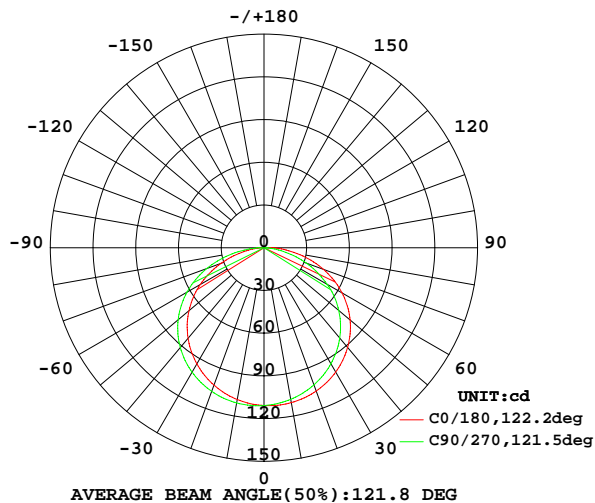


LUMINAIRE PHOTOMETRIC TEST REPORT

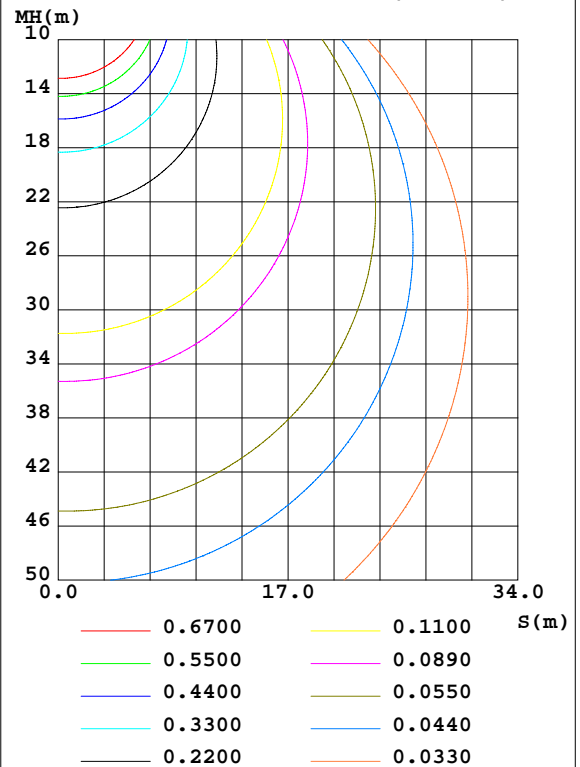
Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm		
NAME: D560RGBW-W	TYPE:	WEIGHT:
SPEC.:D5602412NO-0RGBWCDA012WC0100	DIM.: 1000*12	SERIAL No.:001
MFR.: Colors	SUR.:1000*12	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 77.61 lm/W			
MODEL	D560RGBW-W	I _{max} (cd)	111.1	S/MH(C0/180)	1.27
NOMINAL POWER(W)	4.2	LOR(%)	100.0	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	355.75	η UP,DN(C0-180)	0.4,49.8
NOMINAL FLUX(lm)	355.748	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.3,49.4
LAMPS INSIDE	1	η up(%)	0.8	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	η down(%)	99.2	CIBSE SHR MAX	1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



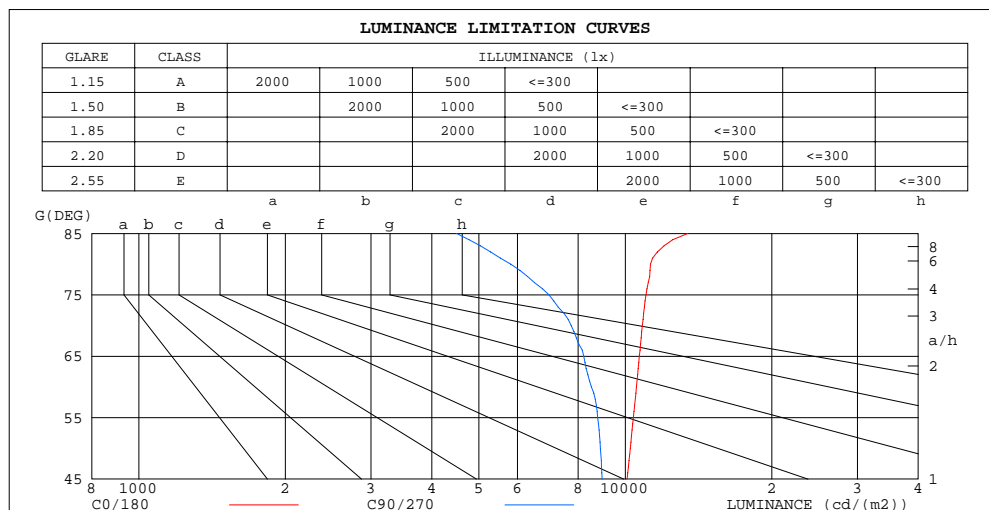
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LQT
Test Date:2018-03-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity:21.8%
Test Distance:7.500m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	$\%lum, lamp$
10	110.4	108.1	108.2	110.7					0- 10	10.51	10.51	2.95,2.95
20	107.1	102.5	102.7	107.4					10- 20	30.37	40.88	11.5,11.5
30	100.8	94.06	94.25	100.9					20- 30	46.86	87.74	24.7,24.7
40	91.40	82.76	82.99	91.49					30- 40	58.02	145.8	41,41
50	78.95	68.56	68.76	78.67					40- 50	62.35	208.1	58.5,58.5
60	63.24	51.11	51.64	62.43					50- 60	58.82	266.9	75,75
70	44.49	31.78	32.09	42.69					60- 70	47.13	314.1	88.3,88.3
80	23.47	12.11	12.78	20.66					70- 80	28.96	343.0	96.4,96.4
90	6.562	0.5852	1.901	2.517					80- 90	9.960	353.0	99.2,99.2
100	0.1610	0.1536	0.2290	0.1065					90-100	1.008	354.0	99.5,99.5
110	0.1565	0.2351	0.2510	0.1848					100-110	0.1870	354.2	99.6,99.6
120	0.2382	0.3197	0.3293	0.2724					110-120	0.2468	354.4	99.6,99.6
130	0.3227	0.3918	0.4013	0.3415					120-130	0.2945	354.7	99.7,99.7
140	0.3954	0.4482	0.4606	0.4355					130-140	0.3083	355.0	99.8,99.8
150	0.4386	0.4983	0.5108	0.4574					140-150	0.2847	355.3	99.9,99.9
160	0.4924	0.5296	0.5453	0.4857					150-160	0.2298	355.5	99.9,99.9
170	0.5364	0.5488	0.5452	0.5271					160-170	0.1491	355.7	100,100
180	0.5452	0.5484	0.5452	0.5421					170-180	0.0517	355.7	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	13437	4499
80	11266	5812
75	11030	6966
70	10841	7743
65	10686	8213
60	10540	8517
55	10390	8775
50	10235	8888
45	10084	8959

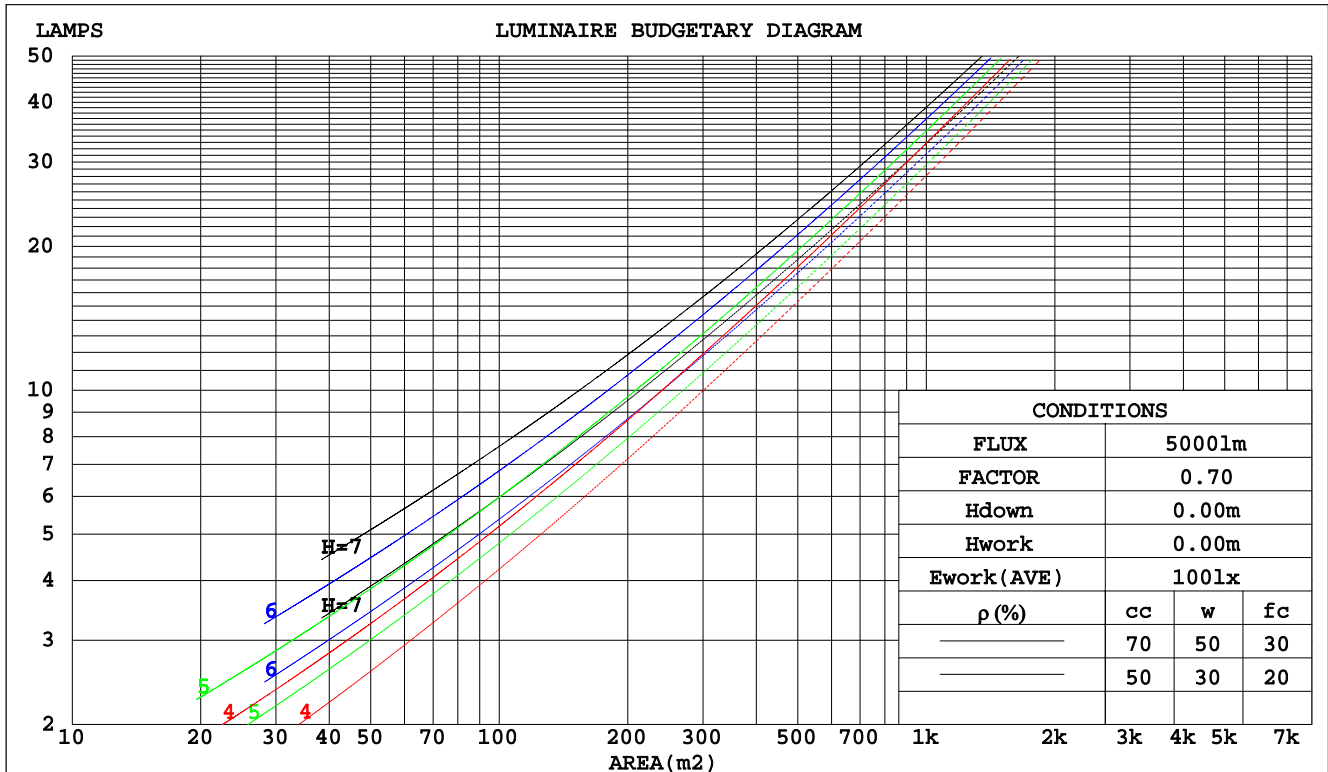
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LQT
Test Date:2018-03-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity:21.8%
Test Distance:7.500m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm		
NAME: D560RGBW-W	TYPE:	WEIGHT:
SPEC.:D5602412NO-0RGBWCDA012WC0100	DIM.: 1000*12	SERIAL No.:001
MFR.: Colors	SUR.:1000*12	PROTECTION 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						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.03	.98	.94	1.00	.96	.92	.96	.92	.89	.92	.89	.86	.88	.86	.84	.81
2.0	.89	.82	.76	.87	.80	.75	.83	.78	.73	.80	.75	.71	.76	.73	.69	.67
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.60	.70	.64	.59	.67	.62	.58	.56
4.0	.68	.59	.52	.67	.58	.52	.64	.57	.51	.62	.55	.50	.60	.54	.49	.47
5.0	.61	.52	.45	.60	.51	.44	.57	.50	.44	.55	.49	.43	.53	.47	.43	.40
6.0	.55	.45	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.48	.42	.37	.35
7.0	.49	.40	.34	.49	.40	.34	.47	.39	.34	.45	.38	.33	.44	.38	.33	.31
8.0	.45	.36	.30	.44	.36	.30	.43	.35	.30	.41	.35	.30	.40	.34	.29	.27
9.0	.41	.33	.27	.41	.33	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.25
10.0	.38	.30	.25	.37	.30	.24	.36	.29	.24	.35	.29	.24	.34	.28	.24	.22



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LQT
 Test Date:2018-03-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
 Humidity:21.8%
 Test Distance:7.500m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm		
NAME: D560RGBW-W	TYPE:	WEIGHT:
SPEC.:D5602412NO-0RGBWCDA012WC0100	DIM.: 1000*12	SERIAL No.:001
MFR.: Colors	SUR.:1000*12	PROTECTION 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	.329	.187	.059	.322	.184	.058	.308	.177	.056	.295	.170	.055	.284	.164	.053		
2.0	.306	.167	.051	.299	.165	.051	.287	.159	.050	.276	.155	.048	.265	.150	.047		
3.0	.280	.149	.045	.275	.147	.044	.264	.143	.043	.254	.139	.043	.245	.135	.042		
4.0	.257	.134	.039	.252	.132	.039	.243	.129	.038	.234	.125	.038	.225	.122	.037		
5.0	.237	.121	.035	.232	.119	.035	.224	.117	.034	.216	.114	.034	.208	.111	.033		
6.0	.219	.110	.031	.215	.109	.031	.207	.106	.031	.200	.104	.031	.193	.102	.030		
7.0	.203	.100	.028	.200	.099	.028	.193	.097	.028	.186	.096	.028	.180	.094	.028		
8.0	.189	.093	.026	.186	.092	.026	.180	.090	.026	.174	.088	.025	.169	.087	.025		
9.0	.177	.086	.024	.174	.085	.024	.169	.083	.024	.164	.082	.023	.159	.081	.023		
10.0	.166	.080	.022	.164	.079	.022	.159	.078	.022	.154	.076	.022	.150	.075	.022		

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	.196	.196	.196	.168	.168	.168	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.188	.162	.139	.161	.139	.119	.110	.096	.083	.063	.055	.048	.020	.018	.016	
2.0	.180	.138	.102	.154	.119	.088	.106	.082	.062	.061	.048	.036	.020	.015	.012	
3.0	.173	.120	.079	.148	.104	.068	.102	.072	.048	.059	.042	.028	.019	.014	.009	
4.0	.165	.107	.063	.142	.093	.055	.097	.065	.039	.056	.038	.023	.018	.012	.008	
5.0	.157	.097	.052	.135	.084	.045	.093	.059	.032	.054	.034	.019	.017	.011	.006	
6.0	.150	.089	.044	.129	.077	.039	.089	.054	.027	.052	.032	.016	.017	.010	.005	
7.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
8.0	.137	.076	.034	.118	.066	.030	.081	.046	.021	.047	.027	.013	.015	.009	.004	
9.0	.130	.071	.031	.112	.062	.027	.078	.043	.019	.045	.026	.011	.015	.008	.004	
10.0	.125	.067	.028	.107	.058	.025	.075	.041	.018	.043	.024	.010	.014	.008	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LQT
Test Date:2018-03-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity:21.8%
Test Distance:7.500m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm											
NAME: D560RGBW-W						TYPE:		WEIGHT:			
SPEC.:D5602412NO-0RGBWCDA012WC0100						DIM.: 1000*12		SERIAL No.:001			
MFR.: Colors						SUR.:1000*12		PROTECTION 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	21.2	22.7	21.4	22.9	23.2	20.4	22.0	20.7	22.2	22.4	
	3H	23.1	24.5	23.4	24.8	25.0	21.9	23.4	22.3	23.6	23.9
	4H	23.9	25.3	24.3	25.6	25.8	22.5	23.9	22.9	24.2	24.4
	6H	24.7	26.0	25.0	26.2	26.5	22.9	24.2	23.2	24.5	24.8
	8H	25.0	26.2	25.3	26.5	26.8	23.0	24.2	23.3	24.5	24.8
	12H	25.2	26.4	25.6	26.7	27.1	23.0	24.2	23.4	24.5	24.9
4H	2H	21.8	23.1	22.1	23.4	23.7	21.2	22.6	21.5	22.8	23.1
	3H	23.8	25.0	24.2	25.4	25.7	22.9	24.1	23.3	24.4	24.8
	4H	24.8	25.9	25.2	26.3	26.6	23.6	24.7	24.0	25.1	25.4
	6H	25.7	26.7	26.1	27.1	27.4	24.1	25.1	24.5	25.5	25.9
	8H	26.1	27.0	26.5	27.4	27.8	24.3	25.2	24.7	25.6	26.0
	12H	26.4	27.3	26.9	27.7	28.1	24.3	25.2	24.8	25.6	26.0
8H	4H	25.1	26.0	25.5	26.4	26.8	24.0	24.9	24.5	25.3	25.7
	6H	26.1	26.9	26.6	27.3	27.8	24.7	25.5	25.2	25.9	26.3
	8H	26.6	27.3	27.1	27.7	28.2	24.9	25.6	25.4	26.1	26.5
	12H	27.1	27.7	27.6	28.2	28.7	25.1	25.7	25.6	26.2	26.7
12H	4H	25.1	25.9	25.5	26.3	26.8	24.1	24.9	24.5	25.3	25.8
	6H	26.2	26.9	26.7	27.3	27.8	24.8	25.5	25.3	25.9	26.4
	8H	26.7	27.3	27.2	27.8	28.3	25.1	25.7	25.6	26.2	26.7
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.4					
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117 Corrected 355.7 lm Total Lamp Luminous Flux.(8log(F/F0) = -3.6)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LQT
Test Date:2018-03-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity:21.8%
Test Distance:7.500m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm		
NAME: D560RGBW-W	TYPE:	WEIGHT:
SPEC.:D5602412NO-0RGBWCDA012WC0100	DIM.: 1000*12	SERIAL No.:001
MFR.: Colors	SUR.:1000*12	PROTECTION 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	55	44	36	55	43	36	53	43	36	29
0.80	65	53	46	64	53	46	62	52	45	38
1.00	74	62	55	73	62	54	70	63	54	46
1.25	81	70	63	79	69	62	77	68	61	54
1.50	86	76	68	84	75	68	81	73	67	59
2.00	93	84	77	91	83	77	88	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	94	89	84	75
4.00	105	99	94	103	97	93	98	94	90	80
5.00	108	102	98	105	100	96	100	97	93	84
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNM = 1.25										

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LQT
Test Date:2018-03-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity:21.8%
Test Distance:7.500m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm		
NAME: D560RGBW-W	TYPE:	WEIGHT:
SPEC.:D5602412NO-0RGBWCDA012WC0100	DIM.: 1000*12	SERIAL No.:001
MFR.: Colors	SUR.:1000*12	PROTECTION ANGLE:

Conical surface Flux(90deg):

176.87 lm

%lum = 49.7%

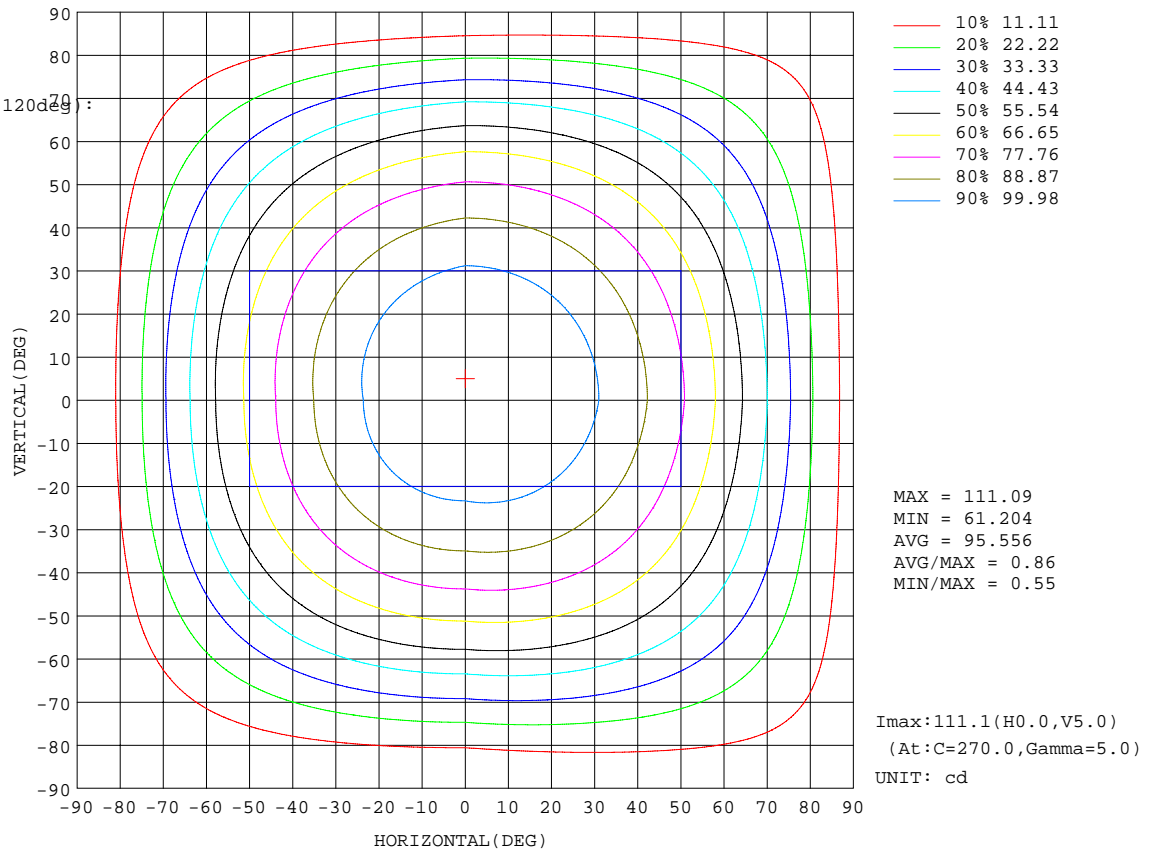
%lamp = 49.7%

Conical surface Flux(120deg):

266.93 lm

%lum = 75.0%

%lamp = 75.0%

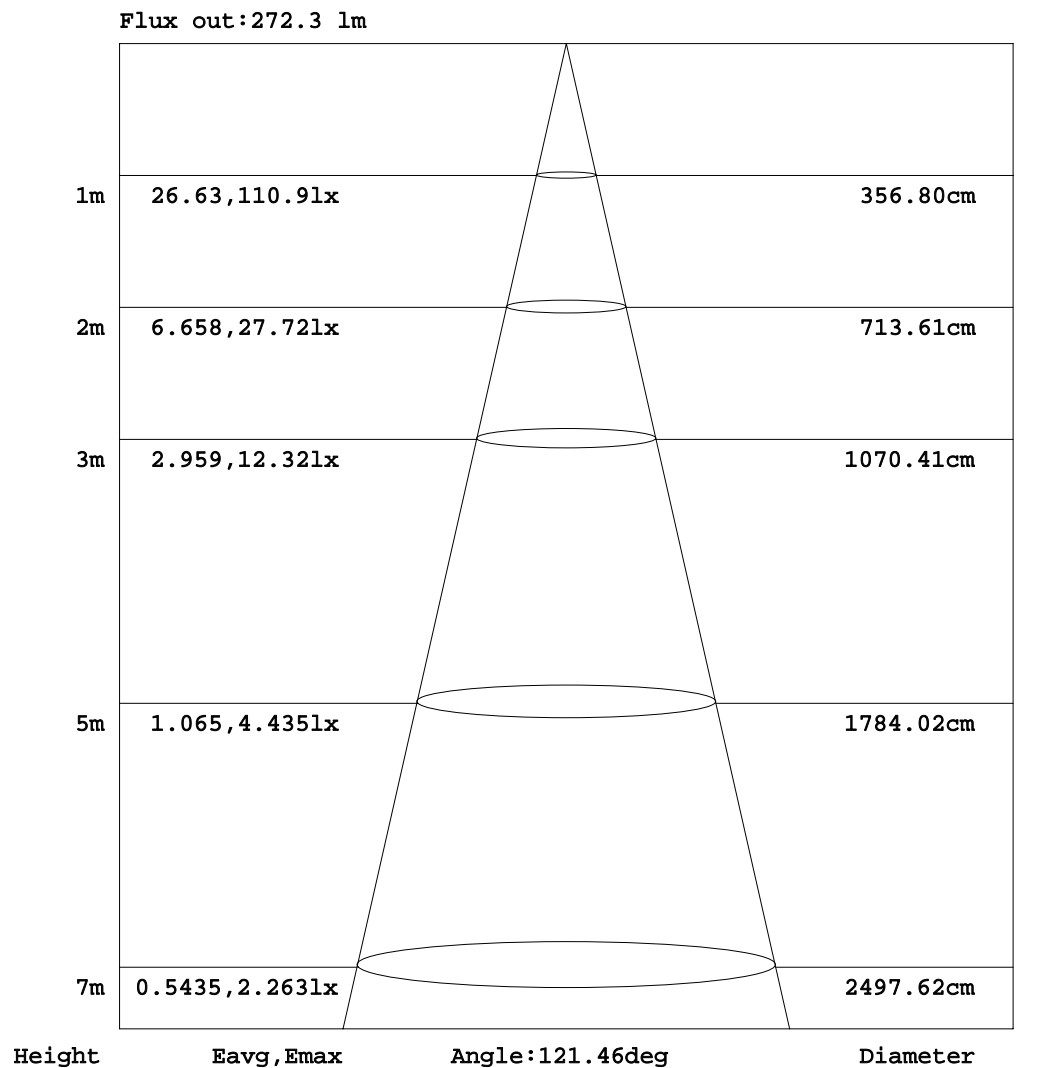


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LQT
Test Date:2018-03-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity:21.8%
Test Distance:7.500m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm		
NAME: D560RGBW-W	TYPE:	WEIGHT:
SPEC.:D5602412NO-0RGBWCDA012WC0100	DIM.: 1000*12	SERIAL No.:001
MFR.: Colors	SUR.:1000*12	PROTECTION ANGLE:



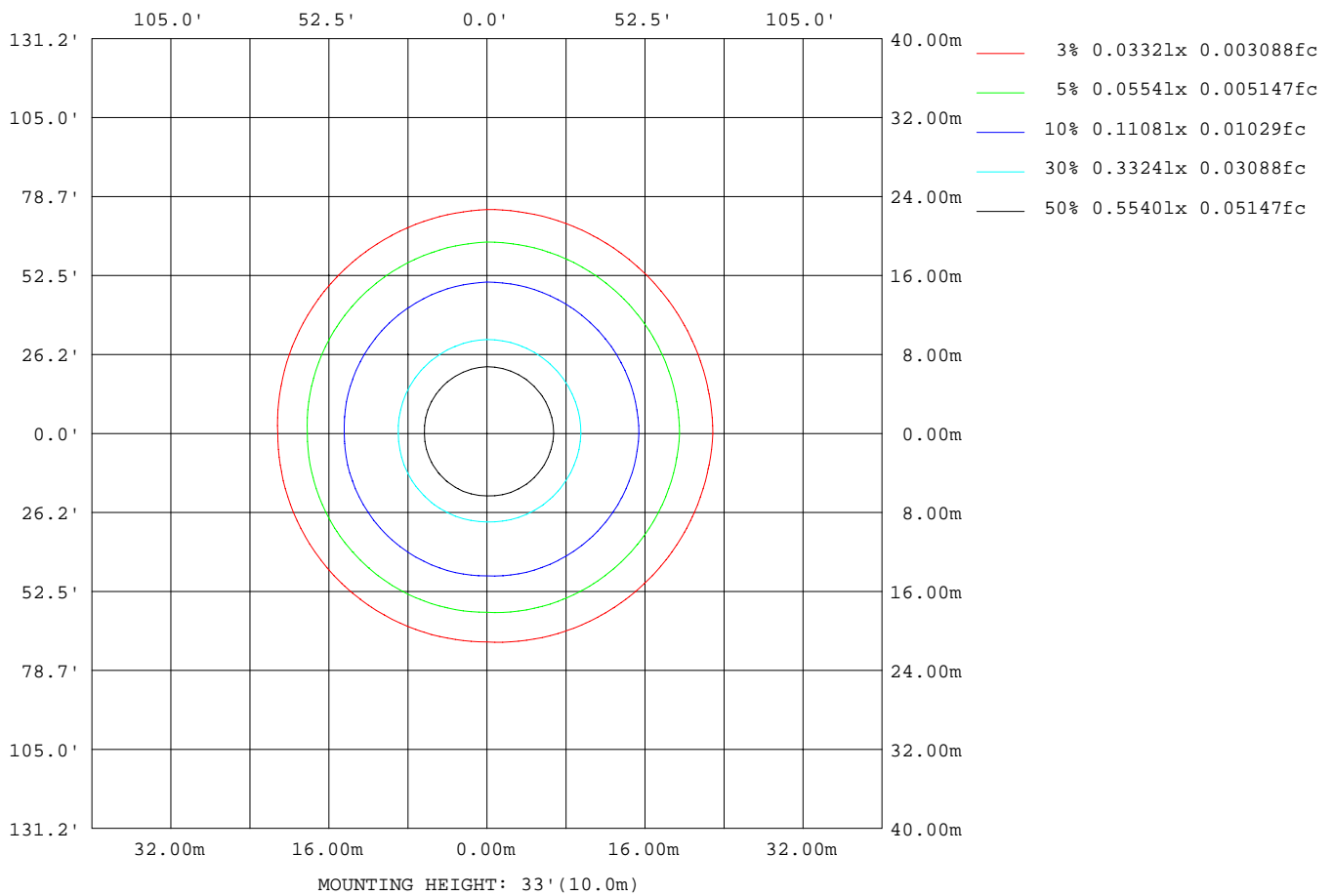
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LQT
 Test Date:2018-03-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
 Humidity:21.8%
 Test Distance:7.500m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

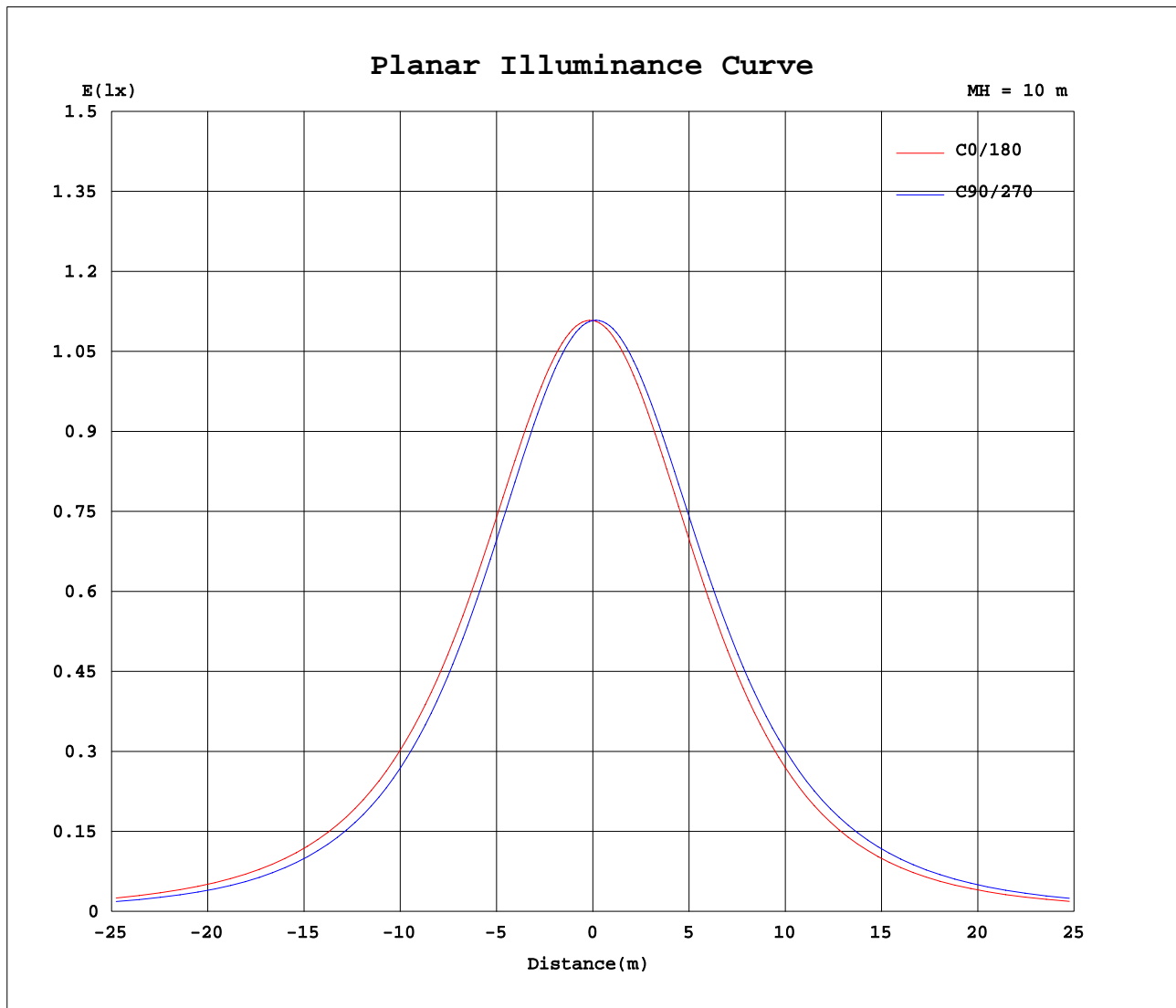
Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm		
NAME: D560RGBW-W	TYPE:	WEIGHT:
SPEC.:D5602412NO-0RGBWCDA012WC0100	DIM.: 1000*12	SERIAL No.:001
MFR.: Colors	SUR.:1000*12	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LQT
Test Date: 2018-03-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity: 21.8%
Test Distance: 7.500m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LQT
Test Date: 2018-03-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity: 21.8%
Test Distance: 7.500m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.1910A P:4.584W PF:1.000 Lamp Flux:355.748x1 lm		
NAME: D560RGBW-W	TYPE:	WEIGHT:
SPEC.:D5602412NO-0RGBWCDA012WC0100	DIM.: 1000*12	SERIAL No.:001
MFR.: Colors	SUR.:1000*12	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	90	180	270														
0	111	111	111	111														
5	111	110	110	111														
10	110	108	108	111														
15	109	106	106	109														
20	107	103	103	107														
25	104	98.6	98.9	105														
30	101	94.1	94.3	101														
35	96.4	88.8	89.0	96.6														
40	91.4	82.8	83.0	91.5														
45	85.6	76.0	76.3	85.5														
50	78.9	68.6	68.8	78.7														
55	71.5	60.4	60.6	71.0														
60	63.2	51.1	51.6	62.4														
65	54.2	41.7	42.1	53.0														
70	44.5	31.8	32.1	42.7														
75	34.3	21.6	22.0	31.8														
80	23.5	12.1	12.8	20.7														
85	14.1	4.70	5.81	10.2														
90	6.56	0.59	1.90	2.52														
95	2.05	0.12	0.46	0.10														
100	0.16	0.15	0.23	0.11														
105	0.14	0.19	0.21	0.15														
110	0.16	0.24	0.25	0.18														
115	0.20	0.28	0.29	0.24														
120	0.24	0.32	0.33	0.27														
125	0.29	0.36	0.37	0.32														
130	0.32	0.39	0.40	0.34														
135	0.34	0.42	0.43	0.39														
140	0.40	0.45	0.46	0.44														
145	0.41	0.47	0.49	0.44														
150	0.44	0.50	0.51	0.46														
155	0.49	0.52	0.53	0.49														
160	0.49	0.53	0.55	0.49														
165	0.51	0.54	0.55	0.51														
170	0.54	0.55	0.55	0.53														
175	0.54	0.55	0.55	0.53														
180	0.55	0.55	0.55	0.54														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LQT
Test Date:2018-03-14

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.292
Humidity:21.8%
Test Distance:7.500m [K=1.0000]
Remarks: