

Spectrum Test Report

Sample :
Specification : DSK6R15927120W
Sample No. :
Manufacturer : RAB LIGHTING INC

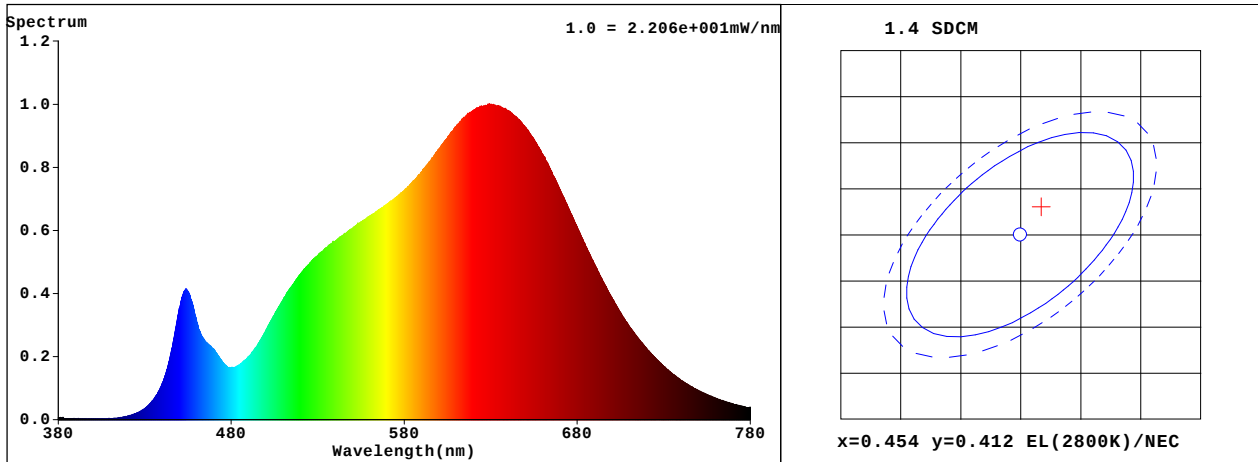
Date : 2019-11-08 13:03:50
Sam. Status :
Instrument : HaasSuite(EVERFINE)
Test by :
Assessor : damin

Test Condition

Temperature : 22.9Deg
WL Range : 380nm-780nm
Test Mode : Fast Test

RH : 65.0%
IP : 56632 (86%)
T : 54 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4557$ $y = 0.4150$ / $u' = 0.2579$ $v' = 0.5284$ ($duv=2.01e-03$)

CCT= 2793K Prcp WL: Ld=583.1nm Purity=61.4%

Peak WL: Lp=629nm FWHM: =163.6nm Ratio:R=25.7% G=72.0% B=2.3%

Render Index: Ra = 93.7 CRI = 90.6 AvgR = 90.7

R1 =94 R2 =95 R3 =94 R4 =95 R5 =93 R6 =94 R7 =96

R8 =88 R9 =71 R10=87 R11=95 R12=76 R13=94 R14=96 R15=91

WHITE:ANSI_2700K

Photometric & Radiometric Parameters

Flux = 1036.1 lm Eff. : 69.71 lm/W Fe = 3.7323 W

Flux of emitted photons(umol/s):18.78 Fluo. and blue light ratio:13.61 Fluorescent eff.:219.4

Electrical parameters

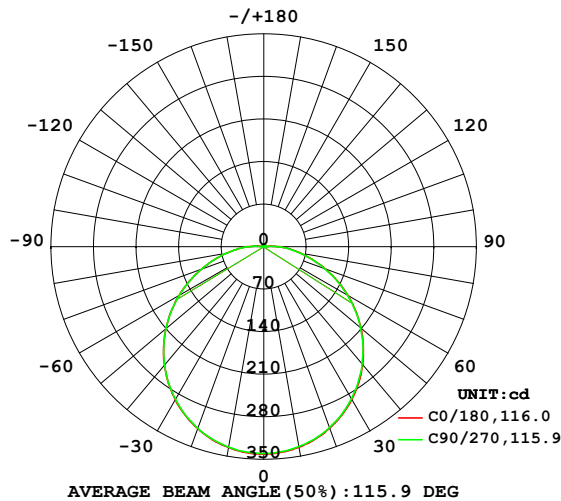
V = 120.1 V I = 0.1320 A P = 14.86 W PF = 0.9376 F=59.98 Hz

LUMINAIRE PHOTOMETRIC TEST REPORT

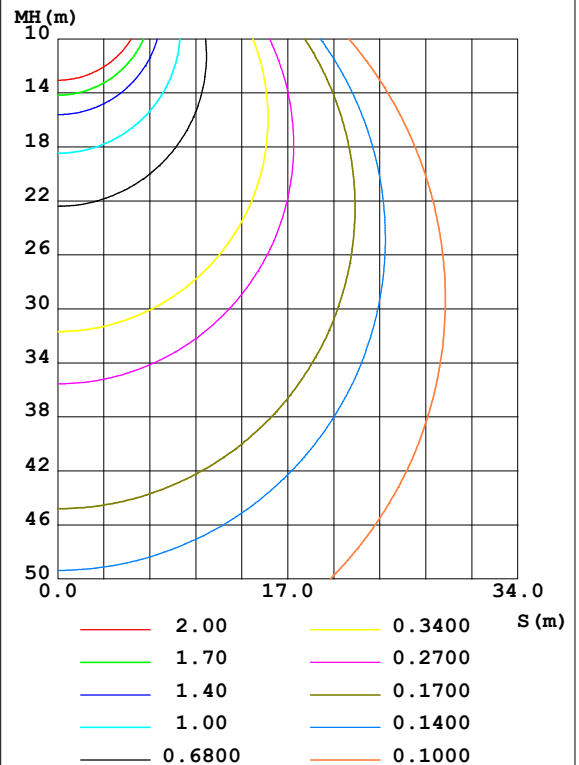
Test:U:120.0V I:0.1320A P:14.87W PF:0.9383 Freq:59.98Hz Lamp Flux:1071.72x1 lm		
NAME:	TYPE:DSK6R15927120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 72.10 lm/W			
MODEL		I _{max} (cd)	341.2	S/MH(C0/180)	1.27
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1071.7	η UP,DN(C0-180)	1.1,48.7
NOMINAL FLUX(lm)	1071.72	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.1,49.1
LAMPS INSIDE	1	η up(%)	2.2	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	97.8	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Testing Room
Test Date:2019-11-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:11.160m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	335.1	333.9	335.6	334.8					0- 10	32.25	32.25	3.01,3.01
20	317.8	316.8	318.5	317.9					10- 20	92.51	124.8	11.6,11.6
30	290.0	288.7	291.2	290.4					20- 30	140.7	265.4	24.8,24.8
40	253.2	252.1	254.5	254.1					30- 40	170.7	436.1	40.7,40.7
50	208.9	208.0	210.5	210.2					40- 50	179.2	615.3	57.4,57.4
60	159.6	158.7	161.2	161.0					50- 60	165.6	780.9	72.9,72.9
70	108.1	107.1	109.6	109.4					60- 70	132.9	913.8	85.3,85.3
80	60.60	59.80	61.82	61.68					70- 80	88.73	1003	93.5,93.5
90	24.95	24.29	25.53	25.59					80- 90	45.61	1048	97.8,97.8
100	0.9315	2.228	4.074	2.064					90-100	12.91	1061	99,99
110	1.294	1.310	1.453	1.310					100-110	1.377	1062	99.1,99.1
120	1.720	1.729	1.878	1.760					110-120	1.551	1064	99.3,99.3
130	2.115	2.155	2.305	2.185					120-130	1.776	1066	99.4,99.4
140	2.430	2.447	2.581	2.563					130-140	1.833	1068	99.6,99.6
150	2.683	2.699	2.825	2.754					140-150	1.635	1069	99.8,99.8
160	2.840	2.897	2.968	2.920					150-160	1.296	1071	99.9,99.9
170	3.109	3.136	3.188	3.125					160-170	0.8623	1071	100,100
180	3.196	3.196	3.220	3.180					170-180	0.3013	1072	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 526.04 lm

%lum = 49.1%

%lamp = 49.1%

Conical surface Flux(120deg): 780.9 lm

%lum = 72.9%

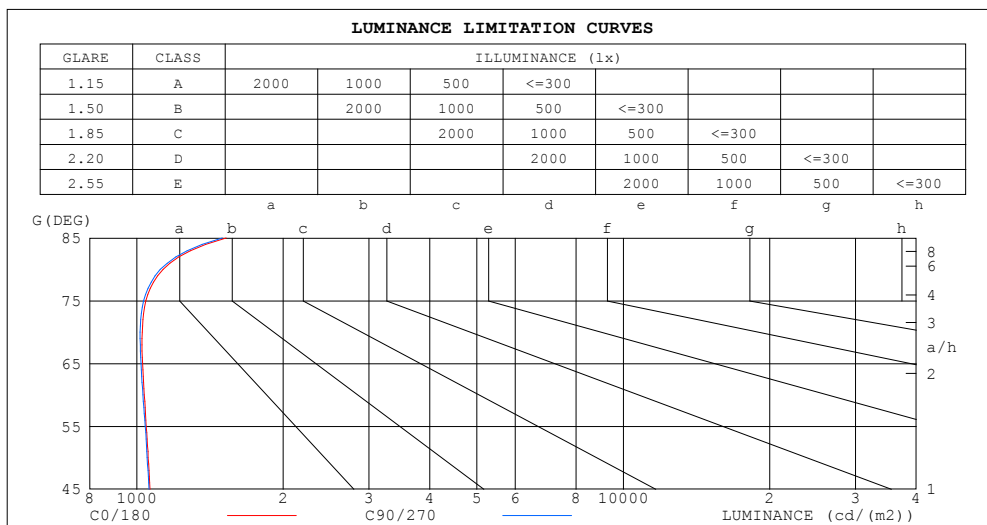
%lamp = 72.9%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Testing Room
 Test Date:2019-11-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
 Humidity:65.0%
 Test Distance:11.160m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1320A P:14.87W PF:0.9383 Freq:59.98Hz Lamp Flux:1071.72x1 lm		
NAME:	TYPE:DSK6R15927120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1526	1499
80	1133	1118
75	1044	1033
70	1026	1016
65	1028	1020
60	1036	1030
55	1046	1041
50	1055	1051
45	1065	1060

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C Interval: 90.0DEG
Test Speed: HIGH
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Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1320A P:14.87W PF:0.9383 Freq:59.98Hz Lamp Flux:1071.72x1 lm		
NAME:	TYPE:DSK6R15927120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding 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						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.342	.195	.062	.334	.191	.061	.320	.183	.059	.306	.177	.057	.294	.170	.055		
2.0	.311	.170	.052	.304	.167	.052	.291	.162	.050	.279	.156	.049	.267	.151	.048		
3.0	.282	.150	.045	.276	.148	.045	.265	.143	.044	.254	.139	.043	.244	.135	.042		
4.0	.258	.134	.039	.253	.132	.039	.242	.128	.038	.233	.125	.038	.224	.122	.037		
5.0	.237	.121	.035	.232	.119	.035	.223	.116	.034	.214	.113	.034	.206	.110	.033		
6.0	.219	.110	.031	.214	.108	.031	.206	.106	.031	.198	.103	.030	.191	.101	.030		
7.0	.203	.100	.028	.199	.099	.028	.191	.097	.028	.185	.095	.028	.178	.092	.027		
8.0	.189	.092	.026	.185	.091	.026	.179	.089	.025	.172	.087	.025	.167	.085	.025		
9.0	.176	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.156	.079	.023		
10.0	.166	.079	.022	.163	.079	.022	.157	.077	.022	.152	.076	.021	.147	.074	.021		

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						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.207	.207	.207	.177	.177	.177	.121	.121	.121	.069	.069	.069	.022	.022	.022		
1.0	.199	.173	.149	.171	.148	.128	.117	.102	.088	.067	.059	.051	.022	.019	.017		
2.0	.192	.149	.113	.164	.128	.097	.113	.089	.068	.065	.052	.040	.021	.017	.013		
3.0	.184	.131	.090	.158	.113	.078	.108	.079	.054	.063	.046	.032	.020	.015	.011		
4.0	.176	.118	.074	.151	.102	.064	.104	.071	.045	.060	.042	.027	.019	.014	.009		
5.0	.169	.108	.063	.145	.093	.055	.100	.065	.039	.058	.038	.023	.019	.013	.008		
6.0	.161	.100	.056	.139	.086	.048	.096	.060	.034	.055	.036	.020	.018	.012	.007		
7.0	.154	.093	.050	.133	.081	.044	.092	.056	.031	.053	.033	.018	.017	.011	.006		
8.0	.148	.087	.046	.127	.076	.040	.088	.053	.028	.051	.031	.017	.017	.010	.006		
9.0	.141	.082	.042	.122	.071	.037	.084	.050	.026	.049	.030	.016	.016	.010	.005		
10.0	.136	.078	.040	.117	.068	.035	.081	.048	.025	.047	.028	.015	.015	.009	.005		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
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Operators:Testing Room
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γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:11.160m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1320A P:14.87W PF:0.9383 Freq:59.98Hz Lamp Flux:1071.72x1 lm										
NAME:			TYPE:DSK6R15927120W			WEIGHT:				
SPEC.:			DIM.:			SERIAL No.:				
MFR.: RAB LIGHTING INC			SUR.:			Shielding 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	12.6	14.1	12.9	14.4	14.6	12.6	14.1	12.9	14.4	14.6
3H	14.3	15.8	14.7	16.0	16.3	14.3	15.7	14.6	16.0	16.3
4H	15.1	16.5	15.5	16.8	17.1	15.1	16.4	15.4	16.7	17.0
6H	15.9	17.1	16.2	17.4	17.8	15.8	17.1	16.2	17.4	17.7
8H	16.2	17.4	16.6	17.8	18.1	16.1	17.4	16.5	17.7	18.0
12H	16.5	17.7	16.9	18.1	18.4	16.5	17.7	16.9	18.0	18.4
4H 2H	13.3	14.6	13.6	14.9	15.2	13.2	14.6	13.6	14.9	15.2
3H	15.2	16.4	15.6	16.7	17.1	15.2	16.4	15.5	16.7	17.0
4H	16.1	17.2	16.5	17.6	18.0	16.1	17.2	16.5	17.6	17.9
6H	17.0	18.0	17.5	18.4	18.8	17.0	18.0	17.4	18.4	18.8
8H	17.5	18.4	17.9	18.8	19.2	17.4	18.3	17.9	18.7	19.2
12H	17.9	18.7	18.4	19.2	19.6	17.8	18.7	18.3	19.1	19.6
8H 4H	16.5	17.4	16.9	17.8	18.2	16.5	17.4	16.9	17.8	18.2
6H	17.6	18.4	18.1	18.8	19.3	17.6	18.3	18.0	18.8	19.3
8H	18.2	18.9	18.7	19.3	19.8	18.1	18.8	18.6	19.3	19.8
12H	18.8	19.4	19.3	19.9	20.4	18.7	19.3	19.3	19.8	20.4
12H 4H	16.5	17.4	17.0	17.8	18.3	16.5	17.4	17.0	17.8	18.2
6H	17.7	18.4	18.2	18.9	19.4	17.7	18.4	18.2	18.9	19.4
8H	18.4	19.0	18.9	19.5	20.0	18.3	18.9	18.9	19.4	20.0
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	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 1072 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.2$)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Testing Room
Test Date:2019-11-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:11.160m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1320A P:14.87W PF:0.9383 Freq:59.98Hz Lamp Flux:1071.72x1 lm		
NAME:	TYPE:DSK6R15927120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
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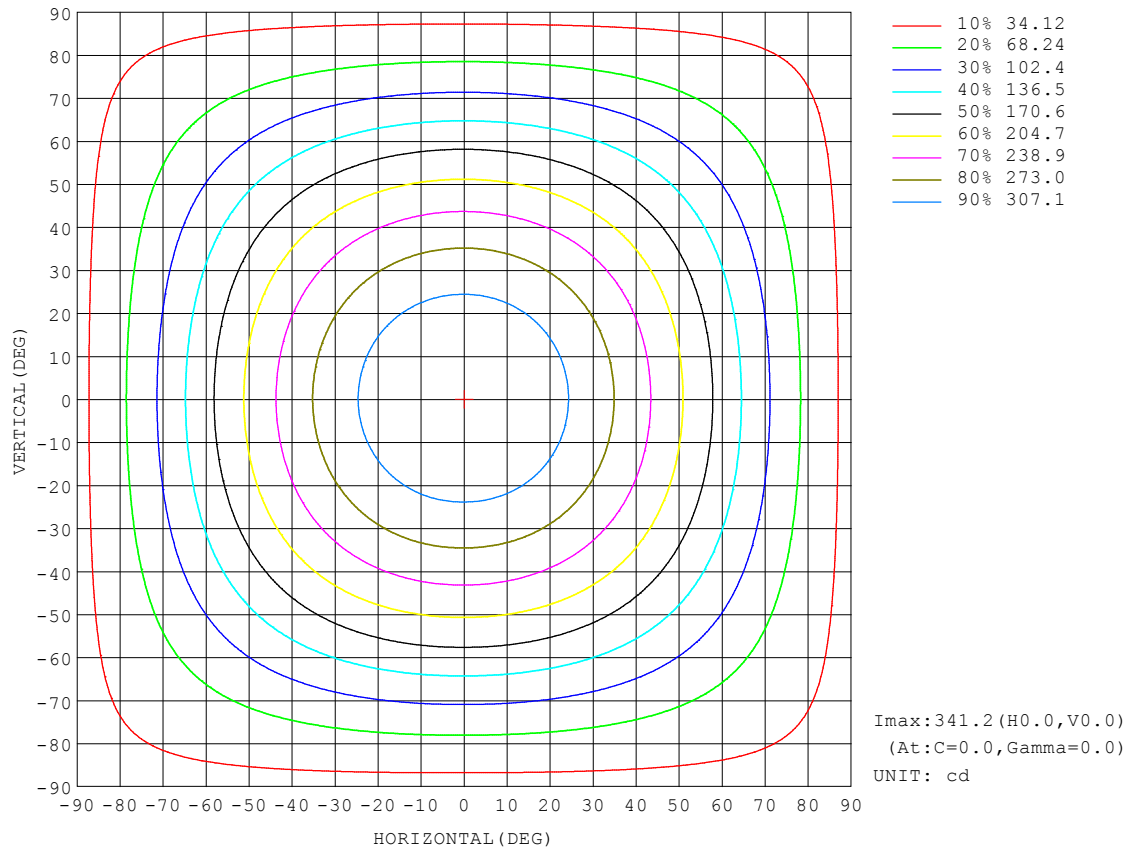
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	43	36	53	43	36	29
0.80	65	53	45	64	53	45	62	52	45	38
1.00	73	62	54	72	61	54	70	62	53	46
1.25	80	69	62	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	86	79	73	65
2.50	96	88	81	94	86	80	90	83	78	69
3.00	100	92	86	97	91	85	93	87	83	73
4.00	104	98	92	101	96	91	97	92	88	78
5.00	107	101	97	104	99	95	99	95	92	81
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1320A P:14.87W PF:0.9383 Freq:59.98Hz Lamp Flux:1071.72x1 lm		
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SPEC.:	DIM.:	SERIAL No.:
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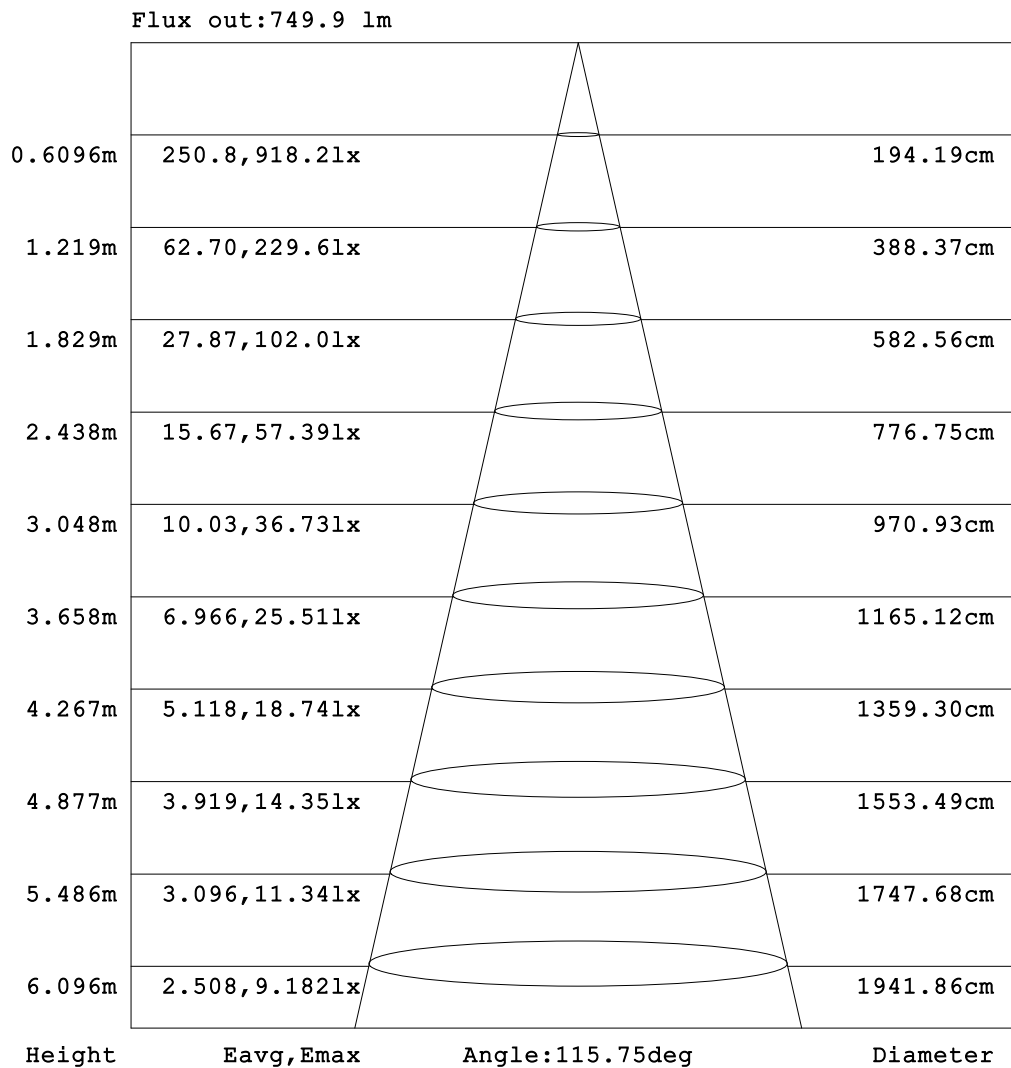


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AAI Figure

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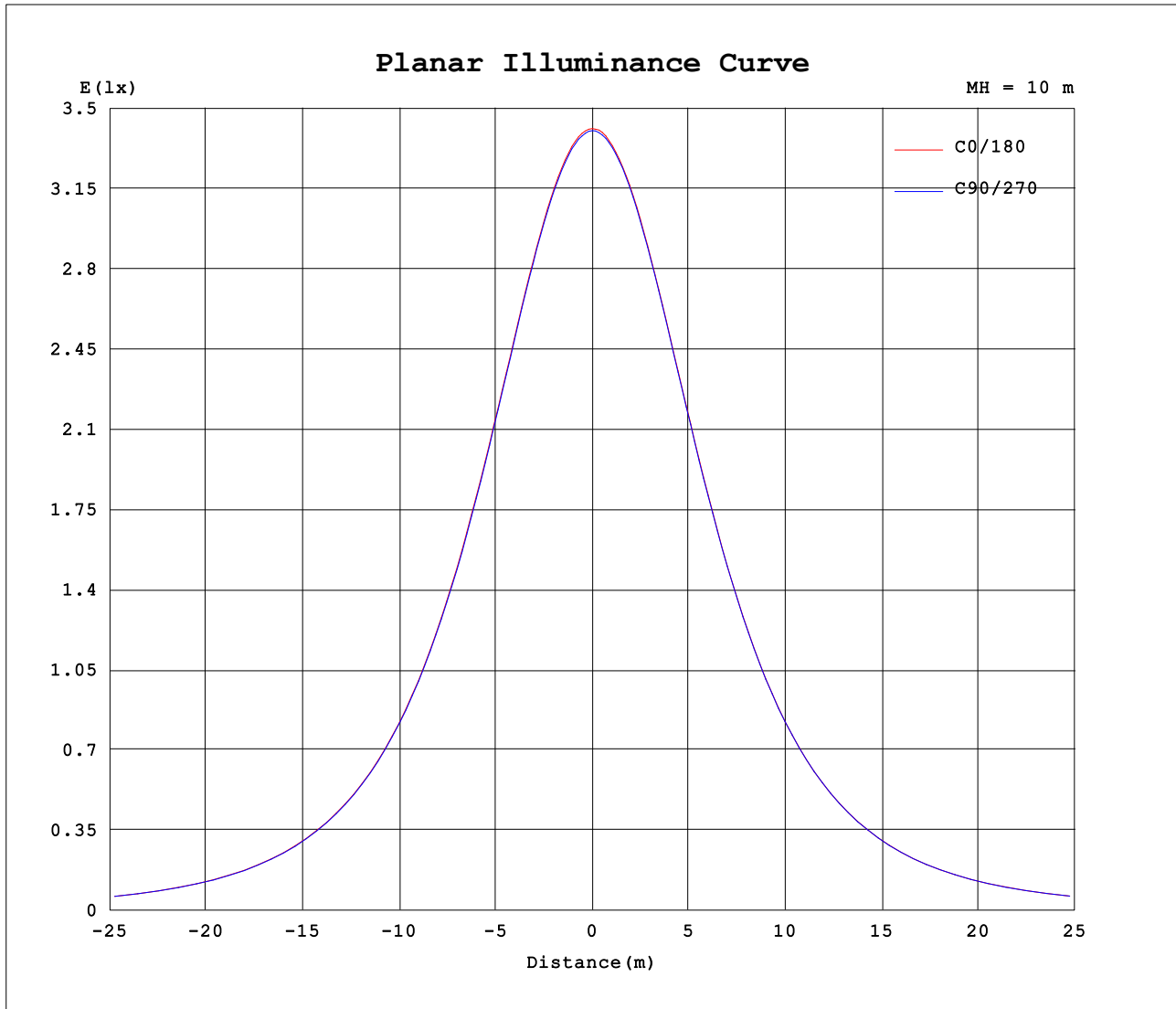


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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Planar Illuminance Curve



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LUMINOUS DISTRIBUTION INTENSITY DATA

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NAME:	TYPE:DSK6R15927120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	341	340	341	340															
5	340	338	340	339															
10	335	334	336	335															
15	328	327	329	328															
20	318	317	319	318															
25	305	304	306	306															
30	290	289	291	290															
35	273	271	274	274															
40	253	252	255	254															
45	232	231	233	233															
50	209	208	211	210															
55	185	184	186	186															
60	160	159	161	161															
65	134	133	135	135															
70	108	107	110	109															
75	83.2	82.4	84.7	84.5															
80	60.6	59.8	61.8	61.7															
85	41.0	40.3	41.9	41.8															
90	25.0	24.3	25.5	25.6															
95	12.7	9.11	13.0	11.7															
100	0.93	2.23	4.07	2.06															
105	1.09	1.07	1.25	1.12															
110	1.29	1.31	1.45	1.31															
115	1.51	1.52	1.67	1.56															
120	1.72	1.73	1.88	1.76															
125	1.93	1.94	2.09	1.98															
130	2.11	2.16	2.30	2.19															
135	2.30	2.33	2.48	2.40															
140	2.43	2.45	2.58	2.56															
145	2.53	2.55	2.68	2.64															
150	2.68	2.70	2.83	2.75															
155	2.71	2.77	2.86	2.82															
160	2.84	2.90	2.97	2.92															
165	3.02	3.09	3.15	3.09															
170	3.11	3.14	3.19	3.13															
175	3.14	3.16	3.20	3.15															
180	3.20	3.20	3.22	3.18															

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γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:65.0%
Test Distance:11.160m [K=1.0000]
Remarks: