

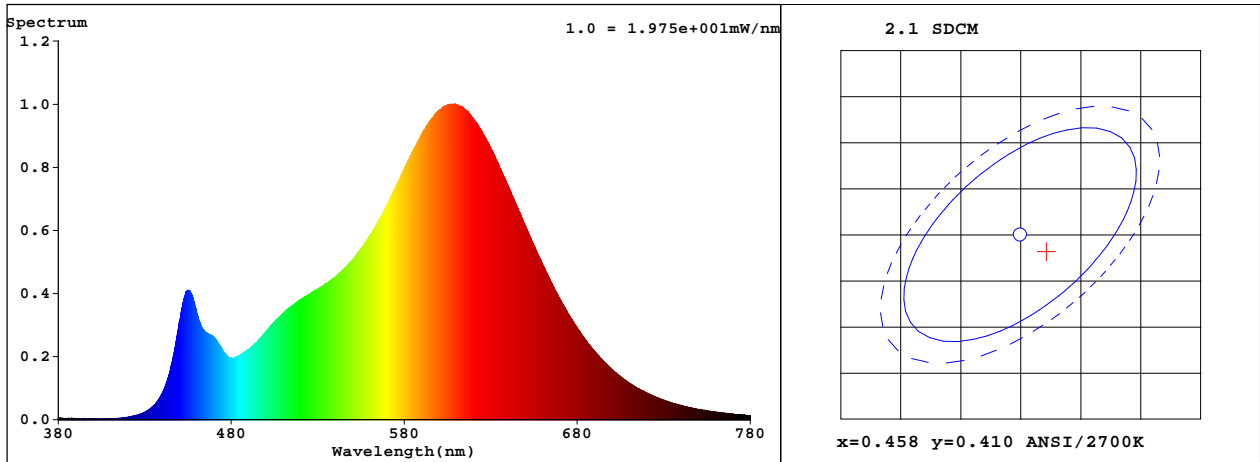
Spectrum Test Report

Sample :	Date :	2019-11-08 13:08:53
Specification : DSK6R11827120W	Sam. Status :	
Sample No. :	Instrument :	HaasSuite(EVERFINE)
Manufacturer : RAB LIGHTING INC	Test by :	
	Assessor :	damin

Test Condition

Temperature : 22.9Deg	RH :	65.0%
WL Range : 380nm-780nm	IP :	52440 (80%)
Test Mode : Fast Test	T :	54 ms
	Sensitivity :	High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4600$ $y = 0.4083$ / $u' = 0.2636$ $v' = 0.5265$ ($duv = -8.71e-04$)

CCT= 2680K Prcp WL: Ld=584.6nm Purity=60.6%

Peak WL: Lp=609nm FWHM: =110.3nm Ratio:R=25.7% G=71.8% B=2.6%

Render Index: Ra = 83.5 CRI = 79.4 AvgR = 79.1

R1 =83 R2 =95 R3 =92 R4 =81 R5 =84 R6 =95 R7 =80

R8 =58 R9 =11 R10=89 R11=81 R12=79 R13=87 R14=96 R15=75

WHITE:ANSI_2700K

Photometric & Radiometric Parameters

Flux = 878.46 lm Eff. : 81.38 lm/W Fe = 2.7369 W

Flux of emitted photons(umol/s):13.449 Flu. and blue light ratio:11.01 Fluorescent eff.:214.0

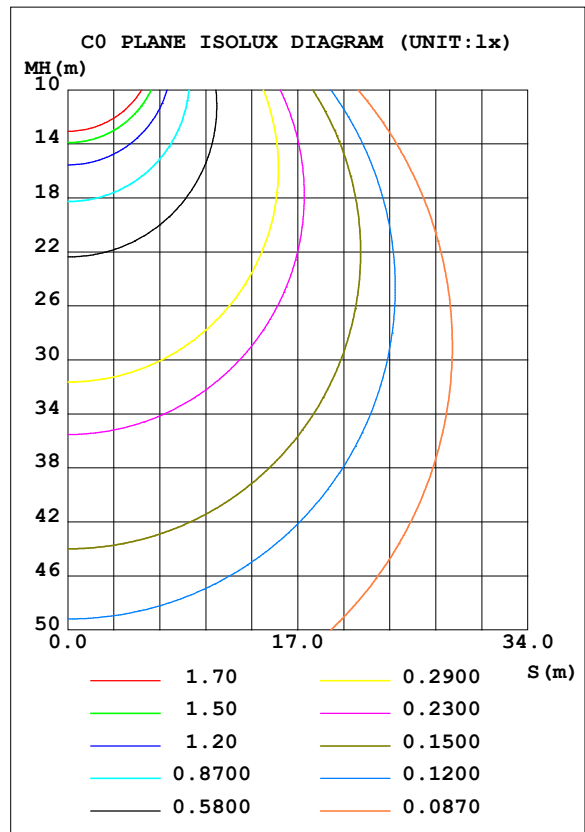
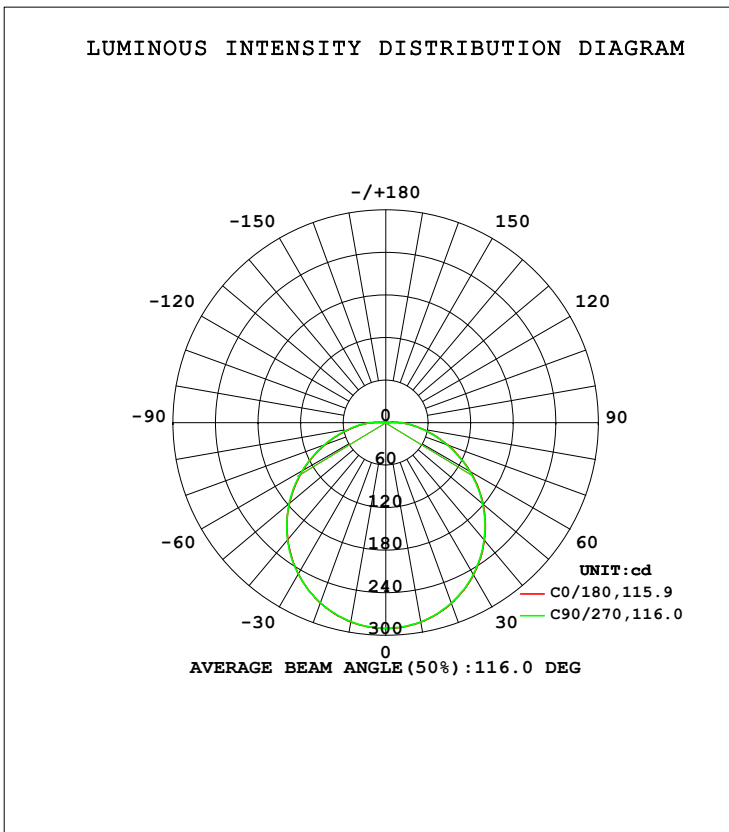
Electrical parameters

V = 120.1 V I = 0.09761 A P = 10.79 W PF = 0.9204 F=59.98 Hz

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.1V I:0.0976A P:10.80W PF:0.9211 Freq:0Hz Lamp Flux:912.351x1 lm		
NAME:	TYPE:DSK6R11827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 84.51 lm/W			
MODEL		I _{max} (cd)	290.2	S/MH (C0/180)	1.26
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.27
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	912.35	η UP, DN (C0-180)	1.1, 49.1
NOMINAL FLUX (lm)	912.351	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.1, 48.8
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



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	285.6	285.2	285.4	284.8				0- 10	27.46	27.46	3.01,3.01
20	271.1	270.6	270.4	270.1				10- 20	78.77	106.2	11.6,11.6
30	247.6	247.2	246.6	246.7				20- 30	119.8	226.0	24.8,24.8
40	216.6	215.9	215.1	215.6				30- 40	145.3	371.3	40.7,40.7
50	179.3	178.4	177.5	178.2				40- 50	152.6	523.9	57.4,57.4
60	137.4	136.4	135.3	136.4				50- 60	141.0	664.9	72.9,72.9
70	93.50	92.46	91.39	92.62				60- 70	113.2	778.2	85.3,85.3
80	52.81	52.00	50.98	52.21				70- 80	75.66	853.8	93.6,93.6
90	21.65	21.02	20.50	21.53				80- 90	38.80	892.6	97.8,97.8
100	1.794	1.585	2.899	1.744				90-100	10.68	903.3	99,99
110	1.073	1.121	1.279	1.120				100-110	1.175	904.5	99.1,99.1
120	1.444	1.484	1.634	1.484				110-120	1.318	905.8	99.3,99.3
130	1.783	1.855	1.981	1.870				120-130	1.518	907.3	99.4,99.4
140	2.038	2.139	2.194	2.154				130-140	1.558	908.9	99.6,99.6
150	2.217	2.312	2.352	2.312				140-150	1.386	910.3	99.8,99.8
160	2.391	2.486	2.549	2.502				150-160	1.102	911.4	99.9,99.9
170	2.565	2.667	2.691	2.640				160-170	0.7270	912.1	100,100
180	2.731	2.746	2.754	2.699				170-180	0.2557	912.4	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

Conical surface Flux(90deg): 447.89 lm

%lum = 49.1%

%lamp = 49.1%

Conical surface Flux(120deg): 664.93 lm

%lum = 72.9%

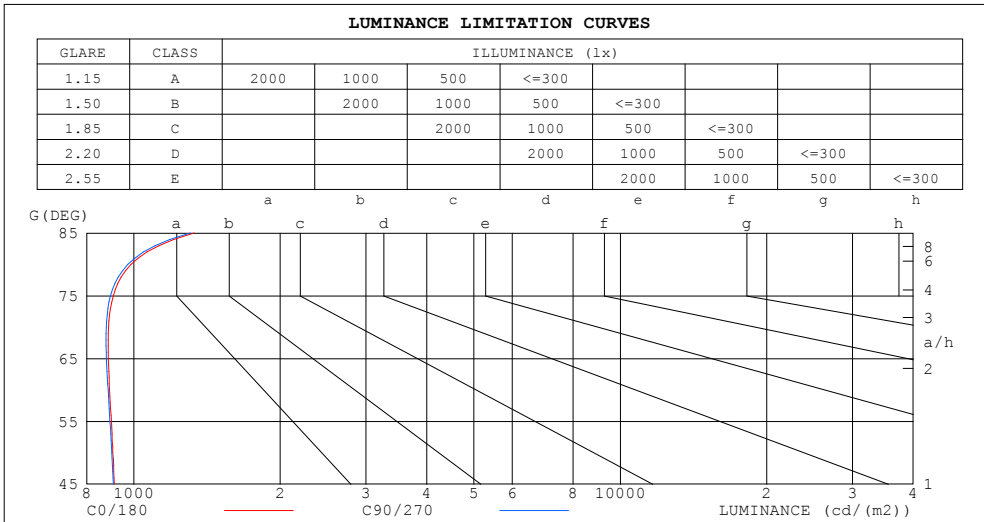
%lamp = 72.9%

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
 γ 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:120.1V I:0.0976A P:10.80W PF:0.9211 Freq:0Hz Lamp Flux:912.35lx1 lm		
NAME:	TYPE:DSK6R11827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1331	1305
80	987	972
75	907	895
70	888	878
65	887	879
60	892	885
55	899	893
50	906	901
45	912	908

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 C Interval: 90.0DEG
 Test Speed: HIGH
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 Test Date:2019-11-08

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 Humidity:65.0%
 Test Distance:11.160m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.1V I:0.0976A P:10.80W PF:0.9211 Freq:0Hz Lamp Flux:912.351x1 lm		
NAME:	TYPE:DSK6R11827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding 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	.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	.268	.151	.048	
3.0	.283	.150	.045	.276	.148	.045	.265	.144	.044	.254	.139	.043	.244	.135	.042	
4.0	.258	.134	.039	.253	.132	.039	.242	.129	.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	.093	.027	
8.0	.189	.092	.026	.185	.091	.026	.179	.089	.025	.172	.087	.025	.167	.086	.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	

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	.207	.207	.207	.177	.177	.177	.121	.121	.121	.069	.069	.069	.022	.022	.022	
1.0	.199	.172	.148	.170	.148	.128	.117	.102	.088	.067	.059	.051	.021	.019	.017	
2.0	.191	.149	.112	.164	.128	.097	.112	.088	.068	.065	.051	.040	.021	.017	.013	
3.0	.184	.131	.089	.157	.113	.077	.108	.079	.054	.062	.046	.032	.020	.015	.010	
4.0	.176	.118	.074	.151	.102	.064	.104	.071	.045	.060	.042	.027	.019	.014	.009	
5.0	.168	.108	.063	.145	.093	.055	.100	.065	.039	.058	.038	.023	.019	.012	.008	
6.0	.161	.099	.055	.138	.086	.048	.095	.060	.034	.055	.035	.020	.018	.012	.007	
7.0	.154	.093	.050	.132	.080	.043	.091	.056	.031	.053	.033	.018	.017	.011	.006	
8.0	.147	.087	.045	.127	.075	.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	.135	.078	.039	.117	.067	.034	.081	.047	.024	.047	.028	.015	.015	.009	.005	

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:

UGR(Unified Glare Rating) Table

Test:U:120.1V I:0.0976A P:10.80W PF:0.9211 Freq:0Hz Lamp Flux:912.351x1 lm										
NAME:					TYPE:DSK6R11827120W			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	12.7	14.2	13.0	14.4	14.7	12.6	14.2	12.9	14.4	14.7
3H	14.4	15.8	14.7	16.1	16.4	14.4	15.8	14.7	16.1	16.4
4H	15.2	16.6	15.6	16.9	17.2	15.2	16.5	15.5	16.8	17.1
6H	16.0	17.2	16.3	17.6	17.9	15.9	17.2	16.3	17.5	17.8
8H	16.3	17.5	16.7	17.9	18.2	16.2	17.5	16.6	17.8	18.2
12H	16.7	17.9	17.1	18.2	18.6	16.6	17.8	17.0	18.1	18.5
4H 2H	13.3	14.7	13.7	15.0	15.3	13.3	14.7	13.7	15.0	15.3
3H	15.3	16.5	15.7	16.8	17.2	15.2	16.4	15.6	16.8	17.1
4H	16.2	17.3	16.6	17.7	18.1	16.2	17.3	16.6	17.6	18.0
6H	17.1	18.1	17.6	18.5	18.9	17.1	18.1	17.5	18.5	18.9
8H	17.6	18.5	18.0	18.9	19.3	17.5	18.4	18.0	18.8	19.3
12H	18.0	18.9	18.5	19.3	19.8	18.0	18.8	18.4	19.2	19.7
8H 4H	16.6	17.5	17.0	17.9	18.4	16.6	17.5	17.0	17.9	18.3
6H	17.7	18.5	18.2	18.9	19.4	17.7	18.4	18.2	18.9	19.4
8H	18.3	19.0	18.8	19.5	20.0	18.3	18.9	18.8	19.4	19.9
12H	18.9	19.5	19.4	20.0	20.5	18.9	19.5	19.4	20.0	20.5
12H 4H	16.6	17.5	17.1	17.9	18.4	16.6	17.5	17.1	17.9	18.3
6H	17.9	18.5	18.4	19.0	19.5	17.8	18.5	18.3	19.0	19.5
8H	18.5	19.1	19.0	19.6	20.1	18.5	19.1	19.0	19.6	20.1
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, 912.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.3)

C Range: 0 - 360DEG
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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:

UTILIZATION FACTORS TABLE

Test:U:120.1V I:0.0976A P:10.80W PF:0.9211 Freq:0Hz Lamp Flux:912.351x1 lm		
NAME:	TYPE:DSK6R11827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding Angle:

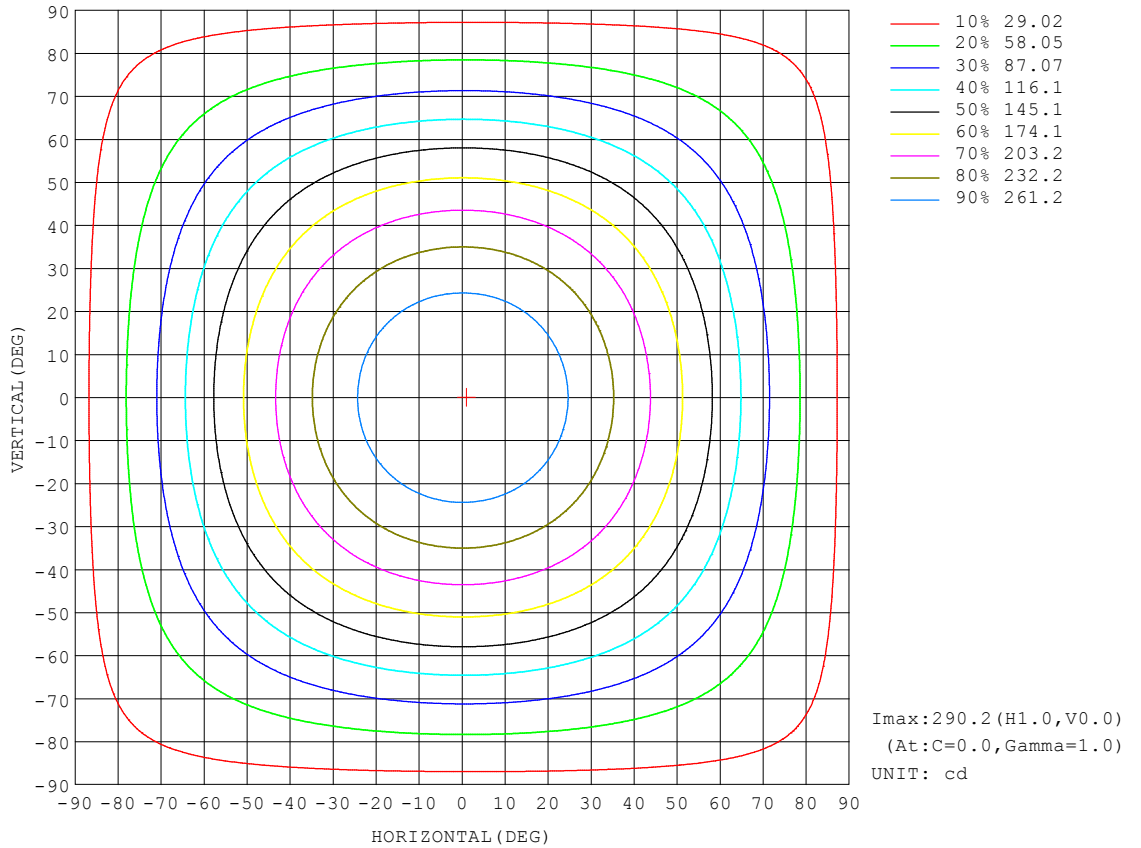
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	43	36	54	43	36	53	43	36	29
0.80	65	53	45	64	53	45	62	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	74	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:120.1V I:0.0976A P:10.80W PF:0.9211 Freq:0Hz Lamp Flux:912.35lx1 lm		
NAME:	TYPE:DSK6R11827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC	SUR.:	Shielding Angle:

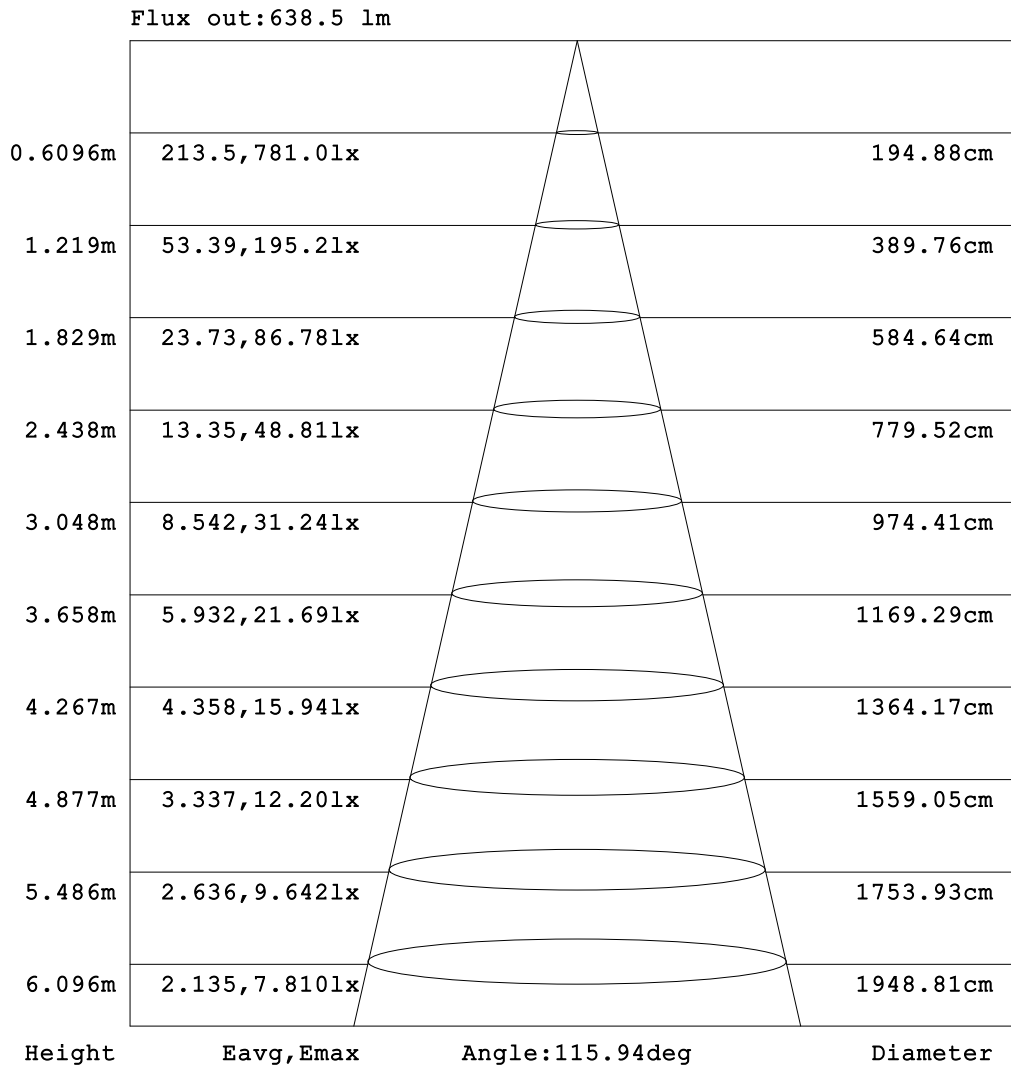


C Range: 0 - 360DEG
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 Remarks:

AAI Figure

Test:U:120.1V I:0.0976A P:10.80W PF:0.9211 Freq:0Hz Lamp Flux:912.35lx1 lm		
NAME:	TYPE:DSK6R11827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
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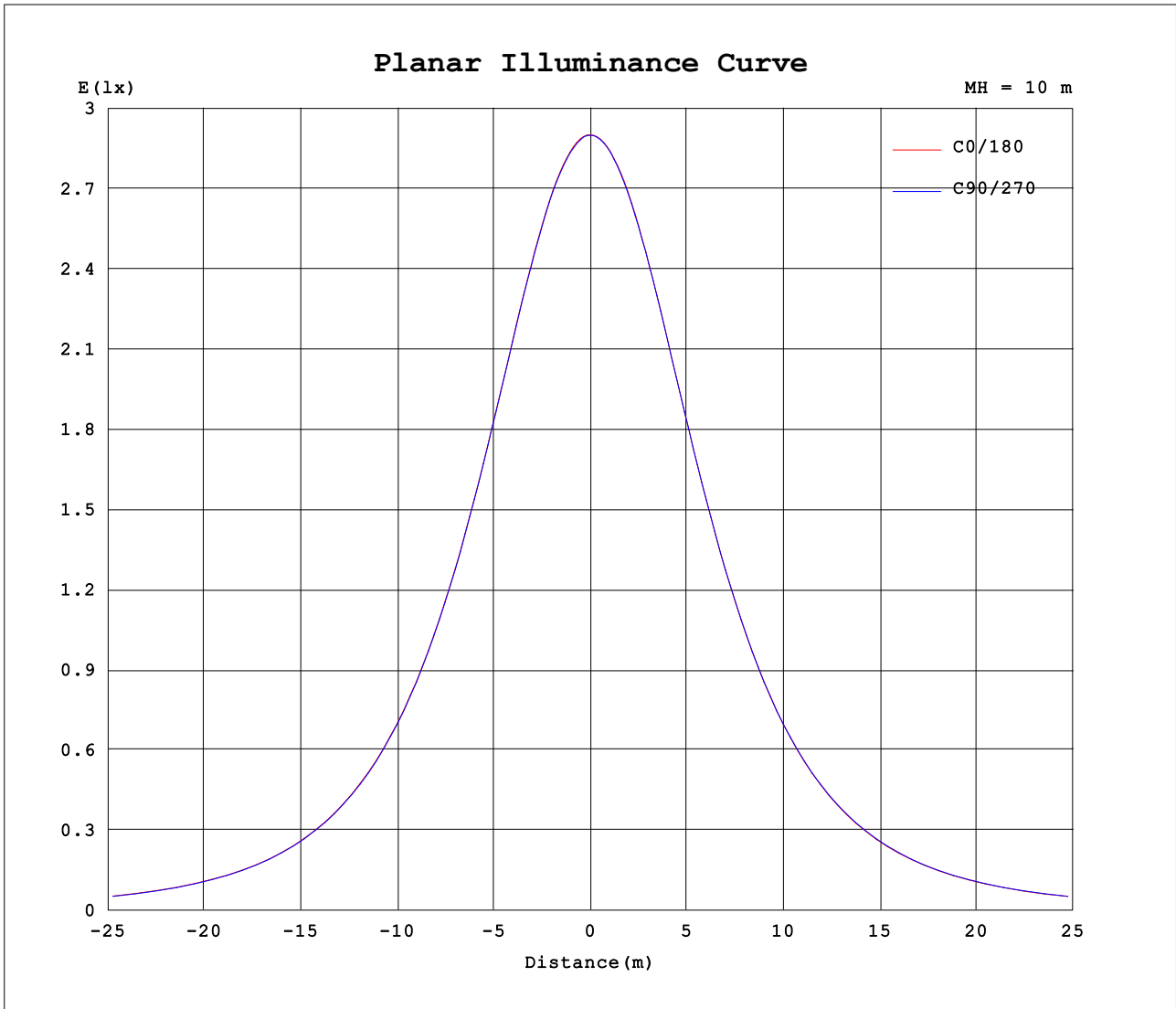


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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Planar Illuminance Curve



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LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.1V I:0.0976A P:10.80W PF:0.9211 Freq:0Hz Lamp Flux:912.35lx1 lm		
NAME:	TYPE:DSK6R11827120W	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	290	290	290	290															
5	289	289	289	289															
10	286	285	285	285															
15	280	279	279	279															
20	271	271	270	270															
25	260	260	260	259															
30	248	247	247	247															
35	233	232	232	232															
40	217	216	215	216															
45	199	198	197	197															
50	179	178	177	178															
55	159	158	157	158															
60	137	136	135	136															
65	115	114	113	114															
70	93.5	92.5	91.4	92.6															
75	72.3	71.3	70.2	71.5															
80	52.8	52.0	51.0	52.2															
85	35.7	35.0	34.2	35.4															
90	21.6	21.0	20.5	21.5															
95	10.8	7.31	10.1	9.33															
100	1.79	1.59	2.90	1.74															
105	0.90	0.96	1.09	0.96															
110	1.07	1.12	1.28	1.12															
115	1.25	1.30	1.45	1.30															
120	1.44	1.48	1.63	1.48															
125	1.61	1.67	1.82	1.67															
130	1.78	1.85	1.98	1.87															
135	1.94	2.00	2.13	2.03															
140	2.04	2.14	2.19	2.15															
145	2.12	2.18	2.30	2.24															
150	2.22	2.31	2.35	2.31															
155	2.27	2.39	2.45	2.38															
160	2.39	2.49	2.55	2.50															
165	2.51	2.60	2.63	2.61															
170	2.56	2.67	2.69	2.64															
175	2.64	2.72	2.75	2.67															
180	2.73	2.75	2.75	2.70															

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