



Light Output Ratio:	100.0%	
Luminaire Power:	19.7 W	
SHR Nominal:	1.75	Calculated using the TM5
SHR Maximum:	1.75	fine grid method.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Rinno
Test Date: 2025-03-04

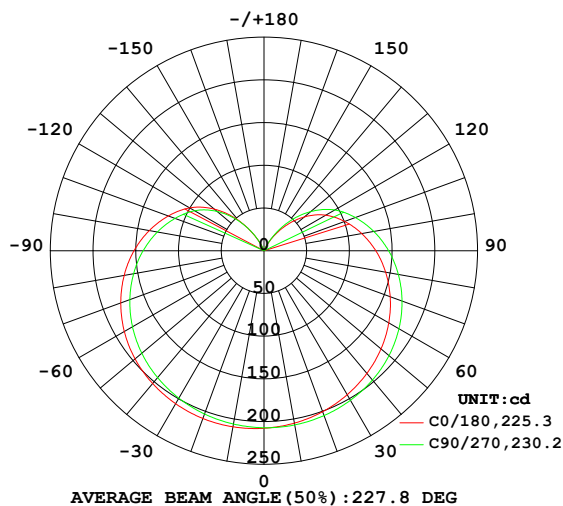
γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

LUMINAIRE PHOTOMETRIC TEST REPORT

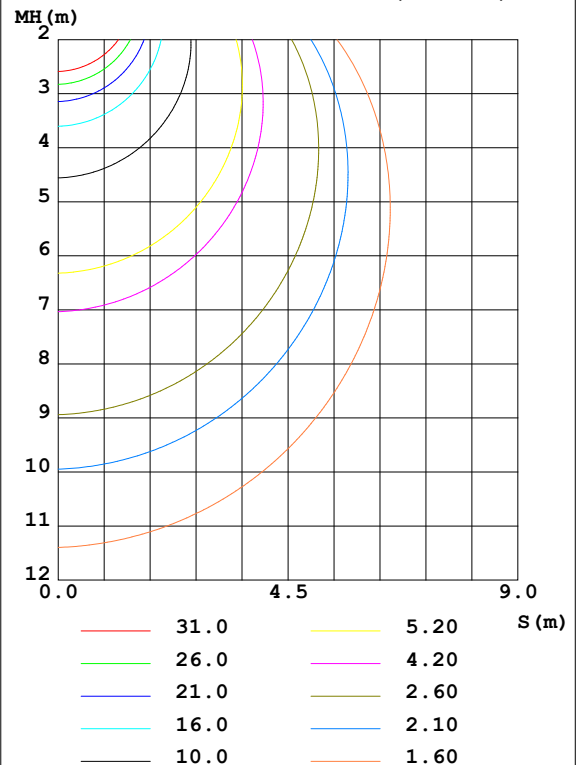
NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: ϕ 190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.: ϕ 100mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 82.90 lm/W
MODEL	Bridgelux 2835 SMD	Imax(cd)	209.4	S/MH(C0/180)	1.51	
NOMINAL POWER(W)	19.7	LOR(%)	100.0	S/MH(C90/270)	1.46	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1633.0	η UP,DN(C0-180)	15.9,34.4	
NOMINAL FLUX(lm)	816.524	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	15.7,34.0	
LAMPS INSIDE	2	η up(%)	31.6	CIBSE SHR NOM	1.75	
TEST VOLTAGE(V)	230	η down(%)	68.4	CIBSE SHR MAX	1.75	

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:Rinno
Test Date:2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

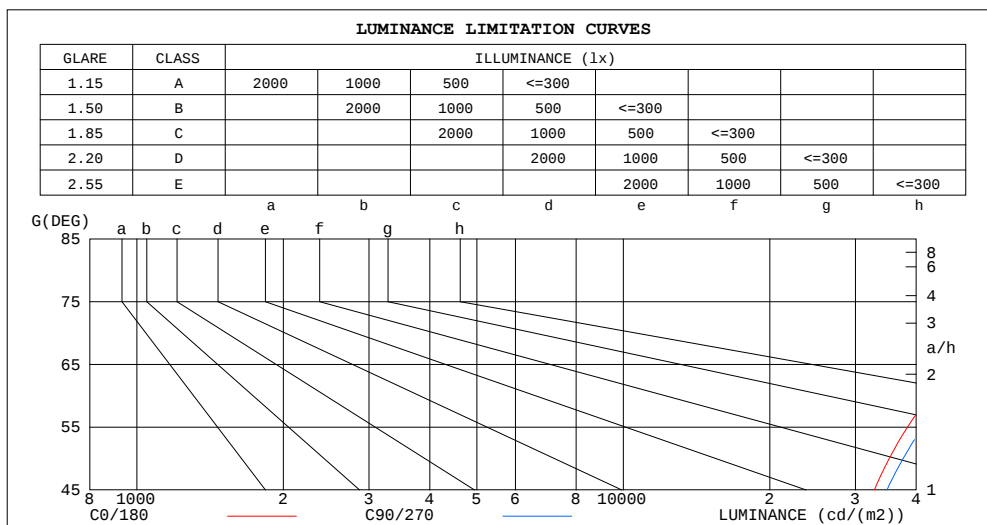
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	204.9	205.6	207.1	208.3	209.2	207.8	206.0	204.5	0- 10	19.76	19.76	1.21,1.21
20	200.6	202.2	205.3	207.6	209.0	206.4	203.4	200.5	10- 20	58.26	78.02	4.78,4.78
30	194.6	197.2	202.2	205.2	206.8	203.3	199.3	195.0	20- 30	93.70	171.7	10.5,10.5
40	187.4	190.8	197.5	201.2	202.9	198.5	193.8	188.1	30- 40	124.2	295.9	18.1,18.1
50	178.8	183.1	191.0	195.3	197.0	192.2	186.7	180.0	40- 50	148.4	444.3	27.2,27.2
60	168.7	173.8	182.4	187.4	188.8	183.8	177.7	170.5	50- 60	164.8	609.1	37.3,37.3
70	157.2	163.1	171.9	177.5	178.4	173.8	167.1	159.8	60- 70	172.7	781.8	47.9,47.9
80	144.6	151.0	159.7	165.5	166.2	161.9	154.9	147.7	70- 80	172.1	953.8	58.4,58.4
90	130.9	137.0	145.9	151.4	152.1	148.0	141.5	134.1	80- 90	163.3	1117	68.4,68.4
100	116.2	122.3	130.5	135.8	136.4	132.7	126.7	119.8	90-100	147.6	1265	77.5,77.5
110	100.5	105.6	113.9	117.8	119.2	114.8	110.9	103.5	100-110	126.4	1391	85.2,85.2
120	83.42	86.99	95.58	97.41	100.5	94.65	93.82	85.37	110-120	101.1	1492	91.4,91.4
130	61.74	65.37	71.45	73.27	75.92	71.12	71.65	64.59	120-130	73.12	1565	95.9,95.9
140	36.63	41.70	42.95	46.78	46.27	45.60	44.90	41.84	130-140	44.11	1609	98.6,98.6
150	12.36	17.98	14.04	19.46	15.95	20.52	17.24	19.51	140-150	19.37	1629	99.7,99.7
160	1.730	1.873	1.509	1.569	1.553	1.616	1.549	1.627	150-160	3.637	1632	100,100
170	1.649	1.553	1.427	1.481	1.484	1.490	1.476	1.451	160-170	0.4378	1633	100,100
180	0.8035	0.7543	0.7379	0.7420	0.7994	0.7625	0.7461	0.7461	170-180	0.1433	1633	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Rinno
Test Date:2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

LUMINANCE LIMITATION CURVES

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: $\phi 190*80*100\text{mm}$	SERIAL No.:
MFR.: NSL	SUR.: $\phi 100\text{mm}$	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	200224	222135
80	105387	116384
75	73824	81165
70	58179	63620
65	48854	53130
60	42702	46177
55	38383	41249
50	35214	37615
45	32811	34822

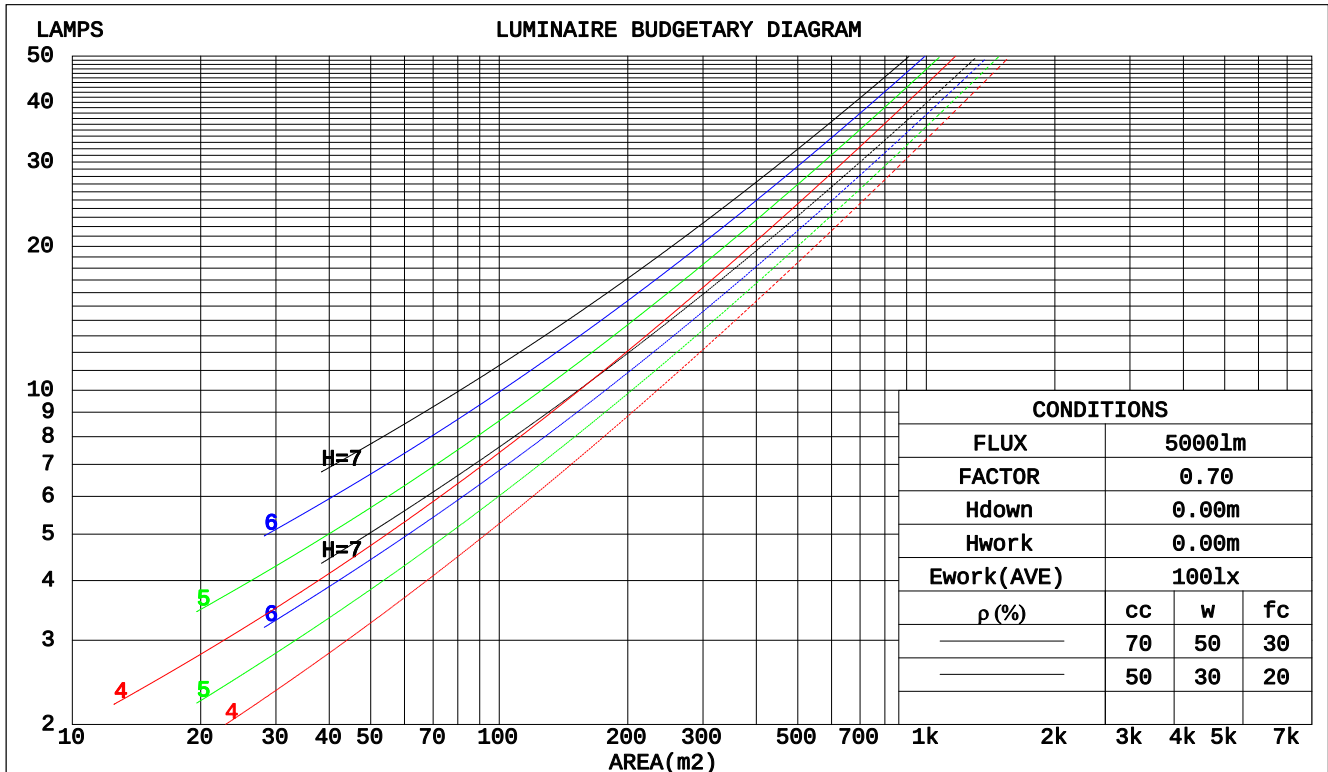
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Rinno
Test Date: 2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: $\phi 190*80*100\text{mm}$	SERIAL No.:
MFR.: NSL	SUR.: $\phi 100\text{mm}$	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						Coefficients of Utilization(CU)									
0.0	1.12	1.12	1.12	1.05	1.05	1.05	.94	.94	.94	.83	.83	.83	.73	.73	.73	.68
1.0	.91	.85	.79	.85	.80	.75	.75	.71	.67	.66	.62	.59	.57	.54	.52	.48
2.0	.76	.68	.61	.72	.64	.58	.63	.57	.52	.55	.50	.46	.47	.44	.40	.36
3.0	.66	.56	.49	.62	.53	.46	.54	.47	.42	.47	.42	.37	.41	.36	.32	.29
4.0	.57	.48	.40	.54	.45	.38	.47	.40	.34	.41	.35	.30	.36	.31	.27	.23
5.0	.51	.41	.34	.48	.39	.32	.42	.35	.29	.37	.30	.26	.32	.27	.23	.20
6.0	.45	.36	.29	.42	.34	.27	.37	.30	.25	.33	.27	.22	.28	.23	.19	.17
7.0	.41	.31	.25	.38	.30	.24	.34	.27	.21	.30	.24	.19	.26	.21	.17	.14
8.0	.37	.28	.22	.35	.26	.21	.31	.24	.19	.27	.21	.17	.24	.19	.15	.13
9.0	.33	.25	.19	.32	.24	.18	.28	.21	.17	.25	.19	.15	.22	.17	.13	.11
10.0	.31	.23	.17	.29	.21	.16	.26	.19	.15	.23	.17	.13	.20	.15	.12	.10



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Rinno
Test Date:2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

WEC AND CCEC

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: φ190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.:φ100mm	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	.420	.239	.076	.403	.230	.073	.372	.213	.068	.343	.198	.063	.316	.183	.059		
2.0	.352	.193	.059	.337	.186	.057	.308	.171	.053	.282	.158	.049	.257	.145	.046		
3.0	.308	.164	.049	.294	.157	.047	.268	.145	.044	.243	.133	.041	.221	.122	.038		
4.0	.274	.142	.042	.261	.137	.040	.237	.126	.038	.215	.115	.035	.194	.106	.032		
5.0	.247	.126	.036	.236	.121	.035	.214	.111	.033	.193	.102	.030	.174	.093	.028		
6.0	.225	.113	.032	.215	.108	.031	.194	.100	.029	.176	.091	.027	.158	.083	.025		
7.0	.207	.102	.029	.197	.098	.028	.178	.090	.026	.161	.083	.024	.145	.075	.022		
8.0	.191	.093	.026	.182	.090	.025	.165	.082	.024	.149	.075	.022	.134	.069	.020		
9.0	.178	.086	.024	.169	.082	.023	.153	.076	.021	.138	.069	.020	.124	.063	.018		
10.0	.166	.079	.022	.158	.076	.021	.143	.070	.020	.129	.064	.018	.116	.058	.017		

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	.431	.431	.431	.368	.368	.368	.252	.252	.252	.144	.144	.144	.046	.046	.046	
1.0	.431	.398	.368	.368	.341	.317	.252	.235	.219	.145	.136	.127	.046	.044	.041	
2.0	.425	.376	.335	.364	.324	.290	.249	.224	.202	.144	.130	.118	.046	.042	.039	
3.0	.417	.360	.315	.358	.311	.273	.246	.216	.191	.142	.126	.113	.046	.041	.037	
4.0	.410	.348	.301	.352	.301	.262	.242	.210	.184	.140	.123	.109	.045	.040	.036	
5.0	.402	.339	.292	.345	.293	.254	.238	.205	.180	.138	.120	.106	.044	.039	.035	
6.0	.394	.331	.286	.339	.287	.249	.234	.201	.176	.136	.118	.105	.044	.039	.035	
7.0	.387	.325	.281	.333	.282	.245	.230	.197	.174	.134	.116	.103	.043	.038	.034	
8.0	.381	.319	.277	.328	.277	.242	.227	.195	.172	.132	.115	.102	.043	.038	.034	
9.0	.374	.315	.275	.322	.273	.240	.223	.192	.170	.130	.113	.101	.042	.037	.034	
10.0	.368	.311	.272	.318	.270	.238	.220	.190	.169	.128	.112	.101	.042	.037	.033	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Rinno
Test Date:2025-03-04

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

UGR(Unified Glare Rating) Table

NAME: BALL S 2						TYPE:Down Light			WEIGHT:		
SPEC.:3000K CRI90						DIM.: ϕ 190*80*100mm			SERIAL No.:		
MFR.: NSL						SUR.: ϕ 100mm			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		23.5	24.8	24.2	25.5	26.3	23.8	25.1	24.5	25.8	26.6
3H		26.4	27.5	27.1	28.3	29.1	26.8	27.9	27.5	28.7	29.5
4H		28.0	29.1	28.7	29.8	30.7	28.4	29.5	29.2	30.3	31.2
6H		29.7	30.8	30.5	31.5	32.5	30.3	31.3	31.0	32.1	33.0
8H		30.7	31.7	31.5	32.5	33.4	31.3	32.3	32.0	33.1	34.0
12H		31.9	32.8	32.6	33.6	34.6	32.5	33.4	33.2	34.2	35.1
4H 2H		24.5	25.6	25.2	26.3	27.2	24.7	25.8	25.4	26.5	27.4
3H		27.5	28.5	28.2	29.2	30.2	27.8	28.8	28.6	29.6	30.5
4H		29.2	30.1	30.0	30.9	31.9	29.6	30.5	30.4	31.3	32.3
6H		31.2	32.0	32.0	32.8	33.8	31.6	32.4	32.4	33.2	34.2
8H		32.2	33.0	33.1	33.8	34.8	32.7	33.5	33.5	34.3	35.3
12H		33.5	34.2	34.3	35.0	36.0	34.0	34.7	34.8	35.6	36.6
8H 4H		29.9	30.7	30.7	31.5	32.5	30.2	31.0	31.0	31.8	32.8
6H		32.1	32.8	33.0	33.6	34.7	32.5	33.1	33.3	34.0	35.0
8H		33.4	34.0	34.3	34.8	35.9	33.8	34.4	34.7	35.3	36.3
12H		34.9	35.4	35.7	36.2	37.3	35.3	35.8	36.2	36.7	37.8
12H 4H		30.1	30.8	30.9	31.7	32.7	30.4	31.1	31.2	31.9	32.9
6H		32.5	33.0	33.3	33.9	35.0	32.8	33.4	33.6	34.2	35.3
8H		33.8	34.3	34.7	35.2	36.3	34.2	34.7	35.1	35.6	36.7
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117, 1633 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 1.7$)
Area: 0.0079 m²

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Rinno
Test Date:2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

UTILIZATION FACTORS TABLE

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: $\phi 190 \times 80 \times 100 \text{mm}$	SERIAL No.:
MFR.: NSL	SUR.: $\phi 100 \text{mm}$	Shielding Angle:

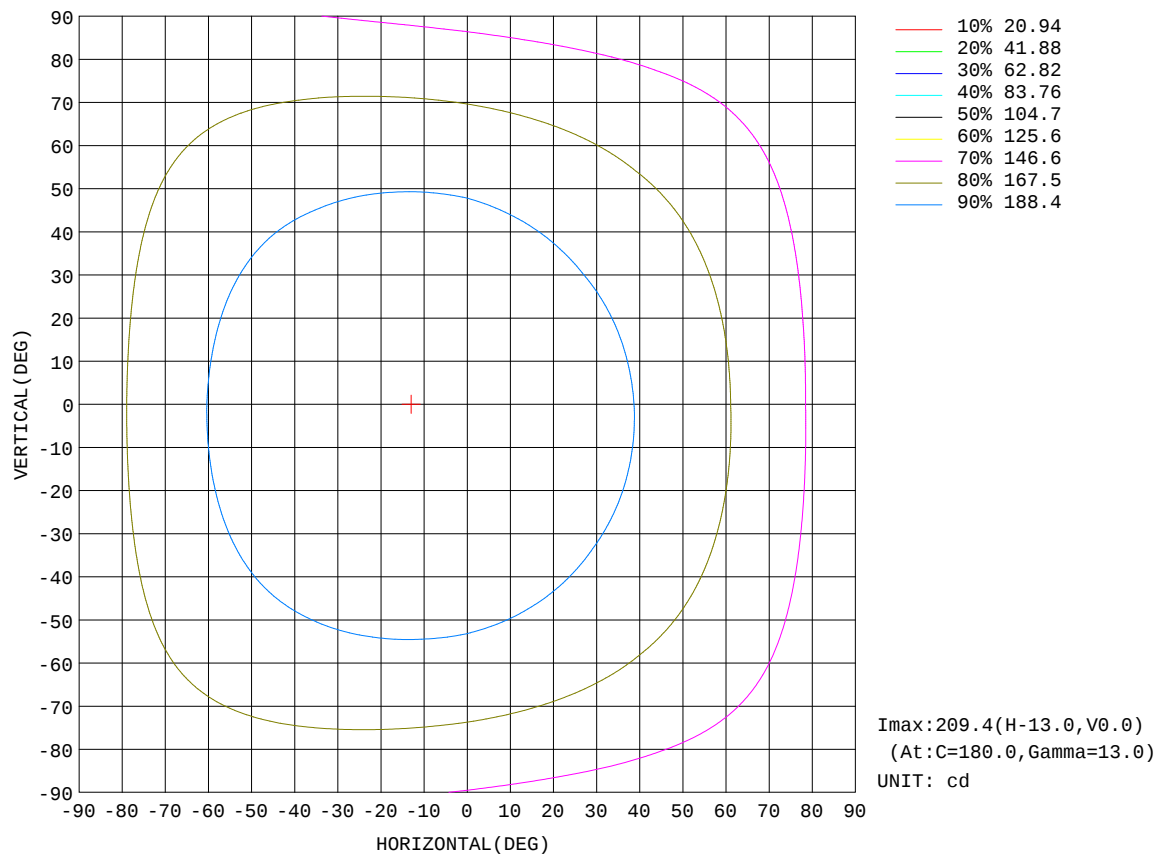
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	41	28	21	40	28	21	37	26	20	13
0.80	50	36	28	48	35	27	44	33	26	17
1.00	57	43	34	55	42	33	50	41	32	22
1.25	64	50	41	61	48	40	56	45	37	26
1.50	69	56	46	66	53	45	60	49	42	29
2.00	77	64	55	73	61	53	65	56	49	35
2.50	82	70	61	77	67	59	69	61	54	38
3.00	86	75	66	81	71	64	72	65	58	41
4.00	91	82	74	86	78	71	76	70	64	46
5.00	94	86	79	89	82	75	79	73	68	49
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:Rinno
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Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

ISOCANDELA DIAGRAM

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: ϕ 190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.: ϕ 100mm	Shielding Angle:

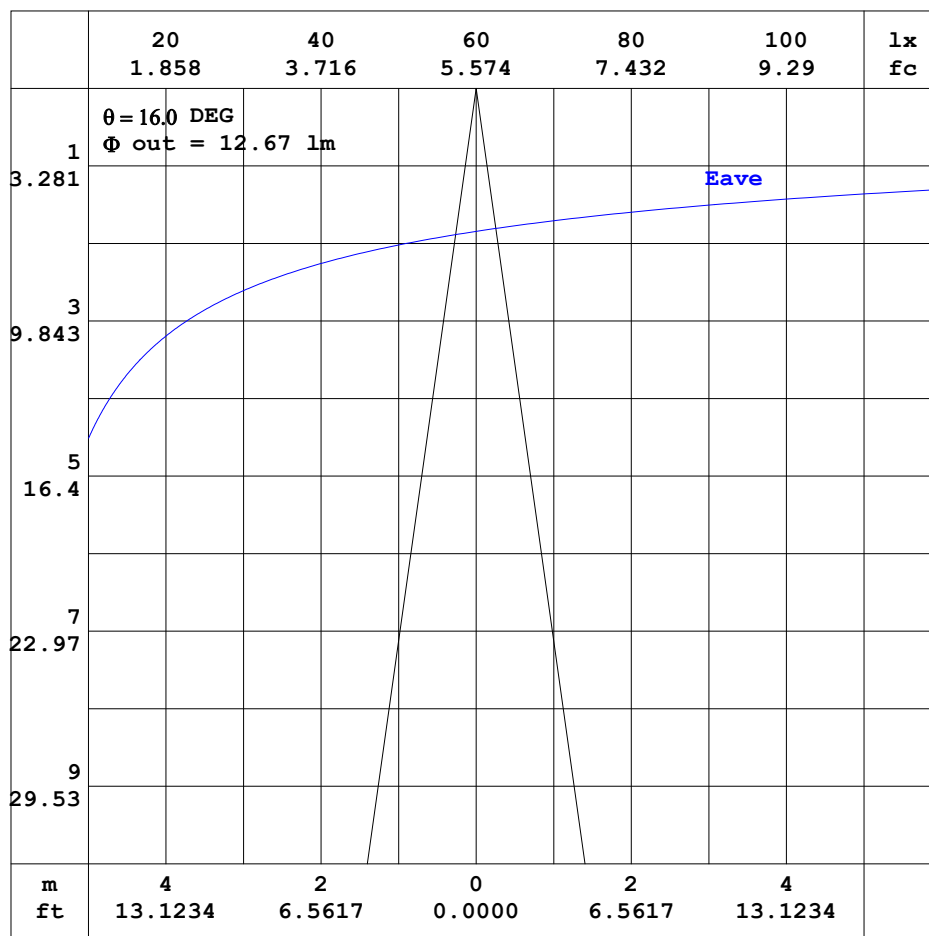


C Range: 0 - 360DEG
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Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

AAI CURVES

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: ϕ 190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.: ϕ 100mm	Shielding Angle:



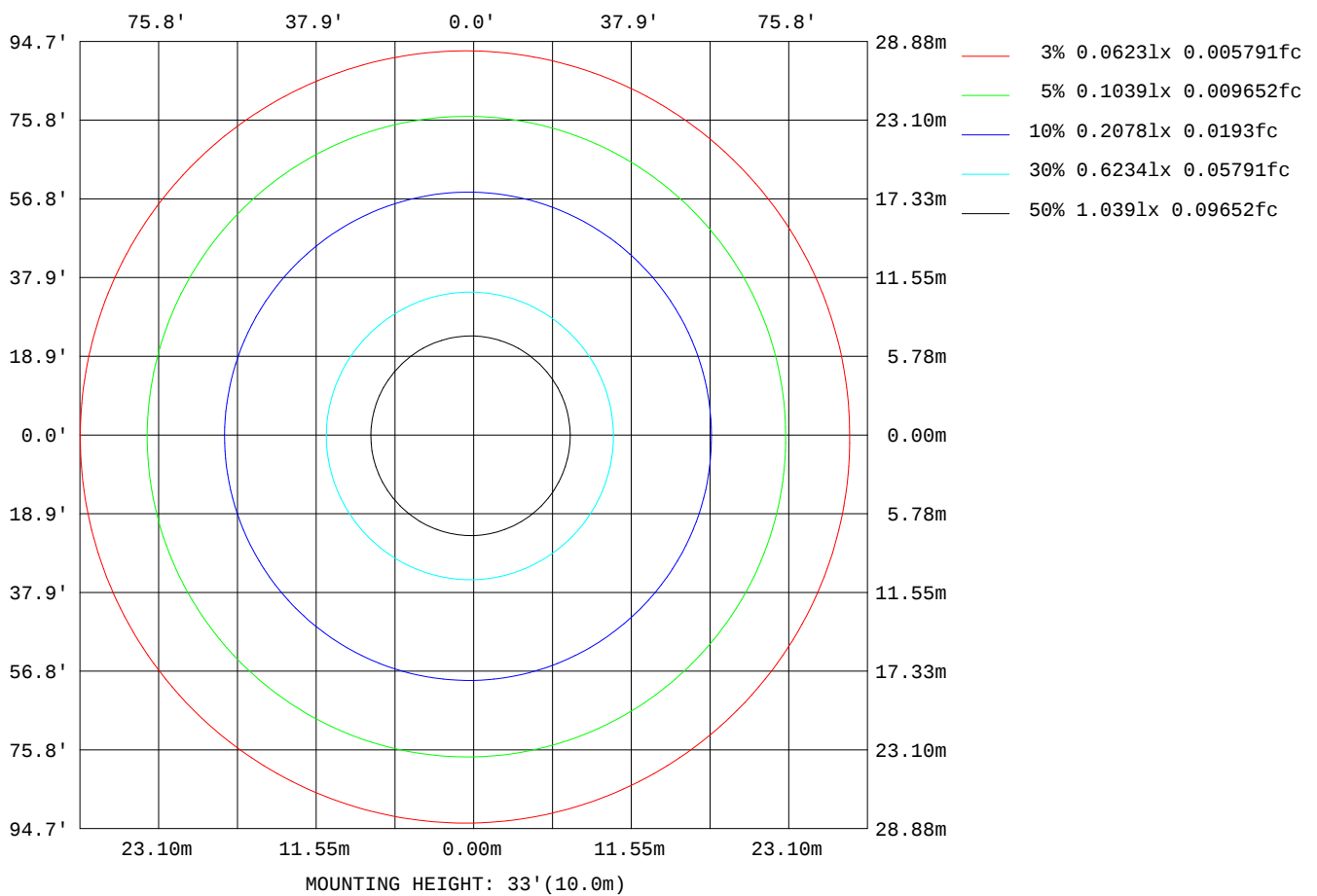
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
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γ Range: 0 - 180DEG
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Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
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Remarks: Driver: KGP RC7W200 Triac

ISOLUX DIAGRAM

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: ϕ 190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.: ϕ 100mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:Rinno
 Test Date:2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:8.068m [K=1.2395]
 Remarks: Driver: KGP RC7W200 Triac

LED Avg.L Report

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: $\phi 190*80*100$ mm	SERIAL No.:
MFR.: NSL	SUR.: $\phi 100$ mm	Shielding Angle:

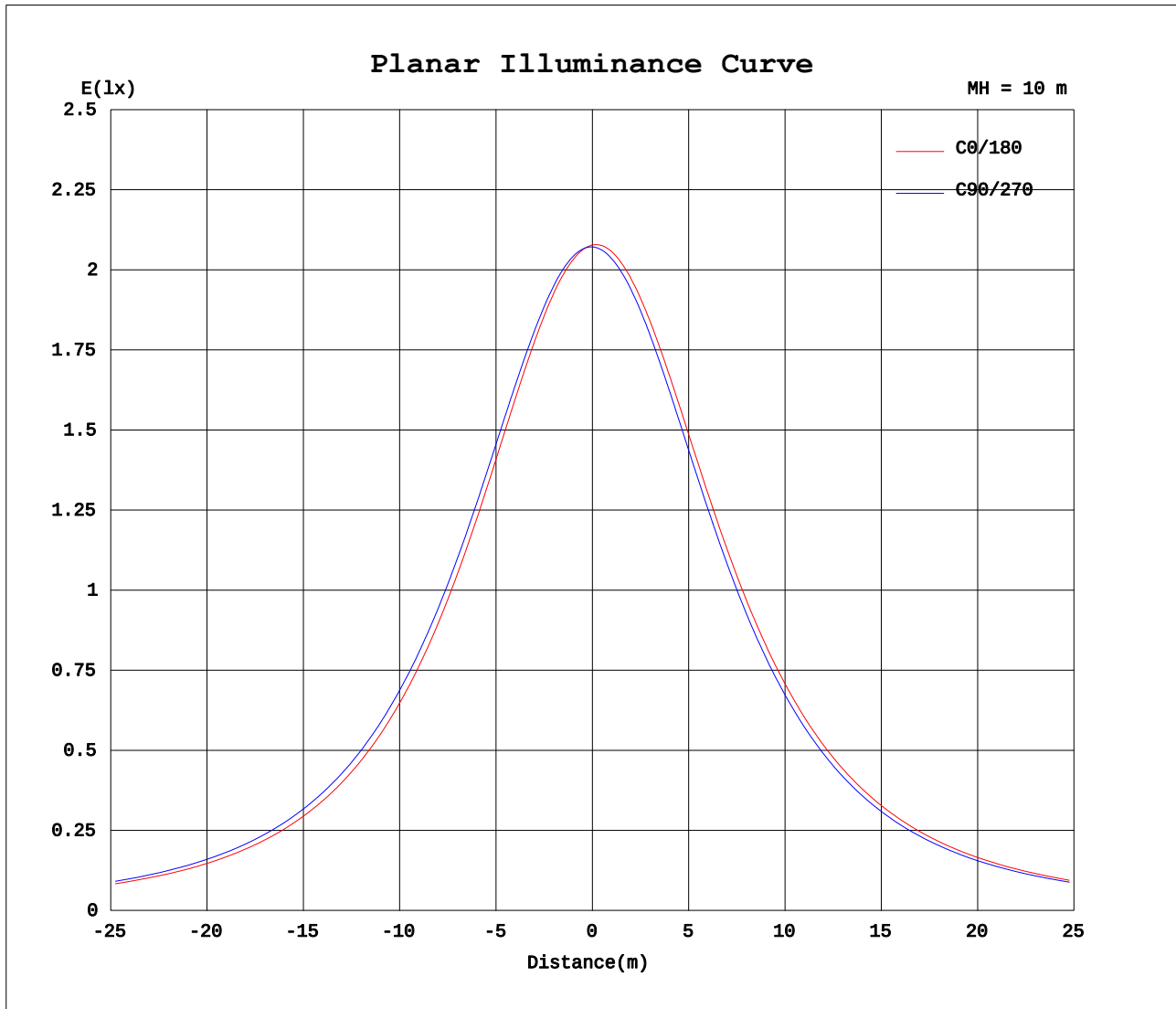
AvgL	cd/m2
L_0~180 (65) av	51960
L_0~180 (75) av	79090
L_0~180 (85) av	215870
L_90~270 (65) av	52413
L_90~270 (75) av	80002
L_90~270 (85) av	218859
L_45 (65) av	52099
L_45 (75) av	79607
L_45 (85) av	217540

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:Rinno
 Test Date:2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:8.068m [K=1.2395]
 Remarks: Driver: KGP RC7W200 Triac

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Rinno
Test Date: 2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: φ190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.:φ100mm	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	208	208	208	208	208	208	208	208	208	207	207	207	207	207	207	207	207	207	207
5	206	206	206	207	207	207	207	207	207	207	207	207	207	207	207	207	207	207	207
10	205	205	205	205	205	205	205	205	206	206	206	206	206	206	206	207	207	207	207
15	203	203	203	203	203	203	204	204	204	204	204	205	205	205	205	206	206	206	206
20	201	201	201	201	201	201	202	202	202	202	203	203	203	204	204	204	205	205	205
25	198	198	198	198	198	199	199	199	200	200	200	201	201	202	202	203	203	204	204
30	195	195	195	195	195	196	196	196	197	197	198	198	199	199	200	201	201	202	202
35	191	191	192	192	192	192	193	193	194	194	195	195	196	197	197	198	199	199	200
40	187	188	188	188	188	189	189	190	190	191	191	192	193	194	195	195	196	197	198
45	183	184	184	184	185	185	185	186	186	187	188	189	190	190	191	192	193	194	195
50	179	179	179	180	180	181	181	182	182	183	184	185	186	187	188	188	189	190	191
55	174	174	175	175	176	176	177	177	178	179	179	180	181	182	183	184	185	186	187
60	169	169	170	170	171	171	172	172	173	174	175	176	177	178	179	180	181	181	182
65	163	164	164	165	165	166	166	167	168	169	170	171	172	173	174	175	176	176	177
70	157	158	158	159	159	160	161	162	162	163	164	165	166	167	168	169	170	171	172
75	151	152	152	153	153	154	155	156	156	157	158	159	160	161	162	163	164	165	166
80	145	145	146	146	147	148	149	149	150	151	152	153	154	155	156	157	158	159	160
85	138	138	139	140	140	141	142	143	143	144	145	146	147	148	149	150	151	152	153
90	131	131	132	133	133	134	135	135	136	137	138	139	140	141	142	143	144	145	146
95	124	124	125	125	126	127	128	128	129	130	131	132	133	134	135	136	137	138	138
100	116	117	117	118	119	119	120	121	122	122	123	124	125	126	127	128	129	130	131
105	109	109	110	110	111	111	112	113	114	114	115	116	117	118	119	120	121	121	122
110	100	101	101	102	102	103	104	104	105	106	106	107	108	109	110	111	112	113	114
115	92.2	92.5	92.8	93.1	93.6	94.0	94.5	95.1	95.8	96.5	97.4	98.4	99.4	100	101	102	103	104	105
120	83.4	83.6	83.8	84.1	84.4	84.8	85.2	85.8	86.3	87.0	87.9	88.9	89.9	90.9	91.9	92.9	93.8	94.7	95.6
125	73.2	73.4	73.7	74.0	74.3	74.7	75.2	75.7	76.2	76.8	77.6	78.5	79.3	80.2	81.1	81.9	82.8	83.5	84.3
130	61.7	62.0	62.3	62.7	63.0	63.4	63.9	64.3	64.8	65.4	66.0	66.7	67.5	68.2	68.9	69.6	70.2	70.9	71.5
135	49.5	49.9	50.4	50.8	51.3	51.8	52.2	52.7	53.1	53.6	54.1	54.5	55.0	55.5	55.9	56.3	56.8	57.2	57.6
140	36.6	37.4	38.1	38.7	39.4	39.9	40.4	40.9	41.3	41.7	41.9	42.1	42.2	42.3	42.5	42.6	42.7	42.8	43.0
145	23.9	25.0	25.9	26.7	27.5	28.1	28.7	29.2	29.5	29.8	29.7	29.6	29.4	29.2	28.9	28.7	28.4	28.3	28.1
150	12.4	13.5	14.4	15.3	16.0	16.7	17.2	17.6	17.8	18.0	17.7	17.3	16.8	16.3	15.8	15.2	14.8	14.4	14.0
155	4.34	4.83	5.27	5.64	5.96	6.21	6.40	6.53	6.60	6.61	6.37	6.09	5.77	5.43	5.09	4.75	4.44	4.16	3.94
160	1.73	1.77	1.81	1.83	1.86	1.87	1.88	1.88	1.88	1.87	1.84	1.80	1.76	1.72	1.67	1.63	1.59	1.55	1.51
165	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.65	1.64	1.63	1.61	1.59	1.57	1.54	1.52	1.50	1.48	1.46	1.44
170	1.65	1.64	1.63	1.62	1.61	1.60	1.59	1.58	1.57	1.55	1.54	1.52	1.50	1.49	1.47	1.46	1.45	1.44	1.43
175	1.64	1.63	1.61	1.60	1.59	1.58	1.56	1.55	1.54	1.53	1.52	1.51	1.50	1.49	1.48	1.47	1.46	1.45	1.45
180	0.80	0.80	0.79	0.78	0.78	0.77	0.77	0.76	0.76	0.75	0.75	0.75	0.75	0.74	0.74	0.74	0.74	0.74	0.74

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Rinno
Test Date:2025-03-04

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: φ190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.:φ100mm	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	207	207	207	207	207	207	207	207	207	207	207	207	207	207	208	208	208	208	208
5	207	207	207	208	208	208	208	208	208	208	208	208	208	208	209	209	209	209	209
10	207	207	207	208	208	208	208	208	208	208	209	209	209	209	209	209	209	209	209
15	207	207	207	207	207	208	208	208	208	208	209	209	209	209	209	209	209	209	209
20	206	206	206	206	207	207	207	207	208	208	208	208	209	209	209	209	209	209	209
25	204	205	205	205	206	206	206	206	207	207	207	207	208	208	208	208	208	208	208
30	203	203	203	204	204	204	205	205	205	206	206	206	206	206	207	207	207	207	207
35	201	201	201	202	202	203	203	203	203	204	204	204	205	205	205	205	205	205	205
40	198	199	199	199	200	200	201	201	201	202	202	202	202	203	203	203	203	203	203
45	195	196	196	197	197	197	198	198	199	199	199	200	200	200	200	200	200	200	200
50	192	192	193	193	194	194	195	195	195	196	196	196	197	197	197	197	197	197	197
55	188	188	189	189	190	190	191	191	192	192	192	193	193	193	193	193	193	193	193
60	183	184	184	185	186	186	187	187	187	188	188	188	189	189	189	189	189	189	188
65	178	179	180	180	181	181	182	182	183	183	183	184	184	184	184	184	184	184	184
70	173	173	174	175	175	176	177	177	177	178	178	178	179	179	179	179	179	178	178
75	167	168	168	169	170	170	171	171	172	172	172	173	173	173	173	173	173	172	172
80	160	161	162	163	163	164	165	165	166	166	166	166	166	167	167	166	166	166	166
85	154	155	155	156	157	157	158	158	159	159	159	159	160	160	160	160	160	159	159
90	147	147	148	149	149	150	151	151	151	152	152	152	152	152	152	152	152	152	152
95	139	140	141	141	142	143	143	143	144	144	144	145	145	145	145	145	145	145	144
100	131	132	133	133	134	134	135	135	136	136	136	137	137	137	137	137	137	136	136
105	123	124	124	125	125	126	126	127	127	127	128	128	128	128	128	128	128	128	128
110	115	115	116	116	116	117	117	118	118	118	118	119	119	119	119	119	119	119	119
115	106	106	106	107	107	107	107	108	108	108	109	109	109	110	110	110	110	110	110
120	96.0	96.3	96.5	96.8	96.9	97.1	97.2	97.3	97.4	97.9	98.3	98.8	99.2	99.6	99.9	100	100	100	100
125	84.6	84.9	85.1	85.3	85.5	85.6	85.7	85.9	86.0	86.4	86.9	87.3	87.8	88.1	88.5	88.7	88.9	89.0	88.6
130	71.8	72.0	72.3	72.5	72.7	72.8	73.0	73.1	73.3	73.7	74.1	74.5	74.8	75.2	75.5	75.7	75.8	75.9	75.5
135	57.9	58.3	58.6	58.9	59.2	59.4	59.7	59.9	60.2	60.4	60.7	60.9	61.2	61.3	61.5	61.6	61.6	61.6	61.3
140	43.4	43.8	44.3	44.7	45.2	45.6	46.1	46.4	46.8	46.9	46.9	46.9	46.8	46.8	46.7	46.5	46.4	46.3	46.2
145	28.6	29.2	29.8	30.4	31.1	31.7	32.2	32.8	33.2	33.1	32.8	32.5	32.2	31.9	31.5	31.2	30.8	30.6	30.8
150	14.5	15.1	15.7	16.4	17.1	17.7	18.4	19.0	19.5	19.2	18.8	18.4	18.0	17.5	17.1	16.6	16.3	15.9	16.3
155	4.12	4.36	4.64	4.94	5.26	5.59	5.90	6.20	6.46	6.38	6.26	6.12	5.96	5.80	5.65	5.52	5.41	5.35	5.63
160	1.50	1.50	1.51	1.51	1.52	1.53	1.54	1.56	1.57	1.57	1.57	1.56	1.56	1.56	1.56	1.55	1.55	1.55	1.56
165	1.44	1.44	1.45	1.45	1.46	1.47	1.48	1.49	1.49	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
170	1.43	1.43	1.44	1.44	1.45	1.46	1.47	1.47	1.48	1.48	1.48	1.49	1.49	1.49	1.49	1.49	1.48	1.48	1.49
175	1.45	1.45	1.45	1.46	1.46	1.47	1.47	1.48	1.48	1.49	1.49	1.50	1.50	1.51	1.51	1.51	1.52	1.52	1.51
180	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.75	0.76	0.76	0.77	0.78	0.78	0.79	0.79	0.80	0.80

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:Rinno
 Test Date:2025-03-04

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:8.068m [K=1.2395]
 Remarks: Driver: KGP RC7W200 Triac

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: φ190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.:φ100mm	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	208	208	208	208	208	208	208	207	207	207	207	207	207	207	207	207	207	207	207
5	209	209	208	208	208	208	208	208	208	208	207	207	207	207	207	207	207	207	206
10	209	209	209	209	208	208	208	208	208	207	207	207	207	207	206	206	206	206	206
15	209	209	209	208	208	208	208	207	207	207	207	206	206	206	205	205	205	205	204
20	209	208	208	208	208	207	207	206	206	206	205	205	205	204	204	204	203	203	203
25	208	207	207	207	206	206	206	205	205	204	204	204	203	203	202	202	202	201	201
30	206	206	206	205	205	204	204	203	203	202	202	202	201	201	200	200	199	199	198
35	204	204	204	203	203	202	202	201	201	200	200	199	199	198	198	197	197	196	195
40	202	202	201	201	200	200	199	199	198	198	197	197	196	195	195	194	194	193	192
45	200	199	199	198	197	197	196	196	195	195	194	193	193	192	192	191	190	190	189
50	196	196	195	195	194	193	193	192	192	191	190	190	189	189	188	187	187	186	185
55	192	192	191	191	190	190	189	188	188	187	186	186	185	184	184	183	182	182	181
60	188	188	187	186	186	185	185	184	183	183	182	181	181	180	179	178	178	177	176
65	183	183	182	182	181	180	180	179	178	178	177	176	176	175	174	173	173	172	171
70	178	177	177	176	176	175	174	174	173	172	172	171	170	169	169	168	167	166	165
75	172	171	171	170	170	169	169	168	167	167	166	165	164	164	163	162	161	160	159
80	166	165	165	164	164	163	163	162	161	161	160	159	158	157	157	156	155	154	153
85	159	158	158	158	157	156	156	155	155	154	153	152	152	151	150	149	148	148	147
90	152	151	151	150	150	149	149	148	147	147	146	145	145	144	143	142	142	141	140
95	144	144	143	143	142	142	141	141	140	139	139	138	137	137	136	135	134	133	133
100	136	136	135	135	134	134	133	133	132	132	131	130	130	129	128	127	127	126	125
105	127	127	127	126	126	125	125	124	124	123	123	122	121	121	120	120	119	118	117
110	119	118	118	117	116	116	115	115	114	114	114	113	113	112	112	111	111	110	109
115	109	109	108	108	107	106	106	105	105	104	104	104	104	104	103	103	103	102	101
120	99.5	98.8	98.2	97.4	96.7	96.0	95.3	94.6	94.5	94.5	94.4	94.4	94.4	94.3	94.2	94.1	93.8	93.0	92.1
125	88.1	87.5	86.9	86.2	85.5	84.9	84.2	83.6	83.6	83.6	83.7	83.7	83.8	83.8	83.8	83.7	83.6	82.8	82.0
130	75.0	74.5	73.9	73.4	72.8	72.2	71.6	71.1	71.2	71.2	71.3	71.5	71.6	71.7	71.7	71.7	71.7	71.0	70.3
135	61.0	60.6	60.2	59.8	59.4	59.0	58.6	58.2	58.3	58.3	58.4	58.5	58.6	58.7	58.7	58.7	58.7	58.2	57.7
140	46.1	46.1	46.0	45.9	45.8	45.8	45.7	45.6	45.6	45.5	45.5	45.4	45.4	45.3	45.2	45.1	44.9	44.7	44.4
145	31.0	31.3	31.6	32.0	32.3	32.6	32.9	33.1	33.0	32.8	32.5	32.3	32.0	31.7	31.4	31.1	30.8	30.9	30.9
150	16.8	17.4	17.9	18.5	19.1	19.6	20.1	20.5	20.3	20.0	19.6	19.2	18.8	18.4	18.0	17.6	17.2	17.5	17.8
155	5.95	6.30	6.66	7.02	7.37	7.69	7.97	8.21	8.05	7.84	7.59	7.32	7.04	6.77	6.51	6.29	6.11	6.37	6.68
160	1.57	1.58	1.58	1.59	1.60	1.61	1.61	1.62	1.61	1.60	1.59	1.59	1.58	1.57	1.56	1.55	1.55	1.55	1.56
165	1.50	1.50	1.51	1.51	1.51	1.51	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.51	1.51	1.51	1.50
170	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.48	1.48	1.48	1.48	1.48	1.47	1.46
175	1.51	1.51	1.50	1.50	1.50	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.50	1.49	1.48
180	0.80	0.79	0.79	0.78	0.78	0.77	0.77	0.76	0.76	0.76	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.74	0.74

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Rinno
Test Date:2025-03-04

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: BALL S 2	TYPE:Down Light	WEIGHT:
SPEC.:3000K CRI90	DIM.: φ190*80*100mm	SERIAL No.:
MFR.: NSL	SUR.:φ100mm	Shielding 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	207	207	207	207	207	207	207	207	207	207	207	207	207	208	208				
5	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206				
10	205	205	205	205	205	205	204	204	204	204	204	204	205	205	205				
15	204	204	203	203	203	203	203	203	203	202	202	203	203	203	203				
20	202	202	202	201	201	201	200	200	200	200	200	200	200	200	200				
25	200	200	199	199	199	198	198	198	198	198	197	197	197	198	198				
30	198	197	197	196	196	195	195	195	195	194	194	194	194	194	194				
35	195	194	194	193	193	192	192	191	191	191	191	191	191	191	191				
40	192	191	190	190	189	189	188	188	188	187	187	187	187	187	187				
45	188	187	187	186	185	185	184	184	184	183	183	183	183	183	183				
50	184	183	183	182	181	181	180	180	179	179	179	179	179	179	179				
55	180	179	178	177	177	176	175	175	175	174	174	174	174	174	174				
60	175	174	173	173	172	171	171	170	170	169	169	169	169	169	169				
65	170	169	168	167	167	166	165	165	164	164	164	163	163	163	163				
70	164	164	163	162	161	160	160	159	159	158	158	158	158	157	157				
75	159	158	157	156	155	155	154	153	153	152	152	152	151	151	151				
80	152	152	151	150	149	148	148	147	147	146	146	145	145	145	145				
85	146	145	144	143	142	142	141	140	140	139	139	139	138	138	138				
90	139	138	137	136	136	135	134	133	133	133	132	132	131	131	131				
95	132	131	130	129	129	128	127	127	126	126	125	125	124	124	124				
100	124	123	123	122	121	120	120	119	119	118	118	117	117	117	116				
105	117	116	115	114	113	113	112	111	111	110	110	110	109	109	109				
110	108	108	107	106	105	104	104	103	102	102	102	101	101	101	101				
115	100	99.1	98.2	97.2	96.3	95.5	94.6	94.1	93.6	93.2	92.9	92.6	92.4	92.3	92.2				
120	91.2	90.2	89.2	88.2	87.2	86.2	85.4	84.8	84.4	84.0	83.7	83.5	83.3	83.3	83.3				
125	81.2	80.2	79.3	78.3	77.4	76.5	75.7	75.1	74.6	74.2	73.9	73.6	73.4	73.3	73.2				
130	69.6	68.7	67.9	67.1	66.2	65.4	64.6	64.1	63.6	63.2	62.8	62.5	62.2	62.0	61.8				
135	57.1	56.5	55.9	55.2	54.5	53.9	53.2	52.7	52.2	51.8	51.3	50.9	50.5	50.1	49.8				
140	44.1	43.8	43.5	43.1	42.7	42.3	41.8	41.4	40.9	40.3	39.8	39.2	38.6	38.0	37.3				
145	30.9	31.0	31.0	31.0	30.9	30.8	30.6	30.2	29.7	29.1	28.4	27.7	26.9	26.0	25.0				
150	18.1	18.4	18.8	19.1	19.3	19.4	19.5	19.2	18.7	18.2	17.5	16.7	15.8	14.8	13.6				
155	7.01	7.35	7.68	7.99	8.27	8.49	8.64	8.50	8.28	7.97	7.57	7.10	6.53	5.88	5.15				
160	1.56	1.57	1.58	1.59	1.60	1.61	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.71	1.72				
165	1.49	1.49	1.49	1.48	1.48	1.48	1.48	1.49	1.51	1.52	1.54	1.55	1.58	1.60	1.63				
170	1.46	1.45	1.45	1.45	1.45	1.45	1.45	1.46	1.48	1.49	1.51	1.53	1.56	1.59	1.62				
175	1.48	1.47	1.47	1.47	1.46	1.46	1.47	1.48	1.49	1.50	1.52	1.54	1.56	1.59	1.61				
180	0.74	0.74	0.74	0.74	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.77	0.78	0.79	0.79				

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Rinno
Test Date:2025-03-04

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:8.068m [K=1.2395]
Remarks: Driver: KGP RC7W200 Triac