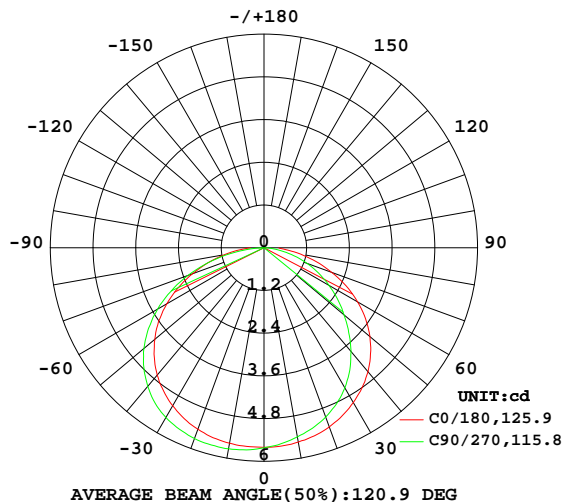


LUMINAIRE PHOTOMETRIC TEST REPORT

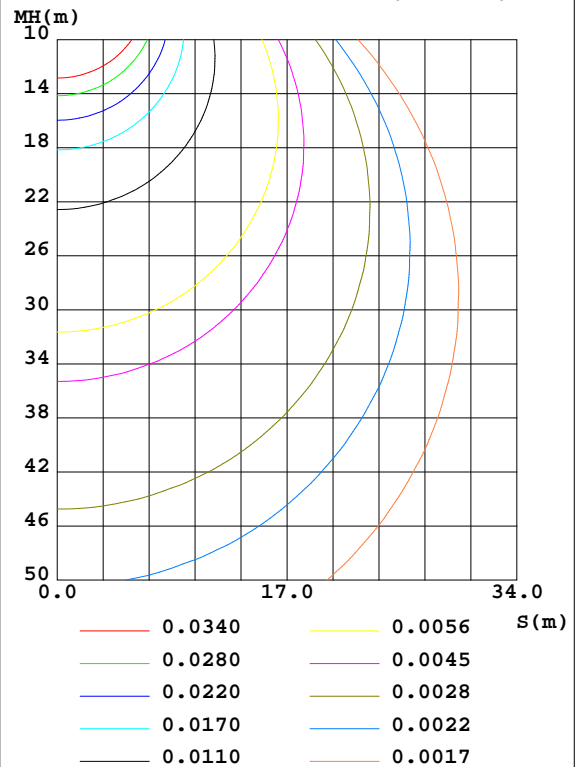
Test:U:24.015V I:0.0615A P:1.4769W PF:1.0000 Freq:50.00Hz Lamp Flux:20x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:B	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 12.51 lm/W			
MODEL		Imax(cd)	5.746	S/MH(C0/180)	1.36
NOMINAL POWER(W)	1.48	LOR(%)	92.4	S/MH(C90/270)	1.45
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	18.483	η UP,DN(C0-180)	0.0,41.8
NOMINAL FLUX(lm)	20	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	η down(%)	92.4	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:
 Test Date:03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:6.020m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5.542	5.437	5.396	5.462	5.576	5.695	5.736	5.673	0- 10	0.5337	0.5337	2.89,2.67
20	5.357	5.158	5.064	5.195	5.426	5.648	5.703	5.613	10- 20	1.555	2.088	11.3,10.4
30	5.019	4.757	4.542	4.812	5.127	5.467	5.508	5.375	20- 30	2.427	4.516	24.4,22.6
40	4.546	4.179	3.808	4.232	4.667	5.077	5.081	4.967	30- 40	3.034	7.550	40.8,37.8
50	3.886	3.423	2.939	3.496	4.007	4.468	4.401	4.290	40- 50	3.271	10.82	58.5,54.1
60	3.033	2.551	2.106	2.633	3.154	3.576	3.449	3.398	50- 60	3.081	13.90	75.2,69.5
70	2.025	1.619	1.286	1.700	2.137	2.416	2.268	2.278	60- 70	2.466	16.37	88.6,81.8
80	1.051	0.7634	0.4969	0.8332	1.129	1.184	0.9703	1.087	70- 80	1.530	17.90	96.8,89.5
90	0.4182	0.2583	0	0.2624	0.3875	0.2993	0	0.2993	80- 90	0.5860	18.48	100,92.4
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 9.1816 lm

%lum = 49.7%

%lamp = 45.9%

Conical surface Flux(120deg): 13.901 lm

%lum = 75.2%

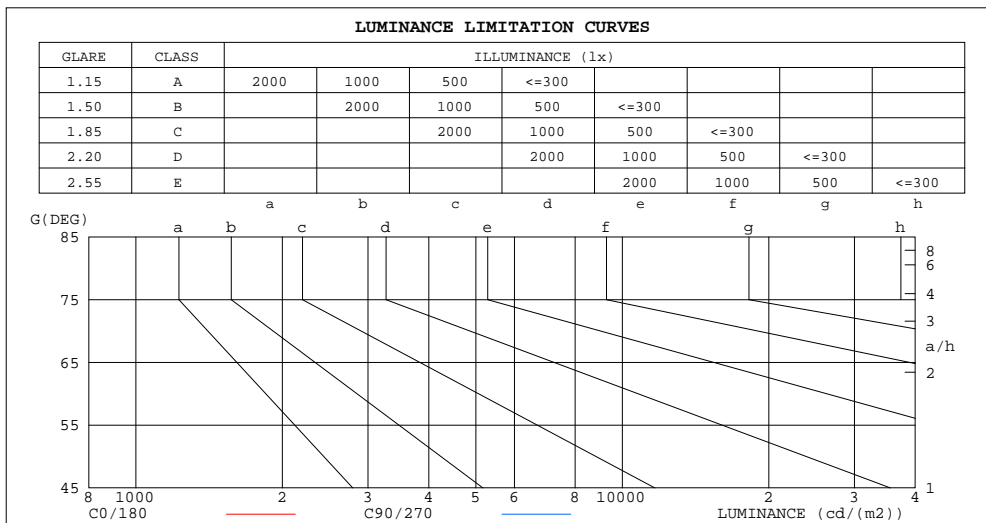
%lamp = 69.5%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:
 Test Date:03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:6.020m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.015V I:0.0615A P:1.4769W PF:1.0000 Freq:50.00Hz Lamp Flux:20x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:B	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	711	208
80	605	286
75	588	338
70	592	376
65	604	401
60	607	421
55	608	441
50	605	457
45	598	476

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 20DEG
Operators:
Test Date: 03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 6.020m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:24.015V I:0.0615A P:1.4769W PF:1.0000 Freq:50.00Hz Lamp Flux:20x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:B	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.309	.176	.056	.302	.172	.055	.290	.166	.053	.278	.161	.052	.268	.155	.050		
2.0	.285	.156	.048	.279	.154	.047	.268	.149	.046	.258	.145	.045	.249	.141	.044		
3.0	.261	.139	.042	.256	.137	.041	.246	.134	.041	.237	.130	.040	.229	.127	.039		
4.0	.239	.124	.037	.235	.123	.036	.226	.120	.036	.218	.117	.035	.211	.115	.035		
5.0	.220	.112	.033	.216	.111	.032	.209	.109	.032	.201	.106	.032	.195	.104	.031		
6.0	.203	.102	.029	.200	.101	.029	.193	.099	.029	.187	.097	.029	.181	.095	.028		
7.0	.189	.093	.026	.186	.092	.026	.180	.091	.026	.174	.089	.026	.168	.088	.026		
8.0	.176	.086	.024	.173	.085	.024	.168	.084	.024	.162	.082	.024	.158	.081	.024		
9.0	.164	.080	.022	.162	.079	.022	.157	.078	.022	.152	.076	.022	.148	.075	.022		
10.0	.154	.074	.021	.152	.073	.020	.148	.072	.020	.144	.071	.020	.140	.070	.020		

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.176	.176	.176	.150	.150	.150	.103	.103	.103	.059	.059	.059	.019	.019	.019	
1.0	.168	.144	.122	.144	.124	.105	.098	.085	.073	.057	.049	.042	.018	.016	.014	
2.0	.161	.122	.089	.138	.105	.077	.095	.073	.053	.055	.042	.031	.018	.014	.010	
3.0	.154	.106	.067	.132	.091	.058	.091	.063	.041	.052	.037	.024	.017	.012	.008	
4.0	.147	.094	.053	.126	.081	.046	.087	.056	.032	.050	.033	.019	.016	.011	.006	
5.0	.140	.084	.042	.120	.073	.037	.083	.051	.026	.048	.030	.015	.015	.010	.005	
6.0	.134	.076	.035	.115	.066	.031	.079	.046	.022	.046	.027	.013	.015	.009	.004	
7.0	.127	.070	.030	.109	.061	.026	.076	.043	.019	.044	.025	.011	.014	.008	.004	
8.0	.121	.065	.026	.104	.056	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003	
9.0	.115	.060	.023	.099	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	
10.0	.110	.056	.020	.095	.049	.018	.066	.034	.013	.038	.020	.008	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:20DEG
Operators:
Test Date:03/13/2017

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.015V I:0.0615A P:1.4769W PF:1.0000 Freq:50.00Hz Lamp Flux:20x1 lm											
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light						WEIGHT:					
SPEC.:B						DIM.: 0.3m			SERIAL No.:		
MFR.: Alloy LED						SUR.:			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	24.6	26.1	24.8	26.3	26.5	23.0	24.6	23.3	24.8	25.0	
	3H	26.4	27.8	26.7	28.0	28.3	24.4	25.9	24.7	26.1	
	4H	27.1	28.5	27.5	28.8	29.0	24.9	26.3	25.2	26.6	
	6H	27.8	29.1	28.1	29.4	29.7	25.3	26.6	25.6	26.9	
	8H	28.1	29.3	28.4	29.6	29.9	25.4	26.6	25.7	26.9	
	12H	28.3	29.6	28.7	29.9	30.2	25.4	26.6	25.8	26.9	
4H	2H	25.0	26.4	25.3	26.7	26.9	23.8	25.2	24.2	25.5	
	3H	27.0	28.2	27.4	28.5	28.9	25.4	26.6	25.7	26.9	
	4H	28.0	29.1	28.3	29.4	29.7	26.0	27.2	26.4	27.5	
	6H	28.8	29.8	29.2	30.1	30.5	26.5	27.5	26.9	27.8	
	8H	29.1	30.1	29.6	30.5	30.8	26.6	27.6	27.1	27.9	
	12H	29.5	30.4	29.9	30.7	31.1	26.7	27.6	27.1	28.0	
8H	4H	28.2	29.1	28.6	29.5	29.8	26.5	27.4	26.9	27.8	
	6H	29.2	29.9	29.6	30.4	30.8	27.1	27.9	27.5	28.3	
	8H	29.7	30.3	30.1	30.8	31.2	27.3	28.0	27.8	28.5	
	12H	30.1	30.7	30.6	31.2	31.7	27.5	28.1	28.0	28.6	
12H	4H	28.2	29.0	28.6	29.4	29.8	26.5	27.4	27.0	27.8	
	6H	29.2	29.9	29.7	30.3	30.8	27.2	27.9	27.7	28.4	
	8H	29.8	30.4	30.2	30.8	31.3	27.5	28.1	28.0	28.6	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117, 20.00 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -13.6$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators:
 Test Date: 03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 6.020m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.015V I:0.0615A P:1.4769W PF:1.0000 Freq:50.00Hz Lamp Flux:20x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:B	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:

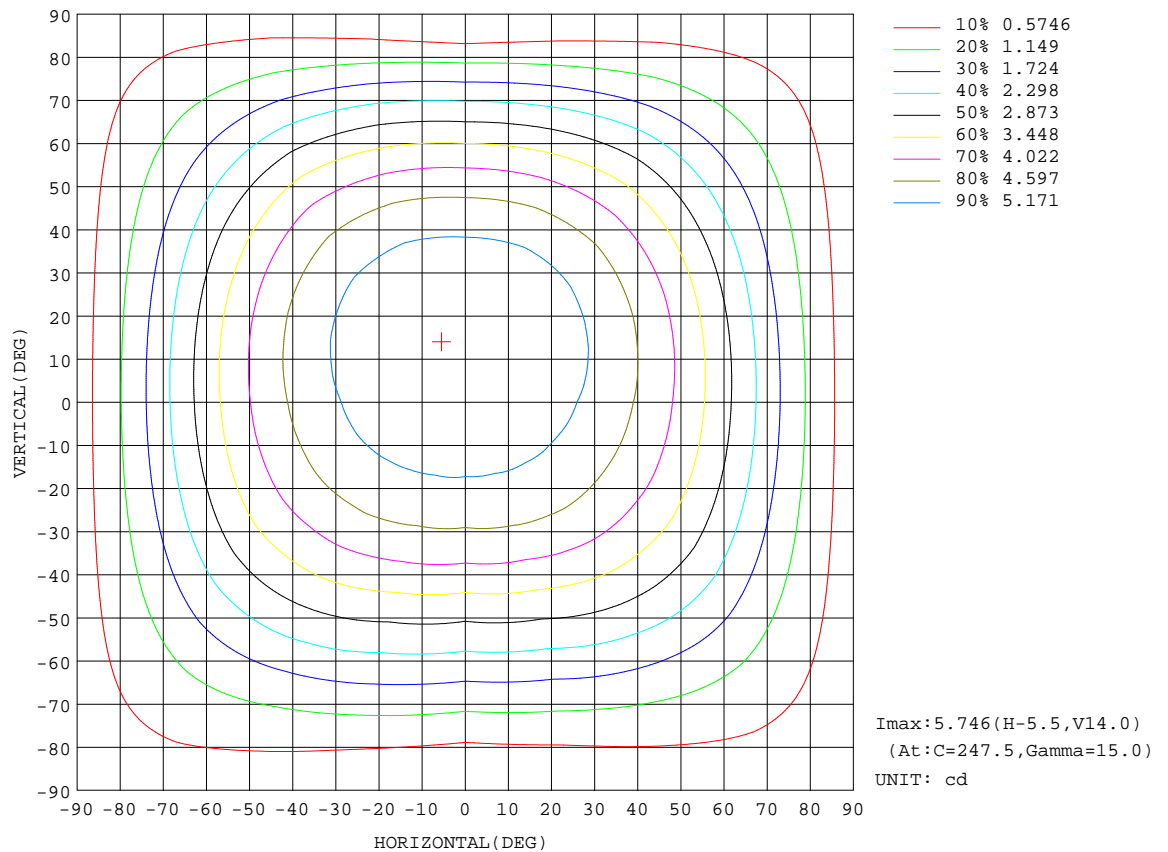
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	51	40	33	50	40	33	49	39	33	27
0.80	60	49	42	59	49	42	58	48	42	35
1.00	68	57	50	67	57	50	65	58	50	43
1.25	75	65	58	73	64	57	71	63	57	50
1.50	80	70	63	78	69	63	75	67	62	54
2.00	86	78	71	84	77	71	81	75	69	62
2.50	90	82	76	88	81	76	84	79	74	66
3.00	93	86	81	91	85	80	87	82	78	70
4.00	97	91	87	95	90	86	91	87	83	75
5.00	100	95	91	97	93	89	93	89	86	78
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNM = 1.25										

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators:
 Test Date: 03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 6.020m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.015V I:0.0615A P:1.4769W PF:1.0000 Freq:50.00Hz Lamp Flux:20x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:B	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:



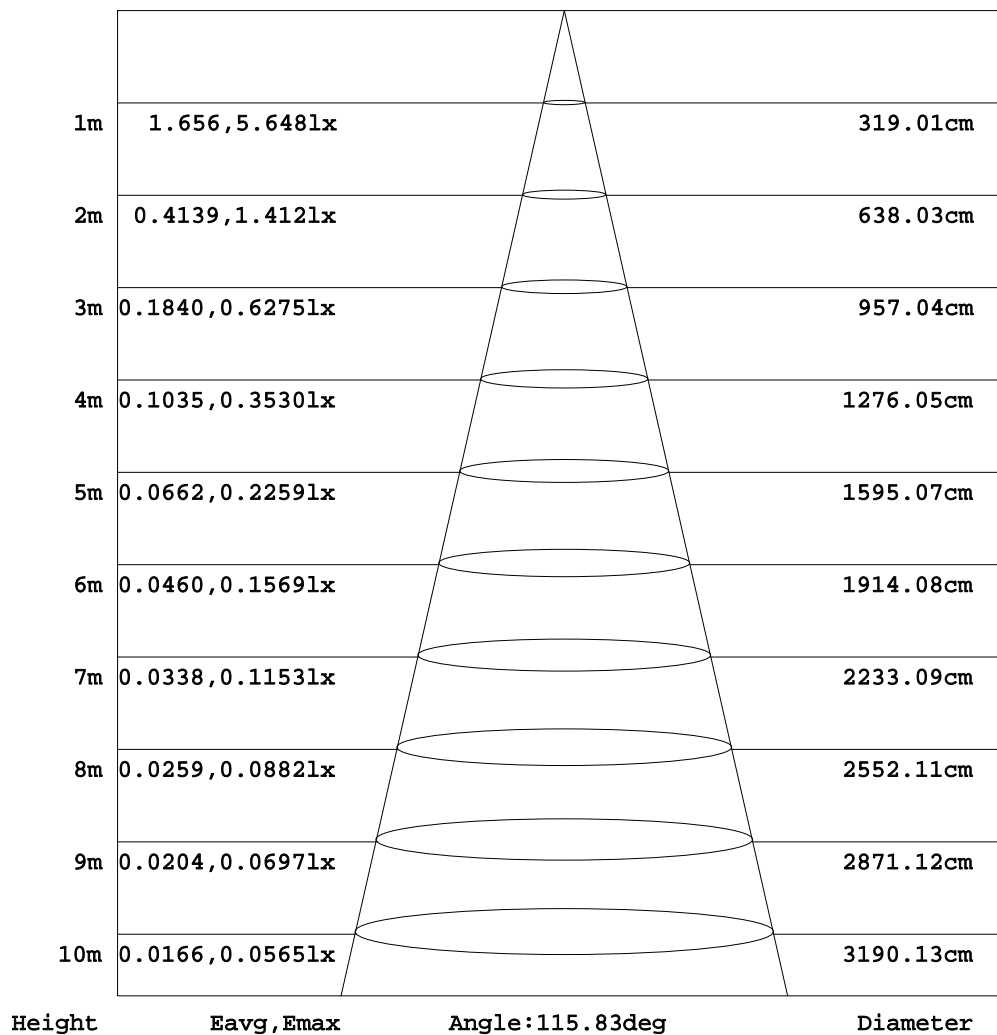
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators:
 Test Date: 03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 6.020m [K=1.0000]
 Remarks:

AAI Figure

Test:U:24.015V I:0.0615A P:1.4769W PF:1.0000 Freq:50.00Hz Lamp Flux:20x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:B	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:

Flux out:13.32 lm

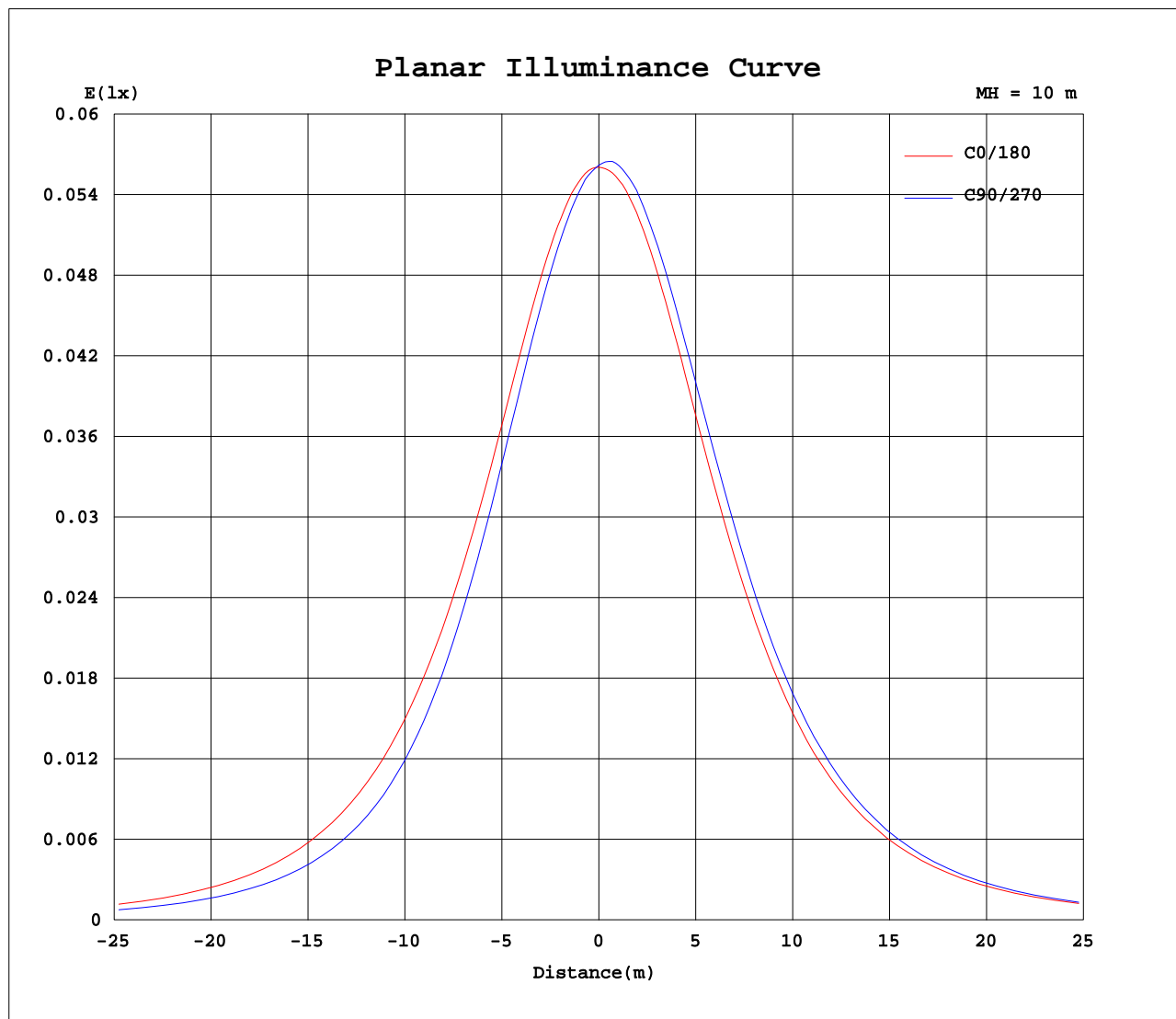


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators:
 Test Date: 03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 6.020m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 20DEG
Operators:
Test Date: 03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 6.020m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.015V I:0.0615A P:1.4769W PF:1.0000 Freq:50.00Hz Lamp Flux:20x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24VTRIP-WELED Tape Light	WEIGHT:	
SPEC.:B	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 20DEG
Operators:
Test Date: 03/13/2017

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

```

Photometric Data Table [cd]

G/C	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0	202.5
0.0	5.605	5.609	5.617	5.611	5.620	5.613	5.622	5.615	5.605	5.609
3.0	5.603	5.582	5.576	5.568	5.568	5.566	5.585	5.597	5.603	5.630
6.0	5.583	5.553	5.521	5.502	5.501	5.508	5.542	5.572	5.597	5.636
9.0	5.556	5.498	5.458	5.435	5.423	5.433	5.480	5.533	5.582	5.642
12.0	5.519	5.445	5.388	5.348	5.343	5.357	5.410	5.488	5.558	5.640
15.0	5.472	5.381	5.314	5.260	5.251	5.279	5.345	5.426	5.525	5.619
18.0	5.408	5.301	5.228	5.166	5.146	5.180	5.259	5.363	5.467	5.593
21.0	5.329	5.215	5.128	5.053	5.019	5.067	5.167	5.277	5.406	5.550
24.0	5.240	5.111	5.017	4.930	4.882	4.930	5.060	5.195	5.328	5.492
27.0	5.136	4.994	4.890	4.789	4.724	4.793	4.943	5.096	5.231	5.419
30.0	5.019	4.869	4.757	4.621	4.542	4.627	4.812	4.977	5.127	5.324
33.0	4.892	4.735	4.603	4.434	4.345	4.450	4.656	4.848	5.008	5.216
36.0	4.755	4.581	4.429	4.227	4.122	4.247	4.484	4.696	4.868	5.095
39.0	4.595	4.413	4.234	3.999	3.878	4.042	4.292	4.526	4.715	4.949
42.0	4.425	4.237	4.029	3.763	3.628	3.802	4.095	4.346	4.549	4.800
45.0	4.228	4.044	3.810	3.527	3.365	3.556	3.878	4.151	4.356	4.613
48.0	4.025	3.851	3.582	3.261	3.109	3.308	3.656	3.954	4.147	4.404
51.0	3.806	3.624	3.339	3.007	2.857	3.056	3.412	3.732	3.929	4.179
54.0	3.564	3.392	3.086	2.748	2.609	2.804	3.158	3.493	3.694	3.933
57.0	3.308	3.140	2.822	2.482	2.354	2.552	2.896	3.236	3.429	3.664
60.0	3.033	2.875	2.551	2.228	2.106	2.306	2.633	2.962	3.154	3.375
63.0	2.744	2.601	2.269	1.971	1.852	2.055	2.353	2.681	2.857	3.066
66.0	2.441	2.302	1.986	1.719	1.614	1.803	2.072	2.381	2.553	2.744
69.0	2.131	1.996	1.717	1.473	1.364	1.555	1.791	2.084	2.244	2.408
72.0	1.822	1.695	1.438	1.223	1.122	1.305	1.518	1.781	1.924	2.062
75.0	1.522	1.404	1.178	0.9773	0.8744	1.053	1.246	1.492	1.627	1.731
78.0	1.225	1.121	0.9193	0.7333	0.6404	0.8029	0.9911	1.203	1.311	1.401
81.0	0.9604	0.8542	0.6855	0.5243	0.4312	0.5816	0.7552	0.9362	1.038	1.106
84.0	0.6960	0.6246	0.4948	0.3501	0.2345	0.3849	0.5482	0.6922	0.7698	0.8088
87.0	0.4785	0.4424	0.3368	0.2027	0.0846	0.2293	0.3738	0.4915	0.5344	0.5481
90.0	0.4182	0.3629	0.2583	0.1169	0	0.1230	0.2624	0.3526	0.3875	0.3854
G/C	225.0	247.5	270.0	292.5	315.0	337.5				
0.0	5.617	5.611	5.620	5.613	5.622	5.615				
3.0	5.652	5.660	5.671	5.660	5.654	5.632				
6.0	5.681	5.693	5.708	5.687	5.660	5.632				
9.0	5.695	5.726	5.730	5.703	5.673	5.619				
12.0	5.695	5.738	5.742	5.714	5.671	5.607				
15.0	5.695	5.746	5.734	5.724	5.656	5.578				
18.0	5.677	5.734	5.724	5.710	5.636	5.533				
21.0	5.640	5.706	5.693	5.675	5.603	5.476				
24.0	5.605	5.665	5.640	5.634	5.541	5.402				
27.0	5.555	5.599	5.580	5.572	5.461	5.318				
30.0	5.467	5.523	5.508	5.495	5.375	5.214				
33.0	5.371	5.425	5.412	5.394	5.279	5.099				
36.0	5.256	5.310	5.285	5.273	5.158	4.960				
39.0	5.121	5.181	5.131	5.124	5.018	4.816				
42.0	4.971	5.015	4.959	4.960	4.852	4.648				
45.0	4.805	4.841	4.770	4.773	4.661	4.462				
48.0	4.608	4.630	4.553	4.542	4.446	4.257				
51.0	4.384	4.396	4.314	4.300	4.216	4.033				
54.0	4.140	4.136	4.050	4.035	3.966	3.783				
57.0	3.868	3.853	3.759	3.746	3.695	3.515				
60.0	3.576	3.552	3.449	3.435	3.398	3.223				
63.0	3.250	3.222	3.115	3.107	3.086	2.914				
66.0	2.898	2.873	2.760	2.764	2.752	2.598				
69.0	2.547	2.510	2.399	2.404	2.407	2.260				
72.0	2.163	2.127	2.012	2.027	2.032	1.918				
75.0	1.784	1.729	1.628	1.649	1.664	1.604				
78.0	1.419	1.336	1.229	1.270	1.321	1.276				
81.0	1.073	0.9624	0.8410	0.9070	0.9829	0.9868				
84.0	0.7656	0.6365	0.4578	0.5997	0.6817	0.7164				
87.0	0.4953	0.3616	0.1218	0.3288	0.4297	0.4702				
90.0	0.2993	0.1435	0	0.1435	0.2993	0.4100				

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators:
 Test Date: 03/13/2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 6.020m [K=1.0000]
 Remarks: