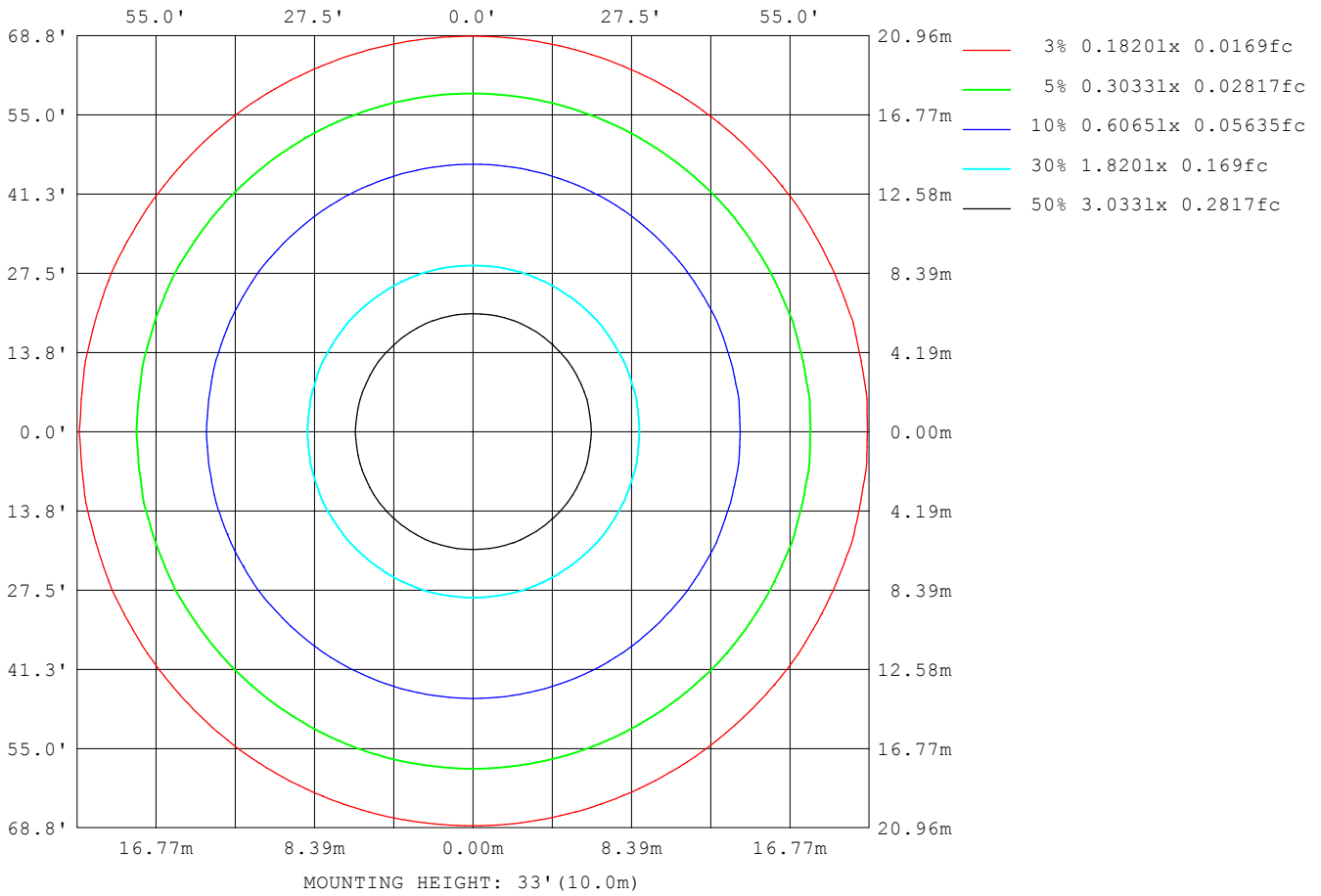
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: T01
 Test Date: 2014-11-21

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

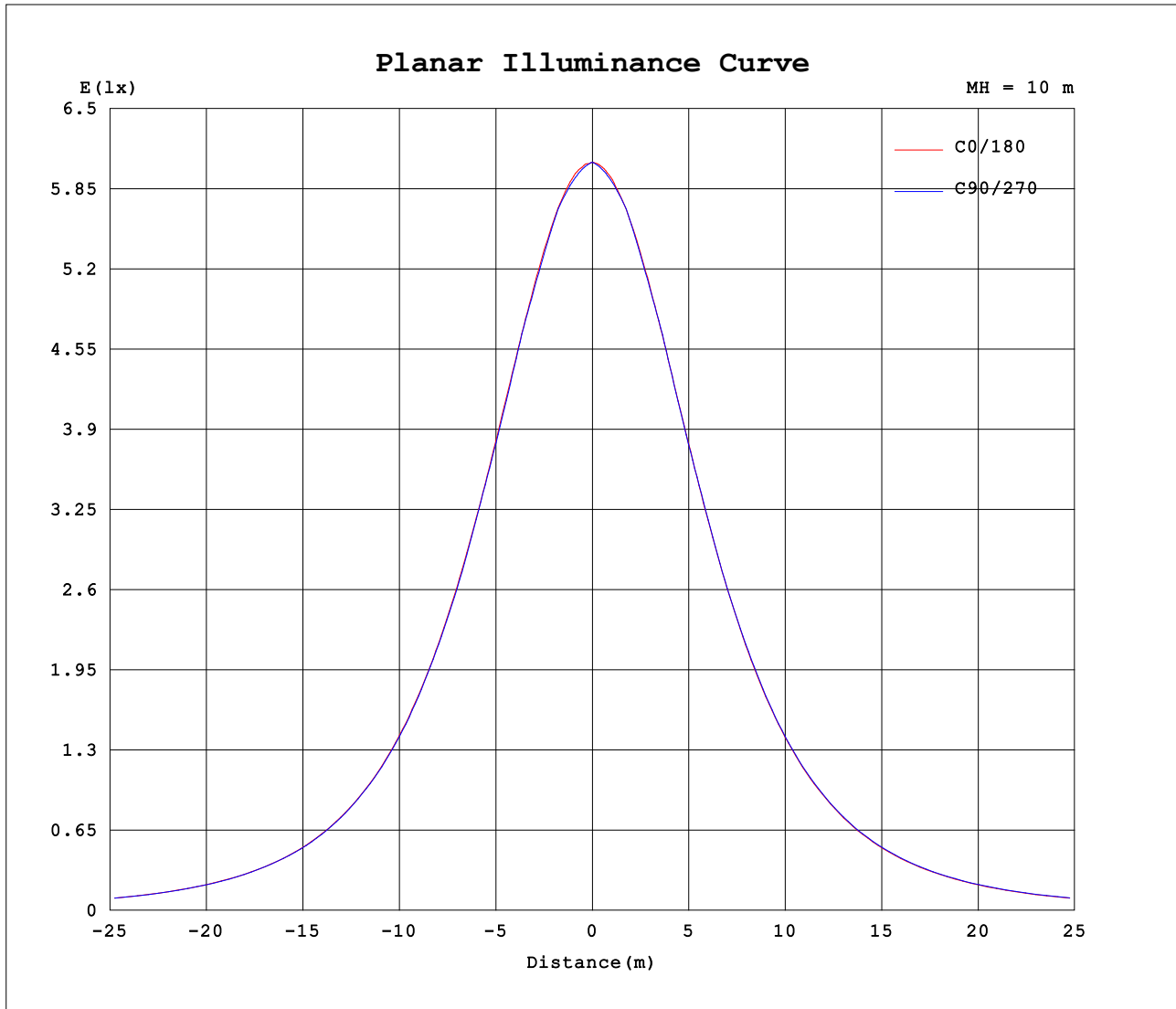
Test:U:220.0V I:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:



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:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE:Recessed	WEIGHT:1.8
SPEC.:3030	DIM.: 295*295*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	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607
5	604	604	603	603	603	602	602	602	601	601	601	601	601	601	601	601	601	601	601
10	596	595	595	594	594	593	593	593	594	594	594	595	595	595	595	596	596	596	595
15	582	581	581	580	580	580	581	582	583	582	581	581	580	580	580	580	580	580	579
20	564	562	562	562	562	563	564	563	562	561	562	562	562	562	562	563	563	563	563
25	540	539	538	538	540	540	539	538	538	539	540	539	538	538	538	537	537	537	537
30	511	510	509	510	511	510	509	510	511	510	509	509	509	510	510	510	510	510	510
35	478	476	477	479	477	476	478	477	476	476	477	478	477	476	476	476	475	475	475
40	441	439	441	440	439	441	440	439	440	441	440	439	439	439	439	439	440	440	440
45	401	399	401	400	400	399	399	401	399	399	399	399	399	399	399	399	398	398	398
50	358	357	358	356	357	357	358	356	356	357	356	356	356	356	356	357	357	357	356
55	313	313	312	312	312	313	311	311	311	311	311	312	312	312	311	311	311	311	311
60	267	268	266	266	267	265	265	265	265	266	265	265	265	265	265	265	266	266	266
65	220	221	219	220	218	218	218	219	218	218	218	218	219	219	219	219	219	219	219
70	173	172	172	171	171	172	171	171	171	171	171	172	172	172	172	173	173	173	173
75	125	124	124	123	123	123	123	123	123	124	125	125	126	126	127	127	127	128	128
80	78.2	77.5	76.3	75.4	75.0	75.2	75.6	75.9	76.4	77.1	77.9	78.6	79.4	80.4	81.2	81.7	82.1	82.4	82.7
85	32.7	23.8	26.5	29.0	28.8	28.9	29.0	26.8	23.8	20.5	17.0	13.5	10.3	7.38	4.83	2.76	1.24	0.31	0.00
90	0.74	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:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*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	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607
5	601	601	601	601	601	601	601	601	601	601	601	601	601	602	602	602	603	603	603
10	596	595	595	595	595	594	594	593	593	592	592	592	592	592	593	593	594	595	594
15	579	579	579	579	579	579	579	580	580	581	580	579	578	578	578	578	579	581	579
20	563	563	562	562	561	561	560	560	560	560	560	562	561	559	559	559	560	562	560
25	537	536	537	537	537	537	538	538	537	536	535	535	536	536	535	535	535	537	535
30	510	510	509	509	508	507	507	507	508	509	508	507	506	507	507	506	506	508	506
35	475	475	475	475	475	475	476	475	474	474	475	475	473	473	474	473	473	475	473
40	440	439	439	438	438	438	437	437	438	437	437	437	438	436	436	436	436	438	436
45	398	398	398	398	398	399	399	397	397	397	398	396	397	397	396	397	395	397	395
50	357	356	356	356	355	355	355	355	356	355	354	355	354	354	354	353	353	356	353
55	311	311	311	311	311	311	311	311	310	311	311	310	310	309	311	309	309	311	309
60	266	266	266	266	266	266	265	265	265	265	265	266	264	264	264	264	263	265	264
65	220	220	220	220	220	220	220	220	220	219	219	219	219	218	218	219	217	219	217
70	173	173	174	174	174	174	174	174	174	174	173	172	172	172	171	170	170	171	170
75	128	128	128	129	128	128	128	128	127	127	127	127	126	125	124	123	124	124	124
80	83.1	83.3	83.6	83.7	83.3	82.9	82.7	82.4	82.0	81.5	81.1	80.7	80.1	79.0	76.9	75.0	72.1	78.4	78.2
85	0.31	1.26	2.83	4.99	7.69	10.9	14.5	18.6	22.9	27.4	32.0	36.5	36.0	35.0	34.0	29.2	23.0	26.2	34.6
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	0.38	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:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*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	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607
5	602	602	602	601	601	601	601	601	601	601	600	600	600	600	601	601	601	601	601
10	593	593	592	592	592	592	592	592	593	593	594	594	594	594	595	595	595	595	595
15	578	578	578	578	579	579	580	580	579	579	579	579	579	579	579	579	579	579	579
20	559	559	559	560	561	560	559	559	559	560	560	561	561	562	562	563	563	563	563
25	534	535	536	536	535	535	535	537	538	537	537	536	536	536	536	536	536	536	536
30	506	507	507	506	507	508	509	507	507	507	507	508	508	509	510	510	510	510	510
35	473	474	473	473	475	475	474	474	475	476	476	475	475	475	475	475	475	475	475
40	436	436	436	438	437	437	438	439	438	438	438	439	439	440	440	440	440	440	440
45	397	396	398	397	397	399	398	398	399	400	400	400	399	399	399	399	399	399	399
50	354	355	355	355	356	355	356	358	357	357	357	357	357	358	358	358	358	358	358
55	309	312	310	311	311	313	313	312	312	313	313	313	313	313	313	313	313	313	313
60	264	265	265	266	267	267	267	267	267	268	268	268	268	269	269	269	268	268	268
65	219	219	220	221	220	221	221	222	222	223	223	223	223	223	222	222	222	222	222
70	171	172	173	174	174	175	176	176	176	176	176	176	176	176	176	176	176	176	175
75	125	126	127	128	129	129	129	130	130	131	131	131	131	131	131	131	130	130	130
80	79.8	80.8	81.8	82.0	82.5	83.0	83.5	83.9	84.4	84.8	85.1	85.5	85.8	85.7	85.5	85.2	84.8	84.5	84.2
85	36.0	36.8	37.5	37.9	38.0	33.2	28.4	23.7	19.2	15.0	11.2	7.91	5.13	2.90	1.29	0.32	0.00	0.32	1.27
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:0.1330A P:24.90W PF:0.8490 Lamp Flux:1734.24x1 lm		
NAME: LED PANEL	TYPE: Recessed	WEIGHT: 1.8
SPEC.: 3030	DIM.: 295*295*9	SERIAL No.:
MFR.:	SUR.: 0.36	PROTECTION ANGLE:

Table--4

UNIT: cd

C (DEG) \ γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	607	607	607	607	607	607	607	607	607	607	607	607	607	607	607				
5	601	601	601	601	601	601	601	601	601	602	602	602	603	603	604				
10	595	595	594	594	594	594	593	593	593	593	593	593	594	594	595				
15	579	579	580	580	580	581	581	582	581	580	580	580	580	581	581				
20	562	562	562	561	561	561	561	562	562	563	563	562	561	562	562				
25	537	537	537	538	539	539	538	538	538	538	539	540	539	538	539				
30	510	510	509	509	509	509	510	510	510	509	510	511	510	509	509				
35	476	476	476	477	478	477	476	476	477	478	476	477	479	477	476				
40	440	440	440	439	439	440	441	441	440	440	441	439	440	440	439				
45	400	400	400	400	400	400	399	400	402	400	400	400	400	402	400				
50	358	358	358	357	357	357	358	357	357	358	357	357	357	359	357				
55	313	313	313	314	314	313	313	313	313	313	314	313	313	313	313				
60	268	268	267	267	267	267	268	267	267	267	267	268	267	266	268				
65	222	221	221	221	221	221	220	220	221	220	220	220	222	220	222				
70	175	175	175	174	174	174	173	174	173	173	174	173	173	173	173				
75	129	129	129	128	128	127	127	126	125	125	125	125	124	125	125				
80	83.8	83.4	82.5	81.5	80.7	79.9	79.2	78.5	78.0	77.7	77.2	77.0	77.2	77.7	78.5				
85	2.83	4.97	7.59	10.6	14.0	17.6	21.2	24.8	28.1	30.7	30.6	30.5	30.7	30.8	32.1				
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:
Humidity: 65.0%
Test Distance: 9.890m [K=1.0000]
Remarks: 4100K