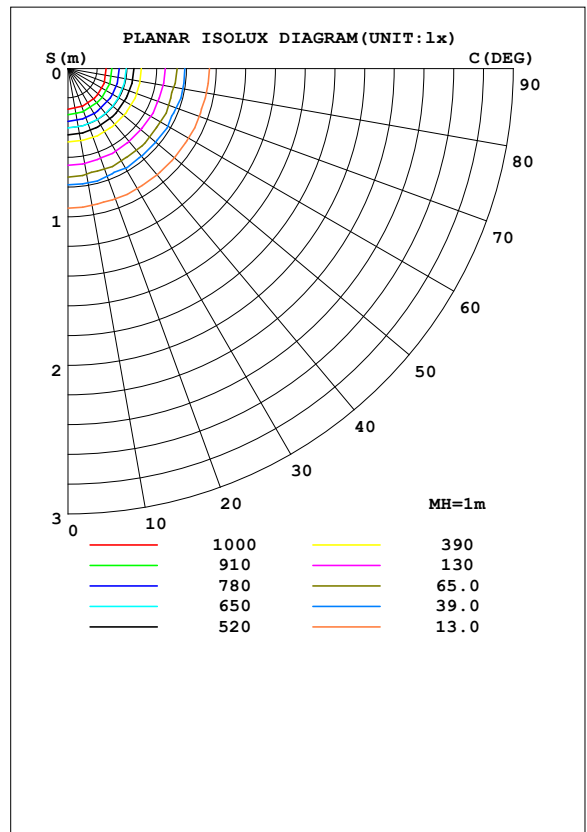
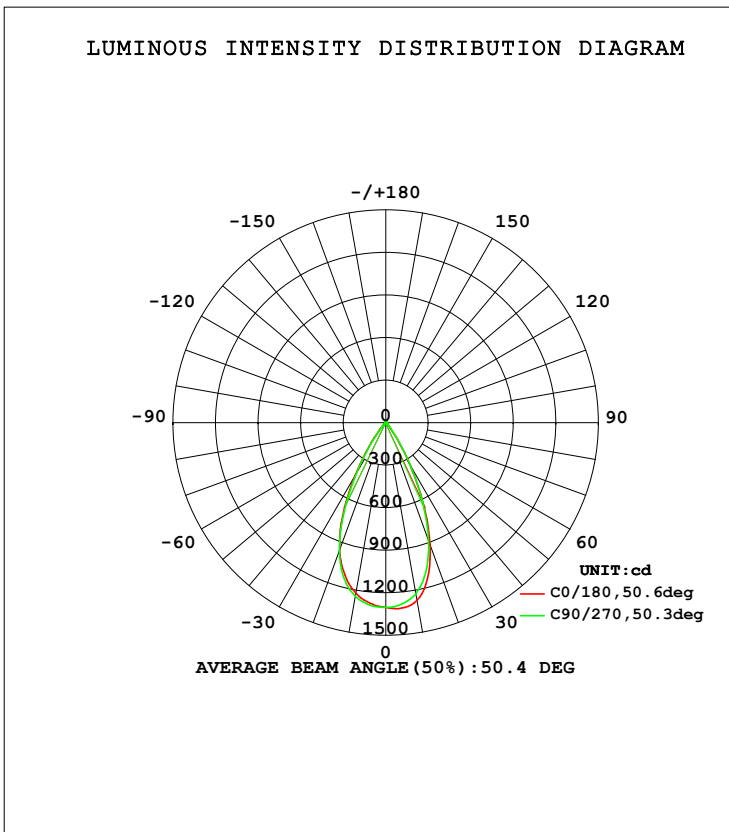


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm		
NAME: R730-W3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 90.15 lm/W			
MODEL		I _{max} (cd)	1314	S/MH (C0/180)	0.74
NOMINAL POWER (W)	10	LOR (%)	100.0	S/MH (C90/270)	0.74
RATED VOLTAGE (V)	240	TOTAL FLUX (lm)	898.15	η UP, DN (C0-180)	0.9, 47.4
NOMINAL FLUX (lm)	898.145	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.8, 50.8
LAMPS INSIDE	1	η up (%)	1.7	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	240.2	η down (%)	98.3	CIBSE SHR MAX	0.80



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 03
 Test Date: 2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 60.0%
 Test Distance: 12.200m [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	1272	1254	1224	1223	1221	1227	1242	1263	0- 10	121.8	121.8	13.6,13.6
20	914.2	894.6	882.3	926.1	953.1	963.3	958.1	933.1	10- 20	309.8	431.6	48.1,48.1
30	339.2	332.8	345.1	402.4	441.0	446.6	418.2	359.7	20- 30	298.9	730.4	81.3,81.3
40	52.03	51.28	55.59	67.84	74.03	71.24	62.97	53.31	30- 40	114.6	845.0	94.1,94.1
50	10.34	10.52	11.11	13.23	13.73	13.61	12.08	10.64	40- 50	23.41	868.4	96.7,96.7
60	5.455	5.479	5.463	5.689	5.687	5.636	5.527	5.714	50- 60	6.935	875.4	97.5,97.5
70	3.007	3.054	3.277	3.420	3.466	3.581	3.511	3.328	60- 70	4.345	879.7	97.9,97.9
80	0.9339	0.9105	1.176	1.395	1.535	1.668	1.545	1.452	70- 80	2.471	882.2	98.2,98.2
90	0.0290	0.0193	0.0193	0.0099	0.0097	0.0193	0.0097	0.0097	80- 90	0.4804	882.7	98.3,98.3
100	0.0290	0.0676	0.0193	0.0489	0.0676	0.0193	0.0676	0.0097	90-100	0.0297	882.7	98.3,98.3
110	0.1641	0.2515	0.1539	0.2031	0.1845	0.1148	0.2032	0.1537	100-110	0.0860	882.8	98.3,98.3
120	0.9462	1.037	0.8955	0.8718	0.7372	0.6264	0.7553	0.7795	110-120	0.4307	883.2	98.3,98.3
130	2.602	2.680	2.561	2.420	2.156	2.037	2.147	2.285	120-130	1.353	884.6	98.5,98.5
140	4.839	4.964	4.869	4.686	4.332	4.213	4.307	4.501	130-140	2.632	887.2	98.8,98.8
150	7.250	7.369	7.320	7.133	6.755	6.656	6.757	6.883	140-150	3.624	890.8	99.2,99.2
160	9.039	9.066	9.111	8.936	8.591	8.522	8.718	8.751	150-160	3.676	894.5	99.6,99.6
170	10.17	10.24	10.17	10.18	9.874	9.875	9.993	10.06	160-170	2.672	897.2	99.9,99.9
180	10.69	10.78	10.76	10.83	10.70	10.79	10.76	10.83	170-180	0.9901	898.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

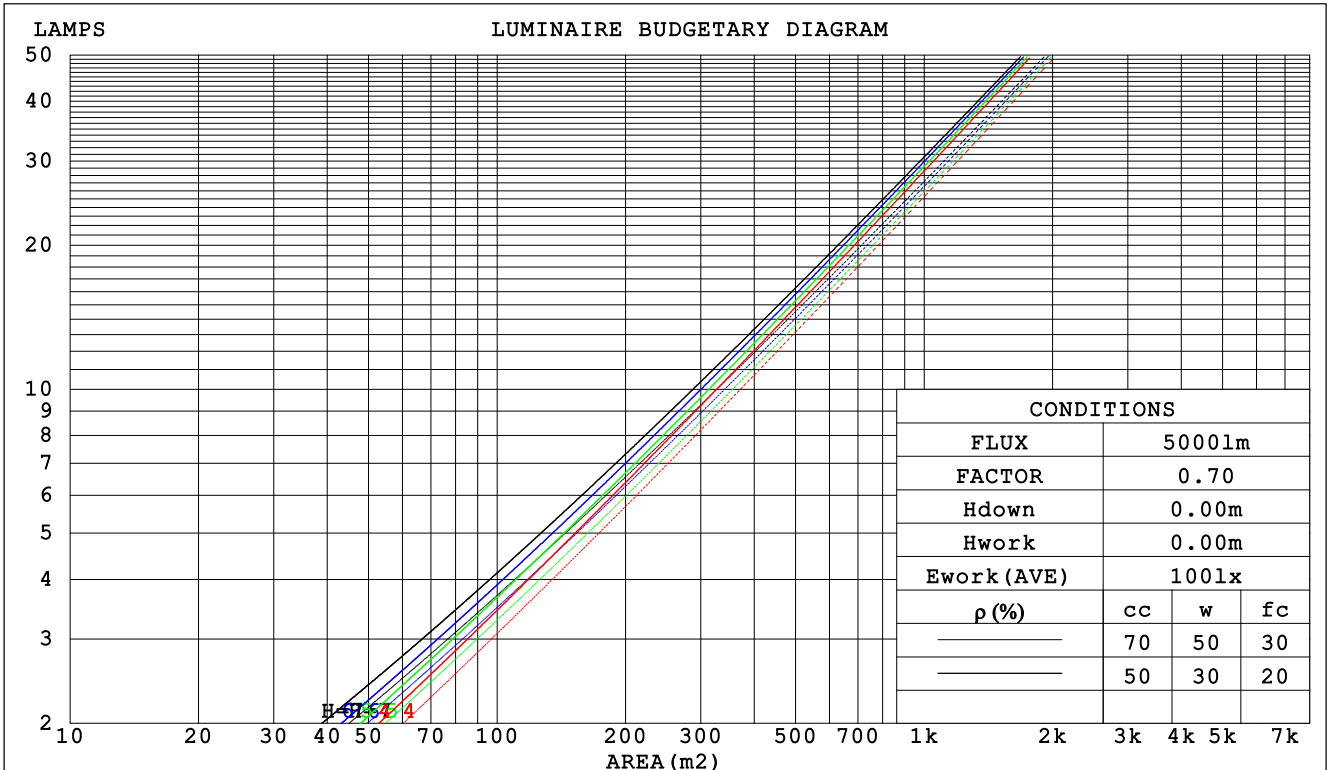
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm		
NAME: R730-W3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	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															
	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	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.00	.99	.98	.96	.95	.95	.93
2.0	1.04	.90	.97	1.02	.98	.96	.98	.96	.93	.95	.93	.91	.92	.90	.89	.87
3.0	.97	.93	.89	.96	.92	.88	.93	.90	.87	.90	.88	.85	.88	.86	.84	.82
4.0	.92	.87	.83	.90	.86	.82	.88	.84	.81	.86	.83	.80	.84	.81	.79	.77
5.0	.87	.81	.77	.85	.80	.77	.84	.79	.76	.82	.78	.75	.80	.77	.74	.73
6.0	.82	.76	.72	.81	.76	.72	.79	.75	.71	.78	.74	.71	.76	.73	.70	.69
7.0	.78	.72	.68	.77	.72	.68	.75	.71	.67	.74	.70	.67	.73	.69	.67	.65
8.0	.74	.68	.64	.73	.68	.64	.72	.67	.64	.71	.67	.63	.70	.66	.63	.62
9.0	.70	.65	.61	.70	.64	.61	.68	.64	.61	.68	.63	.60	.67	.63	.60	.59
10.0	.67	.61	.58	.66	.61	.58	.65	.61	.58	.65	.60	.57	.64	.60	.57	.56



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm		
NAME: R730-W3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	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						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.169	.096	.031	.162	.092	.029	.149	.085	.027	.136	.079	.025	.125	.072	.023	
2.0	.160	.088	.027	.154	.085	.026	.143	.080	.025	.132	.074	.023	.123	.069	.022	
3.0	.152	.081	.024	.147	.079	.024	.137	.074	.023	.128	.070	.022	.120	.066	.020	
4.0	.144	.075	.022	.140	.073	.022	.131	.070	.021	.123	.066	.020	.116	.063	.019	
5.0	.137	.070	.020	.133	.068	.020	.126	.065	.019	.119	.063	.019	.112	.060	.018	
6.0	.131	.065	.019	.127	.064	.018	.121	.062	.018	.115	.060	.017	.109	.057	.017	
7.0	.125	.062	.017	.122	.061	.017	.116	.059	.017	.110	.057	.016	.105	.055	.016	
8.0	.119	.058	.016	.117	.057	.016	.111	.056	.016	.107	.054	.016	.102	.052	.015	
9.0	.114	.055	.015	.112	.055	.015	.107	.053	.015	.103	.052	.015	.099	.050	.014	
10.0	.110	.053	.015	.108	.052	.015	.103	.051	.014	.099	.049	.014	.096	.048	.014	

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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.204	.204	.204	.174	.174	.174	.119	.119	.119	.068	.068	.068	.022	.022	.022	
1.0	.184	.171	.159	.157	.146	.137	.108	.101	.094	.062	.058	.055	.020	.019	.018	
2.0	.168	.146	.127	.144	.126	.110	.099	.087	.077	.057	.051	.045	.018	.016	.015	
3.0	.155	.127	.104	.133	.109	.091	.091	.076	.063	.053	.044	.037	.017	.014	.012	
4.0	.144	.112	.087	.124	.097	.076	.085	.068	.053	.049	.040	.032	.016	.013	.010	
5.0	.135	.100	.075	.116	.087	.065	.080	.061	.046	.046	.036	.027	.015	.012	.009	
6.0	.128	.091	.065	.110	.079	.056	.076	.055	.040	.044	.032	.024	.014	.011	.008	
7.0	.121	.083	.057	.104	.072	.050	.072	.051	.035	.042	.030	.021	.014	.010	.007	
8.0	.115	.077	.051	.099	.067	.044	.069	.047	.031	.040	.028	.019	.013	.009	.006	
9.0	.110	.072	.046	.095	.062	.040	.066	.044	.028	.038	.026	.017	.012	.008	.006	
10.0	.106	.067	.042	.091	.058	.037	.063	.041	.026	.037	.024	.016	.012	.008	.005	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm										
NAME: R730-W3K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.: AXG					SUR.:			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	15.3	16.1	15.5	16.3	16.5	15.4	16.3	15.7	16.5	16.7
3H	15.2	16.0	15.5	16.2	16.5	15.4	16.2	15.7	16.4	16.6
4H	15.2	16.0	15.5	16.2	16.4	15.4	16.1	15.7	16.4	16.6
6H	15.2	15.9	15.5	16.1	16.4	15.3	16.0	15.7	16.3	16.6
8H	15.1	15.8	15.4	16.1	16.4	15.3	16.0	15.6	16.3	16.6
12H	15.1	15.7	15.4	16.0	16.3	15.3	15.9	15.6	16.2	16.5
4H 2H	15.1	15.8	15.4	16.1	16.3	15.2	16.0	15.5	16.2	16.5
3H	15.1	15.7	15.4	16.0	16.3	15.2	15.9	15.6	16.2	16.5
4H	15.1	15.7	15.4	16.0	16.3	15.3	15.8	15.6	16.2	16.5
6H	15.0	15.6	15.4	15.9	16.3	15.2	15.8	15.6	16.1	16.5
8H	15.0	15.5	15.4	15.9	16.3	15.2	15.7	15.6	16.1	16.5
12H	15.0	15.4	15.4	15.8	16.2	15.2	15.6	15.6	16.0	16.4
8H 4H	15.0	15.5	15.4	15.8	16.2	15.2	15.6	15.6	16.0	16.4
6H	15.0	15.4	15.4	15.8	16.2	15.2	15.5	15.6	16.0	16.4
8H	14.9	15.3	15.4	15.7	16.2	15.1	15.5	15.6	15.9	16.4
12H	14.9	15.2	15.4	15.6	16.1	15.1	15.4	15.6	15.8	16.3
12H 4H	14.9	15.4	15.4	15.8	16.2	15.1	15.5	15.5	15.9	16.4
6H	14.9	15.3	15.4	15.7	16.2	15.1	15.4	15.6	15.9	16.4
8H	14.9	15.2	15.4	15.6	16.1	15.1	15.4	15.6	15.8	16.3
Variations with the observer position at spacings:										
S = 1.0H	+ 3.0 / - 3.9					+ 2.9 / - 3.9				
1.5H	+ 5.1 / - 3.6					+ 5.0 / - 3.7				
2.0H	+ 3.4 / - 1.2					+ 3.8 / - 1.2				

CIE Pub.117 Corrected 898.1 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.4)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm		
NAME: R730-W3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

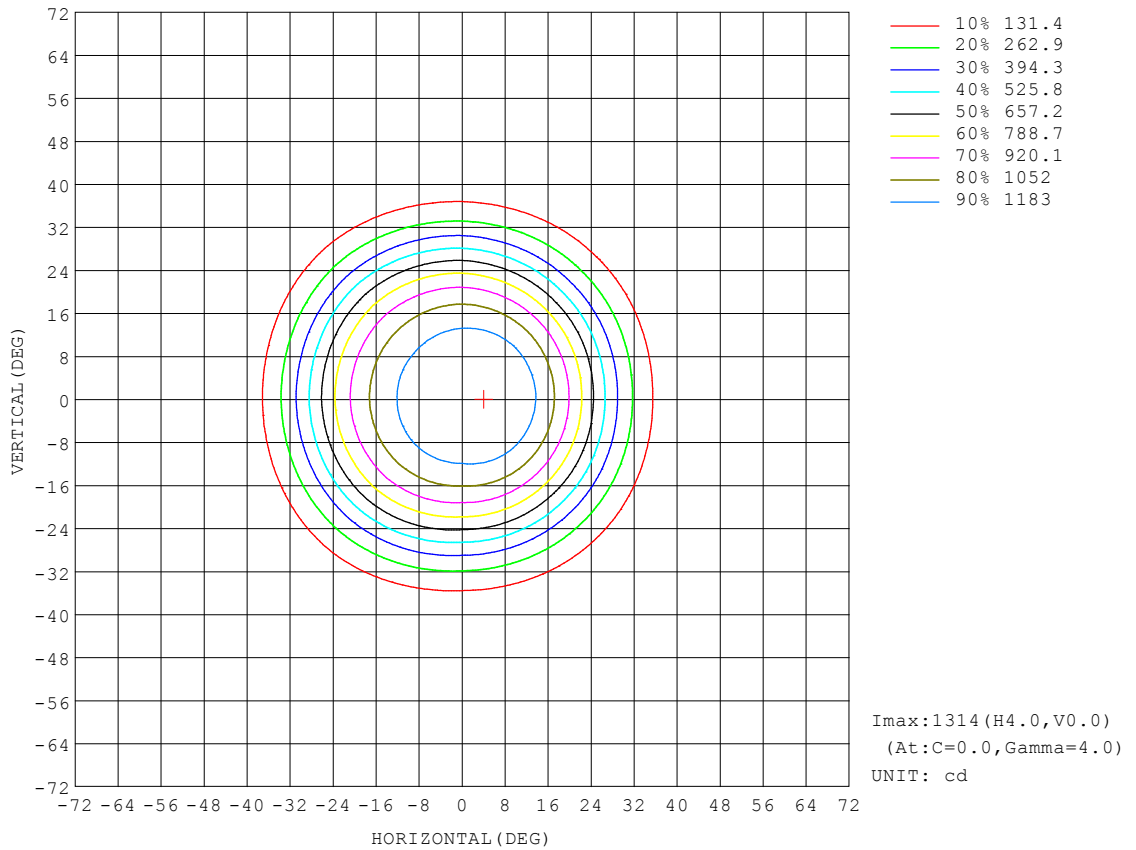
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	88	82	78	87	82	78	86	81	78	74
0.80	95	90	86	94	89	86	93	88	85	82
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	95	102	97	94	100	96	93	89
1.50	106	101	98	104	100	97	102	99	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	111	108	105	110	107	104	106	104	102	95
4.00	113	111	109	111	109	107	107	106	104	97
5.00	115	113	111	112	111	109	108	107	106	98
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:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm		
NAME: R730-W3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

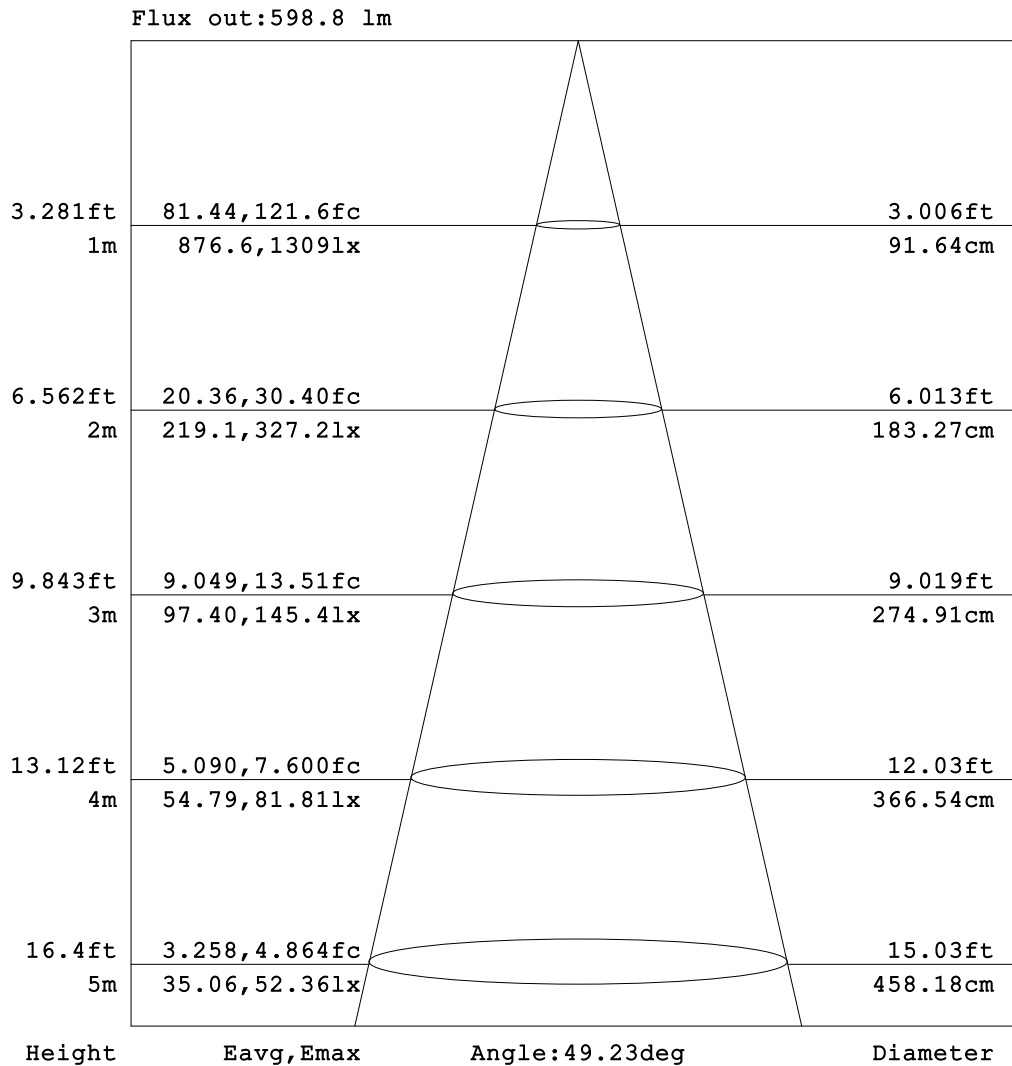


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks:

AAI Figure

Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm		
NAME: R730-W3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:



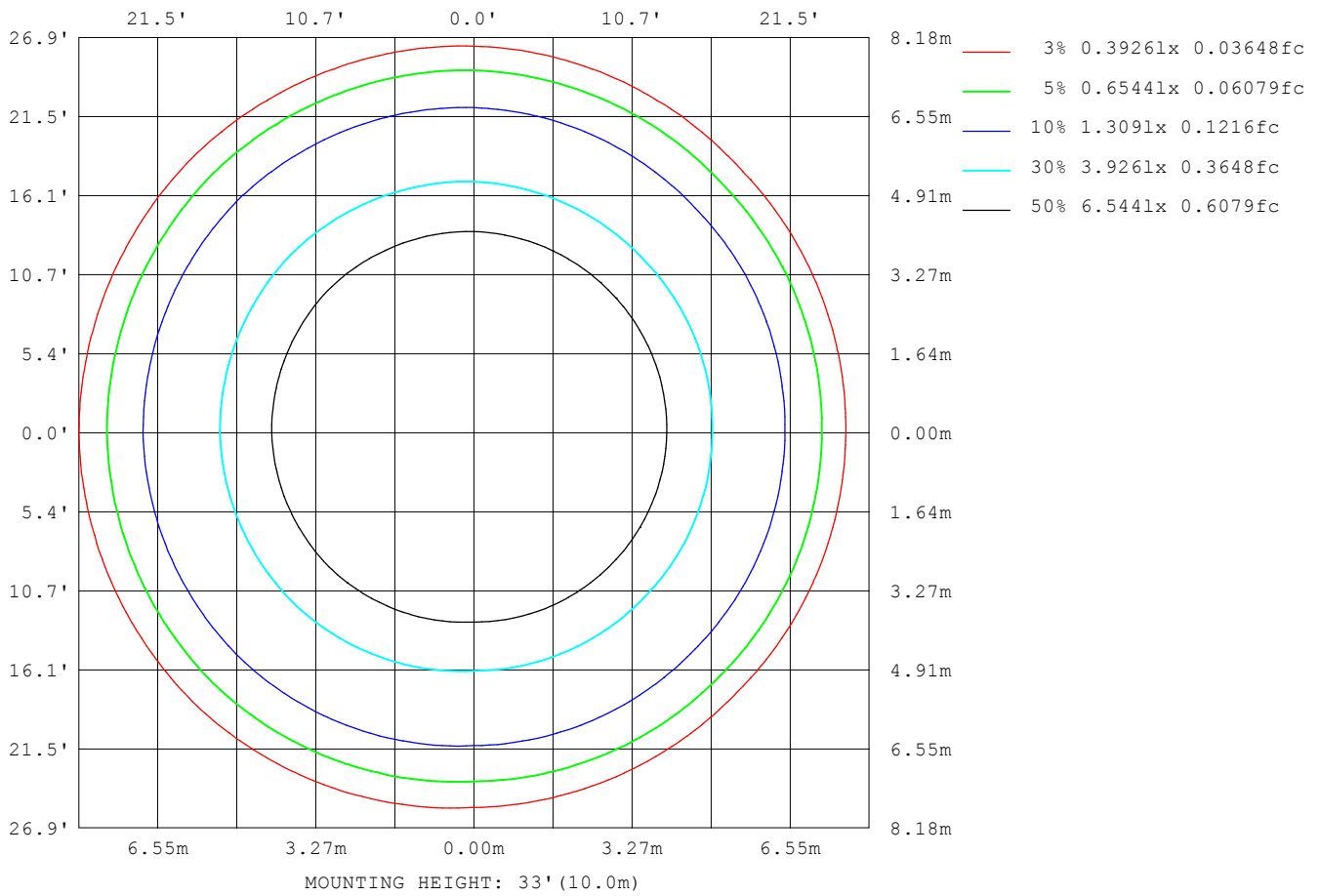
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

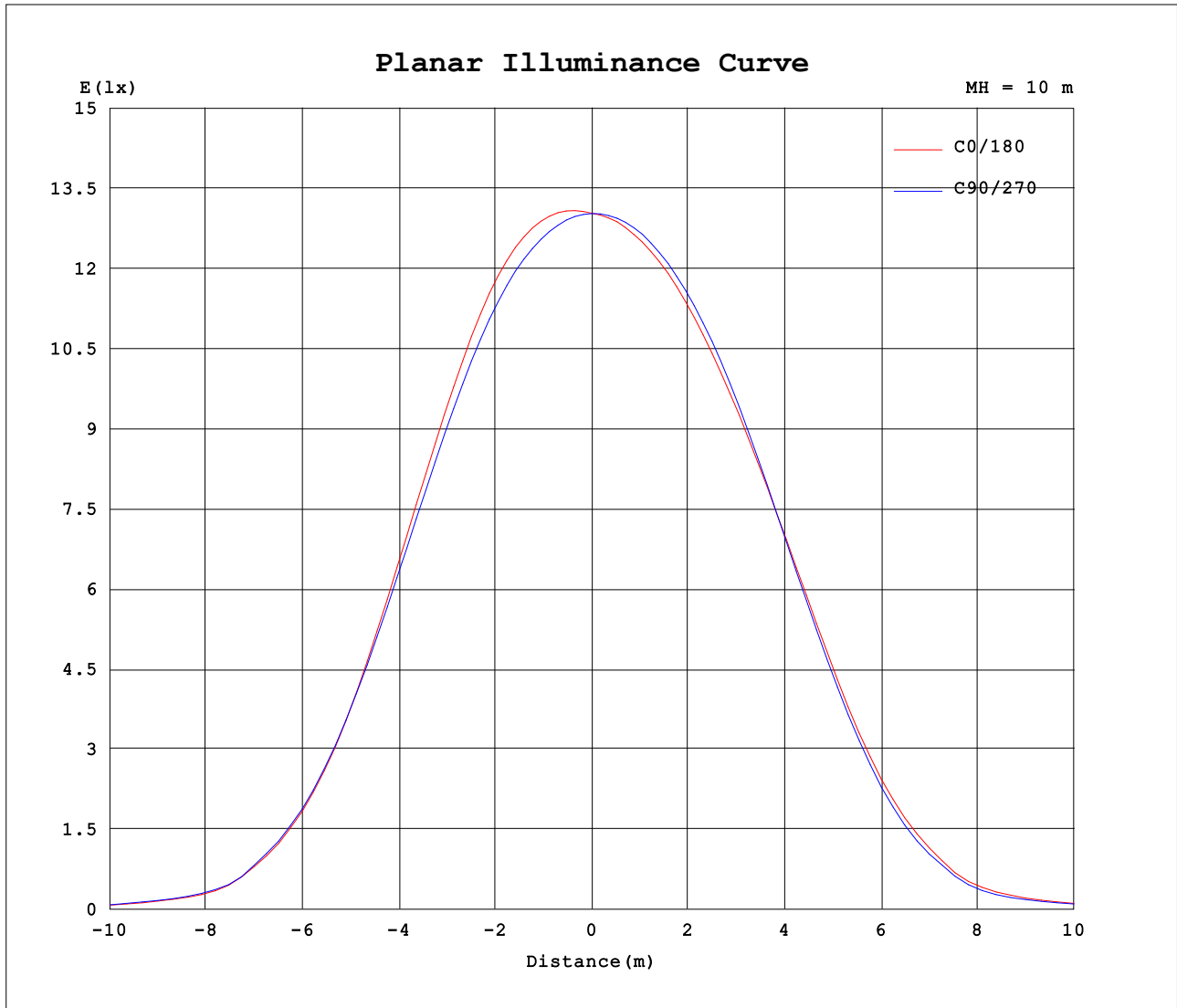
Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm		
NAME: R730-W3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 03
 Test Date: 2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 60.0%
 Test Distance: 12.200m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:240.3V I:0.0446A P:9.963W PF:0.9306 Lamp Flux:898.145x1 lm		
NAME: R730-W3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: AXG	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315										
0	1304	1304	1304	1304	1304	1304	1304	1304										
5	1313	1303	1285	1280	1278	1283	1291	1306										
10	1272	1254	1224	1223	1221	1227	1242	1263										
15	1140	1120	1092	1107	1115	1123	1139	1145										
20	914	895	882	926	953	963	958	933										
25	623	611	615	681	720	730	704	650										
30	339	333	345	402	441	447	418	360										
35	147	142	152	190	211	211	190	156										
40	52.0	51.3	55.6	67.8	74.0	71.2	63.0	53.3										
45	23.4	23.7	26.1	32.4	34.0	33.3	30.2	25.2										
50	10.3	10.5	11.1	13.2	13.7	13.6	12.1	10.6										
55	7.04	6.89	6.82	7.60	7.76	7.79	7.32	7.14										
60	5.46	5.48	5.46	5.69	5.69	5.64	5.53	5.71										
65	4.05	4.13	4.29	4.44	4.47	4.53	4.45	4.37										
70	3.01	3.05	3.28	3.42	3.47	3.58	3.51	3.33										
75	2.06	2.03	2.30	2.43	2.49	2.61	2.53	2.37										
80	0.93	0.91	1.18	1.39	1.53	1.67	1.55	1.45										
85	0.17	0.02	0.13	0.26	0.58	0.52	0.41	0.41										
90	0.03	0.02	0.02	0.01	0.01	0.02	0.01	0.01										
95	0.03	0.05	0.02	0.02	0.04	0.02	0.03	0.01										
100	0.03	0.07	0.02	0.05	0.07	0.02	0.07	0.01										
105	0.03	0.13	0.03	0.11	0.11	0.02	0.11	0.01										
110	0.16	0.25	0.15	0.20	0.18	0.11	0.20	0.15										
115	0.44	0.55	0.44	0.43	0.37	0.28	0.40	0.36										
120	0.95	1.04	0.90	0.87	0.74	0.63	0.76	0.78										
125	1.67	1.76	1.63	1.54	1.33	1.23	1.33	1.42										
130	2.60	2.68	2.56	2.42	2.16	2.04	2.15	2.29										
135	3.65	3.75	3.64	3.49	3.18	3.07	3.16	3.33										
140	4.84	4.96	4.87	4.69	4.33	4.21	4.31	4.50										
145	6.08	6.19	6.13	5.95	5.57	5.46	5.54	5.71										
150	7.25	7.37	7.32	7.13	6.75	6.66	6.76	6.88										
155	8.24	8.31	8.33	8.15	7.79	7.70	7.84	7.92										
160	9.04	9.07	9.11	8.94	8.59	8.52	8.72	8.75										
165	9.67	9.69	9.72	9.58	9.27	9.22	9.43	9.46										
170	10.2	10.2	10.2	10.2	9.87	9.88	9.99	10.1										
175	10.5	10.6	10.6	10.6	10.4	10.5	10.4	10.6										
180	10.7	10.8	10.8	10.8	10.7	10.8	10.8	10.8										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:03
 Test Date:2020-06-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:60.0%
 Test Distance:12.200m [K=1.0000]
 Remarks: