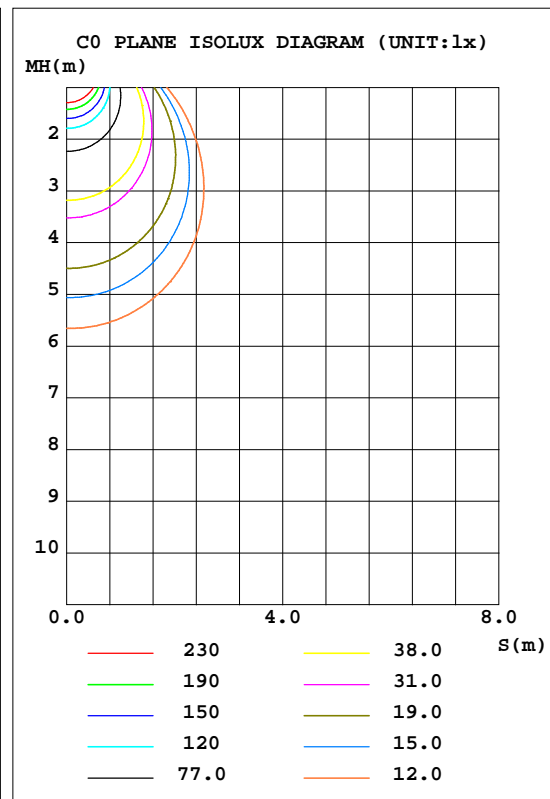
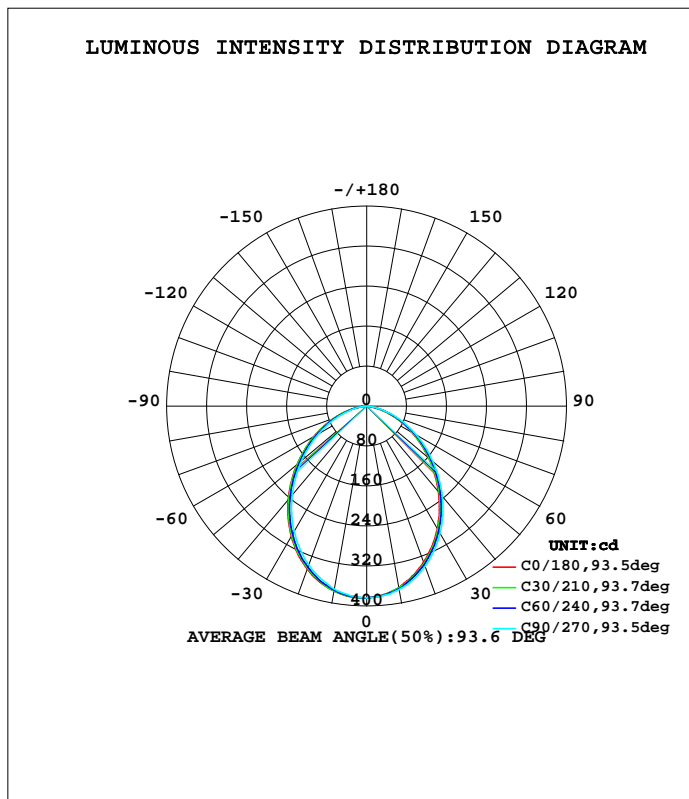


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm		
NAME: ID8W-CC	TYPE:8W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:
MFR.:	SUR.:0.04	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.05 lm/W			
MODEL	ID8W-CC	I _{max} (cd)	383.9	S/MH(C0/180)	1.18
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	1.14
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	861.46	η UP, DN(C0-180)	0.0, 50.2
NOMINAL FLUX(lm)	861.458	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	240.6	η down(%)	100.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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	\$lum,lamp
10	375.9	375.0	371.7	369.6	369.1	370.6	372.5	375.3	0- 10	36.08	36.08	4.19,4.19
20	347.4	344.4	338.4	334.7	332.9	336.3	341.4	345.4	10- 20	100.9	137.0	15.9,15.9
30	301.7	297.9	290.5	285.0	283.1	286.9	293.8	299.0	20- 30	146.2	283.1	32.9,32.9
40	244.1	240.2	231.8	225.7	223.5	228.0	235.9	241.7	30- 40	164.9	448.1	52,52
50	181.5	178.1	170.1	163.7	161.9	165.9	173.0	179.5	40- 50	156.4	604.5	70.2,70.2
60	122.1	118.5	111.3	105.5	104.1	107.6	114.3	120.1	50- 60	126.8	731.3	84.9,84.9
70	67.81	64.83	58.60	53.79	52.73	55.64	61.15	66.08	60- 70	84.93	816.2	94.8,94.8
80	20.21	20.46	16.46	13.12	10.64	13.91	17.62	20.82	70- 80	39.32	855.6	99.3,99.3
90	0	0	0	0	0	0	0	0	80- 90	5.900	861.5	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		

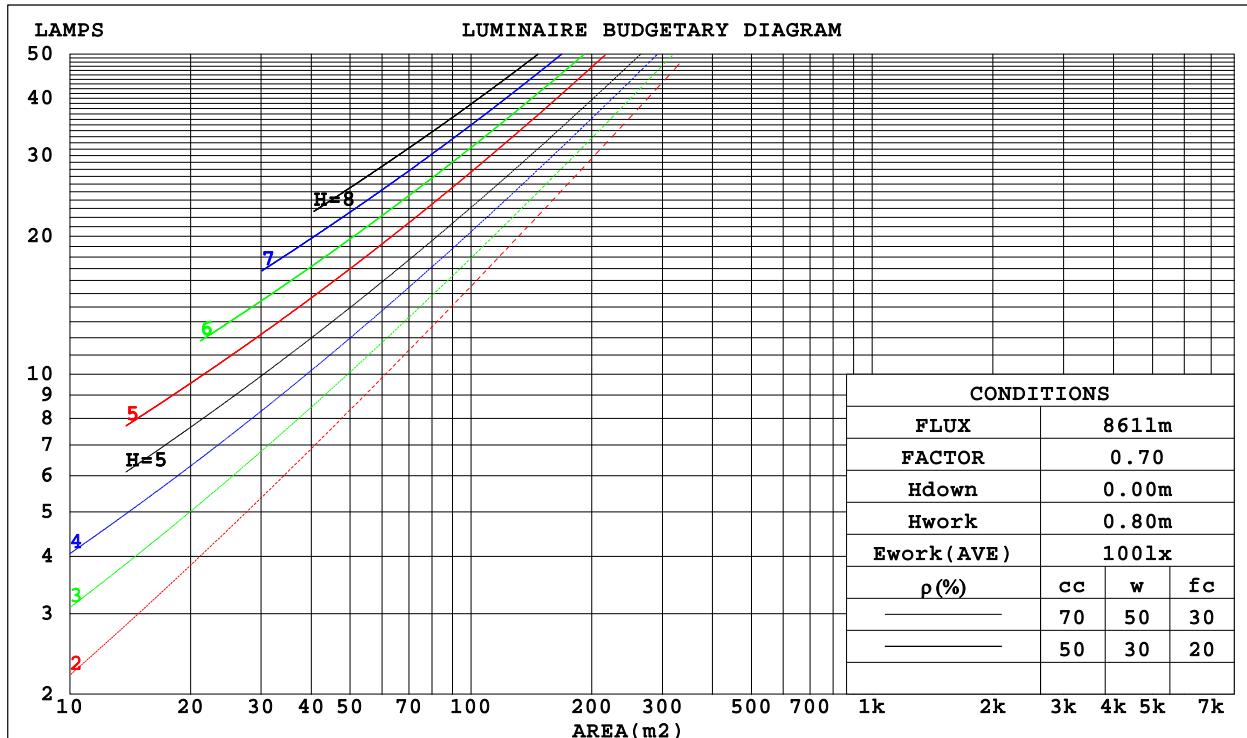
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm		
NAME: ID8W-CC	TYPE:8W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:
MFR.:	SUR.:0.04	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	1.06	1.02	.98	1.03	1.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.87	.82	.91	.86	.81	.88	.83	.79	.85	.81	.77	.82	.79	.76	.74
3.0	.83	.75	.69	.81	.74	.69	.78	.72	.67	.76	.71	.66	.73	.69	.65	.63
4.0	.74	.66	.59	.73	.65	.59	.70	.64	.58	.68	.62	.58	.66	.61	.57	.55
5.0	.67	.58	.52	.65	.57	.52	.63	.56	.51	.61	.55	.50	.60	.54	.50	.48
6.0	.60	.52	.46	.59	.51	.45	.58	.50	.45	.56	.50	.45	.54	.49	.44	.42
7.0	.55	.47	.41	.54	.46	.41	.53	.45	.40	.51	.45	.40	.50	.44	.40	.38
8.0	.50	.42	.37	.50	.42	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
9.0	.46	.38	.33	.46	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.33	.31
10.0	.43	.35	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.40	.34	.30	.28



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm		
NAME: ID8W-CC	TYPE:8W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:
MFR.:	SUR.:0.04	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	.274	.156	.049	.267	.152	.048	.254	.146	.047	.242	.140	.045	.231	.134	.043	
2.0	.264	.145	.044	.258	.142	.044	.246	.137	.043	.236	.132	.041	.226	.128	.040	
3.0	.248	.132	.040	.243	.130	.039	.232	.126	.038	.223	.122	.038	.214	.119	.037	
4.0	.231	.120	.035	.227	.119	.035	.218	.115	.034	.209	.112	.034	.202	.110	.033	
5.0	.216	.110	.032	.212	.109	.032	.204	.106	.031	.196	.104	.031	.189	.101	.030	
6.0	.201	.101	.029	.198	.100	.029	.191	.098	.028	.184	.096	.028	.178	.094	.028	
7.0	.189	.093	.026	.185	.092	.026	.179	.090	.026	.173	.089	.026	.168	.087	.026	
8.0	.177	.086	.024	.174	.086	.024	.168	.084	.024	.163	.083	.024	.158	.081	.024	
9.0	.167	.081	.022	.164	.080	.022	.159	.079	.022	.154	.077	.022	.150	.076	.022	
10.0	.157	.075	.021	.155	.075	.021	.150	.074	.021	.146	.072	.021	.142	.071	.020	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.077	.137	.098	.067	.094	.068	.047	.054	.040	.028	.018	.013	.009	
4.0	.152	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.138	.082	.041	.119	.071	.036	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.035	.113	.065	.030	.078	.045	.021	.045	.027	.013	.015	.009	.004	
8.0	.125	.069	.030	.108	.060	.026	.075	.042	.018	.043	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.103	.055	.023	.071	.039	.016	.042	.023	.010	.013	.008	.003	
10.0	.114	.059	.023	.098	.052	.020	.068	.036	.014	.040	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm										
NAME: ID8W-CC					TYPE:8W			WEIGHT:		
DIM.:					SPEC.:4000K			SERIAL No.:		
MFR.:					SUR.:0.04			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	26.6	28.0	26.8	28.2	28.4	26.2	27.6	26.5	27.8	28.0
3H	27.7	29.0	28.0	29.3	29.5	27.3	28.6	27.5	28.8	29.0
4H	28.1	29.4	28.4	29.6	29.9	27.6	28.8	27.9	29.1	29.3
6H	28.3	29.5	28.6	29.8	30.0	27.7	28.9	28.0	29.2	29.4
8H	28.3	29.5	28.7	29.7	30.0	27.7	28.9	28.1	29.1	29.4
12H	28.3	29.4	28.7	29.7	30.0	27.7	28.8	28.0	29.1	29.4
4H 2H	27.0	28.3	27.3	28.5	28.7	26.7	28.0	27.0	28.2	28.5
3H	28.4	29.4	28.7	29.7	30.0	28.0	29.0	28.3	29.3	29.6
4H	28.9	29.9	29.2	30.2	30.5	28.4	29.4	28.8	29.7	30.0
6H	29.2	30.0	29.5	30.4	30.7	28.6	29.5	29.0	29.8	30.2
8H	29.2	30.0	29.6	30.4	30.7	28.6	29.4	29.0	29.8	30.2
12H	29.2	29.9	29.6	30.3	30.7	28.6	29.4	29.0	29.7	30.1
8H 4H	29.0	29.8	29.4	30.2	30.6	28.6	29.4	29.0	29.7	30.1
6H	29.4	30.1	29.8	30.5	30.9	28.9	29.5	29.3	29.9	30.4
8H	29.5	30.1	29.9	30.5	30.9	28.9	29.5	29.4	29.9	30.4
12H	29.5	30.0	30.0	30.4	30.9	28.9	29.4	29.4	29.9	30.4
12H 4H	29.0	29.7	29.4	30.1	30.5	28.5	29.3	29.0	29.7	30.1
6H	29.4	30.0	29.8	30.4	30.8	28.9	29.5	29.3	29.9	30.3
8H	29.5	30.0	30.0	30.4	30.9	29.0	29.5	29.4	29.9	30.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.4				
1.5H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.5				

CIE Pub.117 Corrected 861.5 lm Total Lamp Luminous Flux.(8log(F/F0) = -0.5)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm		
NAME: ID8W-CC	TYPE:8W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:
MFR.:	SUR.:0.04	PROTECTION ANGLE:

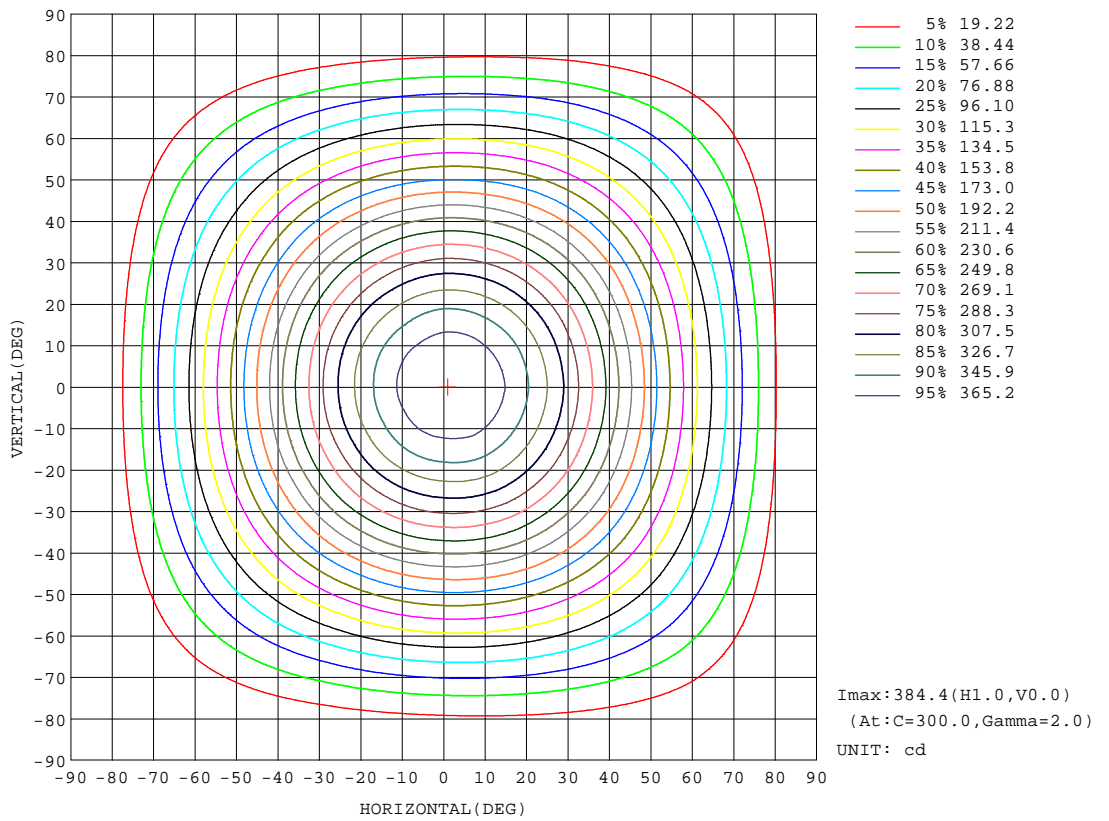
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	62	51	44	61	51	44	60	50	44	38
0.80	72	61	54	71	61	54	69	60	54	47
1.00	80	70	63	79	69	63	77	70	62	56
1.25	87	77	71	85	77	70	83	75	70	63
1.50	92	83	76	90	82	76	87	80	75	68
2.00	98	90	85	96	89	84	93	87	82	75
2.50	101	94	89	99	93	88	96	90	86	79
3.00	104	98	93	102	97	92	98	94	90	82
4.00	108	103	99	106	101	97	102	98	95	86
5.00	110	106	102	108	104	101	103	100	98	89
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:2018-07-05

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:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm		
NAME: ID8W-CC	TYPE:8W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:
MFR.:	SUR.:0.04	PROTECTION ANGLE:



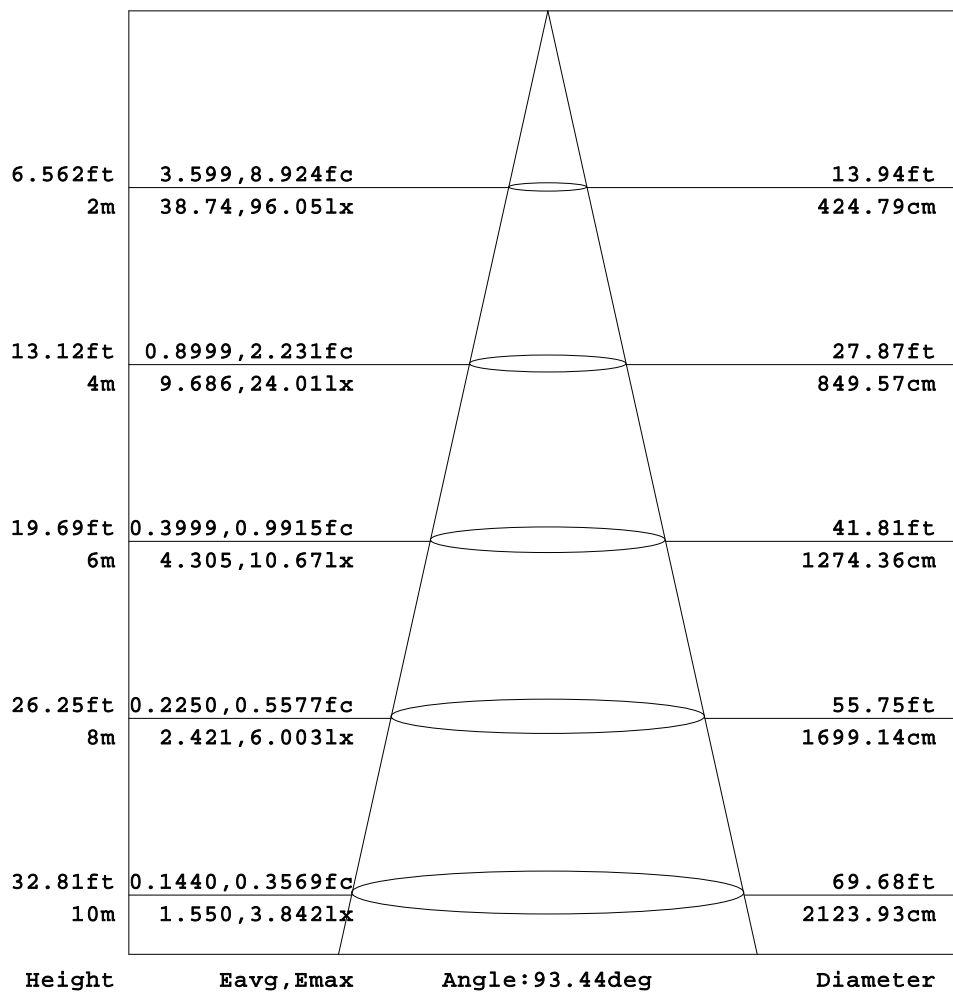
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm		
NAME: ID8W-CC	TYPE:8W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:
MFR.:	SUR.:0.04	PROTECTION ANGLE:

Flux out:559.9 lm



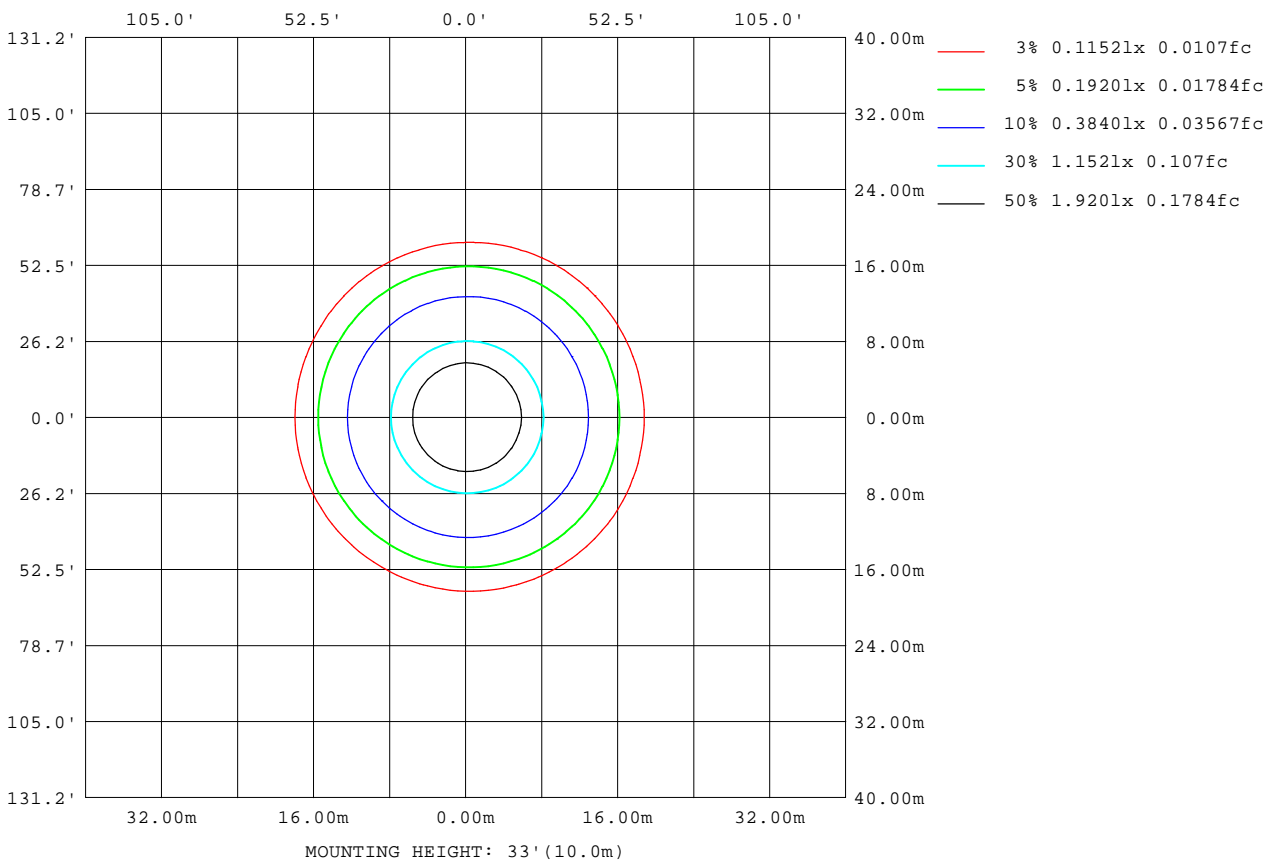
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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

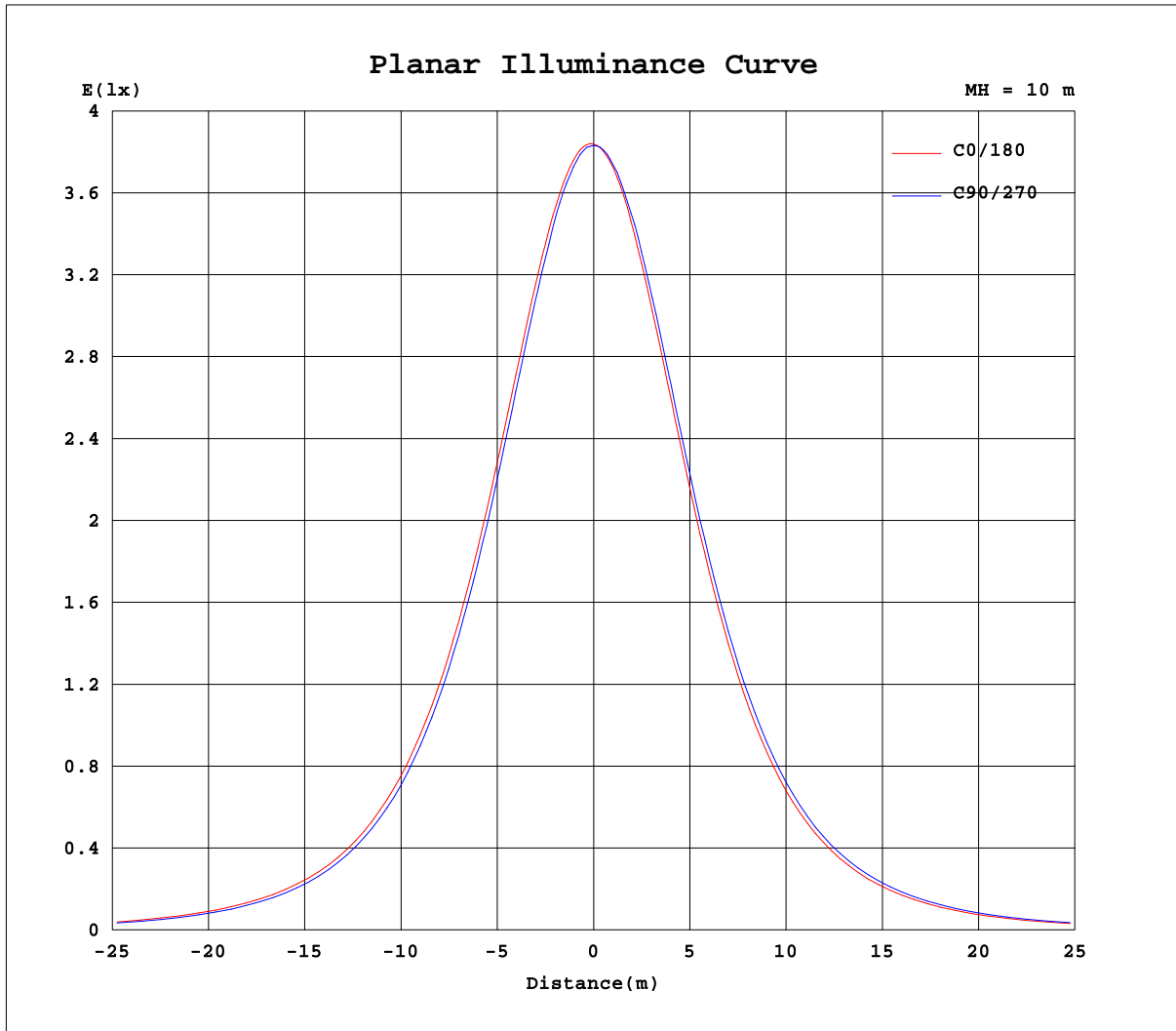
Test:U:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm		
NAME: ID8W-CC	TYPE:8W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:
MFR.:	SUR.:0.04	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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: 2018-07-05

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:240.6V I:0.0360A P:8.360W PF:0.9400 Lamp Flux:861.458x1 lm		
NAME: ID8W-CC	TYPE:8W	WEIGHT:
DIM.:	SPEC.:4000K	SERIAL No.:
MFR.:	SUR.:0.04	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEC) γ (DEC)	0	30	60	90	120	150	180	210	240	270	300	330						
0	383	383	383	383	383	383	383	383	383	383	383	383						
5	383	382	382	380	379	379	379	379	380	381	382	382						
10	376	376	374	372	370	369	369	370	372	373	375	375						
15	364	362	361	357	356	353	352	354	356	359	361	363						
20	347	345	343	338	336	333	333	335	337	341	344	347						
25	326	324	322	316	313	310	309	312	314	319	323	325						
30	302	300	296	291	286	284	283	285	289	294	298	300						
35	274	272	269	262	258	255	254	257	260	266	270	273						
40	244	242	238	232	227	224	224	226	230	236	240	243						
45	213	212	207	201	196	193	192	195	199	205	209	212						
50	181	181	176	170	165	163	162	164	168	173	178	181						
55	151	150	145	140	135	133	132	134	138	143	148	150						
60	122	121	116	111	106	105	104	106	110	114	119	121						
65	94.1	93.0	88.6	84.0	79.6	77.9	77.4	78.6	82.6	86.8	91.4	93.1						
70	67.8	66.8	62.8	58.6	54.5	53.1	52.7	53.9	57.4	61.1	65.2	66.9						
75	43.2	42.9	39.4	35.7	32.1	31.0	29.2	31.6	34.6	37.8	41.3	42.8						
80	20.2	21.6	19.3	16.5	13.8	12.4	10.6	12.5	15.3	17.6	20.4	21.2						
85	4.97	5.65	4.95	3.57	2.61	2.01	1.54	1.96	2.96	3.98	5.37	5.55						
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-07-05

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: