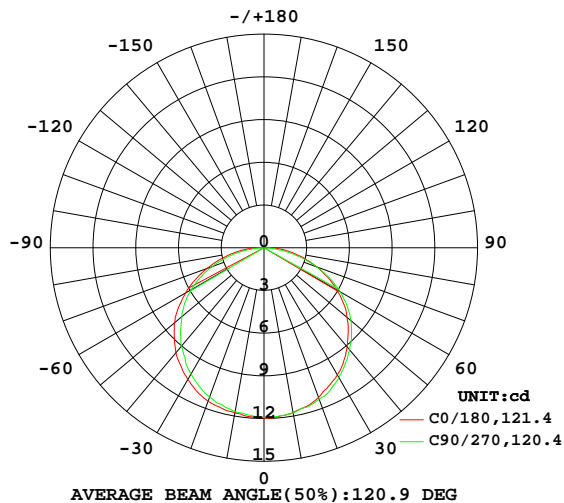


LUMINAIRE PHOTOMETRIC TEST REPORT

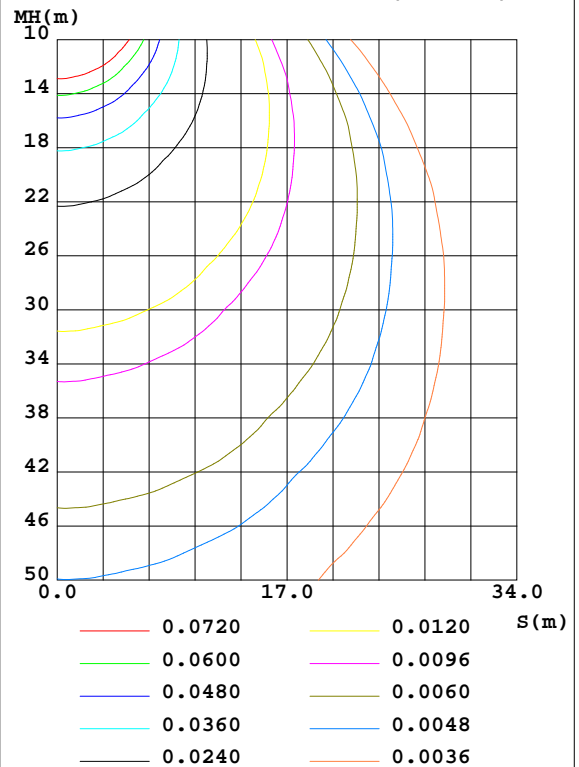
Test:U:24.015V I:0.0609A P:1.4625W PF:1.0000 Freq:50.00Hz Lamp Flux:35x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:R	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 25.96 lm/W			
MODEL		Imax(cd)	11.98	S/MH(C0/180)	1.33
NOMINAL POWER(W)	1.46	LOR(%)	108.5	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	37.961	η UP,DN(C0-180)	0.0,54.4
NOMINAL FLUX(lm)	35	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,54.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	η down(%)	108.5	CIBSE SHR MAX	1.50

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	11.76	11.77	11.78	11.76	11.78	11.71	11.69	11.70	0- 10	1.128	1.128	2.97,3.22
20	11.19	11.28	11.32	11.40	11.47	11.20	11.16	11.01	10- 20	3.257	4.386	11.6,12.5
30	10.31	10.44	10.53	10.71	10.68	10.48	10.24	10.23	20- 30	5.020	9.406	24.8,26.9
40	9.088	9.247	9.352	9.645	9.623	9.404	9.031	9.049	30- 40	6.197	15.60	41.1,44.6
50	7.624	7.788	7.971	8.211	8.192	7.932	7.527	7.616	40- 50	6.643	22.25	58.6,63.6
60	5.906	5.962	6.169	6.429	6.361	6.214	5.896	5.962	50- 60	6.287	28.53	75.2,81.5
70	3.953	3.910	3.937	4.230	4.266	4.169	3.878	4.046	60- 70	5.063	33.60	88.5,96
80	2.056	1.843	1.552	2.036	2.212	2.114	1.760	2.056	70- 80	3.161	36.76	96.8,105
90	0.7442	0.6048	0.0103	0.5412	0.6519	0.5248	0	0.5289	80- 90	1.204	37.96	100,108
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): 18.918 lm

%lum = 49.8%

%lamp = 54.1%

Conical surface Flux(120deg): 28.533 lm

%lum = 75.2%

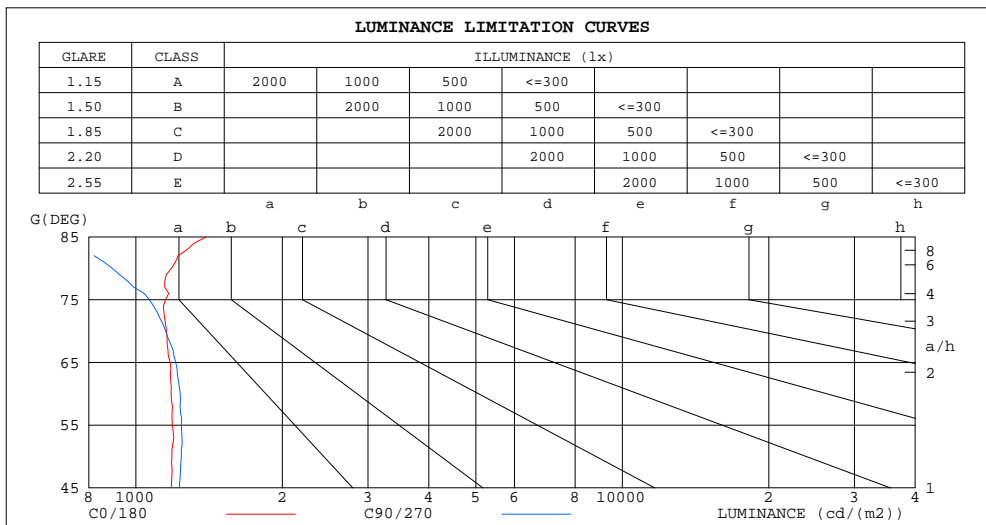
%lamp = 81.5%

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:0.0609A P:1.4625W PF:1.0000 Freq:50.00Hz Lamp Flux:35x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:R	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1397	654
80	1184	894
75	1152	1066
70	1156	1151
65	1176	1208
60	1181	1234
55	1189	1241
50	1186	1240
45	1182	1228

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:0.0609A P:1.4625W PF:1.0000 Freq:50.00Hz Lamp Flux:35x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:R	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	.362	.206	.065	.354	.202	.064	.340	.195	.062	.327	.188	.060	.314	.182	.059	
2.0	.334	.183	.056	.328	.180	.056	.315	.175	.054	.303	.170	.053	.292	.165	.052	
3.0	.306	.163	.049	.300	.161	.048	.289	.157	.048	.278	.152	.047	.268	.149	.046	
4.0	.281	.146	.043	.275	.144	.043	.265	.141	.042	.256	.137	.041	.247	.134	.041	
5.0	.258	.132	.038	.253	.130	.038	.244	.127	.037	.236	.125	.037	.228	.122	.037	
6.0	.238	.120	.034	.234	.118	.034	.226	.116	.034	.219	.114	.033	.212	.111	.033	
7.0	.221	.109	.031	.217	.108	.031	.210	.106	.031	.204	.104	.030	.197	.103	.030	
8.0	.206	.101	.028	.203	.100	.028	.196	.098	.028	.190	.096	.028	.185	.095	.028	
9.0	.193	.093	.026	.190	.092	.026	.184	.091	.026	.179	.090	.026	.173	.088	.025	
10.0	.181	.087	.024	.178	.086	.024	.173	.085	.024	.168	.083	.024	.164	.082	.024	

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	.207	.207	.207	.177	.177	.177	.121	.121	.121	.069	.069	.069	.022	.022	.022	
1.0	.197	.169	.144	.169	.145	.124	.116	.100	.086	.066	.058	.050	.021	.019	.016	
2.0	.189	.143	.104	.162	.123	.090	.111	.085	.063	.064	.050	.037	.021	.016	.012	
3.0	.181	.124	.079	.155	.107	.068	.107	.074	.048	.062	.043	.028	.020	.014	.009	
4.0	.173	.110	.062	.148	.095	.054	.102	.066	.038	.059	.039	.022	.019	.013	.007	
5.0	.164	.099	.050	.141	.085	.043	.097	.060	.031	.056	.035	.018	.018	.011	.006	
6.0	.157	.090	.041	.135	.078	.036	.093	.054	.026	.054	.032	.015	.017	.010	.005	
7.0	.149	.082	.035	.128	.071	.031	.089	.050	.022	.051	.029	.013	.017	.010	.004	
8.0	.142	.076	.031	.122	.066	.027	.084	.046	.019	.049	.027	.011	.016	.009	.004	
9.0	.135	.070	.027	.116	.061	.023	.081	.043	.017	.047	.025	.010	.015	.008	.003	
10.0	.129	.066	.024	.111	.057	.021	.077	.040	.015	.045	.024	.009	.015	.008	.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:0.0609A P:1.4625W PF:1.0000 Freq:50.00Hz Lamp Flux:35x1 lm											
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light						WEIGHT:					
SPEC.:R						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	25.1	26.7	25.4	26.9	27.1	25.3	26.9	25.6	27.1	27.3	
	3H	26.9	28.3	27.2	28.5	28.8	27.0	28.5	27.3	28.7	28.9
	4H	27.6	29.0	27.9	29.2	29.5	27.7	29.0	28.0	29.3	29.6
	6H	28.2	29.5	28.6	29.8	30.1	28.1	29.4	28.4	29.7	29.9
	8H	28.5	29.8	28.9	30.1	30.4	28.2	29.5	28.5	29.7	30.0
	12H	28.8	30.0	29.1	30.3	30.6	28.2	29.5	28.6	29.8	30.1
4H	2H	25.8	27.2	26.1	27.5	27.7	26.0	27.3	26.3	27.6	27.9
	3H	27.7	28.9	28.1	29.2	29.5	27.8	29.0	28.2	29.3	29.7
	4H	28.6	29.7	29.0	30.0	30.4	28.6	29.7	29.0	30.1	30.4
	6H	29.4	30.4	29.8	30.7	31.1	29.2	30.2	29.6	30.5	30.9
	8H	29.7	30.7	30.1	31.0	31.4	29.3	30.3	29.8	30.6	31.0
	12H	30.1	30.9	30.5	31.3	31.7	29.4	30.3	29.9	30.7	31.1
8H	4H	28.9	29.8	29.3	30.2	30.6	28.9	29.9	29.3	30.2	30.6
	6H	29.9	30.7	30.3	31.1	31.5	29.6	30.4	30.1	30.8	31.3
	8H	30.3	31.0	30.8	31.5	31.9	29.9	30.6	30.4	31.0	31.5
	12H	30.8	31.4	31.3	31.9	32.4	30.1	30.7	30.6	31.1	31.6
12H	4H	28.9	29.8	29.4	30.2	30.6	28.9	29.8	29.4	30.2	30.6
	6H	29.9	30.6	30.4	31.1	31.5	29.7	30.4	30.2	30.9	31.3
	8H	30.5	31.1	31.0	31.5	32.0	30.1	30.7	30.5	31.1	31.6
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4					

CIE Pub.117, 35.00 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -11.6$)

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:0.0609A P:1.4625W PF:1.0000 Freq:50.00Hz Lamp Flux:35x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:R	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:

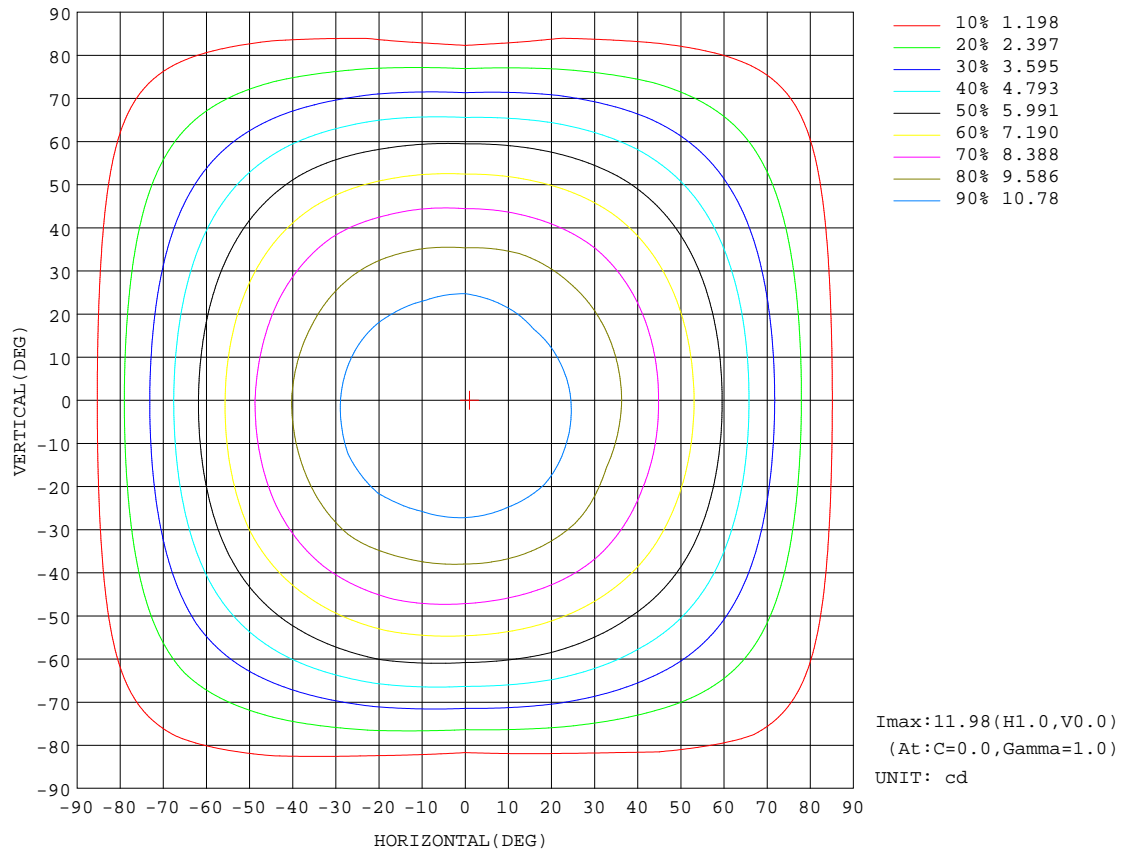
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	60	47	40	59	47	39	58	46	39	32
0.80	71	58	50	70	58	50	68	57	49	41
1.00	80	68	59	79	67	59	76	69	58	50
1.25	88	76	68	86	75	67	83	74	67	58
1.50	93	82	74	92	81	74	88	79	72	64
2.00	101	91	84	99	90	83	95	88	81	73
2.50	106	97	90	103	95	89	99	92	87	77
3.00	109	101	95	107	100	94	103	97	92	82
4.00	114	107	102	111	105	100	107	102	98	88
5.00	117	111	106	114	109	105	109	105	101	91
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:0.0609A P:1.4625W PF:1.0000 Freq:50.00Hz Lamp Flux:35x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:R	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:



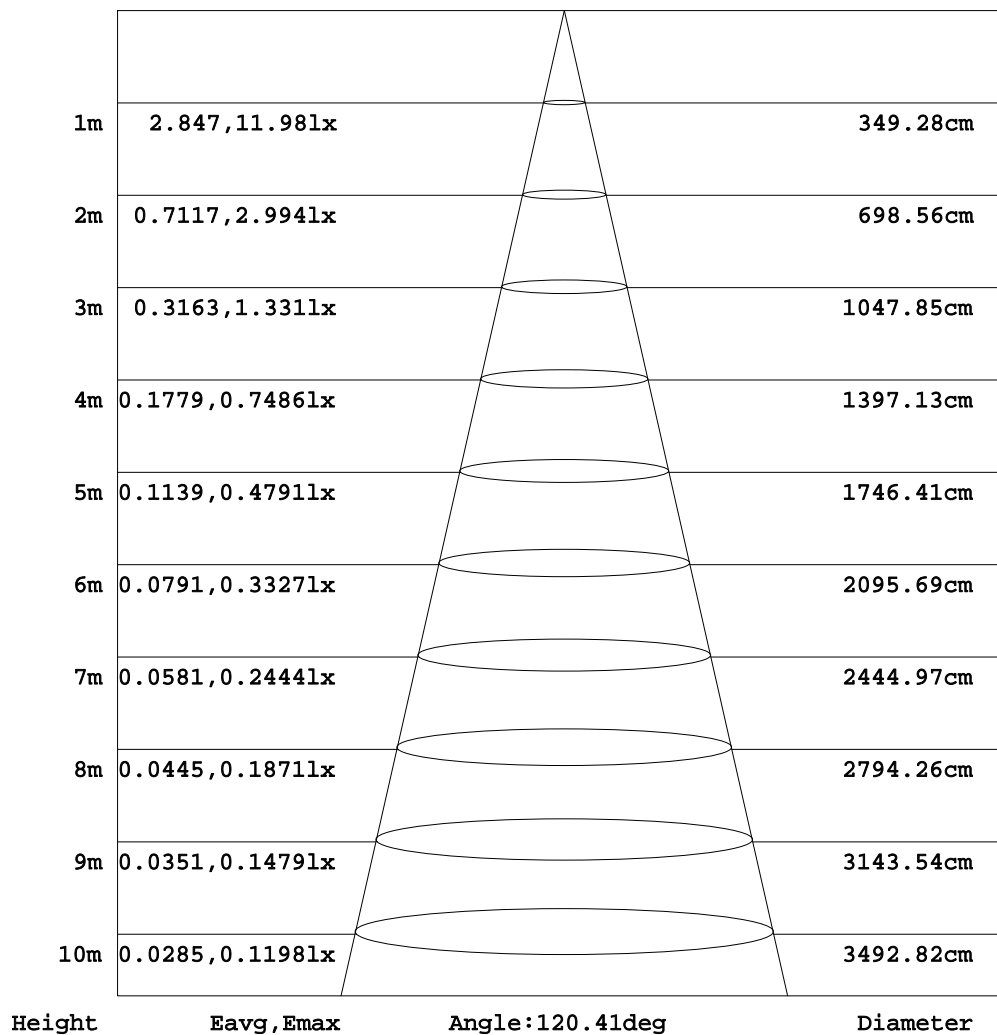
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 20DEG
 Operators:
 Test Date: 03/13/2017

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:0.0609A P:1.4625W PF:1.0000 Freq:50.00Hz Lamp Flux:35x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24V RGB-W LED Tape Light	WEIGHT:	
SPEC.:R	DIM.: 0.3m	SERIAL No.:
MFR.: Alloy LED	SUR.:	Shielding Angle:

Flux out:29.11 lm

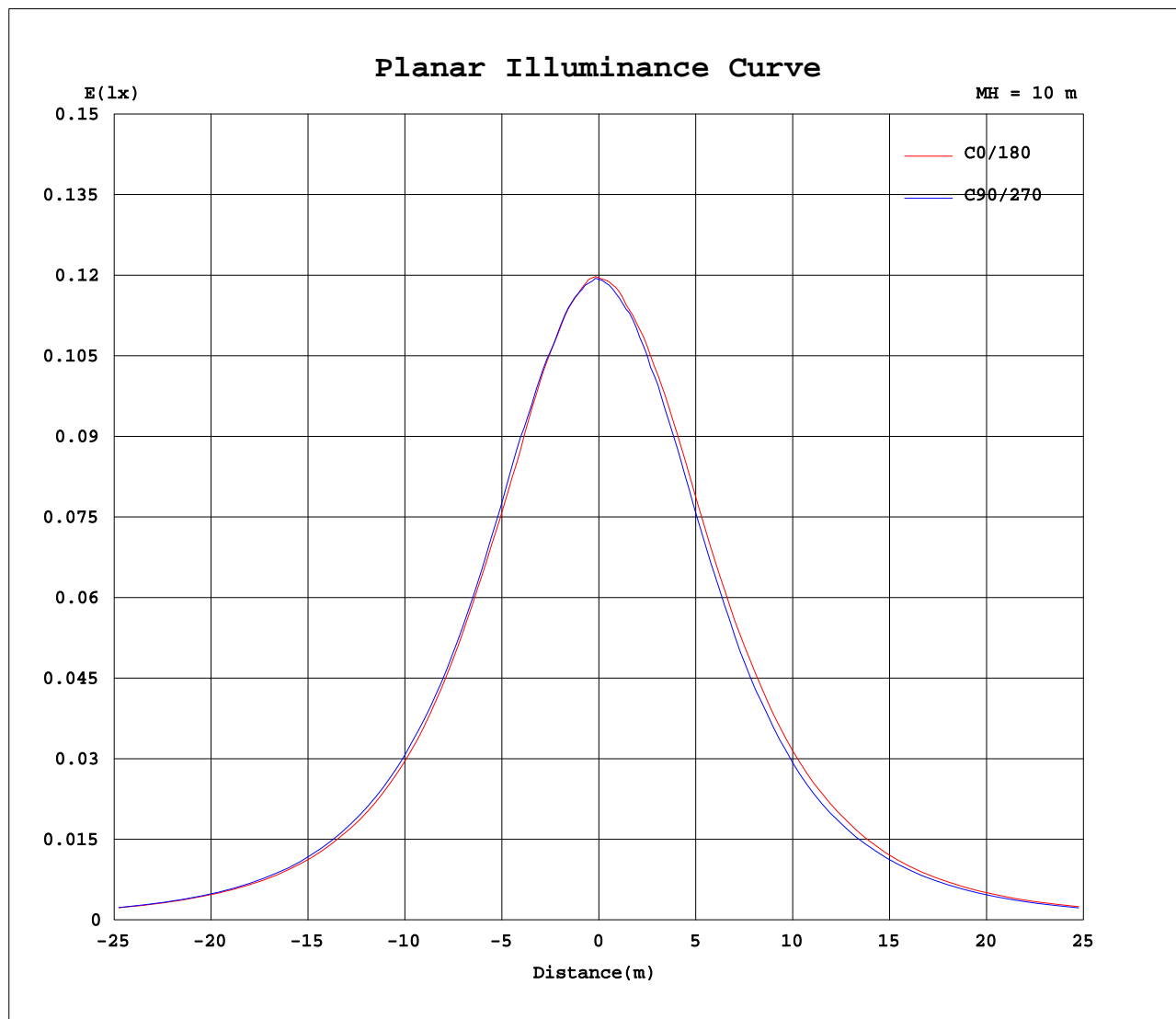


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.0609A P:1.4625W PF:1.0000 Freq:50.00Hz Lamp Flux:35x1 lm		
NAME: Radialux 5.9 Wet Location(4-in-one chip)-24VTRIP-WELED Tape Light	WEIGHT:	
SPEC.:R	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	11.96	11.94	11.93	11.93	11.93	11.93	11.93	11.94	11.96	11.94
3.0	11.97	11.96	11.91	11.90	11.90	11.91	11.93	11.94	11.93	11.93
6.0	11.86	11.88	11.90	11.85	11.86	11.87	11.80	11.86	11.89	11.84
9.0	11.80	11.79	11.78	11.80	11.82	11.79	11.76	11.74	11.78	11.75
12.0	11.64	11.65	11.71	11.69	11.67	11.70	11.75	11.66	11.74	11.73
15.0	11.53	11.53	11.52	11.54	11.59	11.61	11.67	11.64	11.65	11.56
18.0	11.35	11.34	11.37	11.35	11.46	11.46	11.53	11.54	11.56	11.45
21.0	11.10	11.15	11.18	11.14	11.28	11.30	11.35	11.39	11.41	11.30
24.0	10.83	10.91	11.00	11.02	11.12	11.11	11.15	11.22	11.22	11.10
27.0	10.56	10.61	10.73	10.75	10.80	10.84	10.94	10.97	10.95	10.86
30.0	10.31	10.33	10.44	10.48	10.53	10.47	10.71	10.76	10.68	10.57
33.0	9.998	9.969	10.10	10.18	10.18	10.22	10.37	10.42	10.41	10.31
36.0	9.616	9.569	9.764	9.841	9.834	9.909	10.10	10.06	10.06	9.950
39.0	9.227	9.251	9.361	9.429	9.465	9.571	9.726	9.739	9.749	9.596
42.0	8.784	8.894	8.985	9.054	9.096	9.214	9.385	9.384	9.327	9.178
45.0	8.360	8.402	8.553	8.624	8.682	8.855	8.993	8.954	8.910	8.808
48.0	7.942	7.998	8.101	8.132	8.265	8.451	8.501	8.529	8.474	8.384
51.0	7.462	7.541	7.628	7.670	7.805	7.951	8.024	8.074	8.037	7.892
54.0	7.014	7.018	7.059	7.190	7.302	7.481	7.534	7.586	7.514	7.398
57.0	6.466	6.493	6.567	6.669	6.731	6.953	6.974	7.028	6.923	6.845
60.0	5.906	5.964	5.962	6.097	6.169	6.405	6.429	6.458	6.361	6.277
63.0	5.343	5.390	5.361	5.521	5.530	5.798	5.798	5.800	5.758	5.640
66.0	4.744	4.761	4.769	4.884	4.870	5.103	5.142	5.154	5.107	5.006
69.0	4.153	4.141	4.129	4.217	4.166	4.401	4.466	4.504	4.491	4.411
72.0	3.541	3.504	3.484	3.530	3.466	3.678	3.767	3.861	3.833	3.764
75.0	2.981	2.900	2.824	2.823	2.758	2.975	3.098	3.242	3.222	3.149
78.0	2.384	2.321	2.245	2.106	1.995	2.288	2.474	2.590	2.606	2.546
81.0	1.886	1.803	1.679	1.477	1.343	1.591	1.849	2.022	2.015	1.980
84.0	1.376	1.334	1.201	0.9456	0.7284	1.034	1.308	1.441	1.431	1.425
87.0	0.9096	0.9053	0.8070	0.5425	0.2764	0.6039	0.8197	0.9256	0.9375	0.9302
90.0	0.7442	0.7380	0.6048	0.3116	0.0103	0.3219	0.5412	0.6478	0.6519	0.6376

G/C	225.0	247.5	270.0	292.5	315.0	337.5
0.0	11.93	11.93	11.93	11.93	11.93	11.94
3.0	11.93	11.90	11.87	11.88	11.93	11.92
6.0	11.81	11.82	11.78	11.79	11.83	11.88
9.0	11.73	11.69	11.72	11.69	11.73	11.73
12.0	11.62	11.56	11.58	11.61	11.61	11.62
15.0	11.46	11.48	11.41	11.39	11.42	11.44
18.0	11.37	11.31	11.30	11.20	11.15	11.26
21.0	11.15	11.10	11.09	11.03	10.91	11.00
24.0	10.95	10.86	10.84	10.75	10.69	10.74
27.0	10.74	10.63	10.54	10.48	10.50	10.48
30.0	10.48	10.33	10.24	10.25	10.23	10.18
33.0	10.21	10.06	9.915	9.958	9.930	9.954
36.0	9.860	9.677	9.478	9.587	9.556	9.585
39.0	9.497	9.321	9.110	9.151	9.144	9.202
42.0	9.138	8.931	8.732	8.731	8.751	8.810
45.0	8.712	8.511	8.283	8.327	8.394	8.376
48.0	8.260	8.038	7.819	7.921	7.953	7.912
51.0	7.783	7.595	7.417	7.445	7.477	7.474
54.0	7.286	7.101	6.952	6.992	6.999	6.990
57.0	6.753	6.619	6.456	6.463	6.477	6.504
60.0	6.214	6.031	5.896	5.932	5.962	5.914
63.0	5.605	5.494	5.310	5.373	5.426	5.357
66.0	5.008	4.905	4.705	4.797	4.812	4.766
69.0	4.391	4.288	4.104	4.219	4.256	4.173
72.0	3.737	3.653	3.452	3.608	3.620	3.545
75.0	3.100	3.007	2.798	2.962	3.001	2.978
78.0	2.491	2.370	2.173	2.343	2.434	2.429
81.0	1.929	1.763	1.514	1.746	1.876	1.865
84.0	1.410	1.244	0.8029	1.268	1.337	1.375
87.0	0.9330	0.7846	0.1887	0.7499	0.8387	0.8707
90.0	0.5248	0.2624	0	0.2686	0.5289	0.6806

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: