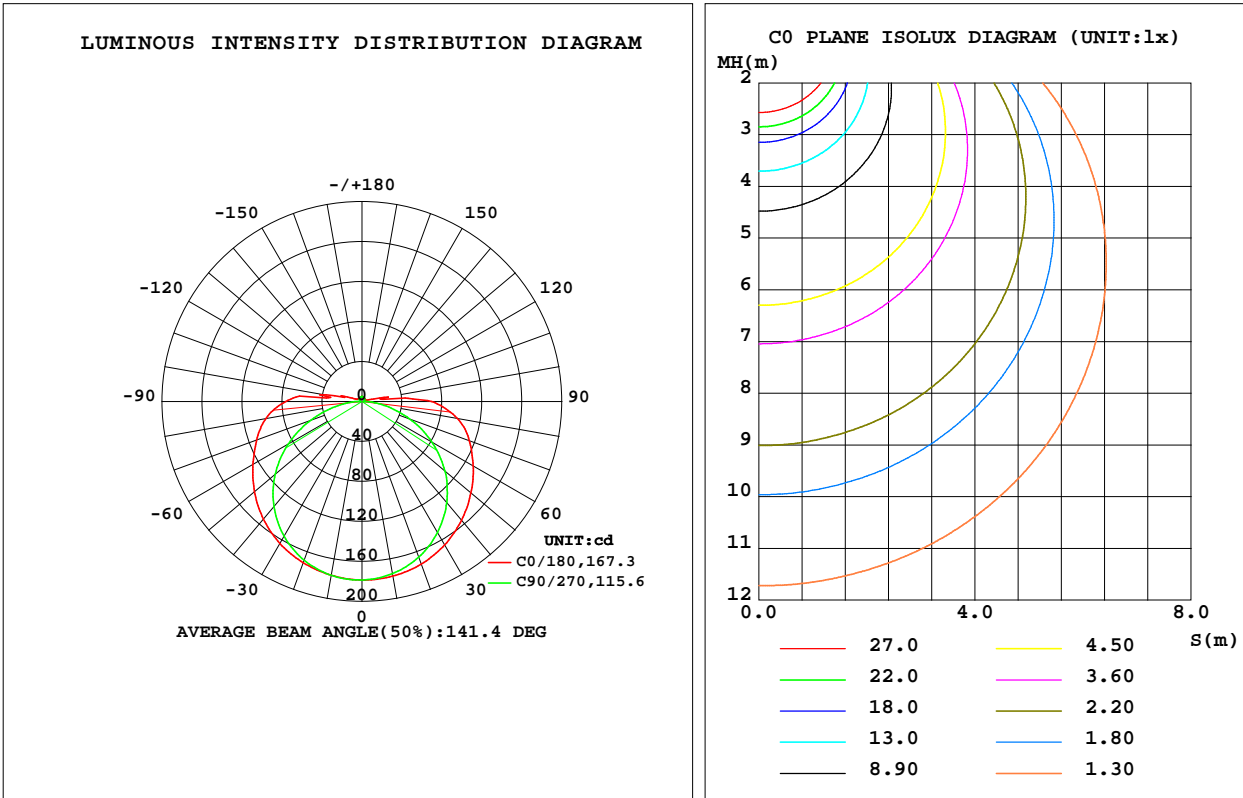


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.4199A P:10.08W PF:1.000 Freq:0Hz Lamp Flux:737.09lx1 lm		
NAME: DRF102408NO	TYPE:	WEIGHT:
SPEC.:DRF102408NO-9NWNSA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 73.15 lm/W			
MODEL	DRF102408NO	I _{max} (cd)	178.7	S/MH(C0/180)	1.39
NOMINAL POWER(W)	9.2	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	737.09	h UP,DN(C0-180)	3.4,45.9
NOMINAL FLUX(lm)	737.091	CIE CLASS	DIRECT	h UP,DN(C180-360)	3.8,46.9
LAMPS INSIDE	1	h up(%)	7.2	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	92.8	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

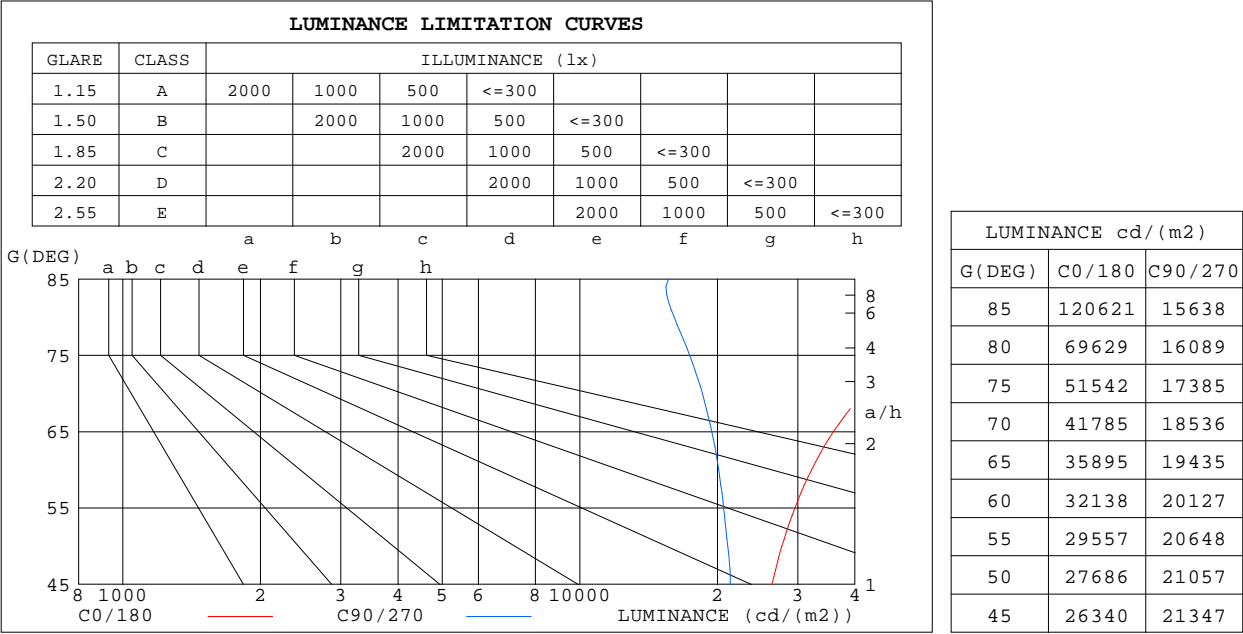
ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	177.3	175.9	174.9	175.7	176.5	176.8	176.6	177.0	0~ 10	16.94	16.94	2.3,2.3
20	173.2	169.4	165.7	168.3	171.7	170.9	169.1	170.9	10~ 20	49.07	66.01	8.96,8.96
30	165.6	158.8	151.3	157.1	164.1	161.3	155.8	160.5	20~ 30	76.20	142.2	19.3,19.3
40	155.0	144.7	132.0	142.3	153.5	148.0	137.2	145.8	30~ 40	95.53	237.7	32.3,32.3
50	142.4	127.8	108.3	124.3	140.4	131.4	113.4	127.8	40~ 50	105.2	343.0	46.5,46.5
60	128.6	109.6	80.51	104.4	126.0	112.8	85.27	108.0	50~ 60	104.8	447.8	60.8,60.8
70	114.3	91.51	50.72	84.98	112.1	94.42	54.37	88.28	60~ 70	95.74	543.5	73.7,73.7
80	96.73	73.68	22.35	67.98	97.44	77.75	24.56	69.03	70~ 80	80.67	624.2	84.7,84.7
90	69.92	48.18	3.273	46.98	76.28	55.71	4.239	42.53	80~ 90	59.82	684.0	92.8,92.8
100	26.66	7.752	2.189	10.88	40.23	14.76	1.680	4.230	90~100	28.04	712.1	96.6,96.6
110	4.146	3.418	2.650	4.005	10.56	4.830	2.267	2.758	100~110	8.034	720.1	97.7,97.7
120	3.789	3.706	3.154	3.976	4.605	3.856	2.873	3.244	110~120	3.729	723.8	98.2,98.2
130	4.125	3.976	3.724	4.036	4.287	3.856	3.406	3.646	120~130	3.373	727.2	98.7,98.7
140	4.371	4.276	4.131	4.359	4.384	4.036	3.898	4.011	130~140	3.113	730.3	99.1,99.1
150	4.593	4.564	4.539	4.677	4.672	4.395	4.276	4.341	140~150	2.729	733.0	99.5,99.5
160	4.785	4.881	4.875	4.965	4.905	4.719	4.660	4.677	150~160	2.154	735.2	99.7,99.7
170	5.001	5.127	5.109	5.157	5.103	5.072	5.013	4.971	160~170	1.400	736.6	99.9,99.9
180	5.163	5.277	5.169	5.217	5.169	5.283	5.217	5.211	170~180	0.4901	737.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

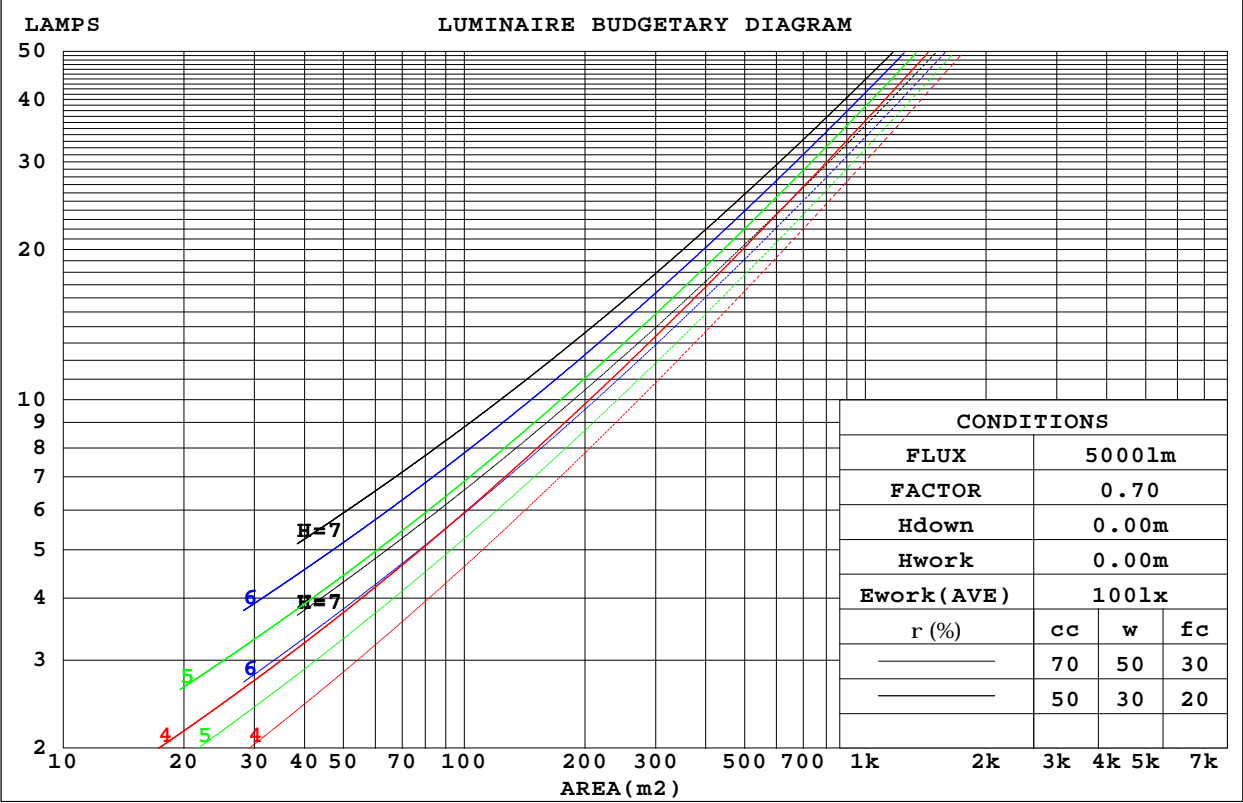


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.17	1.17	1.17	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	.95	.95	.95	.93
1.0	.97	.92	.87	.94	.89	.85	.89	.85	.81	.83	.80	.77	.79	.76	.73	.71
2.0	.83	.75	.68	.80	.73	.67	.76	.69	.64	.71	.66	.61	.67	.63	.59	.56
3.0	.72	.63	.55	.70	.61	.54	.66	.58	.52	.62	.56	.50	.58	.53	.49	.46
4.0	.63	.53	.46	.61	.52	.45	.58	.50	.44	.54	.48	.42	.51	.46	.41	.38
5.0	.56	.46	.39	.54	.45	.38	.51	.43	.37	.49	.42	.36	.46	.40	.35	.33
6.0	.50	.40	.34	.49	.40	.33	.46	.38	.32	.44	.37	.31	.41	.35	.30	.28
7.0	.45	.36	.29	.44	.35	.29	.42	.34	.28	.40	.33	.28	.38	.32	.27	.25
8.0	.41	.32	.26	.40	.32	.26	.38	.31	.25	.36	.29	.24	.35	.28	.24	.22
9.0	.38	.29	.23	.37	.29	.23	.35	.28	.22	.33	.27	.22	.32	.26	.21	.19
10.0	.35	.26	.21	.34	.26	.21	.32	.25	.20	.31	.24	.20	.30	.24	.19	.18



C Range: 0 - 360DEG

C Interval: 45.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:JYH

Test Date:2024-04-29

g Range: 0 - 180DEG

g Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362

Humidity:65.0%

Test Distance:10.375m [K=1.0000]

Remarks:

WEC AND CCEC

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.400	.228	.072	.391	.223	.071	.373	.214	.068	.356	.206	.066	.341	.198	.064	
2.0	.346	.189	.058	.337	.186	.057	.321	.179	.055	.307	.172	.054	.293	.166	.052	
3.0	.306	.163	.049	.299	.160	.048	.285	.154	.047	.271	.149	.046	.259	.143	.044	
4.0	.275	.143	.042	.268	.140	.042	.256	.136	.040	.244	.131	.039	.233	.126	.038	
5.0	.250	.127	.037	.244	.125	.036	.232	.121	.036	.221	.117	.035	.211	.113	.034	
6.0	.228	.114	.033	.223	.113	.032	.213	.109	.032	.203	.105	.031	.194	.102	.030	
7.0	.210	.104	.029	.205	.102	.029	.196	.099	.029	.187	.096	.028	.179	.093	.027	
8.0	.195	.095	.027	.190	.094	.026	.182	.091	.026	.174	.088	.025	.166	.085	.025	
9.0	.181	.088	.025	.177	.086	.024	.170	.084	.024	.162	.081	.023	.155	.079	.023	
10.0	.170	.081	.023	.166	.080	.022	.159	.078	.022	.152	.076	.021	.146	.073	.021	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC)															
0.0	.245	.245	.245	.210	.210	.210	.143	.143	.143	.082	.082	.082	.026	.026	.026	
1.0	.242	.211	.183	.207	.181	.157	.142	.124	.109	.081	.072	.063	.026	.023	.020	
2.0	.235	.187	.147	.201	.161	.127	.138	.112	.089	.080	.065	.052	.026	.021	.017	
3.0	.227	.171	.125	.195	.147	.108	.134	.102	.076	.077	.060	.045	.025	.019	.015	
4.0	.219	.158	.111	.188	.136	.096	.130	.095	.068	.075	.056	.040	.024	.018	.013	
5.0	.212	.148	.101	.182	.128	.088	.125	.089	.062	.072	.052	.037	.023	.017	.012	
6.0	.204	.140	.094	.175	.121	.082	.121	.085	.058	.070	.050	.034	.023	.016	.011	
7.0	.196	.133	.088	.169	.115	.077	.117	.081	.055	.068	.048	.032	.022	.016	.011	
8.0	.190	.127	.084	.163	.110	.074	.113	.077	.052	.066	.046	.031	.021	.015	.010	
9.0	.183	.122	.081	.158	.106	.071	.109	.075	.050	.064	.044	.030	.021	.014	.010	
10.0	.177	.118	.079	.153	.103	.069	.106	.072	.049	.062	.043	.029	.020	.014	.010	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

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	2H	25.5	27.0	25.9	27.4	27.7	23.9	25.4	24.2	25.8	26.1	
	3H	28.2	29.7	28.6	30.0	30.4	25.5	27.0	25.9	27.3	27.7	
	4H	29.7	31.1	30.2	31.5	31.9	26.2	27.6	26.7	28.0	28.4	
	6H	31.4	32.7	31.8	33.1	33.5	26.8	28.1	27.2	28.5	28.9	
	8H	32.3	33.5	32.7	34.0	34.4	27.0	28.2	27.4	28.6	29.1	
	12H	33.3	34.5	33.7	34.9	35.4	27.1	28.3	27.6	28.7	29.2	
	4H	2H	26.2	27.5	26.6	27.9	28.3	25.0	26.4	25.4	26.8	27.2
		3H	29.1	30.3	29.6	30.7	31.2	27.0	28.2	27.4	28.6	29.1
		4H	30.8	31.9	31.3	32.4	32.9	27.9	29.0	28.4	29.5	30.0
		6H	32.6	33.7	33.2	34.1	34.7	28.7	29.7	29.2	30.2	30.7
		8H	33.6	34.6	34.2	35.1	35.6	29.0	29.9	29.5	30.4	31.0
		12H	34.8	35.6	35.3	36.2	36.7	29.2	30.1	29.7	30.6	31.1
8H	4H	31.2	32.2	31.7	32.7	33.2	28.9	29.9	29.5	30.4	30.9	
	6H	33.3	34.1	33.9	34.7	35.3	30.1	30.9	30.7	31.4	32.0	
	8H	34.5	35.3	35.1	35.8	36.4	30.6	31.3	31.2	31.9	32.5	
	12H	35.9	36.5	36.5	37.1	37.7	31.1	31.7	31.6	32.3	32.9	
12H	4H	31.3	32.1	31.8	32.7	33.2	29.2	30.1	29.8	30.6	31.2	
	6H	33.5	34.2	34.1	34.8	35.4	30.6	31.4	31.2	31.9	32.5	
	8H	34.8	35.4	35.4	36.0	36.6	31.3	32.0	31.9	32.5	33.2	
Variations with the observer position at spacings:												
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1						
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3						
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.5						

CIE Pub.117, 737.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.1)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

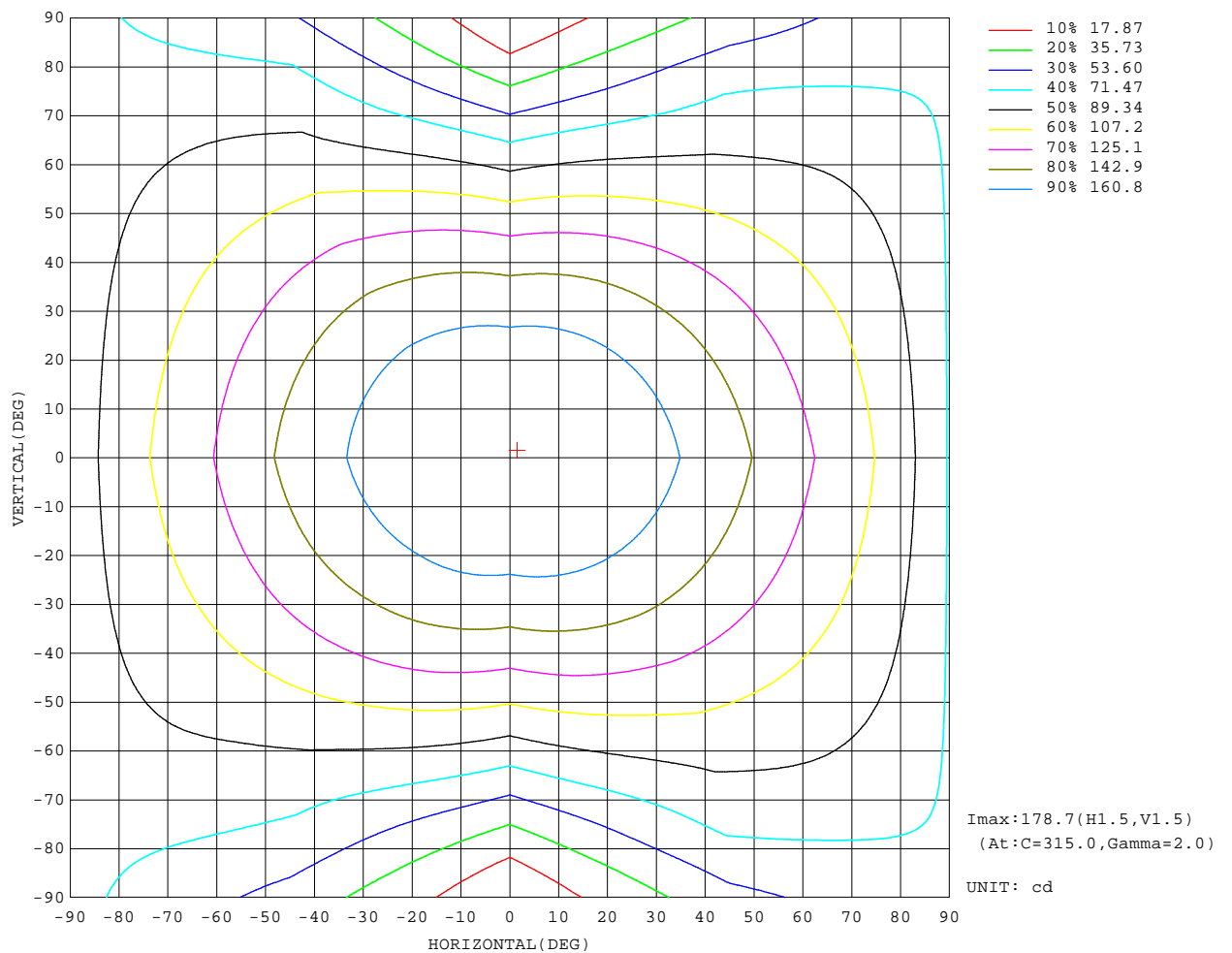
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	50	38	31	50	38	30	48	37	30	23
0.80	60	47	39	58	46	38	56	45	38	30
1.00	68	55	46	66	54	46	63	55	45	37
1.25	75	62	54	73	61	53	69	59	52	43
1.50	80	68	59	77	66	58	74	64	57	48
2.00	87	76	68	84	74	67	80	72	65	55
2.50	91	81	73	89	80	72	84	76	70	59
3.00	95	86	79	92	84	77	87	80	74	64
4.00	100	92	85	97	90	84	91	85	80	69
5.00	103	96	90	99	93	88	94	89	84	72
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

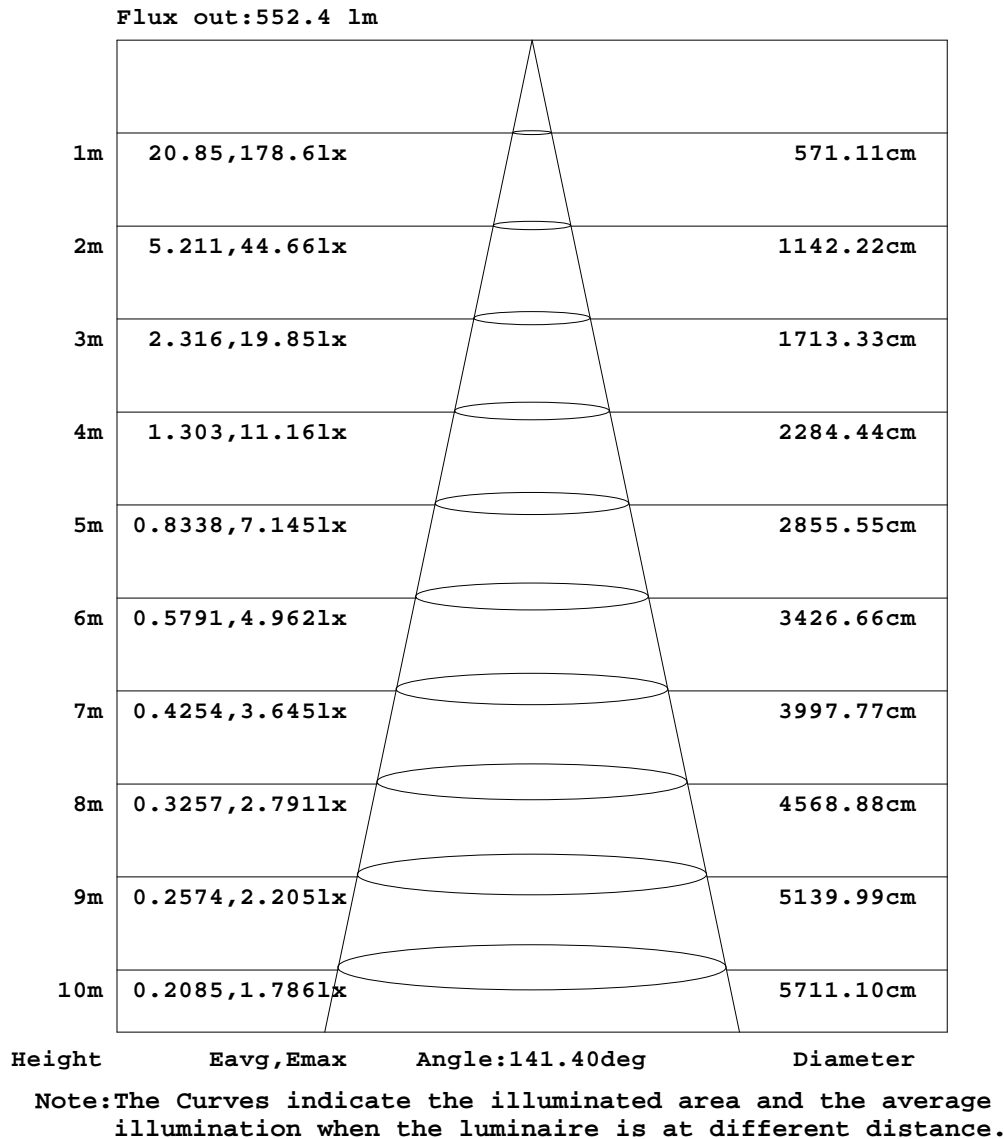
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2024-04-29

deg Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.375m [K=1.0000]
Remarks:

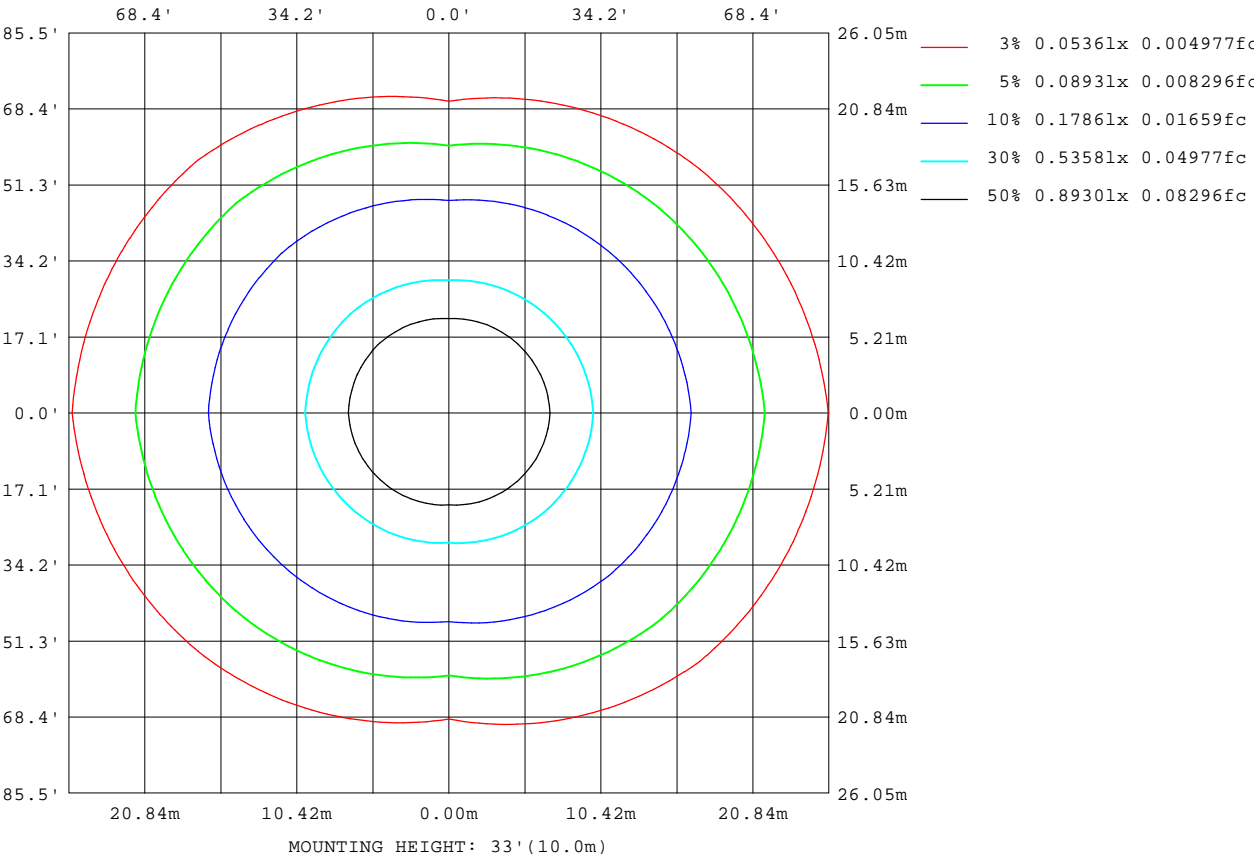
AAI Figure



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

LED Avg.L Report

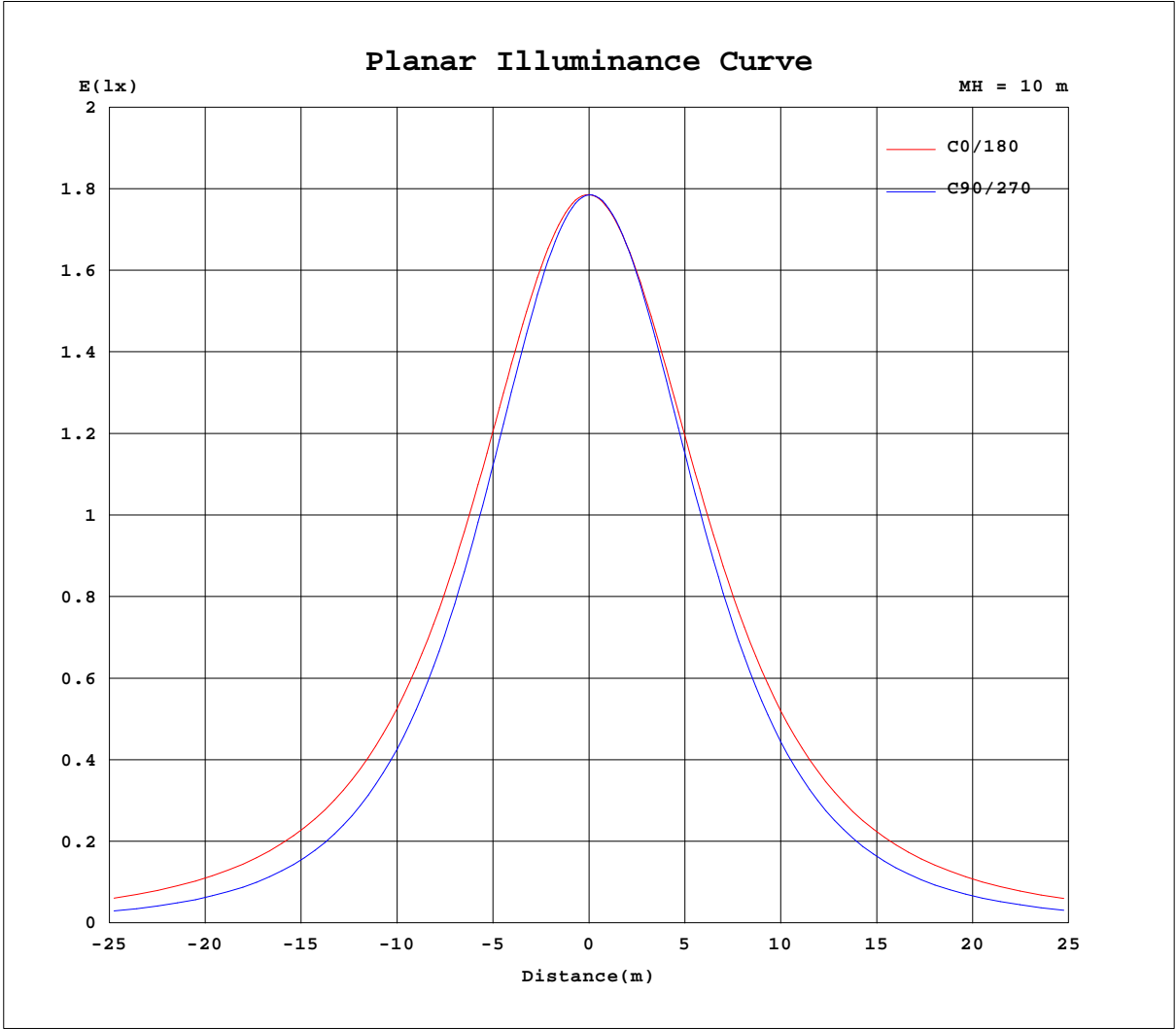
Test:U:24.00V I:0.4199A P:10.08W PF:1.000 Freq:0Hz Lamp Flux:737.09lx1 lm		
NAME: DRF102408NO	TYPE:	WEIGHT:
SPEC.:DRF102408NO-9NWNSA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	35518
L_0~180(75)av	51209
L_0~180(85)av	123248
L_90~270(65)av	20071
L_90~270(75)av	18093
L_90~270(85)av	16870
L_45(65)av	29328
L_45(75)av	39099
L_45(85)av	87316

Standard: GB/T 29293-2012

C Range: 0 - 360DEG	g Range: 0 - 180DEG
C Interval: 45.0DEG	g Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Temperature:25.3DEG	Humidity:65.0%
Operators:JYH	Test Distance:10.375m [K=1.0000]
Test Date:2024-04-29	Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2024-04-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.375m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	179	179	179	179	179	179	179	179										
5	178	178	177	178	178	178	178	178										
10	177	176	175	176	177	177	177	177										
15	176	173	171	172	174	174	174	174										
20	173	169	166	168	172	171	169	171										
25	170	165	159	163	168	167	163	166										
30	166	159	151	157	164	161	156	161										
35	161	152	142	150	159	155	147	154										
40	155	145	132	142	153	148	137	146										
45	149	137	121	134	147	140	126	137										
50	142	128	108	124	140	131	113	128										
55	136	119	94.7	114	133	122	99.7	118										
60	129	110	80.5	104	126	113	85.3	108										
65	121	101	65.7	94.5	119	103	70.0	98.1										
70	114	91.5	50.7	85.0	112	94.4	54.4	88.3										
75	107	82.9	36.0	76.2	105	86.1	38.9	78.7										
80	96.7	73.7	22.4	68.0	97.4	77.7	24.6	69.0										
85	84.1	61.4	10.9	58.3	87.8	67.5	12.6	56.3										
90	69.9	48.2	3.27	47.0	76.3	55.7	4.24	42.5										
95	43.4	14.8	1.90	20.6	62.8	25.9	1.42	15.1										
100	26.7	7.75	2.19	10.9	40.2	14.8	1.68	4.23										
105	7.90	3.90	2.40	5.93	18.8	8.32	1.97	2.65										
110	4.15	3.42	2.65	4.00	10.6	4.83	2.27	2.76										
115	3.62	3.56	2.92	3.88	5.59	4.01	2.57	2.98										
120	3.79	3.71	3.15	3.98	4.61	3.86	2.87	3.24										
125	3.96	3.83	3.42	4.04	4.30	3.86	3.16	3.48										
130	4.13	3.98	3.72	4.04	4.29	3.86	3.41	3.65										
135	4.27	4.13	3.91	4.16	4.30	3.87	3.71	3.83										
140	4.37	4.28	4.13	4.36	4.38	4.04	3.90	4.01										
145	4.50	4.43	4.35	4.52	4.54	4.20	4.08	4.21										
150	4.59	4.56	4.54	4.68	4.67	4.40	4.28	4.34										
155	4.70	4.71	4.68	4.83	4.81	4.59	4.48	4.50										
160	4.79	4.88	4.87	4.97	4.91	4.72	4.66	4.68										
165	4.91	5.04	5.01	5.08	5.01	4.89	4.86	4.88										
170	5.00	5.13	5.11	5.16	5.10	5.07	5.01	4.97										
175	5.08	5.23	5.17	5.22	5.17	5.17	5.13	5.14										
180	5.16	5.28	5.17	5.22	5.17	5.28	5.22	5.21										

C Range: 0 - 360DEGC Interval: 45.0DEGTest Speed: HIGHTemperature:25.3DEGOperators:JYHTest Date:2024-04-29

g Range: 0 - 180DEGg Interval: 1.0DEGTest System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362Humidity:65.0%Test Distance:10.375m [K=1.0000]Remarks: