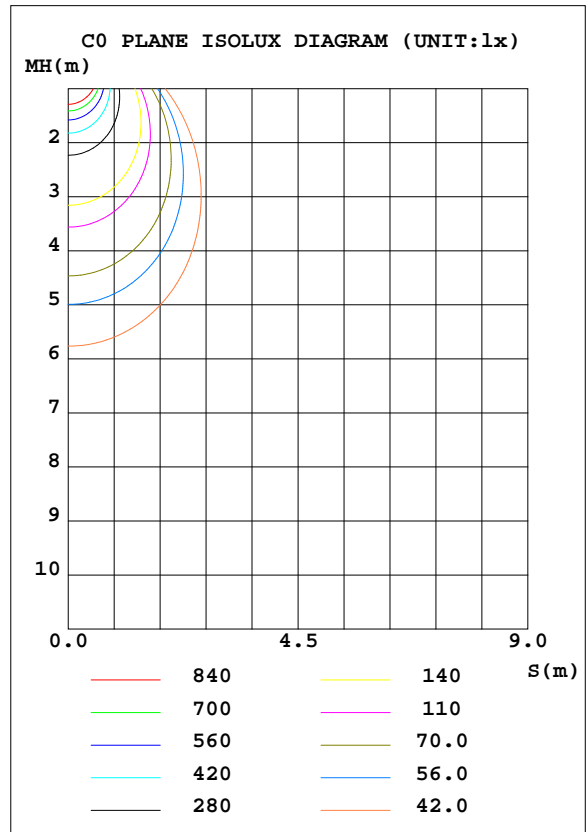
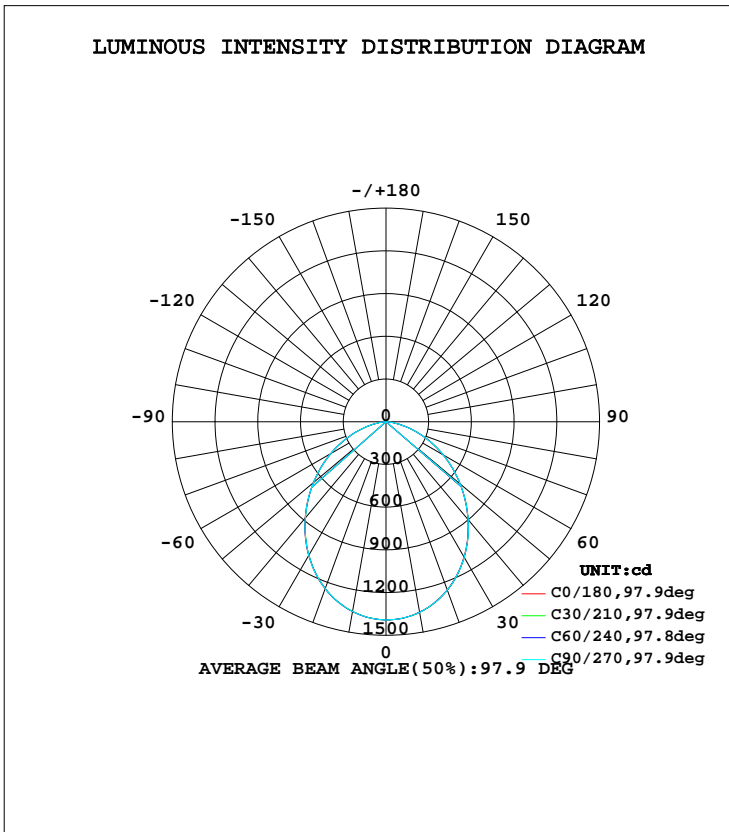


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.1V I:0.1380A P:33.10W PF:0.9930 Lamp Flux:3313.48x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:5700K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 100.11 lm/W			
MODIFIED-DL35W-CC-W-DIM-IP54		Imax(cd)	1391	S/MH(C0/180)	1.18
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	3313.5	η UP, DN(C0-180)	0.0, 50.4
NOMINAL FLUX(lm)	3313.48	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.6
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	1357	1359	1359	1356	1354	1353	1353	1355	0- 10	131.1	131.1	3.96,3.96
20	1256	1259	1258	1254	1249	1247	1248	1252	10- 20	369.7	500.8	15.1,15.1
30	1096	1099	1098	1092	1086	1083	1084	1091	20- 30	542.3	1043	31.5,31.5
40	895.2	898.2	897.4	891.4	884.3	880.9	882.5	889.4	30- 40	621.0	1664	50.2,50.2
50	678.2	680.9	680.2	673.8	666.8	663.7	665.5	672.6	40- 50	603.0	2267	68.4,68.4
60	461.4	463.6	462.4	456.7	450.3	447.6	449.7	456.2	50- 60	504.0	2771	83.6,83.6
70	254.4	255.5	253.6	249.0	243.9	242.2	244.5	249.8	60- 70	347.2	3118	94.1,94.1
80	79.35	80.17	78.78	75.39	72.49	71.61	73.20	76.71	70- 80	166.1	3284	99.1,99.1
90	1.438	1.414	1.424	1.487	1.897	1.901	1.885	1.823	80- 90	29.17	3313	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		

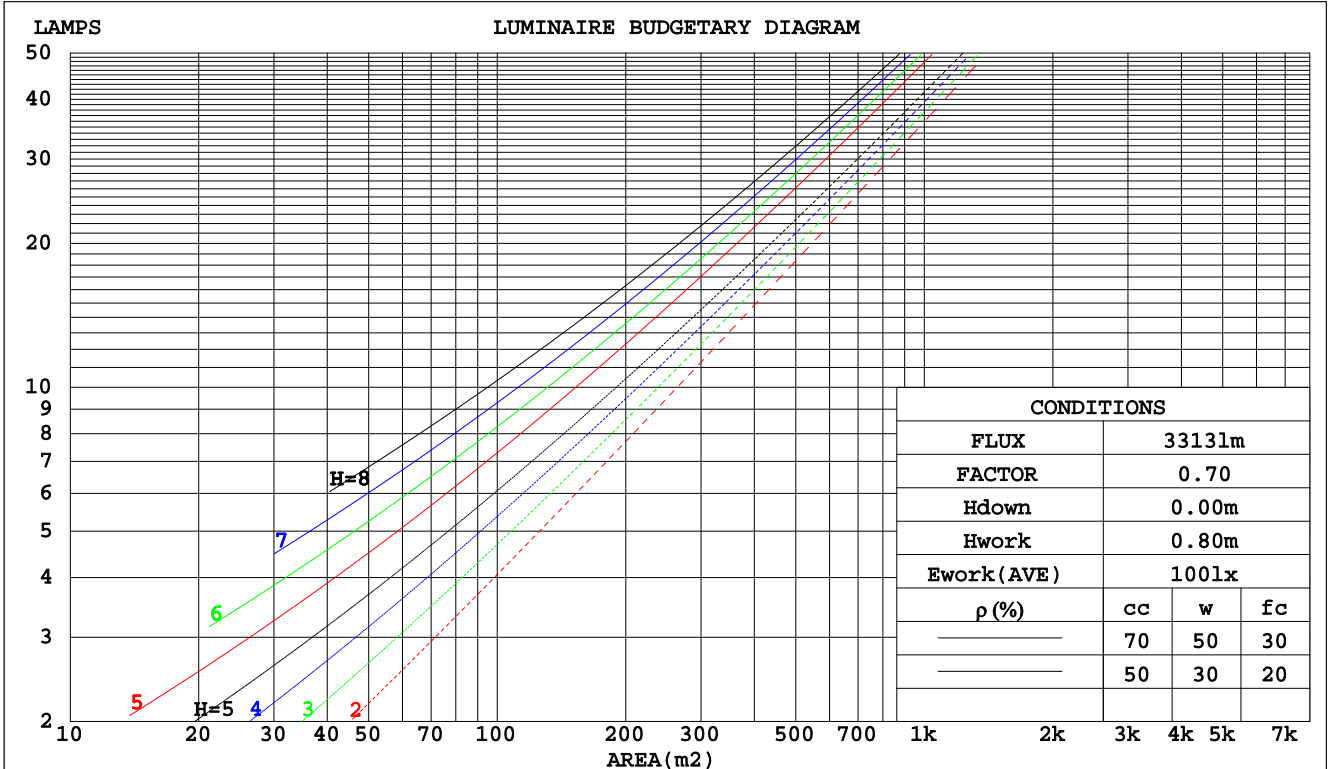
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

$\gamma$  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:0.1380A P:33.10W PF:0.9930 Lamp Flux:3313.48x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:5700K	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	.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	.38	.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:0.1380A P:33.10W PF:0.9930 Lamp Flux:3313.48x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:5700K	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	.157	.050	.261	.150	.048	.249	.144	.046	.238	.138	.044	
2.0	.270	.148	.045	.264	.145	.045	.252	.140	.044	.242	.136	.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	.199	.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	.093	.027	.181	.092	.026	.175	.090	.026	.170	.088	.026	
8.0	.179	.087	.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	.075	.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:0.1380A P:33.10W PF:0.9930 Lamp Flux:3313.48x1 lm										
NAME: LED-DL35W-CC-W-DIM-IP54					TYPE:35W			WEIGHT:		
DIM.:					SPEC.:5700K			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	26.0	27.4	26.2	27.6	27.8
3H	27.1	28.5	27.4	28.7	28.9	27.1	28.5	27.4	28.7	28.9
4H	27.5	28.8	27.8	29.0	29.3	27.5	28.8	27.8	29.0	29.3
6H	27.7	28.9	28.1	29.2	29.5	27.7	28.9	28.0	29.2	29.4
8H	27.8	28.9	28.1	29.2	29.5	27.7	28.9	28.1	29.1	29.4
12H	27.7	28.8	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	26.5	27.7	26.8	28.0	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	29.8	30.2	28.6	29.4	28.9	29.8	30.2
8H	28.6	29.5	29.1	29.8	30.2	28.6	29.4	29.0	29.8	30.2
12H	28.6	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	29.6	30.0	28.4	29.3	28.8	29.6	30.0
6H	28.8	29.5	29.3	29.9	30.3	28.8	29.5	29.2	29.9	30.3
8H	28.9	29.5	29.4	30.0	30.4	28.9	29.5	29.3	29.9	30.4
12H	29.0	29.5	29.4	29.9	30.4	28.9	29.4	29.4	29.9	30.4
12H 4H	28.4	29.2	28.9	29.6	30.0	28.4	29.2	28.8	29.6	30.0
6H	28.8	29.4	29.3	29.9	30.3	28.8	29.4	29.3	29.8	30.3
8H	29.0	29.5	29.4	29.9	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					+ 0.4 / - 0.4				

CIE Pub.117 Corrected 3313 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.2)

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:0.1380A P:33.10W PF:0.9930 Lamp Flux:3313.48x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:5700K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

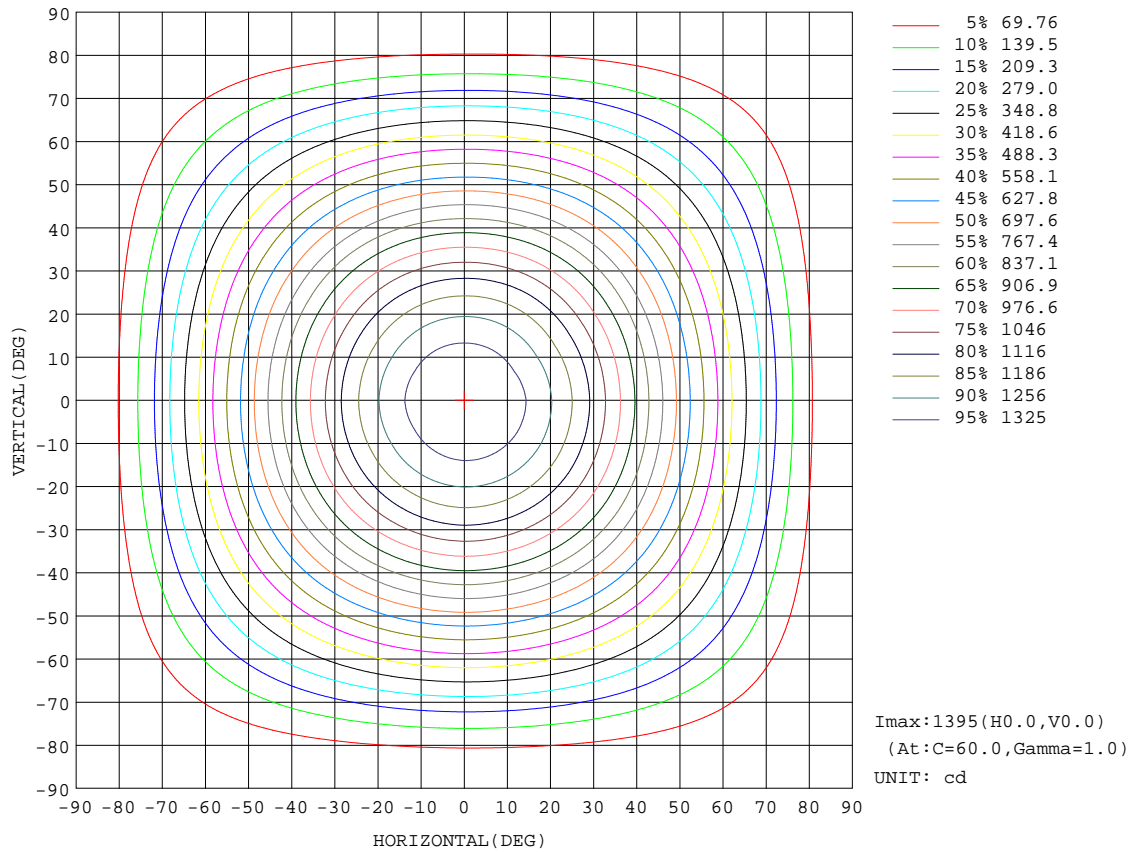
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	50	43	60	49	43	59	49	43	37
0.80	71	60	53	70	59	53	68	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:0.1380A P:33.10W PF:0.9930 Lamp Flux:3313.48x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:5700K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

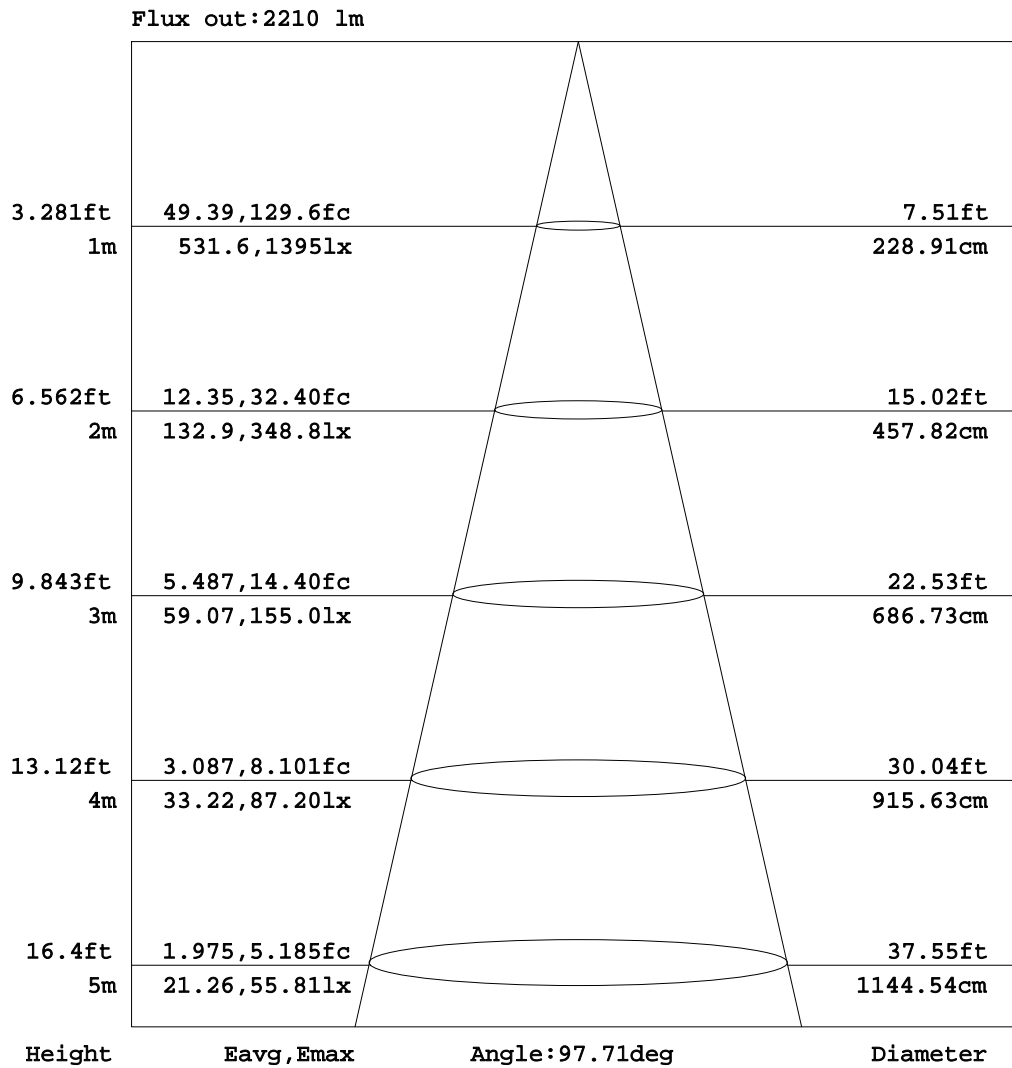


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

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:0.1380A P:33.10W PF:0.9930 Lamp Flux:3313.48x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:5700K	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.

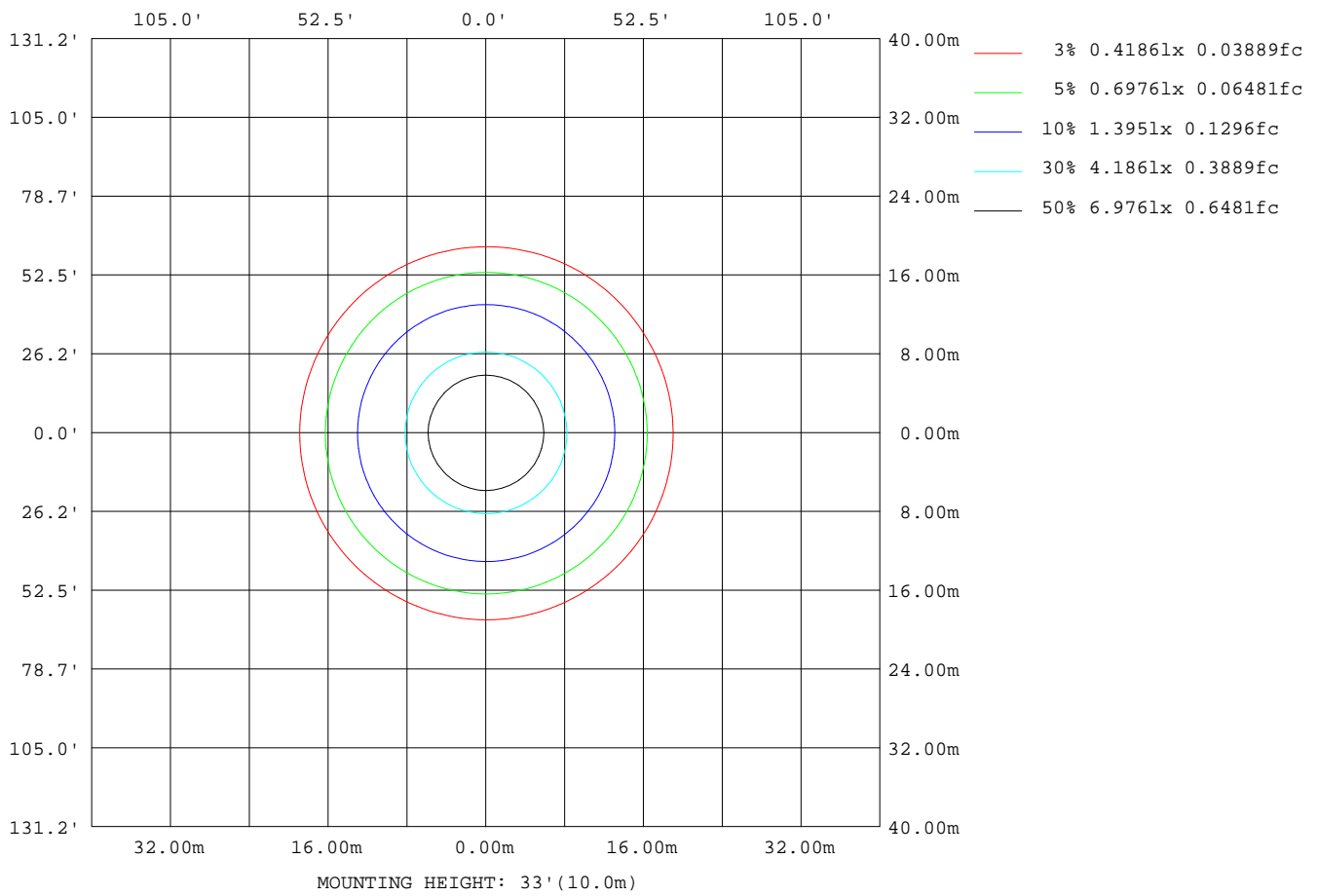
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-20

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**

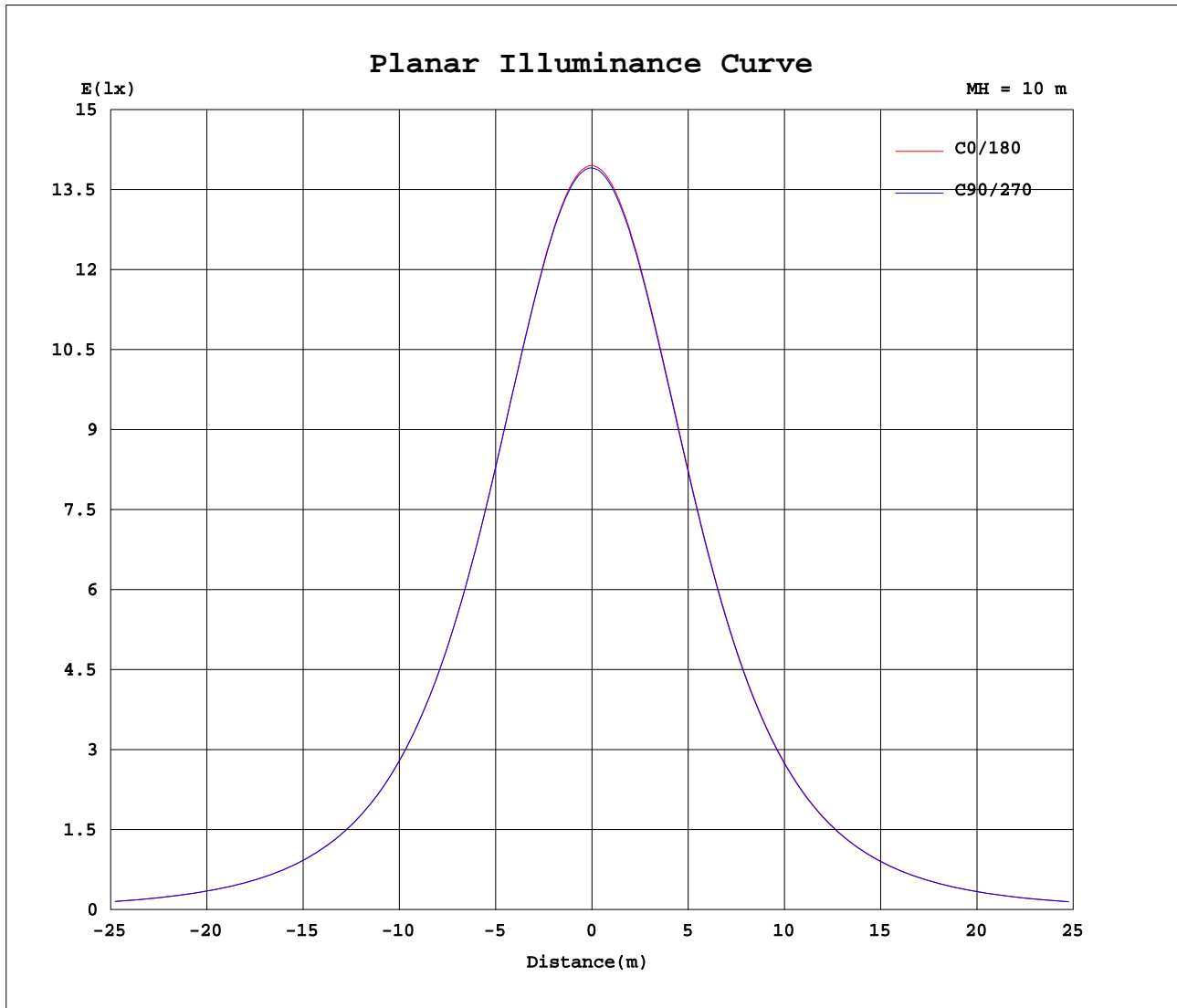
Test:U:240.1V I:0.1380A P:33.10W PF:0.9930 Lamp Flux:3313.48x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:5700K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:



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:

