LEDALITE - MODIFLY

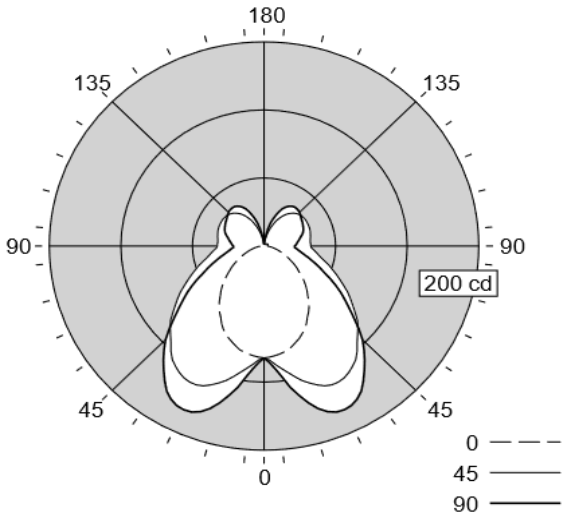
LEDALITE by signify

TEST DATE:	20 Apr 2020	**CATALOG NO:**	**MFxSL93515QN02**
Lamp Type:	LED	**Description:**	MODIFLY SUSPENDED 2FT 1500LM 935
No. of Lamps:	88		
Rated Lamp Lumens:	-1	**Flux (lm), Efficiency (%):**	693 lm 100%
Input Watts:	277 VAC 7.6	**Up/Dn Ratio, Efficacy (lm/W):**	72% Down / 28% Up 91.2
CIE-IES Classification:	Semi-Direct	**Report:**	LNG00787

CANDELA DISTRIBUTION

	0	22.5	45	67.5	90	Flux Lumens
0	110	110	110	110	110	
5	108	111	116	122	121	11
15	102	115	136	155	159	38
25	90	113	150	171	177	65
35	73	105	144	157	161	82
45	55	89	123	129	130	84
55	37	70	101	95	92	74
65	22	56	78	67	62	60
75	11	46	59	47	42	47
85	5	38	47	35	30	38
90	3	35	44	31	29	
95	3	33	43	31	31	34
105	4	31	45	34	36	34
115	4	30	46	38	40	34
125	4	28	46	40	43	31
135	3	25	45	43	47	26
145	2	19	39	42	47	19
155	2	13	28	34	40	11
165	1	6	14	20	23	4
175	1	2	3	5	5	0
180	1	1	1	1	1	

POLAR CANDELA PLOT



72% Down / 28% Up

CHARACTERISTICS

RP1 Meets RP-1-12 recommendations for VDT-Normal spaces				
Direct: Peak Candela & Angle (0°)			109.6	0.0
Direct: Peak Candela & Angle (90°)			177.0	25.0
Spacing Criteria (0°, 90°, 180°)		1.12	1.84	N/A
Beam (H, V), Field (H, V)	112.4	96.5	180.0	180.0
Indirect: Peak Candela & Angle(°)			47.6	140.0
Indirect: Zenith Candela, Peak to Zenith			1.2	39.67
Luminous Width, Length, Height (ft)		0.18	2.01	0.20
DLC, UGR (4H x 8H, 1.0H), MDER		N/A	18.9	0.571
x, y, CCT, D_{uv}	0.4108	0.3928	3399	-0.0002
CRI (R_a), R_9, G_a, C_9	94	61	99	93
TM-30-18 R_f, $R_{f,h1}$, R_g, $R_{cs,h1}$	91	90	100	-5%
120V: P(W), I(A), THD(%), PF	7.1	0.062	22.0	0.950
277V: P(W), I(A), THD(%), PF	7.6	0.035	40.0	0.780
347V: P(W), I(A), THD(%), PF	7.6	0.026	17.0	0.856

COEFFICIENTS OF UTILIZATION (%)

Pc---	80				70			50			0
Pw---	70	50	30	10	70	50	30	50	30	10	0
RCR											
0	112	112	112	112	107	107	107	96	96	96	72
1	101	95	90	86	95	90	86	81	77	74	56
2	91	82	75	69	86	78	71	70	65	60	46
3	83	72	63	57	78	68	60	61	55	50	38
4	75	63	54	48	71	60	52	54	47	42	32
5	69	56	47	41	65	53	45	48	41	36	27
6	64	50	41	35	60	48	40	43	36	31	24
7	59	45	37	31	55	43	35	39	32	27	21
8	55	41	33	27	51	39	31	36	29	24	19
9	51	38	29	24	48	36	28	33	26	22	17
10	47	34	27	22	45	33	26	30	24	19	15

*Based on a floor reflectance of 0.2

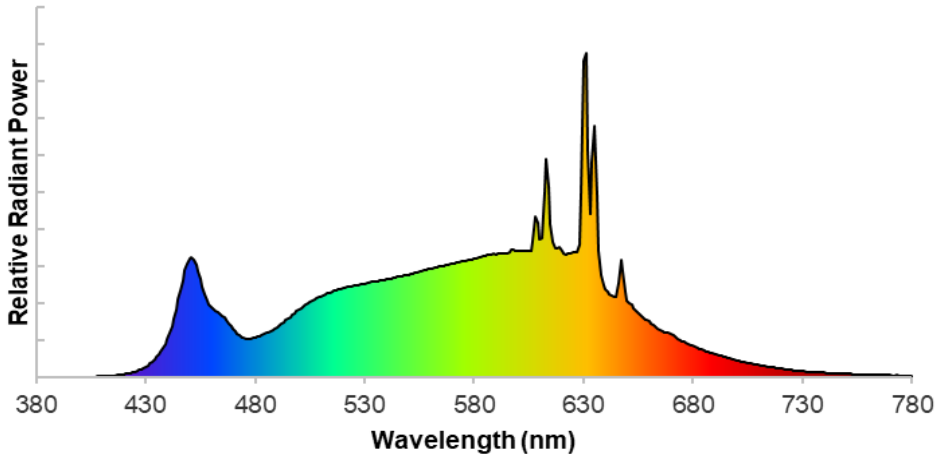
ZONAL LUMENS (lm)

Zone	Lumens	%Fixture	%Lamp
0-30	115	16.5%	16.5%
0-40	196	28.3%	28.3%
0-60	354	51.1%	51.1%
0-90	499	72.0%	72.0%
90-130	133	19.2%	19.2%
90-150	179	25.8%	25.8%
90-180	194	28.0%	28.0%
0-180	693	100.0%	100.0%

AVG LUMINANCE (cd/m²)

	0	45	90
0	3260	3260	3260
5	3199	3227	3290
15	3044	3416	3770
25	2816	3518	3826
35	2481	3264	3294
45	2100	2792	2584
55	1693	2352	1844
65	1282	1936	1294
75	947	1619	944
85	750	1481	757

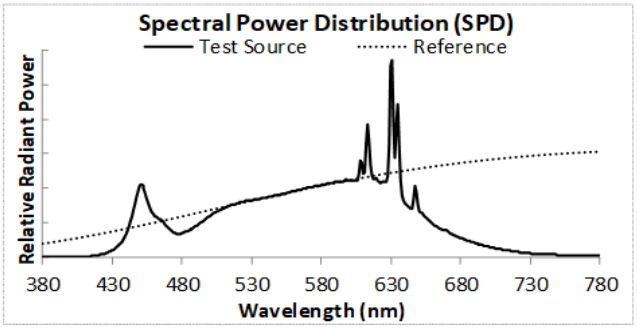
SPECTRAL POWER DISTRIBUTION

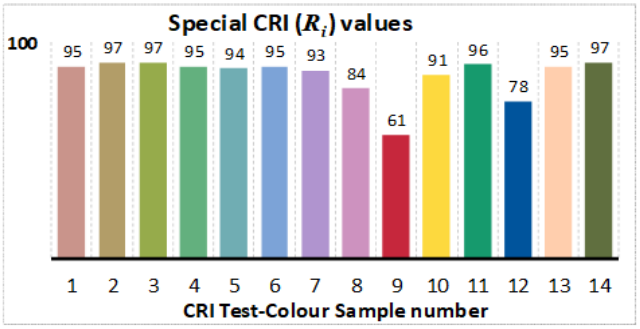


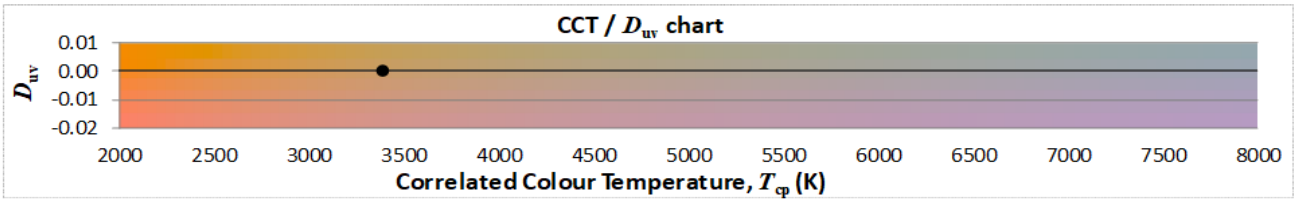
Output of GLA Calculation Tool for CIE 13.3 CRI and Associated CRI-based Colour Rendition Properties

Test Number:	T20200515	**Manufacturer:**	Ledalite by Signify
Date:	25 Mar 2020	**Model:**	ModiFly

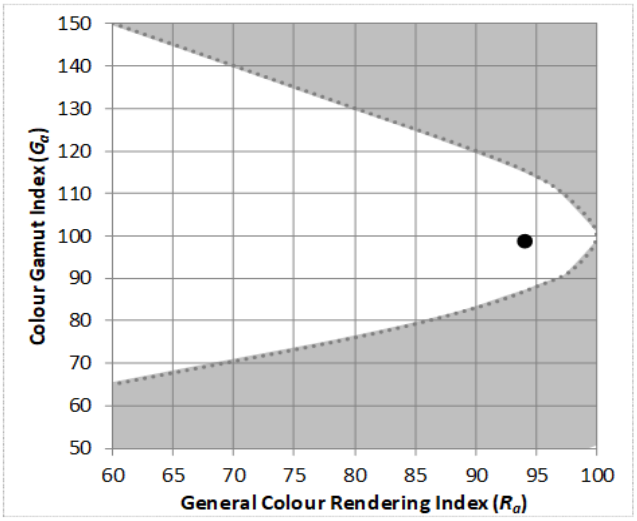
Correlated Colour Temperature (T_{cp}) in K	3399	**CIE1931 chromaticity coordinate, x**	0.4108
Distance to Blackbody Locus (D_{uv})	-0.0002	**CIE1931 chromaticity coordinate, y**	0.3928
General Colour Rendering Index (R_a)	94	**CIE1976 chromaticity coordinate, u'**	0.2384
Red Rendering Index (R_9)	61	**CIE1976 chromaticity coordinate, v'**	0.5130
Colour Gamut Index (G_a)	99		
Red Chroma Index (C_9)	93		



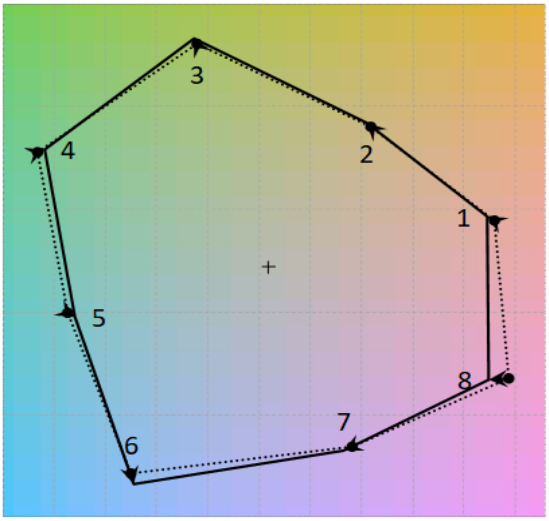


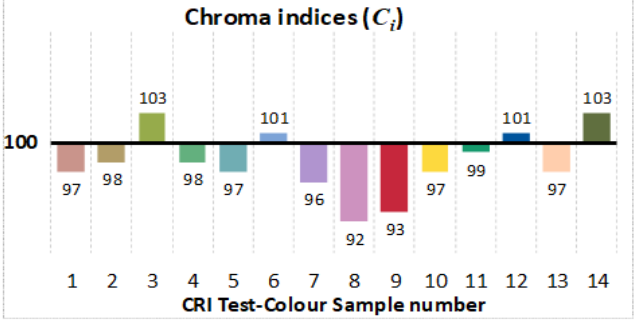


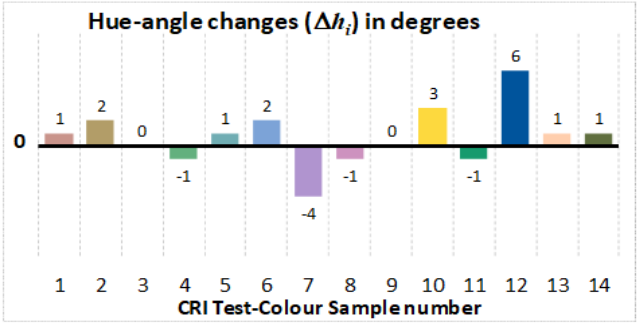
Two-dimensional R_a-G_a Graphic



Colour-shift graphic



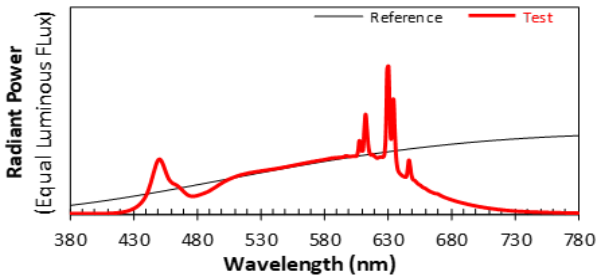


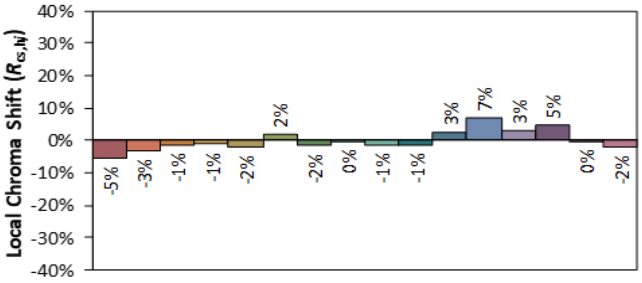


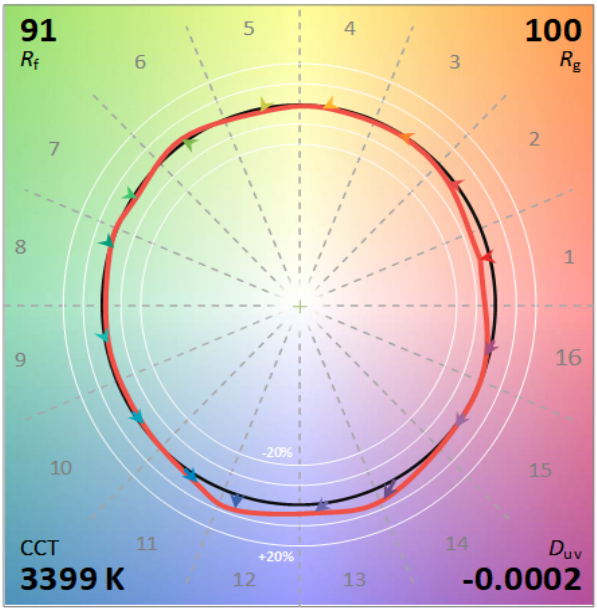
ANSI/IES TM-30-18 Color Rendition Report

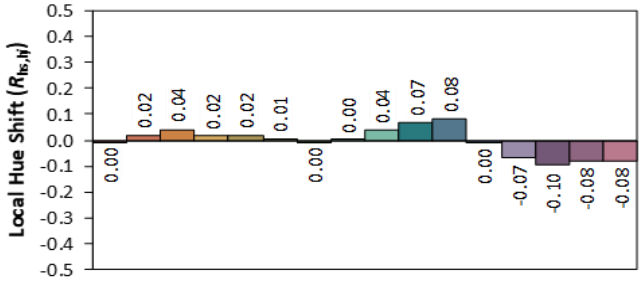
Source: T20200515 **Manufacturer:** Ledalite by Signify

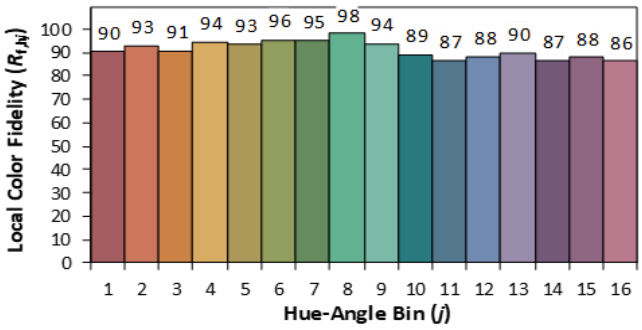
Date: 25 Mar 2020 **Model:** ModiFly

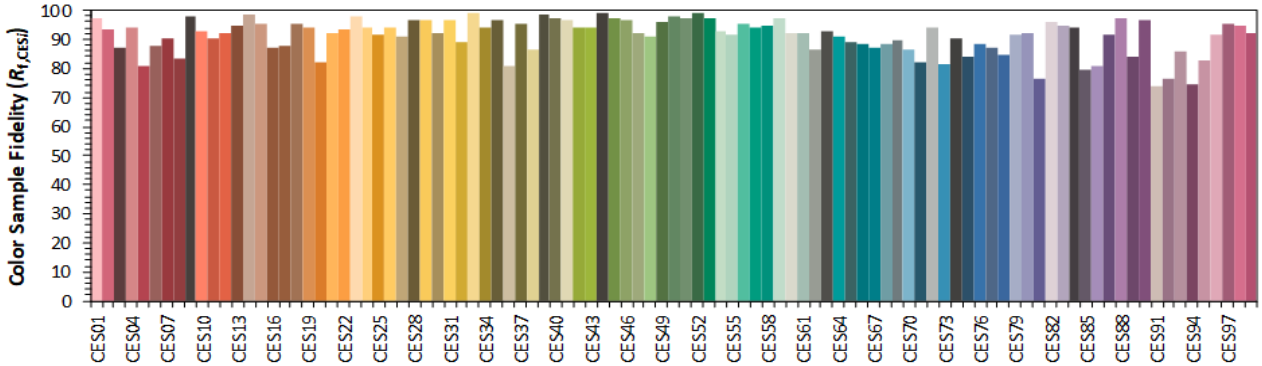












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	**0.4108**
y	**0.3928**
u'	**0.2384**
v'	**0.5130**

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	0.00020	425	0.00290	470	0.02620	515	0.04610	560	0.05850	605	0.06820	650	0.04120	695	0.01070	740	0.00230
381	0.00010	426	0.00330	471	0.02470	516	0.04660	561	0.05880	606	0.06860	651	0.03990	696	0.01030	741	0.00230
382	0.00020	427	0.00380	472	0.02340	517	0.04690	562	0.05920	607	0.07370	652	0.03910	697	0.01000	742	0.00220
383	0.00010	428	0.00430	473	0.02240	518	0.04730	563	0.05940	608	0.08670	653	0.03740	698	0.00960	743	0.00210
384	0.00010	429	0.00500	474	0.02160	519	0.04760	564	0.05980	609	0.08370	654	0.03580	699	0.00940	744	0.00210
385	0.00020	430	0.00570	475	0.02110	520	0.04800	565	0.06000	610	0.07460	655	0.03470	700	0.00910	745	0.00200
386	0.00010	431	0.00640	476	0.02070	521	0.04840	566	0.06030	611	0.07490	656	0.03400	701	0.00880	746	0.00200
387	0.00010	432	0.00730	477	0.02060	522	0.04870	567	0.06070	612	0.10010	657	0.03260	702	0.00850	747	0.00190
388	0.00010	433	0.00830	478	0.02070	523	0.04870	568	0.06100	613	0.11810	658	0.03130	703	0.00820	748	0.00190
389	0.00010	434	0.00950	479	0.02100	524	0.04920	569	0.06110	614	0.10260	659	0.03060	704	0.00790	749	0.00180
390	0.00010	435	0.01070	480	0.02130	525	0.04940	570	0.06170	615	0.08260	660	0.03010	705	0.00770	750	0.00170
391	0.00010	436	0.01210	481	0.02170	526	0.04970	571	0.06170	616	0.07290	661	0.02900	706	0.00740	751	0.00170
392	0.00010	437	0.01380	482	0.02220	527	0.05000	572	0.06210	617	0.06990	662	0.02800	707	0.00720	752	0.00160
393	0.00010	438	0.01570	483	0.02270	528	0.05010	573	0.06220	618	0.06980	663	0.02700	708	0.00690	753	0.00160
394	0.00010	439	0.01800	484	0.02320	529	0.05030	574	0.06270	619	0.07010	664	0.02620	709	0.00670	754	0.00150
395	0.00010	440	0.02060	485	0.02380	530	0.05060	575	0.06280	620	0.06830	665	0.02560	710	0.00650	755	0.00150
396	0.00010	441	0.02380	486	0.02420	531	0.05080	576	0.06310	621	0.06720	666	0.02500	711	0.00630	756	0.00150
397	0.00010	442	0.02740	487	0.02490	532	0.05110	577	0.06340	622	0.06600	667	0.02430	712	0.00600	757	0.00140
398	0.00010	443	0.03180	488	0.02550	533	0.05140	578	0.06370	623	0.06660	668	0.02400	713	0.00580	758	0.00140
399	0.00010	444	0.03650	489	0.02620	534	0.05150	579	0.06370	624	0.06720	669	0.02380	714	0.00570	759	0.00130
400	0.00010	445	0.04170	490	0.02700	535	0.05170	580	0.06420	625	0.06740	670	0.02340	715	0.00550	760	0.00130
401	0.00010	446	0.04720	491	0.02780	536	0.05200	581	0.06450	626	0.06740	671	0.02250	716	0.00530	761	0.00130
402	0.00010	447	0.05260	492	0.02880	537	0.05230	582	0.06460	627	0.06740	672	0.02170	717	0.00510	762	0.00130
403	0.00010	448	0.05770	493	0.02970	538	0.05240	583	0.06500	628	0.07170	673	0.02090	718	0.00490	763	0.00120
404	0.00010	449	0.06170	494	0.03070	539	0.05270	584	0.06540	629	0.09920	674	0.02020	719	0.00470	764	0.00120
405	0.00020	450	0.06420	495	0.03160	540	0.05290	585	0.06550	630	0.17160	675	0.01960	720	0.00460	765	0.00110
406	0.00020	451	0.06490	496	0.03270	541	0.05310	586	0.06600	631	0.17540	676	0.01900	721	0.00440	766	0.00110
407	0.00020	452	0.06370	497	0.03360	542	0.05340	587	0.06620	632	0.12220	677	0.01840	722	0.00420	767	0.00110
408	0.00020	453	0.06100	498	0.03460	543	0.05360	588	0.06630	633	0.08850	678	0.01790	723	0.00410	768	0.00100
409	0.00030	454	0.05740	499	0.03560	544	0.05390	589	0.06660	634	0.11700	679	0.01730	724	0.00390	769	0.00100
410	0.00030	455	0.05300	500	0.03640	545	0.05410	590	0.06660	635	0.13590	680	0.01690	725	0.00380	770	0.00100
411	0.00040	456	0.04880	501	0.03730	546	0.05450	591	0.06670	636	0.09880	681	0.01630	726	0.00360	771	0.00090
412	0.00040	457	0.04490	502	0.03820	547	0.05470	592	0.06700	637	0.06820	682	0.01580	727	0.00350	772	0.00090
413	0.00050	458	0.04170	503	0.03900	548	0.05510	593	0.06690	638	0.05500	683	0.01540	728	0.00340	773	0.00090
414	0.00060	459	0.03940	504	0.03970	549	0.05530	594	0.06710	639	0.04980	684	0.01490	729	0.00320	774	0.00080
415	0.00070	460	0.03780	505	0.04050	550	0.05550	595	0.06710	640	0.04760	685	0.01450	730	0.00320	775	0.00090
416	0.00080	461	0.03640	506	0.04120	551	0.05580	596	0.06740	641	0.04620	686	0.01400	731	0.00300	776	0.00080
417	0.00090	462	0.03560	507	0.04190	552	0.05610	597	0.06880	642	0.04500	687	0.01360	732	0.00290	777	0.00070
418	0.00100	463	0.03490	508	0.04240	553	0.05650	598	0.06890	643	0.04420	688	0.01320	733	0.00280	778	0.00070
419	0.00120	464	0.03410	509	0.04310	554	0.05680	599	0.06840	644	0.04350	689	0.01280	734	0.00280	779	0.00070
420	0.00140	465	0.03320	510	0.04370	555	0.05690	600	0.06810	645	0.04360	690	0.01250	735	0.00270	780	0.00070
421	0.00160	466	0.03210	511	0.04420	556	0.05740	601	0.06800	646	0.05130	691	0.01200	736	0.00260		
422	0.00190	467	0.03070	512	0.04480	557	0.05760	602	0.06810	647	0.06380	692	0.01170	737	0.00250		
423	0.00210	468	0.02920	513	0.04520	558	0.05790	603	0.06840	648	0.05690	693	0.01140	738	0.00240		
424	0.00250	469	0.02770	514	0.04570	559	0.05830	604	0.06850	649	0.04640	694	0.01100	739	0.00240		

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	9.7	10.9	10.4	11.6	12.5	13.9	15.0	14.6	15.8	16.7
	3H	10.9	11.9	11.6	12.7	13.6	15.7	16.8	16.4	17.5	18.5
	4H	11.2	12.2	12.0	13.0	14.0	16.6	17.6	17.3	18.4	19.3
	6H	11.5	12.4	12.3	13.2	14.2	17.4	18.4	18.2	19.2	20.1
	8H	11.5	12.4	12.3	13.2	14.2	17.9	18.8	18.7	19.6	20.6
	12H	11.6	12.4	12.3	13.2	14.2	18.4	19.2	19.2	20.0	21.0
4H	2H	11.5	12.5	12.2	13.3	14.2	14.4	15.4	15.1	16.1	17.1
	3H	13.0	13.9	13.8	14.7	15.7	16.4	17.2	17.2	18.1	19.0
	4H	13.7	14.5	14.5	15.3	16.3	17.4	18.2	18.1	19.0	20.0
	6H	14.2	14.9	15.0	15.8	16.8	18.4	19.1	19.2	19.9	20.9
	8H	14.4	15.0	15.2	15.8	16.9	18.9	19.5	19.7	20.4	21.4
	12H	14.4	15.0	15.3	15.9	16.9	19.5	20.1	20.3	20.9	22.0
8H	4H	14.7	15.4	15.5	16.2	17.2	17.7	18.3	18.5	19.1	20.2
	6H	15.6	16.1	16.4	17.0	18.0	18.8	19.4	19.7	20.3	21.3
	8H	16.0	16.5	16.8	17.3	18.4	19.5	20.0	20.3	20.8	21.9
	12H	16.2	16.7	17.1	17.6	18.6	20.2	20.6	21.0	21.5	22.6
12H	4H	14.9	15.5	15.7	16.3	17.4	17.7	18.3	18.5	19.1	20.2
	6H	15.9	16.4	16.8	17.3	18.4	18.9	19.4	19.8	20.3	21.3
	8H	16.5	16.9	17.3	17.8	18.9	19.6	20.1	20.5	20.9	22.0

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.