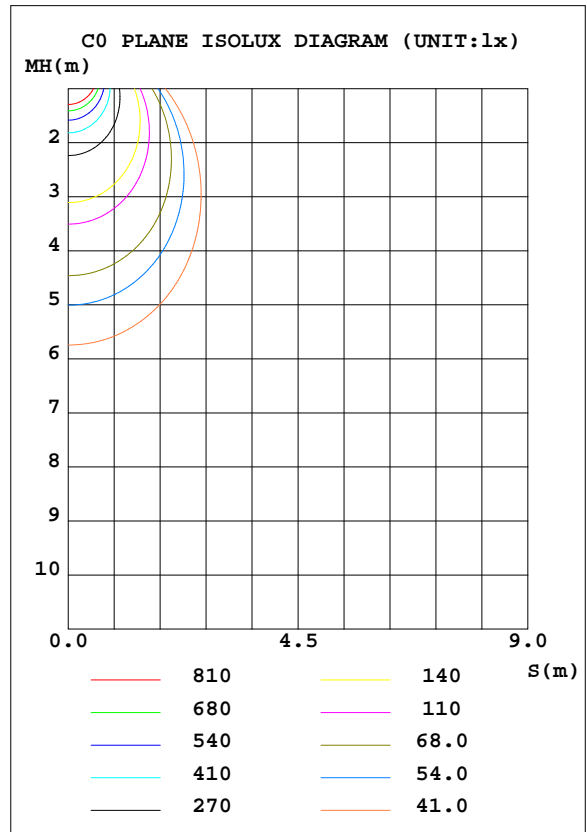
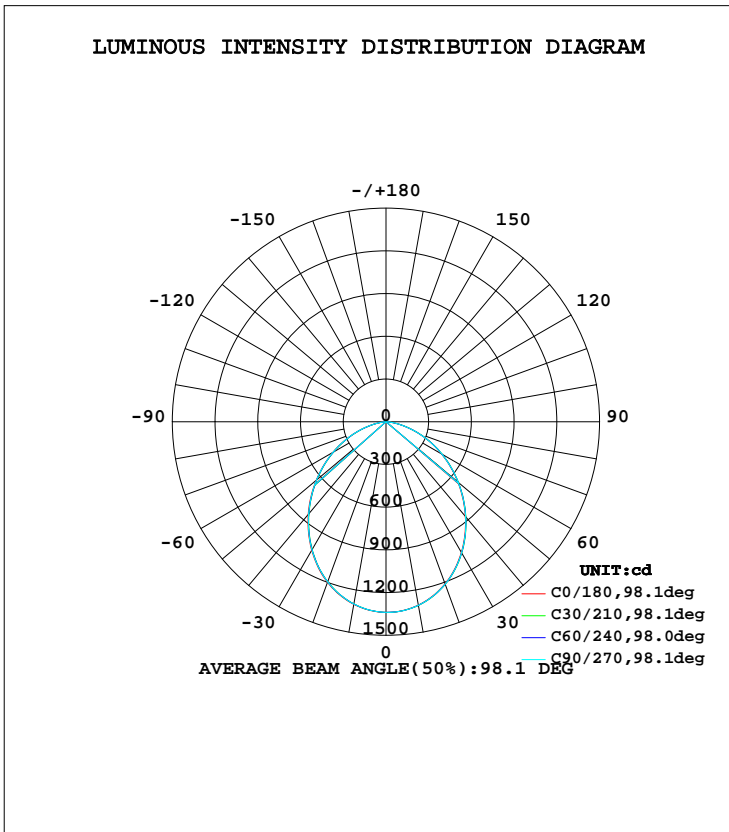


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 95.01 lm/W			
MODIFIED-DL35W-CC-W-DIM-IP54		Imax(cd)	1339	S/MH(C0/180)	1.18
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	1.19
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	3192.4	η UP, DN(C0-180)	0.0, 50.7
NOMINAL FLUX(lm)	3192.36	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	240.1	η down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	1308	1310	1309	1306	1302	1299	1300	1304	0- 10	126.2	126.2	3.95,3.95
20	1212	1215	1214	1208	1201	1196	1198	1204	10- 20	355.7	481.9	15.1,15.1
30	1058	1064	1062	1053	1043	1038	1040	1049	20- 30	522.0	1004	31.4,31.4
40	867.0	871.9	870.4	860.7	849.6	843.0	845.5	856.2	30- 40	598.4	1602	50.2,50.2
50	658.7	663.5	661.7	651.6	640.8	634.6	637.7	648.4	40- 50	581.9	2184	68.4,68.4
60	449.4	453.7	451.6	441.8	431.6	426.3	429.5	439.7	50- 60	486.7	2671	83.7,83.7
70	249.1	252.0	249.0	240.6	231.7	227.8	231.4	240.0	60- 70	335.2	3006	94.2,94.2
80	77.44	79.72	77.27	71.13	65.48	63.32	65.65	71.56	70- 80	159.3	3165	99.2,99.2
90	1.457	1.696	1.350	1.420	1.878	1.875	1.794	1.748	80- 90	27.09	3192	100,100
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		

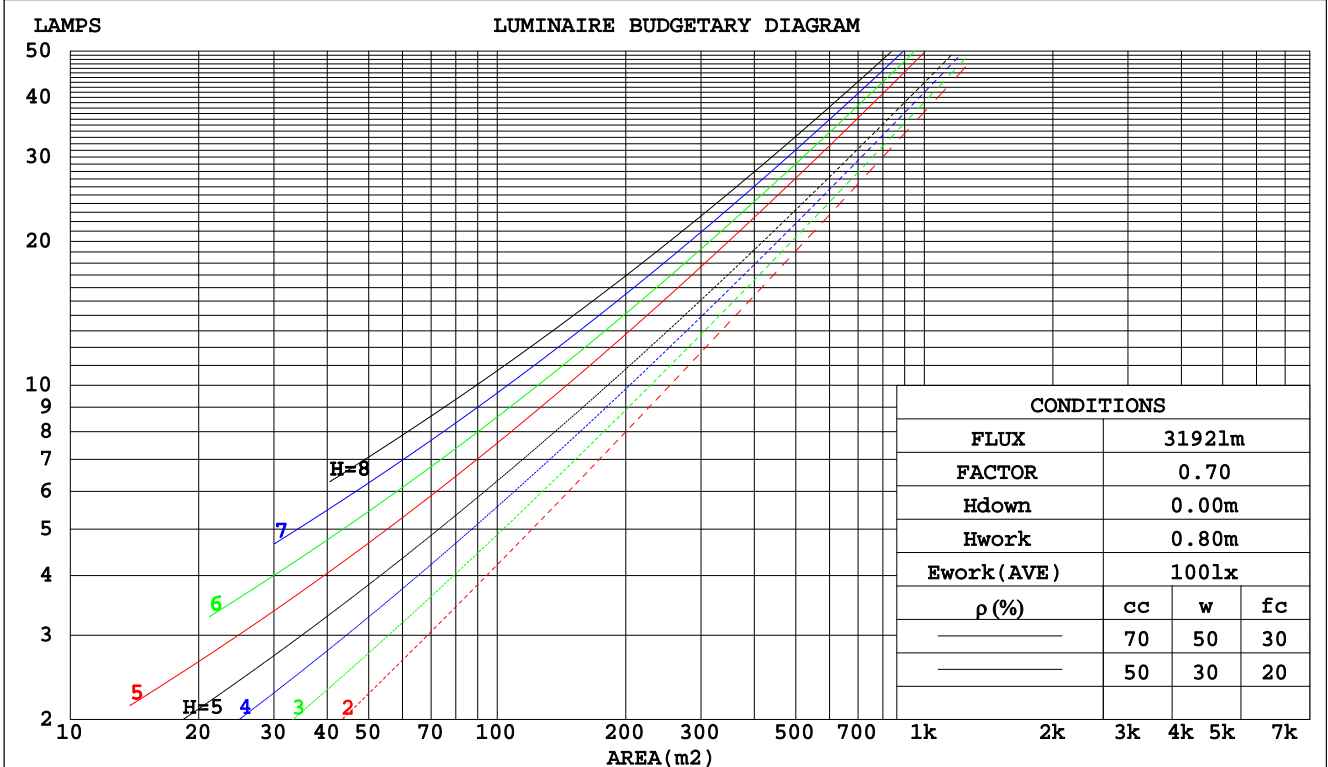
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																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	1.02	1.02	1.02	1.00
1.0	1.05	1.01	.98	1.03	.90	.96	.99	.96	.93	.95	.93	.90	.91	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.68	.78	.71	.66	.75	.70	.65	.72	.68	.64	.62
4.0	.73	.65	.58	.72	.64	.58	.69	.63	.57	.67	.61	.56	.65	.60	.56	.54
5.0	.66	.57	.51	.65	.56	.50	.62	.55	.50	.61	.54	.49	.59	.53	.49	.47
6.0	.59	.51	.45	.58	.50	.44	.57	.49	.44	.55	.49	.44	.53	.48	.43	.41
7.0	.54	.46	.40	.53	.45	.39	.52	.44	.39	.50	.44	.39	.49	.43	.39	.37
8.0	.49	.41	.36	.49	.41	.35	.47	.40	.35	.46	.40	.35	.45	.39	.35	.33
9.0	.45	.37	.32	.45	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.32	.30
10.0	.42	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.281	.160	.051	.274	.156	.050	.261	.150	.048	.249	.144	.046	.238	.138	.044	
2.0	.270	.148	.045	.264	.145	.045	.252	.140	.044	.242	.135	.042	.232	.131	.041	
3.0	.253	.135	.040	.247	.132	.040	.237	.129	.039	.228	.125	.038	.219	.121	.038	
4.0	.235	.122	.036	.231	.121	.036	.222	.118	.035	.213	.115	.035	.206	.112	.034	
5.0	.219	.112	.032	.215	.110	.032	.207	.108	.032	.200	.105	.031	.193	.103	.031	
6.0	.204	.102	.029	.201	.101	.029	.193	.099	.029	.187	.097	.029	.181	.095	.028	
7.0	.191	.094	.027	.188	.094	.027	.181	.092	.026	.175	.090	.026	.170	.088	.026	
8.0	.179	.088	.025	.176	.087	.025	.170	.085	.024	.165	.084	.024	.160	.082	.024	
9.0	.168	.081	.023	.166	.081	.023	.161	.079	.023	.156	.078	.022	.151	.077	.022	
10.0	.159	.076	.021	.156	.076	.021	.152	.074	.021	.147	.073	.021	.143	.072	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.156	.137	.153	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.099	.067	.095	.068	.047	.055	.040	.028	.018	.013	.009	
4.0	.153	.101	.060	.132	.087	.052	.091	.061	.037	.052	.036	.022	.017	.012	.007	
5.0	.146	.090	.049	.125	.078	.042	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.040	.120	.071	.035	.082	.050	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.104	.056	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.036	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

Uncorrected UGR Table

Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm										
NAME: LED-DL35W-CC-W-DIM-IP54					TYPE:35W			WEIGHT:		
DIM.:					SPEC.:3000K			SERIAL No.:1		
MFR.:					SUR.:0.085			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	26.0	27.4	26.2	27.6	27.8	25.9	27.4	26.2	27.6	27.8
3H	27.2	28.5	27.4	28.7	28.9	27.1	28.4	27.4	28.6	28.9
4H	27.5	28.8	27.9	29.1	29.3	27.5	28.7	27.8	29.0	29.2
6H	27.7	28.9	28.1	29.2	29.5	27.7	28.9	28.0	29.1	29.4
8H	27.8	28.9	28.1	29.2	29.5	27.7	28.8	28.0	29.1	29.4
12H	27.7	28.9	28.1	29.1	29.4	27.7	28.8	28.0	29.1	29.4
4H 2H	26.5	27.7	26.8	28.0	28.2	26.4	27.7	26.7	27.9	28.2
3H	27.8	28.9	28.2	29.2	29.5	27.8	28.9	28.1	29.2	29.5
4H	28.3	29.3	28.7	29.6	30.0	28.3	29.3	28.6	29.6	29.9
6H	28.6	29.5	29.0	29.9	30.2	28.5	29.4	28.9	29.8	30.1
8H	28.7	29.5	29.1	29.9	30.2	28.6	29.4	29.0	29.8	30.2
12H	28.7	29.4	29.1	29.8	30.2	28.6	29.4	29.0	29.7	30.1
8H 4H	28.5	29.3	28.9	29.7	30.1	28.4	29.3	28.8	29.6	30.0
6H	28.9	29.6	29.3	30.0	30.4	28.8	29.5	29.2	29.9	30.3
8H	29.0	29.6	29.4	30.0	30.4	28.9	29.5	29.4	29.9	30.4
12H	29.0	29.5	29.5	30.0	30.4	28.9	29.4	29.4	29.9	30.4
12H 4H	28.5	29.2	28.9	29.6	30.0	28.4	29.2	28.8	29.6	30.0
6H	28.9	29.5	29.3	29.9	30.4	28.8	29.4	29.3	29.8	30.3
8H	29.0	29.5	29.5	30.0	30.4	28.9	29.4	29.4	29.9	30.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.4 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 3192 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.0)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

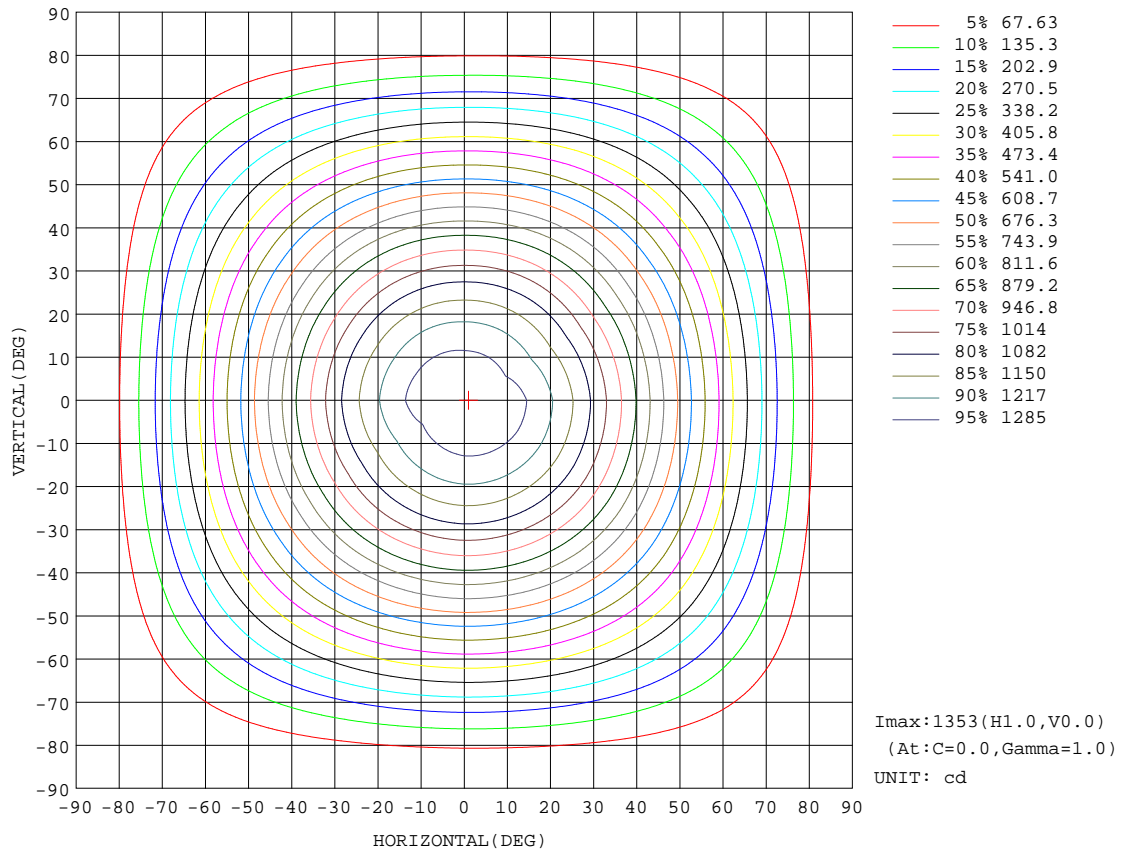
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	50	43	60	49	43	59	49	43	37
0.80	71	60	53	70	59	53	68	59	52	46
1.00	79	69	62	78	68	62	76	69	61	54
1.25	86	76	70	85	76	69	82	74	68	62
1.50	91	82	75	89	81	75	86	79	74	67
2.00	97	89	84	95	88	83	92	86	81	74
2.50	101	94	88	99	92	87	95	90	85	78
3.00	104	98	93	102	96	92	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
5.00	110	105	102	107	104	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

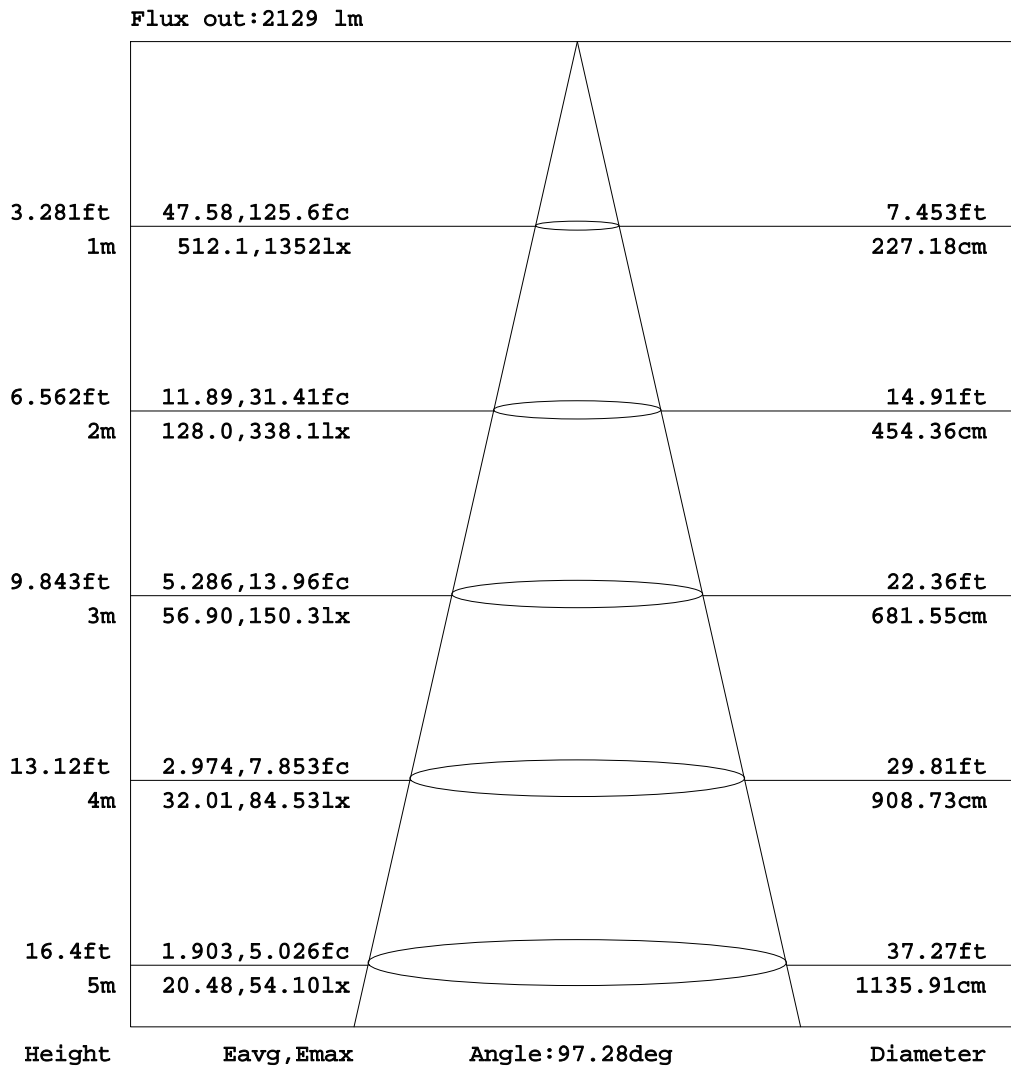


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:



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

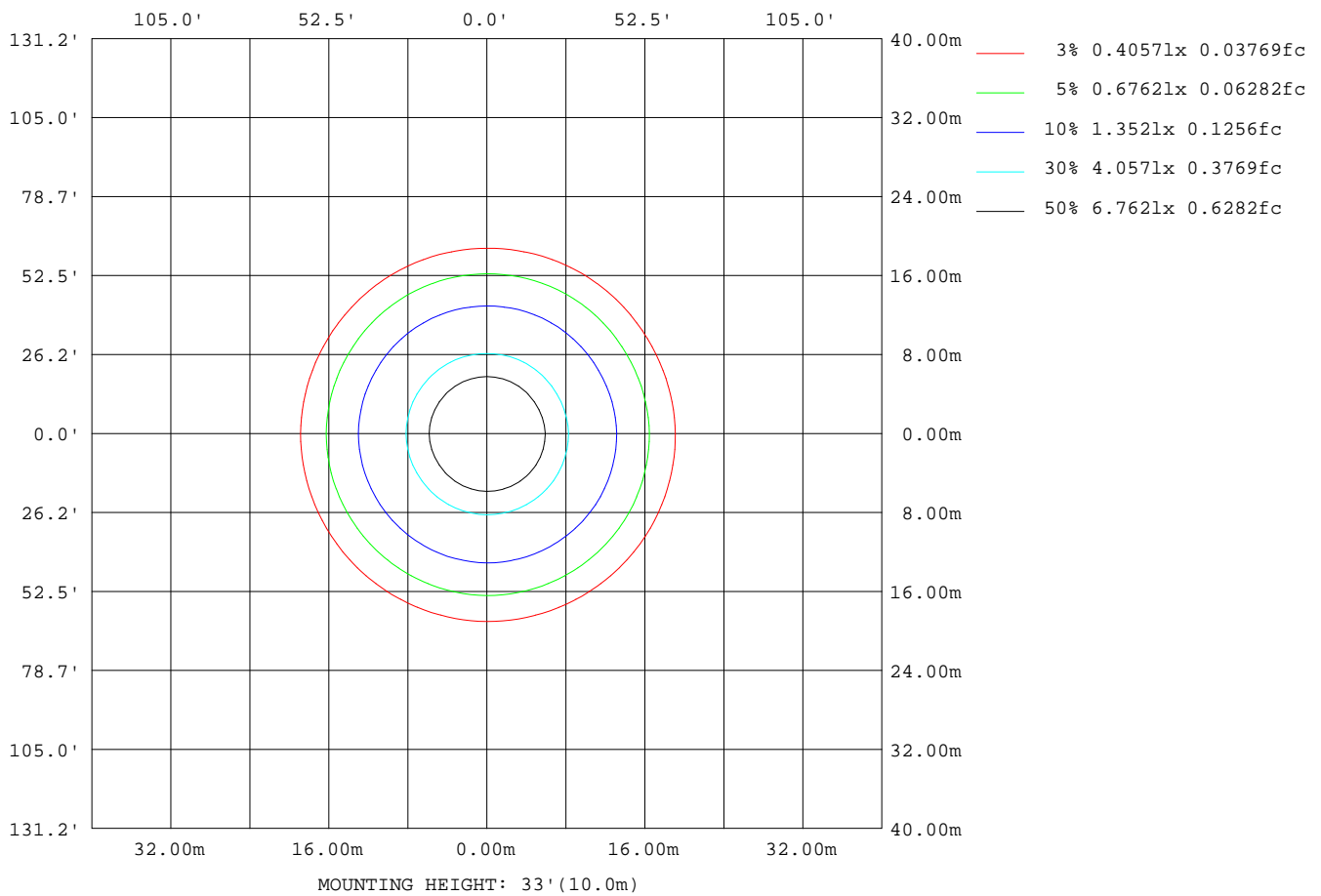
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:



**ISOLUX DIAGRAM**

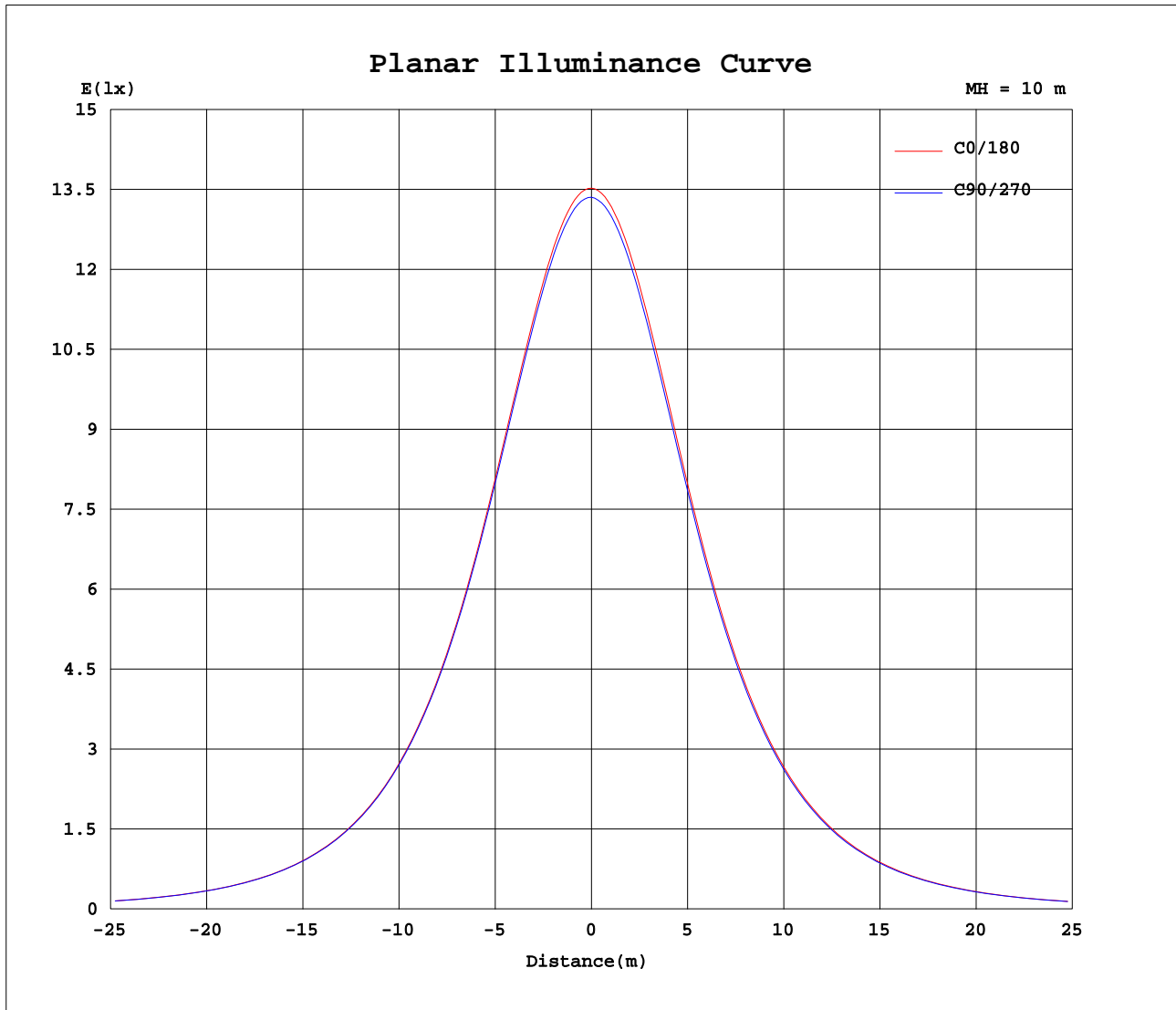
Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2018-12-20

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity: 65.0%  
 Test Distance: 9.443m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:240.1V I:0.1400A P:33.60W PF:0.9940 Lamp Flux:3192.36x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	1339	1339	1339	1339	1339	1339	1339	1339	1339	1339	1339	1339						
5	1332	1333	1332	1333	1331	1330	1329	1328	1328	1328	1330	1330						
10	1308	1310	1309	1309	1307	1304	1302	1299	1300	1300	1303	1304						
15	1267	1270	1269	1269	1266	1263	1259	1255	1256	1256	1261	1262						
20	1212	1215	1214	1214	1210	1206	1201	1196	1197	1198	1203	1205						
25	1142	1146	1145	1144	1139	1135	1128	1123	1124	1125	1132	1134						
30	1058	1064	1063	1062	1056	1051	1043	1037	1038	1040	1048	1051						
35	966	972	970	970	963	957	949	943	944	946	954	957						
40	867	873	871	870	863	858	850	842	844	846	854	858						
45	764	770	768	767	760	755	746	739	740	742	751	755						
50	659	665	662	662	654	649	641	634	636	638	646	651						
55	554	559	557	556	549	544	536	529	531	533	541	546						
60	449	455	452	452	444	439	432	425	427	430	438	442						
65	348	352	350	348	342	336	329	324	325	328	335	340						
70	249	253	251	249	243	238	232	227	229	231	238	242						
75	156	160	158	156	151	147	141	137	139	141	147	150						
80	77.4	80.6	78.8	77.3	72.6	69.7	65.5	62.6	64.1	65.6	70.3	72.8						
85	20.5	22.1	21.2	19.9	17.5	16.2	14.6	13.7	14.1	15.0	16.9	18.2						
90	1.46	1.76	1.63	1.35	1.40	1.44	1.88	1.87	1.88	1.79	1.77	1.73						

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks: