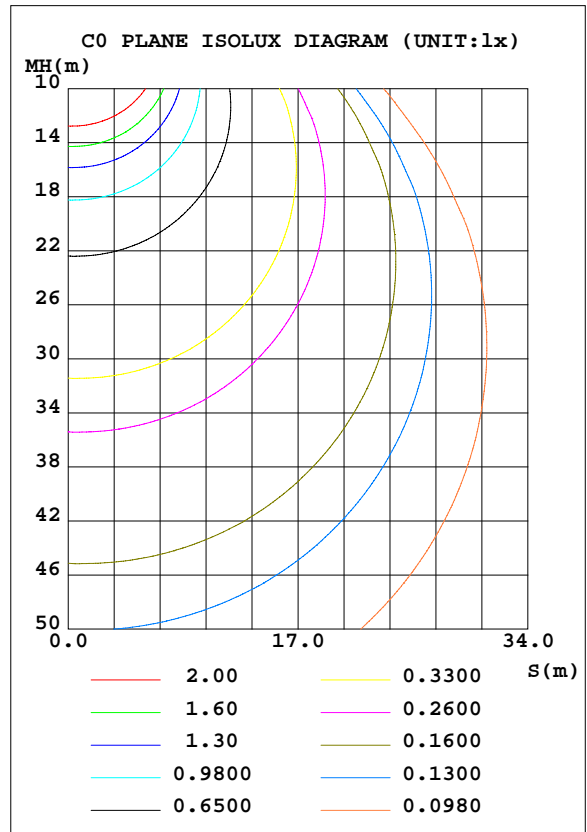
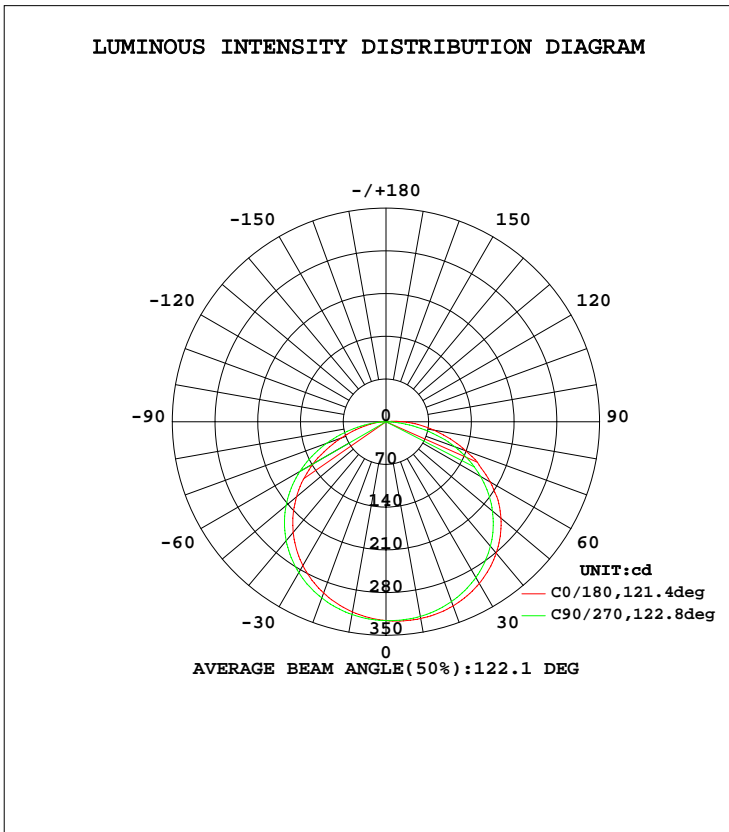


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm		
NAME: DJ1202408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ1202408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 114.94 lm/W			
MODEL	DJ120	I <sub>max</sub> (cd)	327.7	S/MH(C0/180)	1.24
NOMINAL POWER(W)	9.6	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1056.5	η UP, DN(C0-180)	0.6,53.9
NOMINAL FLUX(lm)	1056.55	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.4,45.2
LAMPS INSIDE	1	η up(%)	1.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	η down(%)	99.0	CIBSE SHR MAX	1.50



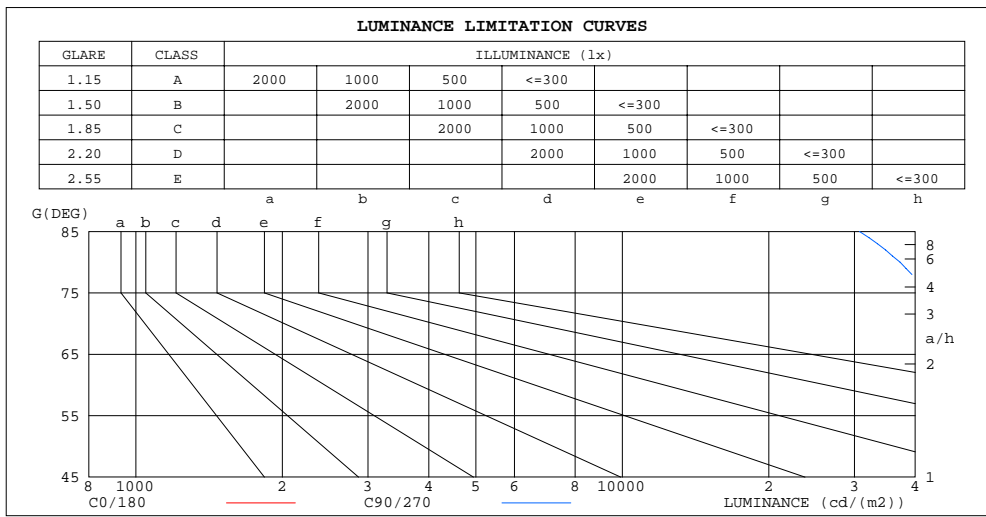
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

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	327.4	323.8	316.3	320.8				0- 10	30.93	30.93	2.93,2.93	
20	321.2	313.5	298.7	307.4				10- 20	89.64	120.6	11.4,11.4	
30	305.8	294.7	272.2	285.6				20- 30	138.9	259.4	24.6,24.6	
40	281.1	266.3	236.6	254.6				30- 40	172.6	432.0	40.9,40.9	
50	245.9	227.7	191.6	213.6				40- 50	185.8	617.8	58.5,58.5	
60	197.3	178.8	138.1	162.9				50- 60	174.8	792.7	75,75	
70	139.0	120.1	78.27	103.4				60- 70	138.7	931.3	88.1,88.1	
80	79.91	51.72	29.85	41.78				70- 80	84.39	1016	96.1,96.1	
90	29.31	3.238	6.657	2.254				80- 90	30.43	1046	99,99	
100	0.8170	0.5037	1.028	0.5766				90-100	4.335	1050	99.4,99.4	
110	0.6290	0.7384	0.9096	0.8380				100-110	0.7186	1051	99.5,99.5	
120	0.8583	0.9793	1.167	1.073				110-120	0.8910	1052	99.6,99.6	
130	1.086	1.224	1.395	1.304				120-130	1.021	1053	99.7,99.7	
140	1.304	1.418	1.556	1.482				130-140	1.042	1054	99.8,99.8	
150	1.489	1.593	1.697	1.645				140-150	0.9564	1055	99.9,99.9	
160	1.660	1.700	1.807	1.723				150-160	0.7701	1056	99.9,99.9	
170	1.753	1.789	1.838	1.776				160-170	0.4990	1056	100,100	
180	1.824	1.820	1.837	1.817				170-180	0.1723	1057	100,100	
DEG	LUMINOUS INTENSITY:cd							UNIT:lm				



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	75887	30726
80	57523	37230
75	52723	41645
70	50795	43897
65	49862	44543
60	49313	44694
55	48862	44579
50	47816	44289
45	46800	43893

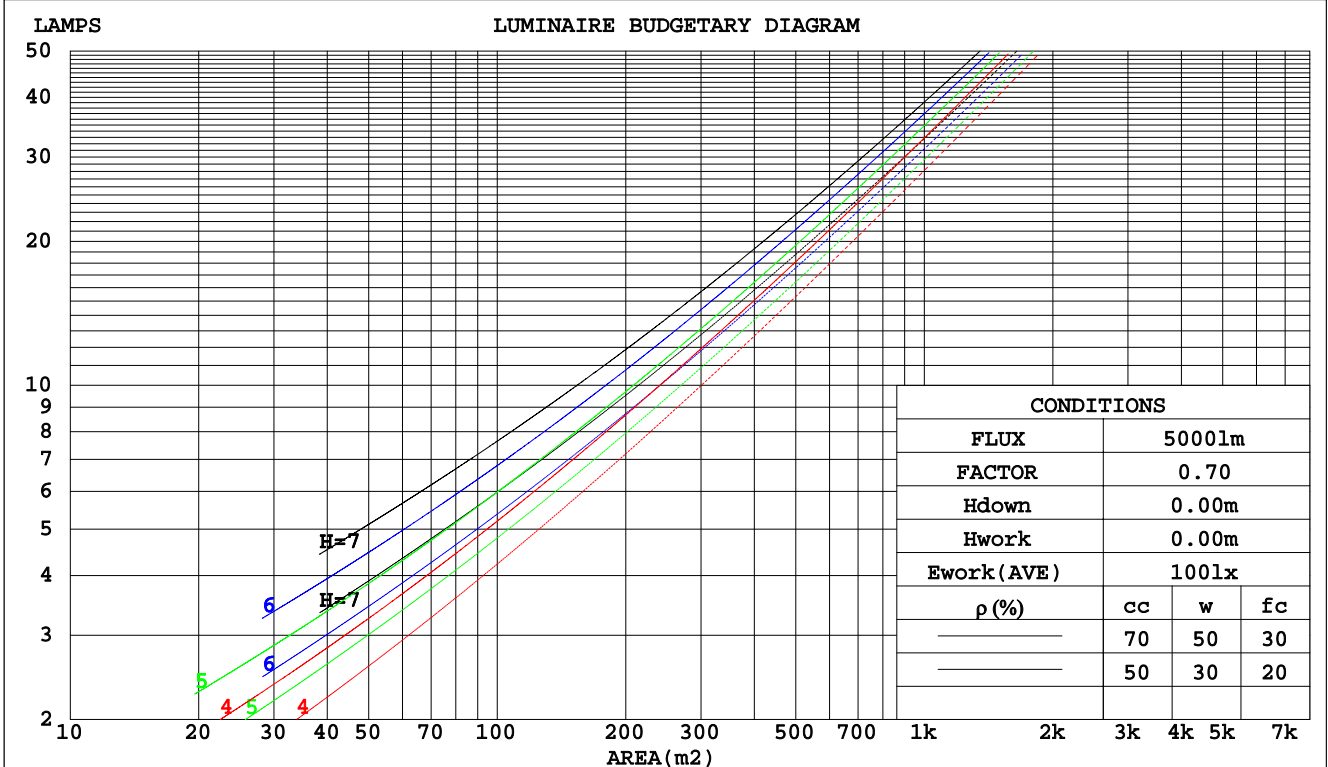
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LQT  
Test Date:2018-01-10

$\gamma$  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:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm		
NAME: DJ1202408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ1202408NO-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	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.03	.98	.94	1.00	.96	.92	.96	.92	.89	.92	.89	.86	.88	.86	.83	.81
2.0	.89	.82	.76	.87	.80	.75	.83	.77	.73	.80	.75	.71	.76	.73	.69	.67
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.60	.70	.64	.59	.67	.62	.58	.56
4.0	.68	.59	.52	.67	.58	.52	.64	.57	.51	.62	.55	.50	.59	.54	.49	.47
5.0	.61	.52	.45	.60	.51	.44	.57	.50	.44	.55	.48	.43	.53	.47	.43	.40
6.0	.55	.45	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.48	.42	.37	.35
7.0	.49	.40	.34	.48	.40	.34	.47	.39	.34	.45	.38	.33	.44	.38	.33	.31
8.0	.45	.36	.30	.44	.36	.30	.43	.35	.30	.41	.35	.30	.40	.34	.29	.27
9.0	.41	.33	.27	.41	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.24
10.0	.38	.30	.24	.37	.30	.24	.36	.29	.24	.35	.29	.24	.34	.28	.24	.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:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm		
NAME: DJ1202408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ1202408NO-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	.329	.187	.059	.322	.184	.058	.308	.177	.056	.295	.170	.055	.283	.164	.053	
2.0	.305	.167	.051	.299	.165	.051	.286	.159	.049	.275	.154	.048	.264	.150	.047	
3.0	.280	.149	.045	.274	.147	.044	.263	.143	.043	.253	.139	.043	.244	.135	.042	
4.0	.257	.134	.039	.252	.132	.039	.242	.128	.038	.233	.125	.038	.225	.122	.037	
5.0	.237	.121	.035	.232	.119	.035	.224	.116	.034	.215	.114	.034	.208	.111	.033	
6.0	.219	.110	.031	.215	.108	.031	.207	.106	.031	.200	.104	.031	.193	.102	.030	
7.0	.203	.100	.028	.200	.099	.028	.193	.097	.028	.186	.095	.028	.180	.094	.027	
8.0	.189	.093	.026	.186	.092	.026	.180	.090	.026	.174	.088	.025	.169	.087	.025	
9.0	.177	.086	.024	.174	.085	.024	.169	.083	.024	.163	.082	.023	.158	.080	.023	
10.0	.166	.080	.022	.164	.079	.022	.159	.078	.022	.154	.076	.022	.149	.075	.022	

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	.198	.198	.198	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.189	.164	.140	.162	.140	.121	.111	.097	.084	.064	.056	.049	.020	.018	.016	
2.0	.182	.139	.104	.156	.120	.090	.107	.083	.063	.061	.048	.037	.020	.016	.012	
3.0	.174	.122	.081	.149	.105	.070	.102	.073	.049	.059	.043	.029	.019	.014	.009	
4.0	.167	.109	.065	.143	.094	.056	.098	.066	.040	.057	.038	.023	.018	.013	.008	
5.0	.159	.099	.054	.137	.085	.047	.094	.060	.033	.054	.035	.020	.018	.011	.006	
6.0	.152	.090	.046	.130	.078	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
7.0	.145	.083	.040	.125	.072	.035	.086	.051	.025	.050	.030	.015	.016	.010	.005	
8.0	.138	.078	.036	.119	.067	.031	.082	.047	.022	.048	.028	.013	.015	.009	.004	
9.0	.132	.073	.033	.114	.063	.028	.079	.044	.020	.046	.026	.012	.015	.009	.004	
10.0	.126	.068	.030	.109	.059	.026	.075	.042	.019	.044	.025	.011	.014	.008	.004	

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:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm										
NAME: DJ1202408NO-8NWCDA0120WC0500					TYPE:			WEIGHT:		
SPEC.:DJ1202408NO-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	26.8	28.3	27.1	28.6	28.8	26.4	28.0	26.7	28.2	28.4
3H	28.7	30.2	29.0	30.4	30.7	28.2	29.6	28.5	29.9	30.1
4H	29.6	31.0	29.9	31.2	31.5	28.9	30.3	29.3	30.6	30.8
6H	30.4	31.7	30.7	32.0	32.3	29.4	30.7	29.8	31.0	31.3
8H	30.8	32.0	31.1	32.3	32.6	29.6	30.8	29.9	31.1	31.5
12H	31.1	32.3	31.5	32.7	33.0	29.7	30.9	30.0	31.2	31.5
4H 2H	27.5	28.8	27.8	29.1	29.4	27.2	28.6	27.5	28.8	29.1
3H	29.6	30.8	29.9	31.1	31.4	29.1	30.3	29.5	30.7	31.0
4H	30.6	31.7	31.0	32.0	32.4	30.0	31.1	30.4	31.4	31.8
6H	31.5	32.5	32.0	32.9	33.3	30.7	31.6	31.1	32.0	32.4
8H	32.0	32.9	32.4	33.3	33.7	30.9	31.8	31.3	32.2	32.6
12H	32.5	33.3	32.9	33.7	34.1	31.0	31.9	31.5	32.3	32.7
8H 4H	30.9	31.8	31.3	32.2	32.6	30.4	31.3	30.8	31.7	32.1
6H	32.1	32.8	32.5	33.2	33.7	31.2	32.0	31.7	32.4	32.9
8H	32.6	33.3	33.1	33.8	34.2	31.6	32.3	32.0	32.7	33.2
12H	33.3	33.8	33.7	34.3	34.8	31.8	32.4	32.3	32.9	33.4
12H 4H	30.9	31.8	31.4	32.2	32.6	30.5	31.3	30.9	31.7	32.1
6H	32.1	32.8	32.6	33.3	33.7	31.4	32.1	31.9	32.5	33.0
8H	32.8	33.4	33.3	33.8	34.3	31.8	32.4	32.3	32.8	33.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.4				

CIE Pub.117 Corrected 1057 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.2)

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:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm		
NAME: DJ1202408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ1202408NO-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	36	55	43	36	53	43	36	29
0.80	65	53	46	64	53	45	62	52	45	38
1.00	74	62	55	73	62	54	70	63	54	46
1.25	81	70	62	79	69	62	77	68	61	53
1.50	86	76	68	84	75	68	81	73	67	59
2.00	93	84	77	91	83	76	88	80	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	93	88	98	92	86	94	89	84	75
4.00	105	99	94	102	97	92	98	93	90	80
5.00	108	102	98	105	100	96	100	96	93	84
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:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm		
NAME: DJ1202408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ1202408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	PROTECTION ANGLE:

Conical surface Flux(90deg):

524.73 lm

%lum = 49.7%

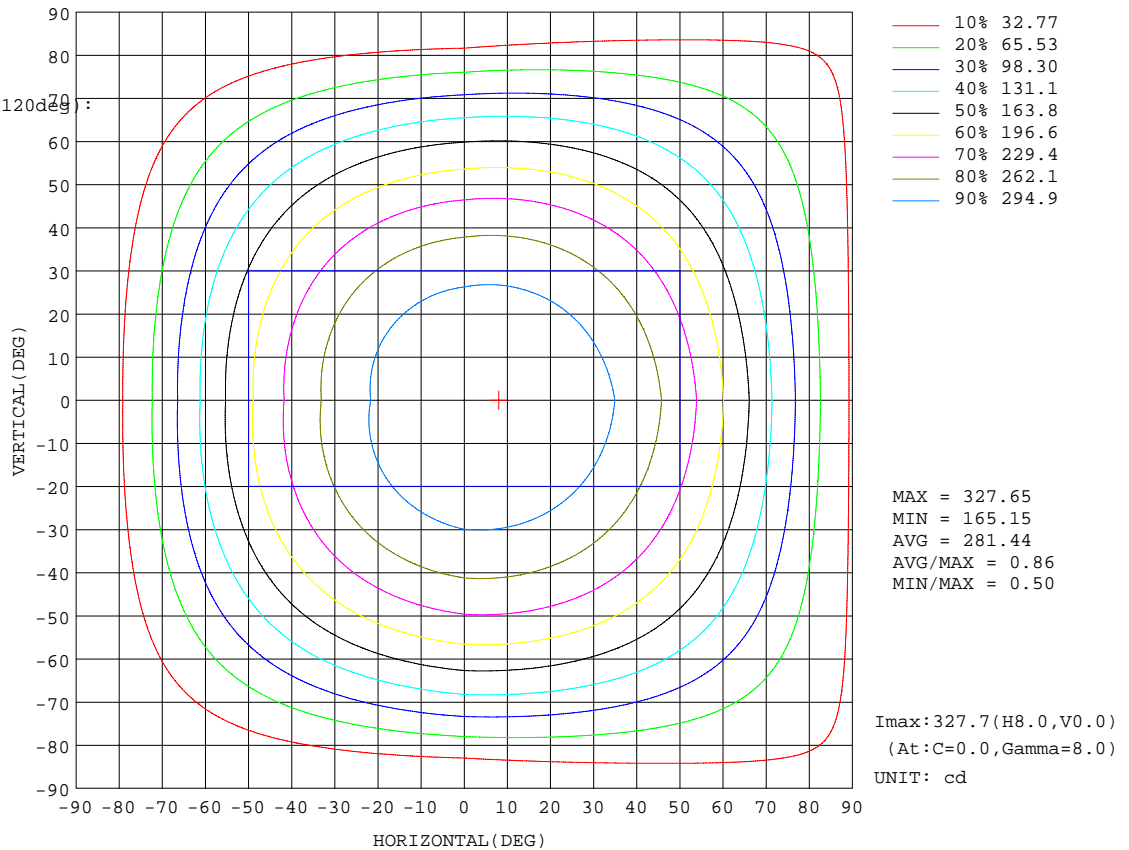
%lamp = 49.7%

Conical surface Flux(120deg):

792.65 lm

%lum = 75.0%

%lamp = 75.0%

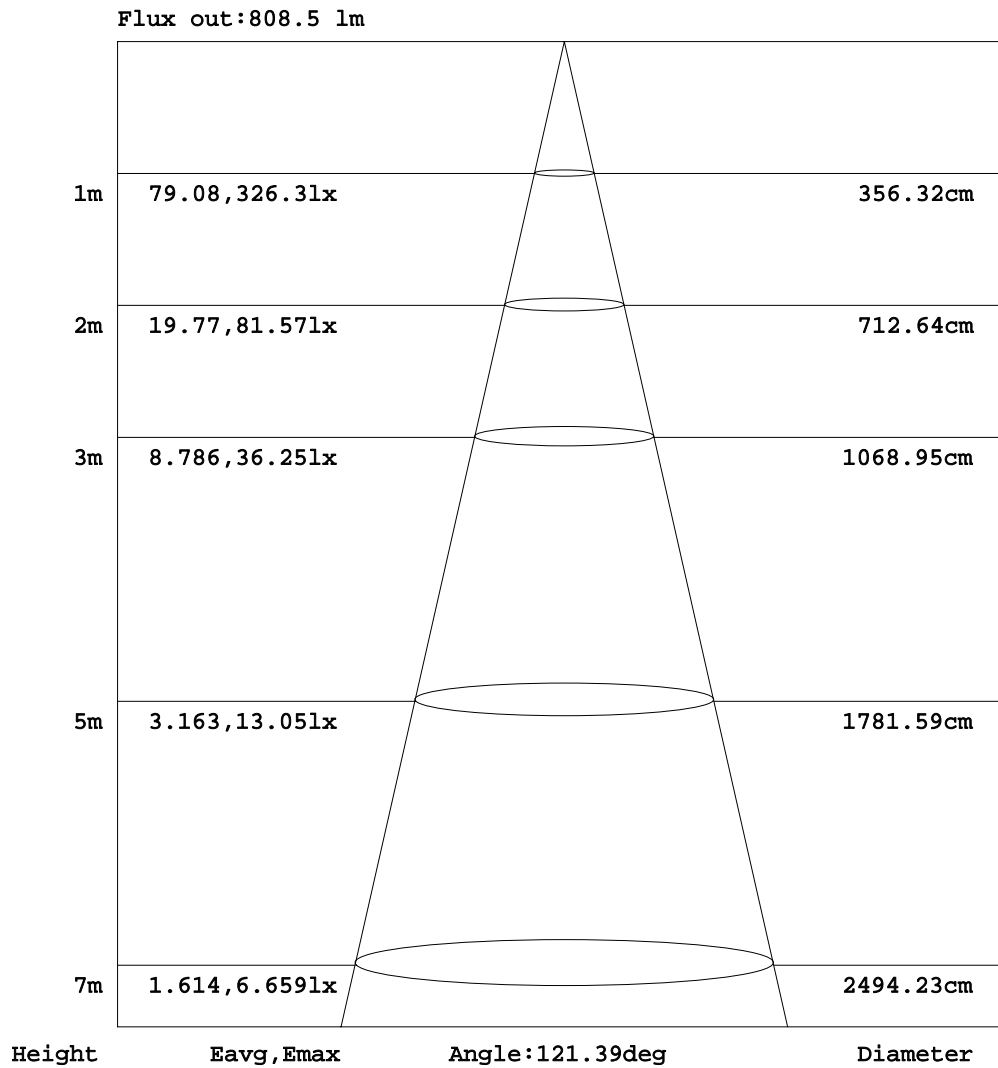


C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LQT  
 Test Date: 2018-01-10

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:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm		
NAME: DJ1202408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ1202408NO-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.

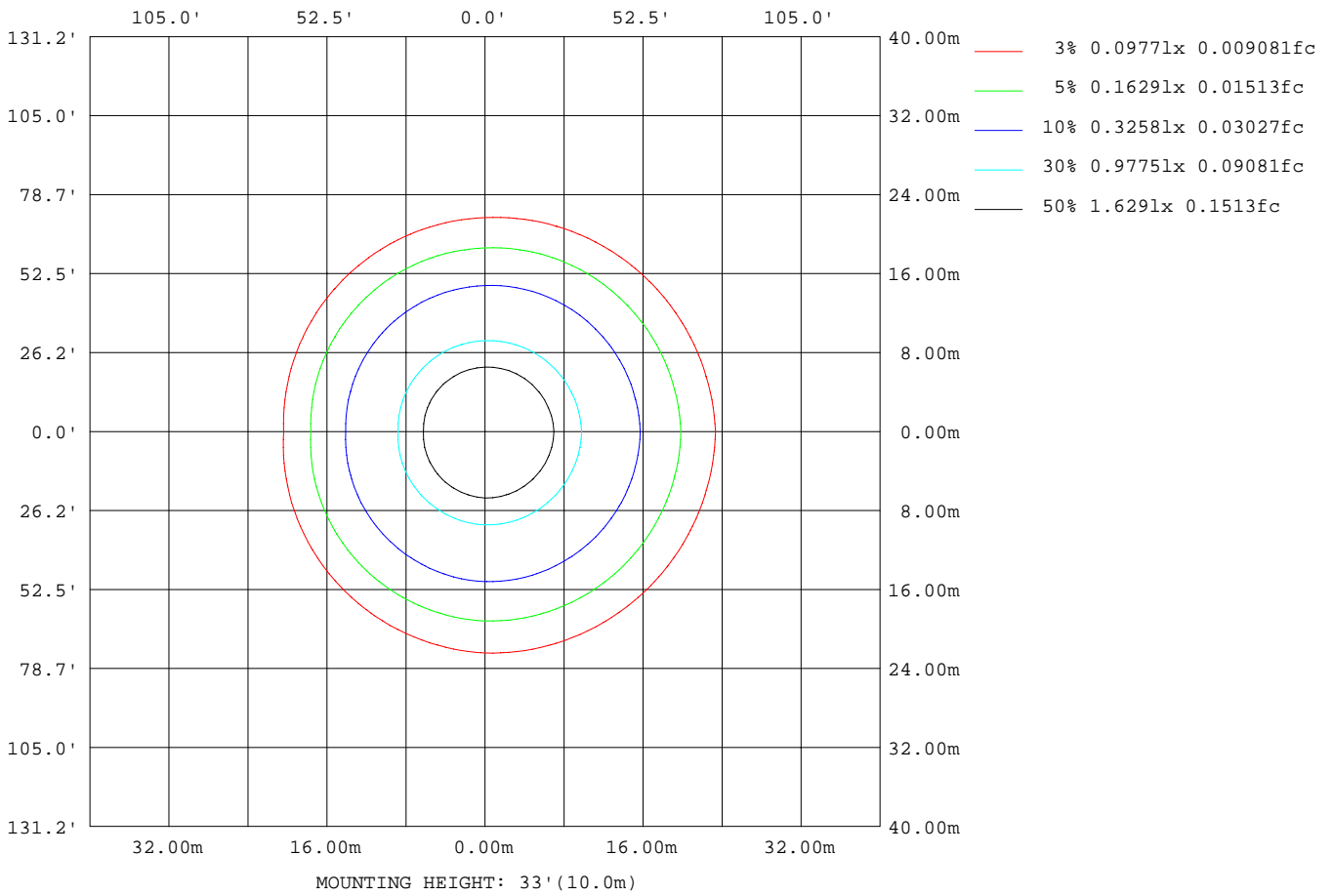
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LQT  
 Test Date:2018-01-10

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**

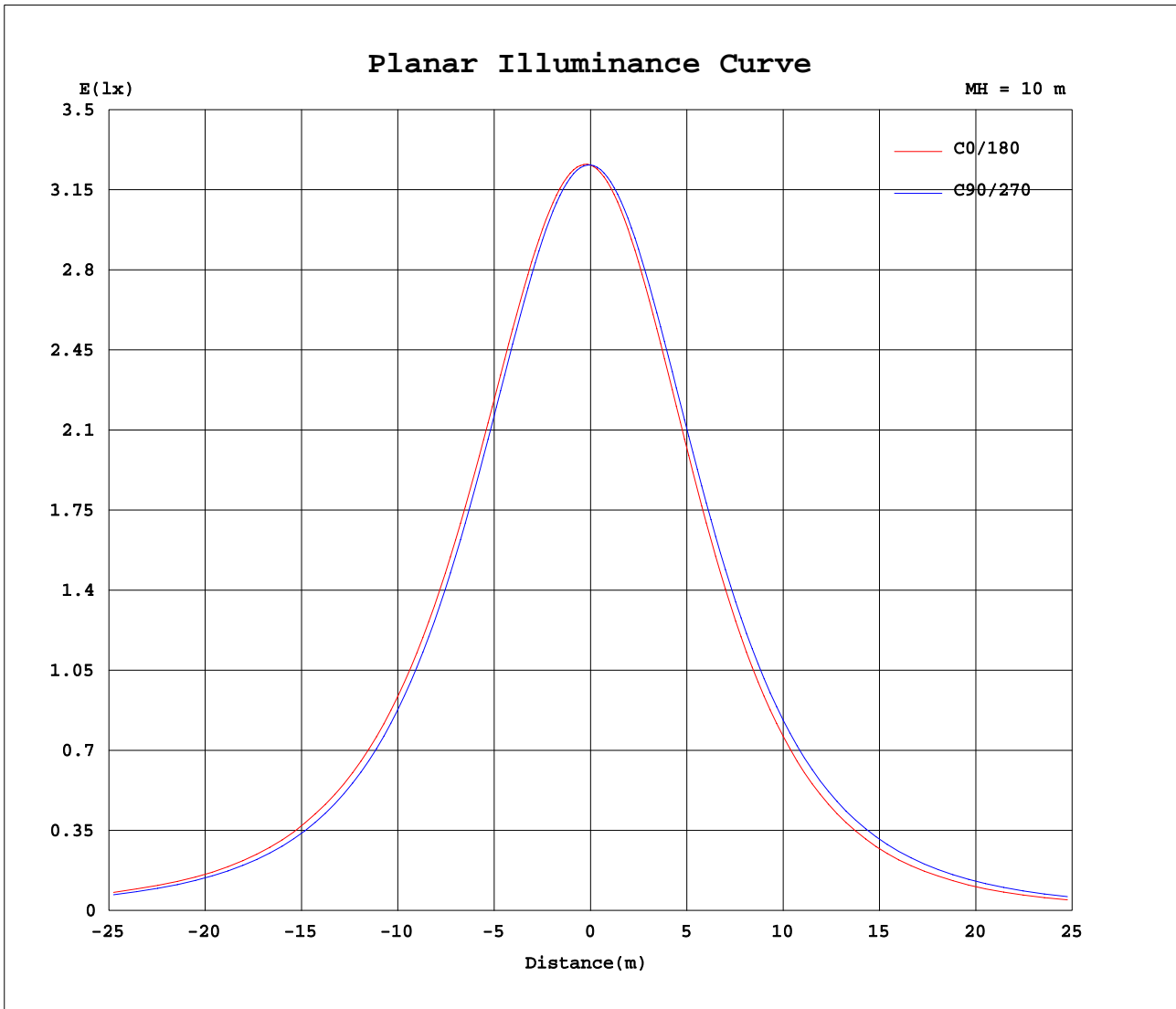
Test:U:24.00V I:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm		
NAME: DJ1202408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ1202408NO-8NWCDA0120WC0500	DIM.: 1000*8	SERIAL No.:001
MFR.: Colors	SUR.:1000*8	PROTECTION ANGLE:



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:0.3830A P:9.192W PF:1.000 Lamp Flux:1056.55x1 lm		
NAME: DJ1202408NO-8NWCDA0120WC0500	TYPE:	WEIGHT:
SPEC.:DJ1202408NO-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	326	326	326	326															
5	328	326	322	324															
10	327	324	316	321															
15	325	320	309	315															
20	321	314	299	307															
25	315	305	287	298															
30	306	295	272	286															
35	295	282	256	271															
40	281	266	237	255															
45	265	248	215	235															
50	246	228	192	214															
55	224	205	166	189															
60	197	179	138	163															
65	169	151	107	134															
70	139	120	78.3	103															
75	109	86.2	51.6	72.0															
80	79.9	51.7	29.9	41.8															
85	52.9	21.4	15.1	16.5															
90	29.3	3.24	6.66	2.25															
95	9.50	0.40	2.60	0.46															
100	0.82	0.50	1.03	0.58															
105	0.51	0.62	0.79	0.70															
110	0.63	0.74	0.91	0.84															
115	0.74	0.85	1.03	0.95															
120	0.86	0.98	1.17	1.07															
125	0.97	1.11	1.28	1.19															
130	1.09	1.22	1.40	1.30															
135	1.20	1.32	1.47	1.40															
140	1.30	1.42	1.56	1.48															
145	1.40	1.51	1.63	1.59															
150	1.49	1.59	1.70	1.65															
155	1.57	1.66	1.76	1.68															
160	1.66	1.70	1.81	1.72															
165	1.70	1.75	1.84	1.77															
170	1.75	1.79	1.84	1.78															
175	1.82	1.81	1.84	1.80															
180	1.82	1.82	1.84	1.82															

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: