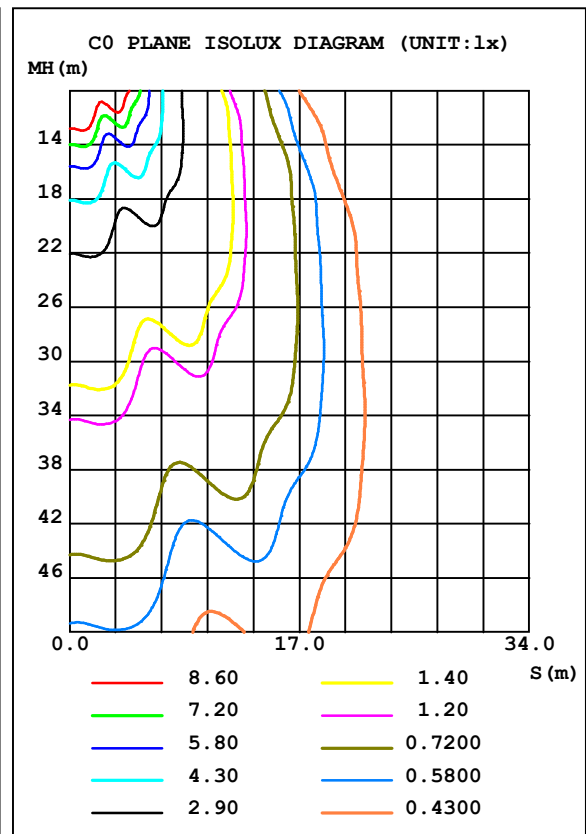
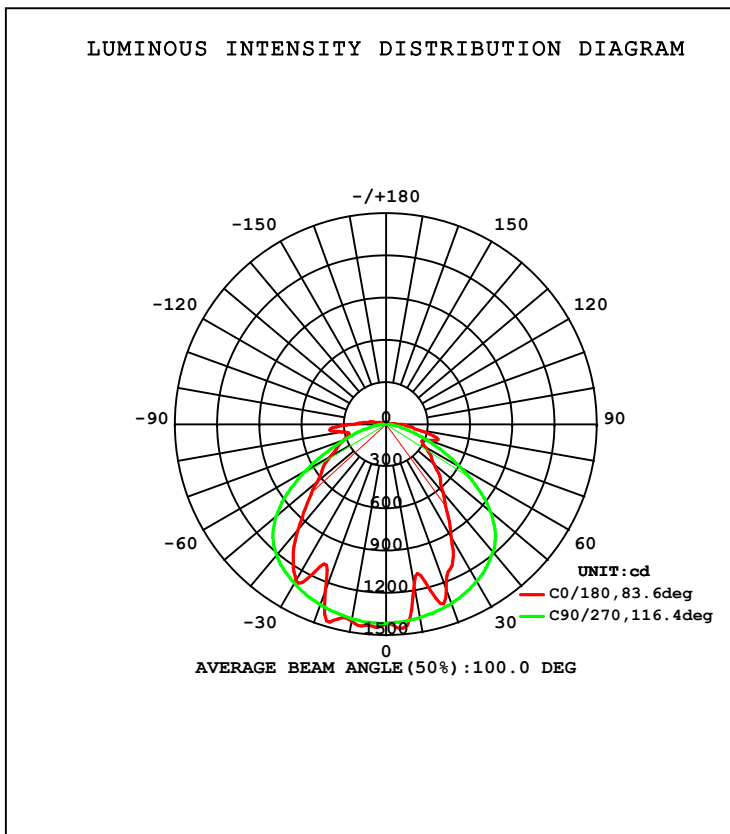


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm		
NAME: LED Vapor Proof Fixture	TYPE:LED Vapor Proof Fixture	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 100.94 lm/W			
MODEL	ASD-LVP44040	I _{max} (cd)	1463	S/MH (C0/180)	1.06
NOMINAL POWER (W)	40	LOR (%)	100.0	S/MH (C90/270)	1.36
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	3968.9	η UP, DN (C0-180)	1.1, 44.9
NOMINAL FLUX (lm)	3968.9	CIE CLASS	DIRECT	η UP, DN (C180-360)	2.2, 51.8
LAMPS INSIDE	1	η up (%)	3.3	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.5	η down (%)	96.7	CIBSE SHR MAX	1.35



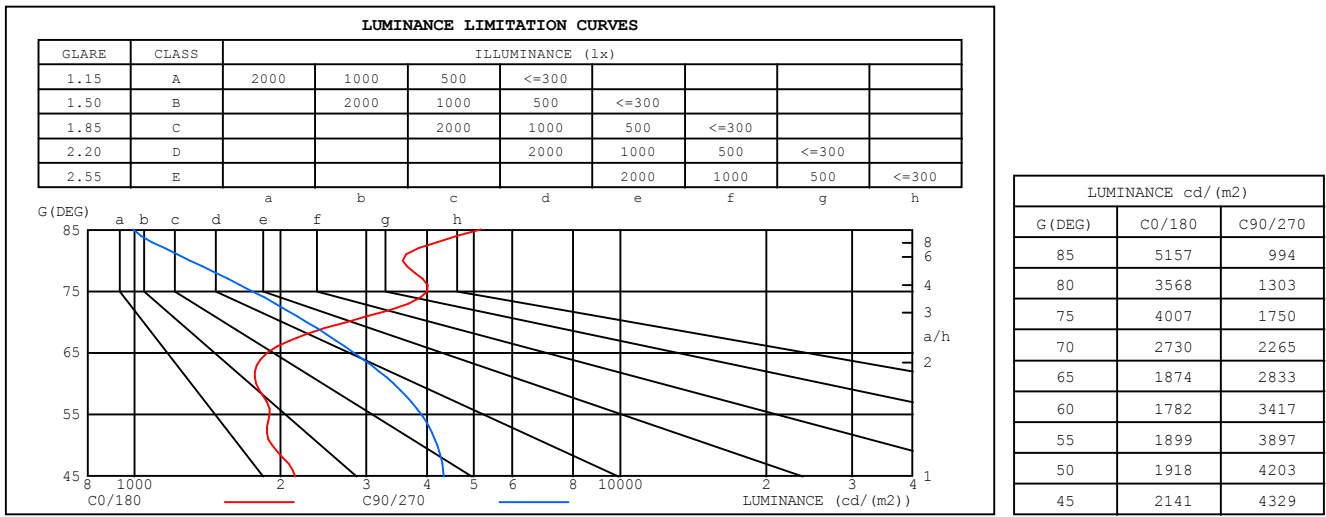
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 18.400m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	1153	1395	1420	1403				0- 10	133.8	133.8	3.35,3.35
20	1256	1356	1263	1366				10- 20	382.7	516.5	12.9,12.9
30	934.3	1290	1286	1306				20- 30	571.4	1088	27.2,27.2
40	629.7	1185	971.0	1214				30- 40	691.6	1780	44.6,44.6
50	445.1	970.0	646.5	1021				40- 50	687.9	2467	61.8,61.8
60	321.6	613.6	454.3	660.5				50- 60	578.2	3046	76.3,76.3
70	337.0	278.1	318.0	307.4				60- 70	393.4	3439	86.1,86.1
80	223.6	81.22	320.3	100.5				70- 80	260.4	3699	92.6,92.6
90	101.0	11.96	253.6	17.04				80- 90	163.2	3863	96.7,96.7
100	39.38	8.065	106.5	10.27				90-100	70.57	3933	98.5,98.5
110	24.90	4.872	40.84	4.899				100-110	28.86	3962	99.2,99.2
120	11.62	4.888	23.82	4.199				110-120	14.27	3976	99.6,99.6
130	5.651	4.644	12.18	3.245				120-130	7.677	3984	99.8,99.8
140	4.094	4.186	6.026	2.867				130-140	4.048	3988	99.9,99.9
150	3.453	3.817	4.390	2.836				140-150	2.481	3991	99.9,99.9
160	3.155	3.435	3.486	2.865				150-160	1.579	3992	100,100
170	2.984	3.240	3.154	2.989				160-170	0.8940	3993	100,100
180	2.920	3.223	2.963	3.159				170-180	0.2950	3993	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		



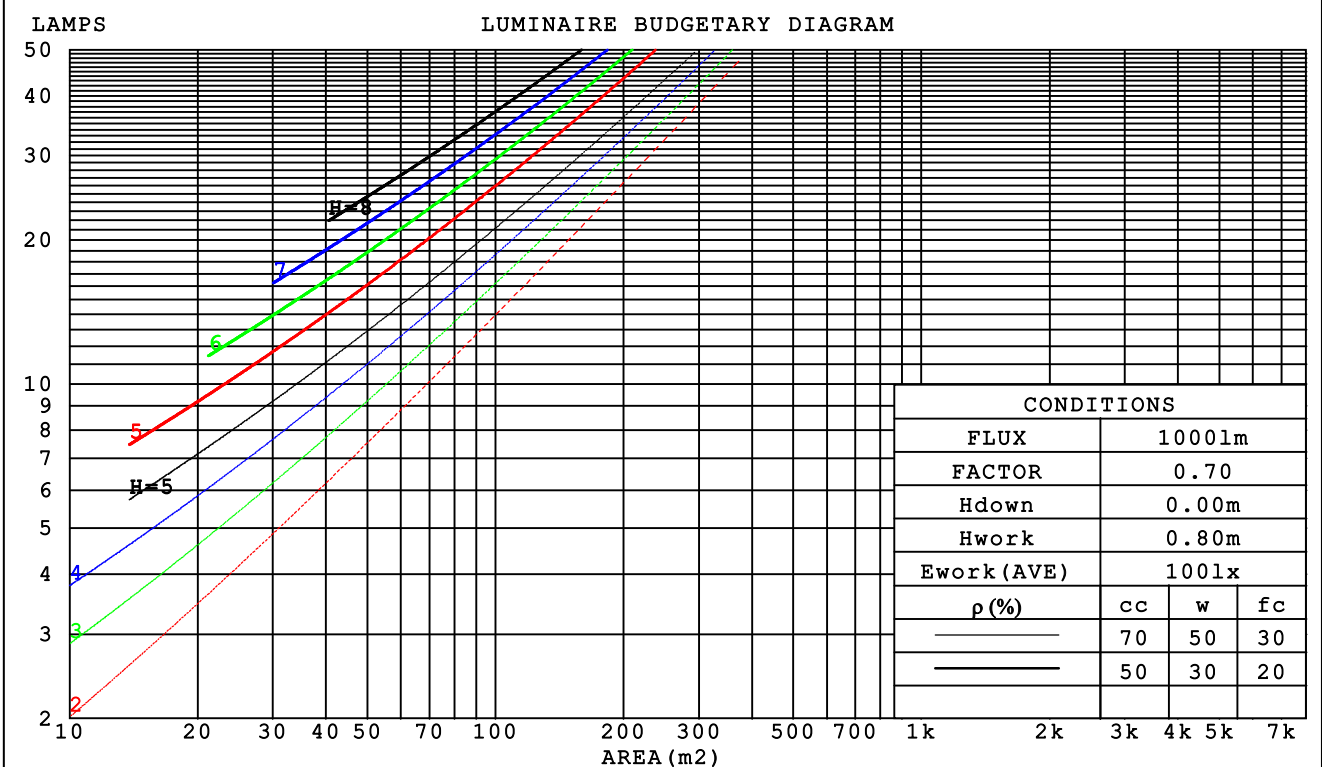
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm		
NAME: LED Vapor Proof Fixture	TYPE:LED Vapor Proof Fixture	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	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	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.97
1.0	1.02	.98	.94	.90	.96	.92	.95	.92	.88	.90	.88	.85	.86	.84	.82	.80
2.0	.89	.82	.77	.87	.81	.75	.83	.78	.73	.79	.75	.71	.76	.72	.69	.67
3.0	.79	.71	.64	.77	.69	.63	.73	.67	.62	.70	.65	.60	.67	.63	.59	.56
4.0	.70	.61	.54	.68	.60	.54	.65	.58	.53	.63	.57	.52	.60	.55	.51	.48
5.0	.63	.54	.47	.61	.53	.47	.59	.51	.46	.57	.50	.45	.54	.49	.44	.42
6.0	.56	.48	.41	.55	.47	.41	.53	.46	.40	.51	.45	.40	.49	.44	.39	.37
7.0	.51	.43	.36	.50	.42	.36	.48	.41	.36	.47	.40	.35	.45	.39	.35	.33
8.0	.47	.38	.33	.46	.38	.32	.44	.37	.32	.43	.36	.32	.42	.36	.31	.29
9.0	.43	.35	.29	.42	.35	.29	.41	.34	.29	.40	.33	.29	.38	.33	.28	.26
10.0	.40	.32	.27	.39	.32	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm		
NAME: LED Vapor Proof Fixture	TYPE:LED Vapor Proof Fixture	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	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	.324	.184	.058	.316	.180	.057	.300	.172	.055	.286	.165	.053	.274	.159	.051	
2.0	.294	.161	.049	.287	.158	.049	.274	.152	.047	.261	.147	.046	.250	.141	.045	
3.0	.269	.143	.043	.263	.141	.042	.251	.136	.041	.240	.131	.040	.229	.127	.039	
4.0	.247	.128	.038	.241	.126	.037	.231	.122	.037	.221	.119	.036	.212	.115	.035	
5.0	.228	.116	.034	.223	.114	.033	.213	.111	.033	.204	.108	.032	.196	.105	.031	
6.0	.211	.106	.030	.206	.104	.030	.198	.101	.030	.190	.099	.029	.183	.096	.029	
7.0	.196	.097	.028	.192	.096	.027	.185	.093	.027	.177	.091	.026	.171	.089	.026	
8.0	.183	.090	.025	.180	.089	.025	.173	.086	.025	.166	.084	.024	.160	.082	.024	
9.0	.172	.083	.023	.169	.082	.023	.162	.080	.023	.156	.078	.022	.151	.077	.022	
10.0	.162	.078	.022	.159	.077	.021	.153	.075	.021	.148	.073	.021	.143	.072	.021	

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	.215	.215	.215	.184	.184	.184	.126	.126	.126	.072	.072	.072	.023	.023	.023	
1.0	.206	.181	.158	.177	.155	.136	.121	.107	.094	.070	.062	.055	.022	.020	.018	
2.0	.198	.157	.123	.169	.135	.106	.116	.094	.074	.067	.054	.043	.021	.018	.014	
3.0	.190	.140	.100	.163	.121	.087	.112	.084	.061	.064	.049	.036	.021	.016	.012	
4.0	.182	.126	.084	.156	.109	.073	.107	.076	.052	.062	.045	.030	.020	.015	.010	
5.0	.174	.116	.073	.150	.100	.064	.103	.070	.045	.060	.041	.027	.019	.013	.009	
6.0	.167	.108	.065	.144	.093	.057	.099	.065	.040	.057	.038	.024	.019	.013	.008	
7.0	.160	.101	.059	.138	.087	.052	.095	.061	.037	.055	.036	.022	.018	.012	.007	
8.0	.154	.095	.055	.132	.083	.048	.092	.058	.034	.053	.034	.020	.017	.011	.007	
9.0	.148	.090	.051	.127	.078	.045	.088	.055	.032	.051	.033	.019	.017	.011	.006	
10.0	.142	.086	.049	.123	.075	.042	.085	.053	.030	.050	.031	.018	.016	.010	.006	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm										
NAME: LED Vapor Proof Fixture					TYPE:LED Vapor Proof Fixture WEIGHT:					
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					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	14.3	15.8	14.6	16.0	16.3	16.9	18.4	17.2	18.6	18.9
3H	16.3	17.6	16.6	17.9	18.2	17.9	19.2	18.2	19.5	19.8
4H	18.0	19.3	18.4	19.6	20.0	18.2	19.5	18.6	19.8	20.1
6H	19.2	20.4	19.5	20.7	21.1	18.4	19.6	18.8	19.9	20.3
8H	19.6	20.8	20.0	21.1	21.5	18.4	19.6	18.8	19.9	20.3
12H	20.1	21.2	20.5	21.5	21.9	18.4	19.5	18.8	19.9	20.2
4H 2H	15.1	16.4	15.5	16.7	17.1	17.1	18.4	17.5	18.7	19.1
3H	17.4	18.5	17.8	18.9	19.2	18.4	19.5	18.8	19.9	20.3
4H	19.2	20.2	19.6	20.6	21.0	18.9	20.0	19.4	20.3	20.7
6H	20.4	21.3	20.9	21.7	22.2	19.2	20.1	19.7	20.5	21.0
8H	20.9	21.7	21.3	22.2	22.6	19.3	20.1	19.8	20.6	21.0
12H	21.4	22.2	21.9	22.7	23.2	19.3	20.1	19.8	20.6	21.0
8H 4H	19.6	20.4	20.0	20.8	21.3	19.3	20.2	19.8	20.6	21.0
6H	20.9	21.6	21.4	22.1	22.6	19.7	20.4	20.2	20.9	21.4
8H	21.5	22.1	22.0	22.6	23.1	19.9	20.5	20.4	21.0	21.5
12H	22.2	22.8	22.7	23.3	23.8	20.0	20.6	20.5	21.1	21.6
12H 4H	19.6	20.3	20.0	20.8	21.3	19.3	20.1	19.8	20.6	21.0
6H	20.9	21.6	21.4	22.0	22.6	19.8	20.5	20.4	21.0	21.5
8H	21.6	22.1	22.1	22.6	23.2	20.1	20.6	20.6	21.1	21.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.3 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.6 / - 0.6				

CIE Pub.117 Corrected 3993 lm Total Lamp Luminous Flux. (8log(F/F0) = 4.8)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm		
NAME: LED Vapor Proof Fixture	TYPE:LED Vapor Proof Fixture	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

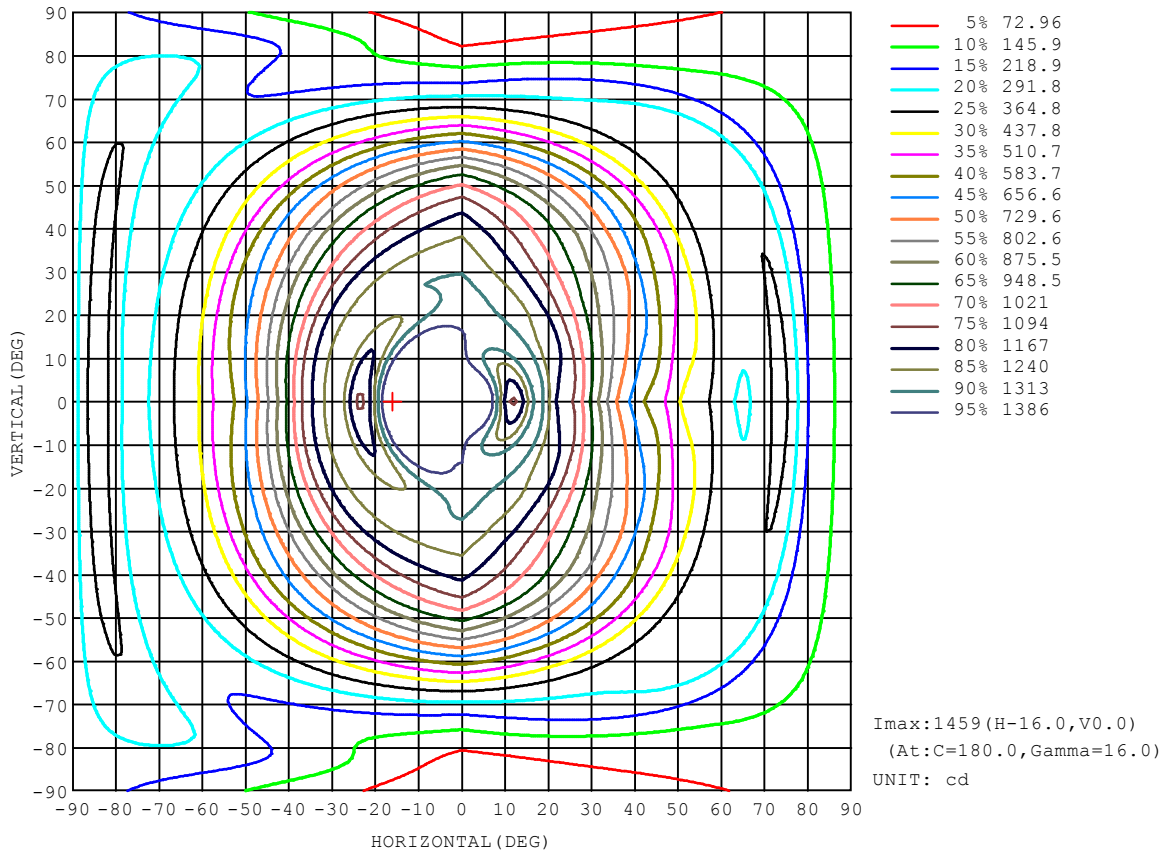
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	57	46	39	56	45	39	55	45	39	32
0.80	67	56	48	66	55	48	64	54	48	41
1.00	75	64	57	74	64	57	72	65	56	49
1.25	82	72	64	81	71	64	78	69	63	56
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	78	92	83	77	88	81	76	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	93	88	98	92	86	94	88	84	75
4.00	105	98	93	102	96	92	97	93	89	79
5.00	107	102	97	104	99	95	99	95	92	82
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:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm		
NAME: LED Vapor Proof Fixture	TYPE:LED Vapor Proof Fixture	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

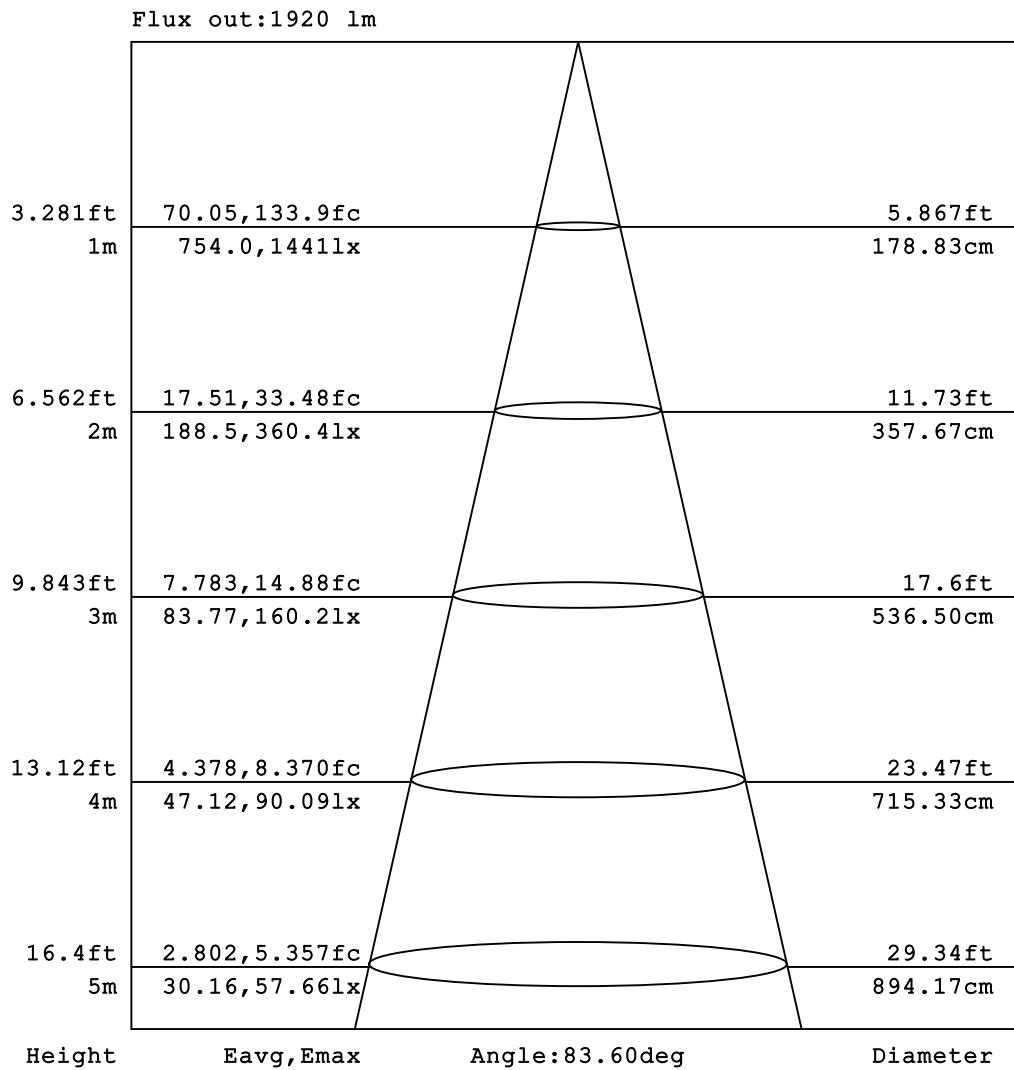


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

AAI Figure

Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm		
NAME: LED Vapor Proof Fixture	TYPE:LED Vapor Proof Fixture	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



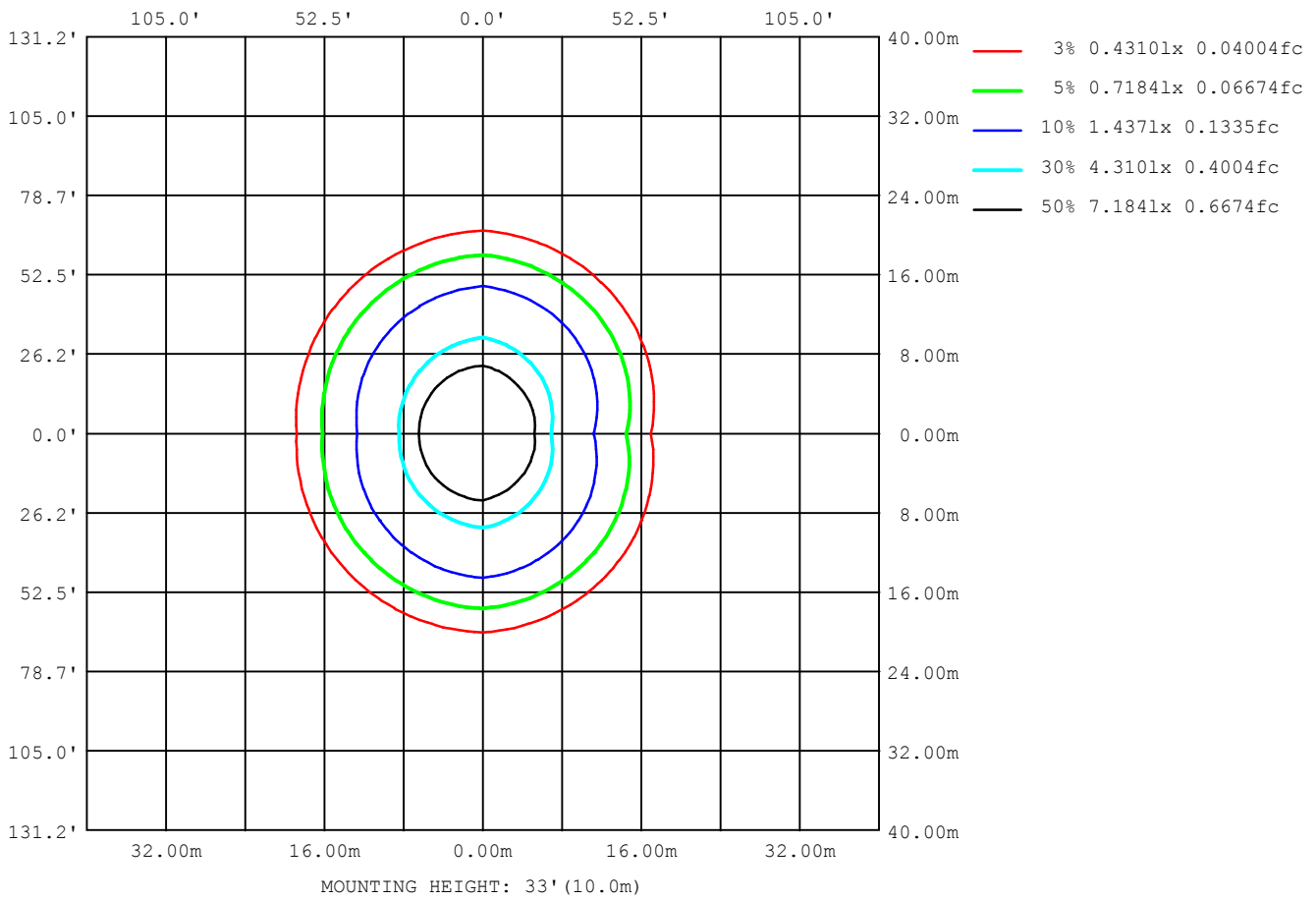
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

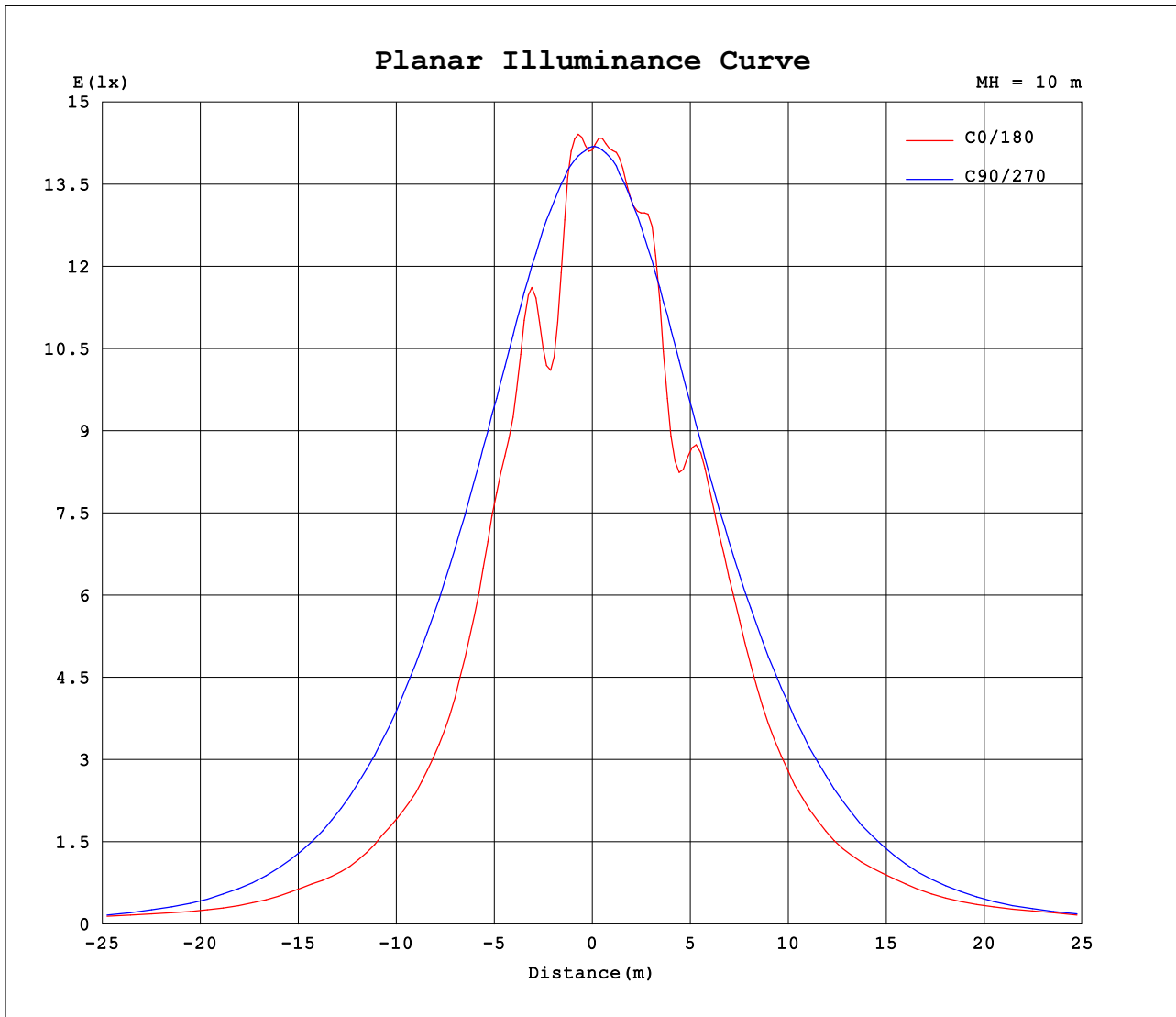
Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm		
NAME: LED Vapor Proof Fixture	TYPE:LED Vapor Proof Fixture	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 18.400m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.5V I:0.1849A P:39.32W PF:0.9605 Lamp Flux:3968.96x1 lm		
NAME: LED Vapor Proof Fixture	TYPE:LED Vapor Proof Fixture	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	90	180	270															
0	1416	1416	1416	1416															
5	1453	1407	1436	1414															
10	1153	1395	1420	1403															
15	1223	1379	1445	1387															
20	1256	1356	1263	1366															
25	1110	1326	1118	1340															
30	934	1290	1286	1306															
35	755	1244	1156	1267															
40	630	1185	971	1214															
45	546	1099	795	1139															
50	445	970	647	1021															
55	393	803	550	857															
60	322	614	454	661															
65	286	430	381	466															
70	337	278	318	307															
75	374	163	275	187															
80	224	81.2	320	101															
85	162	31.1	400	44.0															
90	101	12.0	254	17.0															
95	61.6	10.3	168	13.6															
100	39.4	8.06	107	10.3															
105	28.5	4.86	64.0	5.51															
110	24.9	4.87	40.8	4.90															
115	16.6	4.86	30.0	4.47															
120	11.6	4.89	23.8	4.20															
125	7.96	4.88	16.9	3.73															
130	5.65	4.64	12.2	3.25															
135	4.69	4.49	8.35	2.97															
140	4.09	4.19	6.03	2.87															
145	3.73	4.15	5.09	2.84															
150	3.45	3.82	4.39	2.84															
155	3.32	3.60	3.75	2.85															
160	3.15	3.44	3.49	2.87															
165	2.98	3.32	3.33	2.88															
170	2.98	3.24	3.15	2.99															
175	3.03	3.23	3.02	3.07															
180	2.92	3.22	2.96	3.16															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-10-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity:65.0%
 Test Distance:18.400m [K=1.0000]
 Remarks: