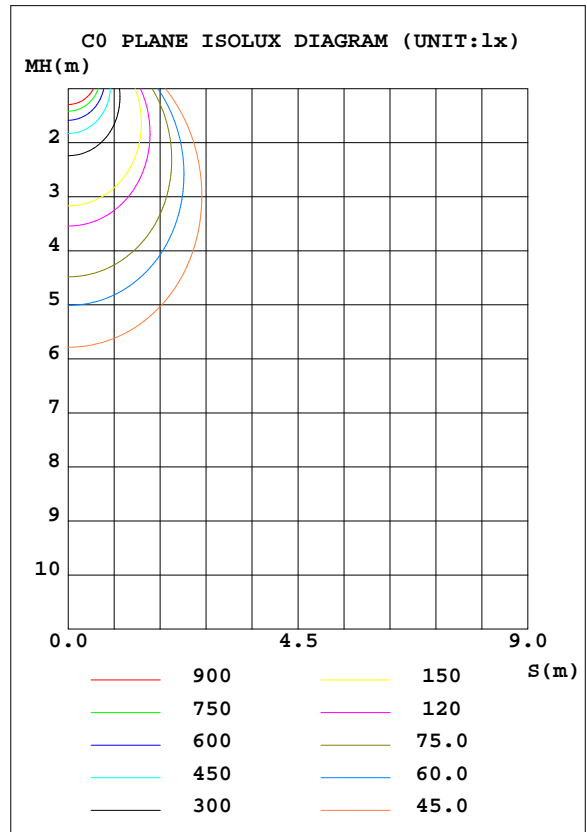
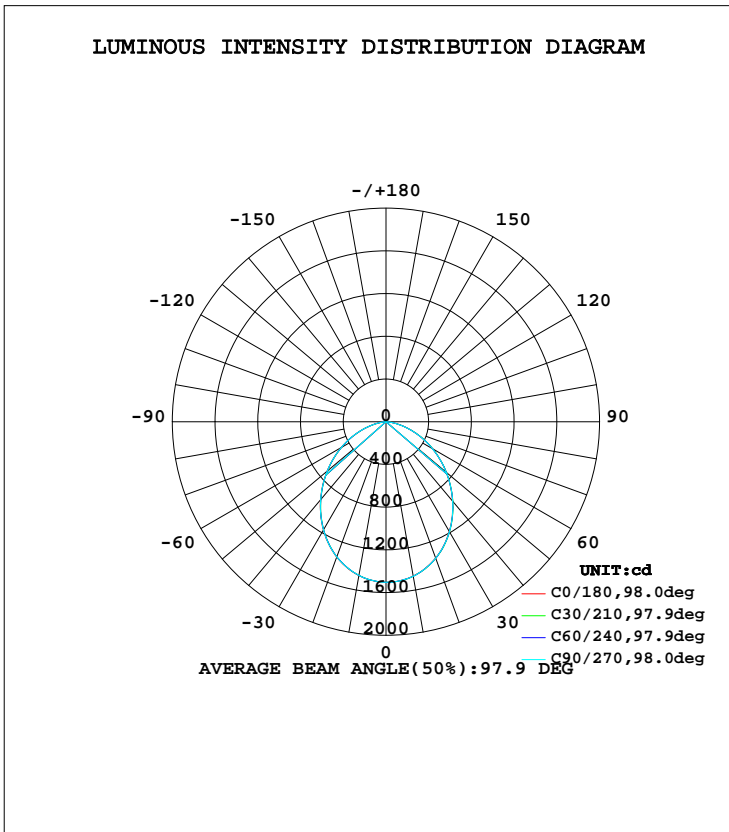


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.1V I:0.1320A P:31.60W PF:0.9930 Lamp Flux:3581.5x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 113.34 lm/W			
MODIFIED-DL35W-CC-W-DIM-IP54		I _{max} (cd)	1504	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)	3581.5	η UP, DN(C0-180)	0.0, 50.4
NOMINAL FLUX(lm)	3581.5	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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	1467	1469	1468	1466	1462	1461	1462	1464	0- 10	141.6	141.6	3.96,3.96
20	1358	1361	1360	1355	1349	1346	1347	1353	10- 20	399.4	541.0	15.1,15.1
30	1186	1189	1188	1181	1172	1168	1171	1178	20- 30	585.9	1127	31.5,31.5
40	969.2	973.3	971.5	963.8	954.2	950.0	952.9	961.6	30- 40	671.3	1798	50.2,50.2
50	735.5	738.7	736.7	729.2	720.0	716.1	718.7	727.7	40- 50	652.2	2450	68.4,68.4
60	501.0	503.6	501.3	493.9	485.7	482.4	485.4	493.9	50- 60	545.3	2996	83.6,83.6
70	276.4	278.0	275.1	269.0	262.2	260.0	263.4	270.1	60- 70	375.6	3371	94.1,94.1
80	85.91	87.09	84.86	80.29	76.38	75.26	77.51	82.09	70- 80	179.1	3551	99.1,99.1
90	1.613	1.579	1.598	1.660	2.127	2.108	2.082	2.027	80- 90	31.00	3582	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		

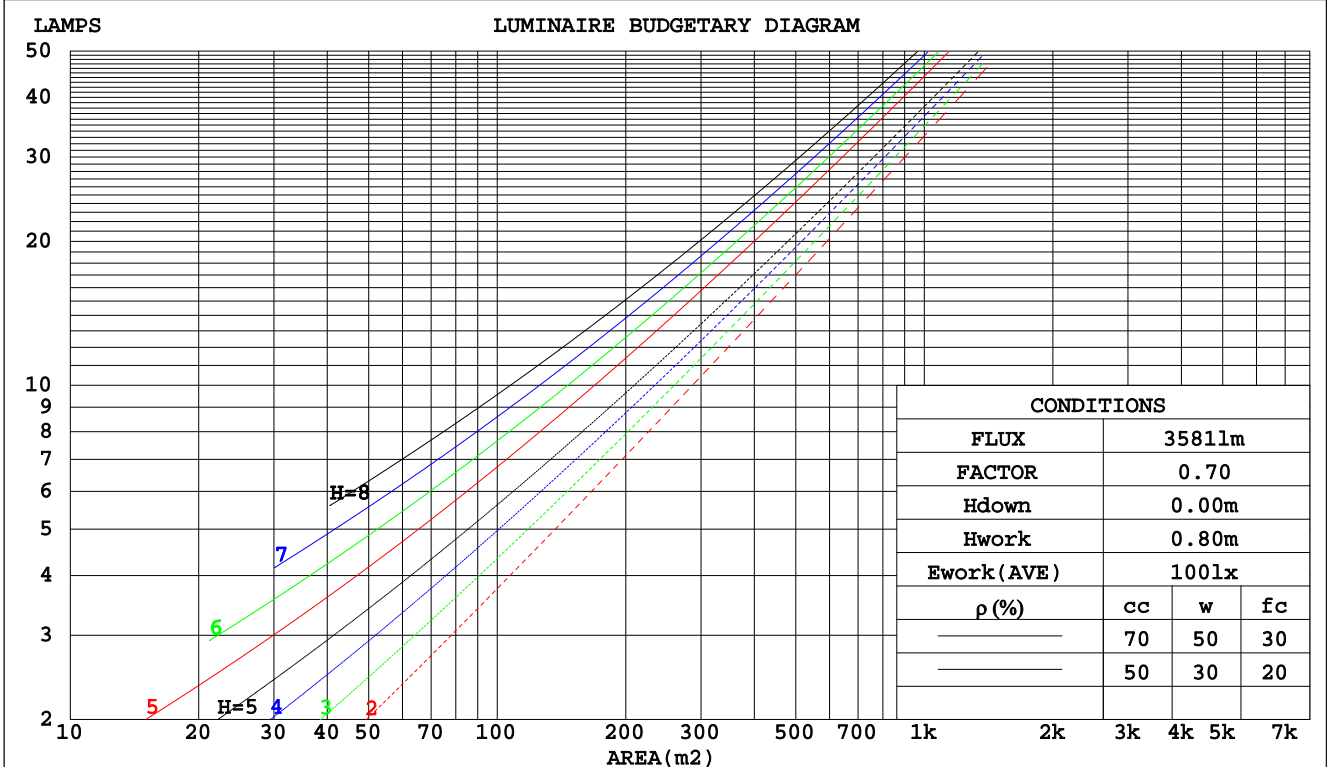
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-12-20

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.1V I:0.1320A P:31.60W PF:0.9930 Lamp Flux:3581.5x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:4000K	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:0.1320A P:31.60W PF:0.9930 Lamp Flux:3581.5x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:4000K	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	.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	.094	.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:0.1320A P:31.60W PF:0.9930 Lamp Flux:3581.5x1 lm										
NAME: LED-DL35W-CC-W-DIM-IP54					TYPE:35W			WEIGHT:		
DIM.:					SPEC.:4000K			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	26.3	27.7	26.5	27.9	28.1	26.2	27.7	26.5	27.9	28.1
3H	27.4	28.8	27.7	29.0	29.2	27.4	28.8	27.7	29.0	29.2
4H	27.8	29.1	28.1	29.3	29.6	27.8	29.1	28.1	29.3	29.6
6H	28.0	29.2	28.4	29.5	29.8	28.0	29.2	28.3	29.4	29.7
8H	28.0	29.2	28.4	29.5	29.8	28.0	29.2	28.4	29.4	29.7
12H	28.0	29.1	28.4	29.4	29.7	28.0	29.1	28.3	29.4	29.7
4H 2H	26.8	28.0	27.1	28.3	28.5	26.8	28.0	27.1	28.3	28.5
3H	28.1	29.2	28.5	29.5	29.8	28.1	29.2	28.4	29.5	29.8
4H	28.6	29.6	29.0	29.9	30.3	28.6	29.6	28.9	29.9	30.2
6H	28.9	29.8	29.3	30.1	30.5	28.9	29.7	29.2	30.1	30.5
8H	28.9	29.8	29.4	30.1	30.5	28.9	29.7	29.3	30.1	30.5
12H	28.9	29.7	29.4	30.1	30.5	28.9	29.7	29.3	30.0	30.4
8H 4H	28.8	29.6	29.2	30.0	30.3	28.7	29.6	29.1	29.9	30.3
6H	29.1	29.8	29.6	30.2	30.6	29.1	29.8	29.5	30.2	30.6
8H	29.2	29.8	29.7	30.3	30.7	29.2	29.8	29.6	30.2	30.7
12H	29.3	29.8	29.7	30.2	30.7	29.2	29.7	29.7	30.2	30.7
12H 4H	28.7	29.5	29.2	29.9	30.3	28.7	29.5	29.1	29.9	30.3
6H	29.1	29.7	29.6	30.2	30.6	29.1	29.7	29.6	30.1	30.6
8H	29.3	29.8	29.7	30.2	30.7	29.2	29.7	29.7	30.2	30.7
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 3582 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.4)

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:0.1320A P:31.60W PF:0.9930 Lamp Flux:3581.5x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

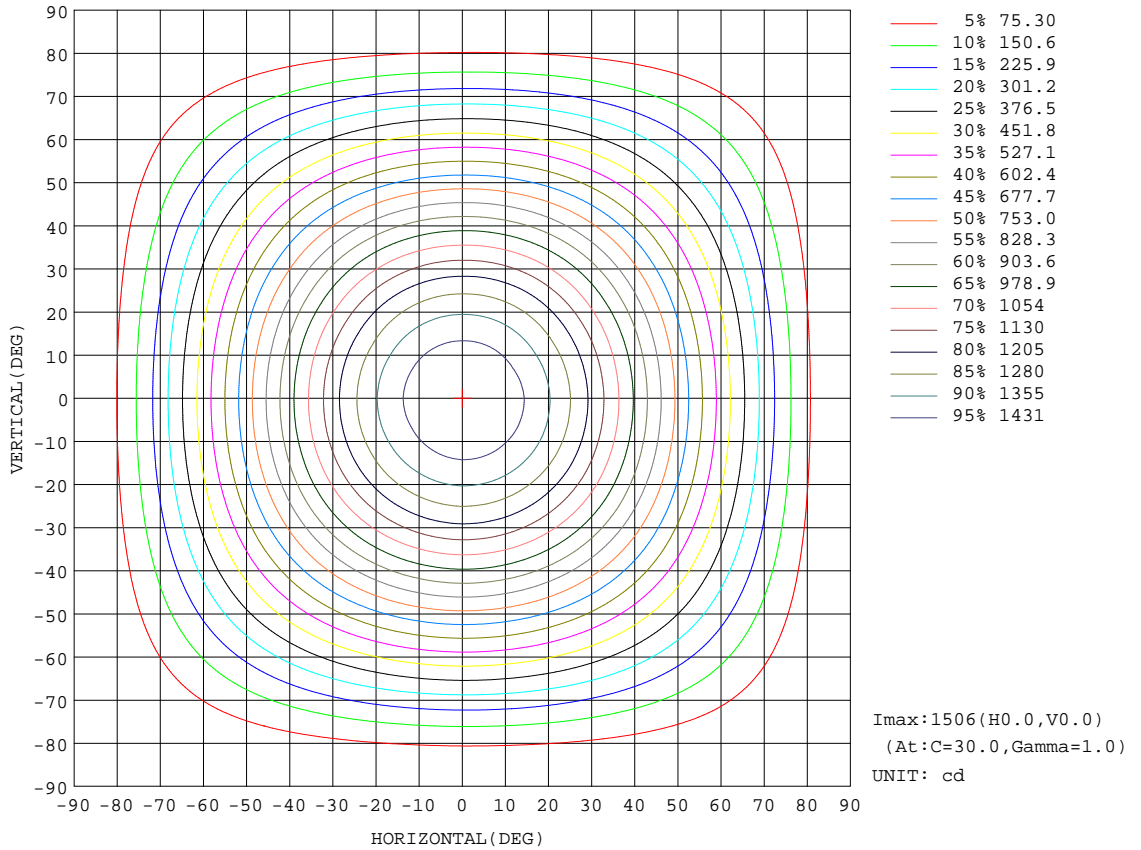
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	50	43	60	49	43	59	49	43	37
0.80	71	60	53	70	59	53	68	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

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:

ISOCANDELA DIAGRAM

Test:U:240.1V I:0.1320A P:31.60W PF:0.9930 Lamp Flux:3581.5x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:

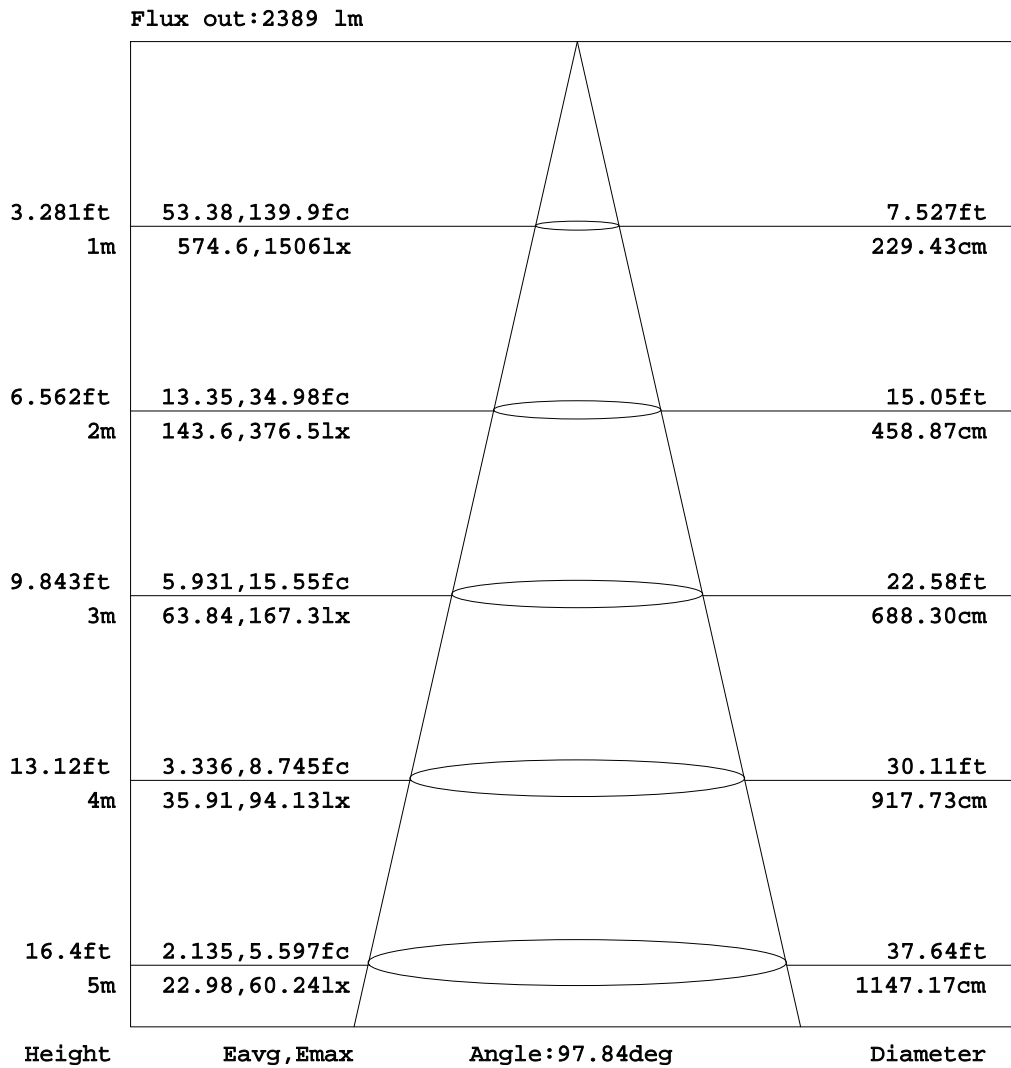


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-12-20

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:0.1320A P:31.60W PF:0.9930 Lamp Flux:3581.5x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:



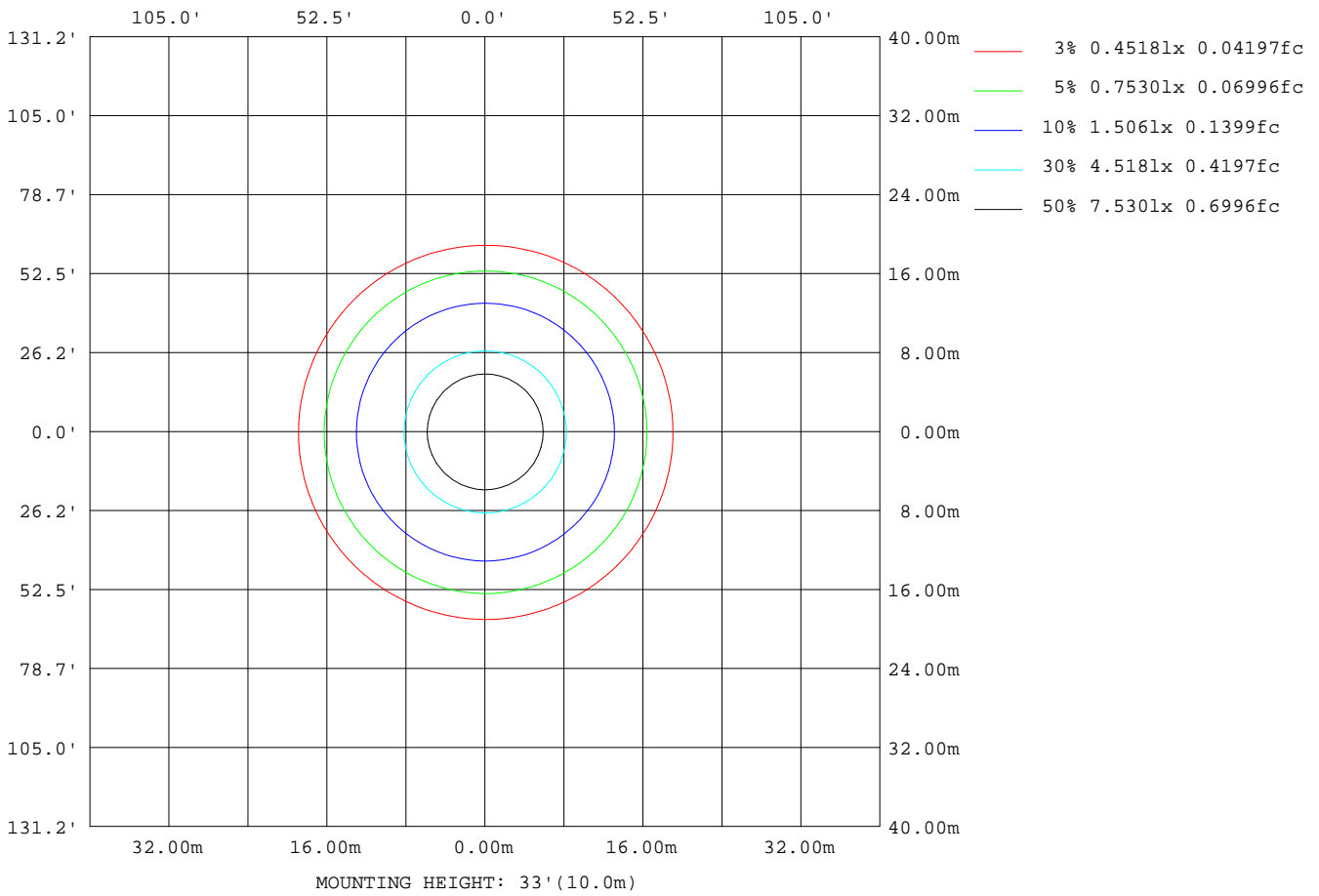
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

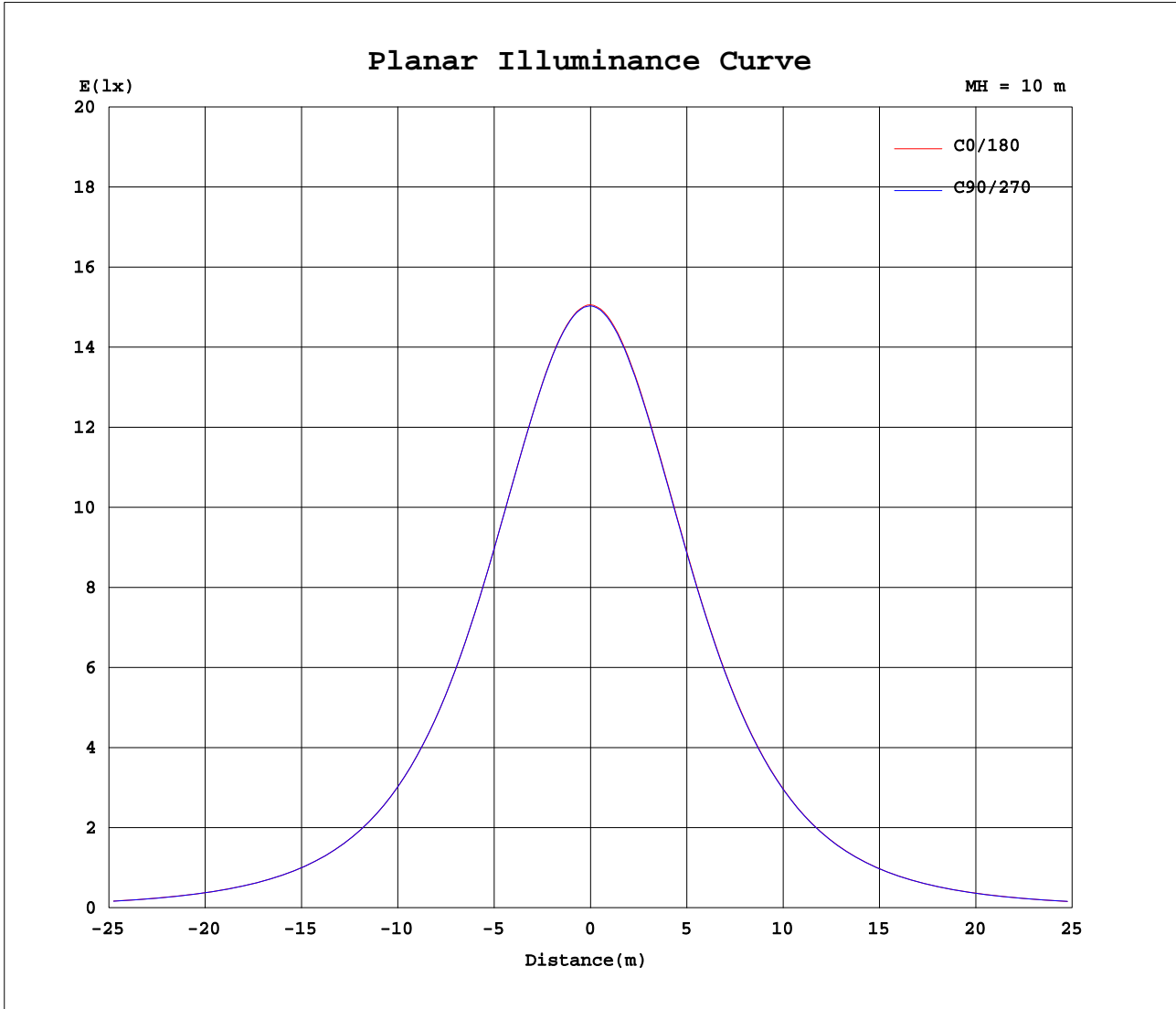
Test:U:240.1V I:0.1320A P:31.60W PF:0.9930 Lamp Flux:3581.5x1 lm		
NAME: LED-DL35W-CC-W-DIM-IP54	TYPE:35W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:1
MFR.:	SUR.:0.085	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
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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

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:

