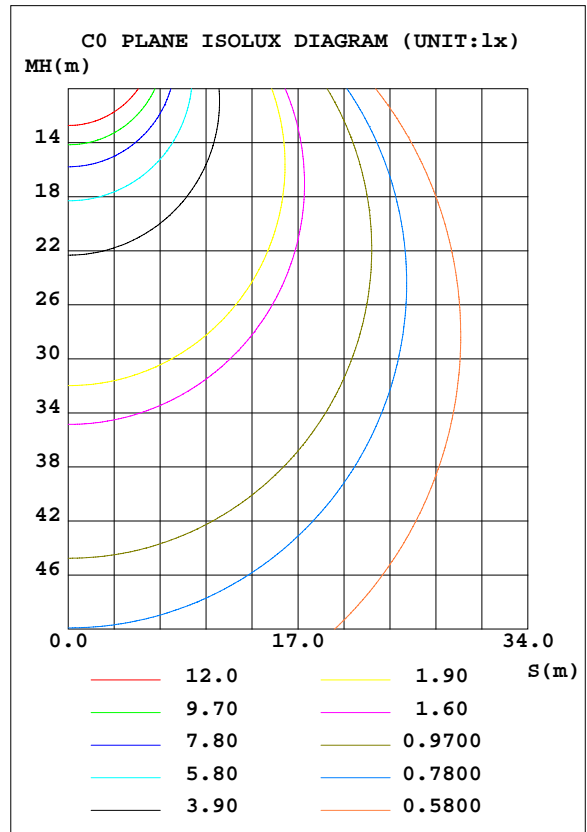
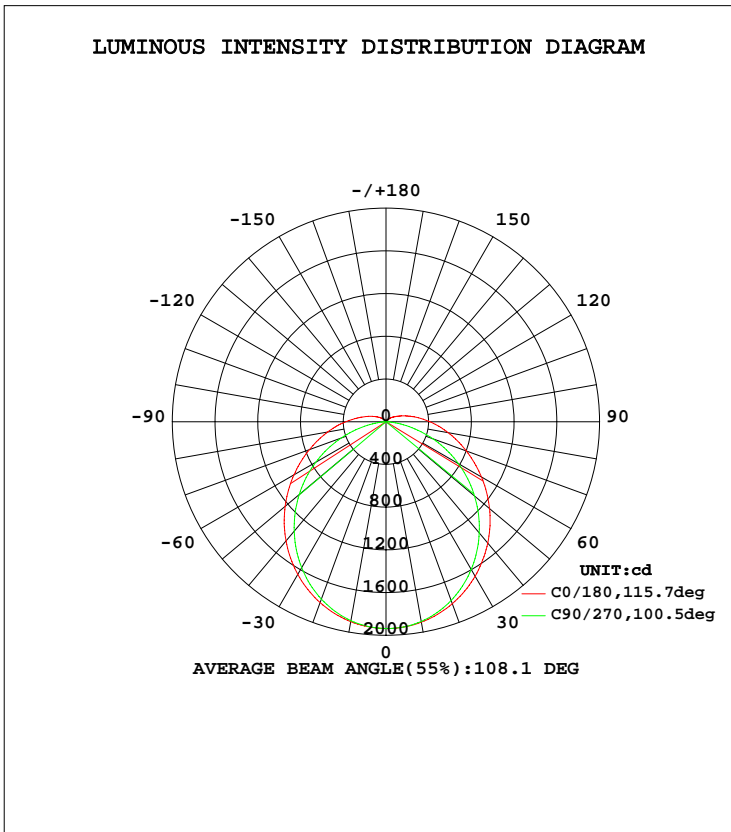


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm		
NAME: ASD-LVP2SM-4A56AC-MS		
SPEC: 5000K		
MFR.: ASD Lighting Corp		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 112.53 lm/W			
MODEL	ASD-LVP2SM-4A56AC-MS	I _{max} (cd)	1936	S/MH(C0/180)	1.28
NOMINAL POWER(W)	56	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	6330.8	η UP, DN(C0-180)	3.4, 47.4
NOMINAL FLUX(lm)	6330.77	CIE CLASS	DIRECT	η UP, DN(C180-360)	3.1, 46.2
LAMPS INSIDE	1	η up(%)	6.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120.6	η down(%)	93.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	Φlum,lamp
10	1906	1899	1900	1891					0- 10	183.0	183.0	2.89,2.89
20	1814	1782	1803	1768					10- 20	523.0	706.0	11.2,11.2
30	1669	1596	1651	1578					20- 30	790.1	1496	23.6,23.6
40	1482	1358	1457	1338					30- 40	951.9	2448	38.7,38.7
50	1266	1083	1233	1061					40- 50	994.1	3442	54.4,54.4
60	1032	782.3	995.1	760.6					50- 60	919.9	4362	68.9,68.9
70	801.1	467.5	763.4	447.1					60- 70	748.8	5111	80.7,80.7
80	591.3	166.8	554.7	151.4					70- 80	517.5	5628	88.9,88.9
90	411.9	0.5935	376.9	0.5479					80- 90	295.4	5924	93.6,93.6
100	269.0	0.8014	243.1	0.8794					90-100	176.6	6100	96.4,96.4
110	163.0	1.260	150.8	1.387					100-110	108.6	6209	98.1,98.1
120	96.60	1.846	91.23	2.023					110-120	62.20	6271	99.1,99.1
130	56.26	2.388	49.76	2.638					120-130	33.76	6305	99.6,99.6
140	25.28	2.961	22.96	3.246					130-140	15.73	6321	99.8,99.8
150	10.05	3.497	8.646	3.754					140-150	6.109	6327	99.9,99.9
160	4.378	3.991	4.304	4.147					150-160	2.349	6329	100,100
170	4.389	4.419	4.524	4.433					160-170	1.211	6330	100,100
180	4.681	4.605	4.695	4.584					170-180	0.4333	6331	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

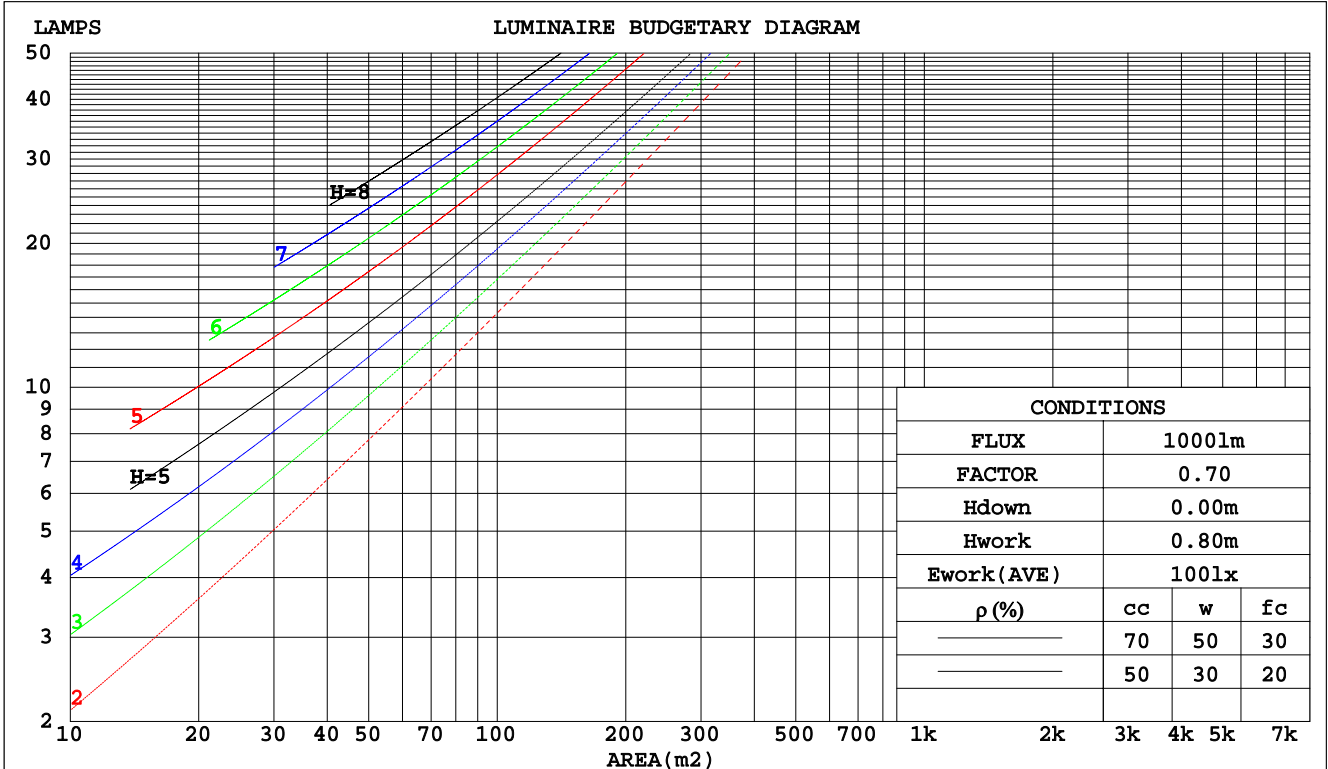
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm		
NAME: ASD-LVP2SM-4A56AC-MS-5000K	TYPE:ASD-LVP2SM-4A56AC-MS	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

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	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.96	.96	.96	.94
1.0	1.00	.96	.91	.98	.93	.89	.92	.88	.85	.87	.84	.81	.82	.80	.78	.75
2.0	.87	.80	.73	.84	.78	.72	.80	.74	.69	.75	.71	.67	.72	.68	.64	.62
3.0	.76	.67	.60	.74	.66	.60	.70	.63	.58	.66	.61	.56	.63	.58	.54	.52
4.0	.67	.58	.51	.65	.57	.50	.62	.55	.49	.59	.53	.47	.56	.51	.46	.44
5.0	.60	.51	.44	.58	.50	.43	.55	.48	.42	.53	.46	.41	.50	.45	.40	.38
6.0	.54	.45	.38	.52	.44	.38	.50	.42	.37	.48	.41	.36	.45	.40	.35	.33
7.0	.49	.40	.33	.48	.39	.33	.45	.38	.32	.43	.37	.32	.41	.36	.31	.29
8.0	.44	.36	.30	.43	.35	.29	.41	.34	.29	.40	.33	.28	.38	.32	.28	.26
9.0	.41	.32	.27	.40	.32	.26	.38	.31	.26	.37	.30	.26	.35	.29	.25	.23
10.0	.37	.29	.24	.37	.29	.24	.35	.28	.24	.34	.28	.23	.33	.27	.23	.21



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm		
NAME: ASD-LVP2SM-4A56AC-MS-5000K	TYPE:ASD-LVP2SM-4A56AC-MS	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION 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	.345	.196	.062	.336	.192	.061	.319	.183	.058	.304	.175	.056	.289	.168	.054	
2.0	.311	.170	.052	.303	.167	.051	.288	.160	.050	.274	.154	.048	.261	.147	.046	
3.0	.282	.150	.045	.275	.147	.044	.261	.141	.043	.248	.136	.042	.237	.131	.041	
4.0	.257	.134	.039	.251	.131	.039	.238	.126	.038	.227	.122	.037	.216	.118	.036	
5.0	.236	.120	.035	.230	.118	.034	.219	.114	.034	.209	.110	.033	.199	.106	.032	
6.0	.217	.109	.031	.212	.107	.031	.202	.104	.030	.193	.100	.029	.184	.097	.029	
7.0	.201	.100	.028	.197	.098	.028	.188	.095	.027	.179	.092	.027	.172	.089	.026	
8.0	.188	.092	.026	.183	.090	.026	.175	.088	.025	.168	.085	.024	.160	.082	.024	
9.0	.175	.085	.024	.171	.084	.023	.164	.081	.023	.157	.079	.023	.151	.076	.022	
10.0	.165	.079	.022	.161	.078	.022	.154	.076	.021	.148	.073	.021	.142	.071	.020	

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	.239	.239	.239	.205	.205	.205	.140	.140	.140	.080	.080	.080	.026	.026	.026	
1.0	.232	.205	.181	.199	.176	.156	.136	.121	.108	.078	.070	.063	.025	.023	.020	
2.0	.225	.182	.145	.192	.156	.126	.132	.108	.088	.076	.063	.051	.024	.020	.017	
3.0	.217	.164	.123	.186	.142	.106	.128	.099	.075	.074	.058	.044	.024	.019	.014	
4.0	.209	.151	.107	.179	.131	.093	.123	.091	.066	.071	.053	.039	.023	.017	.013	
5.0	.201	.141	.097	.173	.122	.084	.119	.085	.059	.069	.050	.035	.022	.016	.012	
6.0	.194	.133	.089	.167	.115	.078	.115	.081	.055	.067	.047	.033	.022	.016	.011	
7.0	.187	.126	.083	.161	.109	.073	.111	.077	.052	.065	.045	.031	.021	.015	.010	
8.0	.180	.120	.079	.155	.104	.069	.108	.073	.049	.063	.043	.029	.020	.014	.010	
9.0	.174	.116	.076	.150	.100	.066	.104	.070	.047	.061	.042	.028	.020	.014	.009	
10.0	.169	.111	.073	.145	.097	.064	.101	.068	.045	.059	.040	.027	.019	.013	.009	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm										
NAME: ASD-LVP2SM-4A56AC-MS-5000K					TYPE:ASD-LVP2SM-4A56AC-MS			WEIGHT:		
DIM.:					SPEC.:			SERIAL No.:		
MFR.:					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	19.6	21.1	19.9	21.4	21.7	18.6	20.1	19.0	20.4	20.7
3H	21.7	23.1	22.1	23.4	23.8	20.0	21.4	20.4	21.8	22.1
4H	22.8	24.1	23.3	24.5	24.9	20.6	21.9	21.0	22.2	22.6
6H	24.1	25.3	24.5	25.7	26.1	20.9	22.1	21.3	22.5	22.9
8H	24.7	25.9	25.2	26.3	26.8	21.0	22.2	21.4	22.6	23.0
12H	25.5	26.7	26.0	27.1	27.5	21.0	22.2	21.5	22.6	23.0
4H 2H	20.1	21.4	20.5	21.8	22.2	19.4	20.7	19.8	21.1	21.5
3H	22.5	23.6	22.9	24.0	24.5	21.1	22.2	21.5	22.6	23.1
4H	23.7	24.8	24.2	25.2	25.7	21.8	22.8	22.2	23.2	23.7
6H	25.2	26.1	25.7	26.6	27.1	22.3	23.2	22.8	23.7	24.2
8H	26.0	26.8	26.5	27.3	27.8	22.4	23.3	22.9	23.8	24.3
12H	26.9	27.7	27.4	28.2	28.7	22.5	23.3	23.0	23.8	24.3
8H 4H	24.0	24.9	24.5	25.4	25.9	22.3	23.2	22.8	23.7	24.2
6H	25.7	26.4	26.2	26.9	27.5	23.1	23.8	23.6	24.3	24.9
8H	26.6	27.3	27.2	27.8	28.4	23.4	24.0	23.9	24.5	25.1
12H	27.8	28.3	28.3	28.9	29.5	23.6	24.1	24.1	24.7	25.3
12H 4H	24.0	24.8	24.6	25.3	25.9	22.5	23.3	23.0	23.8	24.3
6H	25.7	26.4	26.3	26.9	27.5	23.3	24.0	23.9	24.5	25.1
8H	26.8	27.3	27.3	27.9	28.5	23.7	24.3	24.3	24.9	25.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 6331 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.4)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm		
NAME: ASD-LVP2SM-4A56AC-MS-5000K	TYPE:ASD-LVP2SM-4A56AC-MS	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

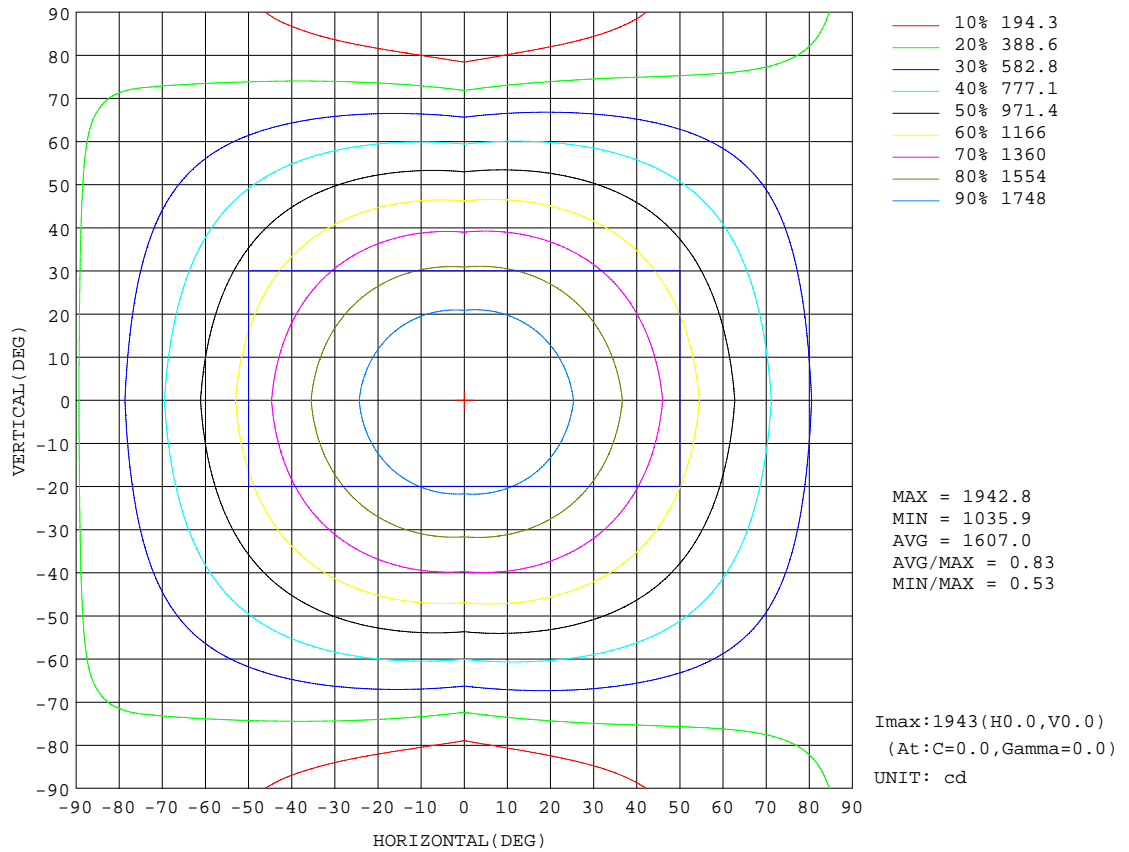
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	54	42	35	53	42	35	52	41	34	28
0.80	63	51	44	62	51	43	60	50	43	36
1.00	72	60	52	70	59	52	67	60	51	43
1.25	79	67	59	77	66	59	74	64	58	50
1.50	84	73	65	82	72	64	78	69	63	54
2.00	91	81	74	88	79	73	84	77	71	62
2.50	95	86	79	92	84	78	88	81	75	66
3.00	98	90	84	96	88	82	91	85	80	70
4.00	102	96	90	100	94	88	94	89	85	74
5.00	105	99	94	102	97	92	97	92	89	77
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm		
NAME: ASD-LVP2SM-4A56AC-MS-5000K	TYPE:ASD-LVP2SM-4A56AC-MS	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

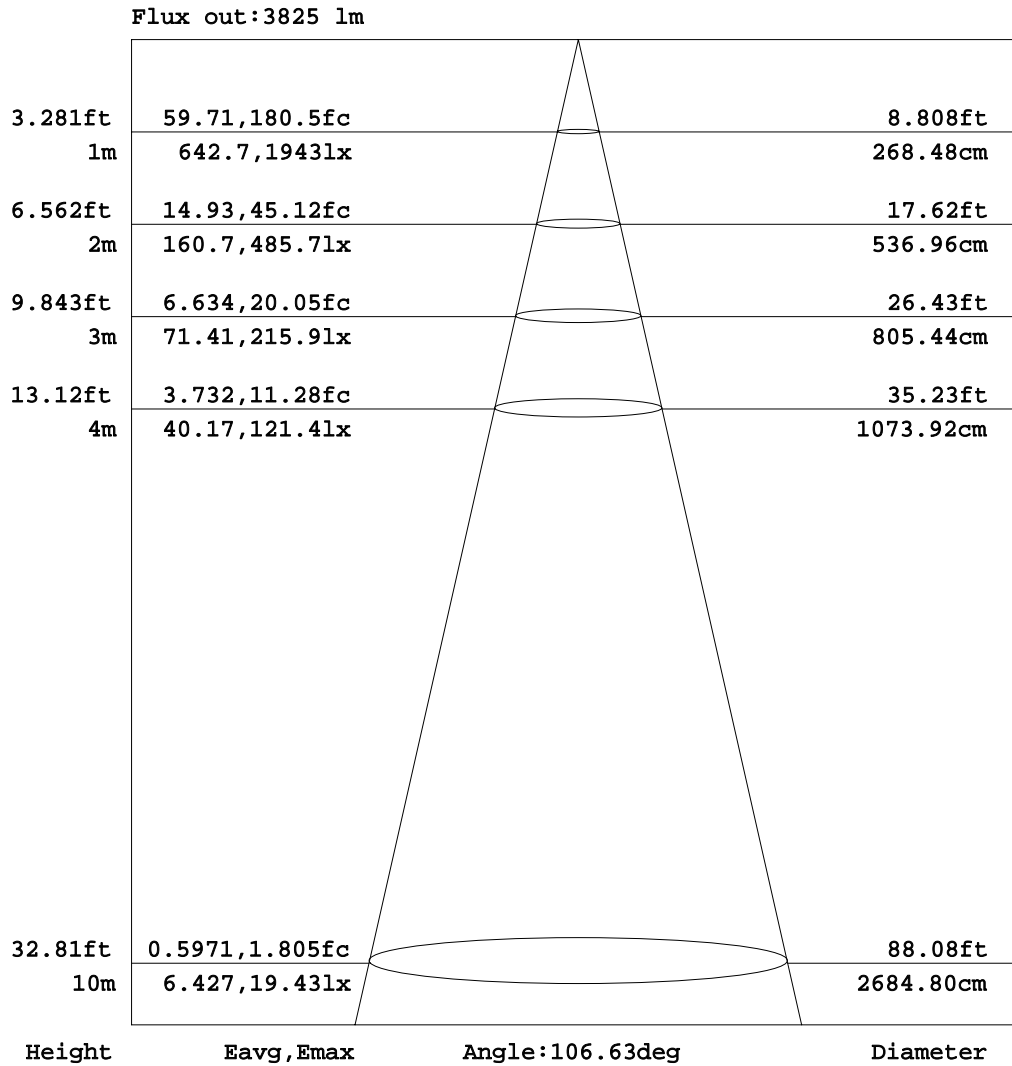


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

AAI Figure

Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm		
NAME: ASD-LVP2SM-4A56AC-MS-5000K	TYPE:ASD-LVP2SM-4A56AC-MS	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



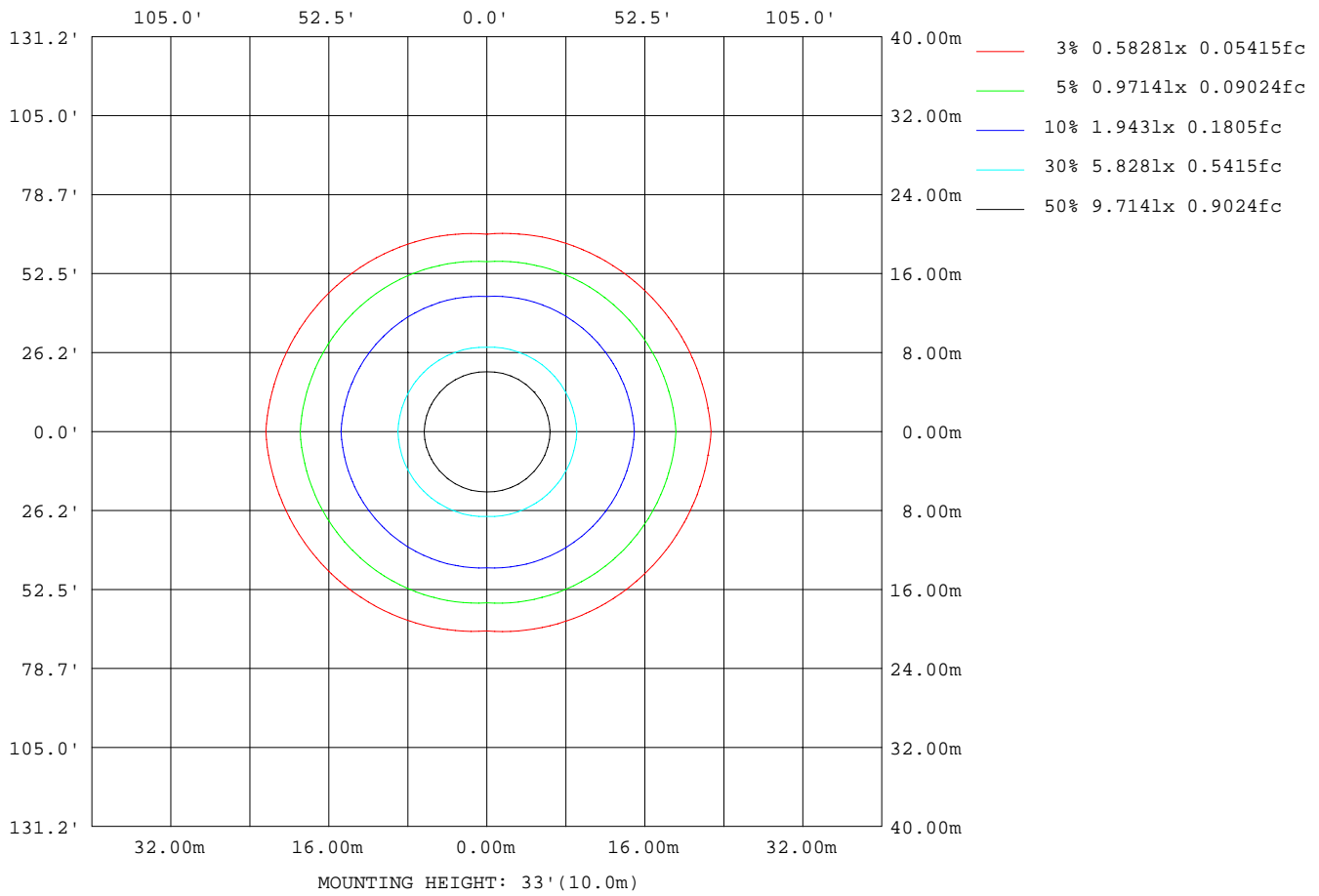
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

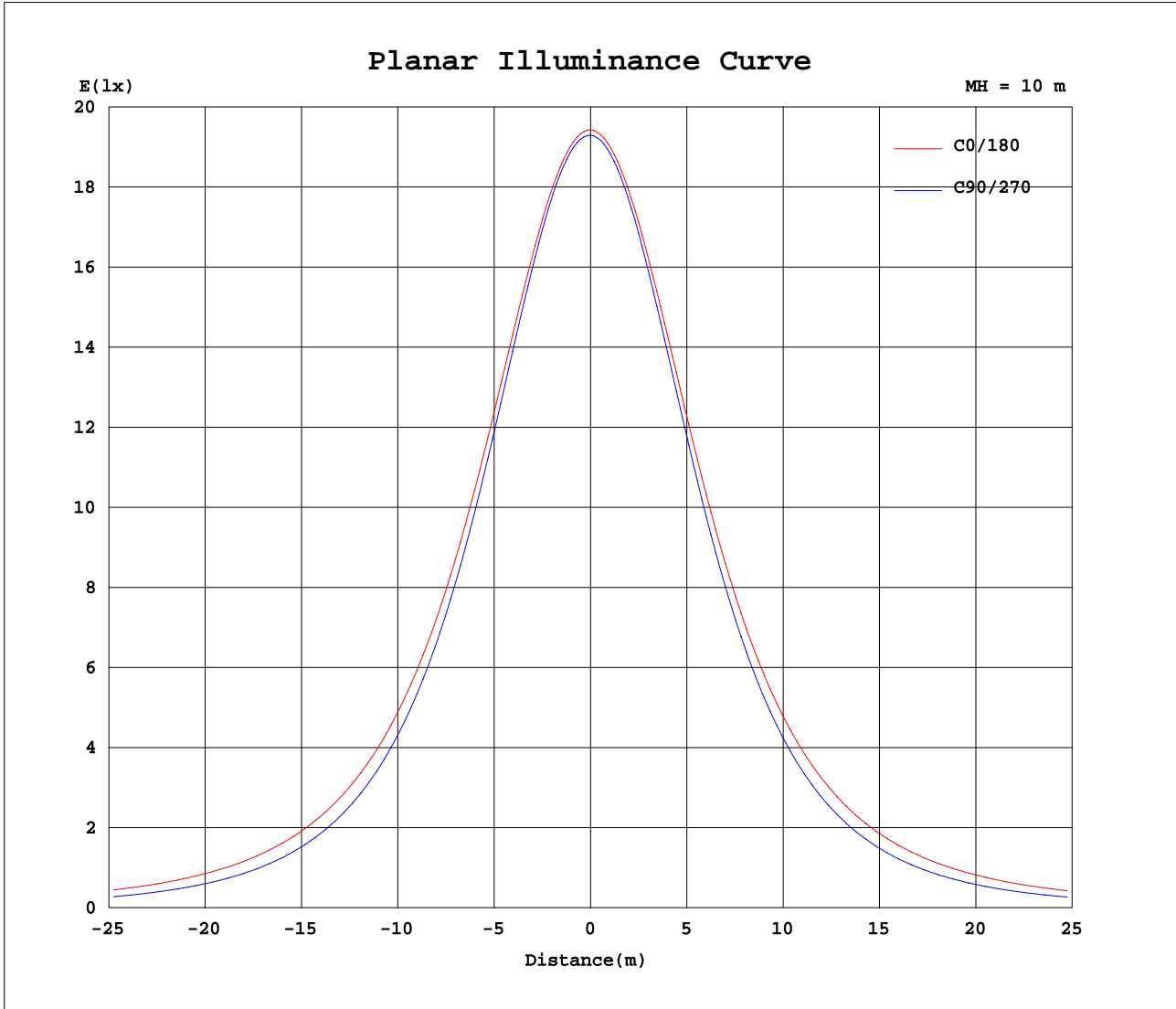
Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm		
NAME: ASD-LVP2SM-4A56AC-MS-5000K	TYPE:ASD-LVP2SM-4A56AC-MS	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 9.100m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.6V I:0.4680A P:56.26W PF:0.9966 Lamp Flux:6330.77x1 lm		
NAME: ASD-LVP2SM-4A56AC-MS-5000K	TYPE:ASD-LVP2SM-4A56AC-MS	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	90	180	270															
0	1936	1936	1936	1936															
5	1929	1928	1926	1924															
10	1906	1899	1900	1891															
15	1867	1850	1858	1839															
20	1814	1782	1803	1768															
25	1748	1697	1733	1681															
30	1669	1596	1651	1578															
35	1580	1483	1559	1463															
40	1482	1358	1457	1338															
45	1377	1225	1348	1203															
50	1266	1083	1233	1061															
55	1150	935	1115	913															
60	1032	782	995	761															
65	915	626	877	604															
70	801	468	763	447															
75	693	310	656	293															
80	591	167	555	151															
85	497	53.7	463	43.9															
90	412	0.59	377	0.55															
95	336	0.66	305	0.64															
100	269	0.80	243	0.88															
105	210	1.00	192	1.14															
110	163	1.26	151	1.39															
115	125	1.54	118	1.71															
120	96.6	1.85	91.2	2.02															
125	75.3	2.11	68.5	2.32															
130	56.3	2.39	49.8	2.64															
135	38.5	2.67	34.7	2.92															
140	25.3	2.96	23.0	3.25															
145	16.3	3.23	14.4	3.50															
150	10.1	3.50	8.65	3.75															
155	6.13	3.76	5.46	3.96															
160	4.38	3.99	4.30	4.15															
165	4.19	4.22	4.36	4.30															
170	4.39	4.42	4.52	4.43															
175	4.60	4.57	4.65	4.52															
180	4.68	4.61	4.69	4.58															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-09-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:9.100m [K=1.0000]
 Remarks: