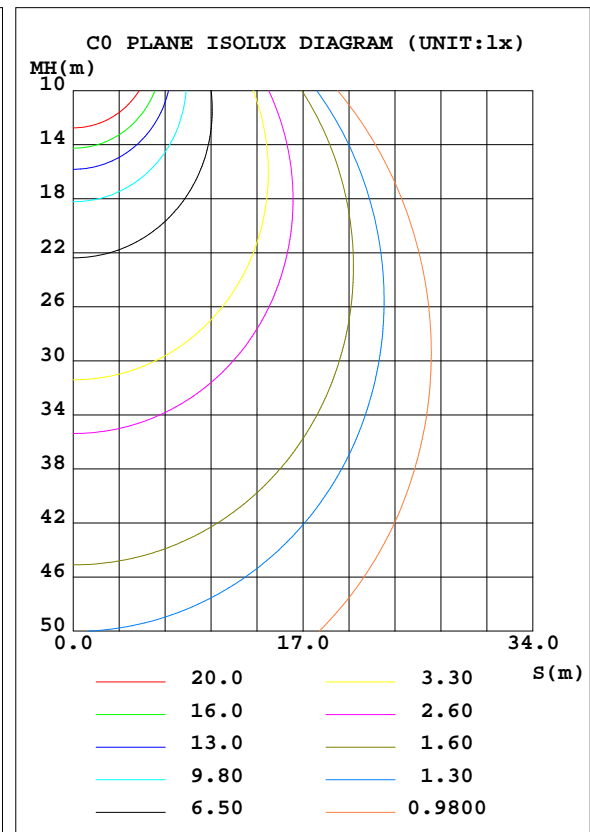
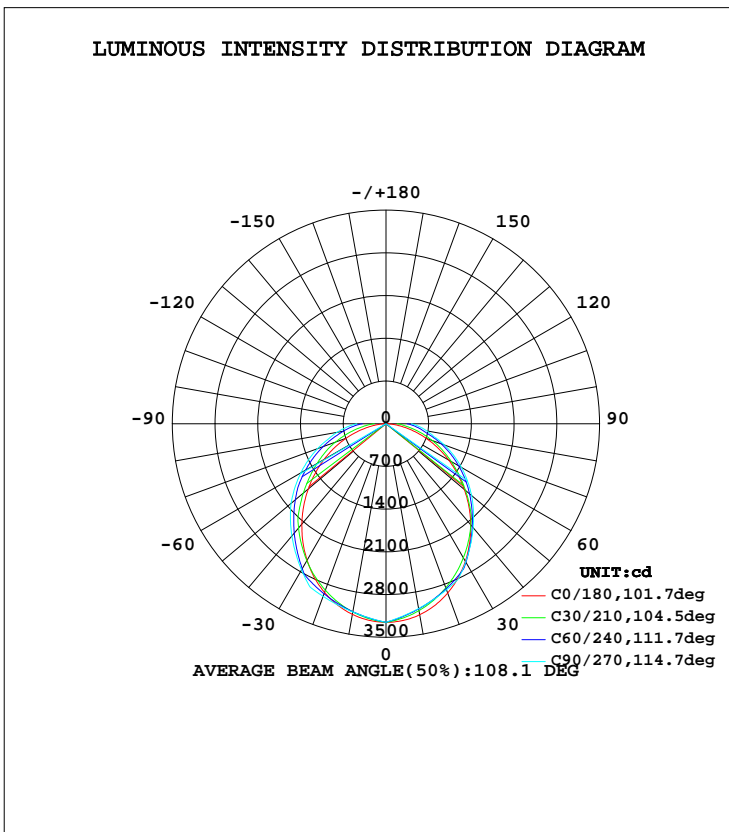


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm		
NAME:ASD-LSF5-8A90AC-PRM-68W5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 2438*66*68mm	SERIAL No.:
MFR.:ASD lighting corp.	SUR.:2438*66*68mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 136.03 lm/W			
MODEL	ASD-LSF5-8A90AC-PRM-68W5000K	3253	S/MH(C0/180)	1.19	
NOMINAL POWER(W)	68	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	9253.4	η UP, DN(C0-180)	0.0,48.3
NOMINAL FLUX(lm)	9253.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.7
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:2020-03-26

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	3235	3181	3164	3179	3232	3199	3193	3202	0- 5	76.91	76.91	0.83,0.83
10	3178	3092	3075	3087	3172	3127	3132	3133	5- 10	225.7	302.6	3.27,3.27
15	3084	2985	2986	2977	3075	3036	3072	3045	10- 15	364.3	666.9	7.21,7.21
20	2953	2864	2896	2853	2943	2930	3011	2943	15- 20	489.4	1156	12.5,12.5
25	2791	2729	2807	2717	2781	2811	2950	2829	20- 25	598.3	1755	19,19
30	2602	2587	2612	2572	2585	2681	2767	2701	25- 30	685.8	2440	26.4,26.4
35	2389	2413	2417	2402	2373	2518	2583	2539	30- 35	744.5	3185	34.4,34.4
40	2160	2185	2222	2168	2146	2290	2399	2315	35- 40	776.6	3961	42.8,42.8
45	1921	1959	2027	1941	1907	2066	2215	2093	40- 45	784.0	4745	51.3,51.3
50	1676	1737	1832	1718	1663	1849	2032	1875	45- 50	768.9	5514	59.6,59.6
55	1430	1522	1628	1503	1418	1640	1822	1665	50- 55	733.0	6247	67.5,67.5
60	1184	1314	1425	1296	1173	1435	1612	1460	55- 60	677.6	6925	74.8,74.8
65	939.7	1099	1221	1079	932.0	1212	1402	1238	60- 65	606.3	7531	81.4,81.4
70	703.4	892.8	1017	872.7	695.6	997.5	1192	1026	65- 70	522.3	8053	87,87
75	476.5	695.6	813.6	675.0	470.7	793.9	982.3	823.6	70- 75	429.4	8483	91.7,91.7
80	269.6	515.4	681.1	495.4	265.7	604.2	814.3	634.3	75- 80	336.0	8819	95.3,95.3
85	104.1	391.5	548.6	383.3	104.5	448.8	646.4	474.8	80- 85	253.2	9072	98,98
90	27.75	272.4	416.2	276.0	42.41	299.1	478.4	320.4	85- 90	181.3	9253	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			

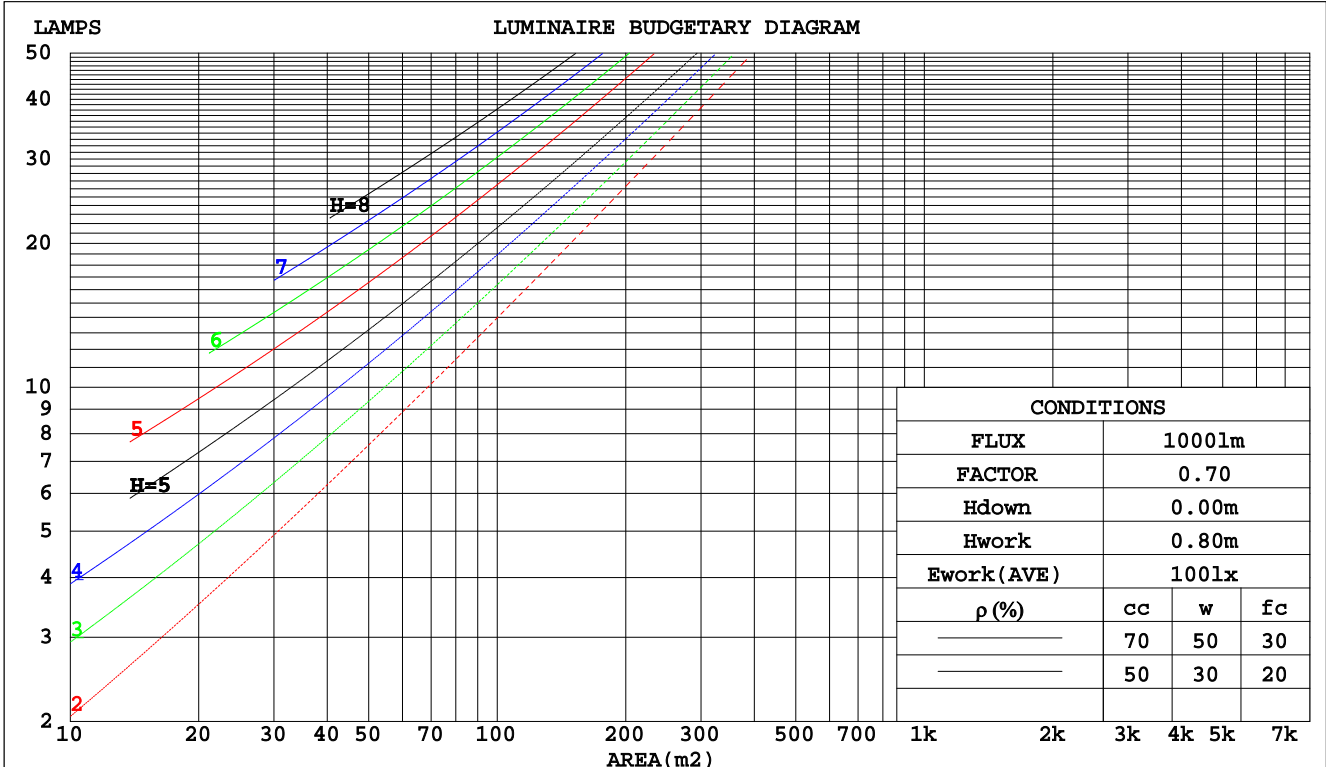
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Peter
 Test Date:2020-03-26

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

Test:U:120.0V I:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm		
NAME: ASD-LSF5-8A90AC-PRM-68W 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 2438*66*68mm	SERIAL No.:
MFR.: ASD lighting corp.	SUR.:2438*66*68mm	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	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	1.02	.97	.93	.90	.95	.91	.95	.92	.89	.91	.89	.86	.88	.85	.83	.81
2.0	.88	.81	.75	.87	.80	.74	.83	.77	.72	.80	.75	.71	.77	.73	.69	.67
3.0	.77	.69	.62	.76	.68	.61	.73	.66	.60	.70	.64	.59	.67	.62	.58	.56
4.0	.69	.59	.52	.67	.59	.52	.65	.57	.51	.62	.56	.51	.60	.55	.50	.48
5.0	.61	.52	.45	.60	.51	.45	.58	.50	.44	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.39	.54	.46	.39	.52	.45	.39	.51	.44	.38	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.34	.46	.39	.34	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.25	.38	.30	.25	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Peter
 Test Date:2020-03-26

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

Test:U:120.0V I:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm		
NAME: ASD-LSF5-8A90AC-PRM-68W 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 2438*66*68mm	SERIAL No.:
MFR.: ASD lighting corp.	SUR.:2438*66*68mm	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	.344	.196	.062	.337	.192	.061	.323	.186	.059	.311	.179	.058	.300	.174	.056	
2.0	.311	.170	.052	.304	.168	.052	.292	.163	.050	.281	.158	.049	.271	.153	.048	
3.0	.282	.150	.045	.276	.148	.045	.266	.144	.044	.256	.140	.043	.247	.137	.042	
4.0	.257	.134	.039	.252	.132	.039	.243	.129	.038	.234	.126	.038	.226	.123	.037	
5.0	.236	.120	.035	.232	.119	.035	.224	.116	.034	.216	.114	.034	.209	.112	.034	
6.0	.218	.109	.031	.214	.108	.031	.207	.106	.031	.200	.104	.031	.193	.102	.030	
7.0	.202	.100	.028	.199	.099	.028	.192	.097	.028	.186	.095	.028	.180	.094	.028	
8.0	.188	.092	.026	.185	.091	.026	.179	.090	.026	.174	.088	.025	.169	.087	.025	
9.0	.176	.085	.024	.173	.084	.024	.168	.083	.024	.163	.082	.023	.158	.080	.023	
10.0	.165	.079	.022	.163	.079	.022	.158	.077	.022	.154	.076	.022	.149	.075	.022	

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	.183	.156	.132	.156	.134	.113	.107	.092	.078	.062	.053	.046	.020	.017	.015	
2.0	.175	.132	.096	.150	.113	.083	.103	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.073	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009	
4.0	.159	.101	.057	.136	.087	.050	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.151	.091	.046	.130	.079	.040	.089	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.144	.082	.039	.124	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.137	.076	.033	.118	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.061	.025	.077	.042	.018	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.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:2020-03-26

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

Test:U:120.0V I:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm										
NAME: ASD-LSF5-8A90AC-PRM-68W 5000K					TYPE:LED			WEIGHT:		
SPEC.:					DIM.: 2438*66*68mm			SERIAL No.:		
MFR.: ASD lighting corp.					SUR.:2438*66*68mm			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	21.9	23.4	22.2	23.6	23.9	22.7	24.3	23.0	24.5	24.7
3H	23.3	24.7	23.6	24.9	25.2	24.6	26.1	24.9	26.3	26.6
4H	23.8	25.1	24.1	25.4	25.7	25.6	26.9	25.9	27.2	27.5
6H	24.1	25.4	24.4	25.7	26.0	26.6	27.9	26.9	28.1	28.4
8H	24.2	25.5	24.5	25.7	26.0	27.1	28.4	27.5	28.7	29.0
12H	24.2	25.5	24.6	25.8	26.1	27.7	29.0	28.1	29.3	29.6
4H 2H	22.6	24.0	23.0	24.3	24.5	23.3	24.7	23.6	24.9	25.2
3H	24.2	25.5	24.6	25.8	26.1	25.4	26.7	25.8	27.0	27.3
4H	24.9	26.0	25.3	26.4	26.7	26.5	27.7	26.9	28.0	28.3
6H	25.4	26.4	25.8	26.8	27.1	27.7	28.7	28.1	29.1	29.5
8H	25.6	26.5	26.0	26.9	27.2	28.4	29.4	28.8	29.7	30.1
12H	25.6	26.5	26.1	26.9	27.3	29.2	30.1	29.6	30.4	30.8
8H 4H	25.4	26.4	25.9	26.8	27.1	26.8	27.8	27.2	28.1	28.5
6H	26.2	27.0	26.6	27.4	27.8	28.3	29.1	28.7	29.5	29.9
8H	26.5	27.2	26.9	27.6	28.1	29.2	29.9	29.6	30.3	30.7
12H	26.7	27.3	27.2	27.7	28.2	30.2	30.8	30.7	31.2	31.7
12H 4H	25.6	26.4	26.0	26.8	27.2	26.9	27.7	27.3	28.1	28.5
6H	26.4	27.1	26.9	27.6	28.0	28.4	29.1	28.9	29.5	30.0
8H	26.8	27.4	27.3	27.9	28.4	29.4	30.0	29.8	30.4	30.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 9253 lm Total Lamp Luminous Flux.(8log(F/F0) = 7.7)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Peter
Test Date:2020-03-26

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

Test:U:120.0V I:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm		
NAME: ASD-LSF5-8A90AC-PRM-68W 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 2438*66*68mm	SERIAL No.:
MFR.:ASD lighting corp.	SUR.:2438*66*68mm	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	57	45	38	56	45	38	55	44	38	31
0.80	66	55	47	65	54	47	64	53	46	39
1.00	75	63	56	73	62	55	71	64	55	47
1.25	82	71	63	80	70	63	77	68	62	54
1.50	86	76	69	85	75	68	82	73	67	59
2.00	93	84	77	91	83	77	88	81	75	67
2.50	97	89	82	95	88	82	91	85	80	71
3.00	101	93	87	98	92	86	94	89	84	75
4.00	105	99	93	102	97	92	98	93	89	80
5.00	107	102	97	105	100	96	100	96	93	83
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:2020-03-26

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

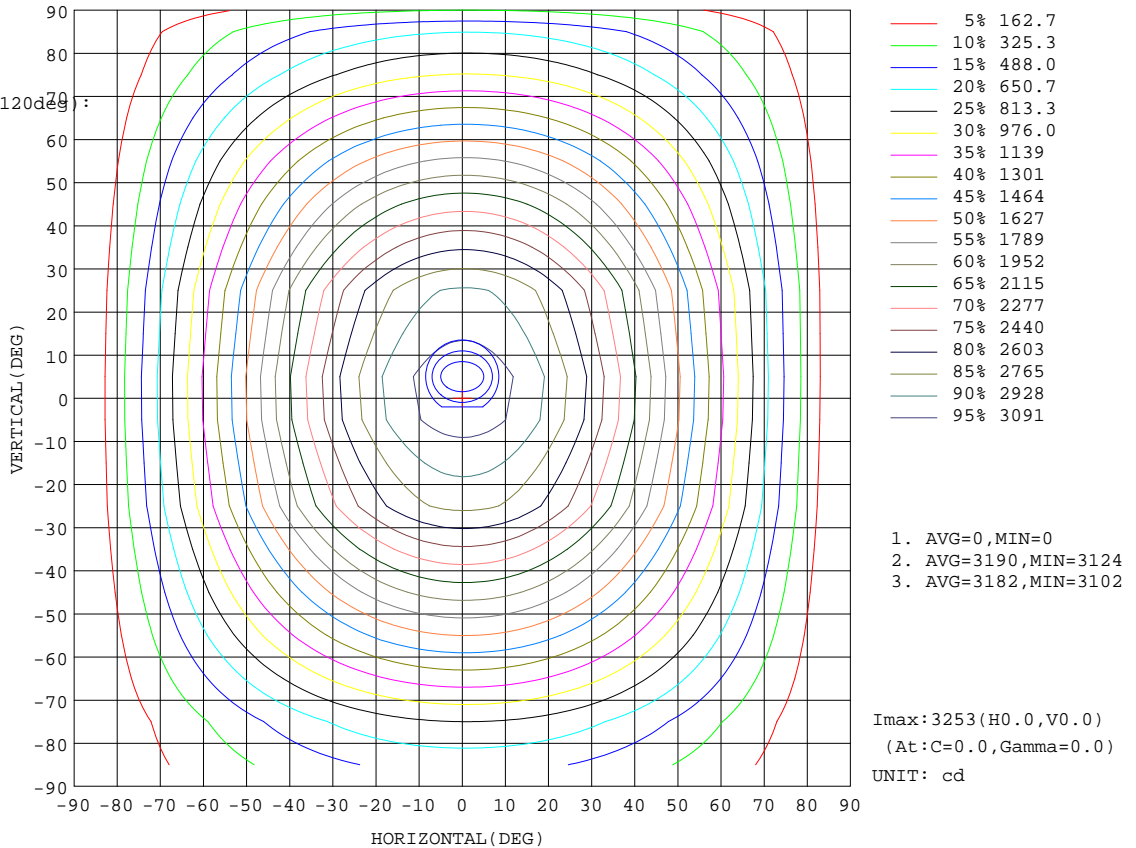
Test:U:120.0V I:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm		
NAME: ASD-LSF5-8A90AC-PRM-68W 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 2438*66*68mm	SERIAL No.:
MFR.:ASD lighting corp.	SUR.:2438*66*68mm	PROTECTION ANGLE:

Conical surface Flux(90deg):

4745.4 lm
%lum = 51.3%
%lamp = 51.3%

Conical surface Flux(120deg):

6924.8 lm
%lum = 74.8%
%lamp = 74.8%

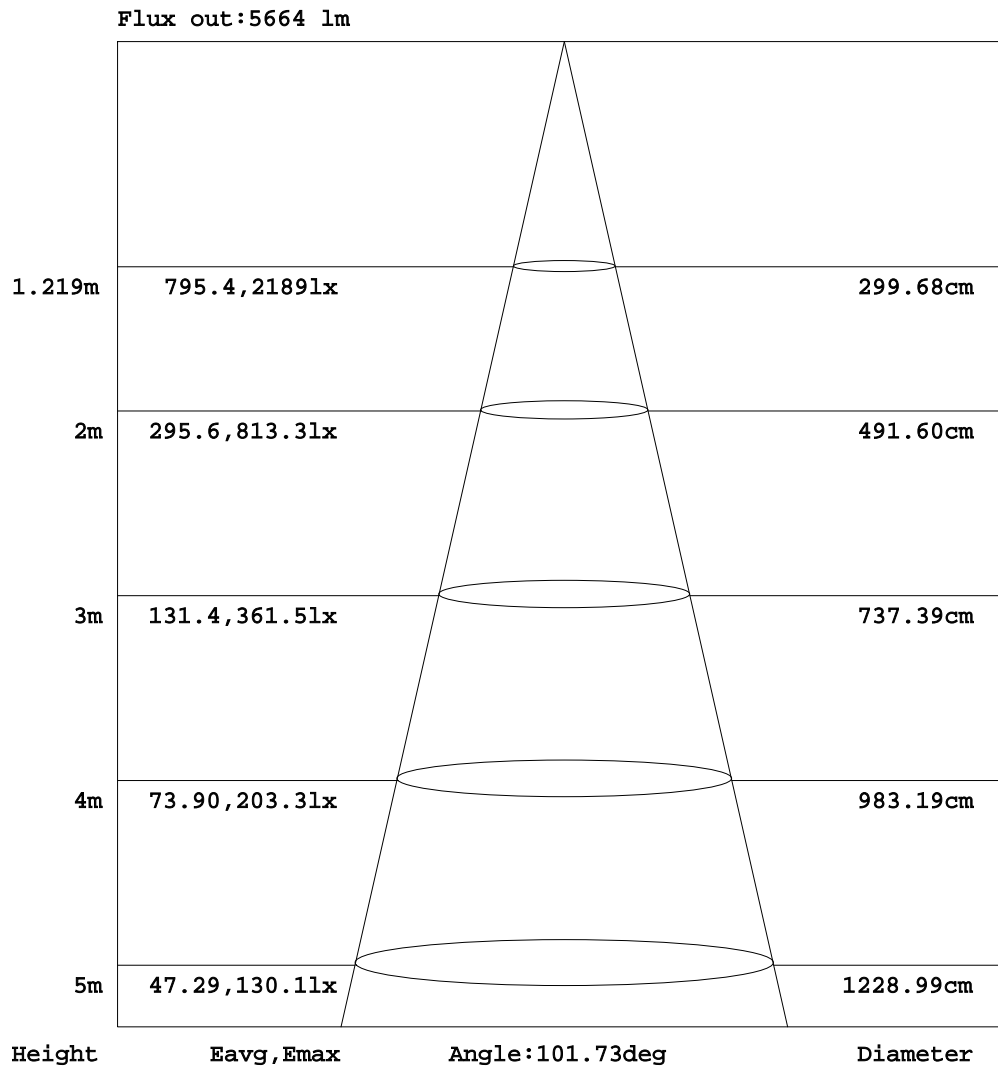


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators: Peter
Test Date: 2020-03-26

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

Test:U:120.0V I:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm		
NAME: ASD-LSF5-8A90AC-PRM-68W 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 2438*66*68mm	SERIAL No.:
MFR.: ASD lighting corp.	SUR.:2438*66*68mm	PROTECTION ANGLE:



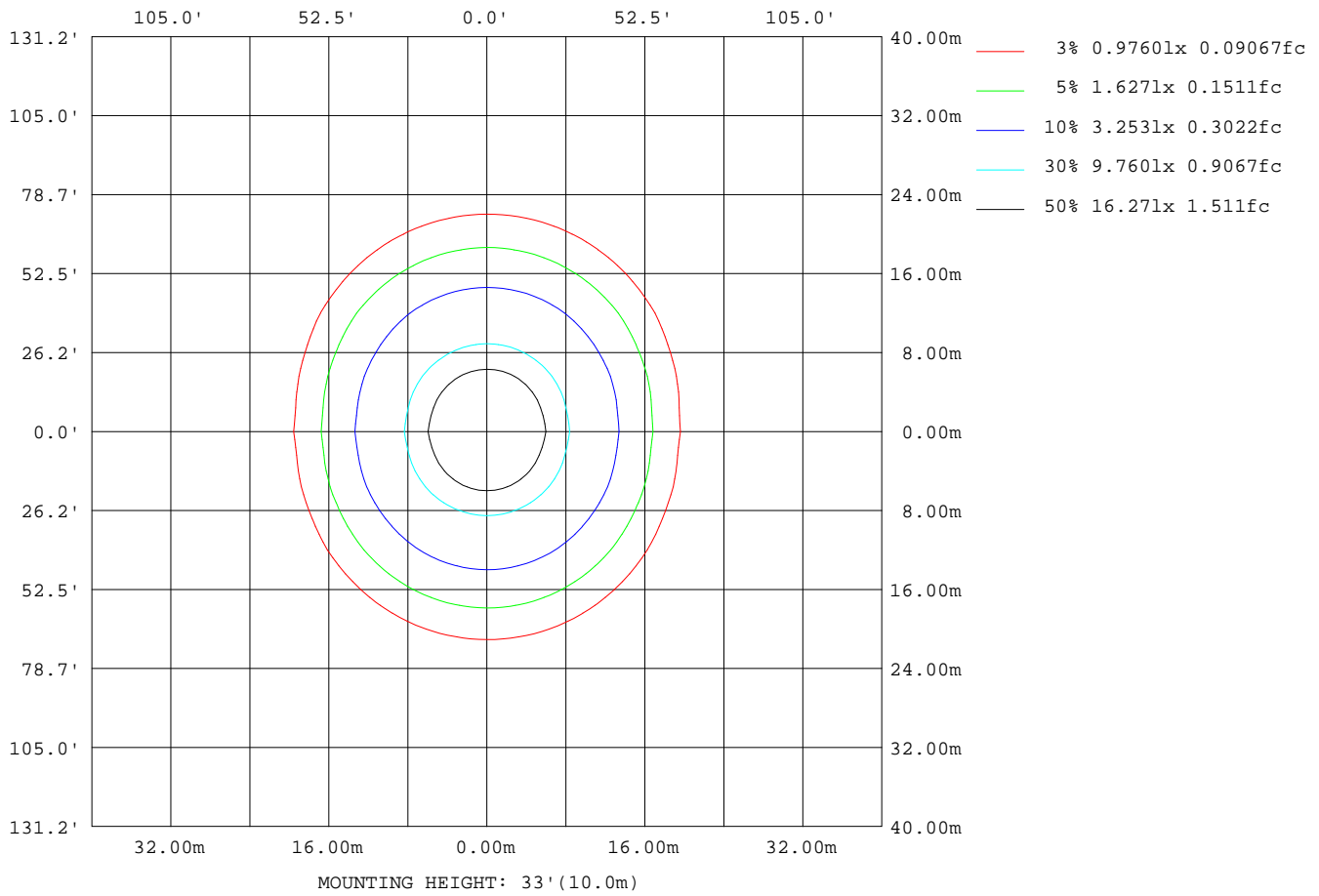
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Peter
 Test Date:2020-03-26

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

Test:U:120.0V I:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm		
NAME: ASD-LSF5-8A90AC-PRM-68W 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 2438*66*68mm	SERIAL No.:
MFR.:ASD lighting corp.	SUR.:2438*66*68mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:Peter
 Test Date:2020-03-26

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:0.5697A P:68.03W PF:0.9953 Lamp Flux:9253.4x1 lm		
NAME:ASD-LSF5-8A90AC-PRM-68W 5000K	TYPE:LED	WEIGHT:
SPEC.:	DIM.: 2438*66*68mm	SERIAL No.:
MFR.:ASD lighting corp.	SUR.:2438*66*68mm	PROTECTION ANGLE:

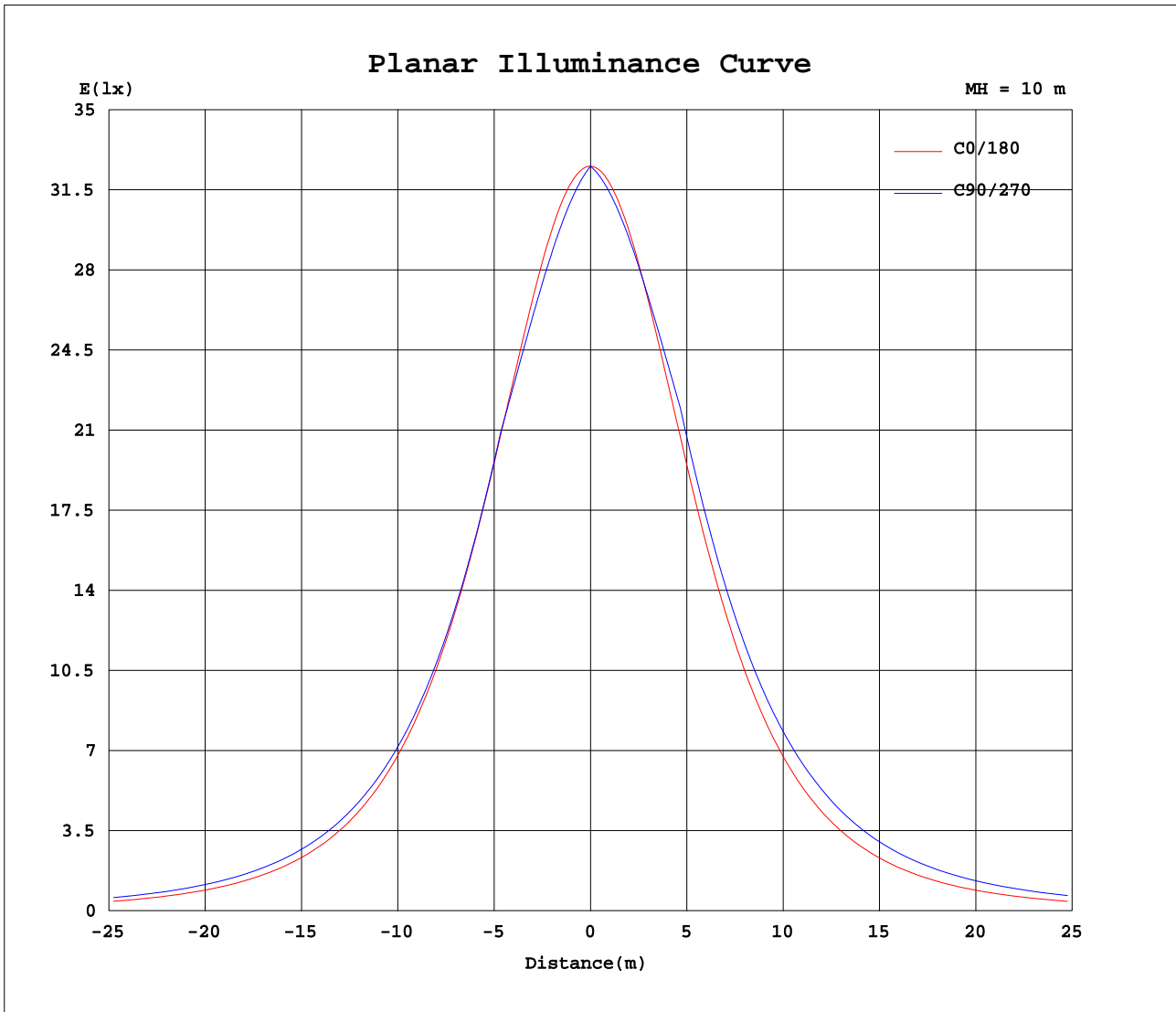
AvgL	cd/m2
L_0~180(65)av	13763
L_0~180(75)av	11372
L_0~180(85)av	7436
L_90~270(65)av	19287
L_90~270(75)av	21562
L_90~270(85)av	42607
L_45(65)av	17015
L_45(75)av	17939
L_45(85)av	30279

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:Peter
Test Date:2020-03-26

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: 2020-03-26

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:

