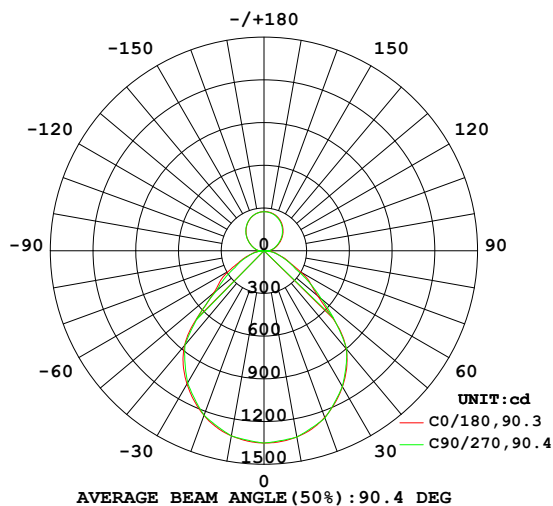


LUMINAIRE PHOTOMETRIC TEST REPORT

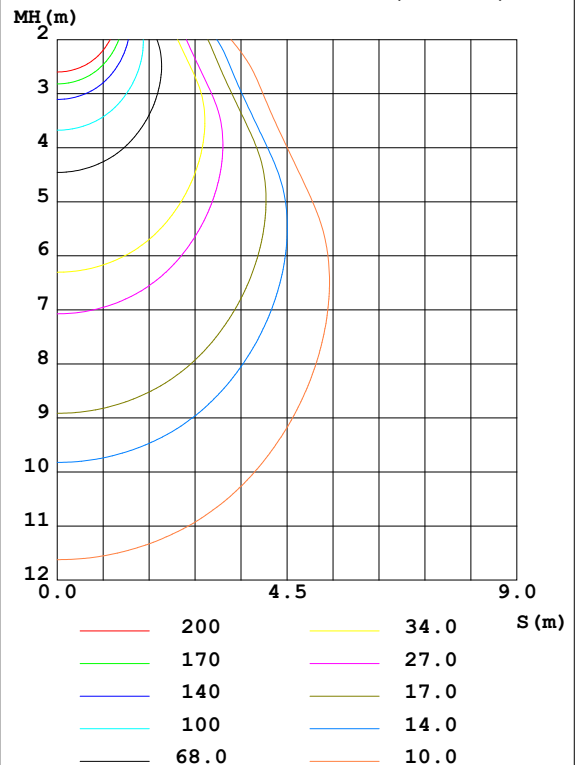
Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 157.95 lm/W			
MODEL	OSRAM-3000K	I _{max} (cd)	1351	S/MH (C0/180)	1.20
NOMINAL POWER (W)	24	LOR (%)	100.0	S/MH (C90/270)	1.19
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	3676.7	η UP,DN (C0-180)	11.5,39.2
NOMINAL FLUX (lm)	3676.66	CIE CLASS	SEMI-D.	η UP,DN (C180-360)	11.5,37.7
LAMPS INSIDE	1	η up (%)	23.1	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.0	η down (%)	76.9	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

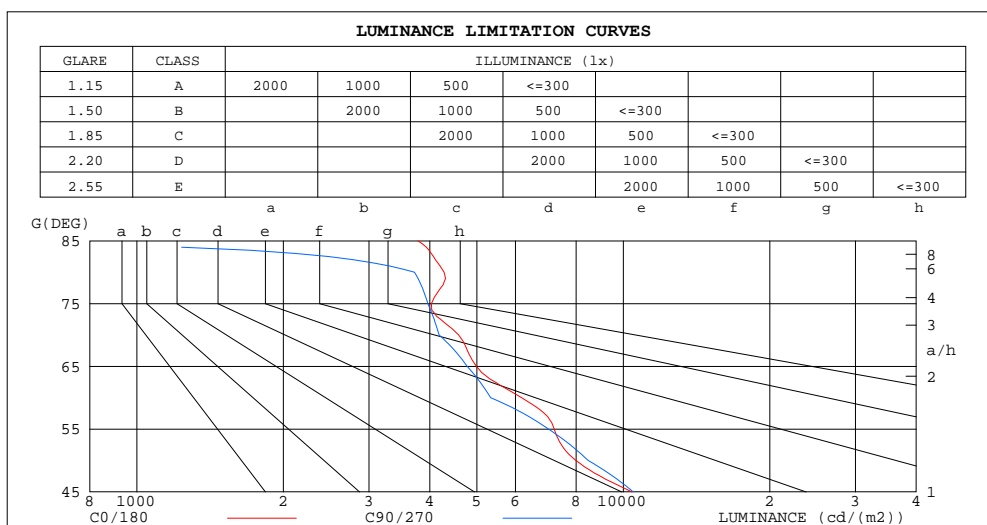
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	1328	1327	1329	1316	1320	1311	1321	1321	0- 10	127.2	127.2	3.46,3.46
20	1246	1252	1251	1225	1231	1211	1230	1239	10- 20	362.2	489.4	13.3,13.3
30	1102	1106	1100	1082	1081	1058	1072	1089	20- 30	536.2	1026	27.9,27.9
40	897.3	906.9	905.1	885.2	867.9	844.1	863.5	881.5	30- 40	616.9	1643	44.7,44.7
50	493.6	537.6	523.4	523.8	462.2	458.4	433.4	500.4	40- 50	533.8	2176	59.2,59.2
60	296.9	270.8	256.7	276.3	287.6	237.6	234.1	273.5	50- 60	332.0	2508	68.2,68.2
70	150.8	146.5	137.5	135.6	143.2	125.2	126.4	140.1	60- 70	191.4	2700	73.4,73.4
80	71.49	68.56	62.14	63.52	63.97	49.69	53.30	62.85	70- 80	104.5	2804	76.3,76.3
90	0	0	0	0	0.2525	0	0	0	80- 90	23.98	2828	76.9,76.9
100	62.97	50.44	58.52	57.37	57.14	56.67	57.14	60.77	90-100	47.10	2875	78.2,78.2
110	95.90	86.13	89.02	86.65	86.15	85.76	86.54	91.44	100-110	76.38	2952	80.3,80.3
120	132.6	129.4	125.5	122.2	120.8	120.4	122.8	128.1	110-120	105.1	3057	83.1,83.1
130	171.4	168.5	165.1	160.9	159.8	159.4	161.8	167.8	120-130	129.6	3187	86.7,86.7
140	207.3	204.6	201.4	197.6	196.6	196.1	198.5	204.3	130-140	141.2	3328	90.5,90.5
150	237.5	234.9	232.4	229.2	228.5	227.9	230.2	234.9	140-150	135.8	3463	94.2,94.2
160	259.8	257.6	255.9	253.6	253.3	252.4	254.3	257.7	150-160	112.7	3576	97.3,97.3
170	272.6	270.9	270.2	269.1	269.3	268.2	269.3	271.4	160-170	74.48	3651	99.3,99.3
180	275.3	275.3	275.3	275.3	275.3	275.3	275.3	275.3	170-180	25.99	3677	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3783	0
80	4281	3721
75	4032	3964
70	4586	4180
65	4987	4775
60	6174	5338
55	7210	7018
50	7985	8467
45	10408	10485

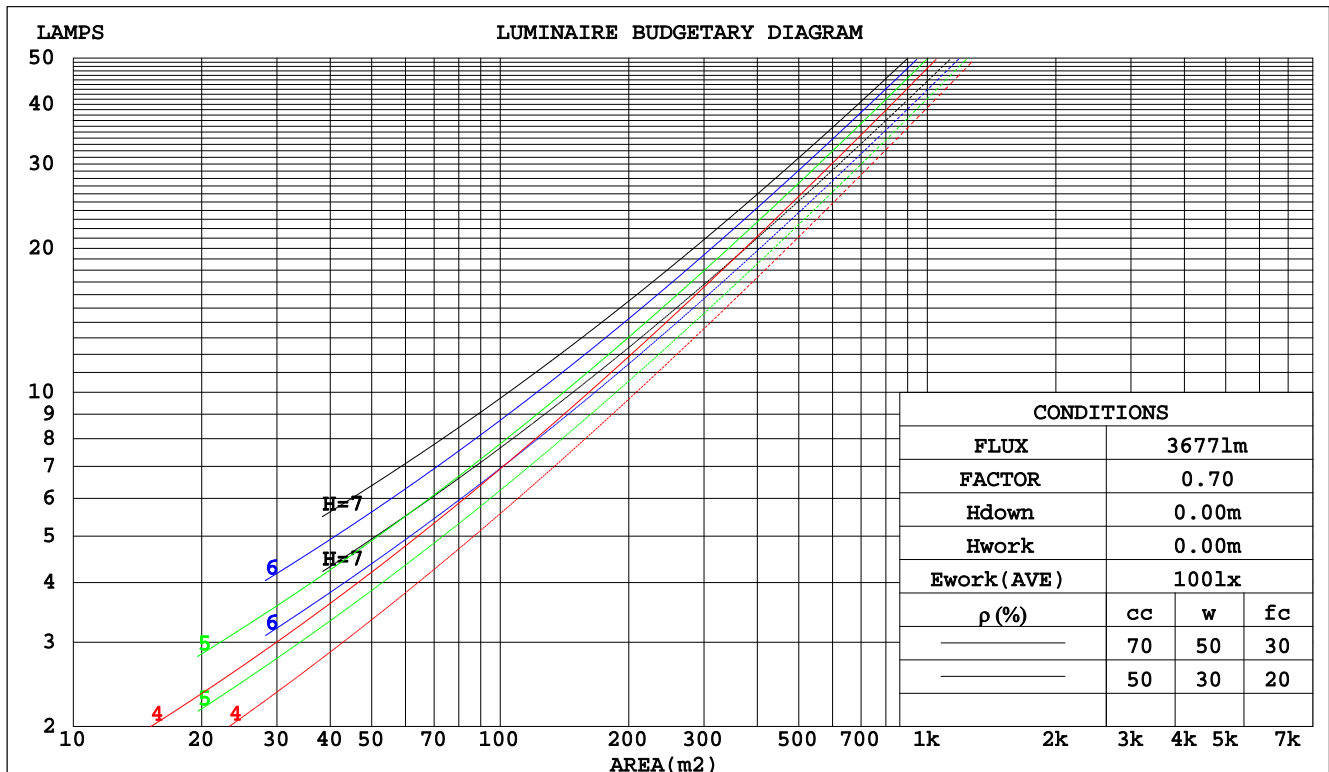
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	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	1.14	1.14	1.14	1.08	1.08	1.08	.98	.98	.98	.89	.89	.89	.81	.81	.81	.77
1.0	1.01	.97	.94	.97	.93	.90	.88	.86	.83	.80	.79	.77	.73	.72	.71	.67
2.0	.90	.84	.79	.86	.81	.76	.79	.75	.71	.72	.69	.66	.66	.64	.61	.58
3.0	.80	.73	.67	.77	.70	.65	.71	.65	.61	.65	.61	.57	.60	.56	.54	.51
4.0	.72	.64	.58	.69	.62	.56	.64	.58	.53	.59	.54	.50	.54	.50	.47	.45
5.0	.65	.57	.51	.62	.55	.49	.58	.51	.47	.53	.48	.44	.49	.45	.42	.39
6.0	.58	.51	.45	.56	.49	.44	.52	.46	.42	.49	.43	.39	.45	.41	.37	.35
7.0	.53	.45	.40	.51	.44	.39	.48	.42	.37	.45	.39	.35	.41	.37	.34	.32
8.0	.49	.41	.36	.47	.40	.35	.44	.38	.33	.41	.36	.32	.38	.34	.30	.28
9.0	.45	.37	.32	.43	.36	.32	.41	.35	.30	.38	.33	.29	.35	.31	.28	.26
10.0	.41	.34	.29	.40	.33	.29	.38	.32	.28	.35	.30	.27	.33	.29	.25	.24



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

WEC AND CCEC

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding 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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.259	.147	.047	.245	.140	.044	.219	.126	.040	.195	.113	.036	.173	.100	.032		
2.0	.246	.135	.041	.234	.129	.040	.210	.117	.036	.189	.106	.033	.169	.095	.030		
3.0	.231	.123	.037	.219	.117	.035	.198	.107	.033	.179	.098	.030	.160	.089	.027		
4.0	.216	.112	.033	.205	.107	.032	.186	.099	.029	.168	.090	.027	.152	.082	.025		
5.0	.202	.103	.030	.192	.099	.029	.175	.091	.027	.158	.084	.025	.143	.077	.023		
6.0	.189	.095	.027	.180	.091	.026	.164	.084	.024	.149	.078	.023	.135	.071	.021		
7.0	.177	.088	.025	.170	.084	.024	.155	.078	.023	.141	.072	.021	.128	.066	.020		
8.0	.167	.082	.023	.160	.079	.022	.146	.073	.021	.133	.068	.019	.121	.062	.018		
9.0	.157	.076	.021	.151	.073	.021	.138	.068	.019	.126	.063	.018	.115	.058	.017		
10.0	.149	.071	.020	.143	.069	.019	.131	.064	.018	.120	.060	.017	.109	.055	.016		

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.366	.366	.366	.313	.313	.313	.214	.214	.214	.123	.123	.123	.039	.039	.039	
1.0	.354	.334	.316	.303	.287	.272	.207	.197	.188	.119	.114	.109	.038	.037	.035	
2.0	.345	.311	.282	.295	.267	.244	.202	.185	.170	.117	.108	.100	.037	.035	.032	
3.0	.336	.293	.259	.288	.253	.225	.198	.176	.158	.114	.103	.093	.037	.033	.030	
4.0	.329	.280	.244	.282	.242	.212	.194	.169	.149	.112	.099	.088	.036	.032	.029	
5.0	.322	.270	.232	.276	.234	.202	.190	.163	.143	.110	.096	.085	.036	.031	.028	
6.0	.315	.262	.224	.271	.227	.195	.187	.159	.138	.108	.093	.082	.035	.031	.027	
7.0	.309	.256	.218	.266	.221	.190	.184	.155	.135	.107	.091	.080	.034	.030	.026	
8.0	.303	.250	.213	.261	.217	.186	.181	.152	.132	.105	.090	.079	.034	.029	.026	
9.0	.298	.245	.210	.257	.213	.183	.178	.150	.130	.104	.088	.077	.034	.029	.026	
10.0	.293	.241	.207	.253	.209	.180	.175	.147	.128	.102	.087	.076	.033	.029	.025	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm										
NAME: GAME 350-U-20W-830					TYPE:Ceiling light			WEIGHT:		
SPEC.:3000K					DIM.: ϕ 350mm*H78mm			SERIAL No.:		
MFR.: NEKO LIGHTING AG					SUR.: ϕ 350mm			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	13.5	14.6	14.0	15.1	15.7	13.4	14.5	14.0	15.1	15.7
3H	14.1	15.1	14.7	15.7	16.3	14.1	15.1	14.7	15.7	16.3
4H	14.4	15.3	15.0	15.9	16.6	14.4	15.3	15.0	15.9	16.6
6H	14.7	15.5	15.3	16.1	16.9	14.6	15.5	15.3	16.1	16.8
8H	14.8	15.6	15.4	16.2	16.9	14.7	15.5	15.3	16.1	16.9
12H	14.8	15.6	15.4	16.2	17.0	14.6	15.4	15.3	16.0	16.8
4H 2H	13.6	14.5	14.2	15.1	15.8	13.5	14.5	14.2	15.1	15.8
3H	14.4	15.2	15.1	15.8	16.6	14.4	15.2	15.1	15.9	16.6
4H	14.8	15.5	15.5	16.2	17.0	14.9	15.6	15.6	16.3	17.0
6H	15.2	15.8	15.9	16.5	17.3	15.3	15.9	16.0	16.6	17.4
8H	15.4	16.0	16.1	16.7	17.5	15.4	15.9	16.1	16.6	17.5
12H	15.5	16.0	16.2	16.7	17.6	15.3	15.8	16.0	16.6	17.4
8H 4H	14.9	15.5	15.6	16.2	17.0	15.0	15.5	15.7	16.2	17.1
6H	15.4	15.9	16.2	16.6	17.5	15.5	16.0	16.3	16.8	17.6
8H	15.7	16.1	16.4	16.8	17.7	15.7	16.1	16.4	16.9	17.7
12H	15.8	16.2	16.6	17.0	17.9	15.6	16.0	16.4	16.8	17.7
12H 4H	14.9	15.4	15.6	16.1	17.0	14.9	15.5	15.7	16.2	17.0
6H	15.5	15.9	16.2	16.6	17.5	15.6	16.0	16.3	16.7	17.6
8H	15.7	16.1	16.5	16.9	17.8	15.7	16.1	16.5	16.9	17.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.5 / - 0.6					+ 0.4 / - 0.5				
1.5H	+ 0.4 / - 0.5					+ 0.3 / - 0.4				
2.0H	+ 1.2 / - 0.7					+ 1.1 / - 1.0				

CIE Pub.117, 3677 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 4.5$)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

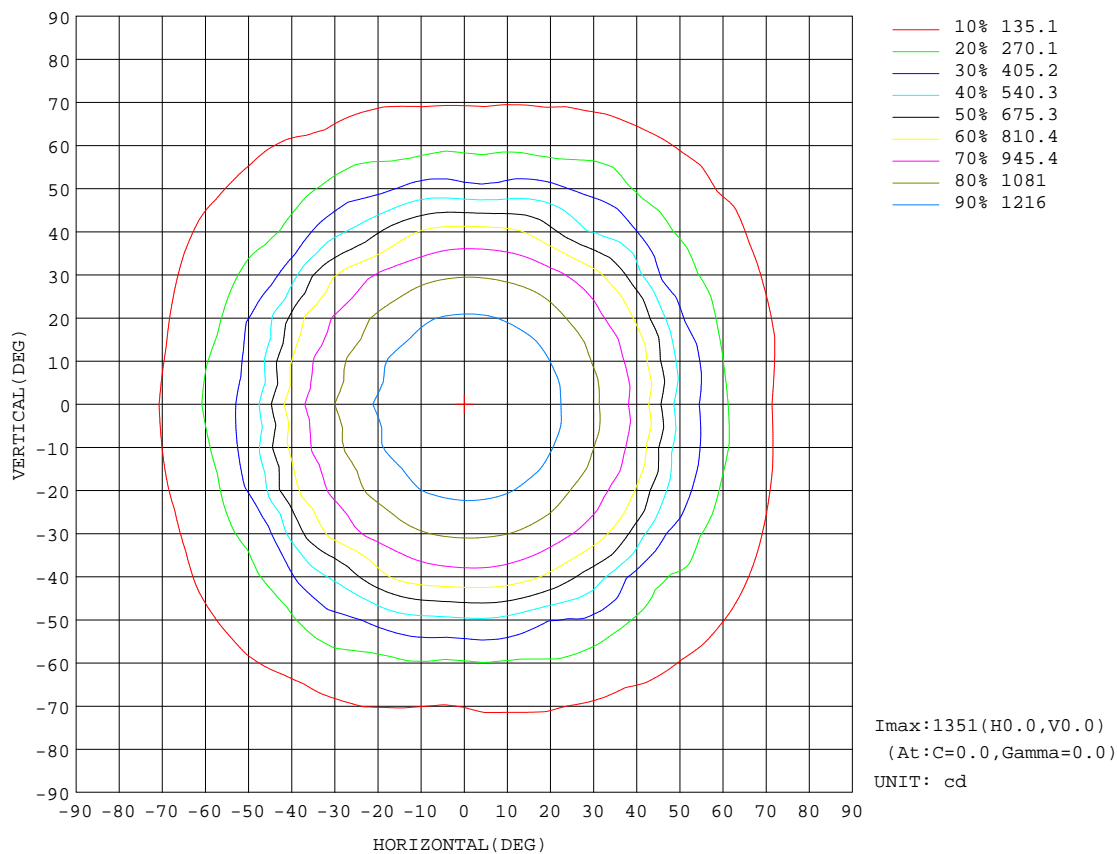
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	47	41	56	46	40	53	45	39	33
0.80	67	56	50	65	55	49	61	53	48	40
1.00	75	64	58	72	63	57	68	62	55	47
1.25	81	72	65	78	70	64	73	66	61	52
1.50	86	77	70	83	75	69	77	71	66	55
2.00	92	84	78	88	81	76	82	76	72	60
2.50	95	88	83	92	85	80	84	80	76	63
3.00	98	92	87	94	89	84	87	83	79	65
4.00	102	97	92	97	93	89	90	86	83	68
5.00	104	99	96	99	96	92	91	88	86	69
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: MEDIUM
 Temperature:25.3DEG
 Operators:Myles
 Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:5.850m [K=1.7094]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

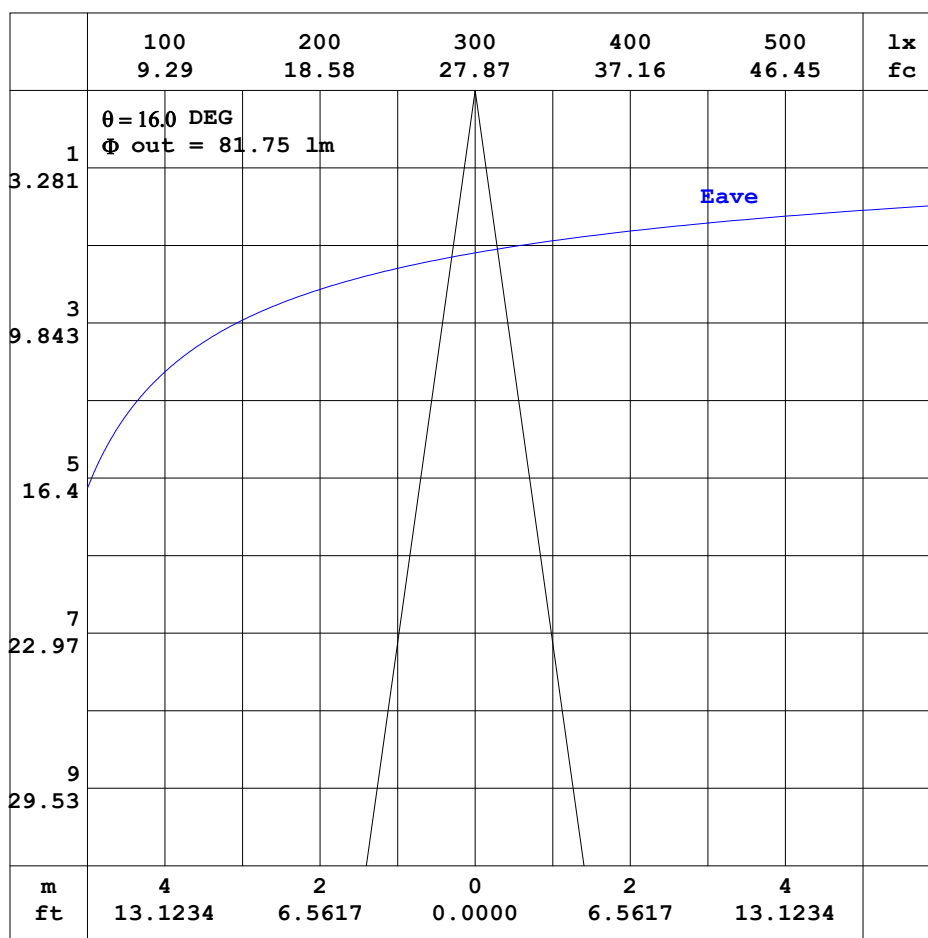


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

AAI CURVES

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:



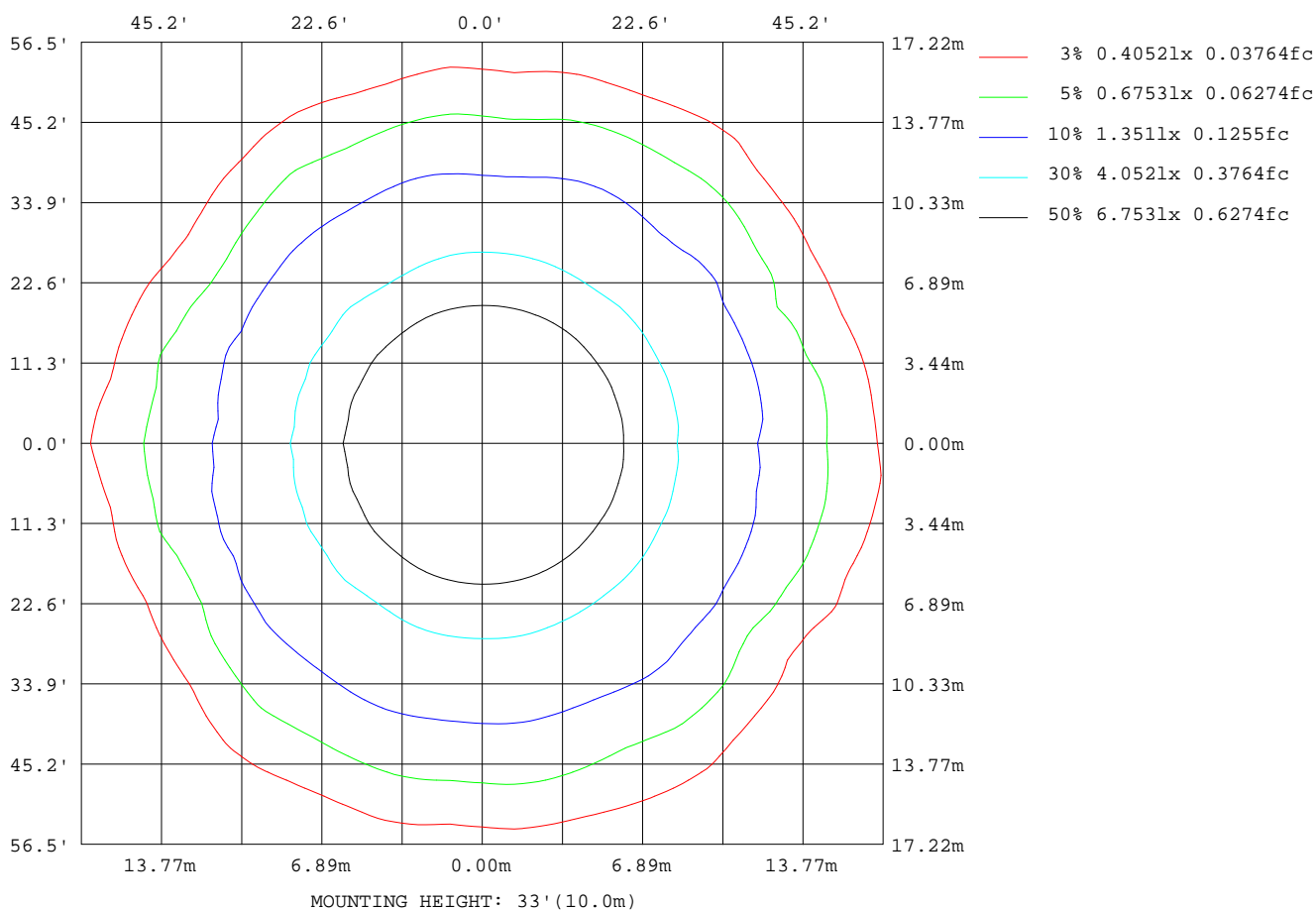
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

ISOLUX DIAGRAM

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

LED Avg.L Report

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding Angle:

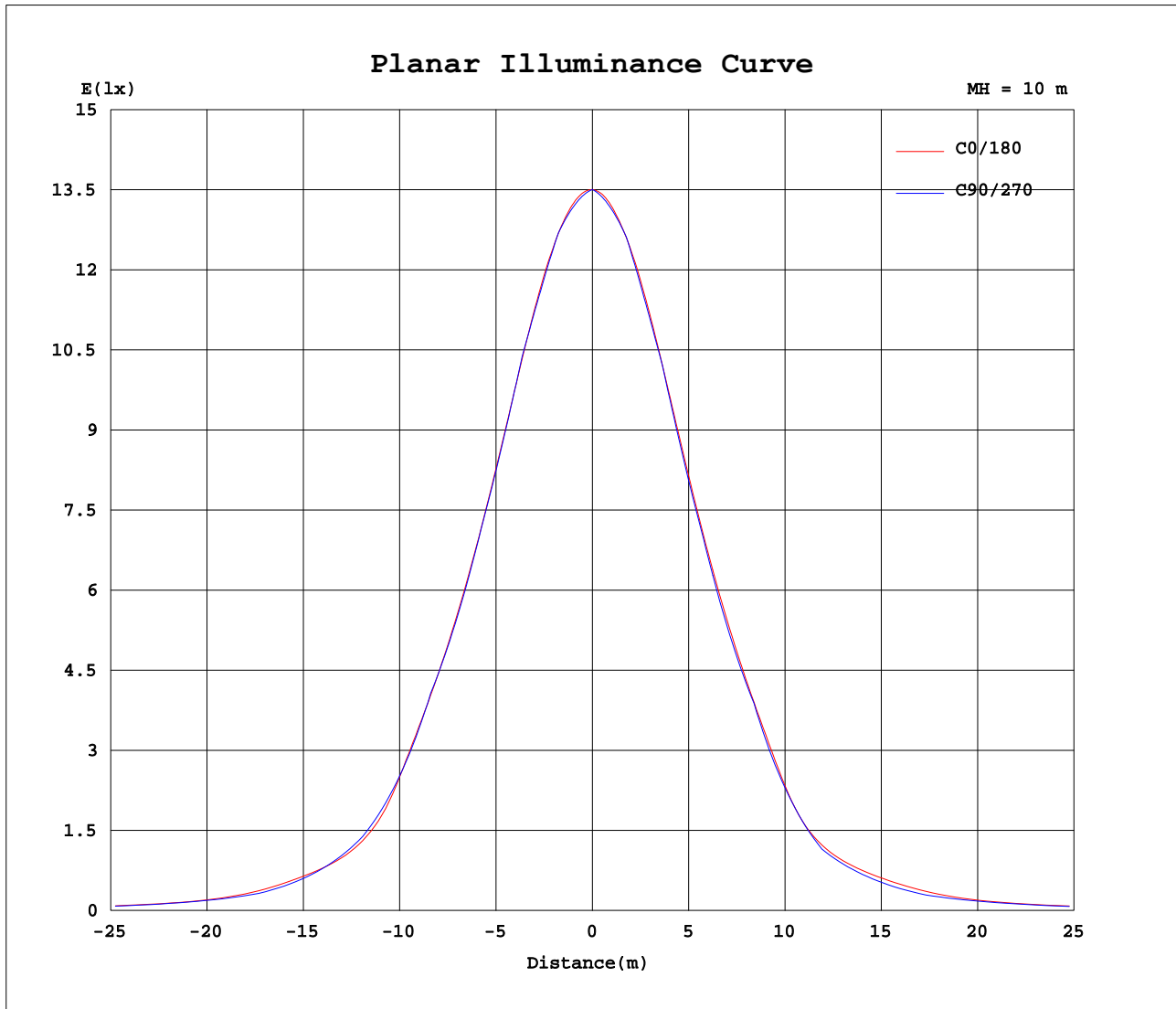
AvgL	cd/m2
L_0~180 (65) av	4918
L_0~180 (75) av	3906
L_0~180 (85) av	3435
L_90~270 (65) av	4634
L_90~270 (75) av	3798
L_90~270 (85) av	0
L_45 (65) av	4647
L_45 (75) av	3825
L_45 (85) av	2071

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Myles
Test Date: 2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 5.850m [K=1.7094]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: φ350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ350mm	Shielding 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	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351
5	1346	1345	1344	1344	1343	1343	1342	1342	1342	1342	1341	1341	1341	1340	1340	1340	1339	1339	1339
10	1328	1327	1327	1327	1327	1327	1328	1327	1327	1327	1327	1328	1328	1329	1329	1329	1329	1329	1329
15	1296	1296	1297	1298	1299	1299	1299	1300	1301	1300	1298	1297	1295	1294	1293	1292	1291	1290	1289
20	1246	1247	1249	1252	1250	1251	1252	1251	1251	1252	1251	1249	1249	1249	1249	1249	1250	1251	1251
25	1180	1182	1188	1186	1184	1184	1186	1189	1185	1184	1185	1185	1186	1185	1183	1181	1179	1177	1175
30	1102	1108	1112	1107	1106	1109	1108	1104	1103	1106	1108	1110	1109	1108	1106	1104	1103	1102	1100
35	1011	1021	1022	1017	1020	1018	1010	1013	1018	1018	1017	1019	1016	1014	1014	1012	1009	1005	1002
40	897	916	910	913	918	907	909	915	912	907	896	897	897	898	902	907	909	908	905
45	708	754	724	765	751	763	764	765	760	747	729	731	739	736	734	734	730	721	713
50	494	517	511	542	543	549	536	555	543	538	560	561	544	526	524	531	536	532	523
55	398	407	413	412	404	373	363	326	356	400	412	408	382	371	380	393	402	400	387
60	297	314	302	293	273	284	256	255	265	271	280	300	298	293	282	270	268	269	257
65	203	212	194	178	196	198	200	196	203	200	183	177	210	223	215	205	207	208	194
70	151	158	158	150	148	147	146	145	145	147	141	145	154	158	157	152	149	149	137
75	100	104	106	108	102	103	103	105	104	101	105	112	111	112	116	113	110	106	98.7
80	71.5	77.4	76.4	72.6	68.7	66.0	65.1	67.5	67.7	68.6	72.8	77.3	76.9	76.9	78.9	75.1	72.4	66.1	62.1
85	31.7	28.1	30.3	32.1	33.8	32.5	31.7	28.1	23.7	19.8	17.0	14.0	10.4	7.22	4.75	2.55	1.09	0.25	0.00
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
95	48.0	44.5	41.8	39.9	39.1	38.9	38.8	38.2	37.5	36.9	36.2	35.9	35.9	36.9	38.3	39.9	41.8	43.6	45.0
100	63.0	59.7	57.1	55.0	53.7	52.9	52.3	51.6	51.0	50.4	49.6	49.1	49.0	50.2	51.8	53.7	55.6	57.2	58.5
105	79.4	77.0	75.0	73.3	72.1	71.2	70.3	69.0	67.8	66.7	66.2	66.1	66.5	68.3	70.3	72.1	72.8	73.2	73.2
110	95.9	94.0	92.4	91.1	90.2	89.4	88.7	87.7	86.8	86.1	85.7	85.5	85.8	87.1	88.5	89.7	89.8	89.5	89.0
115	113	113	112	112	111	110	109	108	107	107	107	108	109	108	108	108	107	107	106
120	133	132	132	131	131	131	131	130	130	129	129	129	128	128	127	127	126	126	126
125	152	152	151	151	151	151	151	150	150	149	149	149	149	148	147	147	146	146	146
130	171	171	171	170	170	170	170	170	169	169	168	168	168	167	167	166	166	165	165
135	190	190	189	189	189	189	189	188	188	187	187	187	187	186	185	185	184	184	184
140	207	207	207	206	206	206	206	206	205	205	204	204	204	203	203	202	202	202	201
145	223	223	222	222	222	222	222	222	221	221	220	220	220	220	219	218	218	218	218
150	238	237	236	236	236	236	236	236	235	235	235	235	235	234	234	233	233	233	232
155	250	249	249	248	248	248	248	248	248	247	247	247	247	247	246	246	246	245	245
160	260	259	259	258	258	258	258	258	258	258	257	257	257	257	256	256	256	256	256
165	267	267	266	266	266	266	266	266	266	266	265	265	265	265	265	265	264	264	264
170	273	272	271	271	271	271	271	271	271	271	271	271	271	271	271	270	270	270	270
175	275	275	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274
180	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding 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	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351
5	1338	1338	1337	1337	1337	1336	1336	1336	1336	1336	1336	1336	1337	1337	1338	1339	1340	1342	1340
10	1328	1327	1326	1325	1323	1321	1319	1317	1316	1314	1312	1310	1311	1311	1313	1315	1317	1320	1316
15	1287	1286	1285	1283	1283	1283	1283	1285	1287	1288	1284	1279	1275	1271	1272	1275	1279	1284	1278
20	1249	1247	1245	1241	1238	1234	1230	1226	1225	1226	1229	1234	1228	1220	1214	1216	1222	1231	1220
25	1173	1171	1169	1169	1169	1170	1172	1172	1164	1156	1148	1151	1157	1157	1146	1140	1149	1162	1147
30	1100	1098	1095	1093	1091	1087	1081	1080	1082	1087	1077	1065	1064	1073	1071	1059	1065	1081	1063
35	1000	998	998	998	998	1000	1005	995	985	979	984	986	971	970	985	970	968	988	964
40	903	903	902	897	885	867	854	860	885	884	864	867	883	861	866	864	840	868	829
45	710	715	726	733	733	725	702	680	688	720	743	707	708	723	669	691	620	661	594
50	518	523	538	545	540	528	518	518	524	534	515	509	473	498	490	490	461	462	440
55	382	394	400	395	388	383	391	405	390	376	356	320	316	330	368	362	373	377	362
60	251	270	279	271	272	283	298	298	276	255	246	252	247	253	244	242	261	288	273
65	192	205	204	197	199	207	209	198	186	186	189	187	191	182	177	167	174	197	194
70	132	139	146	148	152	151	146	137	136	138	137	134	133	132	128	130	137	143	131
75	96.6	100	103	107	109	105	99.8	98.8	97.2	96.0	94.1	97.3	93.7	91.1	87.0	89.3	93.2	94.1	93.3
80	61.1	62.1	63.9	67.2	69.6	70.3	67.2	67.4	63.5	59.5	57.5	55.9	56.6	56.7	55.7	56.2	58.4	64.0	57.9
85	0.23	0.94	2.15	3.99	6.45	9.43	12.3	16.3	19.1	20.8	23.7	25.2	23.9	22.7	22.7	19.0	14.1	25.9	18.8
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	0.25	0.00
95	45.3	45.2	45.0	44.9	44.9	44.8	44.7	44.6	44.5	44.5	44.6	44.6	44.6	44.5	44.4	44.5	44.5	44.4	44.2
100	58.6	58.3	57.8	57.8	57.8	57.8	57.7	57.5	57.4	57.4	57.5	57.5	57.4	57.1	57.0	57.0	57.1	57.1	57.0
105	73.0	72.8	72.4	72.2	72.0	71.9	71.8	71.7	71.7	71.6	71.5	71.4	71.3	71.2	71.1	71.1	71.1	71.0	70.8
110	88.7	88.4	88.0	87.7	87.5	87.2	87.0	86.8	86.7	86.6	86.5	86.4	86.3	86.2	86.1	86.2	86.2	86.2	85.9
115	106	106	105	105	104	104	104	104	103	103	103	103	103	103	102	103	103	103	102
120	125	125	124	124	123	123	123	122	122	122	122	121	121	121	121	121	121	121	120
125	145	144	144	144	143	143	143	142	142	142	142	141	141	141	140	140	141	141	140
130	164	164	163	163	163	163	162	161	161	161	161	161	160	160	159	160	160	160	159
135	183	182	182	182	181	181	181	180	180	180	180	180	179	179	178	178	179	179	178
140	201	200	200	199	199	199	199	198	198	197	197	197	197	197	196	196	196	197	196
145	217	217	216	216	216	216	215	215	214	214	214	214	214	213	213	213	213	213	213
150	232	231	231	231	231	230	230	230	229	229	229	229	229	228	228	228	228	228	228
155	245	244	244	244	244	243	243	243	242	242	242	242	242	242	242	242	242	242	241
160	256	255	255	255	255	254	254	254	254	254	254	254	253	253	253	253	253	253	253
165	264	264	263	263	263	263	263	263	263	263	263	263	262	262	262	262	262	263	262
170	270	270	270	270	270	269	269	269	269	269	269	269	269	269	269	269	269	269	269
175	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	274	274	273
180	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm		
NAME: GAME 350-U-20W-830	TYPE:Ceiling light	WEIGHT:
SPEC.:3000K	DIM.: ϕ 350mm*H78mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: ϕ 350mm	Shielding 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	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351
5	1339	1337	1336	1335	1335	1334	1334	1333	1333	1333	1333	1333	1334	1334	1334	1335	1335	1335	1336
10	1313	1311	1309	1308	1307	1308	1309	1311	1313	1314	1316	1317	1318	1319	1320	1321	1321	1321	1322
15	1272	1268	1267	1269	1273	1277	1281	1279	1276	1274	1272	1272	1272	1272	1273	1274	1275	1276	1277
20	1212	1208	1213	1220	1224	1218	1213	1211	1212	1215	1219	1222	1224	1226	1228	1229	1230	1231	1230
25	1136	1140	1149	1147	1139	1133	1139	1146	1153	1152	1149	1148	1147	1147	1147	1148	1150	1152	1154
30	1053	1063	1063	1050	1049	1058	1065	1058	1055	1055	1060	1065	1068	1069	1070	1071	1072	1073	1074
35	963	975	955	954	966	958	950	954	963	973	961	955	955	958	962	965	967	969	972
40	848	842	832	856	828	820	841	844	810	788	793	809	828	845	858	864	864	863	864
45	645	618	665	645	635	668	654	634	618	607	623	639	651	661	665	660	650	649	660
50	454	463	468	432	432	427	443	458	463	461	453	454	466	477	474	455	433	430	451
55	350	366	332	319	292	287	302	314	334	352	339	329	331	339	347	351	337	328	342
60	244	230	236	234	228	220	232	238	233	241	257	253	233	224	232	245	234	230	248
65	174	161	165	174	169	176	176	174	161	158	180	189	179	172	174	185	183	177	187
70	132	133	129	126	122	123	125	125	123	122	127	132	136	133	129	127	126	126	132
75	90.9	87.5	83.9	82.7	87.4	85.1	83.3	85.2	87.8	91.9	90.8	89.4	95.4	95.4	92.1	89.9	90.4	89.6	91.7
80	57.9	54.7	53.9	50.7	51.4	49.6	48.8	49.7	52.9	57.0	57.5	57.2	59.8	57.4	55.3	52.1	53.3	53.4	52.8
85	21.1	20.3	18.1	17.1	16.4	15.9	14.7	13.4	11.5	9.91	7.49	5.27	3.55	1.92	0.83	0.20	0.00	0.20	0.79
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
95	44.0	43.7	43.6	43.5	43.5	43.6	43.7	43.8	43.8	43.7	43.7	43.9	44.0	44.2	44.3	44.4	44.5	44.7	44.9
100	56.7	56.5	56.4	56.3	56.3	56.4	56.6	56.7	56.6	56.6	56.5	56.7	56.9	57.1	57.1	57.1	57.1	57.4	57.8
105	70.6	70.4	70.4	70.5	70.6	70.6	70.6	70.7	70.7	70.7	70.7	70.8	70.9	71.1	71.1	71.2	71.4	71.6	72.0
110	85.6	85.4	85.4	85.5	85.6	85.7	85.7	85.8	85.8	85.8	85.8	85.8	85.9	86.0	86.1	86.3	86.5	86.9	87.3
115	102	102	102	102	102	102	102	102	102	102	102	102	102	102	103	103	104	104	105
120	120	120	120	120	120	120	120	120	121	121	121	121	121	122	122	122	123	123	124
125	140	139	139	139	139	140	140	140	140	140	140	141	141	142	142	142	142	143	144
130	159	159	158	158	158	159	159	159	159	159	159	160	161	161	161	162	162	163	163
135	178	177	177	177	177	178	178	178	178	178	178	179	179	180	180	180	181	181	182
140	196	195	195	195	195	195	196	196	196	196	196	197	197	198	198	198	199	199	200
145	212	212	212	212	212	212	212	213	213	213	213	213	214	214	215	215	215	216	216
150	227	227	227	227	227	227	228	228	228	228	228	228	229	229	230	230	230	231	231
155	241	240	240	240	240	241	241	241	241	241	241	242	242	243	243	243	243	244	244
160	252	252	252	252	252	252	252	252	252	253	253	253	253	254	254	254	254	255	255
165	261	261	261	261	261	261	261	261	262	262	262	262	262	263	263	263	263	263	264
170	268	268	268	268	268	268	268	268	268	268	268	268	269	269	269	269	269	270	270
175	273	272	272	272	272	272	272	272	272	272	273	273	273	273	273	273	273	273	273
180	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.1057A P:23.28W PF:0.9627 Freq:49.70Hz Lamp Flux:3676.66x1 lm																	
NAME: GAME 350-U-20W-830									TYPE:Ceiling light						WEIGHT:		
SPEC.:3000K									DIM.: ϕ 350mm*H78mm						SERIAL No.:		
MFR.: NEKO LIGHTING AG									SUR.: ϕ 350mm						Shielding Angle:		

Table--4

UNIT: cd

γ (DEG) \ C (DEG)	C (DEG)																			
	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355					
0	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351	1351					
5	1336	1336	1337	1337	1338	1339	1339	1340	1340	1341	1341	1342	1343	1343	1344					
10	1322	1322	1321	1321	1321	1321	1321	1321	1322	1323	1323	1323	1324	1325	1326					
15	1279	1280	1282	1283	1285	1287	1289	1292	1292	1292	1293	1295	1294	1294	1295					
20	1231	1230	1230	1231	1233	1236	1239	1240	1241	1243	1244	1245	1248	1246	1245					
25	1157	1159	1162	1165	1167	1169	1169	1173	1177	1175	1175	1176	1179	1184	1180					
30	1076	1078	1082	1086	1090	1090	1089	1089	1091	1096	1098	1096	1098	1106	1104					
35	975	979	984	989	996	997	1000	1002	998	997	1005	1008	1006	1014	1017					
40	865	862	856	849	848	857	882	891	895	892	895	907	907	909	915					
45	682	699	695	669	645	657	694	724	733	741	749	747	767	738	760					
50	490	518	530	526	509	495	500	546	558	515	524	527	538	535	536					
55	366	377	383	383	387	400	407	390	370	367	328	362	370	407	412					
60	253	249	257	278	297	302	274	261	270	264	270	266	279	281	286					
65	190	179	179	196	204	202	196	191	192	200	202	200	192	180	186					
70	135	135	141	144	148	143	140	140	141	142	137	144	148	154	158					
75	94.3	96.3	102	98.2	96.6	96.5	97.2	98.5	98.8	102	102	101	101	102	104					
80	55.4	57.9	62.0	63.7	62.4	64.1	62.8	61.1	60.7	59.7	62.4	62.2	67.1	70.9	73.0					
85	1.86	3.41	5.62	8.33	10.9	14.6	17.1	19.3	22.4	25.5	26.7	28.5	29.6	31.5	36.6					
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					
95	45.1	45.3	45.5	45.8	46.2	46.7	47.2	47.6	47.9	48.3	49.0	49.6	49.9	49.7	49.0					
100	58.2	58.4	58.7	59.0	59.6	60.2	60.8	61.2	61.6	62.0	62.6	63.2	63.7	63.7	63.5					
105	72.4	72.8	73.2	73.7	74.3	74.9	75.5	76.1	76.6	77.2	77.8	78.3	78.8	79.1	79.3					
110	87.8	88.3	88.9	89.5	90.1	90.8	91.4	92.1	92.7	93.4	94.0	94.6	95.1	95.5	95.7					
115	105	106	106	107	108	108	109	110	110	111	111	112	112	113	113					
120	124	125	126	126	127	127	128	129	129	130	131	132	132	132	133					
125	145	145	145	146	147	148	148	149	149	150	150	151	152	152	152					
130	164	164	165	165	166	167	168	168	169	169	170	171	171	171	172					
135	183	183	184	184	185	186	187	187	187	188	189	189	190	190	190					
140	201	201	201	202	203	203	204	205	205	205	206	207	207	207	207					
145	217	218	218	218	219	220	220	221	221	221	222	223	223	223	223					
150	232	232	233	233	234	234	235	235	236	236	236	237	237	238	238					
155	245	245	245	246	246	247	247	248	248	248	249	249	249	250	250					
160	256	256	256	256	257	257	258	258	258	258	259	259	259	260	260					
165	264	264	265	265	265	265	266	266	266	266	267	267	267	267	267					
170	270	270	270	271	271	271	271	272	272	272	272	272	272	272	273					
175	274	274	274	274	274	274	274	274	275	275	275	275	275	275	275					
180	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275					

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Myles
Test Date:2019-11-19

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.850m [K=1.7094]
Remarks: