

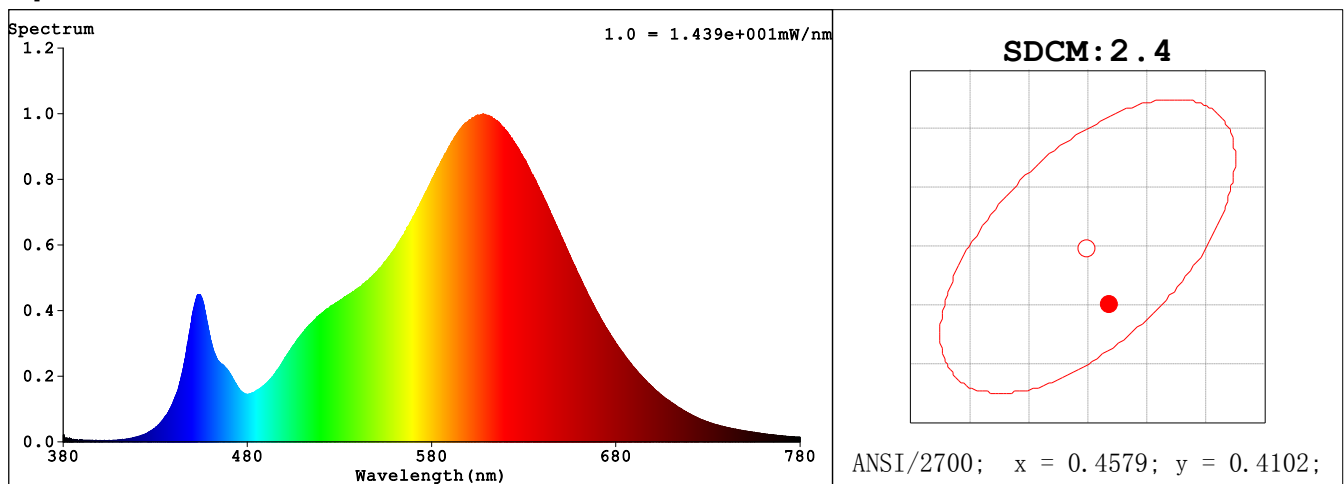
Spectrum Test Report

Sample	:		Date	:	2019-12-08
Specification	:	SM5.5S10827120W	Sam. Status	:	
Sample No.	:	1	Standard	:	
Manufacturer	:	RAB LIGHTING INC.	Instrument	:	HaasSuite(EVERFINE)
Assessor	:	damin			
Remark	:	---	Test by	:	DAMIN
Device SN	:	9#			

Test Condition

Temperature	:	24.5Deg	RH	:	65.0%
WL Range	:	380nm-780nm	IP	:	53118 (81%)
Test Mode	:	Fast Test	T	:	273 ms
Sensitivity	:	High	Stable Time(s)	:	0

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4591$ $y = 0.4067$ / $u' = 0.2638$ $v' = 0.5257$ ($duv = -1.39e-03$)
 CCT= 2680K Prcp WL: $L_d = 584.8\text{nm}$ Purity=59.9%
 Peak WL: $L_p = 608\text{nm}$ FWHM: =113.7nm Ratio:R=25.6% G=72.2% B=2.2%
 Render Index: $R_a = 83.4$

EEl: 0.17661 A

R1 =83 R2 =93 R3 =95 R4 =81 R5 =83 R6 =92 R7 =81
 R8 =59 R9 =12 R10=84 R11=82 R12=76 R13=85 R14=98 R15=75
 LEVEL:OUT WHITE:ANSI_2700K

Photometric & Radiometric Parameters

Flux = 659.22 lm Eff. : 67.99 lm/W Fe = 2.0583 W Scotpic:806.83 S/P:1.2239

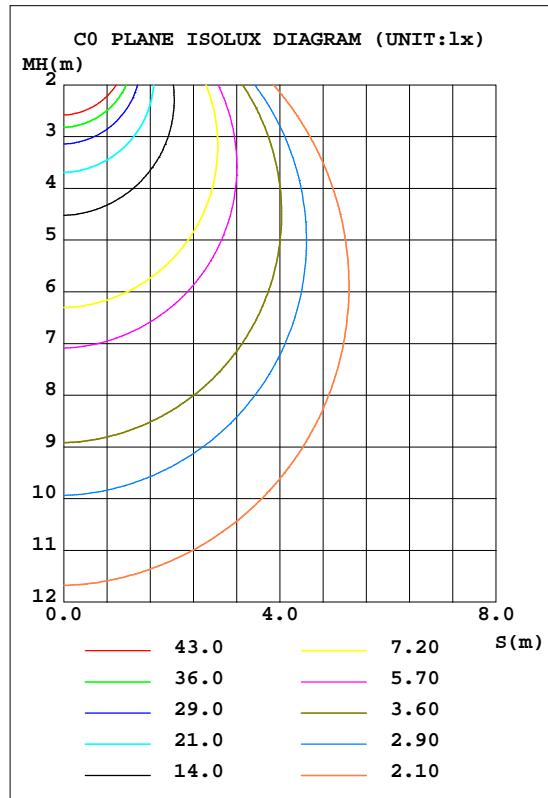
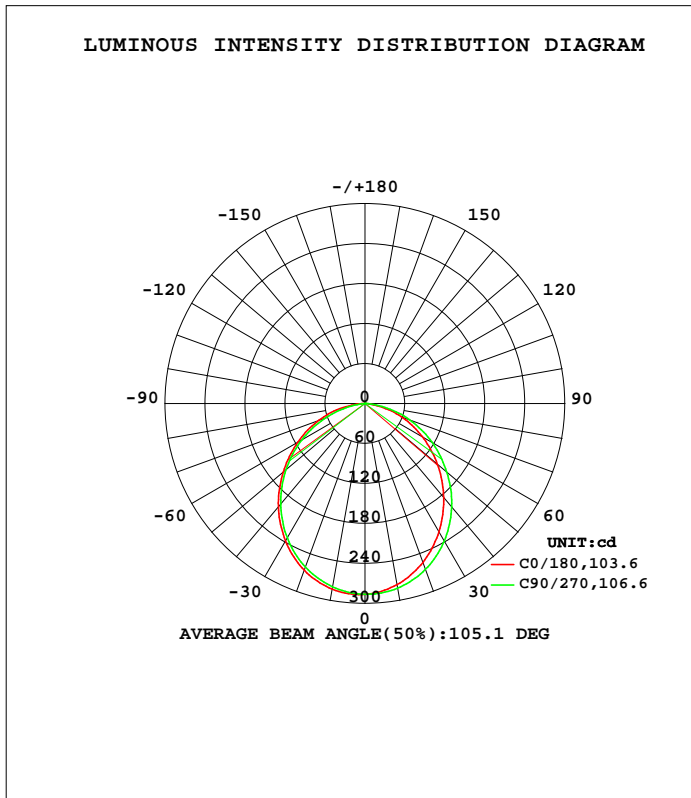
Electrical parameters

V = 120.15 V I = 0.08869 A P = 9.695 W PF = 0.9098 F=59.98 Hz

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME:	TYPE:SM5.5S10827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC.	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 75.53 lm/W			
MODEL		I _{max} (cd)	286.9	S/MH(C0/180)	1.24
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	748.36	h UP, DN(C0-180)	0.0,49.1
NOMINAL FLUX(lm)	748.359	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,50.9
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	h down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2019-12-07

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:3.200m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

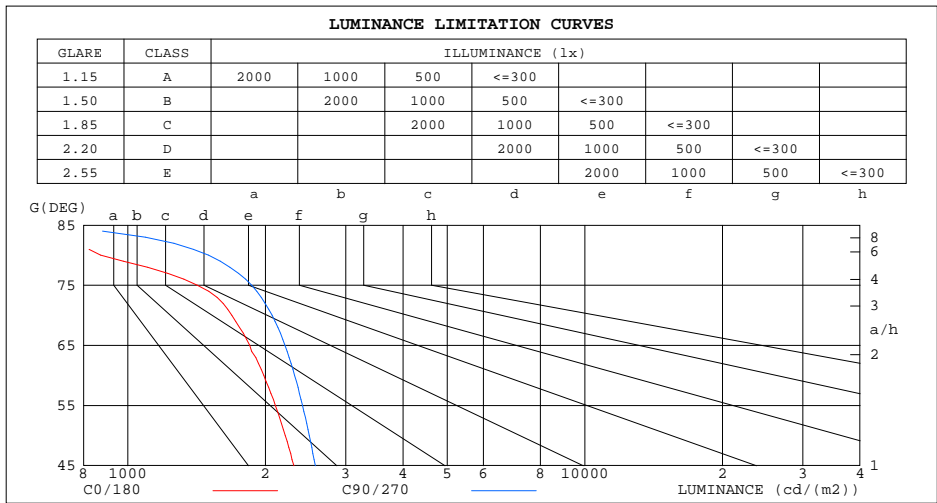
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	276.2	281.4	283.1	279.4					0- 10	27.03	27.03	3.61,3.61
20	254.1	265.1	266.4	261.4					10- 20	76.76	103.8	13.9,13.9
30	222.4	238.2	238.5	233.3					20- 30	114.5	218.2	29.2,29.2
40	184.0	202.6	202.2	196.8					30- 40	134.8	353.0	47.2,47.2
50	142.1	160.4	160.3	155.1					40- 50	135.6	488.6	65.3,65.3
60	99.21	115.9	116.8	109.6					50- 60	118.5	607.1	81.1,81.1
70	57.82	70.75	73.57	61.68					60- 70	87.16	694.3	92.8,92.8
80	15.15	26.07	29.38	16.56					70- 80	46.34	740.6	99,99
90	0.2144	0.1980	0.0291	0.2906					80- 90	7.739	748.4	100,100
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		

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 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2019-12-07

g Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:3.200m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME:	TYPE:SM5.5S10827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC.	SUR.:21cm*16cm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	328	587
80	872	1501
75	1420	1866
70	1690	2069
65	1848	2209
60	1984	2319
55	2104	2411
50	2211	2495
45	2310	2575

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 Remarks:

WEC AND CCEC

NAME:	TYPE:SM5.5S10827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC.	SUR.:21cm*16cm	Shielding Angle:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.294	.167	.053	.287	.164	.052	.274	.157	.050	.261	.151	.048	.250	.145	.047	
2.0	.281	.154	.047	.274	.151	.047	.263	.146	.045	.252	.141	.044	.242	.137	.043	
3.0	.262	.139	.042	.256	.137	.041	.246	.133	.040	.236	.130	.040	.228	.126	.039	
4.0	.243	.126	.037	.238	.124	.037	.229	.121	.036	.220	.118	.036	.212	.115	.035	
5.0	.225	.115	.033	.221	.113	.033	.213	.111	.033	.205	.108	.032	.198	.106	.032	
6.0	.209	.105	.030	.206	.104	.030	.198	.102	.030	.192	.100	.029	.185	.098	.029	
7.0	.195	.097	.027	.192	.096	.027	.185	.094	.027	.179	.092	.027	.174	.090	.027	
8.0	.183	.089	.025	.180	.088	.025	.174	.087	.025	.169	.085	.025	.163	.084	.024	
9.0	.171	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.073	.021	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.083	.050	.024	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.026	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2019-12-07

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:3.200m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

NAME:		TYPE:SM5.5S10827120W					WEIGHT:				
SPEC.:		DIM.:					SERIAL No.:				
MFR.: RAB LIGHTING INC.		SUR.:21cm*16cm					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	16.3	17.8	16.5	18.0	18.2	16.8	18.3	17.1	18.5	18.7
	3H	17.6	18.9	17.9	19.2	19.4	18.3	19.7	18.6	19.9	20.1
	4H	18.0	19.3	18.3	19.6	19.8	18.9	20.2	19.2	20.4	20.7
	6H	18.2	19.4	18.5	19.7	20.0	19.2	20.4	19.5	20.7	21.0
	8H	18.2	19.4	18.5	19.7	20.0	19.3	20.5	19.6	20.7	21.0
	12H	18.2	19.3	18.5	19.6	19.9	19.3	20.4	19.6	20.7	21.0
4H	2H	16.9	18.2	17.2	18.5	18.7	17.3	18.6	17.7	18.9	19.2
	3H	18.4	19.5	18.7	19.8	20.1	19.0	20.1	19.3	20.4	20.7
	4H	18.9	20.0	19.3	20.3	20.6	19.7	20.7	20.0	21.0	21.3
	6H	19.2	20.1	19.6	20.5	20.8	20.1	21.0	20.5	21.4	21.7
	8H	19.2	20.1	19.6	20.5	20.8	20.2	21.1	20.6	21.4	21.8
	12H	19.2	20.0	19.6	20.4	20.8	20.2	21.0	20.6	21.4	21.8
8H	4H	19.2	20.0	19.6	20.4	20.8	19.8	20.7	20.2	21.0	21.4
	6H	19.5	20.2	20.0	20.6	21.1	20.4	21.1	20.8	21.5	21.9
	8H	19.6	20.2	20.1	20.7	21.1	20.5	21.1	21.0	21.6	22.0
	12H	19.6	20.2	20.1	20.6	21.1	20.6	21.1	21.0	21.5	22.0
12H	4H	19.2	20.0	19.6	20.3	20.7	19.8	20.6	20.2	21.0	21.4
	6H	19.6	20.2	20.0	20.6	21.1	20.4	21.0	20.8	21.4	21.9
	8H	19.7	20.2	20.1	20.6	21.1	20.5	21.1	21.0	21.5	22.0
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.2				
1.5H		+ 0.2 / - 0.4					+ 0.1 / - 0.3				
2.0H		+ 0.2 / - 0.4					+ 0.3 / - 0.3				

CIE Pub.117, 748.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.0)

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g Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:3.200m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME:	TYPE:SM5.5S10827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC.	SUR.:21cm*16cm	Shielding Angle:

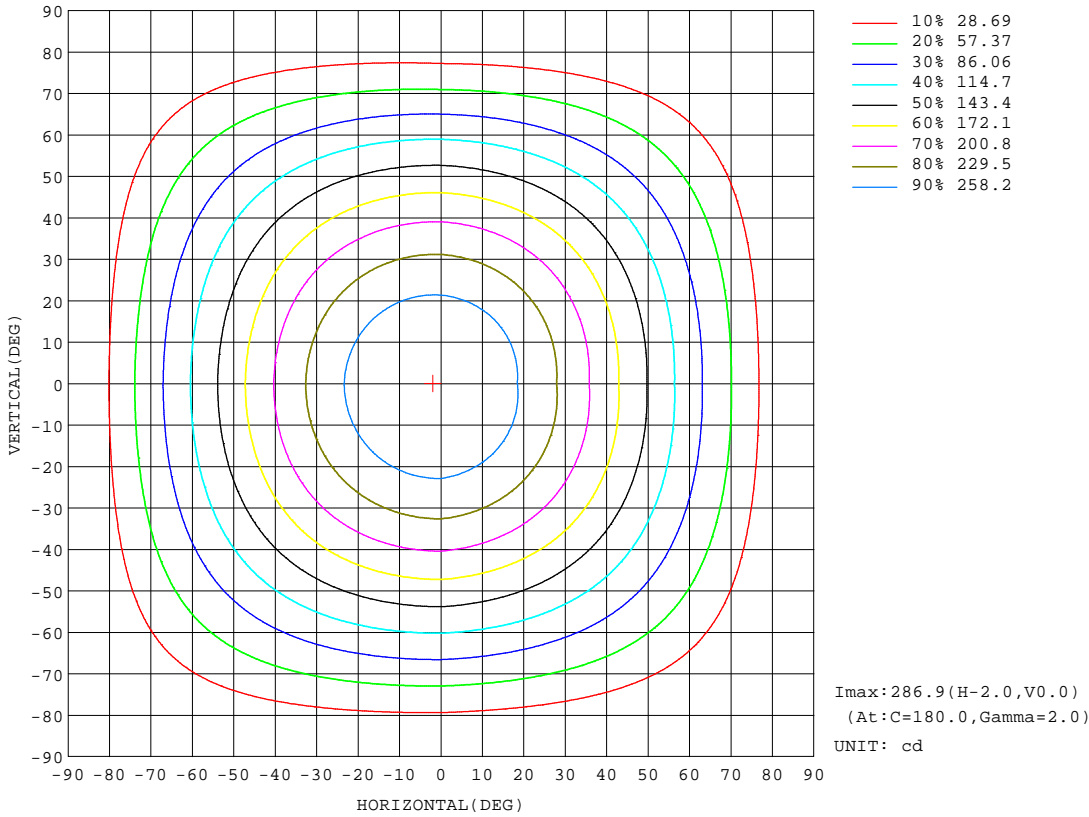
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	48	41	58	47	41	57	47	40	34
0.80	69	58	51	68	57	50	66	56	50	43
1.00	77	67	60	76	66	59	74	67	59	52
1.25	84	74	67	83	74	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	72	64
2.00	96	88	82	94	87	81	91	84	79	72
2.50	100	92	87	98	91	86	94	88	84	76
3.00	103	97	91	101	95	90	97	92	88	80
4.00	107	102	97	105	100	96	100	96	93	84
5.00	109	105	101	107	103	99	102	99	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

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 g Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.0.366
 Humidity:65.0%
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 Remarks:

ISOCANDELA DIAGRAM

NAME:	TYPE:SM5.5S10827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC.	SUR.:21cm*16cm	Shielding Angle:

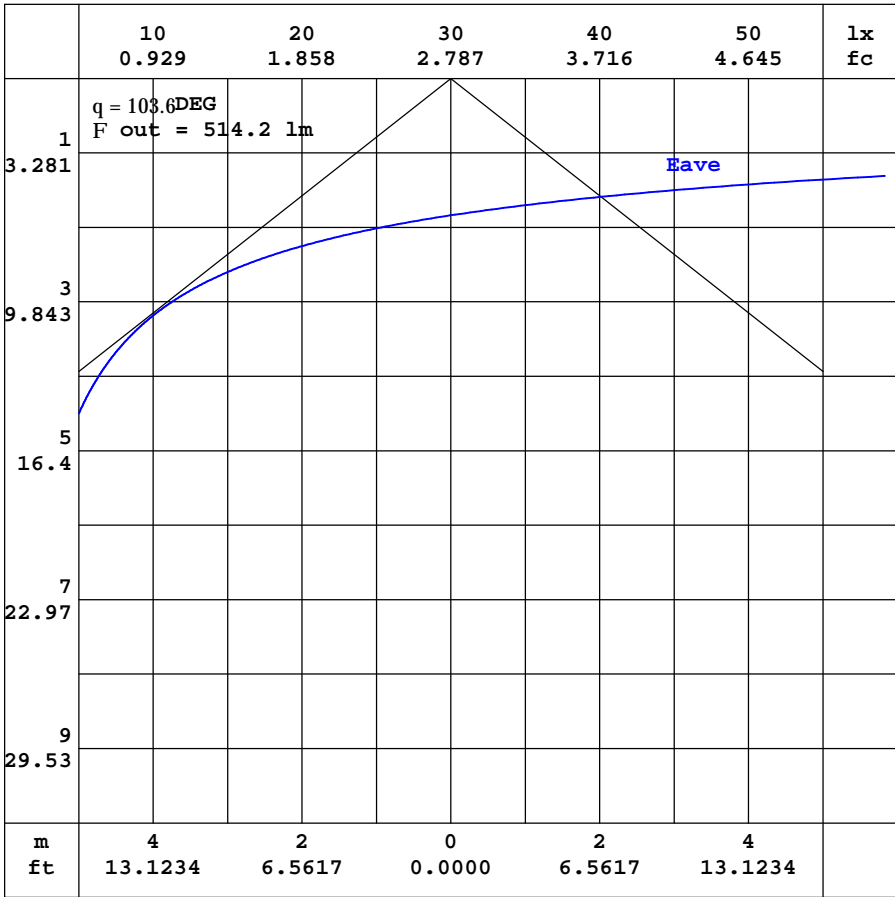


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Range: 0 - 90DEG
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Remarks:

AAI CURVES

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SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC.	SUR.:21cm*16cm	Shielding Angle:

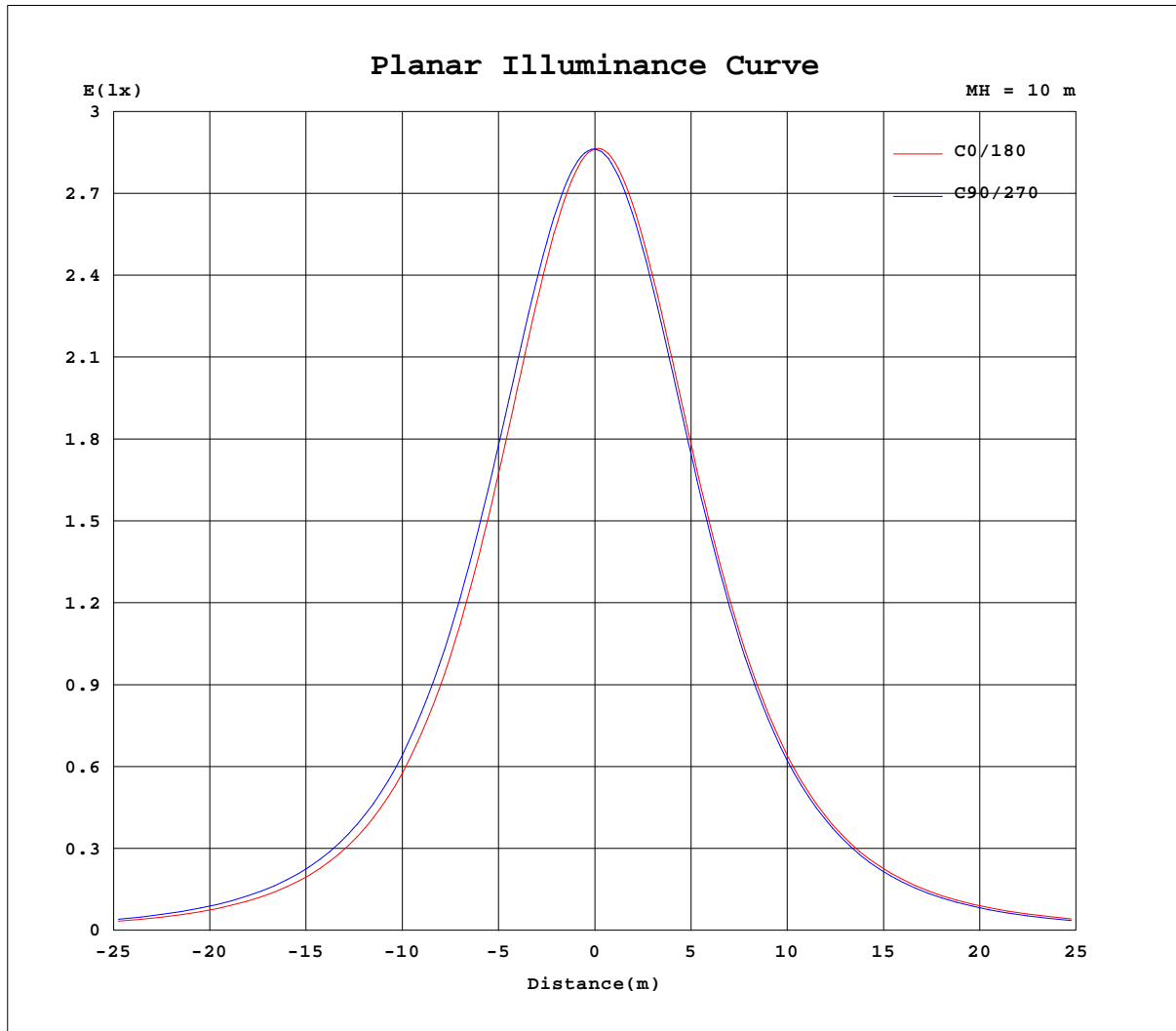


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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Planar Illuminance Curve



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 Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

NAME:	TYPE: SM5.5S10827120W	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: RAB LIGHTING INC.	SUR.: 21cm*16cm	Shielding Angle:

Table--1 UNIT: cd

C(DEG) g (DEG)	0	90	180	270														
0	286	286	286	286														
5	283	285	286	284														
10	276	281	283	279														
15	266	274	276	272														
20	254	265	266	261														
25	239	253	254	249														
30	222	238	239	233														
35	204	221	221	216														
40	184	203	202	197														
45	163	182	182	176														
50	142	160	160	155														
55	121	138	139	133														
60	99.2	116	117	110														
65	78.1	93.4	95.0	85.9														
70	57.8	70.8	73.6	61.7														
75	36.7	48.3	53.0	38.4														
80	15.1	26.1	29.4	16.6														
85	2.86	5.11	10.8	0.07														
90	0.21	0.20	0.03	0.29														

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