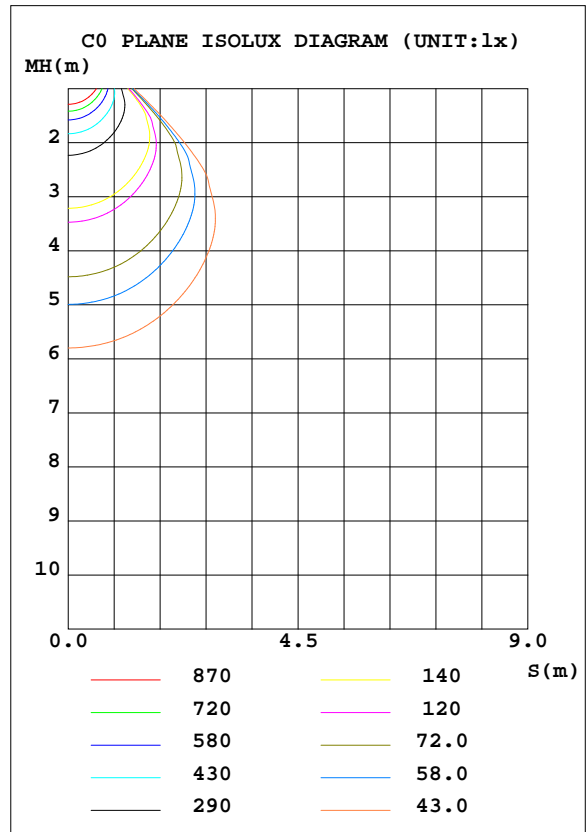
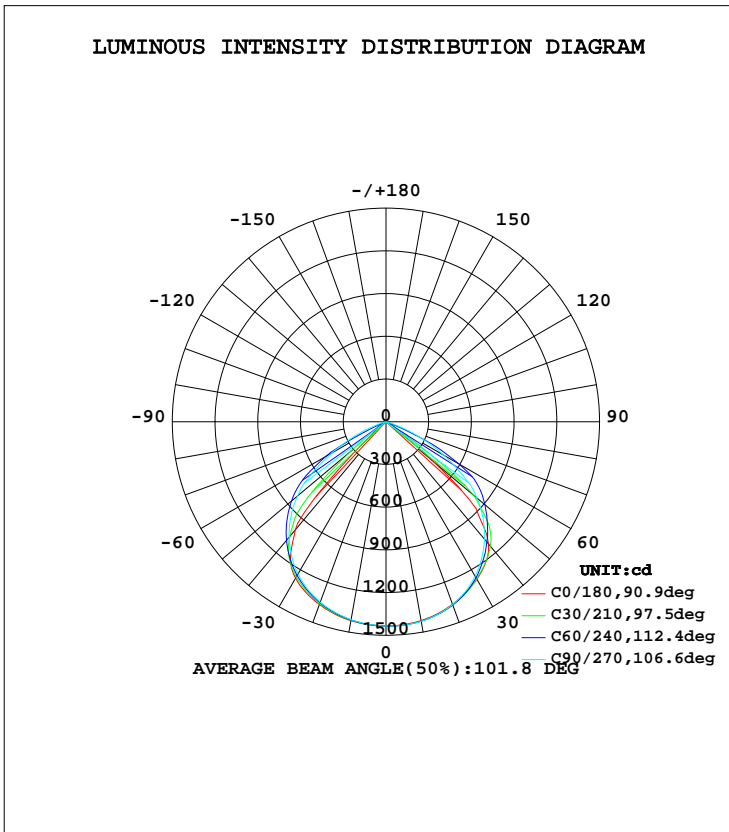


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.3V I:0.1490A P:33.90W PF:0.9440 Lamp Flux:3143.54x1 lm		
NAME: LED-SL35W-CW	TYPE:35W	WEIGHT:
DIM.:	SPEC.:6000K	SERIAL No.:1
MFR.:	SUR.:0.164*0.08	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 92.73 lm/W			
MODEL	LED-SL35W-CW	I _{max} (cd)	1435	S/MH(C0/180)	1.32
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	3143.5	η UP, DN(C0-180)	0.0, 50.9
NOMINAL FLUX(lm)	3143.54	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	240.3	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:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [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	1418	1422	1423	1421	1419	1414	1412	1414	0- 10	136.1	136.1	4.33,4.33
20	1364	1369	1366	1366	1367	1356	1349	1357	10- 20	394.2	530.3	16.9,16.9
30	1277	1269	1252	1262	1270	1253	1235	1258	20- 30	607.3	1138	36.2,36.2
40	1120	1121	1076	1089	992.0	1069	1058	1110	30- 40	739.8	1877	59.7,59.7
50	431.3	856.2	833.8	647.1	99.14	589.8	810.1	852.5	40- 50	695.8	2573	81.9,81.9
60	67.34	327.5	468.0	286.7	56.79	274.2	437.8	313.2	50- 60	400.5	2974	94.6,94.6
70	27.87	27.90	109.1	20.33	16.13	19.88	90.38	44.17	60- 70	149.8	3124	99.4,99.4
80	11.47	9.147	3.849	5.431	7.887	5.385	4.732	8.531	70- 80	15.83	3139	99.9,99.9
90	1.528	1.132	0.0743	0.8330	2.602	0.7002	0.1610	1.417	80- 90	4.172	3144	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		

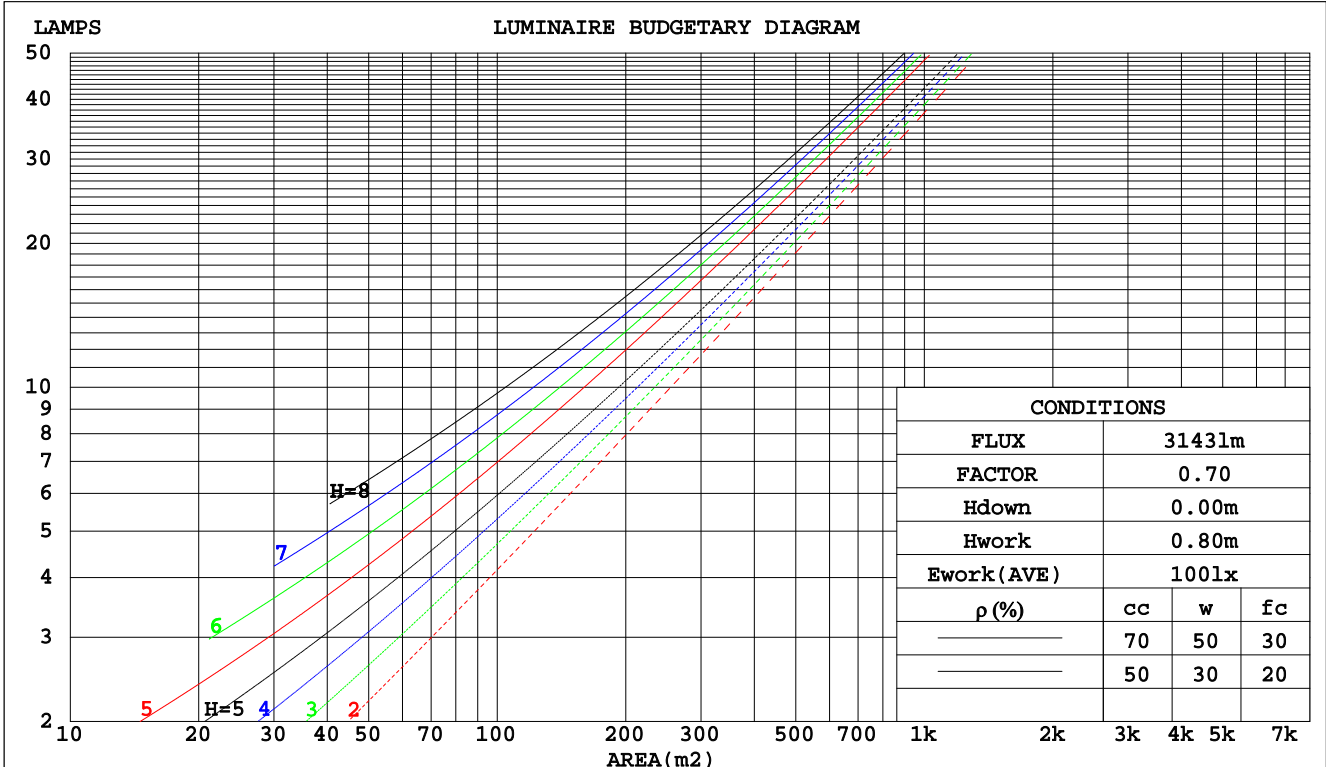
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.3V I:0.1490A P:33.90W PF:0.9440 Lamp Flux:3143.54x1 lm		
NAME: LED-SL35W-CW	TYPE:35W	WEIGHT:
DIM.:	SPEC.:6000K	SERIAL No.:1
MFR.:	SUR.:0.164*0.08	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																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	1.08	1.05	1.02	1.06	1.03	.00	1.01	.99	.97	.98	.96	.94	.94	.93	.91	.89
2.0	.97	.91	.87	.95	.90	.86	.92	.87	.84	.88	.85	.82	.86	.83	.80	.78
3.0	.87	.80	.75	.85	.79	.74	.83	.77	.73	.80	.76	.72	.78	.74	.71	.69
4.0	.78	.71	.65	.77	.70	.65	.75	.69	.64	.73	.67	.63	.70	.66	.62	.60
5.0	.71	.63	.57	.70	.62	.57	.68	.61	.56	.66	.60	.56	.64	.59	.55	.53
6.0	.64	.56	.51	.63	.56	.51	.62	.55	.50	.60	.54	.50	.59	.53	.49	.47
7.0	.59	.51	.45	.58	.50	.45	.56	.50	.45	.55	.49	.45	.54	.48	.44	.42
8.0	.54	.46	.41	.53	.46	.41	.52	.45	.40	.51	.45	.40	.50	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.41	.37	.47	.41	.36	.46	.40	.36	.35
10.0	.46	.38	.34	.45	.38	.33	.44	.38	.33	.43	.37	.33	.43	.37	.33	.31



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:240.3V I:0.1490A P:33.90W PF:0.9440 Lamp Flux:3143.54x1 lm		
NAME: LED-SL35W-CW	TYPE:35W	WEIGHT:
DIM.:	SPEC.:6000K	SERIAL No.:1
MFR.:	SUR.:0.164*0.08	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	.234	.133	.042	.227	.130	.041	.214	.123	.039	.203	.117	.038	.192	.111	.036	
2.0	.231	.126	.039	.225	.124	.038	.213	.119	.037	.203	.114	.036	.194	.110	.035	
3.0	.221	.118	.035	.216	.116	.035	.206	.112	.034	.197	.108	.033	.189	.105	.032	
4.0	.210	.109	.032	.206	.108	.032	.197	.105	.031	.189	.102	.031	.182	.099	.030	
5.0	.199	.101	.029	.195	.100	.029	.187	.098	.029	.180	.095	.028	.174	.093	.028	
6.0	.188	.094	.027	.185	.093	.027	.178	.091	.027	.171	.089	.026	.166	.087	.026	
7.0	.178	.088	.025	.175	.087	.025	.169	.085	.025	.163	.084	.024	.158	.082	.024	
8.0	.168	.082	.023	.166	.082	.023	.160	.080	.023	.155	.078	.023	.150	.077	.022	
9.0	.160	.077	.022	.157	.077	.021	.152	.075	.021	.147	.074	.021	.143	.073	.021	
10.0	.151	.073	.020	.149	.072	.020	.145	.071	.020	.140	.070	.020	.136	.069	.020	

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	.175	.157	.140	.150	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.096	.079	.064	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.070	.091	.068	.049	.053	.040	.029	.017	.013	.010	
4.0	.147	.100	.064	.126	.087	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.134	.081	.043	.115	.070	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.023	.070	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:240.3V I:0.1490A P:33.90W PF:0.9440 Lamp Flux:3143.54x1 lm										
NAME: LED-SL35W-CW					TYPE:35W			WEIGHT:		
DIM.:					SPEC.:6000K			SERIAL No.:1		
MFR.:					SUR.:0.164*0.08			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	25.8	27.1	26.0	27.3	27.5	29.2	30.5	29.5	30.7	30.9
3H	25.6	26.8	25.9	27.0	27.3	29.3	30.5	29.6	30.7	30.9
4H	25.5	26.7	25.8	26.9	27.1	29.2	30.3	29.5	30.6	30.8
6H	25.4	26.5	25.8	26.8	27.0	29.1	30.2	29.4	30.4	30.7
8H	25.4	26.4	25.7	26.7	27.0	29.1	30.1	29.4	30.3	30.6
12H	25.4	26.3	25.7	26.6	26.9	29.0	30.0	29.3	30.3	30.6
4H 2H	26.2	27.3	26.5	27.5	27.8	29.1	30.3	29.4	30.5	30.7
3H	26.0	27.0	26.4	27.3	27.6	29.2	30.2	29.6	30.5	30.8
4H	26.0	26.8	26.3	27.1	27.5	29.1	30.0	29.5	30.3	30.6
6H	25.9	26.7	26.3	27.0	27.4	29.0	29.8	29.4	30.2	30.5
8H	25.8	26.6	26.3	26.9	27.3	29.0	29.7	29.4	30.1	30.4
12H	25.8	26.5	26.2	26.8	27.2	29.0	29.6	29.4	30.0	30.4
8H 4H	25.8	26.5	26.2	26.9	27.3	29.0	29.7	29.4	30.1	30.4
6H	25.8	26.4	26.2	26.8	27.2	28.9	29.5	29.4	29.9	30.3
8H	25.7	26.3	26.2	26.7	27.1	28.9	29.4	29.3	29.8	30.2
12H	25.7	26.2	26.2	26.6	27.1	28.8	29.3	29.3	29.7	30.2
12H 4H	25.8	26.4	26.2	26.8	27.2	29.0	29.6	29.4	30.0	30.4
6H	25.7	26.2	26.2	26.7	27.1	28.9	29.4	29.3	29.8	30.2
8H	25.7	26.1	26.2	26.6	27.1	28.8	29.3	29.3	29.7	30.2
Variations with the observer position at spacings:										
S = 1.0H	+ 2.4 / - 6.7					+ 0.5 / - 0.9				
1.5H	+ 1.5 / - 6.0					+ 1.5 / - 1.4				
2.0H	+ 4.5 / - 8.9					+ 1.1 / - 2.5				

CIE Pub.117 Corrected 3144 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:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.3V I:0.1490A P:33.90W PF:0.9440 Lamp Flux:3143.54x1 lm		
NAME: LED-SL35W-CW	TYPE:35W	WEIGHT:
DIM.:	SPEC.:6000K	SERIAL No.:1
MFR.:	SUR.:0.164*0.08	PROTECTION ANGLE:

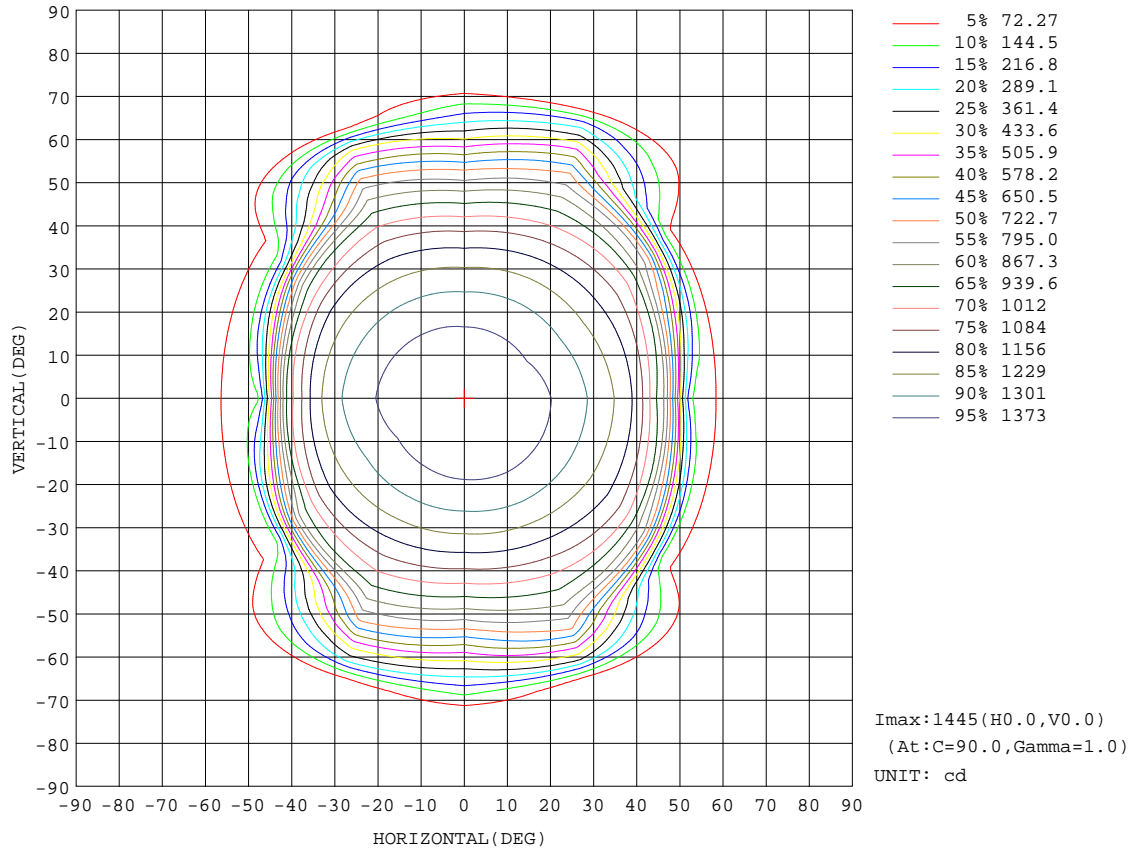
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	66	55	49	65	55	49	64	55	49	43
0.80	76	66	60	75	66	60	74	65	60	54
1.00	85	76	70	84	75	70	82	76	69	63
1.25	92	83	78	90	83	77	88	81	76	70
1.50	96	88	83	94	87	82	92	86	81	75
2.00	102	95	90	100	94	90	97	92	88	81
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	98	94	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	92
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:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:240.3V I:0.1490A P:33.90W PF:0.9440 Lamp Flux:3143.54x1 lm		
NAME: LED-SL35W-CW	TYPE:35W	WEIGHT:
DIM.:	SPEC.:6000K	SERIAL No.:1
MFR.:	SUR.:0.164*0.08	PROTECTION ANGLE:

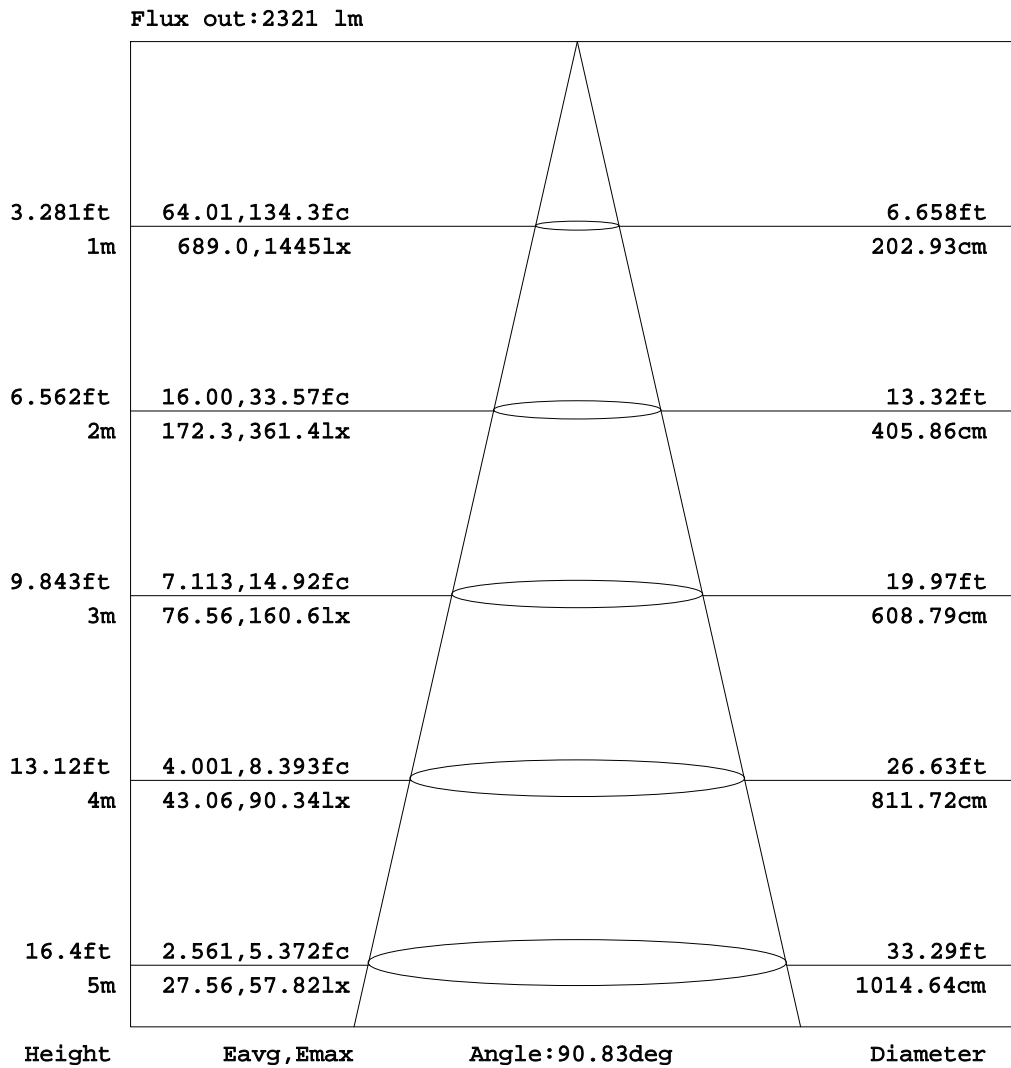


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [K=1.0000]
 Remarks:

AAI Figure

Test:U:240.3V I:0.1490A P:33.90W PF:0.9440 Lamp Flux:3143.54x1 lm		
NAME: LED-SL35W-CW	TYPE:35W	WEIGHT:
DIM.:	SPEC.:6000K	SERIAL No.:1
MFR.:	SUR.:0.164*0.08	PROTECTION ANGLE:



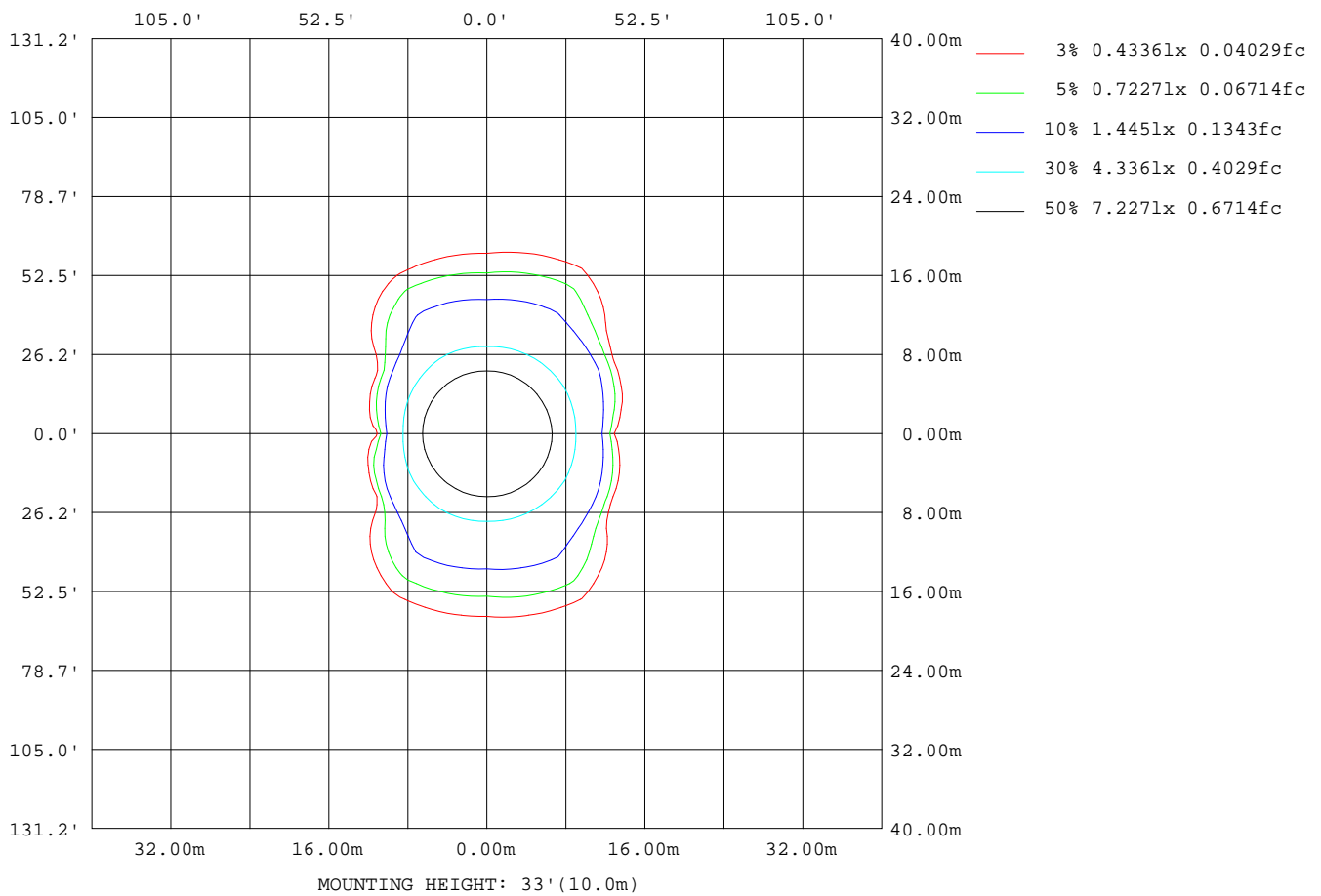
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

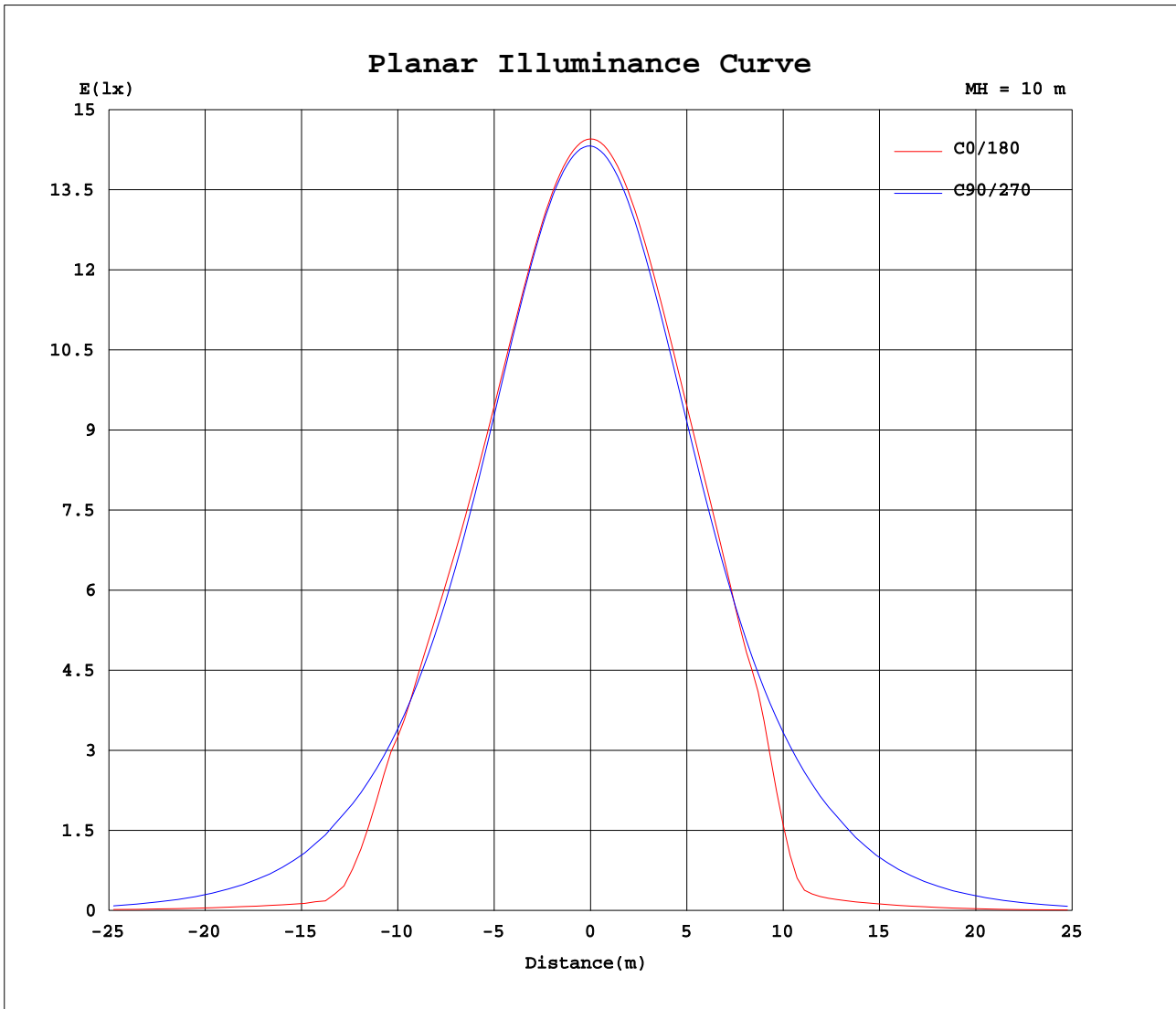
Test:U:240.3V I:0.1490A P:33.90W PF:0.9440 Lamp Flux:3143.54x1 lm		
NAME: LED-SL35W-CW	TYPE:35W	WEIGHT:
DIM.:	SPEC.:6000K	SERIAL No.:1
MFR.:	SUR.:0.164*0.08	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.600m [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: 2018-11-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 9.600m [K=1.0000]
 Remarks:

