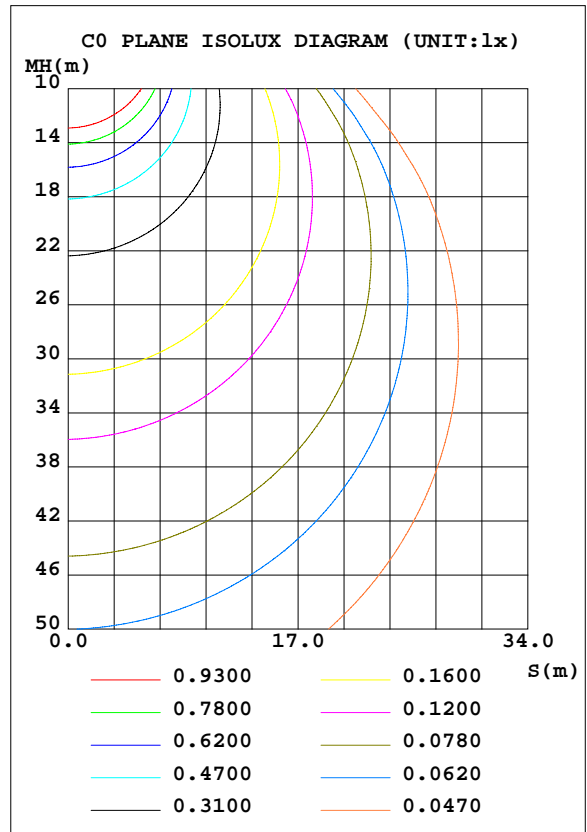
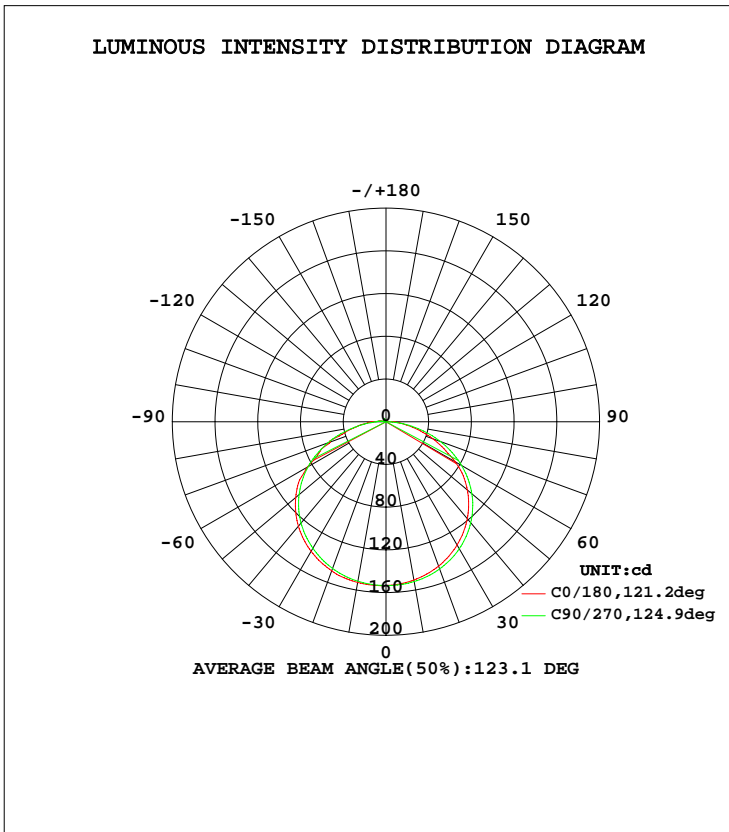


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm		
NAME: DJ602408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ602408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 112.35 lm/W			
MODEL	DJ60	I <sub>max</sub> (cd)	153.5	S/MH(C0/180)	1.36
NOMINAL POWER(W)	4.8	LOR(%)	100.0	S/MH(C90/270)	1.33
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	512.30	η UP, DN(C0-180)	0.5,47.3
NOMINAL FLUX(lm)	512.299	CIE CLASS	DIRECT	η UP, DN(C180-360)	1.4,50.7
LAMPS INSIDE	1	η up(%)	1.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	η down(%)	98.1	CIBSE SHR MAX	1.55



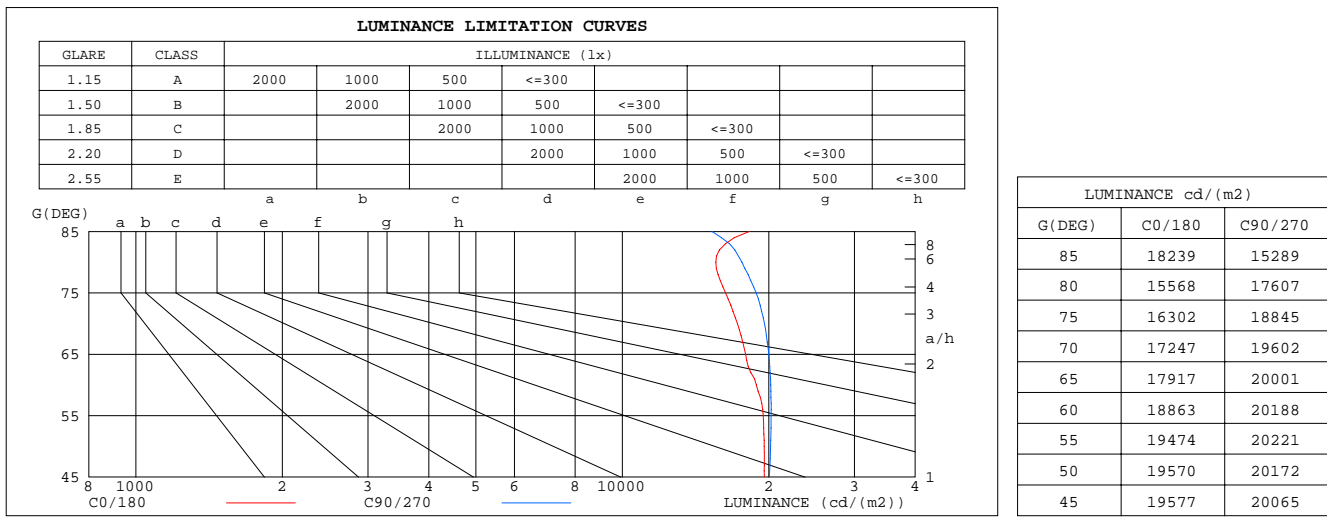
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity:21.8%  
 Test Distance:7.750m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM  
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C90	C180	C270				$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	150.5	151.9	152.8	151.6				0- 10	14.56	14.56	2.84,2.84
20	143.9	146.7	148.5	146.2				10- 20	42.26	56.83	11.1,11.1
30	133.2	137.3	140.2	136.8				20- 30	65.56	122.4	23.9,23.9
40	118.5	123.5	127.6	123.8				30- 40	81.78	204.2	39.9,39.9
50	99.50	104.9	110.4	106.3				40- 50	88.61	292.8	57.2,57.2
60	74.60	81.69	84.96	84.20				50- 60	84.15	376.9	73.6,73.6
70	46.66	54.25	55.39	57.79				60- 70	66.58	443.5	86.6,86.6
80	21.38	24.74	28.37	29.72				70- 80	41.79	485.3	94.7,94.7
90	6.559	1.427	12.39	8.673				80- 90	17.13	502.4	98.1,98.1
100	1.466	0.3086	4.855	2.632				90-100	4.638	507.1	99,99
110	0.3846	0.4211	2.029	0.6050				100-110	1.704	508.8	99.3,99.3
120	0.5334	0.5361	0.9819	0.4544				110-120	0.6244	509.4	99.4,99.4
130	0.7756	0.6512	0.9108	0.5730				120-130	0.6053	510.0	99.6,99.6
140	0.8385	0.7429	0.9042	0.6613				130-140	0.5886	510.6	99.7,99.7
150	0.8618	0.8207	0.8088	3.352				140-150	0.7804	511.4	99.8,99.8
160	0.8799	0.8614	0.8585	0.8038				150-160	0.5810	512.0	99.9,99.9
170	0.8939	1.011	0.8917	0.9084				160-170	0.2458	512.2	100,100
180	0.9016	1.506	0.8983	1.221				170-180	0.0963	512.3	100,100
DEG	LUMINOUS INTENSITY:cd							UNIT:lm			



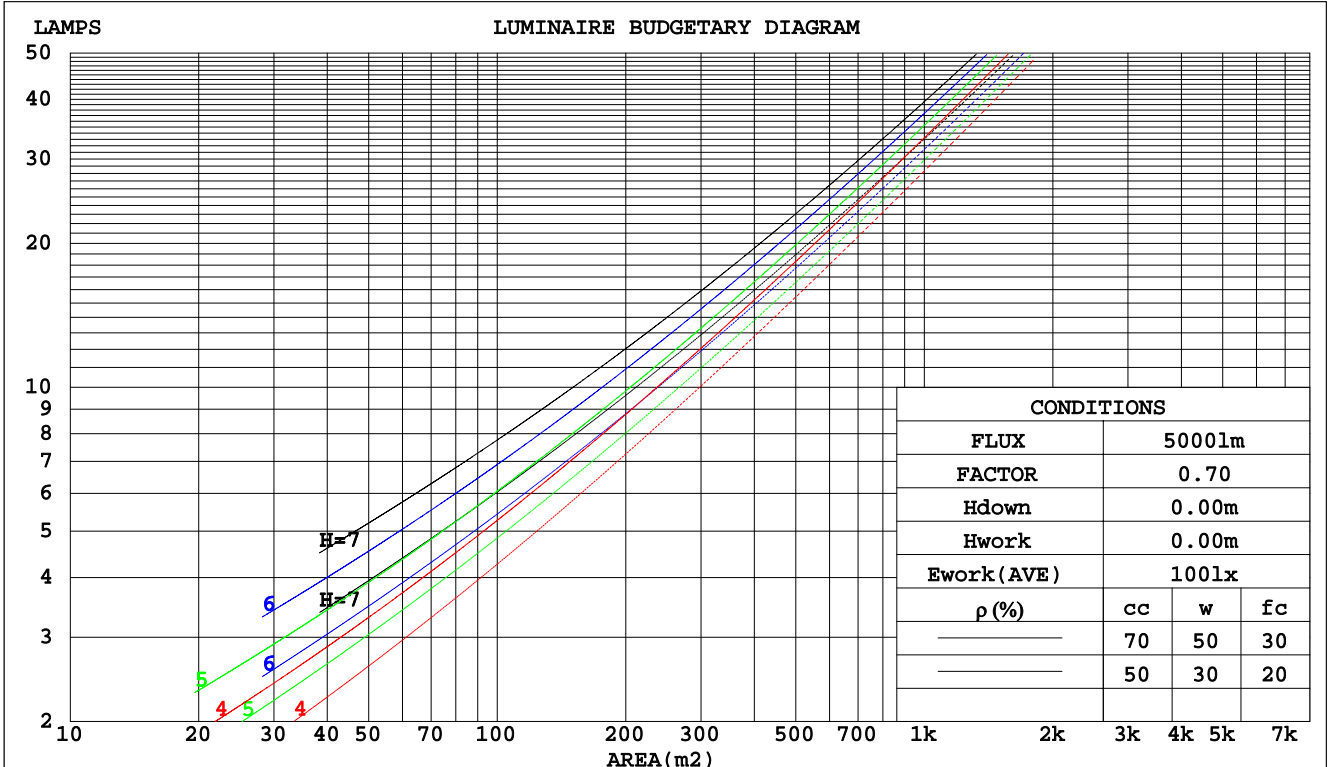
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LQT  
Test Date:2018-01-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
Humidity:21.8%  
Test Distance:7.750m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm		
NAME: DJ602408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ602408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	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															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.02	.97	.93	.90	.95	.92	.95	.91	.88	.91	.88	.85	.87	.84	.82	.80
2.0	.88	.81	.75	.86	.79	.74	.82	.77	.72	.79	.74	.70	.75	.71	.68	.66
3.0	.77	.68	.62	.75	.67	.61	.72	.65	.59	.69	.63	.58	.66	.61	.57	.55
4.0	.68	.59	.52	.66	.58	.51	.64	.56	.50	.61	.55	.49	.59	.53	.48	.46
5.0	.60	.51	.44	.59	.50	.44	.57	.49	.43	.54	.48	.42	.52	.47	.42	.40
6.0	.54	.45	.38	.53	.44	.38	.51	.43	.37	.49	.42	.37	.47	.41	.36	.34
7.0	.49	.40	.34	.48	.39	.33	.46	.39	.33	.45	.38	.33	.43	.37	.32	.30
8.0	.45	.36	.30	.44	.35	.30	.42	.35	.29	.41	.34	.29	.39	.33	.29	.27
9.0	.41	.32	.27	.40	.32	.27	.39	.31	.26	.38	.31	.26	.36	.30	.26	.24
10.0	.38	.29	.24	.37	.29	.24	.36	.29	.24	.35	.28	.24	.34	.28	.23	.22



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity:21.8%  
 Test Distance:7.750m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm		
NAME: DJ602408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ602408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	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	.335	.191	.060	.327	.187	.059	.313	.180	.057	.300	.173	.055	.287	.167	.054	
2.0	.309	.169	.052	.302	.166	.051	.289	.161	.050	.277	.155	.049	.266	.150	.047	
3.0	.282	.150	.045	.276	.148	.045	.265	.143	.044	.254	.139	.043	.244	.135	.042	
4.0	.259	.134	.040	.253	.133	.039	.243	.129	.038	.234	.125	.038	.225	.122	.037	
5.0	.238	.121	.035	.233	.120	.035	.224	.117	.034	.215	.114	.034	.208	.111	.033	
6.0	.220	.110	.032	.215	.109	.031	.207	.106	.031	.200	.104	.030	.193	.101	.030	
7.0	.204	.101	.029	.200	.100	.028	.193	.097	.028	.186	.095	.028	.179	.093	.027	
8.0	.190	.093	.026	.186	.092	.026	.180	.090	.026	.174	.088	.025	.168	.086	.025	
9.0	.177	.086	.024	.174	.085	.024	.168	.083	.024	.163	.082	.023	.158	.080	.023	
10.0	.167	.080	.022	.164	.079	.022	.158	.078	.022	.153	.076	.022	.149	.075	.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	.205	.205	.205	.175	.175	.175	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.197	.171	.147	.168	.147	.127	.115	.101	.088	.066	.058	.051	.021	.019	.016	
2.0	.189	.147	.111	.162	.126	.096	.111	.087	.067	.064	.051	.039	.021	.016	.013	
3.0	.182	.129	.088	.156	.112	.076	.107	.078	.053	.062	.045	.031	.020	.015	.010	
4.0	.174	.116	.072	.149	.100	.063	.103	.070	.044	.059	.041	.026	.019	.013	.009	
5.0	.167	.106	.061	.143	.092	.053	.099	.064	.038	.057	.038	.022	.018	.012	.007	
6.0	.159	.098	.053	.137	.085	.047	.095	.059	.033	.055	.035	.020	.018	.011	.006	
7.0	.152	.091	.048	.131	.079	.042	.091	.055	.029	.053	.033	.018	.017	.011	.006	
8.0	.146	.085	.043	.126	.074	.038	.087	.052	.027	.051	.031	.016	.016	.010	.005	
9.0	.140	.080	.040	.120	.070	.035	.083	.049	.025	.049	.029	.015	.016	.009	.005	
10.0	.134	.076	.037	.115	.066	.033	.080	.046	.023	.047	.027	.014	.015	.009	.005	

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity:21.8%  
 Test Distance:7.750m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm										
NAME: DJ602408NO-8NWCDA0120WC0500					TYPE:			WEIGHT:		
SPEC.:DJ602408NO-8NWCDA0120WC0500					DIM.: 1000*8			SERIAL No.:001		
MFR.: Colors					SUR.:1000*8			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	23.0	24.5	23.3	24.8	25.0	23.2	24.8	23.5	25.0	25.3
3H	24.5	26.0	24.9	26.2	26.5	24.9	26.4	25.3	26.6	26.9
4H	25.2	26.5	25.5	26.8	27.1	25.6	27.0	26.0	27.3	27.6
6H	25.6	26.9	26.0	27.2	27.6	26.2	27.5	26.6	27.8	28.1
8H	25.8	27.1	26.2	27.4	27.7	26.4	27.6	26.7	27.9	28.3
12H	26.0	27.2	26.4	27.5	27.9	26.5	27.7	26.9	28.0	28.4
4H 2H	23.7	25.0	24.0	25.3	25.6	23.8	25.2	24.2	25.5	25.8
3H	25.4	26.6	25.8	26.9	27.3	25.7	26.9	26.1	27.3	27.6
4H	26.2	27.3	26.6	27.6	28.0	26.6	27.7	27.0	28.0	28.4
6H	26.8	27.7	27.2	28.1	28.5	27.2	28.2	27.7	28.6	29.0
8H	27.0	27.9	27.5	28.3	28.8	27.5	28.4	27.9	28.8	29.2
12H	27.3	28.1	27.7	28.5	29.0	27.7	28.5	28.1	28.9	29.4
8H 4H	26.5	27.4	26.9	27.8	28.2	26.8	27.8	27.3	28.2	28.6
6H	27.3	28.0	27.7	28.5	28.9	27.7	28.4	28.2	28.9	29.4
8H	27.6	28.3	28.1	28.8	29.3	28.0	28.7	28.5	29.2	29.7
12H	28.0	28.6	28.5	29.0	29.6	28.3	28.9	28.8	29.4	29.9
12H 4H	26.5	27.3	27.0	27.8	28.2	26.9	27.7	27.3	28.1	28.6
6H	27.3	28.0	27.8	28.5	29.0	27.7	28.4	28.2	28.9	29.4
8H	27.8	28.3	28.3	28.8	29.3	28.1	28.7	28.7	29.2	29.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.1 / - 0.3				

CIE Pub.117 Corrected 512.3 lm Total Lamp Luminous Flux. (8log(F/F0) = -2.3)

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity:21.8%  
 Test Distance:7.750m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm		
NAME: DJ602408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ602408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	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	55	43	35	54	42	35	53	42	35	29
0.80	65	52	45	64	52	45	62	51	44	37
1.00	73	61	54	72	61	53	69	62	53	45
1.25	80	69	61	79	68	61	76	67	60	52
1.50	85	75	67	84	74	67	80	72	66	57
2.00	92	83	76	90	82	75	87	79	74	65
2.50	97	88	82	94	87	81	90	84	79	70
3.00	100	93	87	98	91	85	93	88	83	74
4.00	104	98	93	102	96	91	97	93	89	79
5.00	107	102	97	104	100	95	99	96	92	82
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity:21.8%  
 Test Distance:7.750m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

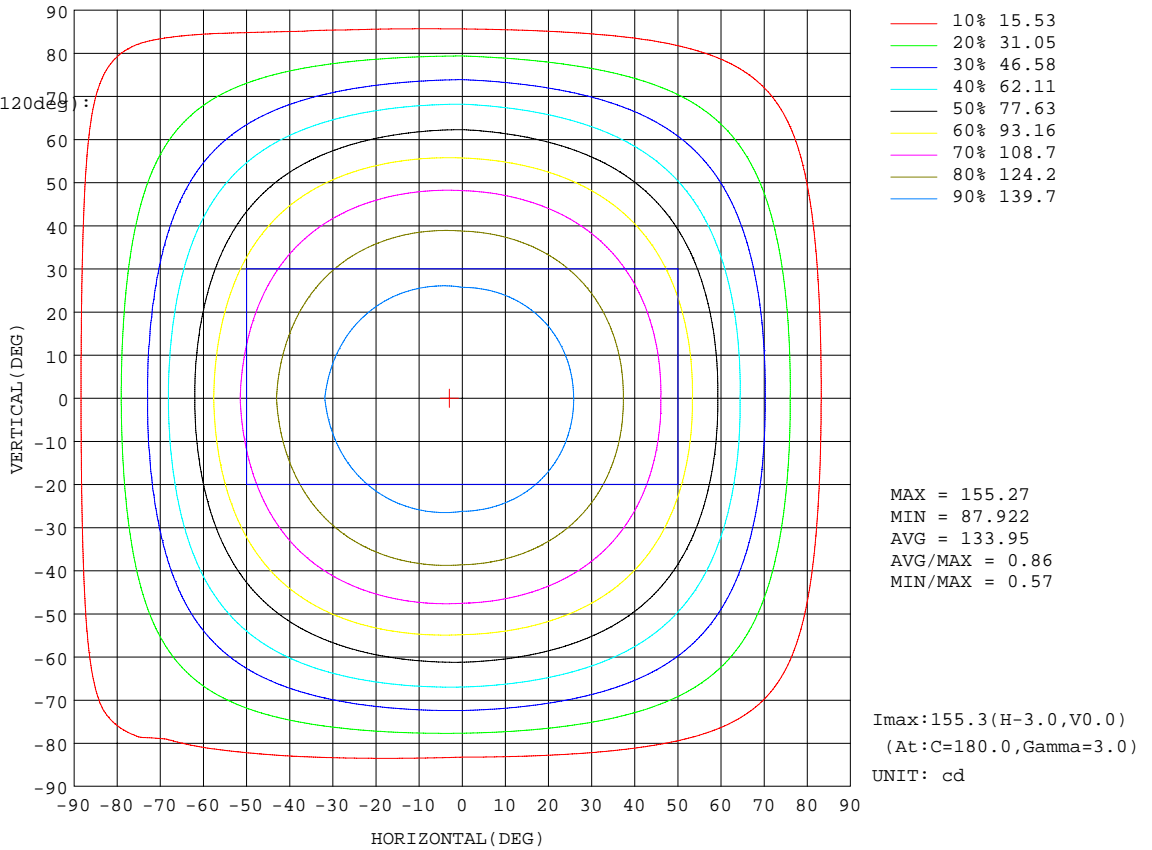
Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm		
NAME: DJ602408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ602408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	PROTECTION ANGLE:

Conical surface Flux(90deg):

248.29 lm  
%lum = 48.5%  
%lamp = 48.5%

Conical surface Flux(120deg):

376.93 lm  
%lum = 73.6%  
%lamp = 73.6%

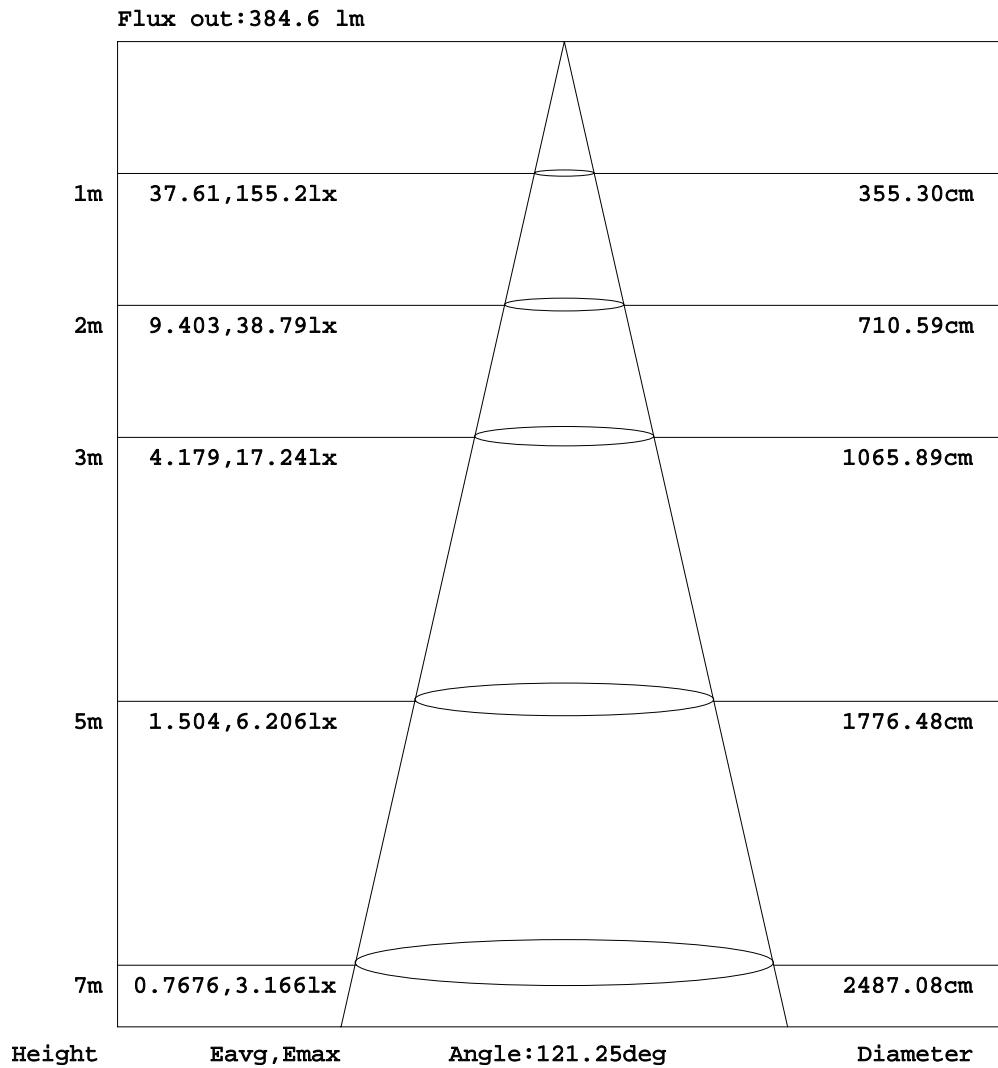


C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: LQT  
Test Date: 2018-01-10

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
Humidity: 21.8%  
Test Distance: 7.750m [K=1.0000]  
Remarks:

AAI Figure

Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm		
NAME: DJ602408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ602408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	PROTECTION ANGLE:



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

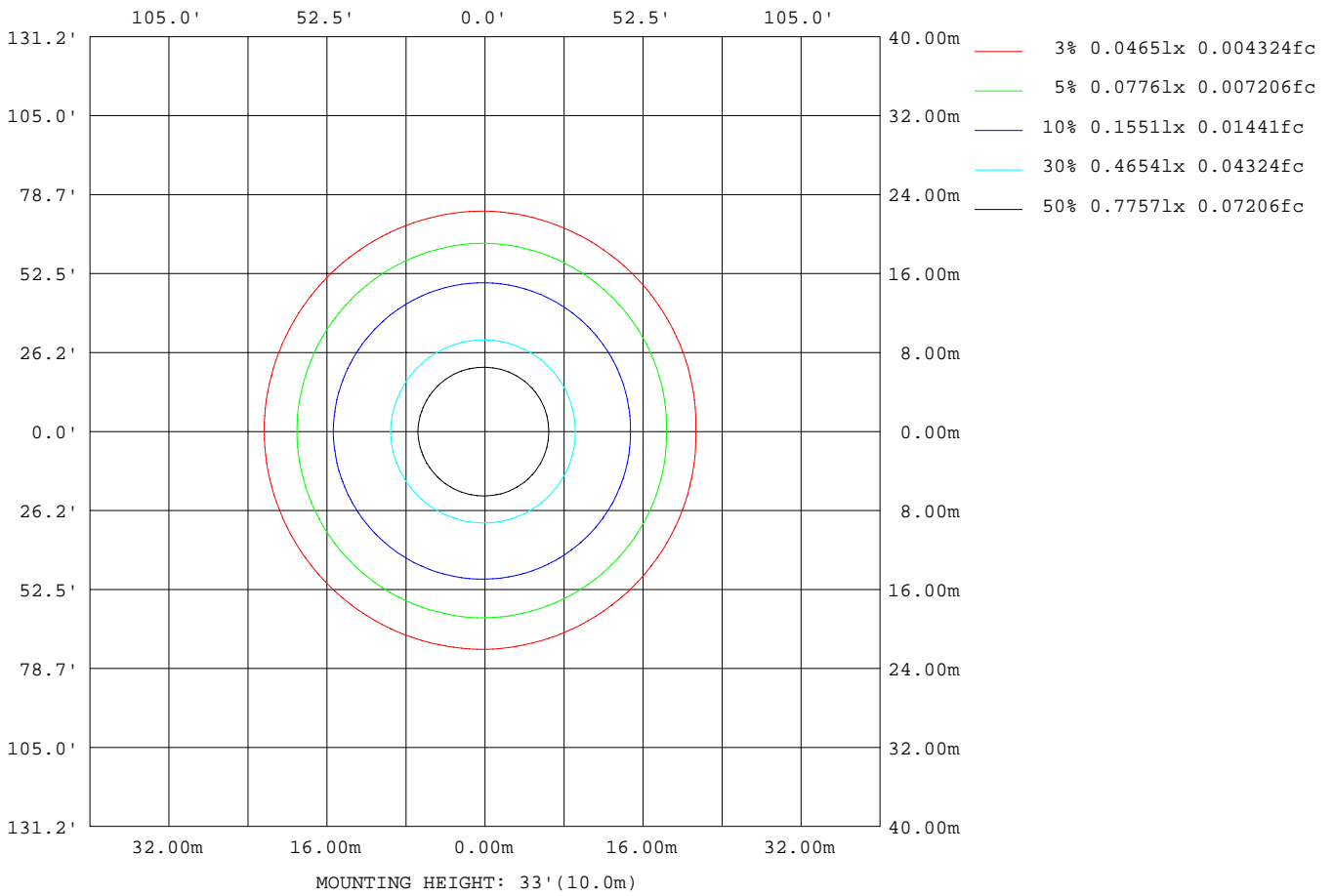
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity:21.8%  
 Test Distance:7.750m [K=1.0000]  
 Remarks:



**ISOLUX DIAGRAM**

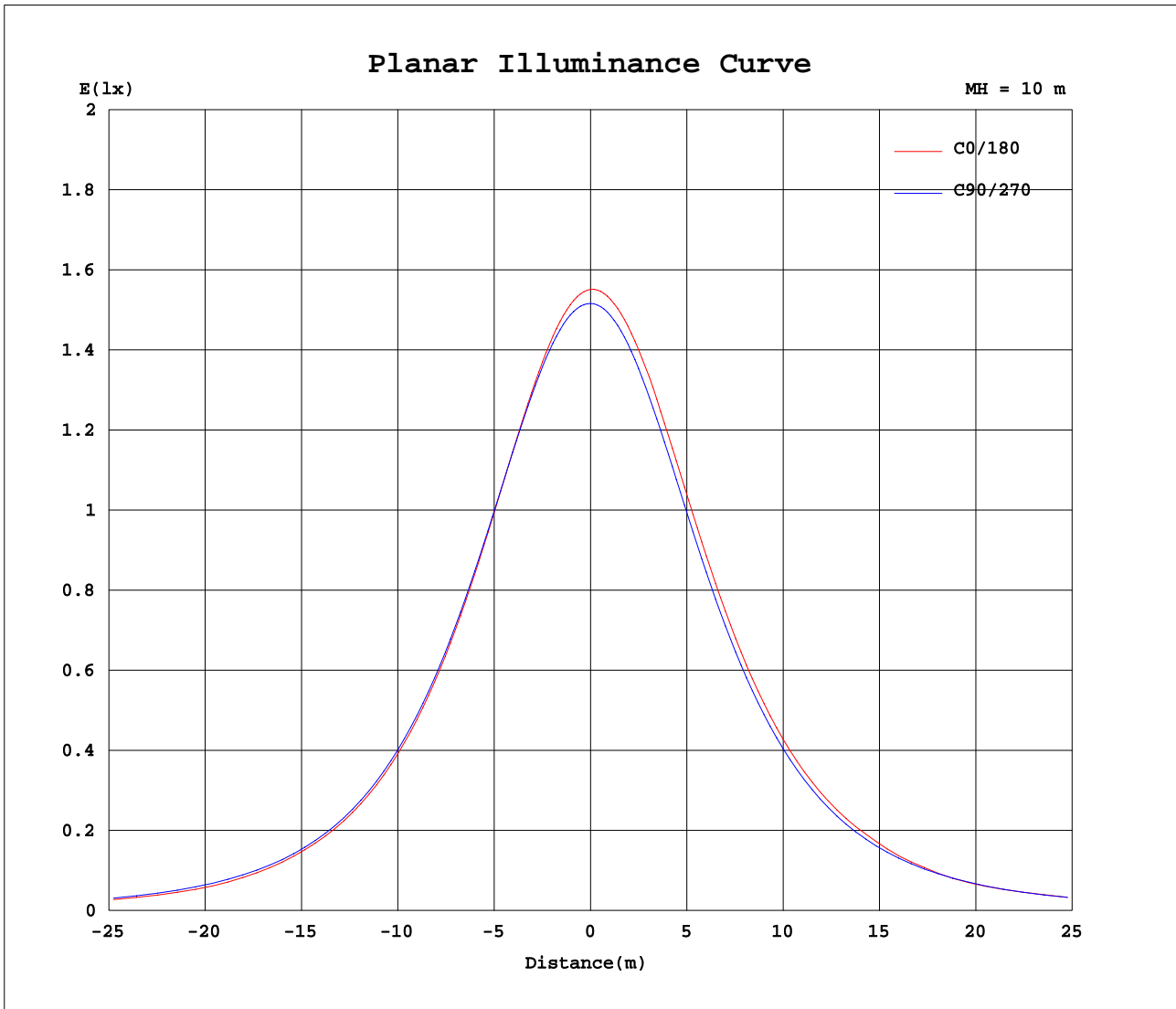
Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm		
NAME: DJ602408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ602408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity:21.8%  
 Test Distance:7.750m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LQT  
 Test Date: 2018-01-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity: 21.8%  
 Test Distance: 7.750m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.1900A P:4.560W PF:1.000 Lamp Flux:512.299x1 lm		
NAME: DJ602408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ602408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	PROTECTION ANGLE:

Table--1

UNIT: cd

C( DEG) γ (DEG)	0	90	180	270															
0	153	153	153	153															
5	152	153	153	153															
10	150	152	153	152															
15	148	150	151	149															
20	144	147	149	146															
25	139	143	145	142															
30	133	137	140	137															
35	126	131	134	131															
40	118	124	128	124															
45	109	115	120	116															
50	99.5	105	110	106															
55	88.4	93.9	100	95.8															
60	74.6	81.7	85.0	84.2															
65	59.9	68.4	69.3	71.3															
70	46.7	54.3	55.4	57.8															
75	33.4	39.5	39.5	43.9															
80	21.4	24.7	28.4	29.7															
85	12.6	10.8	19.1	18.2															
90	6.56	1.43	12.4	8.67															
95	2.78	0.26	6.81	7.38															
100	1.47	0.31	4.86	2.63															
105	1.09	0.36	3.27	2.65															
110	0.38	0.42	2.03	0.61															
115	0.42	0.48	1.07	0.43															
120	0.53	0.54	0.98	0.45															
125	0.67	0.59	0.91	0.51															
130	0.78	0.65	0.91	0.57															
135	0.80	0.71	0.91	0.62															
140	0.84	0.74	0.90	0.66															
145	0.85	0.78	0.89	3.35															
150	0.86	0.82	0.81	3.35															
155	0.87	0.84	0.82	3.13															
160	0.88	0.86	0.86	0.80															
165	0.89	0.88	0.88	0.81															
170	0.89	1.01	0.89	0.91															
175	0.90	1.25	0.90	1.16															
180	0.90	1.51	0.90	1.22															

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.292  
 Humidity:21.8%  
 Test Distance:7.750m [K=1.0000]  
 Remarks: