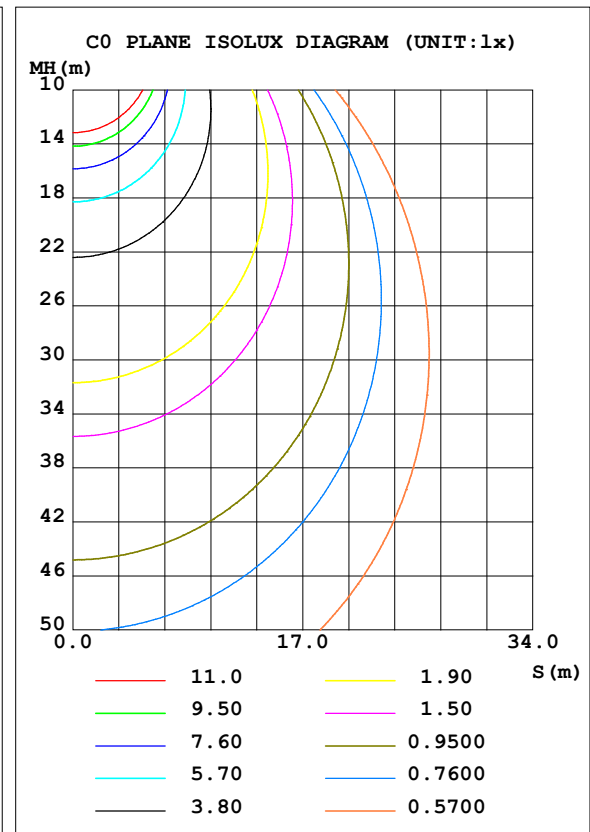
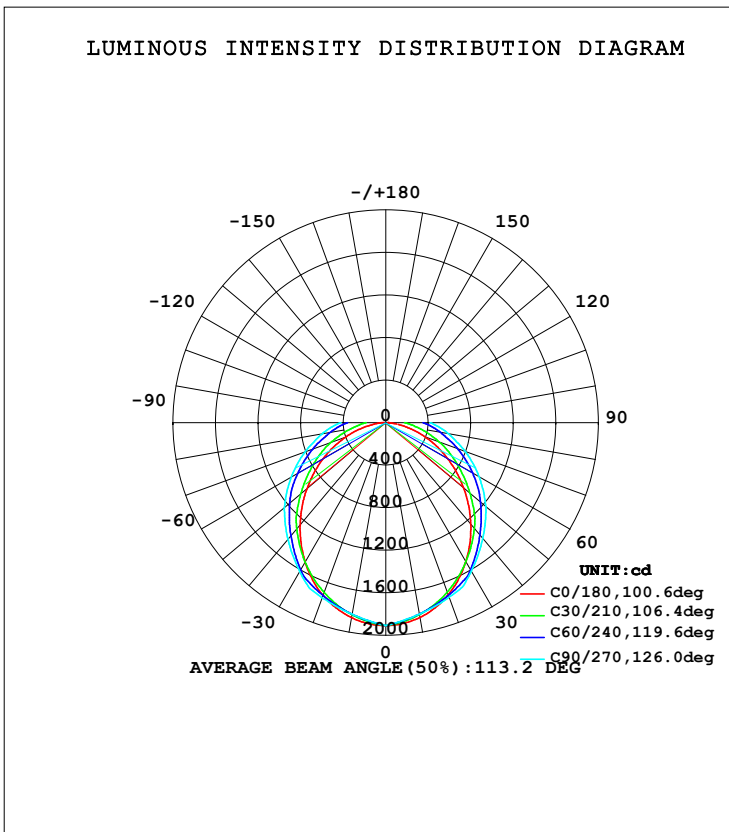


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.3707A P:44.42W PF:0.9986 Lamp Flux:5724x1 lm		
NAME: ASD-LSF5-4A44AC-MS-SW (44W 3500K)	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 1219*66*68mm	SERIAL No.:
MFR.: ASD lighting corp.	SUR.:1219*66*68mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 130.47 lm/W			
MODEL	ASD-LSF5-4A44AC-MS-SW	I _{max} (cd)	1908	S/MH (C0/180)	1.19
NOMINAL POWER (W)	44	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	120-277	TOTAL FLUX (lm)	5724	η UP, DN (C0-180)	0.0, 49.8
NOMINAL FLUX (lm)	5724	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: Peter
 Test Date: 2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity: 50%
 Test Distance: 8.900m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

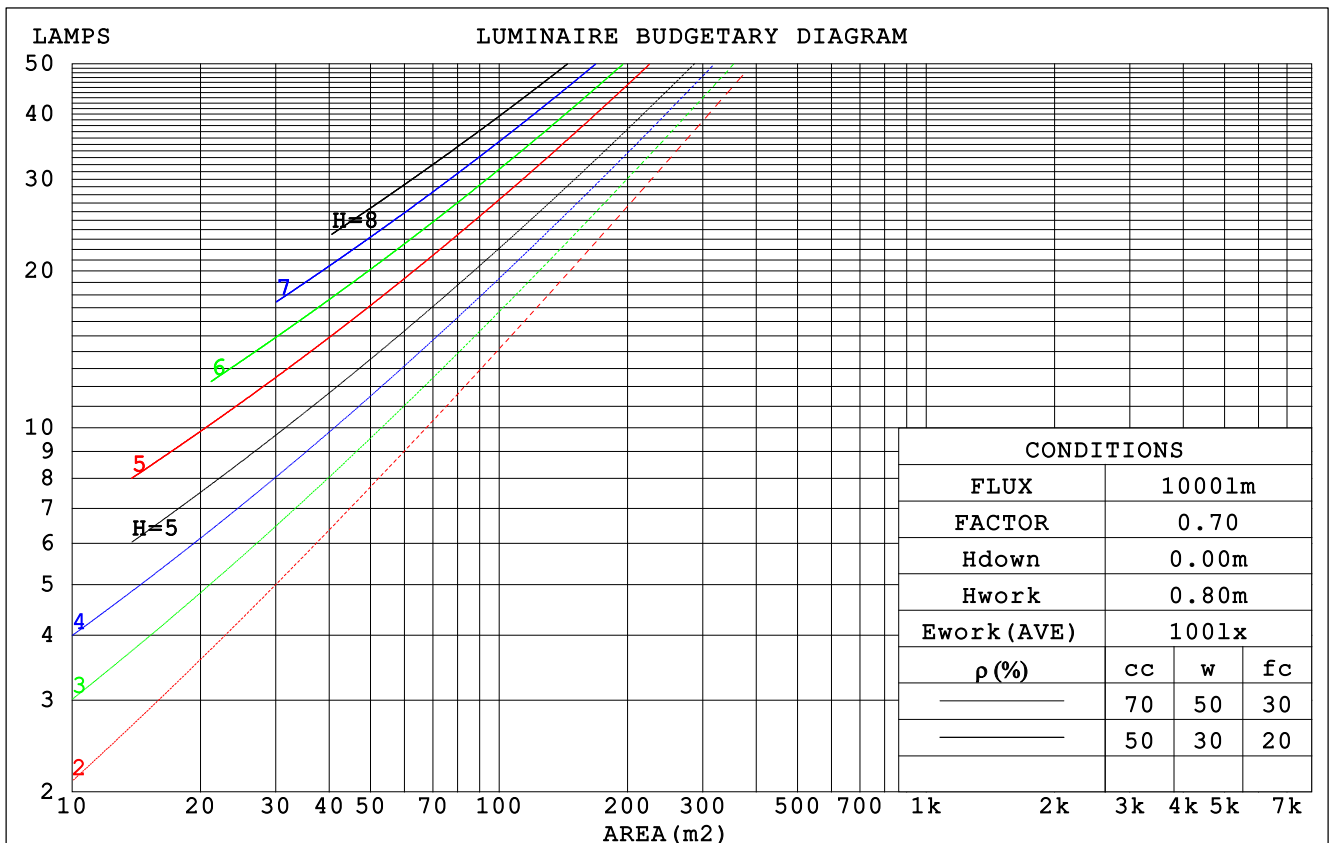
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
5	1895	1873	1868	1874	1896	1874	1868	1874	0- 5	45.14	45.14	0.78,0.78
10	1860	1828	1827	1828	1861	1830	1829	1829	5- 10	132.6	177.8	3.07,3.07
15	1801	1772	1787	1773	1804	1775	1790	1774	10- 15	214.3	392.1	6.77,6.77
20	1721	1708	1747	1708	1727	1711	1751	1710	15- 20	288.3	680.4	11.7,11.7
25	1622	1636	1707	1636	1630	1640	1712	1639	20- 25	352.9	1033	17.8,17.8
30	1508	1559	1611	1561	1516	1566	1618	1563	25- 30	405.5	1439	24.8,24.8
35	1381	1464	1516	1464	1389	1471	1525	1469	30- 35	442.3	1881	32.5,32.5
40	1244	1340	1420	1341	1254	1349	1431	1347	35- 40	464.4	2345	40.5,40.5
45	1102	1217	1324	1217	1113	1228	1338	1226	40- 45	472.7	2818	48.6,48.6
50	957.5	1097	1228	1098	969.0	1109	1245	1107	45- 50	468.4	3287	56.7,56.7
55	812.9	980.5	1120	982.8	824.7	995.1	1136	992.1	50- 55	452.4	3739	64.5,64.5
60	669.6	867.7	1012	870.8	681.7	884.0	1027	880.2	55- 60	425.0	4164	71.9,71.9
65	529.4	748.4	903.9	751.1	541.7	762.6	918.0	759.8	60- 65	388.5	4553	78.6,78.6
70	393.1	634.9	795.7	637.3	405.2	646.8	809.1	645.4	65- 70	344.7	4897	84.5,84.5
75	263.8	527.5	687.6	527.4	275.9	537.4	700.3	537.0	70- 75	295.9	5193	89.6,89.6
80	147.4	428.5	596.7	426.4	157.2	437.1	607.6	436.9	75- 80	245.7	5439	93.9,93.9
85	56.40	348.0	505.9	345.3	65.52	357.2	515.0	356.9	80- 85	199.0	5638	97.3,97.3
90	18.16	271.4	415.1	268.0	26.46	281.4	422.3	280.7	85- 90	157.3	5795	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Peter
Test Date:2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.900m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	1.01	.96	.91	.99	.94	.90	.94	.90	.87	.90	.87	.84	.87	.84	.82	.79
2.0	.87	.79	.73	.85	.78	.72	.81	.75	.70	.78	.73	.69	.75	.71	.67	.65
3.0	.76	.67	.60	.74	.66	.59	.71	.64	.58	.68	.62	.57	.66	.61	.56	.54
4.0	.67	.58	.51	.66	.57	.50	.63	.55	.49	.61	.54	.49	.58	.53	.48	.46
5.0	.60	.50	.43	.59	.50	.43	.56	.49	.43	.54	.48	.42	.53	.46	.42	.39
6.0	.54	.44	.38	.53	.44	.38	.51	.43	.37	.49	.42	.37	.48	.41	.36	.34
7.0	.49	.40	.33	.48	.39	.33	.46	.39	.33	.45	.38	.33	.43	.37	.32	.30
8.0	.44	.36	.30	.44	.35	.30	.42	.35	.29	.41	.34	.29	.40	.34	.29	.27
9.0	.41	.32	.27	.40	.32	.27	.39	.32	.26	.38	.31	.26	.37	.31	.26	.24
10.0	.38	.30	.24	.37	.29	.24	.36	.29	.24	.35	.29	.24	.34	.28	.24	.22



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Peter
 Test Date:2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:50%
 Test Distance:8.900m [K=1.0000]
 Remarks:

WEC AND CCEC

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.366	.208	.066	.359	.205	.065	.346	.198	.063	.333	.192	.062	.322	.186	.060	
2.0	.325	.178	.055	.318	.175	.054	.306	.170	.053	.295	.166	.052	.285	.161	.051	
3.0	.292	.155	.046	.286	.153	.046	.275	.149	.045	.266	.146	.045	.257	.142	.044	
4.0	.265	.137	.040	.260	.136	.040	.250	.133	.040	.241	.130	.039	.233	.127	.039	
5.0	.242	.123	.036	.237	.122	.035	.229	.119	.035	.221	.117	.035	.214	.114	.034	
6.0	.222	.111	.032	.218	.110	.032	.211	.108	.031	.204	.106	.031	.198	.104	.031	
7.0	.206	.102	.029	.202	.101	.029	.195	.099	.028	.189	.097	.028	.183	.095	.028	
8.0	.191	.093	.026	.188	.093	.026	.182	.091	.026	.177	.089	.026	.171	.088	.026	
9.0	.178	.086	.024	.176	.086	.024	.170	.084	.024	.165	.083	.024	.161	.082	.024	
10.0	.167	.080	.022	.165	.080	.022	.160	.078	.022	.155	.077	.022	.151	.076	.022	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	.184	.156	.130	.158	.134	.112	.108	.092	.077	.062	.053	.045	.020	.017	.015	
2.0	.177	.132	.094	.151	.113	.081	.104	.078	.057	.060	.046	.033	.019	.015	.011	
3.0	.169	.114	.071	.145	.099	.062	.099	.069	.043	.057	.040	.026	.018	.013	.008	
4.0	.161	.101	.056	.138	.088	.049	.095	.061	.034	.055	.036	.020	.018	.012	.007	
5.0	.153	.091	.045	.131	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.005	
6.0	.145	.083	.038	.125	.072	.033	.086	.050	.023	.050	.029	.014	.016	.010	.005	
7.0	.138	.076	.032	.119	.066	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004	
8.0	.131	.070	.028	.113	.061	.024	.078	.043	.017	.045	.025	.010	.015	.008	.003	
9.0	.125	.065	.025	.108	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.119	.061	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Peter
Test Date:2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.900m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

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	22.4	24.0	22.6	24.2	24.4	24.1	25.7	24.4	25.9	26.1
3H	23.7	25.2	24.0	25.4	25.7	26.4	27.9	26.7	28.1	28.4
4H	24.2	25.6	24.5	25.9	26.1	27.6	29.0	27.9	29.3	29.5
6H	24.5	25.9	24.9	26.2	26.4	28.9	30.2	29.2	30.5	30.8
8H	24.6	25.9	25.0	26.2	26.5	29.6	30.9	30.0	31.2	31.5
12H	24.6	25.9	25.0	26.2	26.5	30.4	31.7	30.8	32.0	32.3
4H 2H	23.4	24.8	23.7	25.0	25.3	24.7	26.1	25.0	26.4	26.6
3H	25.0	26.2	25.3	26.5	26.8	27.2	28.5	27.6	28.8	29.1
4H	25.7	26.8	26.0	27.1	27.5	28.6	29.8	29.0	30.1	30.4
6H	26.2	27.2	26.6	27.6	27.9	30.1	31.2	30.5	31.5	31.9
8H	26.3	27.3	26.7	27.7	28.0	31.0	32.0	31.4	32.3	32.7
12H	26.4	27.3	26.8	27.7	28.1	31.9	32.8	32.4	33.2	33.6
8H 4H	26.5	27.5	26.9	27.8	28.2	28.9	29.9	29.3	30.3	30.7
6H	27.3	28.2	27.8	28.6	29.0	30.7	31.6	31.2	32.0	32.4
8H	27.7	28.4	28.1	28.8	29.3	31.8	32.5	32.3	33.0	33.4
12H	27.9	28.5	28.4	29.0	29.5	33.0	33.7	33.5	34.1	34.6
12H 4H	26.7	27.6	27.2	28.0	28.4	28.9	29.8	29.4	30.2	30.6
6H	27.8	28.5	28.2	28.9	29.4	30.9	31.6	31.3	32.0	32.5
8H	28.3	28.9	28.7	29.4	29.8	32.0	32.7	32.5	33.1	33.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 5795 lm Total Lamp Luminous Flux. (8log(F/F0) = 6.1)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Peter
Test Date:2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.900m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	55	43	36	53	43	36	29
0.80	65	53	45	64	52	45	62	52	45	37
1.00	73	61	53	72	61	53	70	62	53	45
1.25	80	69	61	79	68	61	76	66	60	52
1.50	85	74	67	83	73	66	80	71	65	57
2.00	92	82	75	90	81	74	86	79	73	64
2.50	96	87	80	94	86	80	90	83	78	69
3.00	100	92	85	97	90	84	93	87	82	73
4.00	104	97	92	101	95	90	97	92	88	78
5.00	106	101	96	104	99	94	99	95	91	82
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: Peter
 Test Date: 2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity: 50%
 Test Distance: 8.900m [K=1.0000]
 Remarks:

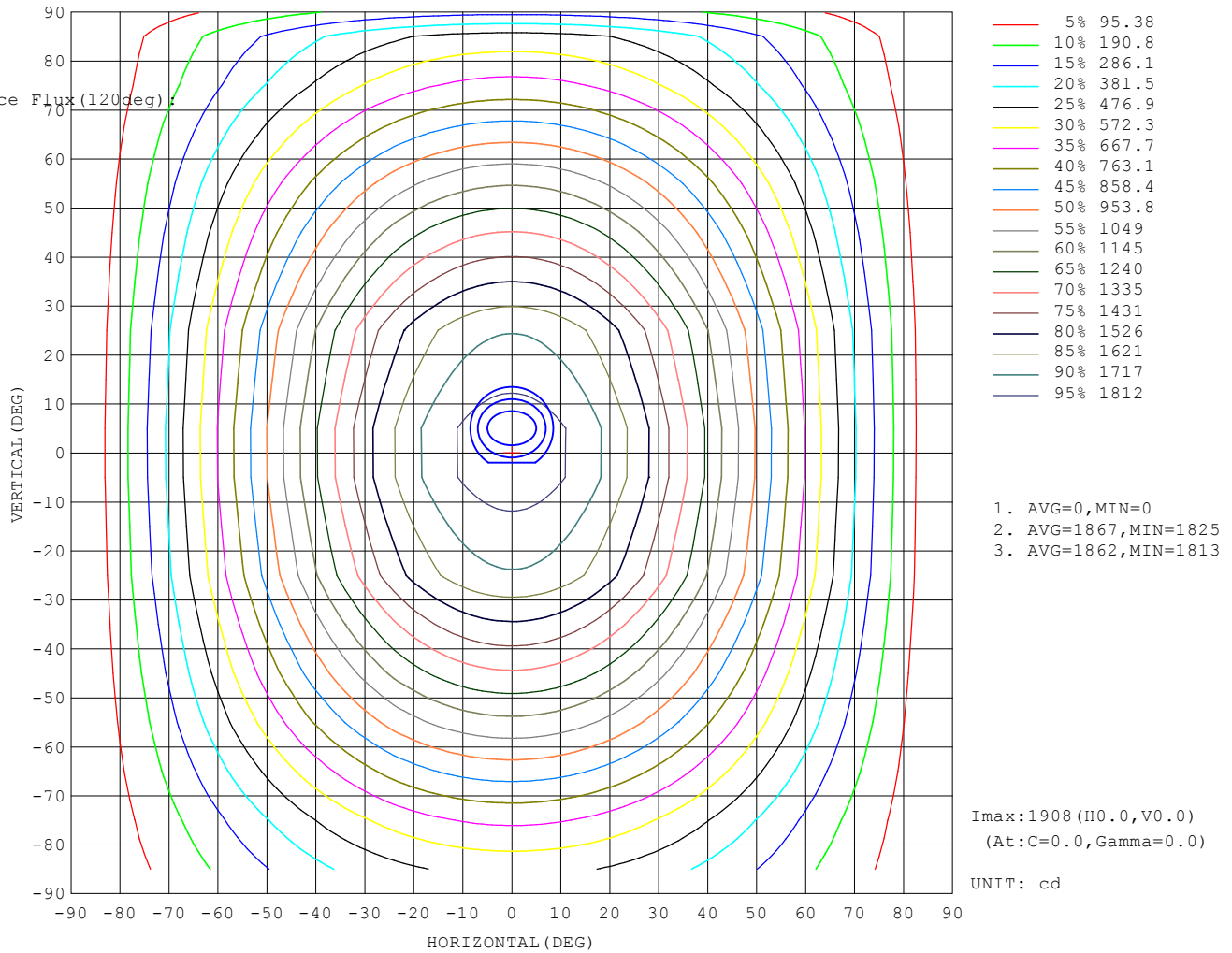
ISOCANDELA DIAGRAM

Conical surface Flux(90deg):

2818.2 lm
 %lum = 48.6%
 %lamp = 48.6%

Conical surface Flux(120deg):

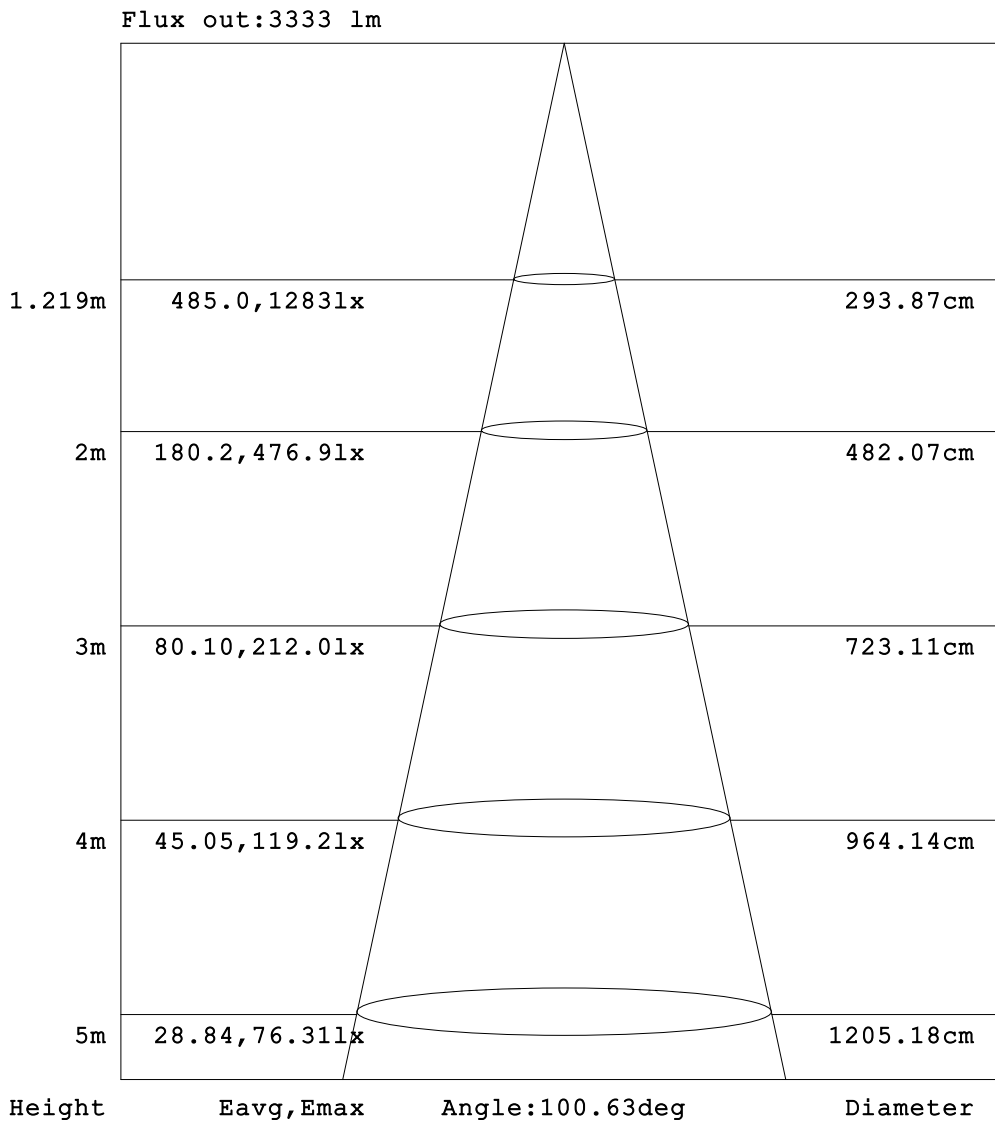
4164 lm
 %lum = 71.9%
 %lamp = 71.9%



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Peter
 Test Date:2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:50%
 Test Distance:8.900m [K=1.0000]
 Remarks:

AAI Figure

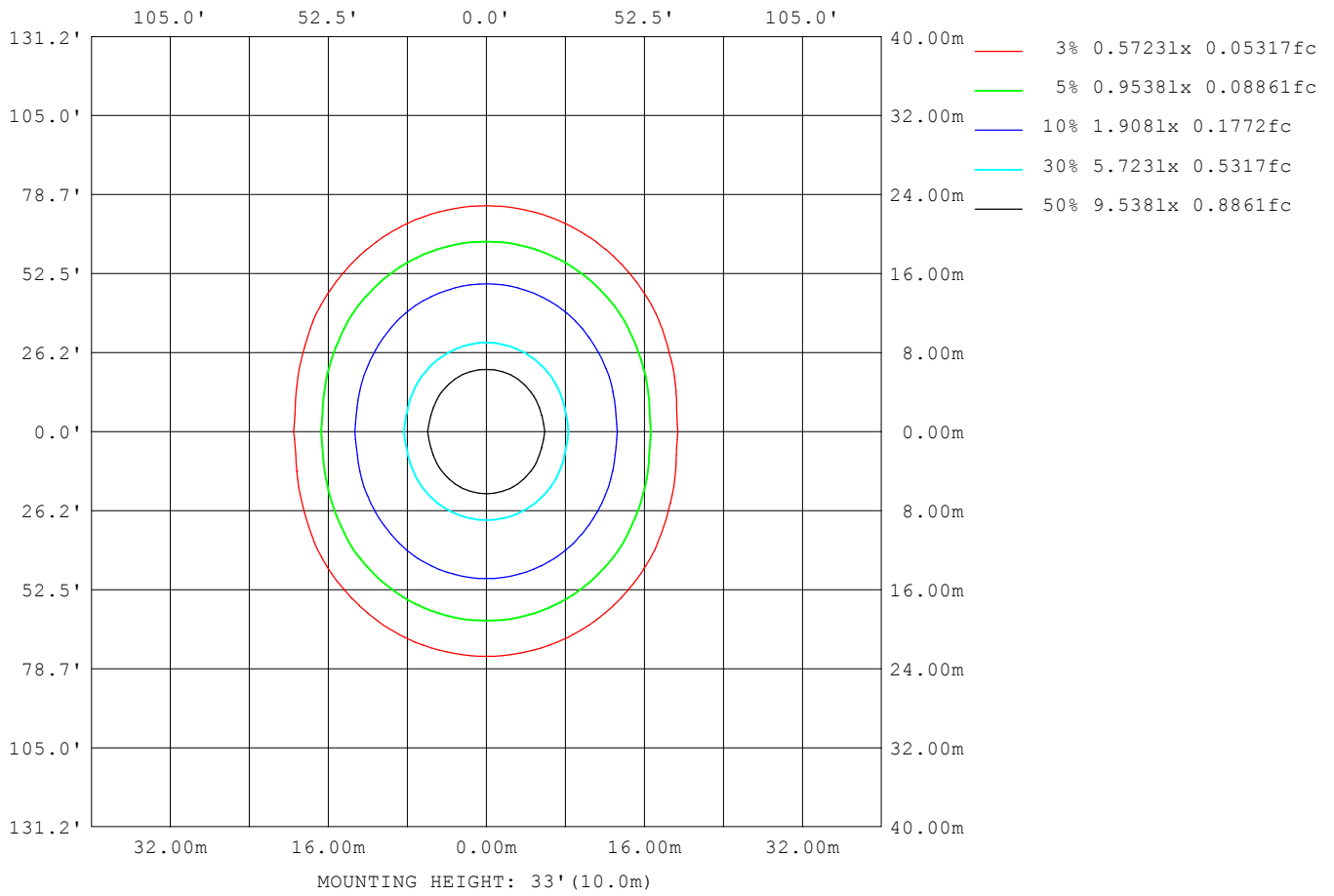


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Peter
 Test Date:2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:50%
 Test Distance:8.900m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: Peter
 Test Date: 2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity: 50%
 Test Distance: 8.900m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:120.0V I:0.3707A P:44.42W PF:0.9986 Lamp Flux:5724x1 lm		
NAME: ASD-LSF5-4A44AC-MS-SW (44W 3500K)	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 1219*66*68mm	SERIAL No.:
MFR.: ASD lighting corp.	SUR.:1219*66*68mm	PROTECTION ANGLE:

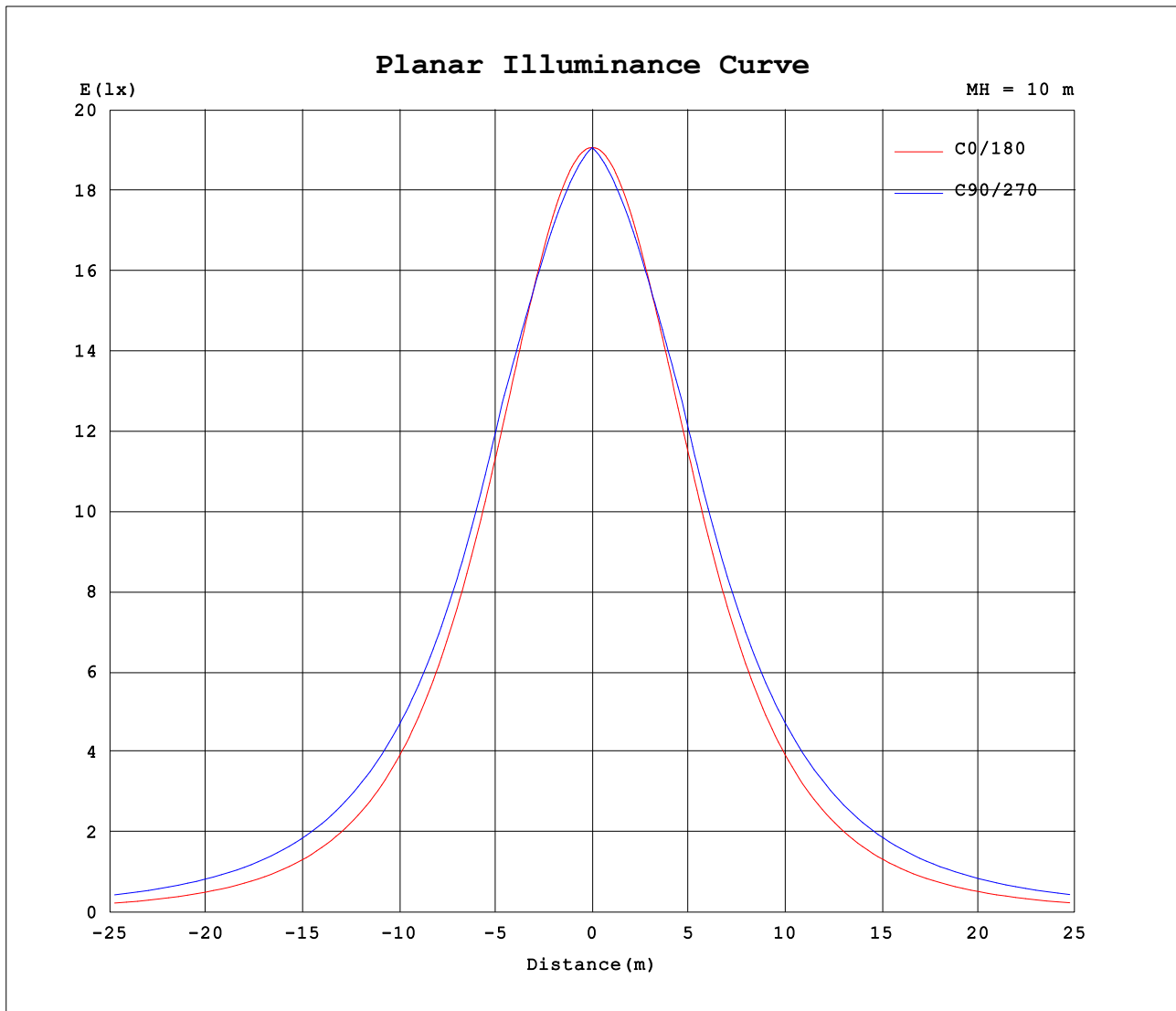
AvgL	cd/m2
L_0~180 (65) av	15872
L_0~180 (75) av	13060
L_0~180 (85) av	8760
L_90~270 (65) av	26998
L_90~270 (75) av	33581
L_90~270 (85) av	73354
L_45 (65) av	22389
L_45 (75) av	25760
L_45 (85) av	50564

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Peter
Test Date:2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:50%
Test Distance:8.900m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: Peter
 Test Date: 2020-03-25

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity: 50%
 Test Distance: 8.900m [K=1.0000]
 Remarks:

