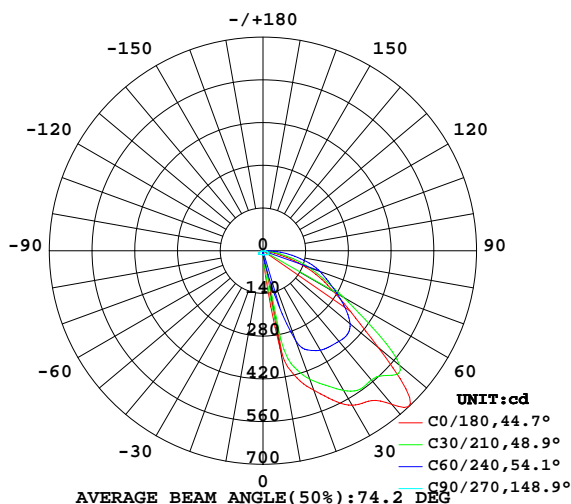


LUMINAIRE PHOTOMETRIC TEST REPORT

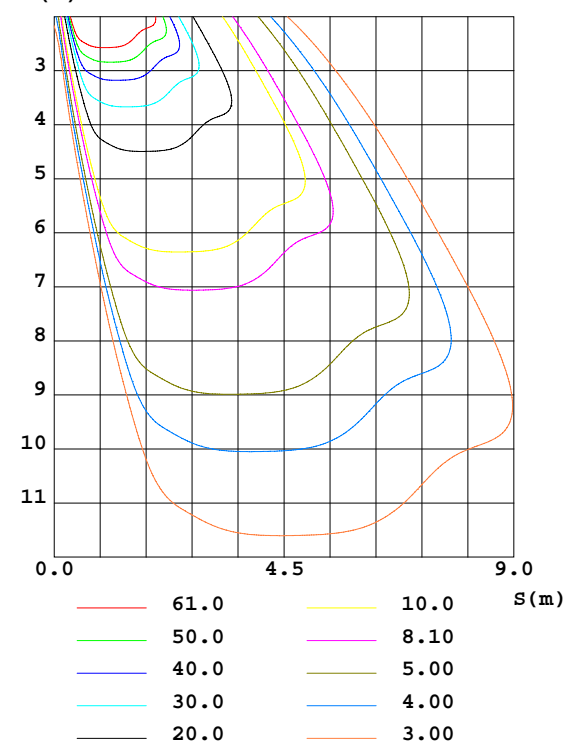
NAME: 8" Wide LED Wallwasher 8-Watts	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Avenue Lighting	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	ML7220-BLK	Imax(cd)	698.7	S/MH(C0/180)	4.28
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.94
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	749.04	η UP, DN(C0-180)	0.3, 54.1
NOMINAL FLUX(lm)	749.038	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.3, 45.3
LAMPS INSIDE	1	η up(%)	0.6	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	24	η down(%)	99.4	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [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	325.4	121.6	13.84	7.674	5.784	7.441	13.62	131.5	0- 10	3.848	3.848	0.51,0.51
20	486.5	400.3	14.20	3.559	0.9491	3.301	13.64	394.4	10- 20	37.92	41.77	5.58,5.58
30	584.8	458.1	14.94	0.5587	0	0.0999	13.98	450.1	20- 30	85.61	127.4	17,17
40	657.7	489.3	16.87	0	0	0	15.47	481.3	30- 40	132.4	259.8	34.7,34.7
50	493.3	464.0	20.89	0	0	0	18.31	450.2	40- 50	170.5	430.2	57.4,57.4
60	267.4	366.8	20.94	0	0	0	16.24	351.3	50- 60	147.9	578.2	77.2,77.2
70	135.7	194.7	17.17	0	0	0	10.62	187.0	60- 70	100.1	678.3	90.6,90.6
80	24.29	77.97	9.883	0	0	0	3.601	71.94	70- 80	51.70	730.0	97.5,97.5
90	7.085	10.23	0	0.0613	0.0190	0.0803	0	9.091	80- 90	14.37	744.3	99.4,99.4
100	1.614	1.347	0.0047	0.3138	0.2362	0.3492	0	1.076	90-100	1.983	746.3	99.6,99.6
110	0.6756	0.3825	0.0755	0.6653	0.6093	0.7032	0.0612	0.2501	100-110	0.4839	746.8	99.7,99.7
120	0.2694	0.0427	0.1463	1.040	1.147	1.076	0.1368	0	110-120	0.4402	747.2	99.8,99.8
130	0.0003	0	0.2171	1.298	1.591	1.343	0.2029	0	120-130	0.4774	747.7	99.8,99.8
140	0	0	0.2879	1.368	1.779	1.408	0.2831	0	130-140	0.4732	748.2	99.9,99.9
150	0	0	0.3351	1.314	1.793	1.335	0.3199	0	140-150	0.3989	748.6	99.9,99.9
160	0	0.0048	0.3823	1.043	1.392	1.057	0.3586	0.0025	150-160	0.2732	748.9	100,100
170	0.0047	0.1510	0.4011	0.7504	0.8773	0.7502	0.3933	0.1864	160-170	0.1383	749.0	100,100
180	0.4247	0.4106	0.4011	0.4554	0.4625	0.4436	0.4011	0.4247	170-180	0.0423	749.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

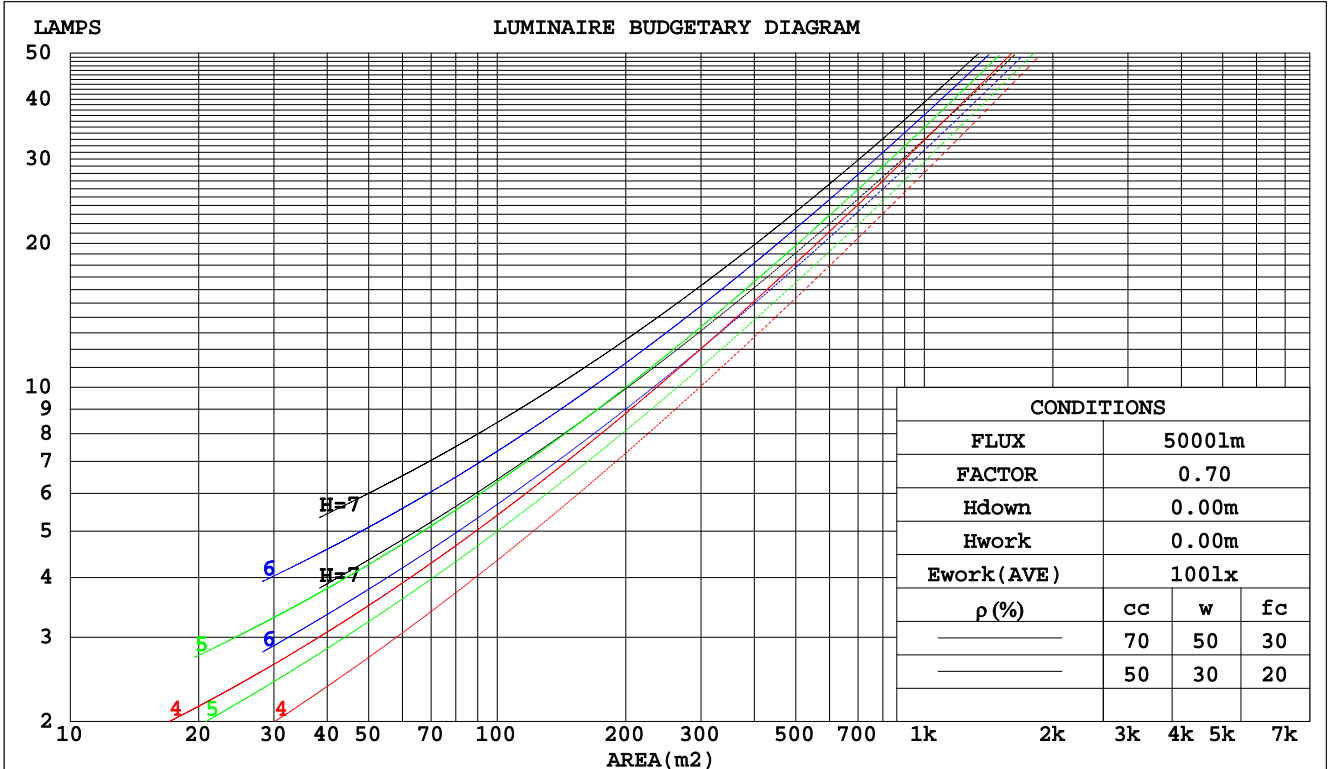
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Vando
Test Date:2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.03	.98	.94	1.01	.96	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.82
2.0	.88	.81	.75	.87	.80	.74	.83	.77	.72	.79	.75	.71	.76	.72	.69	.67
3.0	.77	.68	.61	.75	.67	.60	.72	.65	.59	.69	.63	.58	.66	.61	.57	.54
4.0	.67	.57	.50	.65	.56	.50	.63	.55	.49	.60	.54	.48	.58	.52	.47	.45
5.0	.59	.49	.42	.57	.48	.42	.55	.47	.41	.53	.46	.40	.51	.45	.40	.38
6.0	.52	.42	.35	.51	.42	.35	.49	.41	.35	.47	.40	.34	.45	.39	.34	.32
7.0	.46	.37	.30	.45	.37	.30	.44	.36	.30	.42	.35	.30	.41	.34	.29	.27
8.0	.42	.32	.26	.41	.32	.26	.39	.32	.26	.38	.31	.26	.37	.30	.25	.23
9.0	.38	.29	.23	.37	.29	.23	.36	.28	.23	.35	.28	.22	.33	.27	.22	.20
10.0	.34	.26	.20	.34	.26	.20	.33	.25	.20	.32	.25	.20	.31	.24	.20	.18



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	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	.326	.185	.059	.319	.182	.058	.305	.175	.056	.292	.169	.054	.281	.163	.052	
2.0	.309	.169	.052	.303	.167	.051	.290	.161	.050	.279	.157	.049	.269	.152	.048	
3.0	.287	.153	.046	.281	.151	.045	.270	.147	.045	.260	.143	.044	.251	.139	.043	
4.0	.266	.138	.041	.260	.136	.040	.251	.133	.040	.242	.130	.039	.233	.127	.039	
5.0	.246	.125	.036	.241	.124	.036	.232	.121	.036	.224	.118	.035	.217	.116	.035	
6.0	.228	.114	.033	.224	.113	.033	.216	.111	.032	.209	.108	.032	.202	.106	.032	
7.0	.212	.105	.030	.208	.104	.030	.201	.102	.029	.195	.100	.029	.189	.098	.029	
8.0	.198	.097	.027	.194	.096	.027	.188	.094	.027	.182	.092	.027	.177	.091	.026	
9.0	.185	.089	.025	.182	.089	.025	.176	.087	.025	.171	.086	.025	.166	.084	.024	
10.0	.174	.083	.023	.171	.083	.023	.166	.081	.023	.161	.080	.023	.157	.079	.023	

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	.195	.195	.195	.167	.167	.167	.114	.114	.114	.065	.065	.065	.021	.021	.021	
1.0	.186	.161	.138	.159	.138	.119	.109	.095	.082	.063	.055	.048	.020	.018	.015	
2.0	.179	.137	.101	.154	.118	.087	.105	.081	.061	.061	.047	.036	.019	.015	.012	
3.0	.173	.119	.077	.148	.103	.067	.102	.071	.047	.059	.042	.028	.019	.014	.009	
4.0	.166	.106	.061	.142	.092	.053	.098	.064	.037	.057	.037	.022	.018	.012	.007	
5.0	.159	.096	.050	.136	.083	.043	.094	.058	.031	.054	.034	.018	.018	.011	.006	
6.0	.152	.088	.042	.131	.076	.037	.090	.053	.026	.052	.031	.015	.017	.010	.005	
7.0	.145	.081	.036	.125	.070	.032	.086	.049	.022	.050	.029	.013	.016	.010	.004	
8.0	.139	.076	.032	.120	.066	.028	.083	.046	.020	.048	.027	.012	.016	.009	.004	
9.0	.133	.071	.029	.114	.061	.025	.079	.043	.018	.046	.025	.011	.015	.008	.004	
10.0	.127	.066	.026	.109	.058	.023	.076	.041	.016	.044	.024	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

Uncorrected UGR Table

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse					TYPE:					WEIGHT:				
DIM.:					SPEC.:					SERIAL No.:				
MFR.: VD					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	23.1	24.7	23.4	24.9	25.2	20.1	21.7	20.4	21.9	22.2				
3H	23.9	25.4	24.2	25.6	25.9	21.0	22.5	21.3	22.8	23.0				
4H	24.1	25.5	24.4	25.8	26.0	21.3	22.7	21.6	23.0	23.3				
6H	24.1	25.4	24.4	25.7	26.0	21.4	22.8	21.8	23.0	23.3				
8H	24.0	25.3	24.4	25.6	25.9	21.4	22.7	21.8	23.0	23.3				
12H	24.0	25.2	24.4	25.6	25.9	21.4	22.7	21.8	23.0	23.3				
4H 2H	23.6	25.1	24.0	25.3	25.6	21.8	23.2	22.1	23.5	23.8				
3H	24.6	25.9	25.0	26.2	26.5	23.2	24.4	23.5	24.7	25.0				
4H	24.9	26.1	25.3	26.4	26.7	23.7	24.8	24.1	25.2	25.5				
6H	25.0	26.0	25.4	26.3	26.7	24.0	25.0	24.4	25.4	25.8				
8H	25.0	25.9	25.4	26.3	26.7	24.1	25.0	24.5	25.4	25.8				
12H	24.9	25.8	25.4	26.2	26.6	24.1	25.0	24.6	25.4	25.8				
8H 4H	25.2	26.2	25.7	26.5	27.0	24.2	25.2	24.7	25.5	25.9				
6H	25.4	26.2	25.8	26.6	27.0	25.0	25.8	25.4	26.2	26.6				
8H	25.4	26.1	25.9	26.5	27.0	25.3	26.0	25.7	26.4	26.9				
12H	25.4	26.0	25.9	26.5	26.9	25.5	26.1	26.0	26.5	27.0				
12H 4H	25.3	26.1	25.7	26.5	27.0	24.2	25.1	24.7	25.5	25.9				
6H	25.5	26.2	26.0	26.6	27.1	25.1	25.7	25.5	26.2	26.6				
8H	25.5	26.1	26.0	26.6	27.1	25.5	26.1	26.0	26.5	27.0				
Variations with the observer position at spacings:														
S = 1.0H	+ 0.2 / - 0.2					+ 0.3 / - 0.3								
1.5H	+ 0.5 / - 0.9					+ 0.5 / - 0.9								
2.0H	+ 0.9 / - 0.9					+ 1.1 / - 1.7								

CIE Pub.117 Corrected 749.0 lm Total Lamp Luminous Flux. (8log(F/F0) = -1.0)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

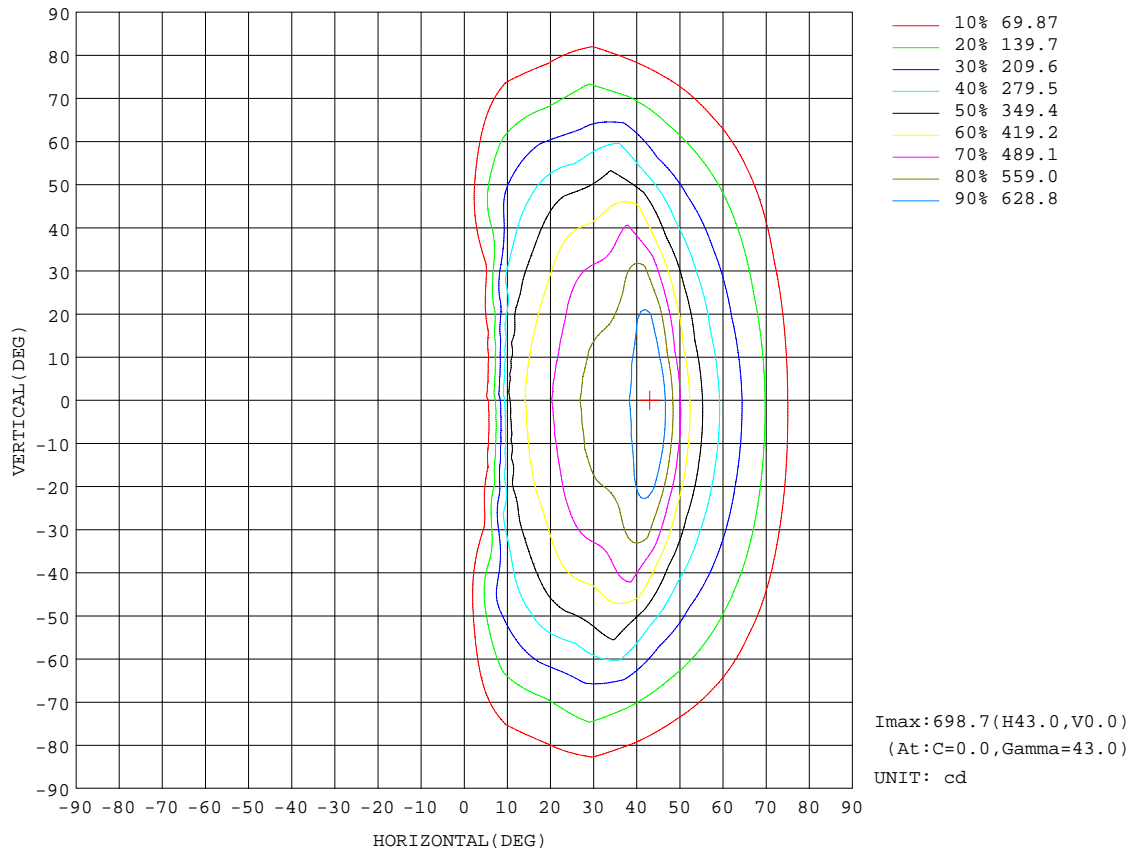
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	51	38	31	50	38	31	49	37	30	23
0.80	62	49	41	61	49	41	59	48	41	33
1.00	72	59	51	70	59	51	68	61	51	43
1.25	80	68	60	78	67	60	75	66	59	51
1.50	85	74	67	83	73	66	80	71	65	57
2.00	93	84	77	91	82	76	87	80	74	66
2.50	97	89	82	95	87	81	91	84	79	70
3.00	101	93	87	98	92	86	94	89	84	75
4.00	105	99	94	102	97	92	98	93	90	80
5.00	107	102	98	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: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

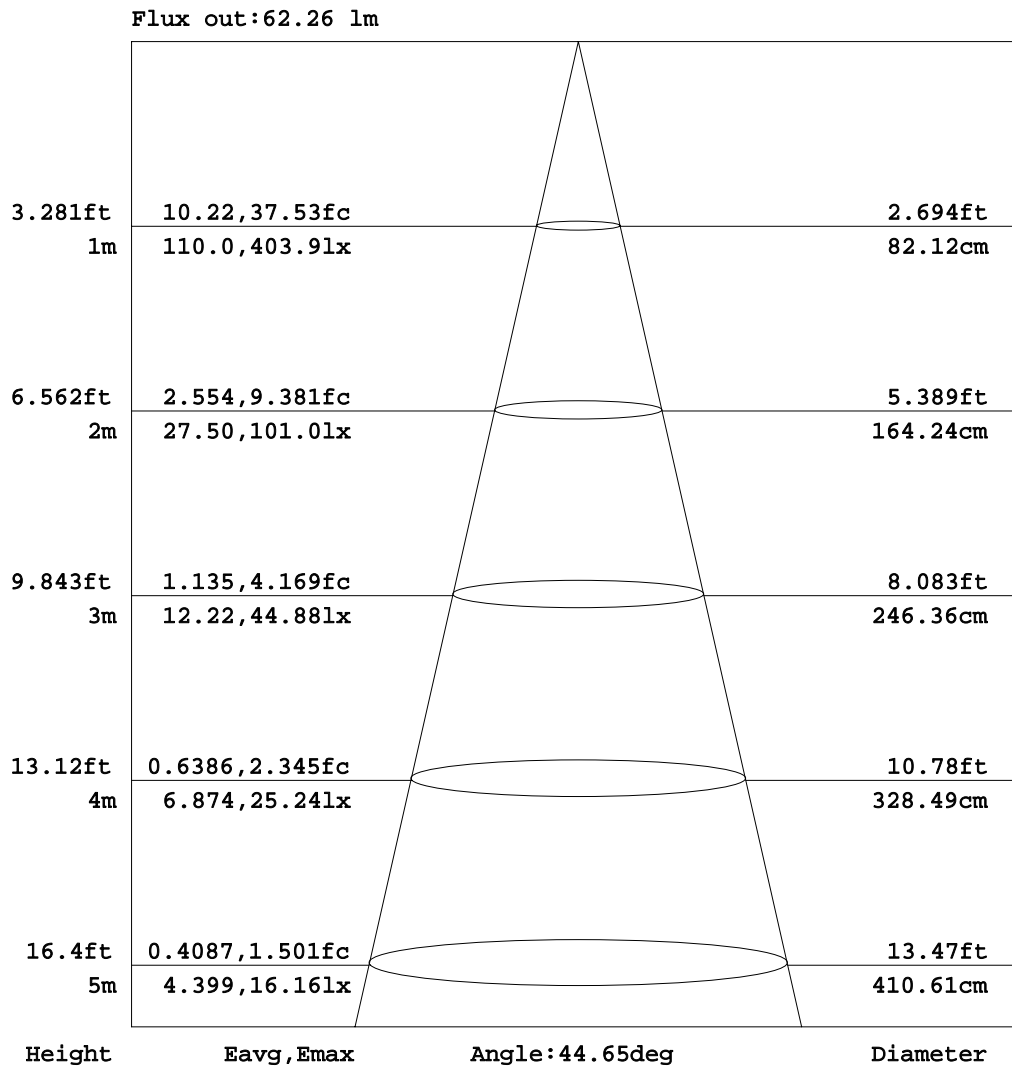


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

AAI Figure

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



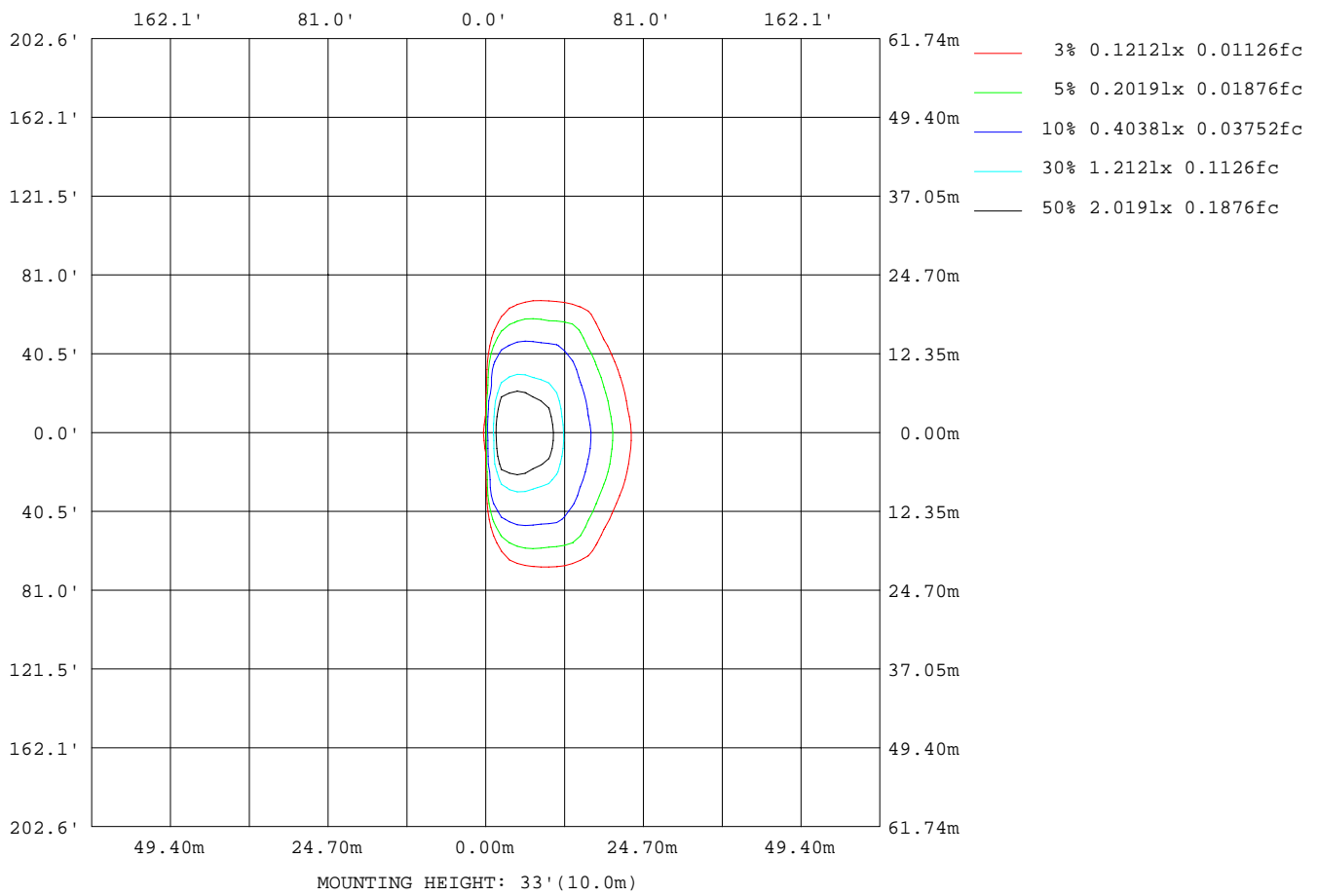
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Vando
 Test Date:2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity:65.0%
 Test Distance:7.100m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

Average Luminance Table(CIBSE)

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	749.038	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.1	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	6174	6338	6659	7620	8457	6910	5750	4580	3131	374	100	1	0	0	0	0	0	0	0
60	5348	5389	5612	6091	7217	7455	5596	4594	3129	419	71	0	0	0	0	0	0	0	0
65	4791	4834	4997	5195	5894	7289	5575	4402	3091	461	31	0	0	0	0	0	0	0	0
70	3968	4122	4379	4712	5195	6192	5815	4145	2966	502	6	0	0	0	0	0	0	0	0
75	2702	2908	3273	3992	4674	5504	6077	3993	2800	539	0	0	0	0	0	0	0	0	0
80	1399	1558	1910	2739	3827	5153	6143	4166	2681	569	0	0	0	0	0	0	0	0	0
85	1258	1311	1421	1763	2572	4426	6552	5145	2842	567	0	0	0	2	0	0	0	0	0

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum	specified	maximum	specified
		calculated	maximum	measured	maximum
Category 1	55 to 90	8457	200	---	500
Category 2	65 to 90	7289	200	---	500
Category 3	75 to 90	6552	200	---	500

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Vando
 Test Date:2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity:65.0%
 Test Distance:7.100m [K=1.0000]
 Remarks:

Average Luminance Table(CIBSE)

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	749.038	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.1	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	6174	6338	6659	7620	8457	6910	5750	4580	3131	374	100	1	0	0	0	0	0	0	0
60	5348	5389	5612	6091	7217	7455	5596	4594	3129	419	71	0	0	0	0	0	0	0	0
65	4791	4834	4997	5195	5894	7289	5575	4402	3091	461	31	0	0	0	0	0	0	0	0
70	3968	4122	4379	4712	5195	6192	5815	4145	2966	502	6	0	0	0	0	0	0	0	0
75	2702	2908	3273	3992	4674	5504	6077	3993	2800	539	0	0	0	0	0	0	0	0	0
80	1399	1558	1910	2739	3827	5153	6143	4166	2681	569	0	0	0	0	0	0	0	0	0
85	1258	1311	1421	1763	2572	4426	6552	5145	2842	567	0	0	0	2	0	0	0	0	0

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

range (deg)	Maximum measured	Average Luminance(cd/sq.m)			
		Maximum limit for screen type & software category used			
		Type I,II screen Some neg.s'ware	Type I,II screen Only pos.s'ware	Type III screen Some neg.s'ware	Type III screen Only pos.s'ware
55 to 90	8457	1000	1500	200	500
65 to 90	7289	1000	1500	200	500

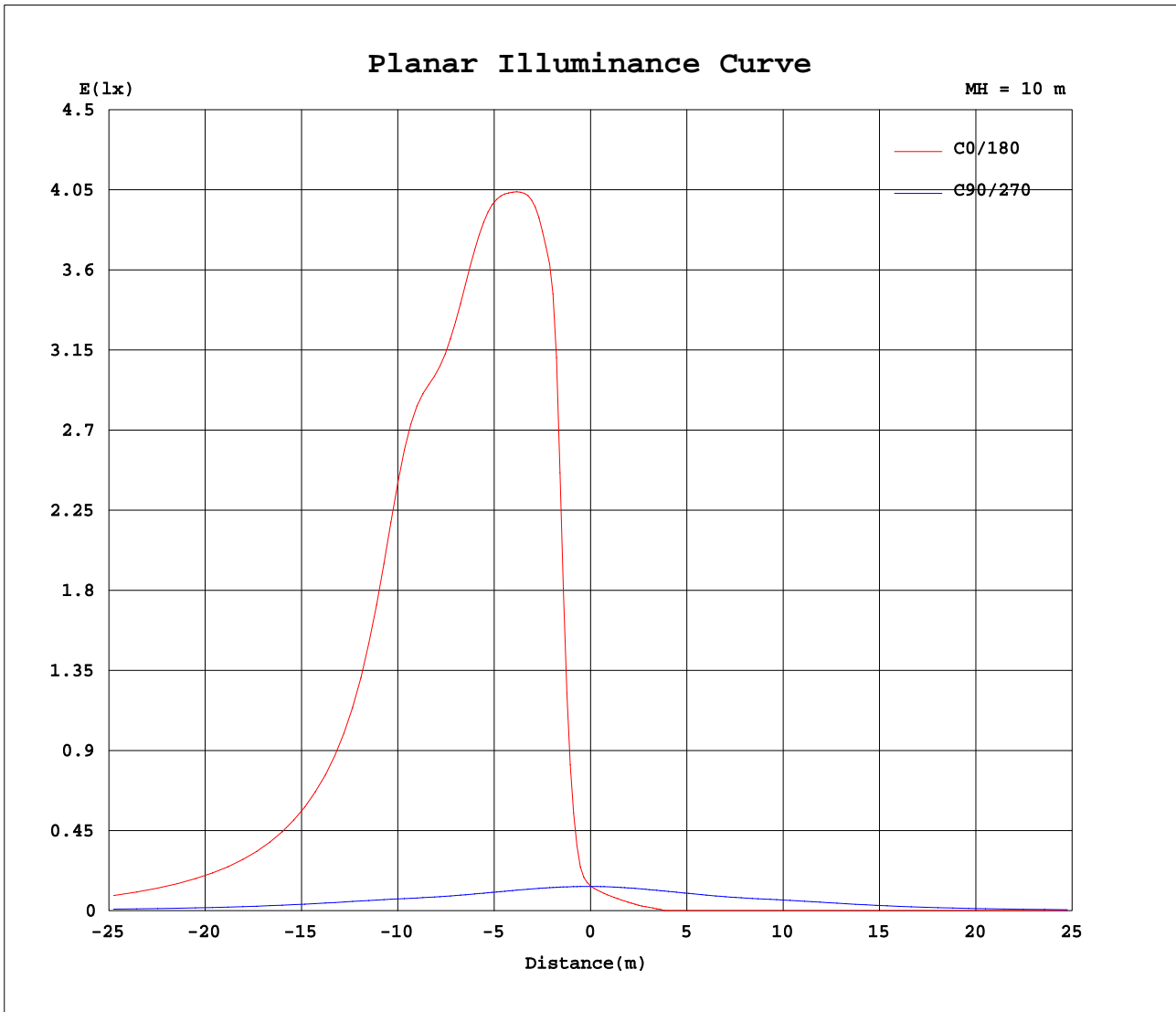
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

No match

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Vando
 Test Date:2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity:65.0%
 Test Distance:7.100m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	14.1	13.8	13.9	13.7	13.7	13.7	13.7	13.6	13.6	13.7	13.7	13.8	13.9	14.1	14.1	14.3	14.4	14.6	14.1
5	55.5	50.7	46.7	38.2	31.3	24.1	19.9	17.0	15.1	13.7	12.7	11.8	11.1	10.6	10.1	9.76	9.45	9.38	9.10
10	325	306	273	219	153	90.3	51.8	27.1	17.4	13.8	11.8	10.3	9.03	8.08	7.27	6.72	6.25	6.06	5.78
15	432	425	414	394	368	289	150	56.9	21.9	14.0	11.0	8.92	7.32	6.04	4.98	4.16	3.54	3.24	2.97
20	487	480	468	448	420	380	313	121	31.7	14.2	10.3	7.72	5.79	4.18	2.94	2.22	1.56	1.19	0.95
25	539	531	514	487	454	413	360	234	48.6	14.5	9.57	6.62	4.35	2.62	1.24	0.03	0.03	0.00	0.00
30	585	577	560	529	485	431	376	306	75.1	14.9	8.95	5.59	3.00	1.07	0.04	0.00	0.00	0.00	0.00
35	602	595	578	554	513	449	383	314	117	15.6	8.41	4.52	1.58	0.00	0.00	0.00	0.00	0.00	0.00
40	658	638	597	553	515	464	388	312	171	16.9	8.06	3.38	0.10	0.00	0.00	0.00	0.00	0.00	0.00
45	680	681	657	578	499	455	390	301	204	19.0	8.06	2.10	0.04	0.00	0.00	0.00	0.00	0.00	0.00
50	493	513	550	585	505	423	372	284	199	20.9	8.02	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	354	364	382	437	485	396	330	263	180	21.5	5.74	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	267	269	281	305	361	373	280	230	156	20.9	3.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	202	204	211	220	249	308	236	186	131	19.5	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	136	141	150	161	178	212	199	142	101	17.2	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	69.9	75.3	84.7	103	121	142	157	103	72.5	14.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	24.3	27.1	33.2	47.6	66.5	89.5	107	72.3	46.5	9.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	11.0	11.4	12.4	15.4	22.4	38.6	57.1	44.8	24.8	4.94	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
90	7.09	7.28	7.51	8.21	9.19	11.3	14.2	11.9	5.79	0.00	0.00	0.05	0.04	0.09	0.03	0.05	0.00	0.00	0.02
95	4.80	4.90	4.90	5.05	5.04	4.91	2.48	1.01	0.10	0.00	0.00	0.13	0.13	0.20	0.15	0.15	0.07	0.09	0.11
100	1.61	1.65	1.52	1.44	1.44	1.26	0.90	0.27	0.00	0.00	0.05	0.22	0.26	0.34	0.29	0.29	0.20	0.21	0.24
105	1.01	0.98	0.99	0.90	0.86	0.64	0.36	0.00	0.00	0.04	0.11	0.32	0.39	0.51	0.48	0.48	0.38	0.38	0.40
110	0.68	0.63	0.65	0.55	0.49	0.28	0.09	0.00	0.00	0.08	0.18	0.42	0.53	0.66	0.67	0.69	0.60	0.59	0.61
115	0.45	0.41	0.42	0.31	0.26	0.07	0.00	0.00	0.00	0.11	0.25	0.52	0.68	0.84	0.87	0.92	0.85	0.86	0.87
120	0.27	0.22	0.24	0.13	0.09	0.00	0.00	0.00	0.00	0.15	0.31	0.60	0.81	1.01	1.07	1.14	1.09	1.12	1.15
125	0.12	0.08	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.35	0.67	0.90	1.15	1.23	1.34	1.32	1.36	1.39
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.22	0.40	0.71	0.95	1.24	1.35	1.50	1.50	1.57	1.59
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.25	0.42	0.71	0.99	1.25	1.43	1.60	1.61	1.69	1.72
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.29	0.45	0.72	1.00	1.26	1.47	1.62	1.68	1.74	1.78
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.10	0.31	0.47	0.72	1.00	1.25	1.46	1.62	1.70	1.76	1.79
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.14	0.34	0.48	0.69	0.98	1.18	1.44	1.57	1.70	1.75	1.79
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.17	0.35	0.48	0.67	0.91	1.08	1.31	1.42	1.59	1.60	1.65
160	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.15	0.20	0.38	0.48	0.63	0.84	0.94	1.14	1.23	1.36	1.38	1.39
165	0.00	0.00	0.00	0.00	0.00	0.09	0.10	0.22	0.25	0.40	0.47	0.59	0.75	0.82	0.97	1.01	1.12	1.11	1.13
170	0.00	0.08	0.07	0.13	0.11	0.19	0.19	0.29	0.32	0.40	0.47	0.54	0.67	0.69	0.81	0.81	0.89	0.87	0.88
175	0.19	0.26	0.23	0.28	0.25	0.31	0.29	0.36	0.35	0.40	0.47	0.47	0.57	0.56	0.64	0.62	0.69	0.66	0.68
180	0.42	0.43	0.43	0.44	0.41	0.42	0.40	0.40	0.40	0.40	0.44	0.43	0.45	0.44	0.47	0.45	0.49	0.48	0.46

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Wallsher20-s-3000k-90RA-12W-Diffuse	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	13.8	13.9	13.7	13.7	13.7	13.7	13.6	13.6	13.7	13.7	13.8	13.9	14.1	14.1	14.3	14.4	14.6		
5	9.00	9.25	9.42	9.85	10.3	10.9	11.7	12.5	13.7	15.1	17.3	20.5	26.7	34.5	45.1	53.5	62.7		
10	5.77	6.09	6.45	7.07	7.81	8.82	10.1	11.6	13.6	17.1	27.2	52.4	97.9	165	242	297	334		
15	3.00	3.34	3.87	4.74	5.76	7.07	8.66	10.7	13.6	20.7	55.2	147	289	366	395	414	428		
20	1.02	1.33	1.99	2.74	3.86	5.50	7.43	9.91	13.6	28.2	113	303	375	414	445	466	481		
25	0.00	0.00	0.06	1.02	2.36	3.99	6.31	9.16	13.8	41.1	214	351	406	446	482	510	531		
30	0.00	0.00	0.00	0.00	0.20	2.64	5.23	8.48	14.0	61.1	292	367	424	476	522	554	573		
35	0.00	0.00	0.00	0.00	0.04	1.12	4.01	7.89	14.4	92.4	302	372	443	505	544	568	587		
40	0.00	0.00	0.00	0.00	0.00	0.02	2.80	7.51	15.5	137	299	375	456	507	542	588	637		
45	0.00	0.00	0.00	0.00	0.00	0.00	1.27	7.40	17.2	176	288	375	443	491	568	644	661		
50	0.00	0.00	0.00	0.00	0.00	0.00	0.15	6.17	18.3	184	272	358	408	493	568	531	481		
55	0.00	0.00	0.00	0.00	0.00	0.00	0.06	4.19	17.9	167	250	318	377	472	417	366	343		
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	16.2	144	217	264	351	352	290	265	257		
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	13.7	119	175	219	293	237	212	199	194		
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	10.6	91.3	130	181	205	169	154	141	130		
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.12	64.1	93.4	144	135	116	95.2	79.3	66.8		
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	39.6	63.3	99.2	82.2	61.7	41.3	29.7	22.9		
85	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.75	19.3	36.6	50.4	31.5	19.8	13.6	11.6	10.5		
90	0.00	0.04	0.02	0.09	0.07	0.10	0.02	0.01	0.00	1.47	6.35	11.6	9.64	8.55	7.53	7.15	6.78		
95	0.07	0.13	0.12	0.21	0.18	0.21	0.11	0.07	0.00	0.00	0.69	1.58	2.88	4.22	4.40	4.52	4.36		
100	0.20	0.26	0.27	0.37	0.33	0.33	0.20	0.13	0.00	0.00	0.16	0.66	1.05	1.10	1.13	1.19	1.32		
105	0.36	0.45	0.46	0.54	0.49	0.47	0.30	0.20	0.01	0.00	0.00	0.15	0.45	0.60	0.70	0.65	0.76		
110	0.58	0.68	0.68	0.74	0.67	0.62	0.41	0.26	0.06	0.00	0.00	0.00	0.20	0.30	0.46	0.45	0.43		
115	0.84	0.93	0.91	0.95	0.84	0.76	0.52	0.33	0.10	0.00	0.00	0.00	0.06	0.14	0.26	0.28	0.32		
120	1.11	1.17	1.13	1.15	1.00	0.88	0.60	0.39	0.14	0.03	0.00	0.00	0.00	0.00	0.14	0.13	0.19		
125	1.35	1.40	1.34	1.32	1.14	0.99	0.67	0.45	0.17	0.06	0.00	0.00	0.00	0.00	0.02	0.02	0.08		
130	1.55	1.59	1.49	1.44	1.24	1.03	0.73	0.48	0.20	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
135	1.67	1.69	1.59	1.50	1.30	1.05	0.76	0.50	0.25	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
140	1.73	1.72	1.64	1.51	1.30	1.06	0.77	0.51	0.28	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
145	1.77	1.73	1.64	1.50	1.30	1.03	0.77	0.51	0.30	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
150	1.77	1.71	1.61	1.42	1.25	0.97	0.76	0.51	0.32	0.21	0.04	0.00	0.00	0.00	0.00	0.00	0.00		
155	1.66	1.56	1.49	1.29	1.14	0.89	0.73	0.51	0.34	0.24	0.08	0.03	0.00	0.00	0.00	0.00	0.00		
160	1.42	1.33	1.27	1.11	1.01	0.80	0.69	0.49	0.36	0.28	0.14	0.10	0.00	0.00	0.00	0.00	0.00		
165	1.16	1.08	1.05	0.93	0.88	0.72	0.65	0.49	0.38	0.33	0.20	0.17	0.08	0.09	0.00	0.01	0.00		
170	0.91	0.84	0.85	0.76	0.74	0.63	0.59	0.47	0.39	0.37	0.28	0.27	0.18	0.19	0.12	0.14	0.06		
175	0.70	0.64	0.66	0.58	0.59	0.51	0.51	0.43	0.40	0.40	0.33	0.35	0.29	0.32	0.26	0.30	0.24		
180	0.47	0.47	0.46	0.45	0.44	0.43	0.43	0.43	0.40	0.40	0.40	0.42	0.42	0.43	0.43	0.45	0.45		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Vando
 Test Date: 2022-03-16

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks: