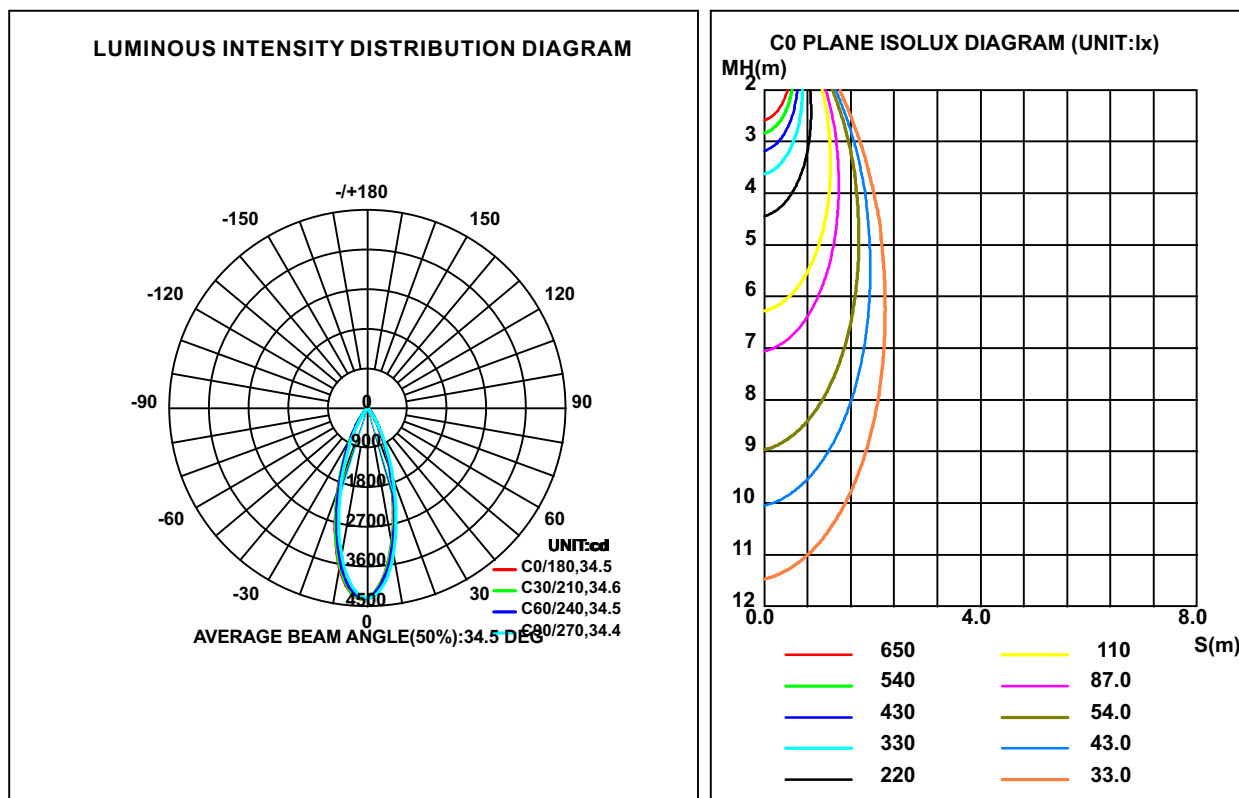




LUMINAIRE PHOTOMETRIC TEST REPORT

DATA OF LAMP			PHOTOMETRIC DATA			Eff: 94.71 lm/W
MODEL	CREE		Imax(cd)	4343	S/MH(C0/180)	0.62
NOMINAL POWER(W)	22		LOR(%)	81.3	S/MH(C90/270)	0.57
RATED VOLTAGE(V)	31		TOTAL FLUX(lm)	1878.3	hUP,DN(C0-180)	0.0,39.1
NOMINAL FLUX(lm)	2310.8		CIE CLASS	DIRECT	hUP,DN(C180-360)	0.0,42.2
LAMPS INSIDE	1		hup(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	31		hdown(%)	81.3	CIBSE SHR MAX	0.60



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:zoe
Test Date:2019-06-17

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.160m [K=1.0000]
Remarks: LAMP:XPGDWT-U1-0000-00C7G Ra:90
DC 31V 700MA
LENS:EM-SB-AFC30L06-M2 30R
30minutes warm-up



ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	Fzone	Ftotal	%lum,lamp
10	3141	3199	3373	3556	3690	3613	3418	3276	0- 10	366.7	366.7	19.5,15.9
20	1490	1541	1686	1875	2002	1938	1743	1626	10- 20	701.0	1068	56.8,46.2
30	495.3	560.3	599.4	721.0	763.8	748.8	631.9	602.7	20- 30	506.7	1574	83.8,68.1
40	106.8	158.8	133.2	216.6	195.9	225.7	140.1	171.0	30- 40	227.4	1802	95.9,78
50	14.74	25.82	17.73	39.17	23.12	40.09	18.11	27.59	40- 50	64.62	1867	99.4,80.8
60	0.4352	2.301	0.4406	5.161	1.232	5.230	0.4206	2.392	50- 60	10.97	1877	100,81.2
70	0.1969	0.1824	0.2071	0.2134	0.2185	0.1951	0.2069	0.1755	60- 70	0.6192	1878	100,81.3
80	0.0894	0.0774	0.1018	0.0920	0.1080	0.0892	0.1007	0.0769	70- 80	0.1449	1878	100,81.3
90	0.0325	0.0223	0.0349	0.0222	0.0284	0.0210	0.0343	0.0190	80- 90	0.0586	1878	100,81.3
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:zoe
 Test Date:2019-06-17

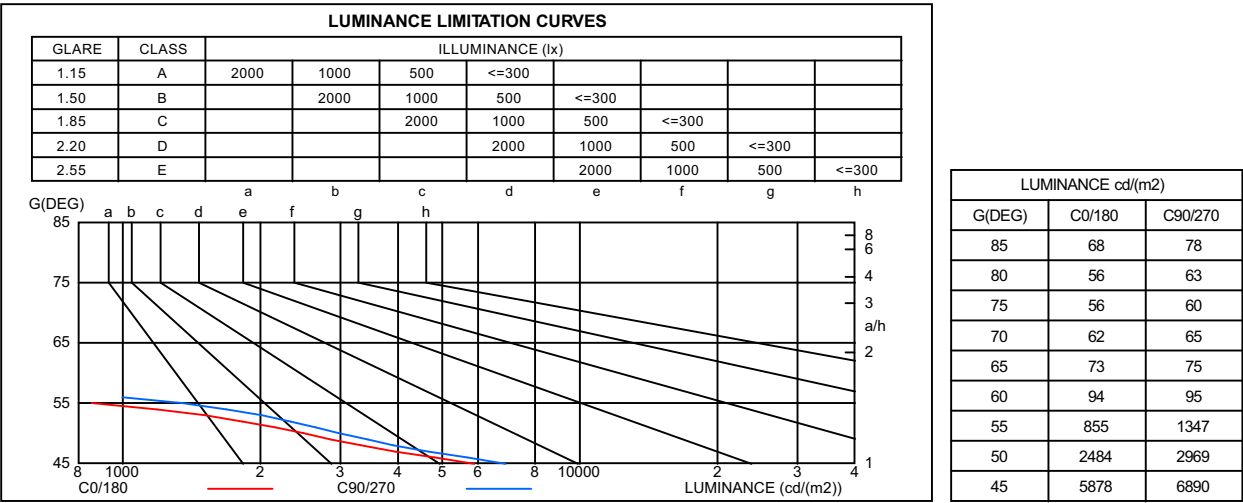
g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.160m [K=1.0000]
 Remarks: LAMP:XPGDWT-U1-0000-00C7G Ra:90
 DC 31V 700MA
 LENS:EM-SB-AFC30L06-M2 30R
 30minutes warm-up



IDEA

/KAUS CRI 90 (06.76.4211.__)

LUMINANCE LIMITATION CURVES



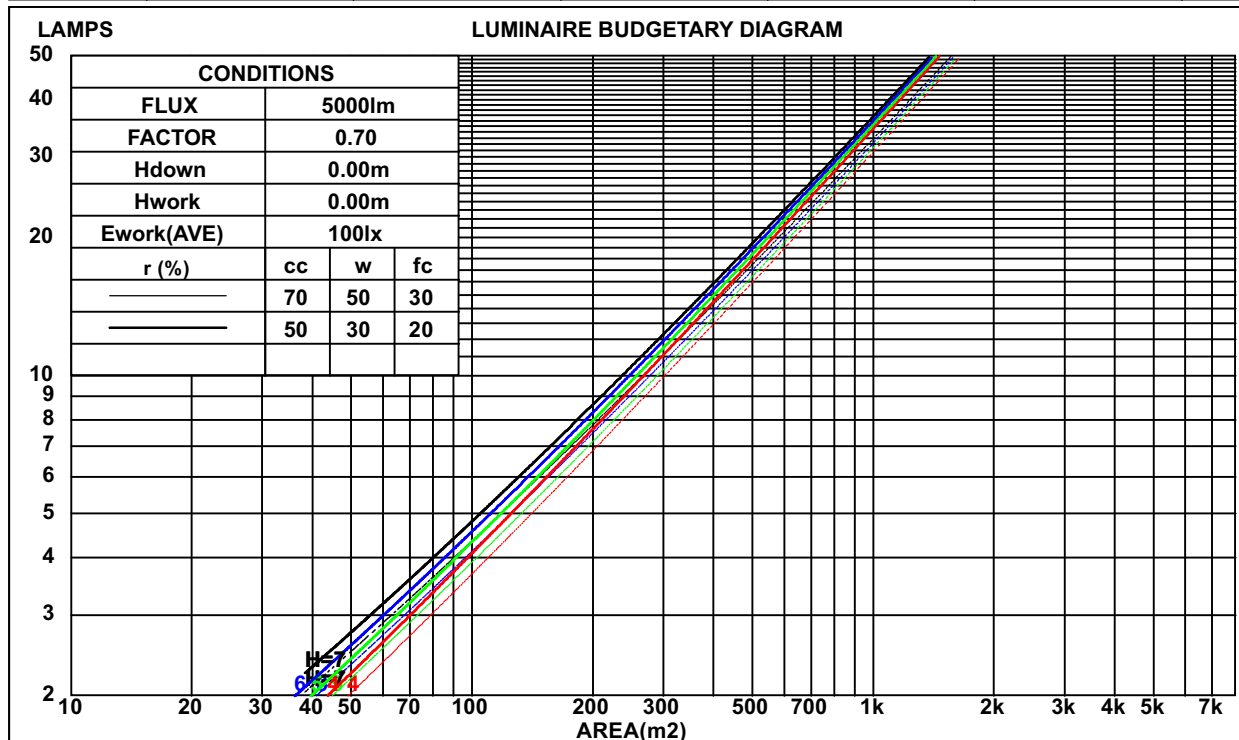
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:zoe
Test Date:2019-06-17

gRange: 0 - 90DEG
gInterval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.160m [K=1.0000]
Remarks: LAMP:XPGDWT-U1-0000-00C7G Ra:90
DC 31V 700MA
LENS:EM-SB-AFC30L06-M2 30R
30minutes warm-up



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
rhc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															0
	Coefficients of Utilization(CU)															
0.0	.97	.97	.97	.95	.95	.95	.90	.90	.90	.86	.86	.86	.83	.83	.83	.81
1.0	.91	.89	.87	.89	.88	.86	.86	.85	.83	.83	.82	.81	.80	.79	.79	.77
2.0	.86	.83	.80	.84	.82	.79	.82	.79	.78	.79	.77	.76	.77	.76	.74	.73
3.0	.81	.77	.74	.80	.76	.74	.78	.75	.73	.76	.73	.72	.74	.72	.70	.69
4.0	.76	.73	.70	.76	.72	.69	.74	.71	.68	.72	.70	.68	.71	.69	.67	.66
5.0	.73	.68	.65	.72	.68	.65	.70	.67	.65	.69	.66	.64	.68	.65	.63	.62
6.0	.69	.65	.62	.68	.64	.62	.67	.64	.61	.66	.63	.61	.65	.62	.60	.59
7.0	.66	.62	.59	.65	.61	.58	.64	.61	.58	.63	.60	.58	.62	.60	.58	.57
8.0	.63	.59	.56	.62	.58	.56	.62	.58	.55	.61	.58	.55	.60	.57	.55	.54
9.0	.60	.56	.53	.60	.56	.53	.59	.55	.53	.58	.55	.53	.58	.55	.53	.52
10.0	.58	.53	.51	.57	.53	.51	.57	.53	.51	.56	.53	.50	.55	.52	.50	.49



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: zoe
Test Date: 2019-06-17

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity: 65.0%
Test Distance: 3.160m [K=1.0000]
Remarks: LAMP: XPGDWT-U1-0000-00C7G Ra:90
DC 31V 700MA
LENS: EM-SB-AFC30L06-M2 30R
30minutes warm-up



WEC AND CCEC

rcc	80%			70%			50%			30%			10%			0
r _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)															
0.0																
1.0	.129	.073	.023	.124	.070	.022	.113	.065	.021	.104	.060	.019	.095	.055	.018	
2.0	.122	.067	.021	.118	.065	.020	.109	.061	.019	.101	.057	.018	.094	.053	.017	
3.0	.116	.061	.018	.112	.060	.018	.105	.057	.017	.098	.054	.016	.092	.051	.016	
4.0	.110	.057	.017	.106	.056	.016	.100	.053	.016	.095	.051	.015	.089	.049	.015	
5.0	.104	.053	.015	.101	.052	.015	.096	.050	.015	.091	.048	.014	.087	.046	.014	
6.0	.099	.050	.014	.097	.049	.014	.092	.047	.014	.088	.046	.013	.084	.044	.013	
7.0	.095	.047	.013	.093	.046	.013	.089	.045	.013	.085	.044	.013	.081	.042	.012	
8.0	.091	.044	.012	.089	.044	.012	.085	.043	.012	.082	.042	.012	.079	.040	.012	
9.0	.087	.042	.012	.085	.042	.012	.082	.041	.012	.079	.040	.011	.076	.039	.011	
10.0	.084	.040	.011	.082	.040	.011	.079	.039	.011	.077	.038	.011	.074	.037	.011	

rcc	80%			70%			50%			30%			10%			0
r _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC)															
0.0	.155	.155	.155	.132	.132	.132	.090	.090	.090	.052	.052	.052	.017	.017	.017	
1.0	.138	.128	.119	.118	.110	.102	.081	.076	.071	.047	.044	.041	.015	.014	.013	
2.0	.125	.108	.094	.107	.093	.081	.073	.064	.056	.042	.037	.033	.014	.012	.011	
3.0	.114	.092	.075	.097	.080	.065	.067	.055	.046	.039	.032	.027	.012	.010	.009	
4.0	.105	.080	.061	.090	.069	.053	.062	.048	.037	.036	.028	.022	.011	.009	.007	
5.0	.097	.070	.051	.083	.061	.044	.057	.043	.031	.033	.025	.018	.011	.008	.006	
6.0	.090	.063	.043	.078	.054	.037	.054	.038	.026	.031	.022	.016	.010	.007	.005	
7.0	.085	.056	.036	.073	.049	.031	.050	.034	.022	.029	.020	.013	.009	.007	.004	
8.0	.080	.051	.031	.069	.044	.027	.048	.031	.019	.028	.018	.011	.009	.006	.004	
9.0	.076	.047	.027	.065	.040	.023	.045	.028	.017	.026	.017	.010	.009	.006	.003	
10.0	.072	.043	.024	.062	.037	.021	.043	.026	.015	.025	.016	.009	.008	.005	.003	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:zoe
 Test Date:2019-06-17

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity:65.0%
 Test Distance:3.160m [K=1.0000]
 Remarks: LAMP:XPGDWT-U1-0000-00C7G Ra:90
 DC 31V 700MA
 LENS:EM-SB-AFC30L06-M2 30R
 30minutes warm-up



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 = 2 H y = 2 H	13.4	14.3	13.7	14.4	14.6	14.4	15.2	14.6	15.4	15.5
3H	13.3	14.0	13.5	14.2	14.4	14.2	15.0	14.5	15.2	15.4
4H	13.2	13.9	13.5	14.1	14.3	14.2	14.9	14.4	15.1	15.3
6H	13.1	13.8	13.4	14.0	14.3	14.1	14.7	14.4	15.0	15.2
8H	13.1	13.7	13.4	14.0	14.2	14.0	14.7	14.3	14.9	15.2
12H	13.0	13.6	13.3	13.9	14.2	14.0	14.6	14.3	14.9	15.1
4 H 2H	13.2	13.9	13.5	14.1	14.4	14.2	14.9	14.4	15.1	15.3
3H	13.0	13.7	13.3	13.9	14.2	14.0	14.6	14.3	14.9	15.1
4H	12.9	13.5	13.3	13.8	14.1	13.9	14.4	14.2	14.7	15.0
6H	12.8	13.3	13.2	13.7	14.0	13.8	14.3	14.2	14.6	15.0
8H	12.8	13.2	13.2	13.6	14.0	13.7	14.2	14.1	14.5	14.9
12H	12.7	13.2	13.1	13.5	13.9	13.7	14.1	14.1	14.5	14.9
8 H 4H	12.8	13.2	13.2	13.6	14.0	13.7	14.2	14.1	14.5	14.9
6H	12.7	13.1	13.1	13.5	13.9	13.6	14.0	14.1	14.4	14.8
8H	12.6	13.0	13.1	13.4	13.8	13.6	13.9	14.0	14.3	14.8
12H	12.6	12.9	13.0	13.3	13.8	13.5	13.8	14.0	14.2	14.7
12 H 4H	12.7	13.2	13.1	13.5	13.9	13.7	14.1	14.1	14.5	14.9
6H	12.6	13.0	13.1	13.4	13.8	13.6	13.9	14.0	14.3	14.8
8H	12.6	12.9	13.0	13.3	13.8	13.5	13.8	14.0	14.2	14.7
Variations with the observer position at spacings:										
S = 1.0H	+ 2.7 / -21.2					+ 2.9 / -18.0				
1.5H	+ 4.7 / - 9.8					+ 5.1 / - 9.4				
2.0H	+ 6.3 / -20.4					+ 6.3 / -21.4				

CIE Pub.117, 2311 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 2.9$)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: zoe
 Test Date: 2019-06-17

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity: 65.0%
 Test Distance: 3.160m [K=1.0000]
 Remarks: LAMP: XPGDWT-U1-0000-00C7G Ra:90
 DC 31V 700MA
 LENS: EM-SB-AFC30L06-M2 30R
 30minutes warm-up



UTILIZATION FACTORS TABLE

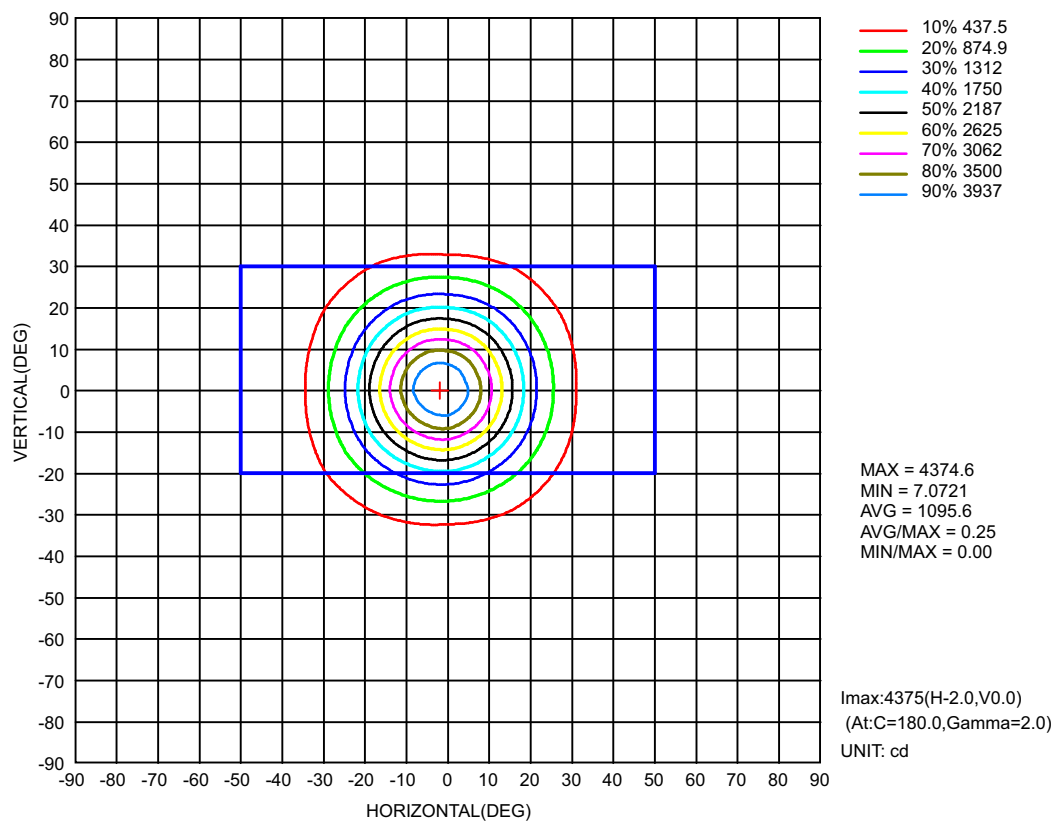
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	72	67	64	72	67	64	71	67	64	62
0.80	78	74	71	78	73	71	77	73	70	68
1.00	82	77	75	81	77	74	80	77	74	71
1.25	85	81	78	84	80	78	82	79	77	74
1.50	87	83	81	86	83	80	84	81	79	76
2.00	89	86	83	88	85	83	86	83	81	77
2.50	90	87	85	89	86	84	86	84	83	78
3.00	91	89	87	90	87	86	87	85	84	79
4.00	93	91	89	91	89	88	88	87	86	80
5.00	94	92	91	92	91	89	89	88	87	81
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: zoe
 Test Date: 2019-06-17

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
 Humidity: 65.0%
 Test Distance: 3.160m [K=1.0000]
 Remarks: LAMP: XPGDWT-U1-0000-00C7G Ra: 90
 DC 31V 700MA
 LENS: EM-SB-AFC30L06-M2 30R
 30minutes warm-up



ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:zoe
Test Date:2019-06-17

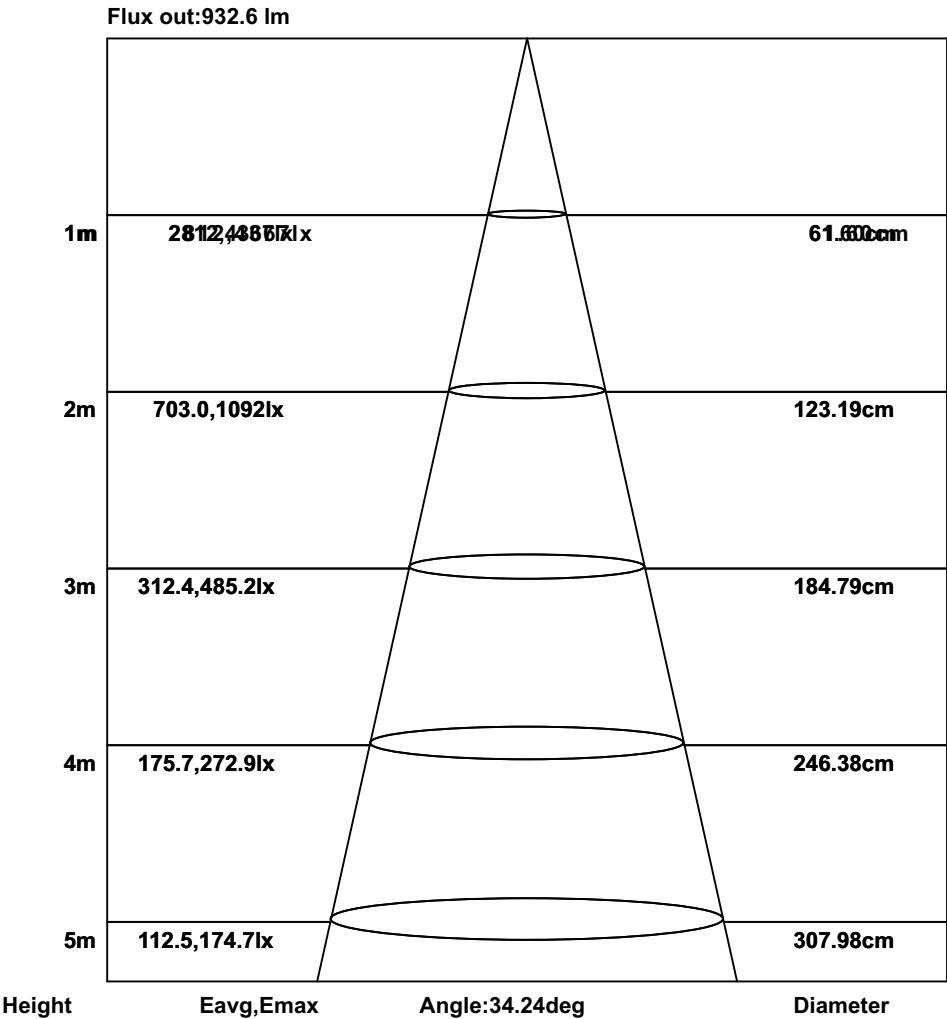
g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.160m [K=1.0000]
Remarks: LAMP:XPGDWT-U1-0000-00C7G Ra:90
DC 31V 700MA
LENS:EM-SB-AFC30L06-M2 30R
30minutes warm-up



IDEA

/KAUS CRI 90 (06.76.4211.__)

AAI Figure

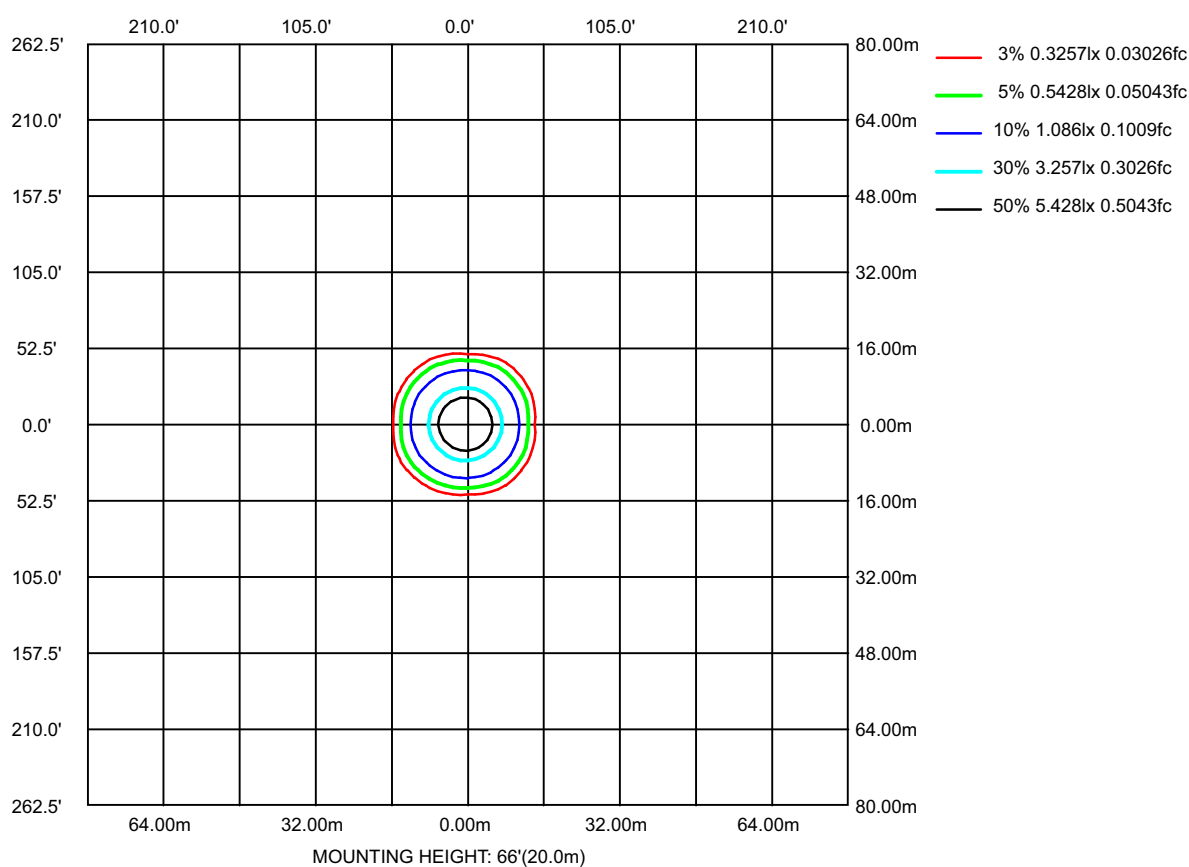


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG	g Range: 0 - 90DEG
C Interval: 30.0DEG	g Interval: 1.0DEG
Test Speed: HIGH	Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Temperature: 25.3DEG	Humidity: 65.0%
Operators: zoe	Test Distance: 3.160m [K=1.0000]
Test Date: 2019-06-17	Remarks: LAMP: XPGDWT-U1-0000-00C7G Ra: 90
	DC 31V 700MA
	LENS: EM-SB-AFC30L06-M2 30R
	30minutes warm-up



ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: zoe
Test Date: 2019-06-17

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity: 65.0%
Test Distance: 3.160m [K=1.0000]
Remarks: LAMP: XPGDWT-U1-0000-00C7G Ra: 90
DC 31V 700MA
LENS: EM-SB-AFC30L06-M2 30R
30minutes warm-up



LED Avg.L Report

AvgL	cd/m2
L_0~180(65)av	75
L_0~180(75)av	60
L_0~180(85)av	77
L_90~270(65)av	74
L_90~270(75)av	60
L_90~270(85)av	79
L_45(65)av	78
L_45(75)av	53
L_45(85)av	55

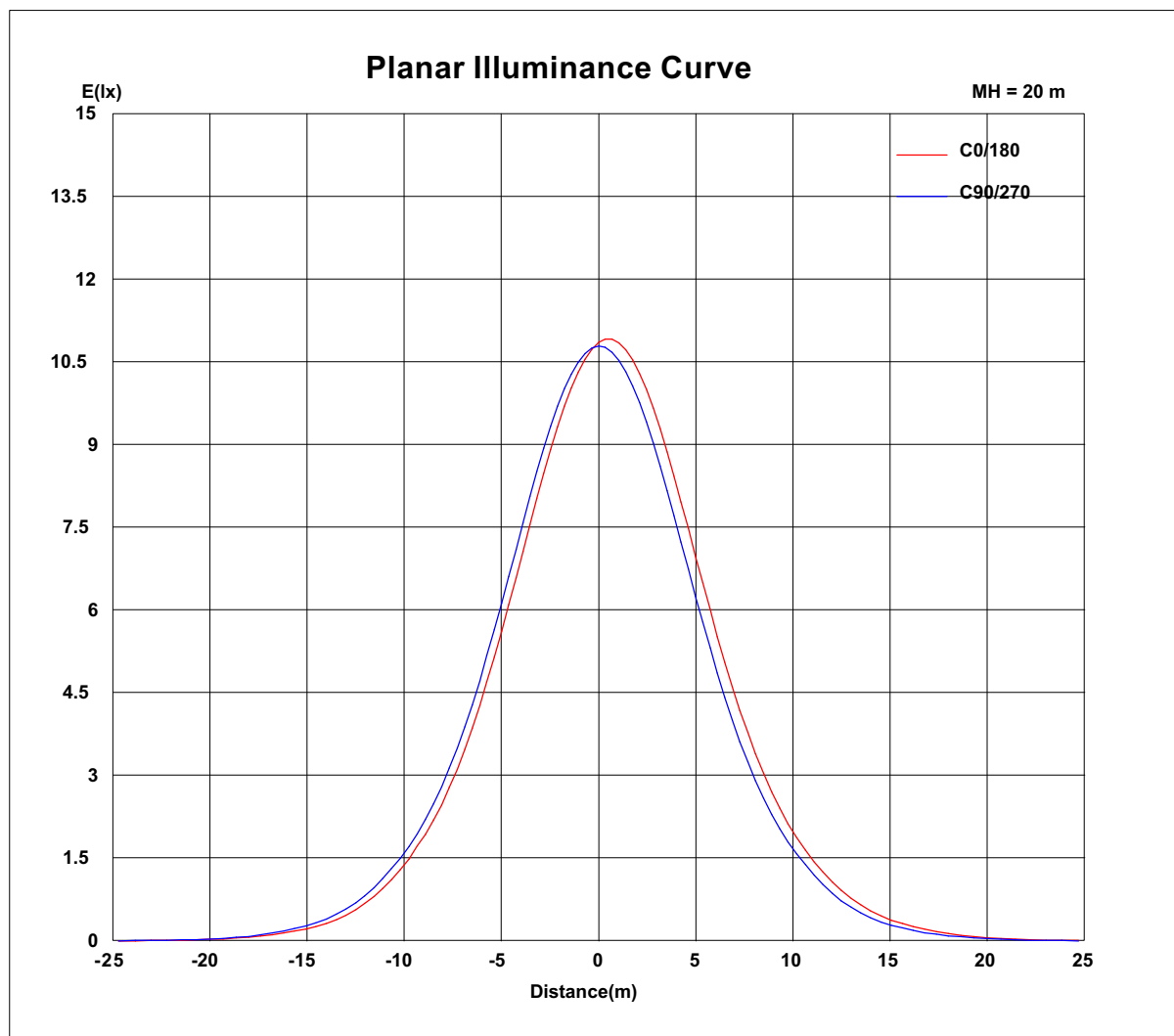
Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:zoe
Test Date:2019-06-17

gRange: 0 - 90DEG
gInterval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.160m [K=1.0000]
Remarks: LAMP:XPGDWT-U1-0000-00C7G Ra:90
DC 31V 700MA
LENS:EM-SB-AFC30L06-M2 30R
30minutes warm-up



Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: zoe
Test Date: 2019-06-17

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity: 65.0%
Test Distance: 3.160m [K=1.0000]
Remarks: LAMP: XPGDWT-U1-0000-00C7G Ra:90
 DC 31V 700MA
 LENS: EM-SB-AFC30L06-M2 30R
 30minutes warm-up

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: zoe
Test Date: 2019-06-17

gRange: 0 - 90DEG
gInterval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.402
Humidity:65.0%
Test Distance:3.160m [K=1.0000]
Remarks: LAMP:XPGDWT-U1-0000-00C7G Ra:90
DC 31V 700MA
LENS:EM-SB-AFC30L06-M2 30R
30minutes warm-up