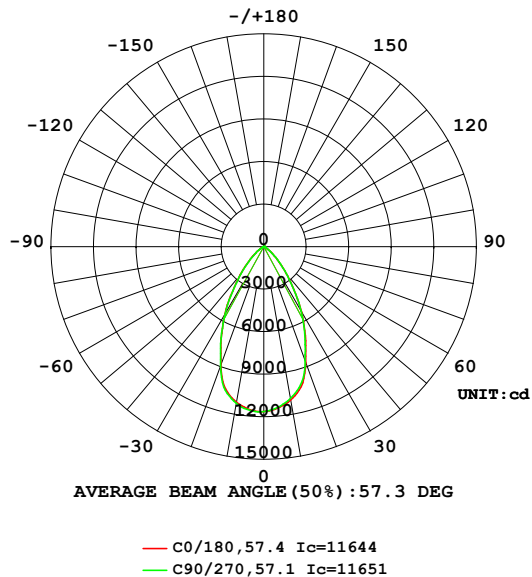


LUMINAIRE PHOTOMETRIC TEST REPORT

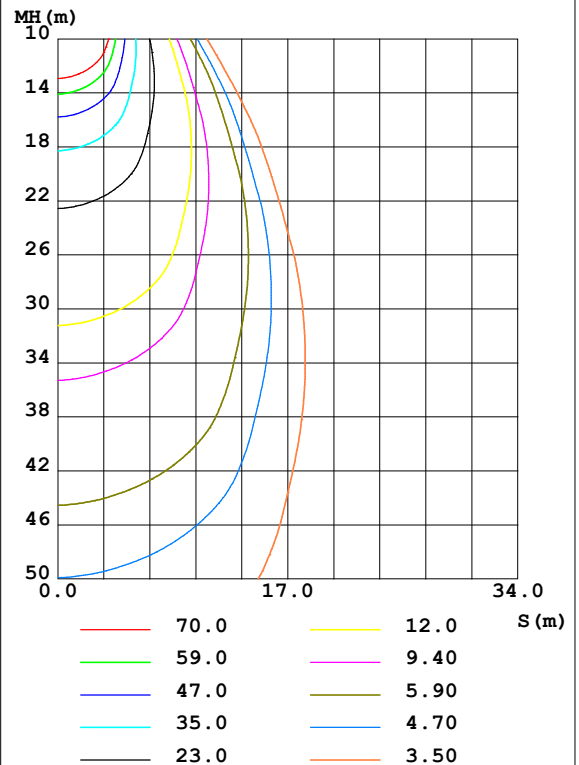
Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 61.02 lm/W
L0228-MODEL-60-WR-60D-OSRAM-4000K		Imax(cd)	11658	S/MH(C0/180)	0.88	
NOMINAL POWER(W)	180	LOR(%)	100.0	S/MH(C90/270)	0.88	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	11372	□ UP,DN(C0-180)	0.0,49.5	
NOMINAL FLUX(lm)	11372.2	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,50.5	
LAMPS INSIDE	1	□ up(%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	220	□ down(%)	100.0	CIBSE SHR MAX	0.90	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-11-10

□ Range: 0 - 90DEG  
□ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
Humidity:65.0%  
Test Distance:11.635m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	1099	1089	1087	1099	1114	1124	1122	1110	0- 10	1082	1082	9.52, 9.52
20	867.3	847.1	855.1	871.0	888.1	897.9	891.8	877.3	10- 20	2844	3926	34.5, 34.5
30	533.3	527.2	528.2	538.0	546.9	554.7	544.2	541.0	20- 30	3200	7126	62.7, 62.7
40	248.5	245.2	250.7	254.2	260.6	261.5	254.5	248.0	30- 40	2383	9509	83.6, 83.6
50	86.36	87.47	89.13	92.70	92.53	93.28	87.31	86.47	40- 50	1227	10737	94.4, 94.4
60	22.96	23.49	25.60	25.62	25.67	24.76	23.42	21.50	50- 60	449.3	11186	98.4, 98.4
70	5.511	5.690	5.948	5.854	5.138	4.790	4.418	4.353	60- 70	118.6	11305	99.4, 99.4
80	3.509	3.558	3.609	3.573	2.664	2.561	2.464	2.452	70- 80	41.88	11347	99.8, 99.8
90	2.338	2.342	2.348	2.347	1.371	1.368	1.367	1.365	80- 90	25.68	11372	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: ×10cd									UNIT: lm		

Conical surface Flux(90deg): 10252 lm

%lum = 90.1%

%lamp = 90.1%

Conical surface Flux(120deg): 11186 lm

%lum = 98.4%

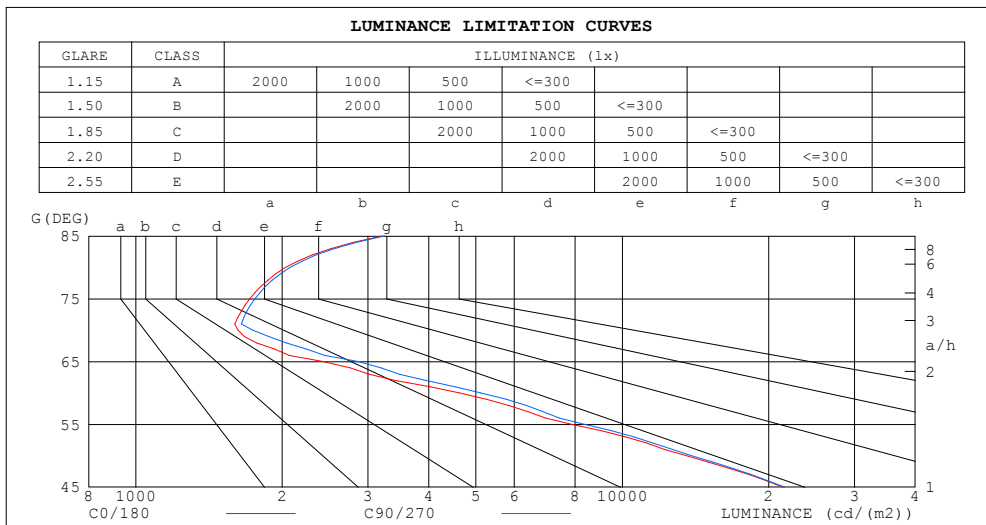
%lamp = 98.4%

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-11-10

□ Range: 0 - 90DEG  
 □ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
 Humidity: 65.0%  
 Test Distance: 11.635m [K=1.0000]  
 Remarks:

### LUMINANCE LIMITATION CURVES

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3207	3246
80	2034	2077
75	1715	1758
70	1622	1738
65	2423	2864
60	4621	5118
55	7854	8343
50	13521	13860
45	21409	21606

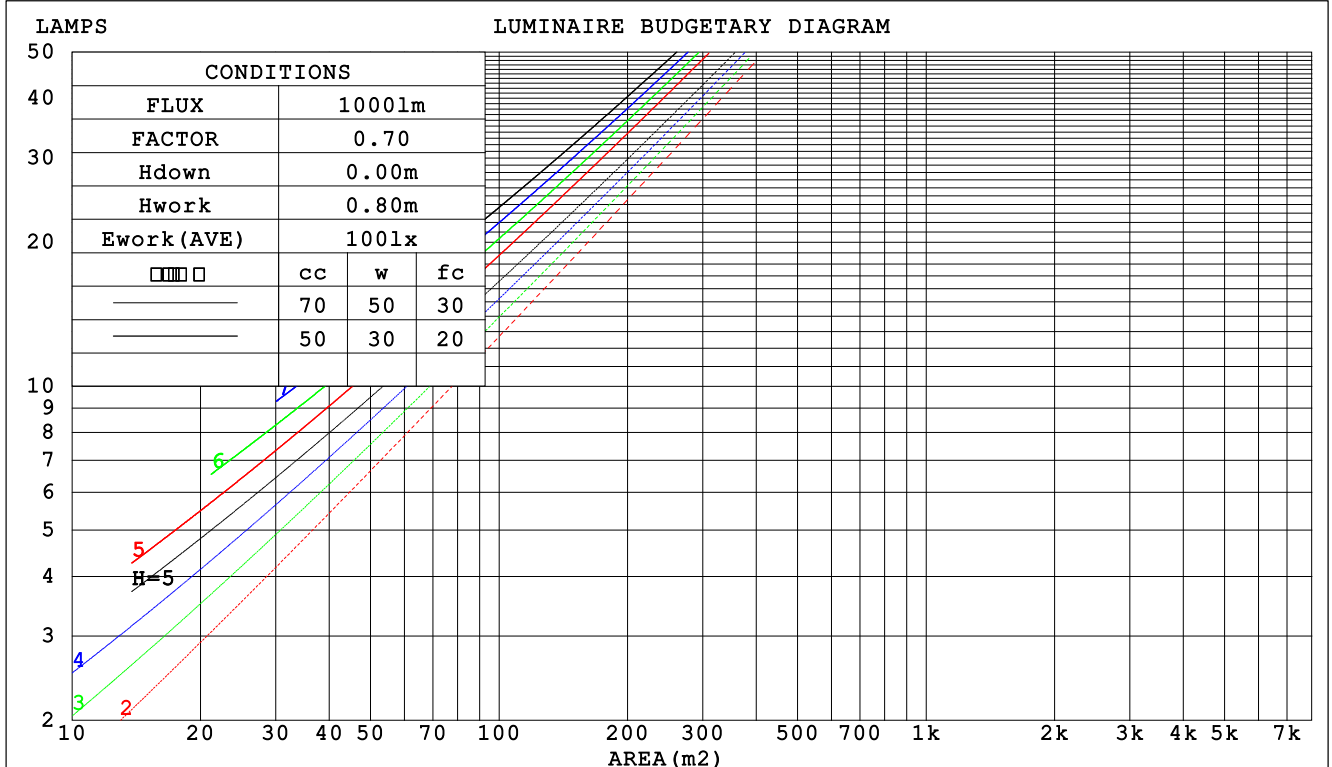
C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
 Humidity: 65.0%  
 Test Distance: 11.635m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-11-10

□ Range: 0 - 90DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
 Humidity:65.0%  
 Test Distance:11.635m [K=1.0000]  
 Remarks:

### WEC AND CCEC

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)					
0.0						
1.0	.193 .110 .035	.186 .106 .034	.174 .100 .032	.162 .093 .030	.151 .088 .028	
2.0	.186 .102 .031	.180 .099 .031	.169 .094 .029	.159 .089 .028	.150 .085 .027	
3.0	.177 .094 .028	.172 .092 .028	.163 .088 .027	.154 .085 .026	.146 .081 .025	
4.0	.168 .087 .026	.164 .086 .025	.156 .083 .025	.149 .080 .024	.142 .077 .023	
5.0	.160 .082 .024	.156 .080 .023	.149 .078 .023	.143 .075 .022	.137 .073 .022	
6.0	.152 .076 .022	.149 .075 .022	.143 .073 .021	.137 .071 .021	.132 .069 .021	
7.0	.145 .072 .020	.142 .071 .020	.137 .069 .020	.132 .067 .020	.127 .066 .019	
8.0	.139 .068 .019	.136 .067 .019	.131 .065 .019	.126 .064 .018	.122 .063 .018	
9.0	.132 .064 .018	.130 .063 .018	.126 .062 .018	.121 .061 .017	.117 .060 .017	
10.0	.127 .061 .017	.124 .060 .017	.120 .059 .017	.117 .058 .016	.113 .057 .016	

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	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	.172 .157 .144	.147 .135 .124	.101 .093 .085	.058 .054 .050	.019 .017 .016	
2.0	.158 .132 .111	.135 .114 .096	.093 .079 .067	.054 .046 .039	.017 .015 .013	
3.0	.147 .114 .087	.126 .098 .076	.086 .068 .053	.050 .040 .031	.016 .013 .010	
4.0	.137 .099 .070	.117 .086 .061	.081 .060 .043	.047 .035 .025	.015 .011 .008	
5.0	.129 .088 .058	.111 .076 .050	.076 .053 .035	.044 .031 .021	.014 .010 .007	
6.0	.122 .079 .048	.104 .068 .042	.072 .048 .030	.042 .028 .018	.013 .009 .006	
7.0	.115 .071 .041	.099 .062 .035	.068 .043 .025	.040 .026 .015	.013 .008 .005	
8.0	.110 .065 .035	.094 .057 .030	.065 .040 .021	.038 .023 .013	.012 .008 .004	
9.0	.104 .060 .030	.090 .052 .026	.062 .037 .019	.036 .022 .011	.012 .007 .004	
10.0	.100 .056 .026	.086 .048 .023	.060 .034 .016	.035 .020 .010	.011 .007 .003	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
Humidity:65.0%  
Test Distance:11.635m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm										
NAME: JH11-03-1 L0228 WR 180W					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: Traxon Technologies					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	10.4	11.5	10.6	11.6	11.8	10.5	11.5	10.7	11.7	11.8
3H	10.3	11.2	10.5	11.4	11.6	10.3	11.3	10.6	11.5	11.7
4H	10.2	11.1	10.5	11.3	11.6	10.3	11.2	10.6	11.4	11.6
6H	10.2	11.0	10.5	11.3	11.5	10.2	11.1	10.5	11.3	11.6
8H	10.1	11.0	10.5	11.2	11.5	10.2	11.0	10.5	11.3	11.5
12H	10.1	10.9	10.5	11.2	11.5	10.2	11.0	10.5	11.2	11.5
4H 2H	10.2	11.1	10.5	11.4	11.6	10.3	11.2	10.6	11.4	11.6
3H	10.1	10.9	10.4	11.2	11.5	10.2	10.9	10.5	11.2	11.5
4H	10.1	10.8	10.4	11.1	11.4	10.1	10.8	10.5	11.1	11.4
6H	10.0	10.7	10.4	11.0	11.3	10.1	10.7	10.5	11.0	11.4
8H	10.0	10.6	10.4	11.0	11.3	10.1	10.7	10.5	11.0	11.4
12H	10.0	10.6	10.5	10.9	11.3	10.1	10.6	10.5	11.0	11.4
8H 4H	10.0	10.5	10.4	10.9	11.3	10.0	10.6	10.4	10.9	11.3
6H	9.9	10.4	10.4	10.8	11.2	10.0	10.5	10.4	10.9	11.3
8H	10.0	10.4	10.4	10.8	11.2	10.0	10.4	10.5	10.8	11.3
12H	10.0	10.4	10.5	10.8	11.3	10.1	10.4	10.5	10.9	11.3
12H 4H	9.9	10.4	10.3	10.8	11.2	10.0	10.5	10.4	10.9	11.2
6H	9.9	10.3	10.4	10.7	11.2	10.0	10.4	10.4	10.8	11.2
8H	9.9	10.3	10.4	10.7	11.2	10.0	10.3	10.5	10.8	11.3
Variations with the observer position at spacings:										
S = 1.0H	+ 2.0 / - 4.8					+ 2.0 / - 4.5				
1.5H	+ 3.0 / - 3.7					+ 2.9 / - 3.6				
2.0H	+ 4.3 / - 4.7					+ 4.2 / - 4.6				

CIE Pub.117, 11372 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 8.4)  
Area: 0.1 m2

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
Humidity:65.0%  
Test Distance:11.635m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:

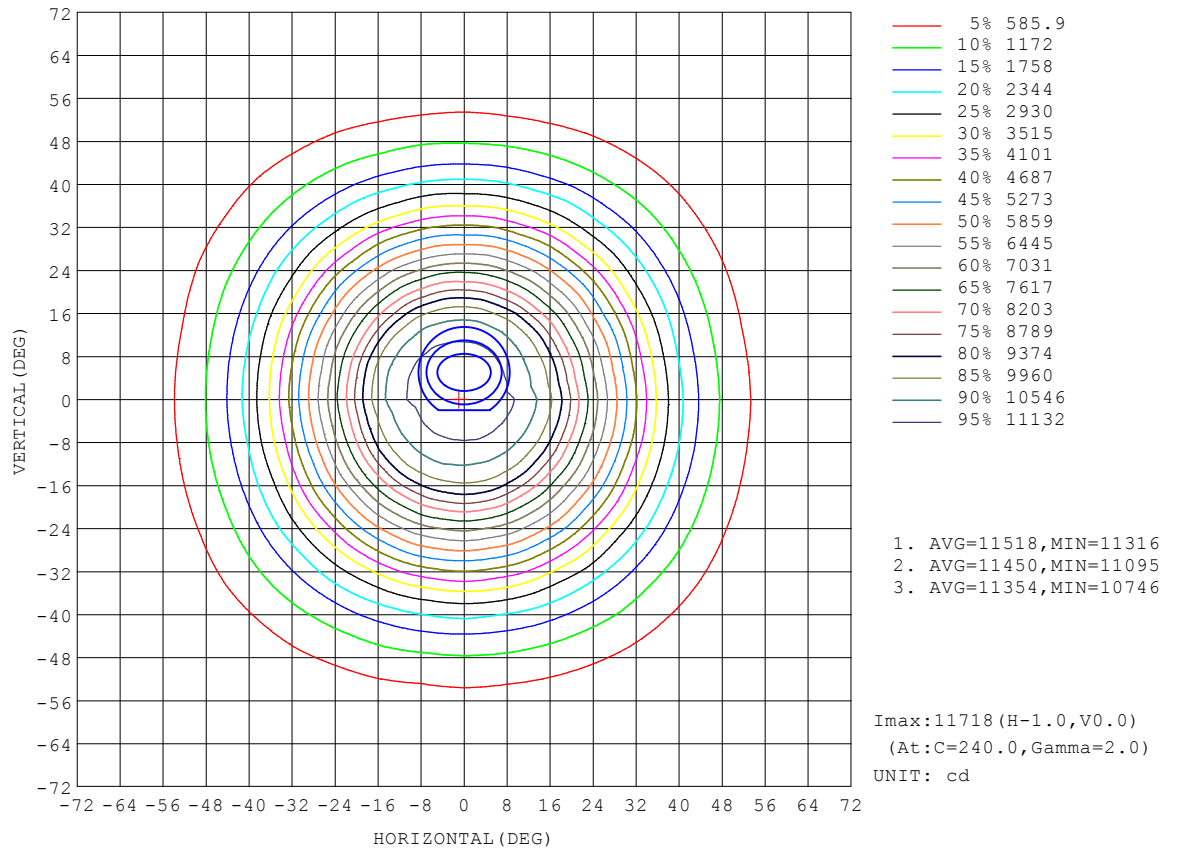
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	81	74	69	80	73	69	80	73	69	65
0.80	89	83	78	89	82	78	87	82	78	73
1.00	95	89	84	94	88	84	93	88	84	79
1.25	100	94	90	99	93	90	97	92	89	84
1.50	103	98	94	102	97	93	100	95	92	87
2.00	107	102	98	105	101	97	102	99	96	90
2.50	109	104	101	107	103	100	104	101	98	92
3.00	110	107	103	109	105	102	105	102	100	93
4.00	113	109	107	111	108	105	107	105	103	95
5.00	114	111	109	112	109	107	108	106	104	97
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
Humidity: 65.0%  
Test Distance: 11.635m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:



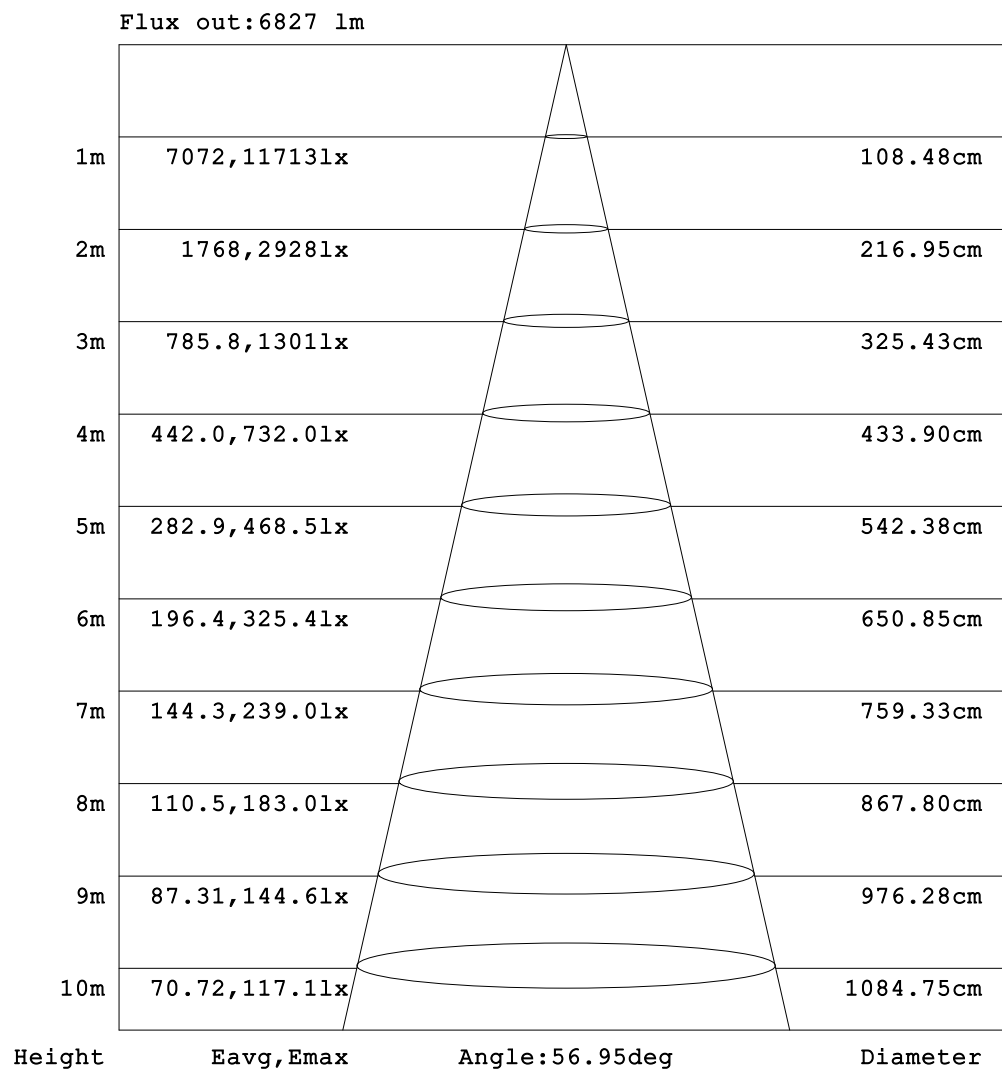
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
Humidity:65.0%  
Test Distance:11.635m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:



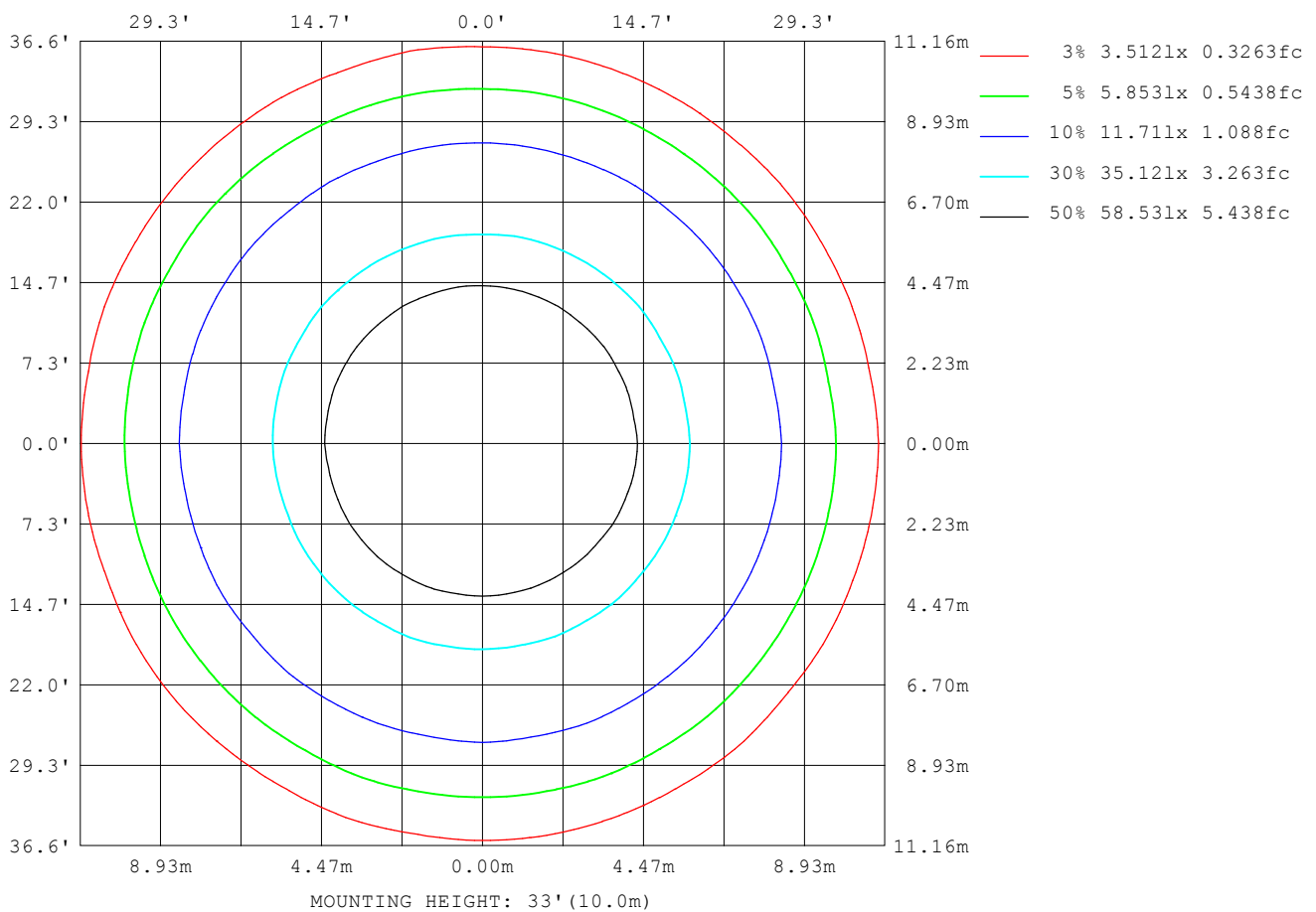
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
Humidity: 65.0%  
Test Distance: 11.635m [K=1.0000]  
Remarks:

# ISOLUX DIAGRAM

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
 Humidity:65.0%  
 Test Distance:11.635m [K=1.0000]  
 Remarks:

### LED Avg.L Report

Test:U:220.79V I:0.8930A P:186.38W PF:0.9453 Freq:50.01Hz Lamp Flux:11372.2x1 lm		
NAME: JH11-03-1 L0228 WR 180W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Traxon Technologies	SUR.:	Shielding Angle:

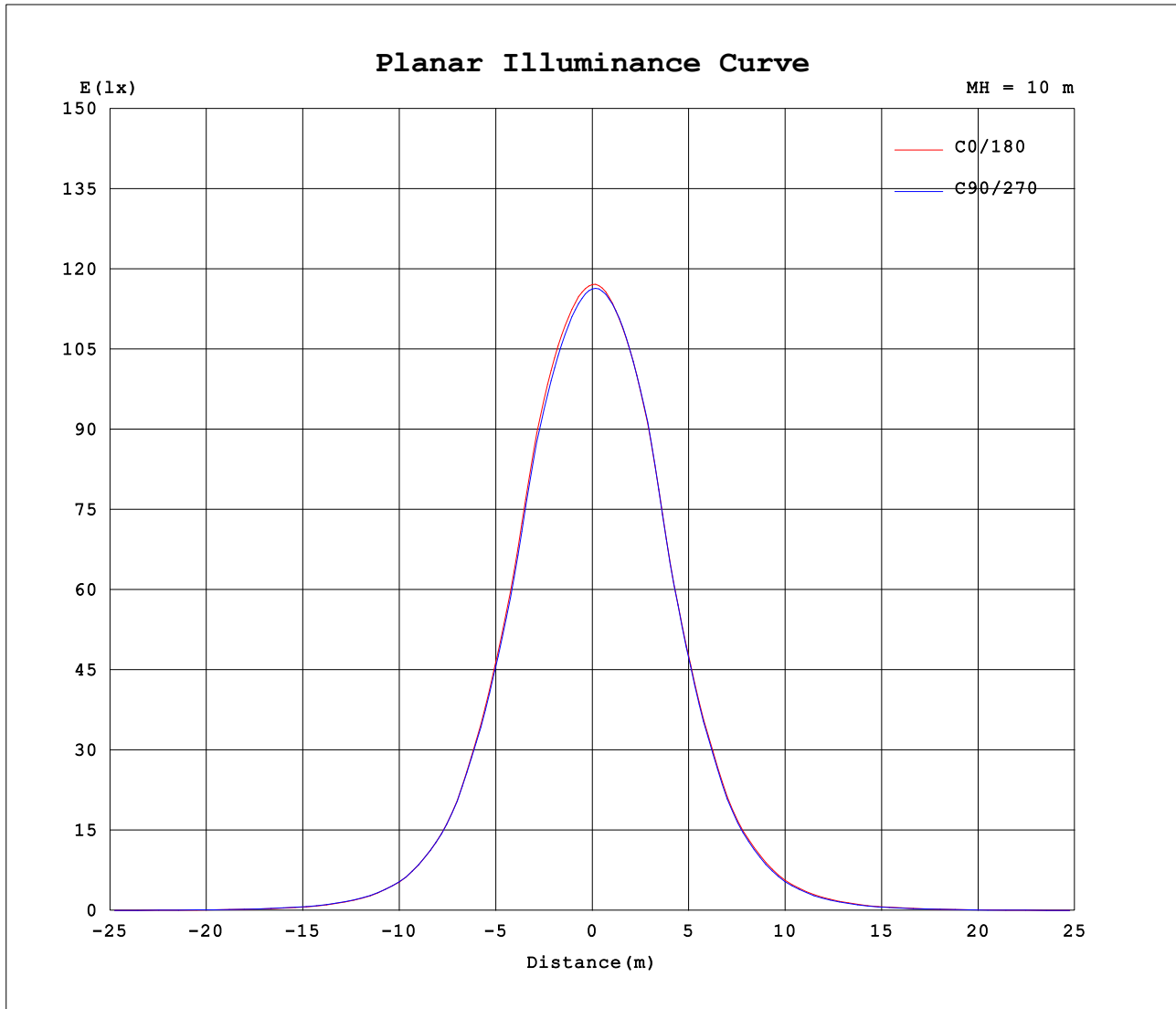
AvgL	cd/m2
L_0~180 (65) av	2572
L_0~180 (75) av	1552
L_0~180 (85) av	2668
L_90~270 (65) av	2618
L_90~270 (75) av	1523
L_90~270 (85) av	2646
L_45 (65) av	2557
L_45 (75) av	1522
L_45 (85) av	2644

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
Humidity:65.0%  
Test Distance:11.635m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2022-11-10

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
 Humidity: 65.0%  
 Test Distance: 11.635m [K=1.0000]  
 Remarks:

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
 Humidity:65.0%  
 Test Distance:11.635m [K=1.0000]  
 Remarks:

☐ Range: 0 - 90DEG  
☐ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.417  
 Humidity:65.0%  
 Test Distance:11.635m [K=1.0000]  
 Remarks: