LEDALITE - BLOOMBOX

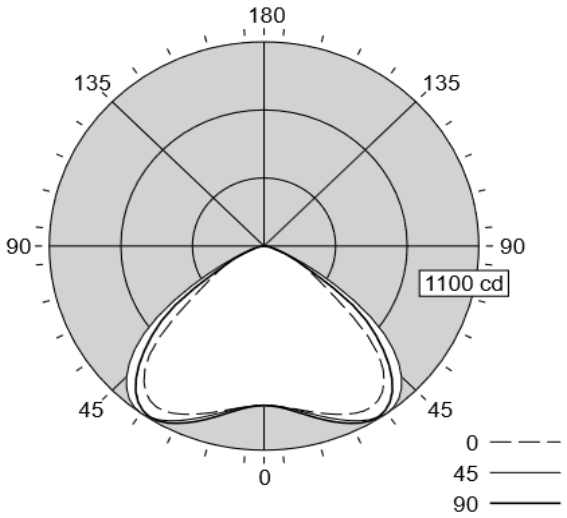
LEDALITE by signify

TEST DATE:	28 Sep 2023	**CATALOG NO:**	**BB22D1STL94030Y1DE**
Lamp Type:	LED	**Description:**	3000LM BLOOMBOX 940
No. of Lamps:	1		
Rated Lamp Lumens:	-1	**Flux (lm), Efficiency (%):**	2989 lm 100%
Input Watts:	120 VAC 17.5	**Up/Dn Ratio, Efficacy (lm/W):**	100% Down / 0% Up 170.8
CIE-IES Classification:	Direct	**Report:**	F44603

CANDELA DISTRIBUTION

	0	22.5	45	67.5	90	Flux Lumens
0	859	859	859	859	859	
5	868	867	867	870	871	84
15	924	927	936	947	952	267
25	1000	1012	1038	1054	1054	478
35	1017	1053	1099	1098	1082	669
45	831	911	996	952	906	709
55	379	458	667	630	556	495
65	180	207	226	206	179	209
75	57	57	57	51	48	62
85	14	14	12	10	9	15
90	1	1	1	1	1	
95	0	0	0	0	0	0
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

POLAR CANDELA PLOT



CHARACTERISTICS

RP1	Meets RP-1-12 recommendations for VDT-Normal spaces			
Direct: Peak Candela & Angle (0°)			1027.6	32.5
Direct: Peak Candela & Angle (90°)			1091.4	32.5
Spacing Criteria (0°, 90°, 180°)		1.68	1.74	N/A
Beam (H, V), Field (H, V)	108.6	100.3	139.8	136.0
Indirect: Peak Candela & Angle(°)			N/A	N/A
Indirect: Zenith Candela, Peak to Zenith			N/A	N/A
Luminous Width, Length, Height (ft)		1.69	1.87	0.00
DLC, UGR (4H x 8H, 1.0H), MDER		N/A	16.9	0.636
x, y, CCT, D_{uv}	0.3904	0.3858	3809	0.0014
CRI (R_a), R_9, G_a, C_9	93	60	97	93
TM-30-18 R_f, $R_{f,h1}$, R_g, $R_{cs,h1}$	89	88	97	-6%
120V: P(W), I(A), THD(%), PF	17.5	0.147	5.1	0.996
277V: P(W), I(A), THD(%), PF	17.5	0.066	8.0	0.962
347V: P(W), I(A), THD(%), PF	N/A	N/A	N/A	N/A

COEFFICIENTS OF UTILIZATION (%)

Pc---	80				70			50			0
Pw---	70	50	30	10	70	50	30	50	30	10	0
RCR											
0	119	119	119	119	116	116	116	111	111	111	100
1	110	106	103	99	108	104	101	100	97	95	87
2	102	94	88	83	99	92	87	89	84	80	75
3	93	84	76	70	91	82	75	79	73	68	64
4	85	74	66	60	83	73	65	71	64	59	55
5	79	66	58	52	77	65	57	63	56	51	48
6	73	60	51	45	71	59	51	57	50	44	42
7	67	54	46	40	65	53	45	52	44	39	37
8	62	49	41	35	61	48	41	47	40	35	33
9	58	45	37	31	57	44	37	43	36	31	29
10	54	41	33	28	53	41	33	40	33	28	26

*Based on a floor reflectance of 0.2

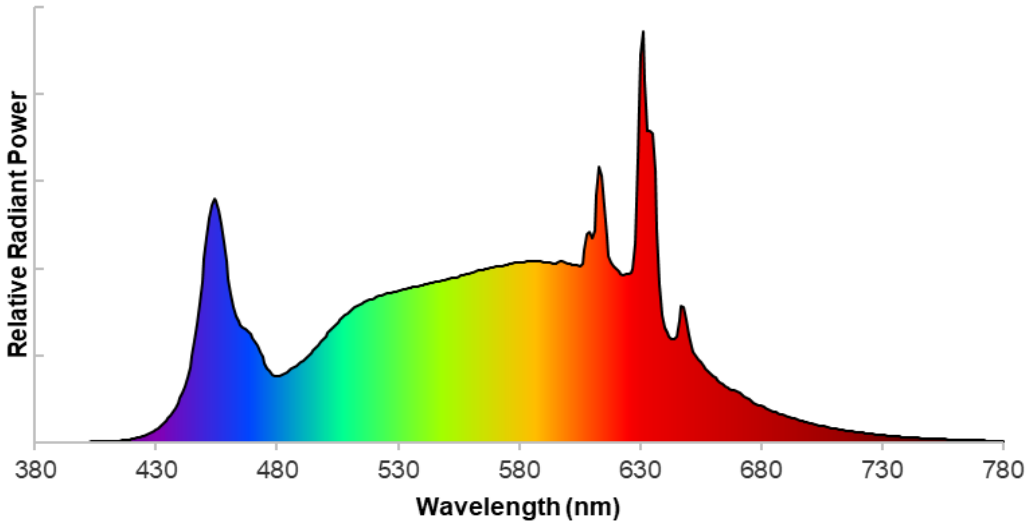
ZONAL LUMENS (lm)

Zone	Lumens	%Fixture	%Lamp
0-30	829	27.8%	27.8%
0-40	1498	50.1%	50.1%
0-60	2703	90.4%	90.4%
0-90	2988	100.0%	100.0%
90-130	0	0.0%	0.0%
90-150	0	0.0%	0.0%
90-180	0	0.0%	0.0%
0-180	2989	100.0%	100.0%

AVG LUMINANCE (cd/m²)

	0	45	90
0	2923	2923	2923
5	2966	2964	2977
15	3258	3299	3355
25	3755	3901	3959
35	4229	4569	4498
45	3999	4796	4361
55	2247	3961	3298
65	1452	1822	1444
75	755	749	628
85	561	464	367

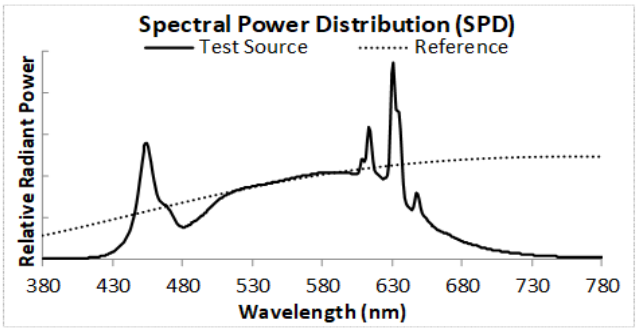
SPECTRAL POWER DISTRIBUTION

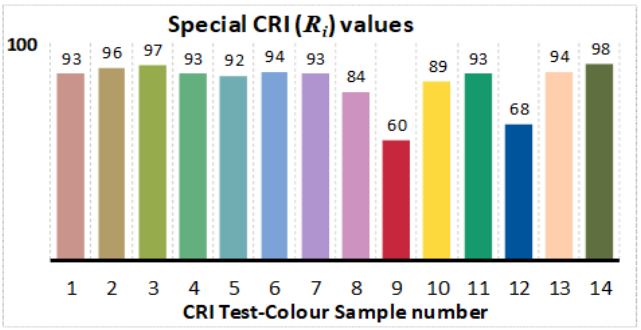


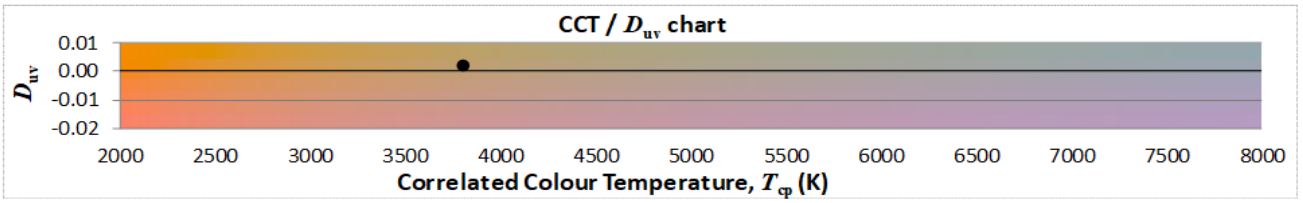
Output of GLA Calculation Tool for CIE 13.3 CRI and Associated CRI-based Colour Rendition Properties

Test Number:	F44603	**Manufacturer:**	Ledalite by Signify
Date:	29 Sep 2023	**Model:**	BloomBox

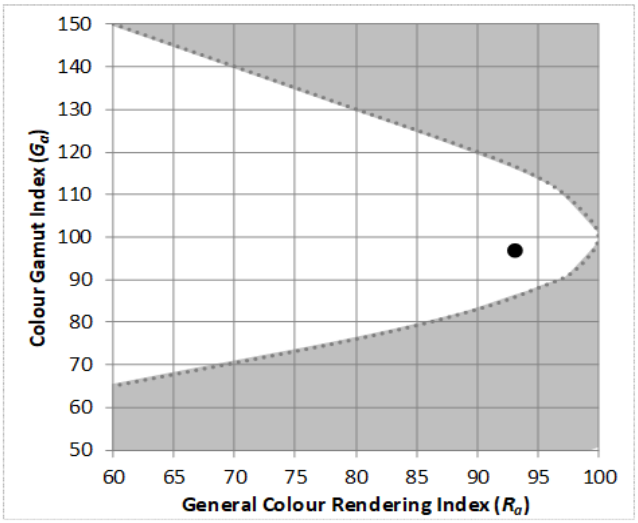
Correlated Colour Temperature (T_{cp}) in K	3809	**CIE1931 chromaticity coordinate, x**	0.3904
Distance to Blackbody Locus (D_{uv})	0.0014	**CIE1931 chromaticity coordinate, y**	0.3858
General Colour Rendering Index (R_a)	93	**CIE1976 chromaticity coordinate, u'**	0.2280
Red Rendering Index (R_9)	60	**CIE1976 chromaticity coordinate, v'**	0.5070
Colour Gamut Index (G_a)	97		
Red Chroma Index (C_9)	93		



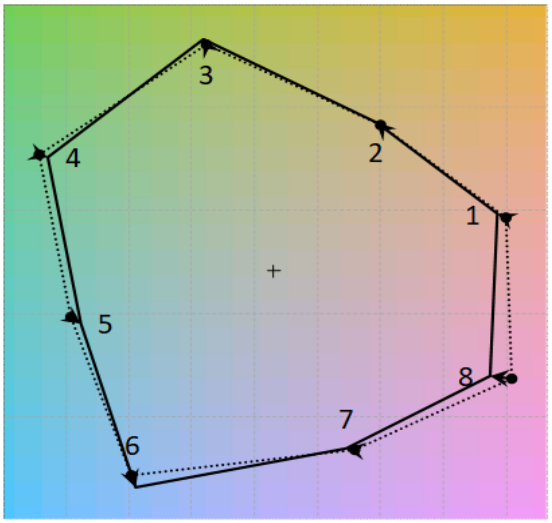


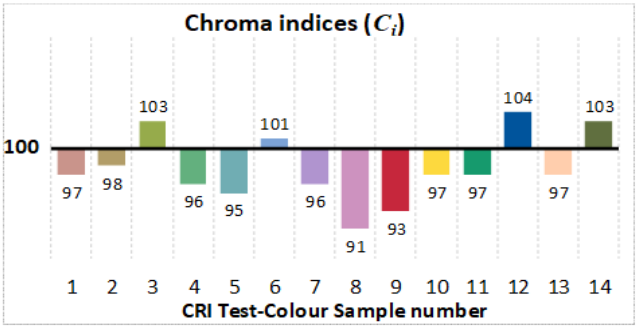


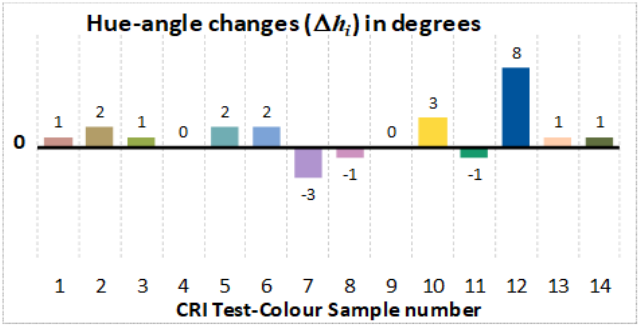
Two-dimensional R_a-G_a Graphic



Colour-shift graphic



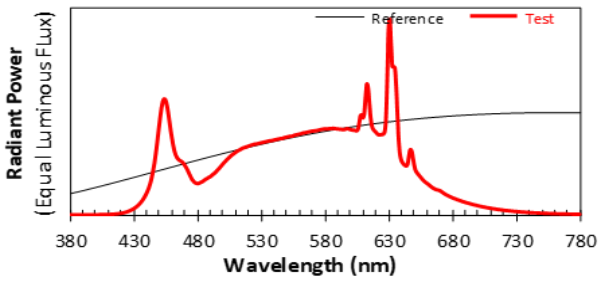


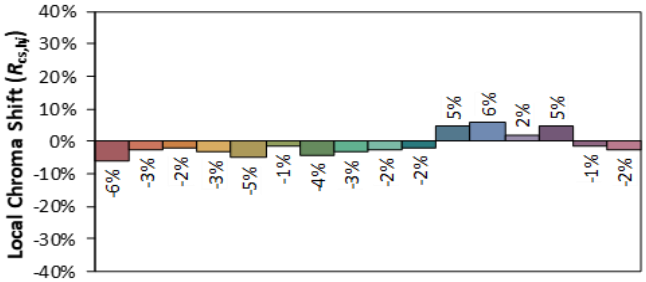


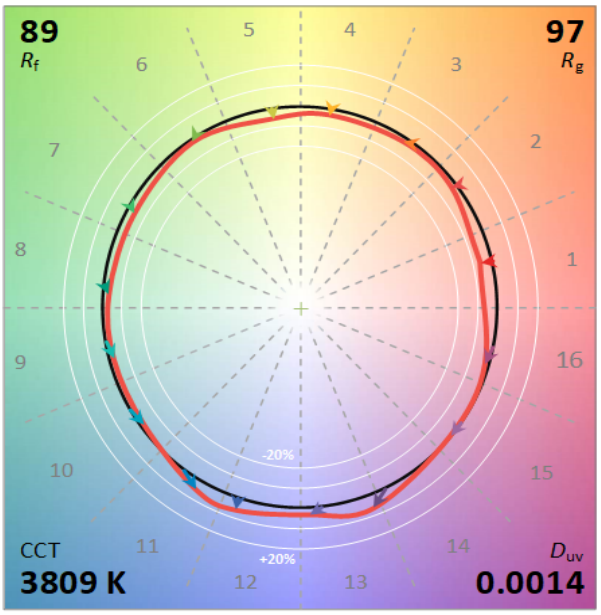
ANSI/IES TM-30-18 Color Rendition Report

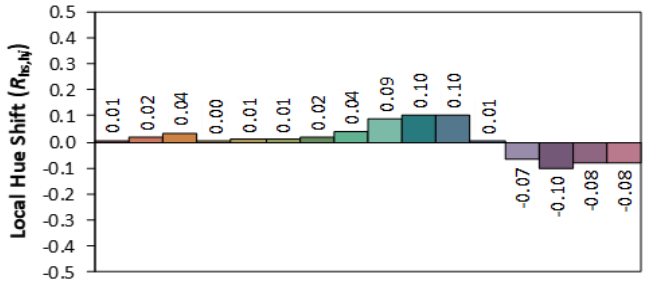
Source: F44603 **Manufacturer:** Ledalite by Signify

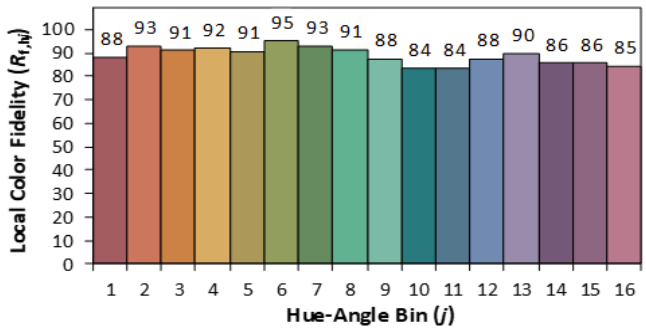
Date: 29 Sep 2023 **Model:** BloomBox

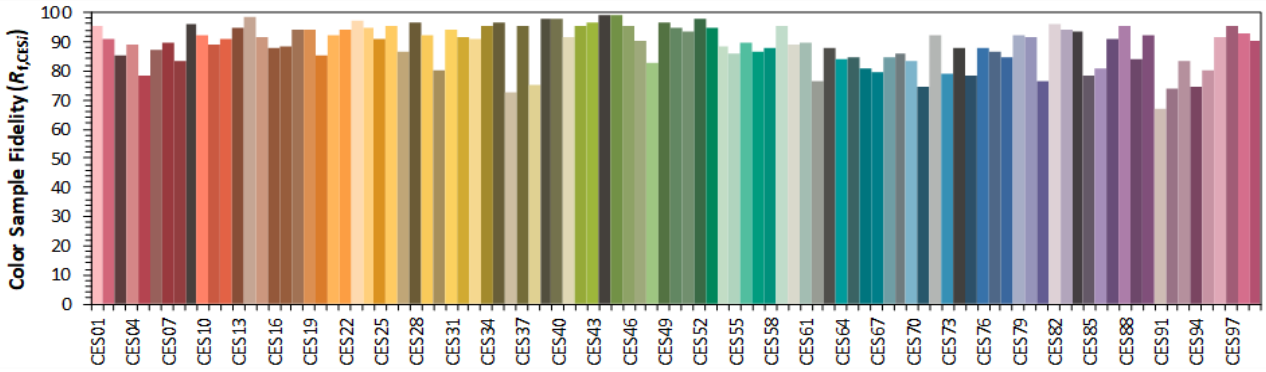












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	**0.3904**
y	**0.3858**
u'	**0.2280**
v'	**0.5070**

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.

SPECTRAL POWER DISTRIBUTION

λ (nm)	SPD	λ (nm)	SPD	λ (nm)	SPD	λ (nm)	SPD	λ (nm)	SPD	λ (nm)	SPD	λ (nm)	SPD	λ (nm)	SPD	λ (nm)	SPD
380	0.00010	425	0.00110	470	0.01670	515	0.02210	560	0.02690	605	0.02800	650	0.01700	695	0.00370	740	0.00090
381	0.00010	426	0.00120	471	0.01600	516	0.02230	561	0.02700	606	0.02840	651	0.01520	696	0.00360	741	0.00080
382	0.00010	427	0.00140	472	0.01530	517	0.02240	562	0.02710	607	0.03050	652	0.01430	697	0.00340	742	0.00080
383	0.00010	428	0.00160	473	0.01440	518	0.02260	563	0.02730	608	0.03300	653	0.01370	698	0.00330	743	0.00080
384	0.00010	429	0.00180	474	0.01350	519	0.02270	564	0.02730	609	0.03330	654	0.01320	699	0.00320	744	0.00080
385	0.00010	430	0.00210	475	0.01260	520	0.02290	565	0.02740	610	0.03230	655	0.01270	700	0.00310	745	0.00070
386	0.00010	431	0.00230	476	0.01180	521	0.02300	566	0.02750	611	0.03360	656	0.01220	701	0.00300	746	0.00070
387	0.00010	432	0.00270	477	0.01130	522	0.02320	567	0.02760	612	0.03920	657	0.01170	702	0.00290	747	0.00070
388	0.00010	433	0.00300	478	0.01080	523	0.02330	568	0.02770	613	0.04360	658	0.01130	703	0.00280	748	0.00070
389	0.00010	434	0.00340	479	0.01060	524	0.02340	569	0.02780	614	0.04230	659	0.01090	704	0.00270	749	0.00070
390	0.00010	435	0.00380	480	0.01050	525	0.02360	570	0.02790	615	0.03740	660	0.01060	705	0.00270	750	0.00060
391	0.00010	436	0.00430	481	0.01050	526	0.02360	571	0.02790	616	0.03250	661	0.01030	706	0.00260	751	0.00060
392	0.00010	437	0.00490	482	0.01070	527	0.02370	572	0.02800	617	0.02960	662	0.01000	707	0.00250	752	0.00060
393	0.00010	438	0.00550	483	0.01090	528	0.02380	573	0.02800	618	0.02850	663	0.00960	708	0.00240	753	0.00060
394	0.00010	439	0.00620	484	0.01110	529	0.02390	574	0.02810	619	0.02800	664	0.00930	709	0.00230	754	0.00060
395	0.00010	440	0.00700	485	0.01140	530	0.02400	575	0.02820	620	0.02760	665	0.00900	710	0.00230	755	0.00050
396	0.00010	441	0.00790	486	0.01170	531	0.02410	576	0.02830	621	0.02710	666	0.00870	711	0.00220	756	0.00050
397	0.00010	442	0.00900	487	0.01200	532	0.02420	577	0.02840	622	0.02670	667	0.00850	712	0.00210	757	0.00050
398	0.00010	443	0.01030	488	0.01220	533	0.02430	578	0.02850	623	0.02660	668	0.00840	713	0.00210	758	0.00050
399	0.00010	444	0.01190	489	0.01250	534	0.02440	579	0.02860	624	0.02670	669	0.00830	714	0.00200	759	0.00050
400	0.00010	445	0.01380	490	0.01270	535	0.02450	580	0.02860	625	0.02680	670	0.00820	715	0.00190	760	0.00050
401	0.00010	446	0.01610	491	0.01300	536	0.02460	581	0.02860	626	0.02690	671	0.00800	716	0.00190	761	0.00050
402	0.00010	447	0.01880	492	0.01340	537	0.02470	582	0.02860	627	0.02760	672	0.00770	717	0.00180	762	0.00040
403	0.00010	448	0.02210	493	0.01370	538	0.02470	583	0.02870	628	0.03160	673	0.00740	718	0.00180	763	0.00040
404	0.00010	449	0.02560	494	0.01410	539	0.02480	584	0.02870	629	0.04500	674	0.00710	719	0.00170	764	0.00040
405	0.00010	450	0.02920	495	0.01450	540	0.02490	585	0.02870	630	0.06150	675	0.00680	720	0.00160	765	0.00040
406	0.00010	451	0.03260	496	0.01500	541	0.02500	586	0.02880	631	0.06510	676	0.00660	721	0.00160	766	0.00040
407	0.00020	452	0.03560	497	0.01540	542	0.02510	587	0.02880	632	0.05720	677	0.00640	722	0.00150	767	0.00040
408	0.00020	453	0.03770	498	0.01590	543	0.02520	588	0.02870	633	0.04940	678	0.00620	723	0.00150	768	0.00040
409	0.00020	454	0.03860	499	0.01640	544	0.02530	589	0.02870	634	0.04930	679	0.00600	724	0.00150	769	0.00040
410	0.00020	455	0.03830	500	0.01690	545	0.02540	590	0.02860	635	0.04890	680	0.00580	725	0.00140	770	0.00030
411	0.00020	456	0.03690	501	0.01740	546	0.02540	591	0.02860	636	0.04300	681	0.00560	726	0.00140	771	0.00030
412	0.00020	457	0.03460	502	0.01780	547	0.02550	592	0.02850	637	0.03380	682	0.00540	727	0.00130	772	0.00030
413	0.00030	458	0.03180	503	0.01830	548	0.02570	593	0.02850	638	0.02510	683	0.00530	728	0.00130	773	0.00030
414	0.00030	459	0.02880	504	0.01870	549	0.02580	594	0.02840	639	0.02030	684	0.00510	729	0.00120	774	0.00030
415	0.00030	460	0.02590	505	0.01910	550	0.02590	595	0.02840	640	0.01830	685	0.00500	730	0.00120	775	0.00030
416	0.00040	461	0.02350	506	0.01950	551	0.02600	596	0.02850	641	0.01740	686	0.00480	731	0.00120	776	0.00030
417	0.00040	462	0.02150	507	0.01990	552	0.02610	597	0.02870	642	0.01680	687	0.00470	732	0.00110	777	0.00030
418	0.00050	463	0.02010	508	0.02020	553	0.02620	598	0.02870	643	0.01650	688	0.00450	733	0.00110	778	0.00030
419	0.00050	464	0.01920	509	0.02050	554	0.02620	599	0.02860	644	0.01630	689	0.00440	734	0.00110	779	0.00030
420	0.00060	465	0.01860	510	0.02080	555	0.02630	600	0.02840	645	0.01690	690	0.00430	735	0.00100	780	0.00030
421	0.00070	466	0.01820	511	0.02110	556	0.02650	601	0.02830	646	0.01940	691	0.00410	736	0.00100		
422	0.00070	467	0.01800	512	0.02140	557	0.02660	602	0.02820	647	0.02170	692	0.00400	737	0.00100		
423	0.00080	468	0.01770	513	0.02160	558	0.02670	603	0.02820	648	0.02150	693	0.00390	738	0.00090		
424	0.00100	469	0.01730	514	0.02180	559	0.02680	604	0.02810	649	0.01950	694	0.00380	739	0.00090		

UNIFIED GLARE RATING

Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	14.0	15.5	14.3	15.8	16.1	16.2	17.8	16.6	18.1	18.4
	3H	14.5	15.9	14.9	16.2	16.6	16.6	17.9	16.9	18.2	18.6
	4H	14.7	15.9	15.1	16.3	16.7	16.6	17.8	17.0	18.2	18.6
	6H	14.8	15.9	15.2	16.3	16.7	16.6	17.7	17.0	18.1	18.5
	8H	14.8	15.9	15.2	16.3	16.7	16.5	17.7	17.0	18.1	18.5
	12H	14.8	15.9	15.2	16.3	16.7	16.5	17.6	17.0	18.0	18.4
4H	2H	14.5	15.7	14.9	16.1	16.5	16.4	17.7	16.8	18.0	18.4
	3H	15.1	16.2	15.5	16.6	17.0	16.8	17.9	17.2	18.3	18.7
	4H	15.3	16.2	15.7	16.6	17.1	16.9	17.8	17.3	18.2	18.7
	6H	15.4	16.3	15.9	16.7	17.2	16.9	17.7	17.4	18.1	18.6
	8H	15.5	16.2	16.0	16.7	17.1	16.9	17.6	17.4	18.1	18.6
	12H	15.5	16.2	16.0	16.7	17.1	16.9	17.5	17.3	18.0	18.5
8H	4H	15.3	16.1	15.8	16.5	17.0	16.9	17.6	17.3	18.0	18.5
	6H	15.5	16.1	16.0	16.6	17.1	16.9	17.5	17.4	18.0	18.5
	8H	15.6	16.1	16.1	16.6	17.1	16.9	17.4	17.4	17.9	18.4
	12H	15.6	16.1	16.1	16.6	17.2	16.9	17.4	17.4	17.9	18.4
12H	4H	15.3	16.0	15.8	16.4	16.9	16.8	17.5	17.3	18.0	18.4
	6H	15.5	16.1	16.0	16.5	17.1	16.8	17.4	17.4	17.9	18.4
	8H	15.6	16.1	16.1	16.6	17.1	16.8	17.4	17.4	17.9	18.4

The UGR values have been calculated according to CIE Publ. 117.

Spacing-to-Height-Ratio = 1.00.

The highlighted value refers to the UGR value which the luminaire would have in a reference situation with room dimensions of 4H/8H and degrees of reflectance of 20% for the floor, 50% for the walls and 70% for the ceiling, as recommended by DLC.

The UGR value may vary depending on application specific parameters.