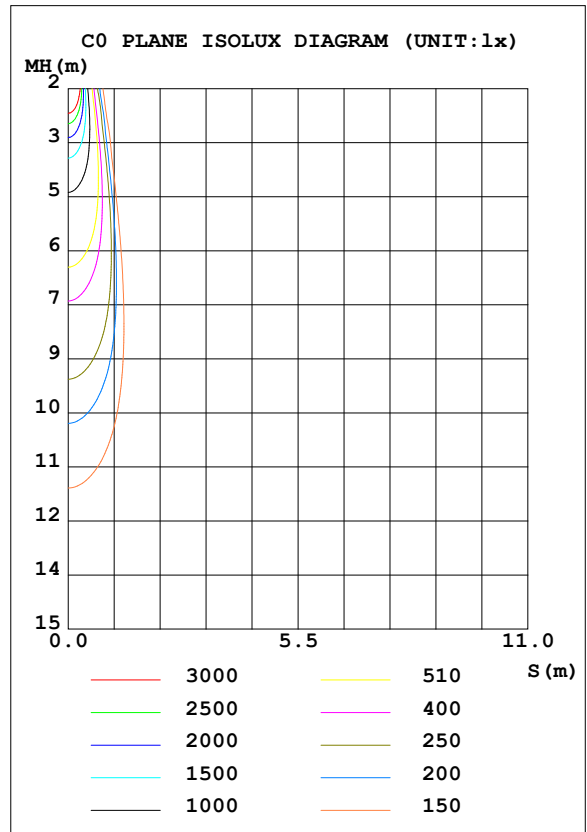
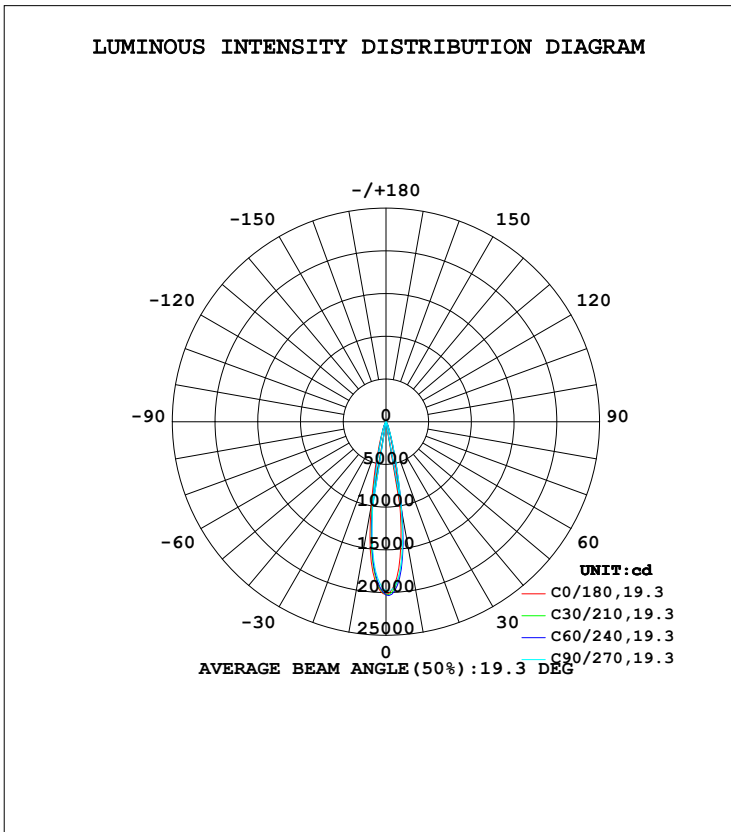


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-L49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 91.18 lm/W			
MODEL	XOB CRI 90 3000K	I _{max} (cd)	20348	S/MH (C0/180)	0.33
NOMINAL POWER (W)	30	LOR (%)	100.0	S/MH (C90/270)	0.30
RATED VOLTAGE (V)	37	TOTAL FLUX (lm)	2860.8	η UP, DN (C0-180)	0.0, 53.2
NOMINAL FLUX (lm)	2860.83	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 46.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	34.9	η down (%)	100.0	CIBSE SHR MAX	0.30



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: Jasoan
 Test Date: 2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity: 58%
 Test Distance: 9.322m [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
10	898.8	1045	1051	1101	998.6	860.4	818.2	780.4	0- 10	1396	1396	48.8,48.8
20	107.2	129.6	135.2	122.7	136.5	113.9	117.5	124.5	10- 20	1016	2413	84.3,84.3
30	32.57	35.87	35.60	35.80	35.11	30.95	30.74	31.68	20- 30	299.4	2712	94.8,94.8
40	8.734	9.658	9.920	10.31	9.308	8.404	8.177	7.857	30- 40	121.0	2833	99,99
50	0.4392	0.4996	0.5643	0.6016	0.5305	0.4451	0.3503	0.3947	40- 50	25.26	2858	99.9,99.9
60	0.0817	0.0795	0.0710	0.0767	0.0724	0.0691	0.0637	0.0656	50- 60	1.812	2860	100,100
70	0.0228	0.0176	0.0117	0.0138	0.0104	0.0142	0.0152	0.0145	60- 70	0.3099	2861	100,100
80	0.0117	0.0114	0.0117	0.0114	0.0097	0.0097	0.0097	0.0100	70- 80	0.1207	2861	100,100
90	0.0117	0.0114	0.0117	0.0114	0.0097	0.0097	0.0097	0.0097	80- 90	0.1155	2861	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): 2853.4 lm

%lum = 99.7%
%lamp = 99.7%

Conical surface Flux(120deg): 2860.3 lm

%lum = 100.0%
%lamp = 100.0%

0 - 45 DEG Zonal Flux:2853.4 %lum: 99.7%
135 - 180 DEG Zonal Flux:0 %lum: 0.0%

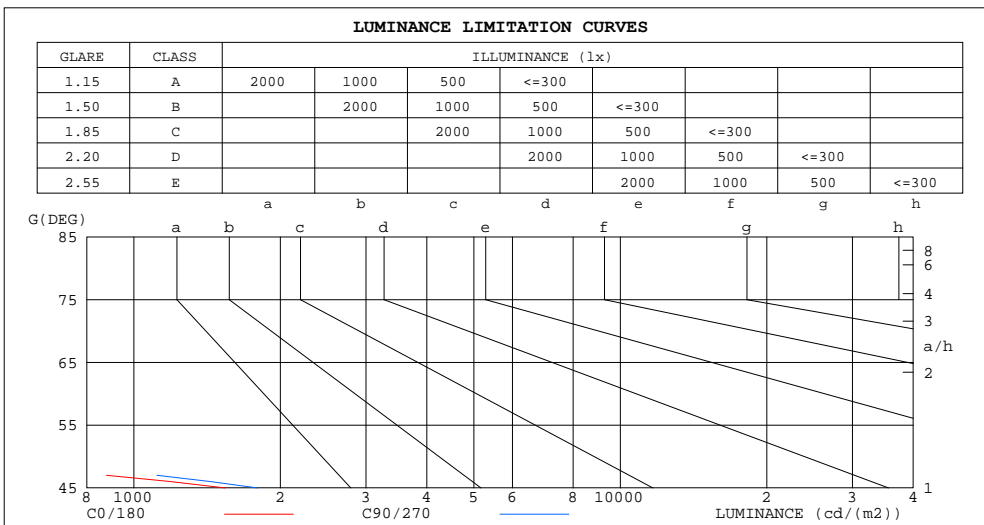
All measured values may vary less than 35 %
from the average measured value in the 0 to 130 deg. zone: 4.1%
All measured values in the 0 to 130 deg. zone
may vary less than 50% from the average value of itself: 6.4%

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jasoan
Test Date:2024-10-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity:58%
Test Distance:9.322m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-L49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	65	65
80	33	33
75	23	22
70	32	17
65	41	23
60	79	69
55	171	167
50	332	426
45	1539	1795

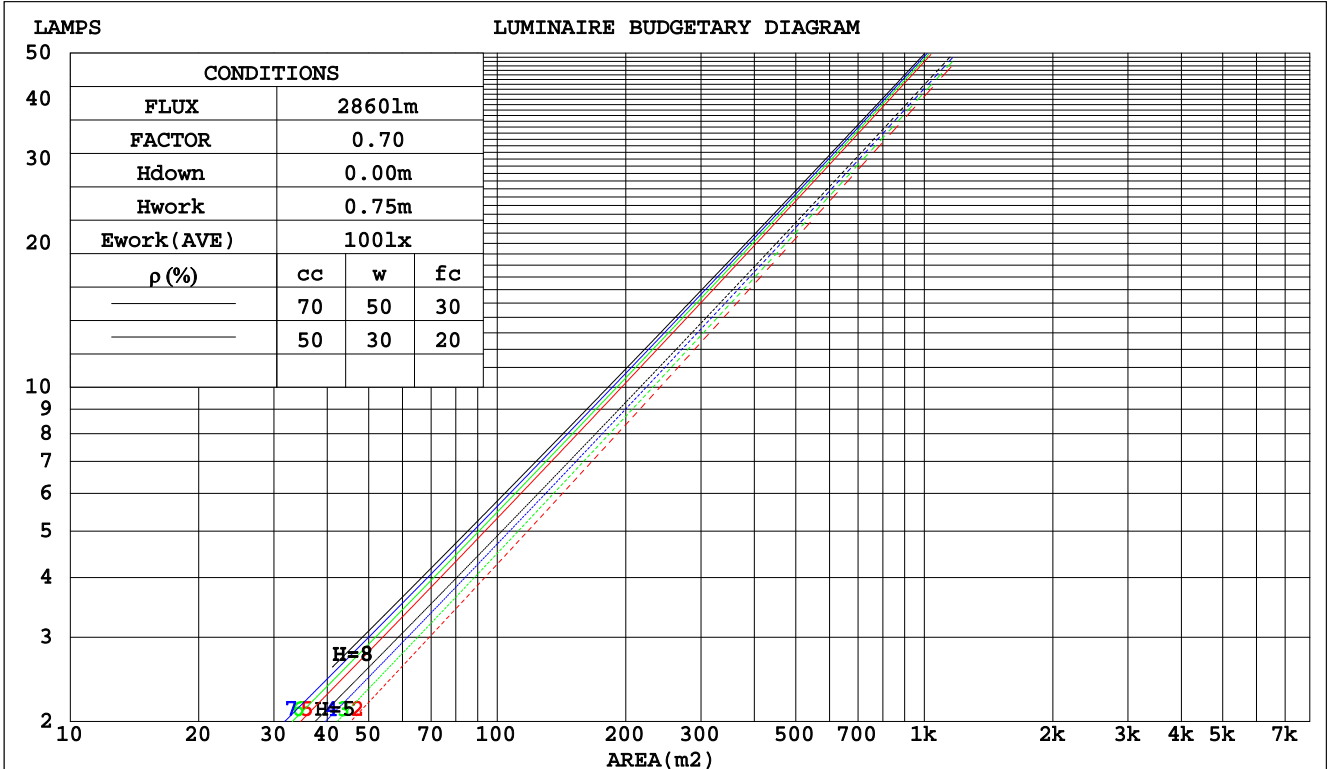
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: Jasoan
 Test Date: 2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity: 58%
 Test Distance: 9.322m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-L49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: ϕ 162mm*H188mm	
MFR.: SBC XICATO CORP.		

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc	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	1.00
1.0	1.13	1.12	1.10	1.11	1.10	1.08	1.07	1.06	1.05	1.04	1.03	1.02	1.00	.00	.99	.97
2.0	1.09	1.06	1.04	1.07	1.05	1.02	1.04	1.02	1.00	1.01	.00	.98	.98	.97	.96	.95
3.0	1.05	1.01	.99	1.03	1.00	.98	1.01	.98	.96	.99	.97	.95	.97	.95	.94	.92
4.0	1.01	.97	.95	.00	.97	.94	.98	.95	.93	.96	.94	.92	.95	.93	.91	.90
5.0	.98	.94	.91	.97	.94	.91	.95	.93	.90	.94	.92	.90	.93	.91	.89	.88
6.0	.95	.91	.89	.94	.91	.88	.93	.90	.88	.92	.89	.87	.91	.89	.87	.86
7.0	.93	.89	.86	.92	.88	.86	.91	.88	.86	.90	.87	.85	.89	.87	.85	.84
8.0	.90	.87	.84	.90	.86	.84	.89	.86	.84	.88	.85	.83	.87	.85	.83	.82
9.0	.88	.85	.82	.88	.84	.82	.87	.84	.82	.86	.83	.81	.86	.83	.81	.80
10.0	.86	.83	.80	.86	.82	.80	.85	.82	.80	.85	.82	.80	.84	.82	.80	.79



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: Jasoan
 Test Date: 2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity: 58%
 Test Distance: 9.322m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz		
Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-I49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		

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	.127	.072	.023	.121	.069	.022	.108	.062	.020	.097	.056	.018	.086	.050	.016	
2.0	.117	.064	.020	.112	.062	.019	.102	.056	.018	.092	.052	.016	.084	.047	.015	
3.0	.108	.058	.017	.104	.056	.017	.096	.052	.016	.088	.048	.015	.081	.045	.014	
4.0	.101	.053	.015	.097	.051	.015	.090	.048	.014	.084	.045	.014	.078	.042	.013	
5.0	.095	.048	.014	.092	.047	.014	.086	.045	.013	.080	.042	.013	.075	.040	.012	
6.0	.089	.045	.013	.087	.044	.013	.082	.042	.012	.077	.040	.012	.072	.038	.011	
7.0	.084	.042	.012	.082	.041	.012	.078	.039	.011	.074	.038	.011	.070	.036	.011	
8.0	.080	.039	.011	.078	.038	.011	.074	.037	.011	.071	.036	.010	.067	.035	.010	
9.0	.076	.037	.010	.075	.036	.010	.071	.035	.010	.068	.034	.010	.065	.033	.010	
10.0	.073	.035	.010	.071	.034	.010	.068	.034	.009	.066	.033	.009	.063	.032	.009	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.168	.158	.149	.143	.135	.128	.098	.093	.089	.056	.054	.052	.018	.017	.017	
2.0	.149	.133	.119	.128	.114	.103	.087	.079	.072	.050	.046	.042	.016	.015	.014	
3.0	.133	.113	.097	.114	.098	.084	.078	.068	.059	.045	.040	.035	.015	.013	.011	
4.0	.120	.098	.080	.103	.084	.070	.071	.059	.049	.041	.034	.029	.013	.011	.010	
5.0	.109	.085	.067	.094	.074	.059	.065	.051	.041	.037	.030	.025	.012	.010	.008	
6.0	.100	.075	.057	.086	.065	.050	.059	.045	.035	.034	.027	.021	.011	.009	.007	
7.0	.092	.067	.049	.079	.058	.043	.055	.041	.030	.032	.024	.018	.010	.008	.006	
8.0	.085	.060	.042	.074	.052	.037	.051	.036	.026	.030	.021	.016	.010	.007	.005	
9.0	.080	.054	.037	.069	.047	.032	.048	.033	.023	.028	.019	.014	.009	.006	.004	
10.0	.075	.049	.032	.064	.043	.028	.045	.030	.020	.026	.018	.012	.008	.006	.004	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:Jasoan
 Test Date:2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity:58%
 Test Distance:9.322m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz		
Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-L49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		

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	2.7	3.3	2.9	3.4	3.6	3.2	3.7	3.4	3.9	4.0
3H	2.6	3.1	2.8	3.3	3.5	3.0	3.6	3.3	3.8	3.9
4H	2.5	3.0	2.7	3.2	3.4	2.9	3.5	3.2	3.7	3.9
6H	2.4	2.9	2.7	3.1	3.4	2.9	3.4	3.1	3.6	3.8
8H	2.4	2.8	2.6	3.1	3.3	2.8	3.3	3.1	3.5	3.8
12H	2.3	2.8	2.6	3.0	3.3	2.8	3.2	3.1	3.5	3.8
4H 2H	2.5	3.0	2.7	3.2	3.4	2.9	3.5	3.2	3.7	3.9
3H	2.3	2.8	2.6	3.0	3.3	2.8	3.2	3.1	3.5	3.8
4H	2.2	2.6	2.5	2.9	3.2	2.7	3.1	3.0	3.4	3.7
6H	2.1	2.5	2.5	2.8	3.2	2.6	3.0	2.9	3.3	3.6
8H	2.1	2.4	2.4	2.8	3.1	2.5	2.9	2.9	3.2	3.6
12H	2.0	2.3	2.4	2.7	3.1	2.5	2.8	2.9	3.2	3.5
8H 4H	2.1	2.4	2.4	2.8	3.1	2.5	2.9	2.9	3.2	3.6
6H	1.9	2.2	2.4	2.6	3.0	2.4	2.7	2.8	3.1	3.5
8H	1.9	2.1	2.3	2.6	3.0	2.3	2.6	2.8	3.0	3.5
12H	1.8	2.0	2.3	2.5	2.9	2.3	2.5	2.7	2.9	3.4
12H 4H	2.0	2.3	2.4	2.7	3.1	2.5	2.8	2.9	3.2	3.5
6H	1.9	2.1	2.3	2.5	3.0	2.3	2.6	2.8	3.0	3.5
8H	1.8	2.0	2.3	2.5	2.9	2.3	2.5	2.7	2.9	3.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.1 / -20.3					+ 3.3 / -21.0				
1.5H	+ 5.7 / -16.9					+ 5.9 / -17.8				
2.0H	+ 7.9 / -12.0					+ 8.3 / -13.0				

CIE Pub.117, 2861 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.7)
 Area: 0.0206015 m2

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:Jasoan
 Test Date:2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity:58%
 Test Distance:9.322m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz		
Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-I49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		

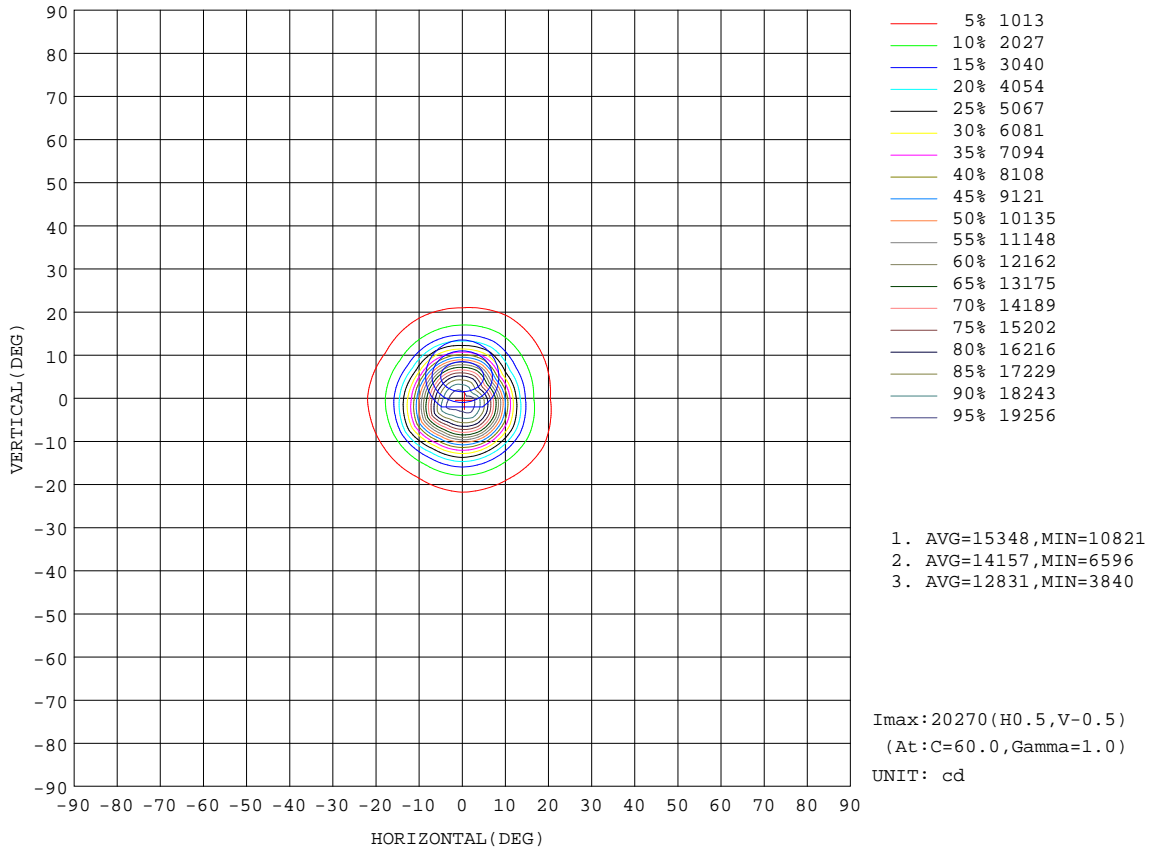
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	91	85	82	90	85	82	90	85	82	78
0.80	98	93	89	97	92	89	96	92	89	86
1.00	102	97	93	101	96	93	99	96	93	89
1.25	105	101	98	104	100	97	102	99	96	93
1.50	108	103	101	106	103	100	104	101	99	95
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	107	104	107	104	102	97
3.00	113	110	107	111	108	106	108	106	104	98
4.00	115	112	110	113	110	109	109	107	106	99
5.00	116	114	112	114	112	111	110	109	107	100
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: MEDIUM
 Temperature:25.3DEG
 Operators:Jasoan
 Test Date:2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity:58%
 Test Distance:9.322m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz		
Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-L49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		



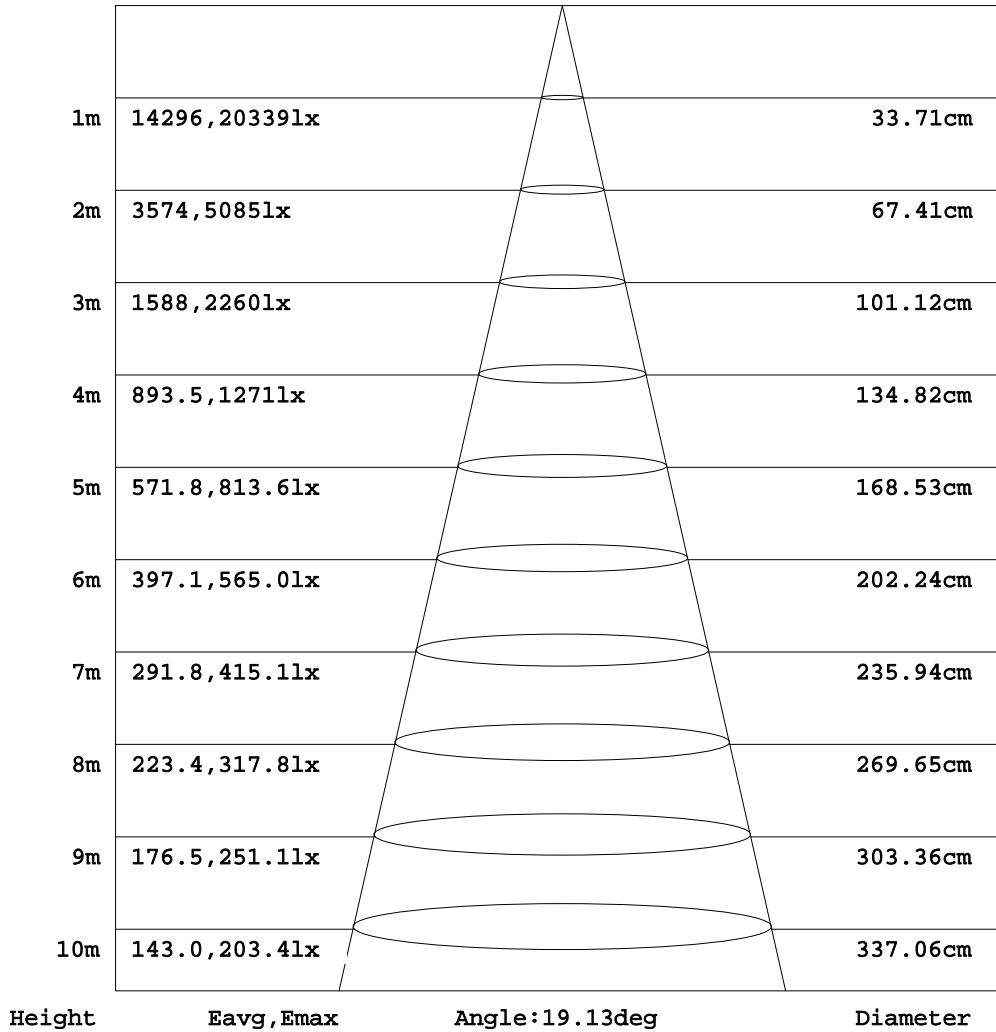
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: Jasoan
 Test Date: 2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity: 58%
 Test Distance: 9.322m [K=1.0000]
 Remarks:

AAI Figure

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-L49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		

Flux out:1396 lm



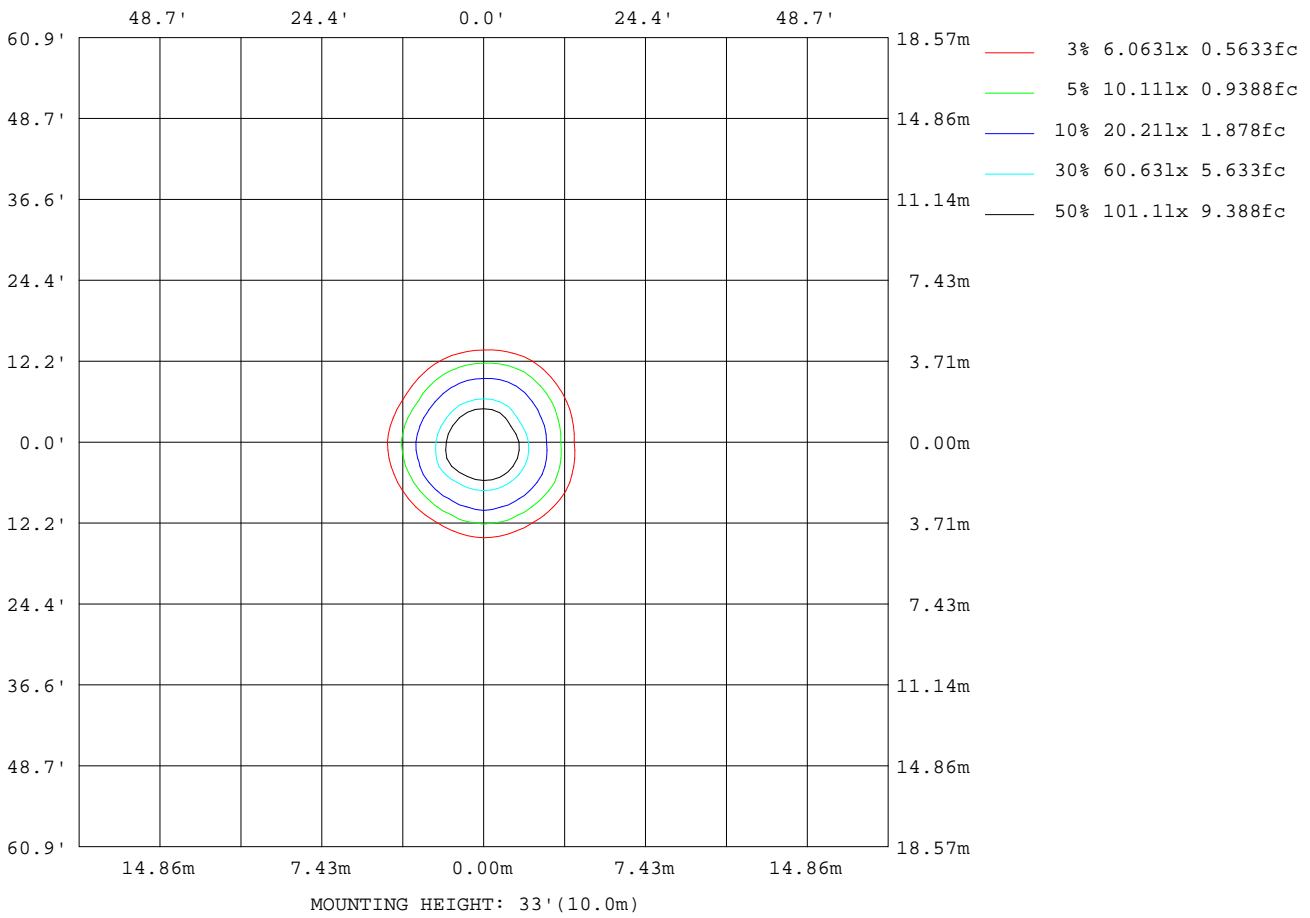
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jasoan
Test Date:2024-10-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity:58%
Test Distance:9.322m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz		
Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-L49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3DEG
 Operators: Jasoan
 Test Date: 2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity: 58%
 Test Distance: 9.322m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:34.900V I:0.8990A P:31.375W PF:1.0000 Freq:0Hz		
Lamp Flux:2860.83x1 lm		
NAME: XDL E6-WRA-L49030-20DW	TYPE: Downlight	SERIAL No.:
SPEC.: XOB CRI 90 3000K	DIM.: φ162mm*H188mm	
MFR.: SBC XICATO CORP.		

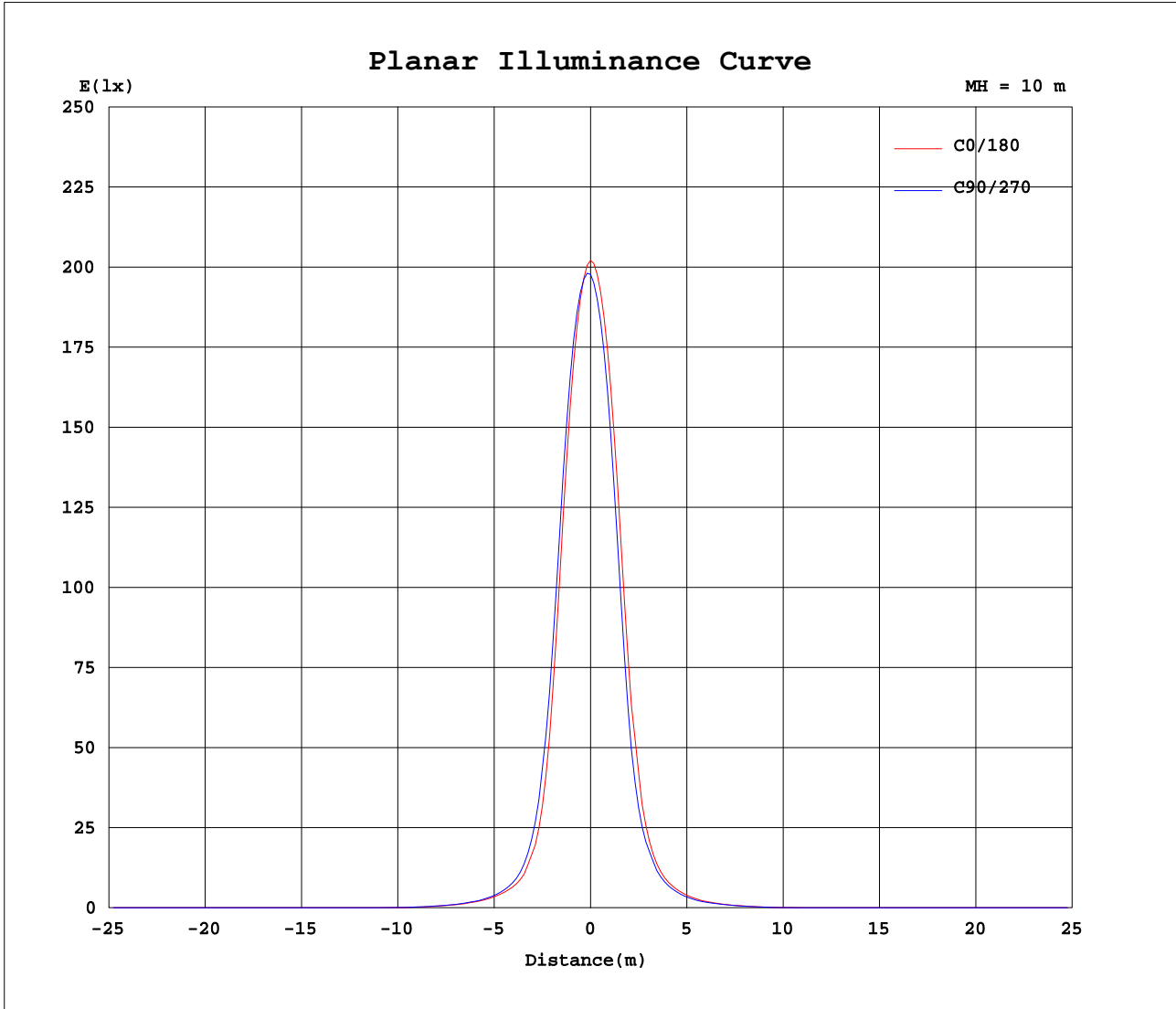
AvgL	cd/m2
L_0~180 (65) av	32
L_0~180 (75) av	21
L_0~180 (85) av	60
L_90~270 (65) av	25
L_90~270 (75) av	21
L_90~270 (85) av	60
L_45 (65) av	29
L_45 (75) av	21
L_45 (85) av	58

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:Jasoan
 Test Date:2024-10-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity:58%
 Test Distance:9.322m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Jasoan
Test Date: 2024-10-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity: 58%
Test Distance: 9.322m [K=1.0000]
Remarks:

