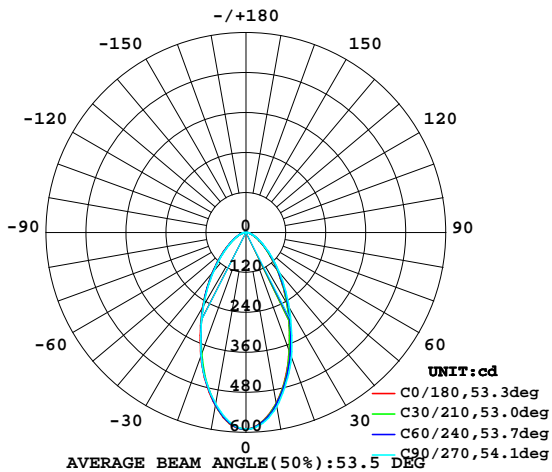


## LUMINAIRE PHOTOMETRIC TEST REPORT

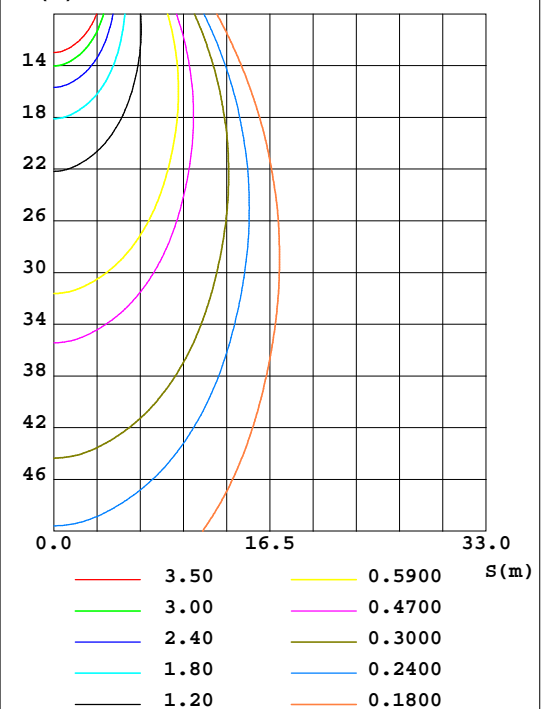
NAME: 5RS128	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:003
MFR.: Lediant	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 100.19 lm/W			
MODEL	4000K	Imax(cd)	590.3	S/MH(C0/180)	0.77
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	0.80
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	645.79	h UP,DN(C0-180)	0.1,50.0
NOMINAL FLUX(lm)	645.787	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.1,49.8
LAMPS INSIDE	1	h up(%)	0.2	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230.3	h down(%)	99.8	CIBSE SHR MAX	0.90

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2019-06-03

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity: 65.0%  
Test Distance: 8.989m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	520.6	523.5	531.1	530.7	527.9	526.2	522.7	520.5	0- 10	53.11	53.11	8.22,8.22
20	379.7	385.2	399.3	397.8	397.0	391.7	393.4	383.5	10- 20	128.6	181.7	28.1,28.1
30	246.6	250.6	260.4	261.1	261.4	258.5	256.5	249.8	20- 30	146.1	327.8	50.8,50.8
40	145.5	148.7	156.0	156.5	156.9	155.1	150.5	146.5	30- 40	125.0	452.7	70.1,70.1
50	78.92	81.41	86.65	85.95	86.49	83.92	81.36	78.21	40- 50	87.86	540.6	83.7,83.7
60	41.29	42.73	45.68	44.81	45.14	43.31	42.54	40.51	50- 60	54.33	594.9	92.1,92.1
70	20.46	21.05	22.02	21.84	22.01	21.30	20.90	20.23	60- 70	30.71	625.6	96.9,96.9
80	7.875	8.100	8.196	8.358	8.497	8.199	7.912	7.827	70- 80	14.91	640.6	99.2,99.2
90	0.0386	0.0351	0.0318	0.0383	0.0381	0.0383	0.0450	0.0384	80- 90	3.628	644.2	99.8,99.8
100	0.0382	0.0413	0.0572	0.0414	0.0446	0.0413	0.0191	0.0509	90-100	0.0381	644.2	99.8,99.8
110	0.0700	0.0731	0.0827	0.0763	0.0827	0.0763	0.0700	0.0922	100-110	0.0619	644.3	99.8,99.8
120	0.1208	0.1399	0.1578	0.1305	0.1464	0.1303	0.1399	0.1432	110-120	0.1007	644.4	99.8,99.8
130	0.2288	0.2416	0.2608	0.2385	0.2481	0.2384	0.2480	0.2514	120-130	0.1700	644.6	99.8,99.8
140	0.3815	0.4038	0.4136	0.3914	0.4072	0.4007	0.3817	0.4010	130-140	0.2448	644.8	99.8,99.8
150	0.5787	0.6072	0.6107	0.5918	0.5979	0.5945	0.5916	0.6116	140-150	0.3110	645.1	99.9,99.9
160	0.8076	0.8045	0.8208	0.8019	0.8080	0.8013	0.7888	0.8211	150-160	0.3233	645.4	99.9,99.9
170	0.9919	0.9919	0.9924	0.9832	0.9795	0.9792	0.9796	0.9927	160-170	0.2524	645.7	100,100
180	1.081	1.075	1.081	1.075	1.068	1.075	1.069	1.072	170-180	0.0972	645.8	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

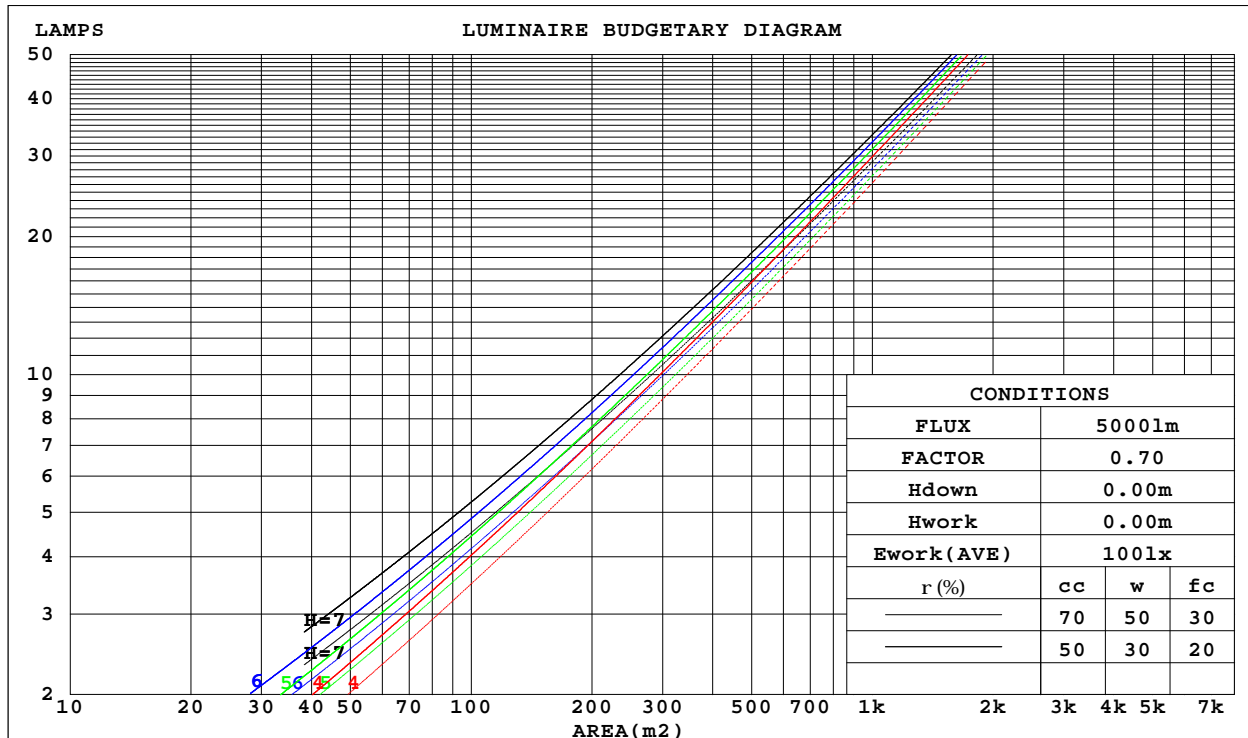
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-06-03

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity:65.0%  
 Test Distance:8.989m [K=1.0000]  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: 5RS128	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:003
MFR.: Lediant	SUR.:	PROTECTION ANGLE:

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	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	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.91	.90
2.0	.98	.93	.89	.96	.91	.87	.93	.89	.85	.90	.86	.84	.87	.84	.82	.80
3.0	.89	.83	.78	.88	.82	.77	.85	.80	.76	.82	.78	.75	.80	.76	.73	.72
4.0	.82	.75	.70	.80	.74	.69	.78	.73	.68	.76	.71	.67	.74	.70	.66	.65
5.0	.75	.68	.63	.74	.67	.62	.72	.66	.62	.70	.65	.61	.69	.64	.60	.59
6.0	.69	.62	.57	.68	.62	.57	.67	.61	.56	.65	.60	.56	.64	.59	.55	.54
7.0	.64	.57	.52	.64	.57	.52	.62	.56	.52	.61	.55	.51	.60	.55	.51	.49
8.0	.60	.53	.48	.59	.53	.48	.58	.52	.48	.57	.51	.47	.56	.51	.47	.46
9.0	.56	.49	.44	.55	.49	.44	.54	.48	.44	.53	.48	.44	.53	.47	.44	.42
10.0	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.45	.41	.49	.44	.41	.39



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-06-03

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity: 65.0%  
 Test Distance: 8.989m [K=1.0000]  
 Remarks:

### WEC AND CCEC

NAME: 5RS128	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:003
MFR.: Lediand	SUR.:	PROTECTION 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
rfe	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)					
0.0						
1.0	.228 .130 .041	.221 .126 .040	.208 .119 .038	.196 .113 .036	.185 .107 .035	
2.0	.219 .120 .037	.213 .117 .036	.201 .112 .035	.191 .107 .034	.182 .103 .032	
3.0	.206 .110 .033	.201 .108 .032	.191 .104 .032	.182 .100 .031	.174 .096 .030	
4.0	.194 .101 .030	.189 .099 .029	.181 .096 .029	.173 .093 .028	.166 .090 .027	
5.0	.182 .093 .027	.179 .092 .027	.171 .089 .026	.164 .087 .026	.158 .084 .025	
6.0	.172 .086 .025	.168 .085 .024	.162 .083 .024	.156 .081 .024	.150 .079 .023	
7.0	.162 .080 .023	.159 .079 .023	.153 .077 .022	.148 .076 .022	.142 .074 .022	
8.0	.153 .075 .021	.151 .074 .021	.145 .073 .021	.140 .071 .021	.136 .070 .020	
9.0	.145 .070 .020	.143 .070 .020	.138 .068 .019	.134 .067 .019	.130 .066 .019	
10.0	.138 .066 .018	.136 .066 .018	.132 .064 .018	.128 .063 .018	.124 .062 .018	

rcc	80%	70%	50%	30%	10%	0
rw	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
rfe	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC)					
0.0	.192 .192 .192	.164 .164 .164	.112 .112 .112	.064 .064 .064	.021 .021 .021	
1.0	.177 .159 .143	.151 .136 .123	.103 .094 .085	.059 .054 .049	.019 .017 .016	
2.0	.164 .134 .109	.141 .116 .094	.096 .080 .066	.056 .046 .038	.018 .015 .013	
3.0	.154 .116 .085	.132 .100 .074	.091 .069 .052	.052 .041 .031	.017 .013 .010	
4.0	.145 .102 .068	.125 .088 .059	.086 .061 .042	.050 .036 .025	.016 .012 .008	
5.0	.137 .091 .056	.118 .078 .049	.081 .055 .035	.047 .032 .020	.015 .010 .007	
6.0	.130 .082 .047	.112 .071 .041	.077 .050 .029	.045 .029 .017	.014 .010 .006	
7.0	.124 .075 .040	.106 .065 .035	.073 .045 .025	.043 .027 .015	.014 .009 .005	
8.0	.118 .069 .035	.101 .059 .030	.070 .042 .022	.041 .025 .013	.013 .008 .004	
9.0	.112 .063 .031	.097 .055 .027	.067 .039 .019	.039 .023 .011	.013 .008 .004	
10.0	.107 .059 .027	.092 .051 .024	.064 .036 .017	.037 .021 .010	.012 .007 .003	

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2019-06-03

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

### Uncorrected UGR Table

NAME: 5RS128					TYPE:		WEIGHT:				
SPEC.:					DIM.:		SERIAL No.:003				
MFR.: Lediant					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	2H	26.5	27.7	26.7	27.9	28.0	26.9	28.1	27.1	28.3	28.4
	3H	27.1	28.2	27.4	28.4	28.6	27.5	28.6	27.8	28.8	29.0
	4H	27.3	28.3	27.6	28.6	28.8	27.7	28.7	28.0	29.0	29.2
	6H	27.5	28.4	27.8	28.7	29.0	27.9	28.8	28.2	29.1	29.3
	8H	27.5	28.4	27.8	28.7	29.0	27.9	28.8	28.2	29.1	29.4
	12H	27.5	28.4	27.9	28.7	29.0	27.9	28.8	28.2	29.1	29.4
4H	2H	26.7	27.8	27.0	28.0	28.2	27.1	28.1	27.4	28.3	28.6
	3H	27.5	28.4	27.8	28.7	29.0	27.8	28.7	28.2	29.0	29.3
	4H	27.8	28.6	28.2	28.9	29.3	28.2	29.0	28.5	29.3	29.6
	6H	28.1	28.8	28.5	29.1	29.5	28.4	29.1	28.8	29.5	29.8
	8H	28.2	28.8	28.6	29.2	29.6	28.5	29.1	28.9	29.5	29.9
	12H	28.2	28.8	28.6	29.2	29.6	28.5	29.1	28.9	29.5	29.9
8H	4H	27.9	28.6	28.3	28.9	29.3	28.2	28.9	28.6	29.3	29.6
	6H	28.3	28.8	28.7	29.2	29.6	28.6	29.1	29.0	29.5	29.9
	8H	28.4	28.9	28.9	29.3	29.8	28.7	29.2	29.2	29.6	30.1
	12H	28.5	28.9	29.0	29.4	29.8	28.8	29.2	29.3	29.7	30.1
12H	4H	27.9	28.5	28.3	28.9	29.3	28.2	28.8	28.6	29.2	29.6
	6H	28.3	28.8	28.7	29.2	29.6	28.6	29.1	29.0	29.5	29.9
	8H	28.4	28.9	28.9	29.3	29.8	28.7	29.1	29.2	29.6	30.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.8					+ 0.6 / - 0.7					
1.5H	+ 0.6 / - 0.5					+ 0.5 / - 0.4					
2.0H	+ 1.2 / - 0.9					+ 1.2 / - 1.0					

CIE Pub.117 Corrected 645.8 lm Total Lamp Luminous Flux.(8log(F/F0) = -1.5)

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2019-06-03

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

NAME: 5RS128	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:003
MFR.: Lediant	SUR.:	PROTECTION ANGLE:

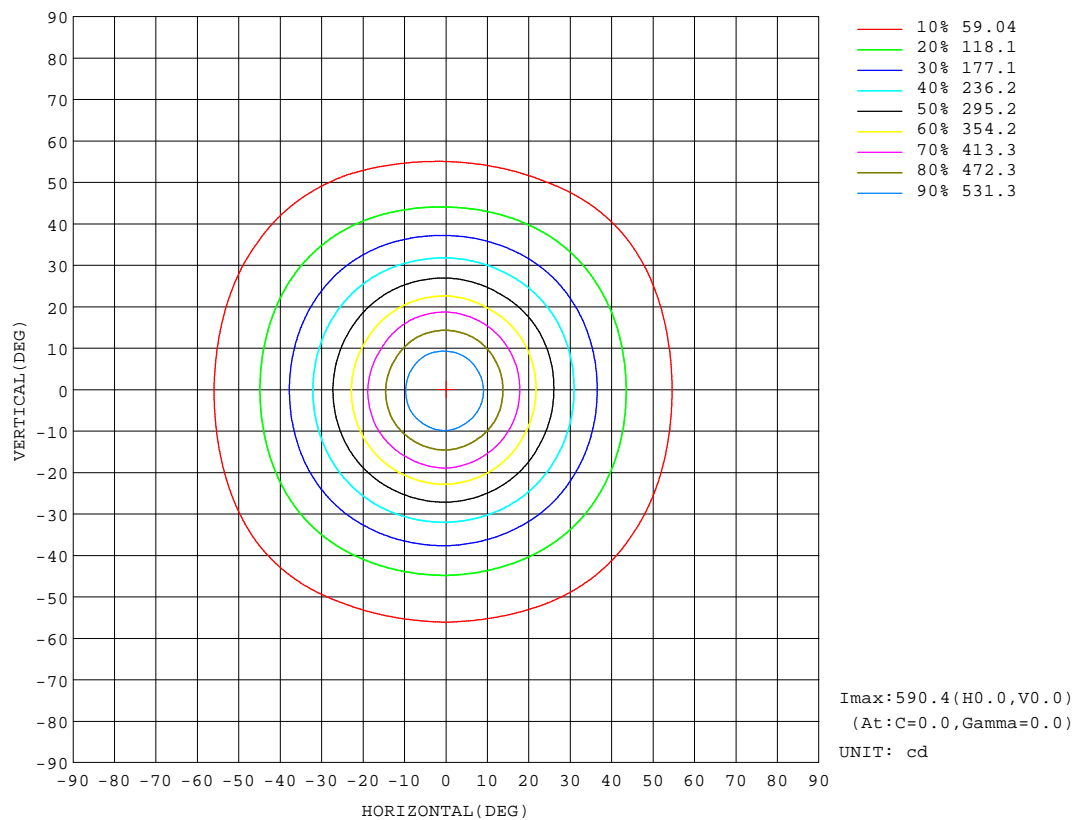
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	73	64	59	72	64	58	71	63	58	53
0.80	82	73	68	81	73	68	80	72	67	62
1.00	89	81	75	88	80	75	86	81	74	69
1.25	94	87	82	93	86	81	91	85	80	75
1.50	98	91	86	97	90	86	94	89	85	79
2.00	103	97	92	101	96	91	98	94	90	84
2.50	105	100	96	104	99	95	100	96	93	86
3.00	108	103	99	106	101	98	102	99	96	88
4.00	111	107	103	108	105	102	104	102	99	91
5.00	112	109	106	110	107	104	106	103	101	93
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-06-03

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
 Humidity: 65.0%  
 Test Distance: 8.989m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

NAME: 5RS128	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:003
MFR.: Lediant	SUR.:	PROTECTION ANGLE:

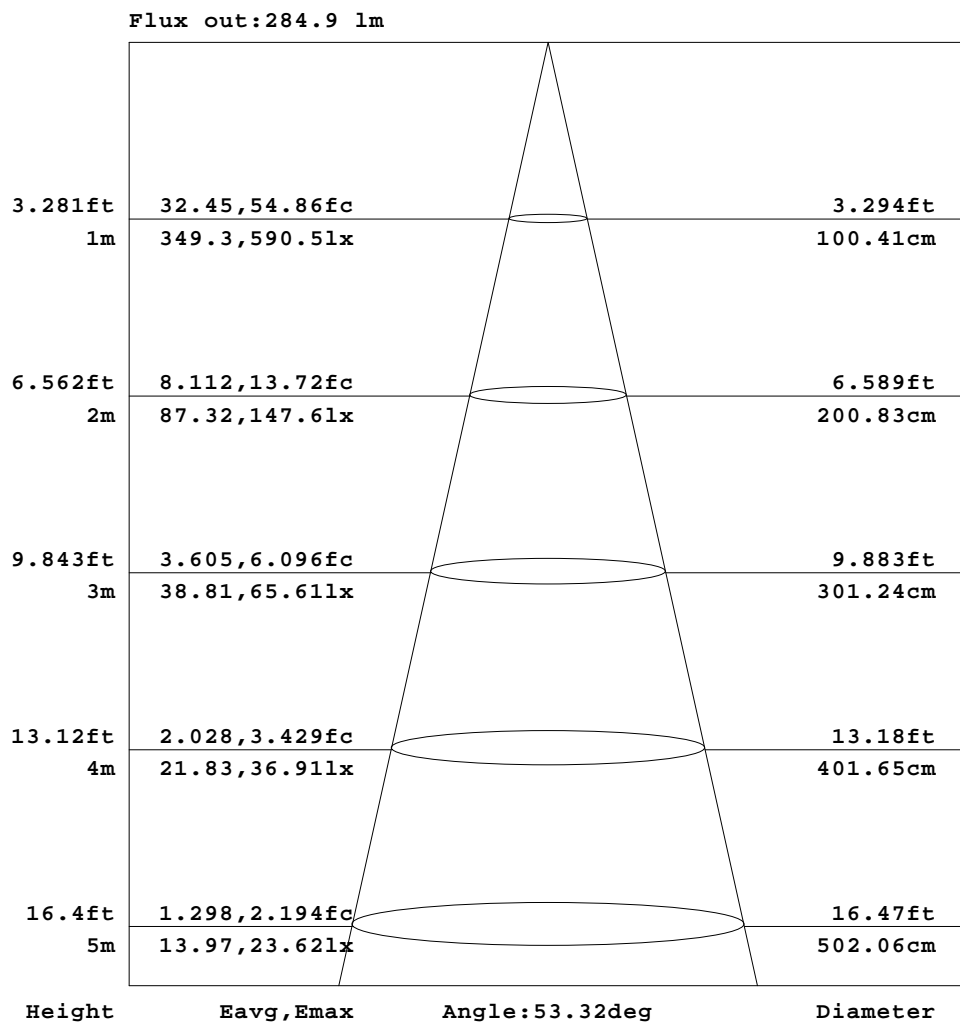


C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2019-06-03

deg Range: 0 - 180DEG  
deg Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity: 65.0%  
Test Distance: 8.989m [K=1.0000]  
Remarks:

### AAI Figure

NAME: 5RS128	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:003
MFR.: Lediand	SUR.:	PROTECTION ANGLE:



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

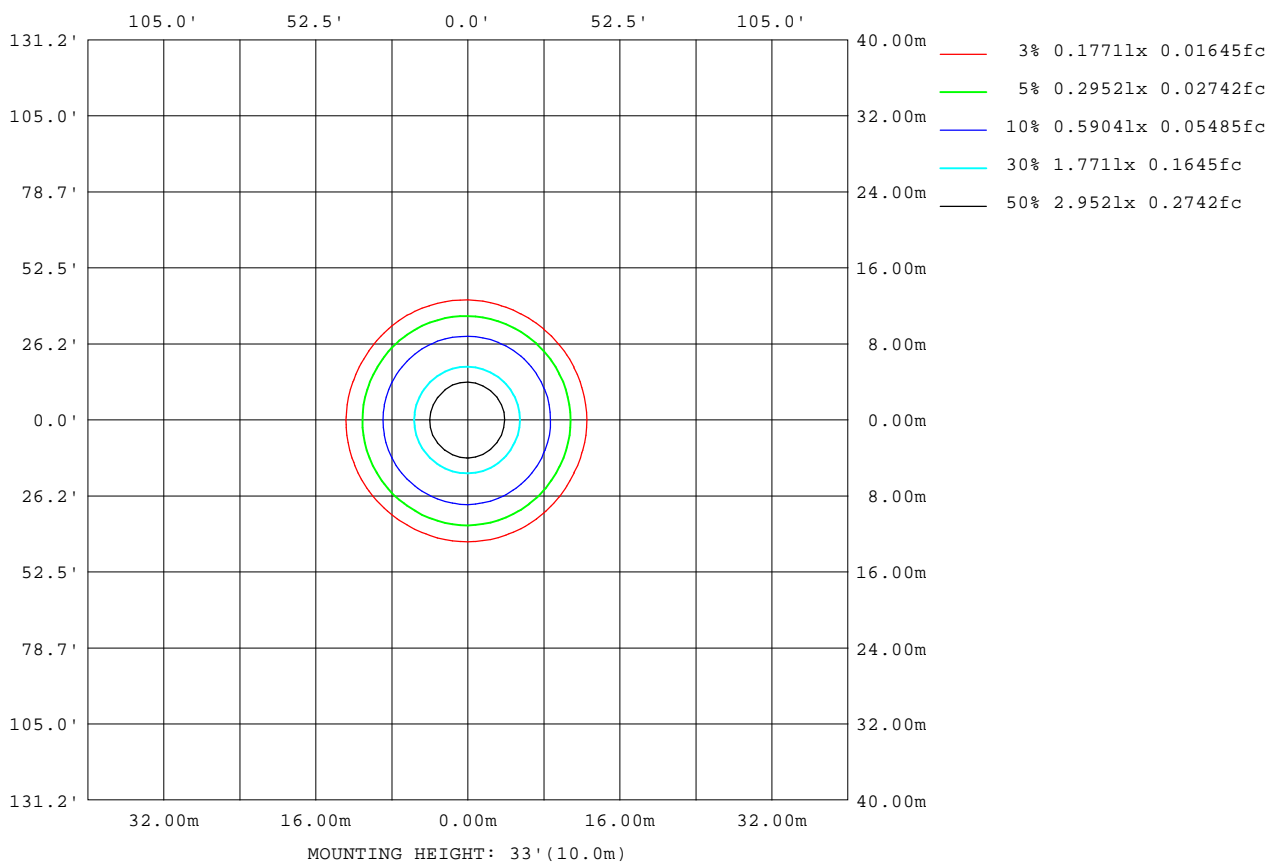
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2019-06-03

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:



## ISOLUX DIAGRAM

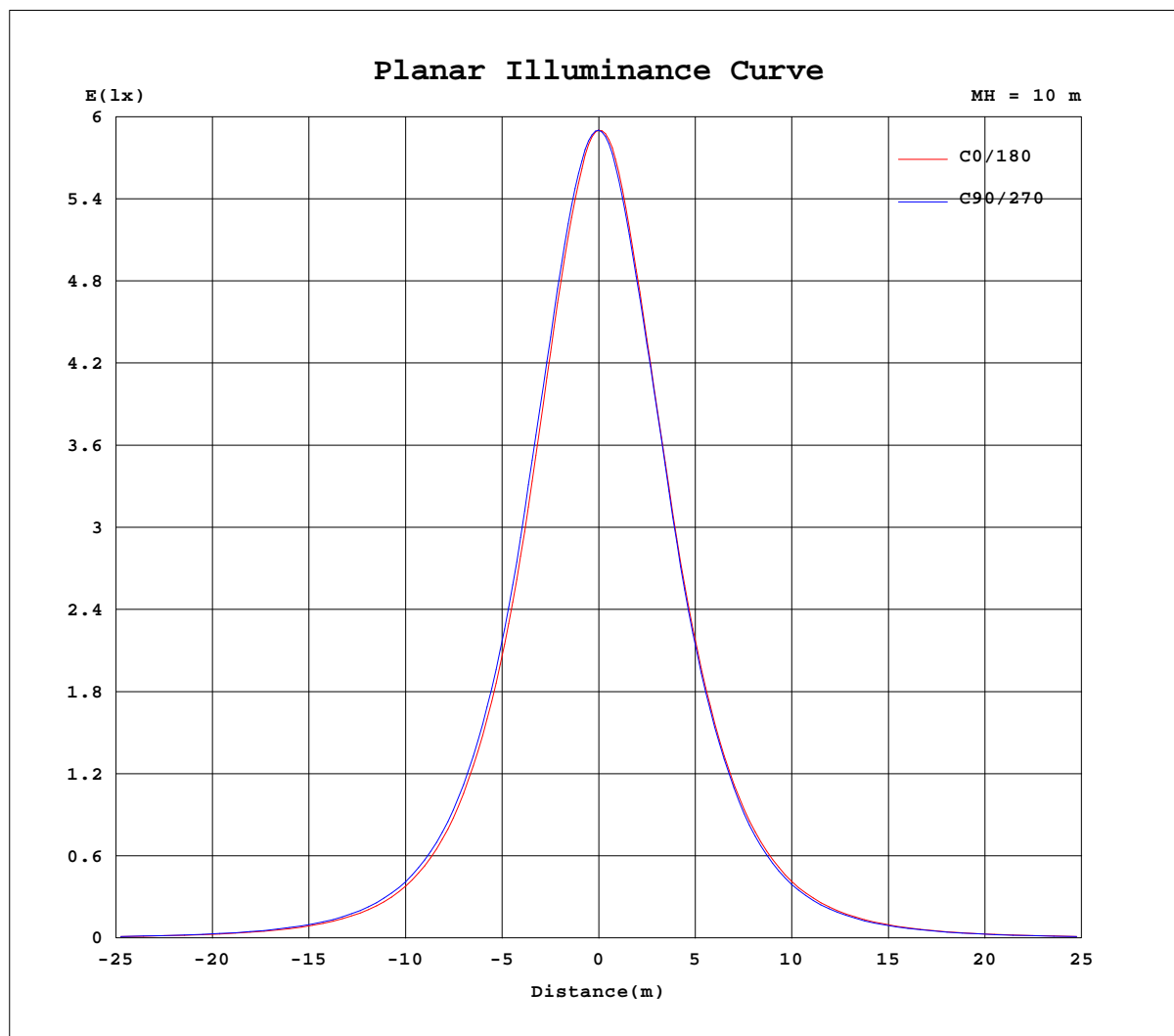
NAME: 5RS128	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:003
MFR.: Lediant	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2019-06-03

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity: 65.0%  
Test Distance: 8.989m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2019-06-03

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity: 65.0%  
Test Distance: 8.989m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 5RS128	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:003
MFR.: Lediant	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(°) g (°)	0	30	60	90	120	150	180	210	240	270	300	330						
0	590	590	590	590	590	590	590	590	590	590	590	590						
5	569	570	571	574	575	576	576	574	573	571	569	568						
10	521	522	525	531	530	531	528	526	526	523	521	519						
15	454	458	461	467	467	469	466	462	464	464	461	456						
20	380	381	389	399	396	399	397	389	394	393	385	382						
25	308	309	317	325	324	325	325	320	321	320	312	311						
30	247	247	254	260	261	262	261	258	259	257	251	249						
35	192	193	199	204	206	205	205	204	203	200	195	194						
40	145	147	151	156	156	157	157	155	155	151	147	146						
45	108	109	113	117	117	117	117	116	115	111	109	107						
50	78.9	79.0	83.8	86.6	85.5	86.4	86.5	83.7	84.1	81.4	78.4	78.0						
55	57.4	57.5	61.1	63.4	61.6	62.9	62.9	59.6	61.0	59.1	55.7	56.7						
60	41.3	41.6	43.8	45.7	44.4	45.2	45.1	42.7	43.9	42.5	40.3	40.7						
65	29.4	29.7	31.0	32.0	31.4	31.8	31.9	30.3	31.2	30.1	28.9	28.9						
70	20.5	20.7	21.4	22.0	21.7	22.0	22.0	21.0	21.6	20.9	20.3	20.2						
75	13.5	13.7	13.9	14.2	14.2	14.4	14.4	13.8	14.1	13.7	13.4	13.3						
80	7.88	8.10	8.10	8.20	8.31	8.41	8.50	8.16	8.24	7.91	7.89	7.77						
85	3.01	3.19	3.08	3.27	3.37	3.53	3.63	3.29	3.40	3.14	3.11	3.01						
90	0.04	0.03	0.04	0.03	0.04	0.03	0.04	0.04	0.03	0.05	0.03	0.04						
95	0.03	0.03	0.03	0.04	0.03	0.03	0.04	0.03	0.04	0.02	0.04	0.03						
100	0.04	0.05	0.03	0.06	0.03	0.05	0.04	0.03	0.05	0.02	0.05	0.05						
105	0.06	0.06	0.03	0.06	0.04	0.06	0.06	0.05	0.06	0.05	0.08	0.06						
110	0.07	0.09	0.06	0.08	0.07	0.08	0.08	0.07	0.08	0.07	0.10	0.08						
115	0.08	0.11	0.08	0.12	0.08	0.11	0.12	0.07	0.12	0.08	0.13	0.09						
120	0.12	0.17	0.11	0.16	0.11	0.15	0.15	0.11	0.15	0.14	0.16	0.13						
125	0.18	0.20	0.18	0.20	0.17	0.20	0.20	0.18	0.20	0.19	0.20	0.18						
130	0.23	0.26	0.22	0.26	0.23	0.25	0.25	0.22	0.26	0.25	0.27	0.23						
135	0.30	0.34	0.30	0.34	0.29	0.33	0.32	0.28	0.33	0.31	0.34	0.30						
140	0.38	0.43	0.38	0.41	0.37	0.41	0.41	0.38	0.42	0.38	0.43	0.38						
145	0.49	0.53	0.49	0.51	0.47	0.50	0.49	0.48	0.51	0.49	0.52	0.48						
150	0.58	0.63	0.58	0.61	0.58	0.60	0.60	0.57	0.62	0.59	0.63	0.59						
155	0.69	0.73	0.69	0.72	0.68	0.71	0.70	0.67	0.72	0.69	0.73	0.69						
160	0.81	0.83	0.78	0.82	0.79	0.82	0.81	0.78	0.83	0.79	0.83	0.81						
165	0.89	0.92	0.88	0.92	0.88	0.92	0.90	0.88	0.91	0.89	0.92	0.90						
170	0.99	1.00	0.99	0.99	0.98	0.99	0.98	0.97	0.99	0.98	1.00	0.99						
175	1.02	1.05	1.02	1.05	1.01	1.06	1.05	1.01	1.04	1.02	1.06	1.02						
180	1.08	1.07	1.07	1.08	1.08	1.08	1.07	1.08	1.07	1.07	1.08	1.07						

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2019-06-03

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.279  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks: