

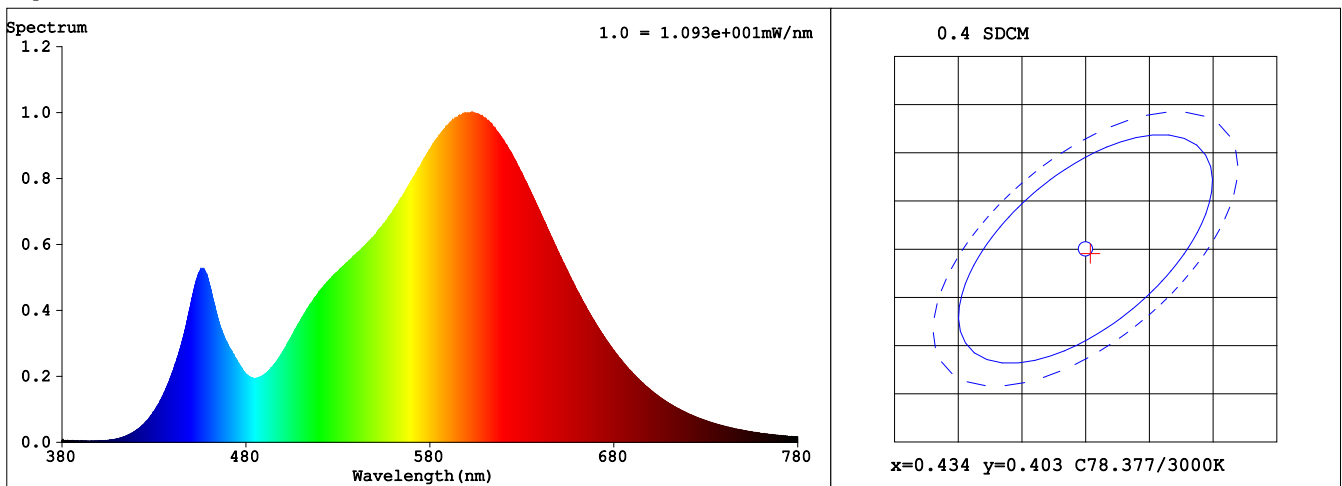
## Spectrum Test Report

Sample	:	Date	:	2019-11-08 01:50:04
Specification	:	Sam. Status	:	
Sample No.	:	Standard	:	
Manufacturer	:	Instrument	:	HaasSuite(EVERFINE)
Remark	:	Test by	:	yang yi (2.0)

### Test Condition

Temperature	:	25.3Deg	RH	:	30.1%
WL Range	:	380nm-780nm	IP	:	52360 (80%)
Test Mode	:	Fast Test	T	:	343 ms
Sensitivity	:	High			

### Spectrum



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.4342$   $y = 0.4027$  /  $u' = 0.2494$   $v' = 0.5204$  ( $duv = -1.70e-04$ )

CCT= 3035K Prcp WL:  $L_d = 582.7nm$  Purity=51.2%

Peak WL:  $L_p = 603nm$  FWHM: =129.8nm Ratio:R=22.5% G=75.0% B=2.5%

Render Index:  $R_a = 81.2$  TM30:Rf=81 Rg=95

R1 =79 R2 =90 R3 =96 R4 =78 R5 =79 R6 =87 R7 =82

R8 =58 R9 =3 R10=76 R11=76 R12=67 R13=82 R14=99 R15=72

LEVEL:OUT WHITE:ANSI\_3000K

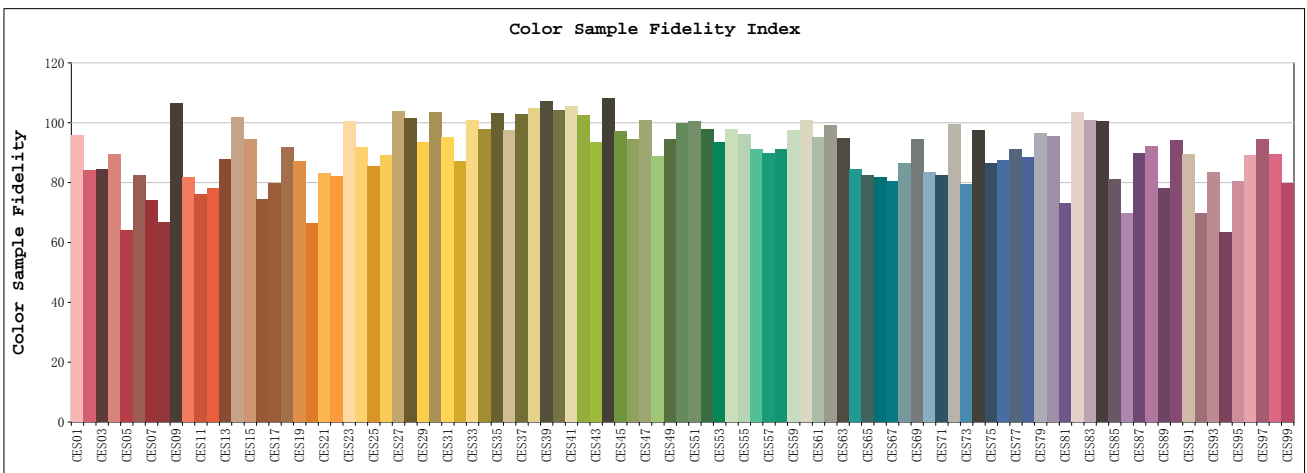
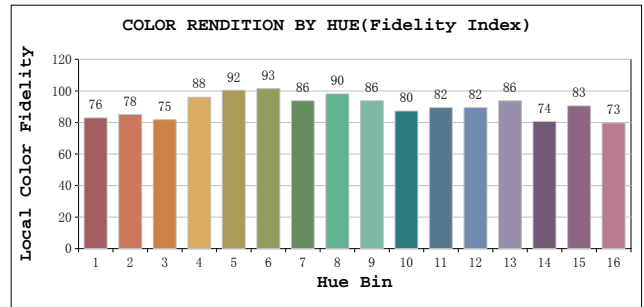
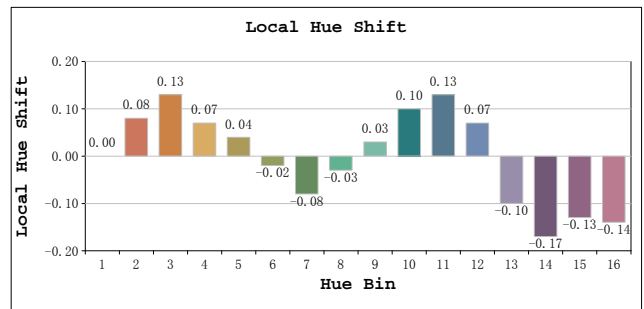
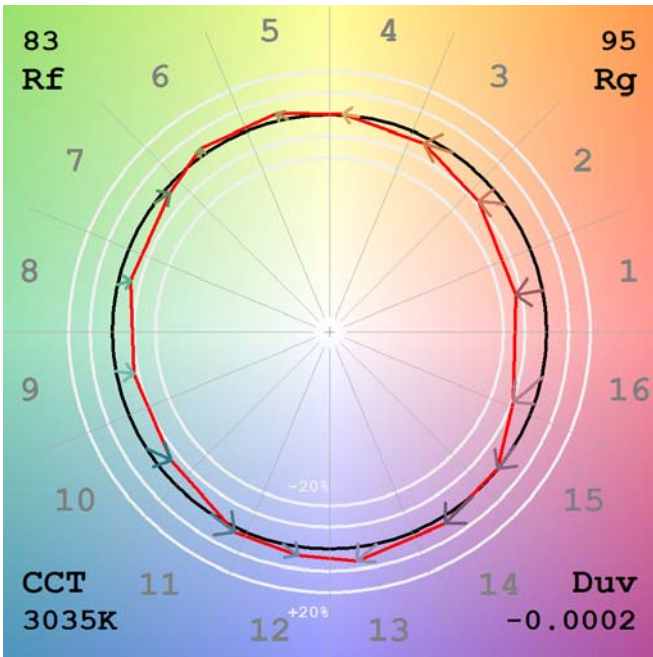
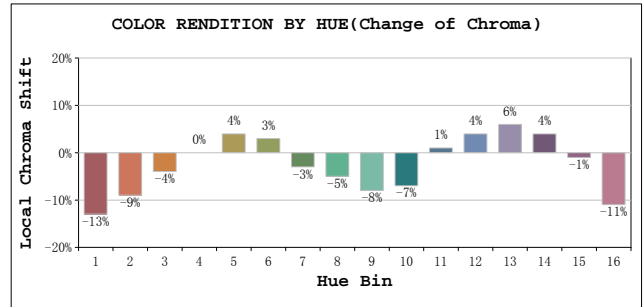
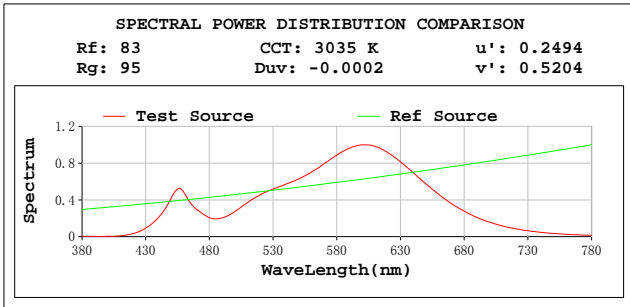
### Photometric & Radiometric Parameters

Flux = 539.75 lm Eff. : 94.20 lm/W  $F_e = 1.6367 W$

### Electrical parameters

V = 120.04 V I = 0.06040 A P = 5.730 W PF = 0.7903

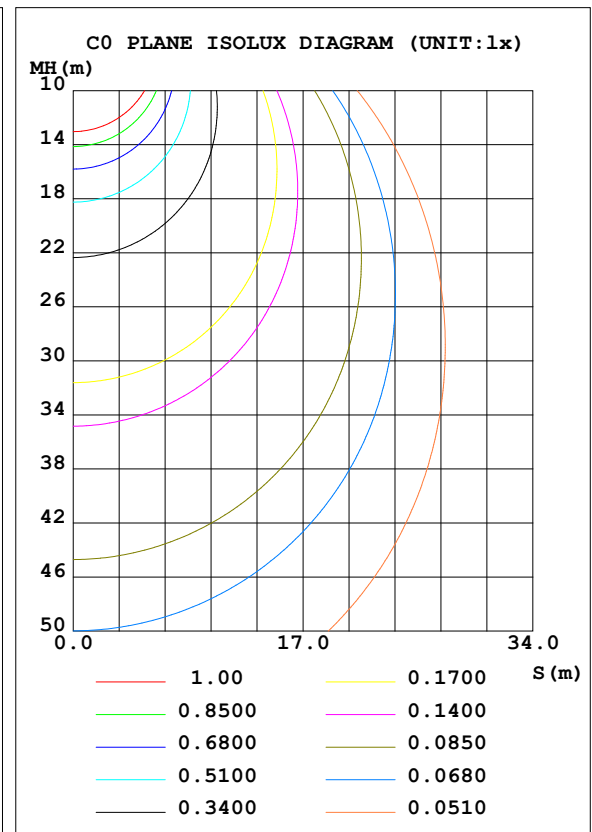
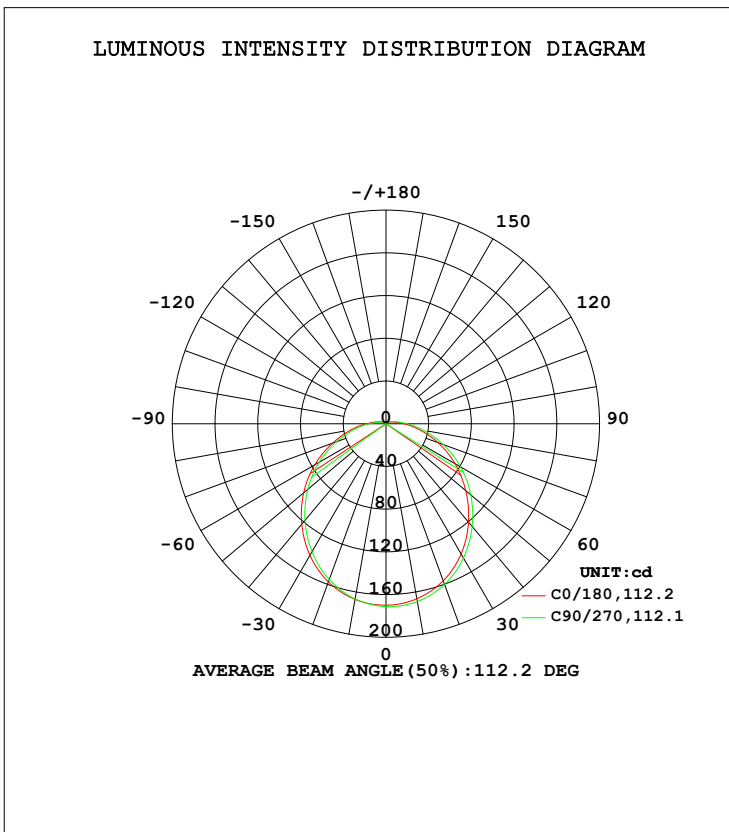
# TM30



LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	WEIGHT: /
SPEC.: /	DIM.: /	SERIAL No.: /
MFR.: RAB Lighting Inc	SUR.: /	Shielding Angle: /

DATA OF LAMP		PHOTOMETRIC DATA Eff: 95.26 lm/W			
MODEL	/	I <sub>max</sub> (cd)	171.8	S/MH (C0/180)	1.25
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	544.91	η UP, DN (C0-180)	3.0, 48.4
NOMINAL FLUX (lm)	544.908	CIE CLASS	DIRECT	η UP, DN (C180-360)	2.6, 46.1
LAMPS INSIDE	1	η up (%)	5.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	η down (%)	94.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LXJ  
 Test Date: 2019-11-07

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 28.2%  
 Test Distance: 1.191m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

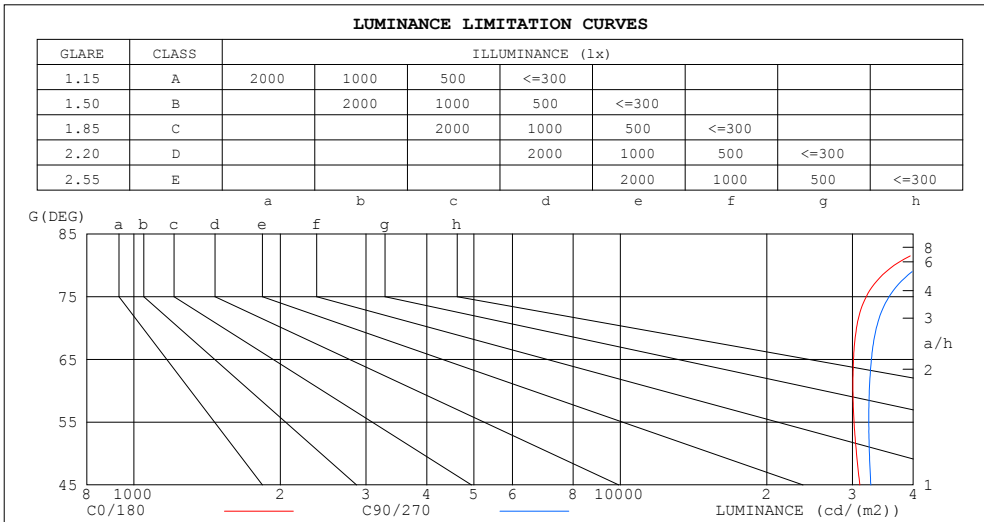
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	168.9	170.2	171.0	171.3	169.3	169.5	169.7	170.2	0- 5	4.077	4.077	0.75,0.75
10	166.4	168.0	168.9	169.3	167.0	166.7	166.5	167.1	5- 10	12.08	16.16	2.97,2.97
15	162.2	164.3	165.4	165.6	163.1	162.3	161.7	162.3	10- 15	19.64	35.80	6.57,6.57
20	156.5	159.0	160.1	160.2	157.6	156.3	155.3	156.1	15- 20	26.47	62.27	11.4,11.4
25	149.3	152.1	153.3	153.4	150.6	148.9	147.5	148.3	20- 25	32.33	94.61	17.4,17.4
30	140.7	143.8	145.1	145.2	142.3	140.2	138.5	139.4	25- 30	37.02	131.6	24.2,24.2
35	130.9	134.3	135.7	136.0	133.0	130.6	128.6	129.4	30- 35	40.40	172.0	31.6,31.6
40	120.2	123.7	125.5	125.9	122.8	120.3	118.0	118.6	35- 40	42.42	214.5	39.4,39.4
45	109.0	112.6	114.8	115.2	112.0	109.2	107.0	107.4	40- 45	43.11	257.6	47.3,47.3
50	97.51	101.1	103.7	104.0	100.7	97.69	95.60	96.04	45- 50	42.53	300.1	55.1,55.1
55	86.03	89.40	92.25	92.52	88.99	85.95	84.04	84.64	50- 55	40.78	340.9	62.6,62.6
60	74.59	77.79	80.60	80.73	77.07	73.95	72.34	73.17	55- 60	37.98	378.8	69.5,69.5
65	63.20	66.21	68.77	68.63	65.06	61.95	60.68	61.74	60- 65	34.23	413.1	75.8,75.8
70	51.89	54.70	57.00	56.69	53.40	50.41	49.33	50.36	65- 70	29.74	442.8	81.3,81.3
75	41.14	43.85	45.82	45.56	42.71	39.93	38.90	39.66	70- 75	24.84	467.6	85.8,85.8
80	31.50	34.07	35.80	35.69	33.29	30.72	29.69	30.19	75- 80	19.96	487.6	89.5,89.5
85	23.38	25.62	27.14	27.20	25.24	22.97	21.95	22.25	80- 85	15.45	503.1	92.3,92.3
90	16.89	18.68	20.00	20.15	18.66	16.78	15.88	16.03	85- 90	11.53	514.6	94.4,94.4
95	12.14	13.46	14.53	14.67	13.60	12.20	11.52	11.58	90- 95	8.379	523.0	96,96
100	8.951	9.877	10.65	10.78	10.03	8.998	8.562	8.606	95-100	6.066	529.0	97.1,97.1
105	6.819	7.483	7.999	8.094	7.527	6.801	6.506	6.563	100-105	4.460	533.5	97.9,97.9
110	5.248	5.745	6.113	6.149	5.710	5.179	4.960	5.014	105-110	3.315	536.8	98.5,98.5
115	4.039	4.422	4.683	4.686	4.329	3.943	3.801	3.840	110-115	2.454	539.3	99,99
120	3.096	3.400	3.587	3.581	3.300	3.004	2.899	2.921	115-120	1.803	541.1	99.3,99.3
125	2.332	2.580	2.729	2.726	2.503	2.267	2.185	2.190	120-125	1.305	542.4	99.5,99.5
130	1.724	1.931	2.042	2.050	1.881	1.688	1.617	1.606	125-130	0.9226	543.3	99.7,99.7
135	1.237	1.411	1.506	1.523	1.393	1.230	1.165	1.139	130-135	0.6330	543.9	99.8,99.8
140	0.8525	1.001	1.087	1.115	1.011	0.8719	0.8090	0.7718	135-140	0.4179	544.3	99.9,99.9
145	0.5284	0.6733	0.7640	0.7995	0.7155	0.5994	0.5366	0.4927	140-145	0.2626	544.6	99.9,99.9
150	0.2122	0.3972	0.5202	0.5587	0.4912	0.3992	0.3352	0.2918	145-150	0.1521	544.8	100,100
155	0.1076	0.1186	0.3451	0.3810	0.3298	0.2621	0.1976	0.1594	150-155	0.0795	544.8	100,100
160	0.0857	0.0938	0.2301	0.2587	0.2209	0.1769	0.1146	0.0859	155-160	0.0425	544.9	100,100
165	0.0459	0.0810	0.1231	0.1625	0.1396	0.1165	0.0729	0.0380	160-165	0.0214	544.9	100,100
170	0.0215	0.0445	0.0581	0.0772	0.0261	0.0249	0.0371	0.0217	165-170	0.0076	544.9	100,100
175	0.0127	0.0127	0.0158	0.0132	0.0125	0.0128	0.0130	0.0127	170-175	0.0019	544.9	100,100
180	0.0007	0.0004	0.0006	0.0004	0.0005	0.0007	0.0006	0.0007	175-180	0.0002	544.9	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LXJ  
 Test Date:2019-11-07

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:28.2%  
 Test Distance:1.191m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	WEIGHT: /
SPEC.: /	DIM.: /	SERIAL No.: /
MFR.: RAB Lighting Inc	SUR.: /	Shielding Angle: /



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	54086	62774
80	36577	41562
75	32047	35695
70	30588	33601
65	30151	32809
60	30077	32499
55	30240	32425
50	30583	32518
45	31076	32734

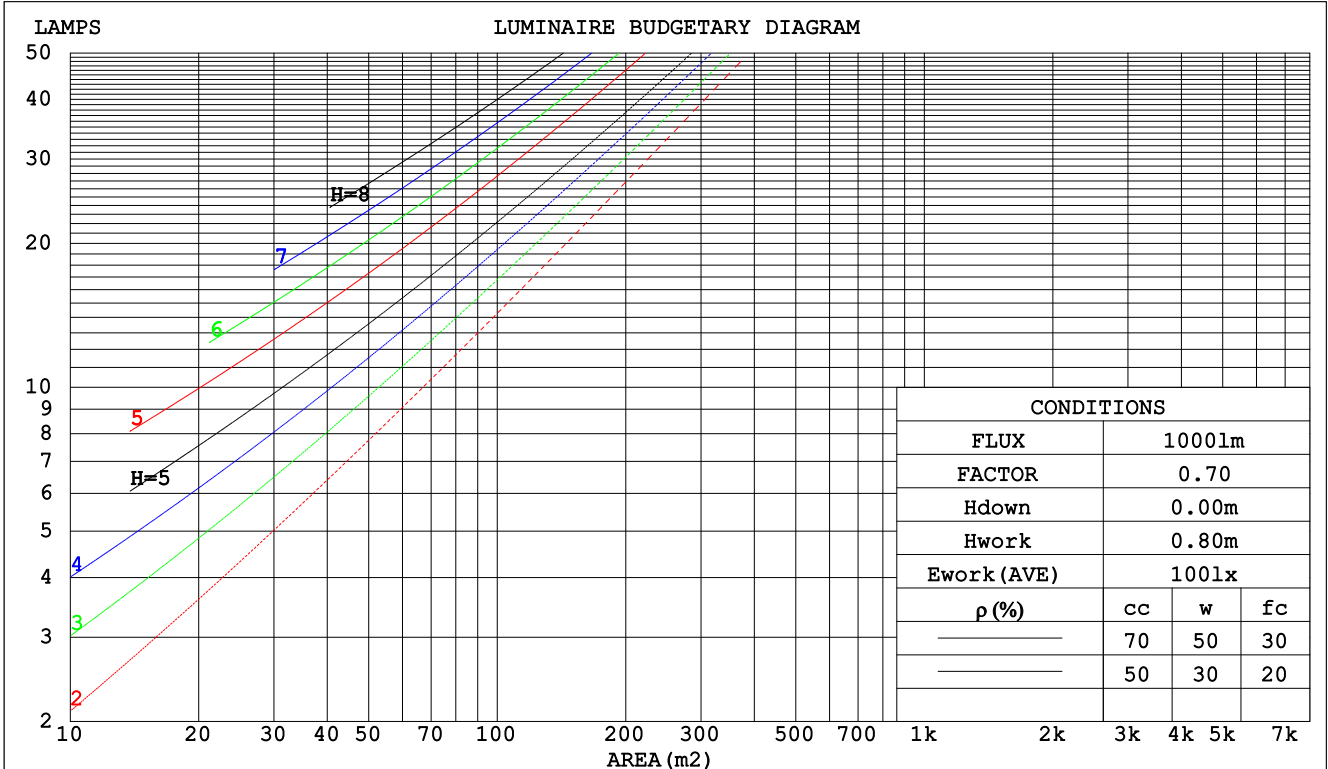
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LXJ  
 Test Date: 2019-11-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 28.2%  
 Test Distance: 1.191m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	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						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.97	.97	.97	.94
1.0	1.01	.96	.91	.98	.93	.89	.92	.89	.85	.87	.85	.82	.83	.81	.78	.76
2.0	.87	.80	.73	.85	.78	.72	.80	.74	.70	.76	.71	.67	.72	.68	.65	.62
3.0	.76	.67	.61	.74	.66	.60	.70	.63	.58	.67	.61	.56	.63	.59	.55	.52
4.0	.67	.58	.51	.66	.57	.50	.62	.55	.49	.59	.53	.48	.56	.51	.47	.44
5.0	.60	.51	.44	.58	.50	.43	.56	.48	.42	.53	.47	.41	.51	.45	.40	.38
6.0	.54	.45	.38	.53	.44	.38	.50	.43	.37	.48	.41	.36	.46	.40	.35	.33
7.0	.49	.40	.34	.48	.39	.33	.46	.38	.33	.44	.37	.32	.42	.36	.31	.29
8.0	.45	.36	.30	.44	.35	.30	.42	.34	.29	.40	.34	.29	.39	.33	.28	.26
9.0	.41	.33	.27	.40	.32	.27	.38	.31	.26	.37	.31	.26	.36	.30	.25	.24
10.0	.38	.30	.24	.37	.29	.24	.36	.29	.24	.34	.28	.23	.33	.27	.23	.21



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LXJ  
 Test Date: 2019-11-07

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 28.2%  
 Test Distance: 1.191m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	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	.348	.198	.063	.339	.193	.061	.322	.185	.059	.307	.177	.057	.293	.170	.055	
2.0	.312	.171	.052	.304	.167	.052	.289	.161	.050	.276	.155	.048	.263	.149	.047	
3.0	.282	.150	.045	.275	.147	.044	.262	.142	.043	.250	.137	.042	.239	.132	.041	
4.0	.257	.134	.039	.251	.131	.039	.239	.127	.038	.228	.123	.037	.218	.118	.036	
5.0	.236	.120	.035	.230	.118	.034	.220	.114	.034	.210	.111	.033	.200	.107	.032	
6.0	.217	.109	.031	.212	.107	.031	.203	.104	.030	.194	.101	.030	.186	.098	.029	
7.0	.201	.100	.028	.197	.098	.028	.188	.095	.027	.180	.092	.027	.173	.090	.026	
8.0	.188	.092	.026	.183	.090	.026	.176	.088	.025	.168	.085	.025	.161	.083	.024	
9.0	.175	.085	.024	.172	.084	.023	.165	.081	.023	.158	.079	.023	.152	.077	.022	
10.0	.165	.079	.022	.161	.078	.022	.155	.076	.021	.149	.074	.021	.143	.072	.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	.233	.233	.233	.199	.199	.199	.136	.136	.136	.078	.078	.078	.025	.025	.025	
1.0	.226	.199	.174	.193	.170	.150	.132	.117	.104	.076	.068	.060	.024	.022	.019	
2.0	.218	.175	.139	.187	.151	.120	.128	.104	.084	.074	.061	.049	.024	.020	.016	
3.0	.210	.158	.116	.180	.136	.100	.124	.094	.070	.071	.055	.042	.023	.018	.014	
4.0	.202	.145	.101	.174	.125	.087	.119	.087	.062	.069	.051	.036	.022	.017	.012	
5.0	.195	.134	.090	.167	.116	.078	.115	.081	.055	.067	.048	.033	.021	.016	.011	
6.0	.187	.126	.082	.161	.109	.072	.111	.076	.051	.064	.045	.030	.021	.015	.010	
7.0	.180	.119	.077	.155	.103	.067	.107	.073	.047	.062	.043	.028	.020	.014	.009	
8.0	.174	.114	.072	.149	.099	.063	.103	.069	.045	.060	.041	.027	.019	.013	.009	
9.0	.167	.109	.069	.144	.094	.060	.100	.066	.043	.058	.039	.026	.019	.013	.008	
10.0	.162	.104	.066	.139	.091	.058	.097	.064	.041	.056	.038	.025	.018	.012	.008	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
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γ Range: 0 - 180DEG  
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 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:28.2%  
 Test Distance:1.191m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm										
NAME: R20-7-830-DIM					TYPE: /			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	24.3	25.8	24.7	26.1	26.4	24.6	26.1	25.0	26.4	26.7
3H	26.1	27.5	26.5	27.8	28.1	26.5	27.8	26.9	28.2	28.5
4H	26.9	28.2	27.3	28.6	29.0	27.4	28.7	27.8	29.0	29.4
6H	27.8	29.0	28.2	29.4	29.8	28.3	29.5	28.7	29.9	30.3
8H	28.2	29.4	28.6	29.8	30.2	28.7	29.9	29.2	30.3	30.7
12H	28.6	29.8	29.1	30.2	30.6	29.2	30.4	29.7	30.8	31.2
4H 2H	25.0	26.3	25.4	26.7	27.1	25.2	26.6	25.6	26.9	27.3
3H	27.0	28.1	27.4	28.5	29.0	27.3	28.5	27.8	28.9	29.3
4H	28.0	29.1	28.5	29.5	29.9	28.4	29.4	28.8	29.9	30.3
6H	29.0	29.9	29.5	30.4	30.9	29.5	30.4	29.9	30.9	31.3
8H	29.5	30.4	30.0	30.9	31.4	30.0	30.9	30.5	31.4	31.9
12H	30.1	30.9	30.6	31.4	31.9	30.7	31.5	31.2	32.0	32.5
8H 4H	28.4	29.3	28.9	29.8	30.3	28.8	29.6	29.3	30.1	30.6
6H	29.7	30.4	30.2	30.9	31.5	30.1	30.8	30.6	31.3	31.9
8H	30.4	31.0	30.9	31.6	32.1	30.8	31.5	31.4	32.0	32.6
12H	31.1	31.7	31.7	32.2	32.8	31.7	32.2	32.2	32.8	33.4
12H 4H	28.5	29.3	29.0	29.8	30.3	28.8	29.6	29.3	30.1	30.6
6H	29.9	30.5	30.4	31.1	31.6	30.2	30.9	30.8	31.4	32.0
8H	30.6	31.2	31.2	31.8	32.4	31.1	31.6	31.6	32.2	32.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 544.9 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -2.1)

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LXJ  
 Test Date:2019-11-07

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:28.2%  
 Test Distance:1.191m [K=1.0000]  
 Remarks:



## UTILIZATION FACTORS TABLE

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	WEIGHT: /
SPEC.: /	DIM.: /	SERIAL No.: /
MFR.: RAB Lighting Inc	SUR.: /	Shielding Angle: /

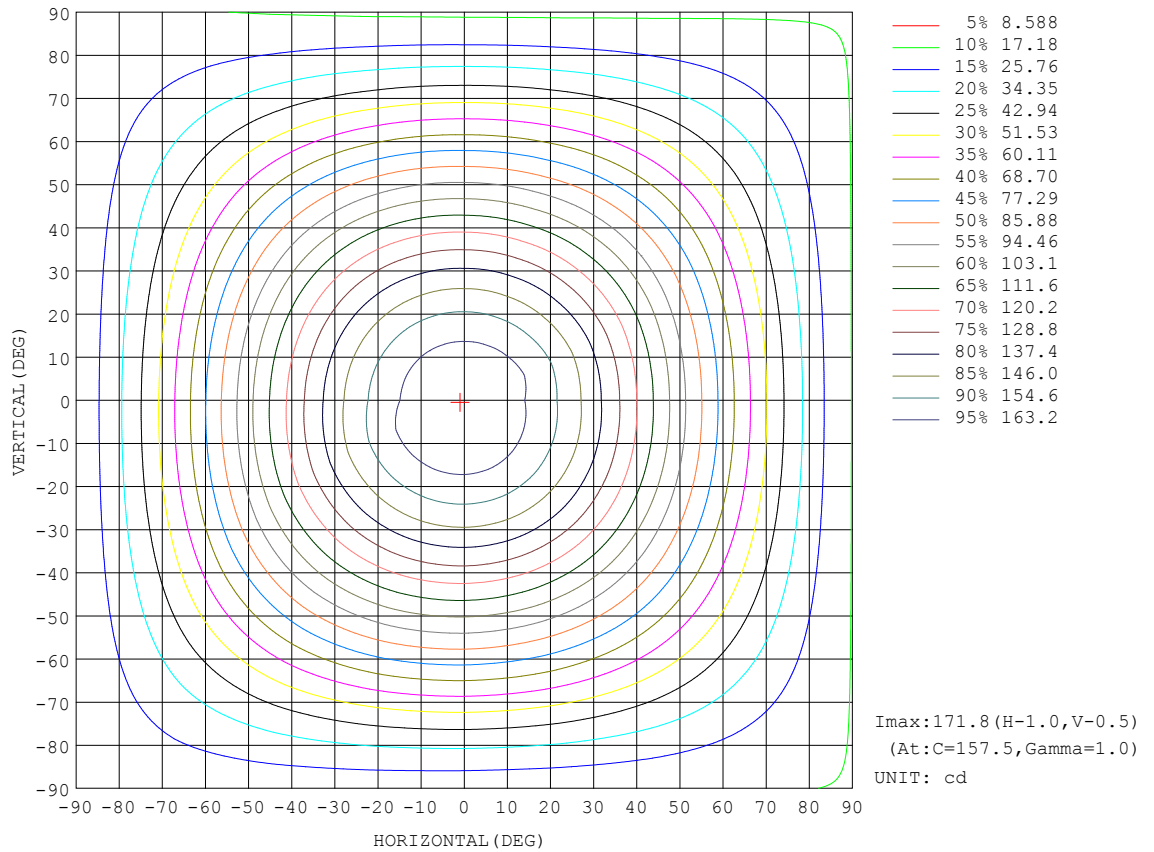
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	54	42	35	53	42	35	52	42	35	28
0.80	64	52	44	63	51	44	61	50	43	36
1.00	72	60	52	71	59	52	68	61	51	44
1.25	79	68	60	77	67	59	74	65	58	50
1.50	84	73	65	82	72	65	78	70	63	55
2.00	91	81	74	89	80	73	84	77	71	62
2.50	95	86	79	92	84	78	88	81	76	66
3.00	98	90	84	96	89	83	91	85	80	70
4.00	103	96	90	100	94	89	95	90	86	75
5.00	105	99	95	102	97	93	97	93	89	78
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LXJ  
 Test Date: 2019-11-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 28.2%  
 Test Distance: 1.191m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	WEIGHT: /
SPEC.: /	DIM.: /	SERIAL No.: /
MFR.: RAB Lighting Inc	SUR.: /	Shielding Angle: /

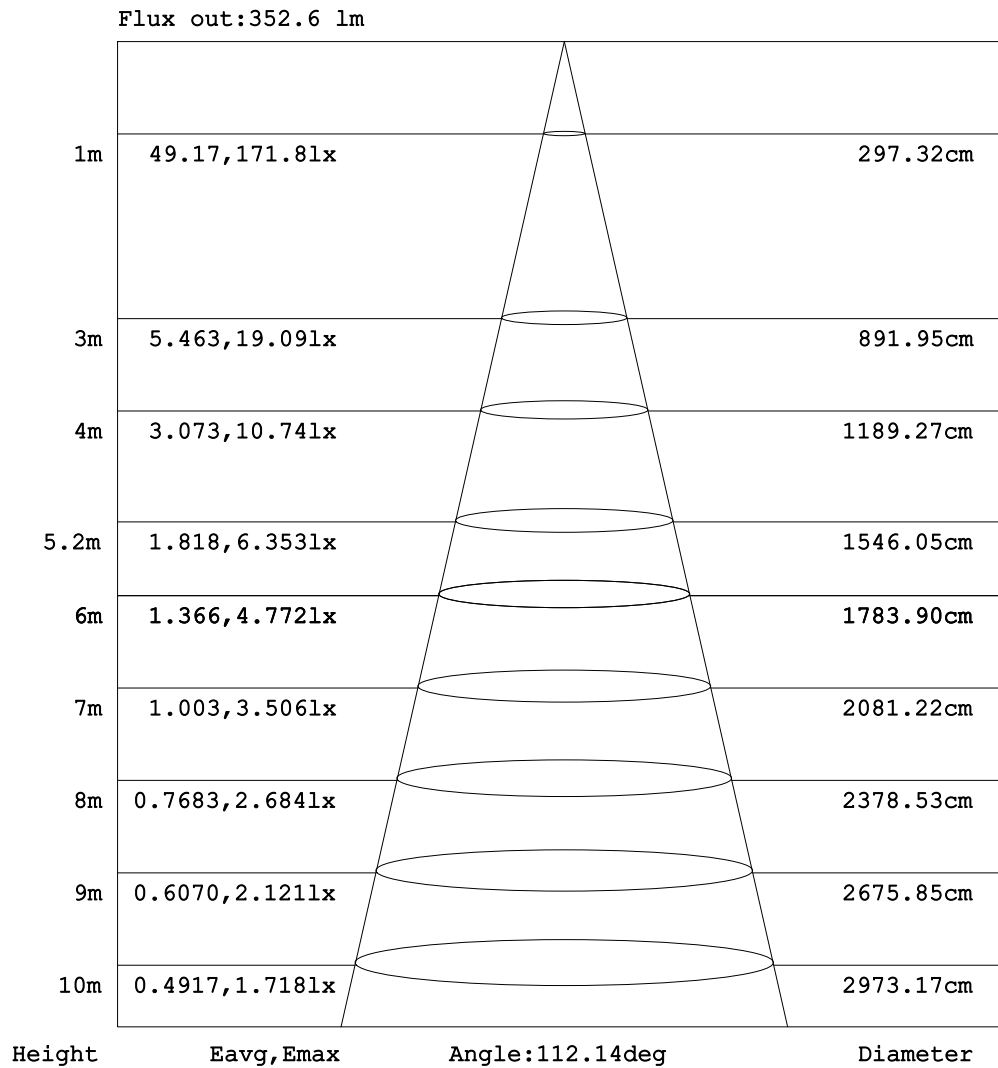


C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LXJ  
 Test Date:2019-11-07

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:28.2%  
 Test Distance:1.191m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	WEIGHT: /
SPEC.: /	DIM.: /	SERIAL No.: /
MFR.: RAB Lighting Inc	SUR.: /	Shielding Angle: /



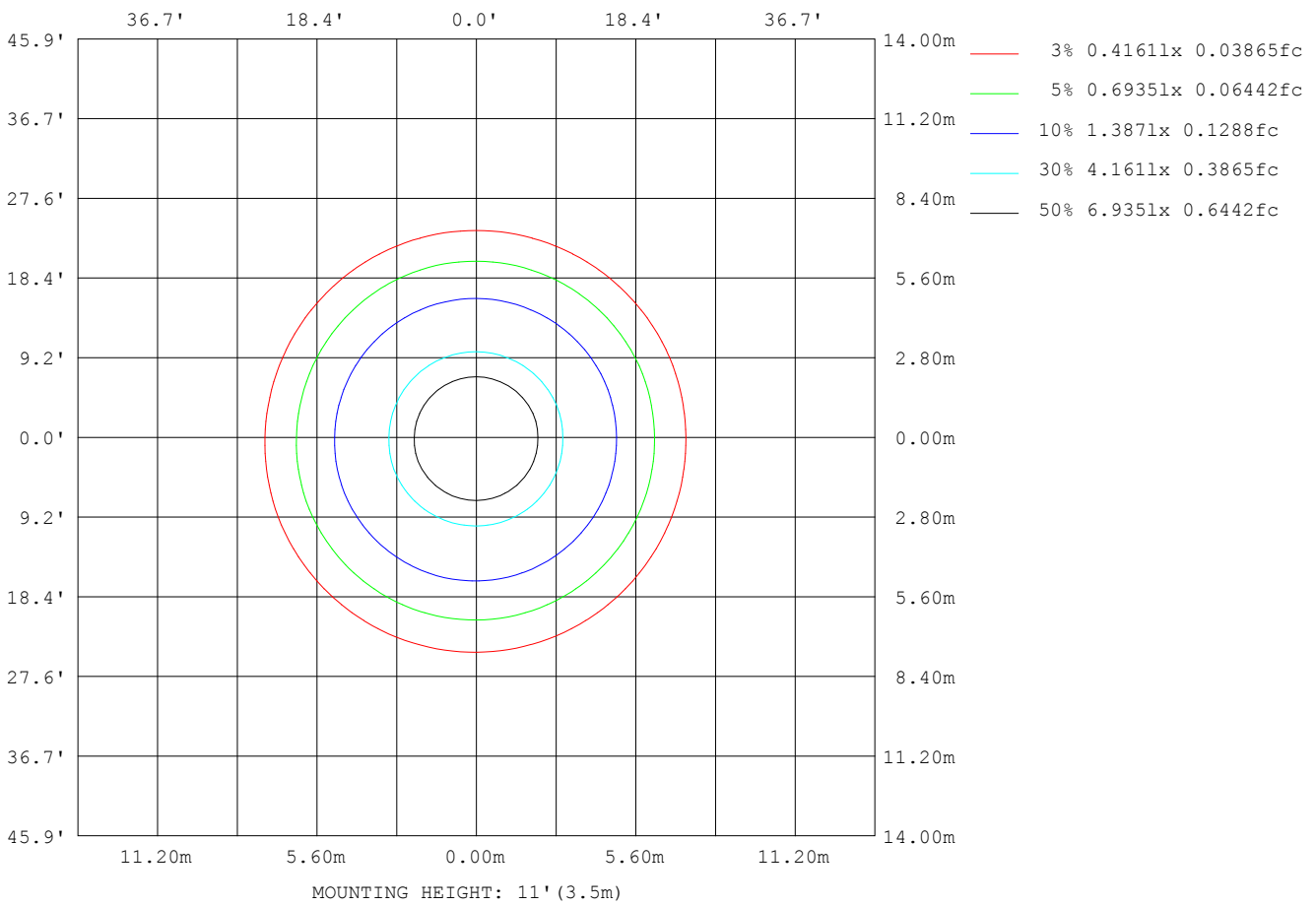
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LXJ  
 Test Date:2019-11-07

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:28.2%  
 Test Distance:1.191m [K=1.0000]  
 Remarks:

ISOLUX DIAGRAM

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	WEIGHT: /
SPEC.: /	DIM.: /	SERIAL No.: /
MFR.: RAB Lighting Inc	SUR.: /	Shielding Angle: /



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LXJ  
 Test Date: 2019-11-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 28.2%  
 Test Distance: 1.191m [K=1.0000]  
 Remarks:

## LED Avg.L Report

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	WEIGHT: /
SPEC.: /	DIM.: /	SERIAL No.: /
MFR.: RAB Lighting Inc	SUR.: /	Shielding Angle: /

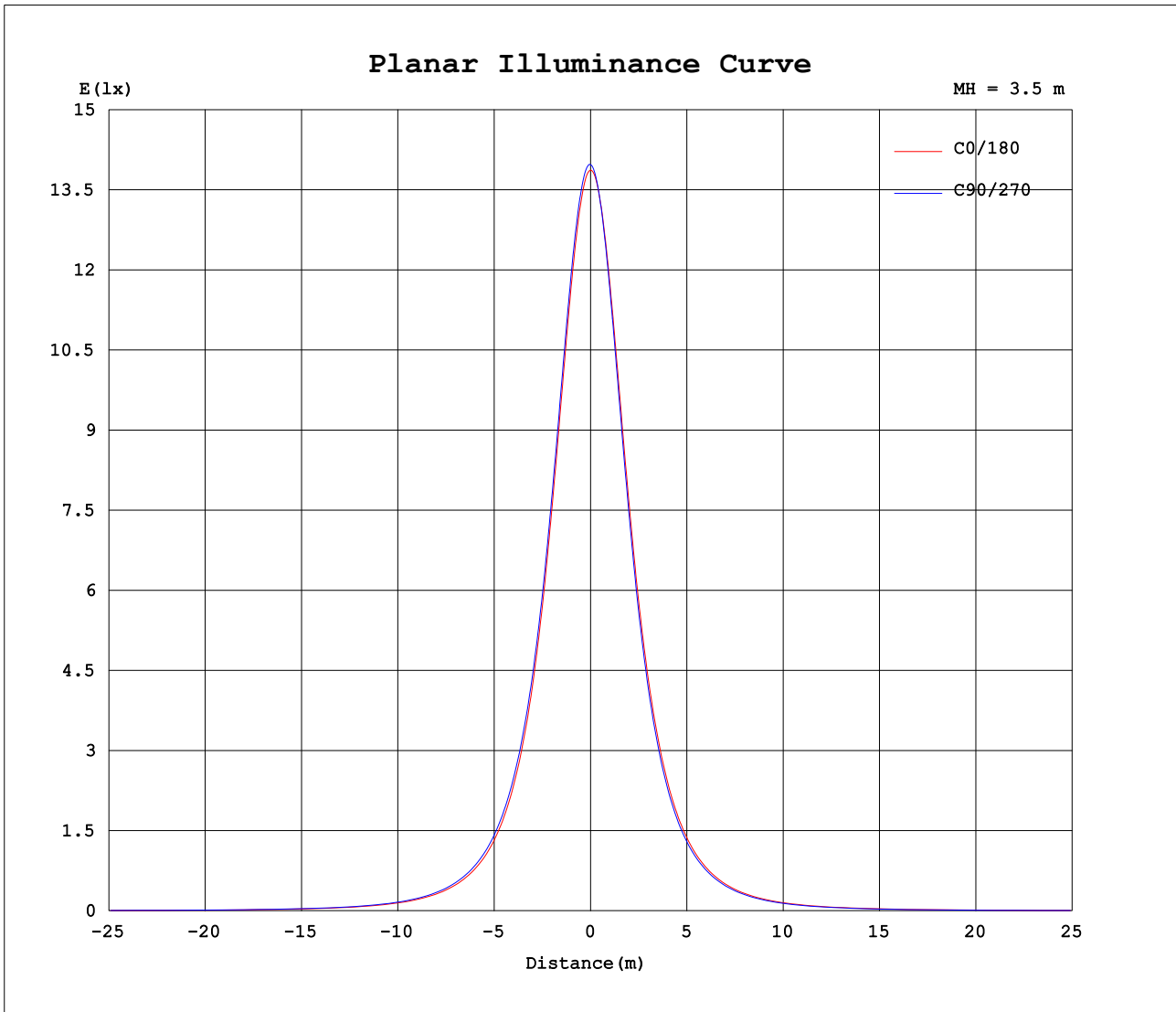
AvgL	cd/m2
L_0~180 (65) av	30595
L_0~180 (75) av	32660
L_0~180 (85) av	56241
L_90~270 (65) av	30879
L_90~270 (75) av	32997
L_90~270 (85) av	56778
L_45 (65) av	30834
L_45 (75) av	32911
L_45 (85) av	56694

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LXJ  
Test Date:2019-11-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
Humidity:28.2%  
Test Distance:1.191m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:LXJ  
Test Date:2019-11-07

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
Humidity:28.2%  
Test Distance:1.191m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.9V I:0.0620A P:5.720W PF:0.7692 Freq:0Hz Lamp Flux:544.908x1 lm		
NAME: R20-7-830-DIM	TYPE: /	WEIGHT: /
SPEC.: /	DIM.: /	SERIAL No.: /
MFR.: RAB Lighting Inc	SUR.: /	Shielding Angle: /

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	170	170	171	171	171	171	172	172	170	170	171	171	171	171	172	172			
5	169	170	170	171	171	171	171	171	169	169	169	170	170	170	170	171			
10	166	167	168	169	169	169	169	169	167	167	167	167	167	167	167	168			
15	162	163	164	165	165	166	166	165	163	163	162	162	162	162	162	163			
20	157	158	159	160	160	160	160	160	158	157	156	156	155	155	156	157			
25	149	151	152	153	153	153	153	153	151	150	149	148	147	148	148	150			
30	141	143	144	145	145	145	145	145	142	141	140	139	139	139	139	141			
35	131	133	134	135	136	136	136	136	133	132	131	129	129	129	129	131			
40	120	122	124	125	126	126	126	125	123	121	120	119	118	118	119	120			
45	109	111	113	114	115	115	115	114	112	111	109	108	107	107	107	109			
50	97.5	99.2	101	103	104	104	104	103	101	99.1	97.7	96.5	95.6	95.3	96.0	97.3			
55	86.0	87.6	89.4	91.1	92.2	92.7	92.5	91.6	89.0	87.3	85.9	84.9	84.0	83.9	84.6	85.8			
60	74.6	76.1	77.8	79.4	80.6	81.0	80.7	79.7	77.1	75.3	74.0	73.0	72.3	72.4	73.2	74.3			
65	63.2	64.6	66.2	67.8	68.8	69.1	68.6	67.5	65.1	63.3	62.0	61.1	60.7	60.9	61.7	62.8			
70	51.9	53.2	54.7	56.1	57.0	57.2	56.7	55.6	53.4	51.7	50.4	49.6	49.3	49.6	50.4	51.3			
75	41.1	42.4	43.8	45.1	45.8	46.0	45.6	44.7	42.7	41.1	39.9	39.1	38.9	39.1	39.7	40.5			
80	31.5	32.7	34.1	35.2	35.8	36.0	35.7	35.0	33.3	31.9	30.7	29.9	29.7	29.8	30.2	30.9			
85	23.4	24.4	25.6	26.6	27.1	27.3	27.2	26.6	25.2	24.0	23.0	22.2	22.0	22.0	22.2	22.8			
90	16.9	17.7	18.7	19.5	20.0	20.2	20.2	19.7	18.7	17.7	16.8	16.1	15.9	15.8	16.0	16.5			
95	12.1	12.7	13.5	14.1	14.5	14.7	14.7	14.4	13.6	12.9	12.2	11.7	11.5	11.5	11.6	11.9			
100	8.95	9.37	9.88	10.3	10.6	10.8	10.8	10.6	10.0	9.50	9.00	8.69	8.56	8.53	8.61	8.80			
105	6.82	7.12	7.48	7.80	8.00	8.11	8.09	7.93	7.53	7.15	6.80	6.59	6.51	6.50	6.56	6.71			
110	5.25	5.47	5.75	5.97	6.11	6.18	6.15	6.02	5.71	5.44	5.18	5.01	4.96	4.96	5.01	5.14			
115	4.04	4.22	4.42	4.59	4.68	4.72	4.69	4.58	4.33	4.13	3.94	3.84	3.80	3.80	3.84	3.93			
120	3.10	3.25	3.40	3.52	3.59	3.61	3.58	3.50	3.30	3.14	3.00	2.93	2.90	2.90	2.92	3.00			
125	2.33	2.46	2.58	2.67	2.73	2.75	2.73	2.66	2.50	2.38	2.27	2.21	2.19	2.18	2.19	2.25			
130	1.72	1.83	1.93	2.00	2.04	2.06	2.05	2.00	1.88	1.78	1.69	1.64	1.62	1.61	1.61	1.64			
135	1.24	1.33	1.41	1.47	1.51	1.53	1.52	1.49	1.39	1.31	1.23	1.19	1.16	1.15	1.14	1.16			
140	0.85	0.93	1.00	1.05	1.09	1.11	1.12	1.09	1.01	0.94	0.87	0.83	0.81	0.79	0.77	0.78			
145	0.53	0.61	0.67	0.72	0.76	0.79	0.80	0.78	0.72	0.66	0.60	0.56	0.54	0.52	0.49	0.49			
150	0.21	0.06	0.40	0.48	0.52	0.55	0.56	0.54	0.49	0.45	0.40	0.36	0.34	0.31	0.29	0.28			
155	0.11	0.21	0.12	0.29	0.35	0.37	0.38	0.37	0.33	0.31	0.26	0.22	0.20	0.18	0.16	0.15			
160	0.09	0.11	0.09	0.16	0.23	0.25	0.26	0.25	0.22	0.21	0.18	0.14	0.11	0.10	0.09	0.08			
165	0.05	0.06	0.08	0.08	0.12	0.16	0.16	0.15	0.14	0.14	0.12	0.09	0.07	0.05	0.04	0.03			
170	0.02	0.03	0.04	0.04	0.06	0.08	0.08	0.06	0.03	0.03	0.02	0.04	0.04	0.02	0.02	0.02			
175	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
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 Temperature:25.3DEG  
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γ Range: 0 - 180DEG  
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 Remarks: