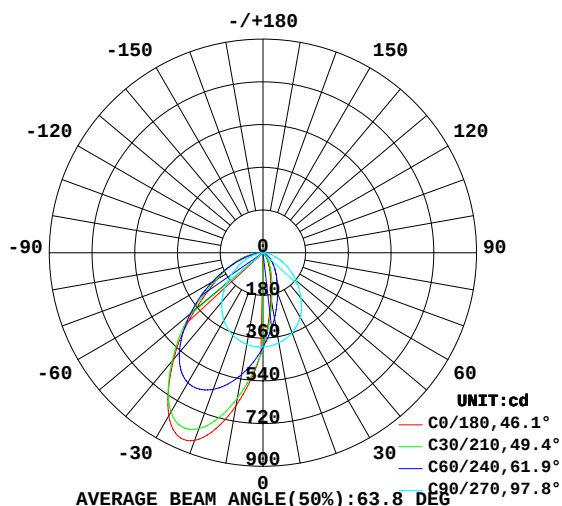


LUMINAIRE PHOTOMETRIC TEST REPORT

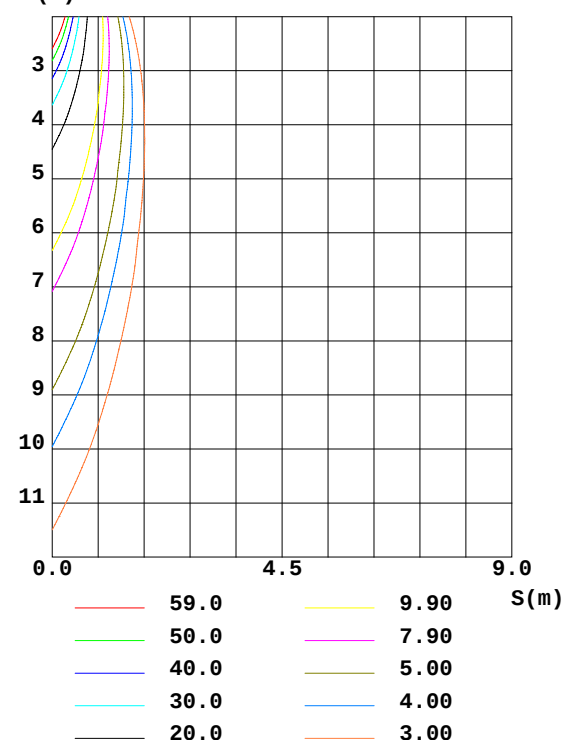
NAME: CL-Washer27 3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 61.83 lm/W			
MODEL		I _{max} (cd)	855.3	S/MH(C0/180)	0.32
NOMINAL POWER(W)	16	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1053.5	η UP, DN(C0-180)	0.2, 47.5
NOMINAL FLUX(lm)	1053.54	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.2, 52.2
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	24	η down(%)	99.7	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: tang
Test Date: 2022-04-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_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	193.2	240.2	385.9	562.7	653.2	576.7	392.3	238.4	0- 10	38.20	38.20	3.63, 3.63
20	87.71	133.7	358.8	704.2	841.3	713.3	370.5	136.2	10- 20	117.2	155.4	14.7, 14.7
30	41.58	75.07	313.8	738.7	793.4	729.4	329.7	77.83	20- 30	188.4	343.8	32.6, 32.6
40	17.85	40.52	248.6	621.0	585.7	595.1	269.7	43.03	30- 40	217.7	561.5	53.3, 53.3
50	4.548	17.92	182.7	432.7	370.8	410.4	200.1	19.75	40- 50	196.8	758.4	72, 72
60	0	3.621	118.8	260.1	222.5	242.7	128.5	4.570	50- 60	145.6	903.9	85.8, 85.8
70	0	0	63.33	131.3	133.1	124.3	69.00	0	60- 70	91.83	995.8	94.5, 94.5
80	0	0	19.87	51.51	55.43	48.12	23.10	0	70- 80	46.37	1042	98.9, 98.9
90	0	0.0000	0	0	0	0	0	0.0095	80- 90	7.898	1050	99.7, 99.7
100	0.1555	0.1721	0.0426	0	0	0	0	0.1982	90-100	0.0332	1050	99.7, 99.7
110	0.4338	0.4766	0.2078	0	0	0	0.1509	0.5144	100-110	0.1538	1050	99.7, 99.7
120	0.8630	0.9036	0.4391	0	0	0	0.3726	0.9486	110-120	0.3243	1051	99.7, 99.7
130	1.429	1.387	0.7128	0.0260	0	0.0024	0.6274	1.416	120-130	0.5091	1051	99.8, 99.8
140	1.981	1.817	0.9723	0.1227	0.0379	0.1251	0.8916	1.824	130-140	0.6441	1052	99.8, 99.8
150	2.331	2.084	1.213	0.3257	0.1843	0.3280	1.132	2.076	140-150	0.6824	1052	99.9, 99.9
160	2.376	2.128	1.406	0.6323	0.4770	0.6395	1.331	2.101	150-160	0.5966	1053	99.9, 99.9
170	2.171	1.970	1.524	1.050	0.9727	1.069	1.468	1.940	160-170	0.4092	1053	100, 100
180	1.628	1.590	1.567	1.534	1.581	1.557	1.538	1.562	170-180	0.1465	1054	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

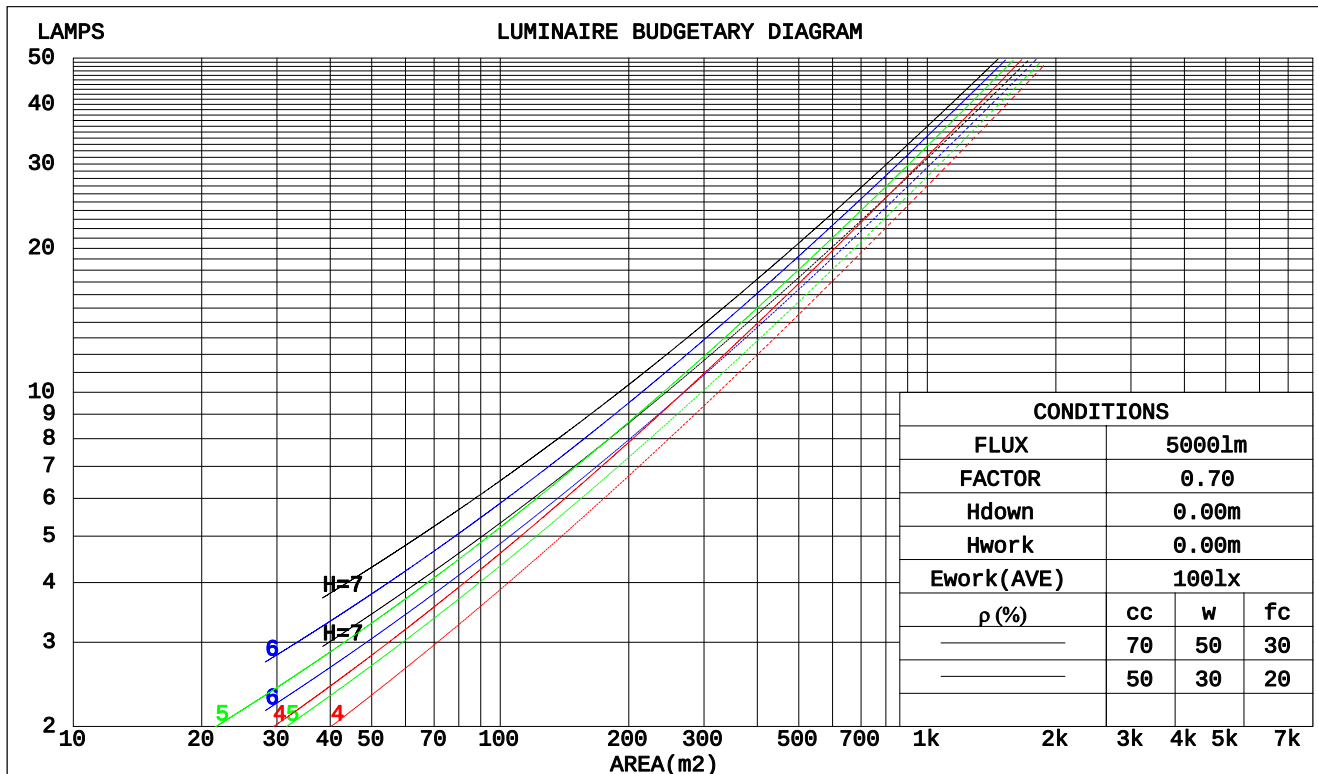
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: washer27-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

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	.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.94	.87	.82	.92	.86	.81	.88	.83	.79	.85	.81	.77	.82	.79	.76	.74
3.0	.83	.76	.70	.82	.75	.69	.79	.73	.68	.76	.71	.67	.73	.69	.65	.63
4.0	.74	.66	.60	.73	.65	.60	.70	.64	.59	.68	.62	.58	.66	.61	.57	.55
5.0	.67	.58	.52	.66	.58	.52	.64	.57	.51	.62	.56	.51	.60	.55	.50	.48
6.0	.61	.52	.46	.60	.52	.46	.58	.51	.45	.56	.50	.45	.55	.49	.45	.43
7.0	.55	.47	.41	.54	.46	.41	.53	.46	.40	.51	.45	.40	.50	.44	.40	.38
8.0	.50	.42	.37	.50	.42	.37	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
9.0	.46	.38	.33	.46	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.33	.31
10.0	.43	.35	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.39	.34	.30	.28



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: washer27-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

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	.272	.154	.049	.265	.151	.048	.251	.144	.046	.239	.138	.044	.228	.132	.043		
2.0	.261	.143	.044	.255	.140	.043	.243	.135	.042	.233	.131	.041	.223	.126	.040		
3.0	.245	.131	.039	.240	.129	.039	.230	.125	.038	.220	.121	.037	.212	.117	.036		
4.0	.229	.119	.035	.225	.118	.035	.216	.114	.034	.207	.111	.034	.199	.108	.033		
5.0	.214	.109	.032	.210	.108	.031	.202	.105	.031	.194	.103	.031	.187	.100	.030		
6.0	.200	.100	.029	.197	.099	.029	.189	.097	.028	.183	.095	.028	.176	.093	.028		
7.0	.188	.093	.026	.184	.092	.026	.178	.090	.026	.172	.088	.026	.166	.086	.025		
8.0	.176	.086	.024	.173	.085	.024	.168	.084	.024	.162	.082	.024	.157	.081	.024		
9.0	.166	.080	.022	.164	.080	.022	.158	.078	.022	.154	.077	.022	.149	.076	.022		
10.0	.157	.075	.021	.155	.075	.021	.150	.073	.021	.146	.072	.021	.141	.071	.020		

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	.193	.193	.193	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.180	.159	.140	.154	.136	.120	.105	.094	.083	.061	.054	.048	.019	.017	.016	
2.0	.171	.135	.104	.146	.116	.090	.100	.080	.063	.058	.047	.037	.019	.015	.012	
3.0	.162	.117	.080	.139	.101	.070	.096	.070	.049	.055	.041	.029	.018	.013	.009	
4.0	.155	.103	.064	.133	.089	.055	.091	.062	.039	.053	.036	.023	.017	.012	.008	
5.0	.147	.093	.052	.126	.080	.045	.087	.056	.032	.050	.033	.019	.016	.011	.006	
6.0	.140	.084	.044	.121	.073	.038	.083	.051	.027	.048	.030	.016	.016	.010	.005	
7.0	.134	.077	.037	.115	.067	.033	.080	.047	.023	.046	.028	.014	.015	.009	.005	
8.0	.128	.071	.032	.110	.062	.028	.076	.043	.020	.044	.026	.012	.014	.008	.004	
9.0	.122	.066	.029	.105	.058	.025	.073	.040	.018	.042	.024	.011	.014	.008	.004	
10.0	.117	.062	.026	.101	.054	.022	.070	.038	.016	.041	.022	.010	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

Uncorrected UGR Table

NAME: washer27-3000k-Ra90					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					-5.0	-3.5	-4.7	-3.3	-3.1	10.6	12.0	10.8	12.2	12.4
3H					-5.2	-3.9	-4.9	-3.6	-3.4	11.9	13.2	12.2	13.4	13.6
4H					-5.3	-4.0	-5.0	-3.8	-3.5	12.3	13.6	12.6	13.8	14.1
6H					-5.4	-4.2	-5.1	-4.0	-3.7	12.6	13.8	12.9	14.0	14.3
8H					-5.4	-4.3	-5.1	-4.0	-3.7	12.7	13.8	13.0	14.0	14.3
12H					-5.5	-4.4	-5.1	-4.1	-3.8	12.7	13.7	13.0	14.0	14.3
4H 2H					-3.9	-2.6	-3.5	-2.4	-2.1	10.3	11.5	10.6	11.7	12.0
3H					-4.1	-3.0	-3.7	-2.7	-2.4	11.6	12.6	11.9	12.9	13.2
4H					-4.2	-3.2	-3.8	-2.9	-2.5	12.0	13.0	12.4	13.3	13.7
6H					-4.3	-3.4	-3.9	-3.1	-2.7	12.3	13.2	12.7	13.5	13.9
8H					-4.3	-3.5	-3.9	-3.1	-2.8	12.4	13.2	12.8	13.5	13.9
12H					-4.4	-3.6	-3.9	-3.2	-2.8	12.4	13.1	12.8	13.5	13.9
8H 4H					-4.2	-3.4	-3.8	-3.0	-2.6	11.9	12.7	12.3	13.1	13.4
6H					-4.3	-3.6	-3.8	-3.2	-2.8	12.2	12.8	12.6	13.2	13.7
8H					-4.3	-3.7	-3.8	-3.3	-2.8	12.2	12.8	12.7	13.2	13.7
12H					-4.3	-3.9	-3.9	-3.4	-2.9	12.3	12.8	12.7	13.2	13.7
12H 4H					-4.2	-3.5	-3.8	-3.1	-2.7	11.8	12.6	12.3	13.0	13.4
6H					-4.3	-3.7	-3.8	-3.3	-2.8	12.1	12.7	12.6	13.1	13.6
8H					-4.3	-3.9	-3.9	-3.4	-2.9	12.2	12.7	12.7	13.1	13.6
Variations with the observer position at spacings:														
S = 1.0H					+ 2.5 / -23.3					+ 2.2 / - 2.2				
1.5H					+ 2.9 / - 7.4					+ 3.5 / - 5.6				
2.0H					+ 4.6 / - 1.5					+ 4.7 / -10.1				

CIE Pub.117 Corrected 1054 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.2)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: washer27-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

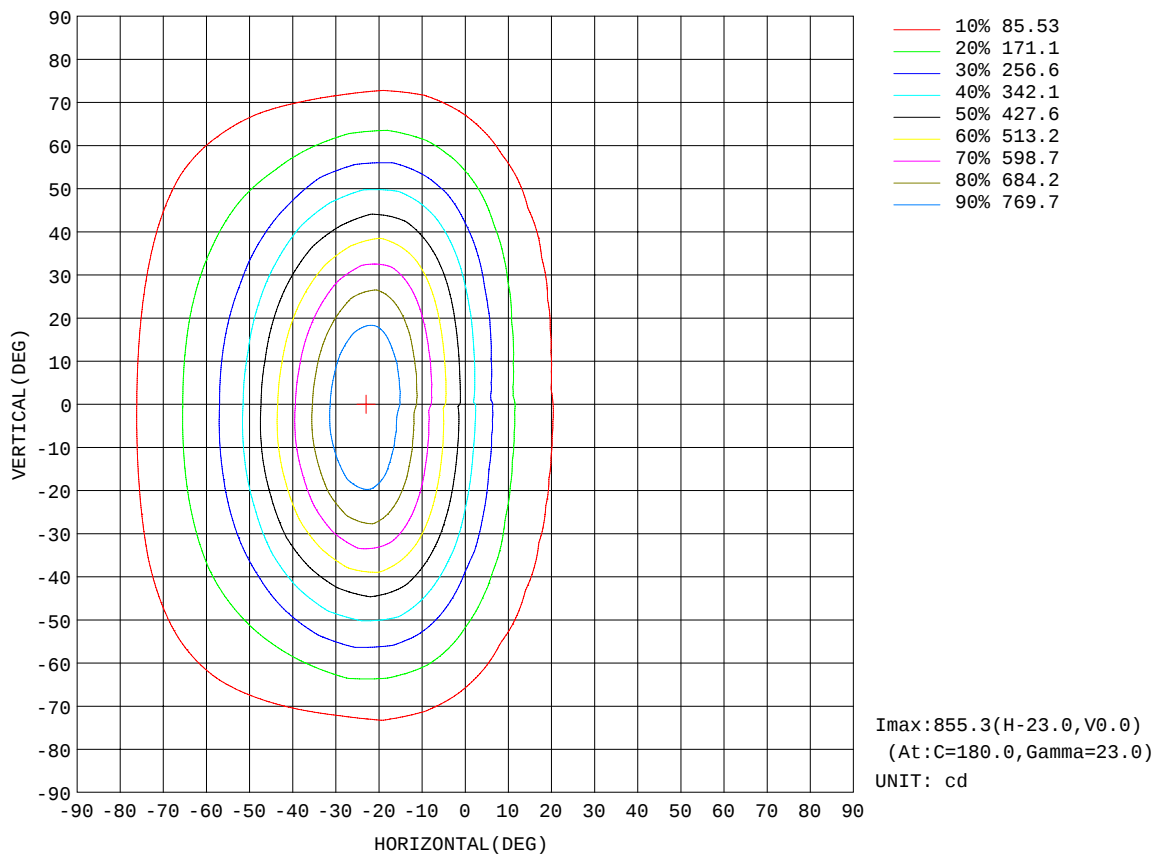
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	62	52	45	62	51	45	61	51	45	39
0.80	73	62	55	72	62	55	70	61	55	48
1.00	81	71	64	80	70	64	77	71	63	57
1.25	87	78	72	86	77	71	84	76	71	64
1.50	92	83	77	91	83	77	88	81	76	69
2.00	98	91	85	97	90	84	93	87	83	76
2.50	102	95	90	100	93	89	96	91	87	79
3.00	105	99	94	103	97	93	99	94	91	82
4.00	108	103	99	106	101	98	102	98	95	86
5.00	110	106	102	108	104	101	103	100	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNM = 1.25										

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: washer27-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

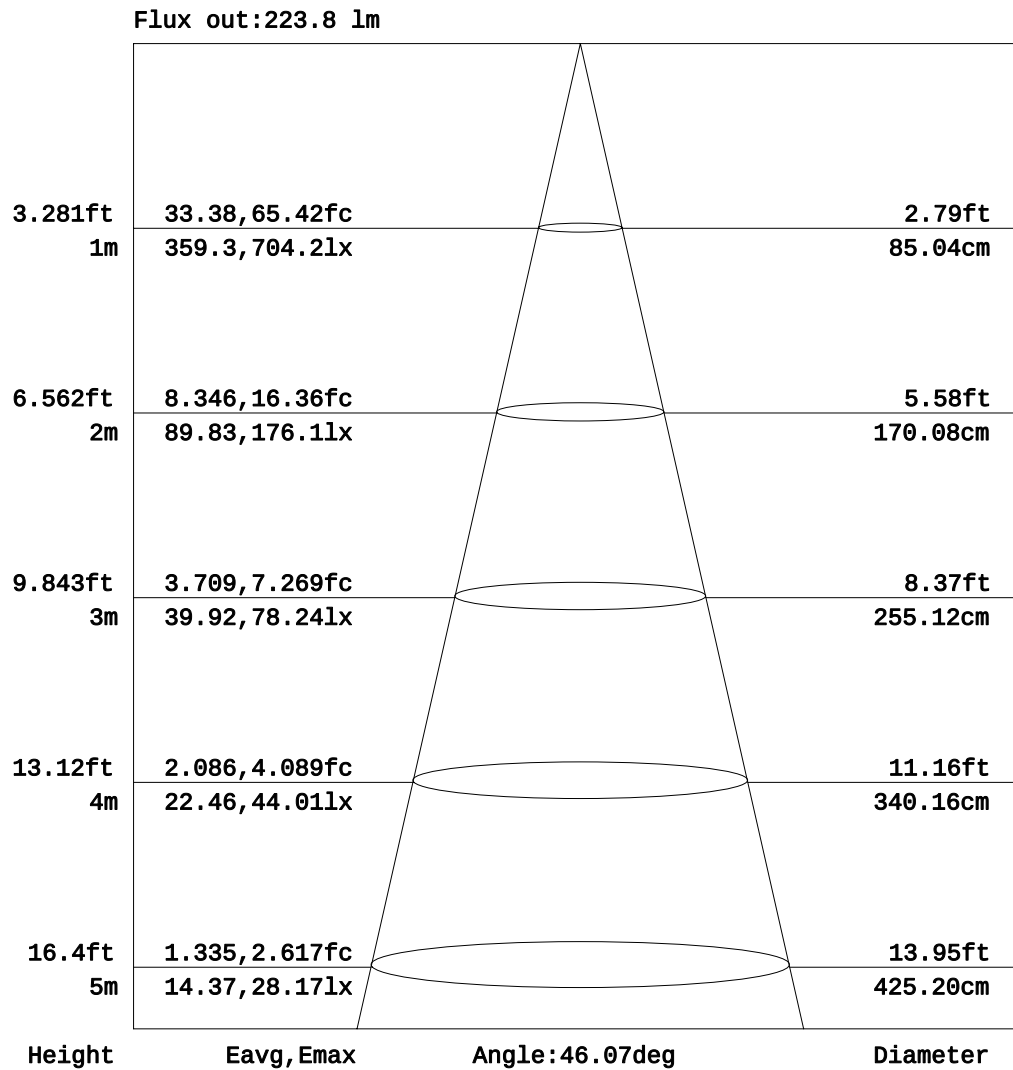


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

AAI Figure

NAME: washer27-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



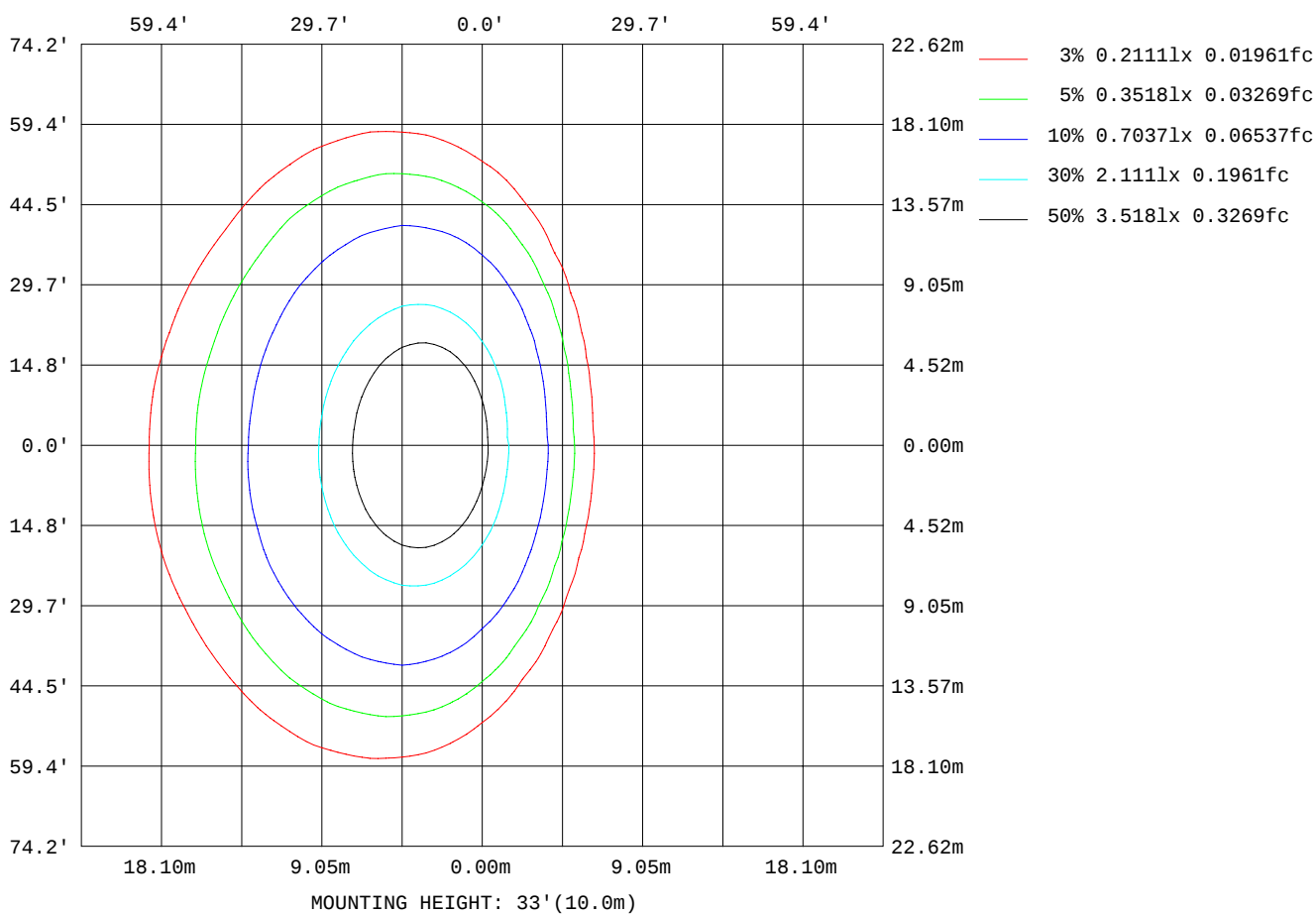
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: washer27-3000k-Ra90	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: tang
Test Date: 2022-04-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: washer27-3000k-Ra90	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	1053.54	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	C plane(deg)																		
deg	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	7	11	24	58	116	229	440	847	1543	2617	3898	5066	5755	6053	5965	5719	5358	5170	4957
60	0	0	0	0	28	117	293	665	1328	2377	3564	4533	5149	5289	5116	4862	4743	4590	4450
65	0	0	0	0	0	14	147	466	1098	2123	3175	4027	4539	4520	4402	4349	4363	4272	4147
70	0	0	0	0	0	0	9	259	841	1852	2814	3558	3826	3818	3861	3982	4015	4017	3891
75	0	0	0	0	0	0	0	41	532	1548	2429	3075	3143	3325	3480	3656	3743	3784	3634
80	0	0	0	0	0	0	0	0	165	1144	2049	2458	2622	2873	3060	3273	3391	3464	3192
85	0	0	0	0	0	0	0	0	0	574	1420	1793	1797	1650	834	274	78	43	0

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

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum calculated	specified maximum	maximum measured	specified maximum
Category 1	55 to 90	6053	200	---	500
Category 2	65 to 90	4539	200	---	500
Category 3	75 to 90	3784	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:tang
Test Date:2022-04-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: washer27-3000k-Ra90	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	1053.54	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	7	11	24	58	116	229	440	847	1543	2617	3898	5066	5755	6053	5965	5719	5358	5170	4957
60	0	0	0	0	28	117	293	665	1328	2377	3564	4533	5149	5289	5116	4862	4743	4590	4450
65	0	0	0	0	0	14	147	466	1098	2123	3175	4027	4539	4520	4402	4349	4363	4272	4147
70	0	0	0	0	0	0	9	259	841	1852	2814	3558	3826	3818	3861	3982	4015	4017	3891
75	0	0	0	0	0	0	0	41	532	1548	2429	3075	3143	3325	3480	3656	3743	3784	3634
80	0	0	0	0	0	0	0	0	165	1144	2049	2458	2622	2873	3060	3273	3391	3464	3192
85	0	0	0	0	0	0	0	0	0	574	1420	1793	1797	1650	834	274	78	43	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	6053	1000	1500	200	500
65 to 90	4539	1000	1500	200	500

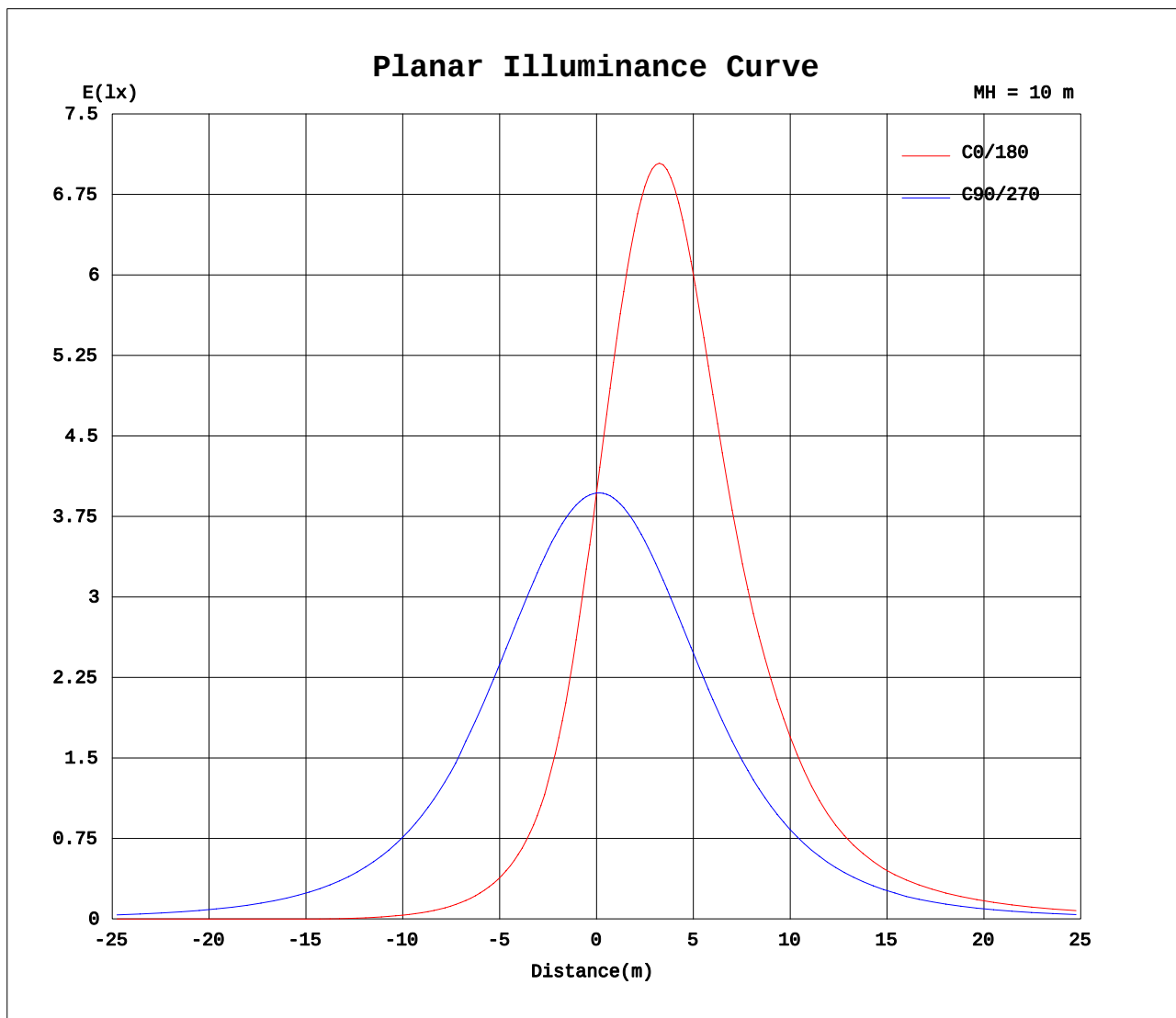
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

No match

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_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: tang
Test Date: 2022-04-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: washer27-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(°) γ (°)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	396	399	398	400	399	400	399	399	398	397	396	394	393	391	390	387	387	384	396
5	285	287	292	301	310	324	338	355	373	393	413	433	452	469	485	495	505	508	524
10	193	194	202	212	230	250	280	313	347	386	427	469	510	546	580	604	625	635	653
15	129	131	137	149	168	191	226	266	319	374	436	499	561	617	667	704	734	749	767
20	87.7	89.7	95.0	106	122	146	182	226	290	359	438	520	601	673	735	780	812	828	841
25	60.4	62.0	66.4	75.4	89.2	111	144	191	259	339	432	531	625	708	772	813	837	847	850
30	41.6	42.8	46.3	53.8	65.5	84.7	114	159	228	314	416	525	628	712	766	793	800	800	793
35	28.0	29.0	31.8	37.9	47.6	64.0	89.6	131	197	283	389	502	604	679	715	725	715	707	693
40	17.8	18.6	20.8	25.7	33.7	47.4	69.5	107	168	249	354	463	553	611	631	627	611	599	586
45	10.3	10.8	12.5	16.2	22.4	33.7	52.5	85.1	138	216	314	413	485	522	531	526	509	495	480
50	4.55	4.90	6.16	8.86	13.6	22.3	37.9	65.9	112	183	270	355	408	431	434	427	403	387	371
55	0.42	0.64	1.37	3.30	6.63	13.1	25.2	48.6	88.5	150	224	291	330	347	342	328	307	297	284
60	0.00	0.00	0.00	0.00	1.40	5.85	14.7	33.2	66.4	119	178	227	257	264	256	243	237	230	223
65	0.00	0.00	0.00	0.00	0.00	0.58	6.23	19.7	46.4	89.7	134	170	192	191	186	184	184	181	175
70	0.00	0.00	0.00	0.00	0.00	0.00	0.31	8.87	28.8	63.3	96.2	122	131	131	132	136	137	137	133
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	13.8	40.1	62.9	79.6	81.3	86.1	90.1	94.6	96.9	97.9	94.1
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	19.9	35.6	42.7	45.5	49.9	53.1	56.8	58.9	60.2	55.4
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.01	12.4	15.6	15.7	14.4	7.27	2.39	0.68	0.37	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	0.05	0.09	0.04	0.08	0.03	0.07	0.03	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.16	0.19	0.15	0.17	0.15	0.19	0.14	0.16	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.27	0.32	0.27	0.33	0.28	0.33	0.27	0.27	0.16	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.43	0.47	0.43	0.48	0.46	0.50	0.43	0.42	0.28	0.21	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.63	0.67	0.63	0.68	0.66	0.70	0.61	0.58	0.42	0.32	0.13	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.86	0.90	0.87	0.93	0.89	0.92	0.82	0.76	0.57	0.44	0.23	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	1.14	1.17	1.13	1.18	1.14	1.15	1.03	0.94	0.73	0.57	0.33	0.20	0.03	0.00	0.00	0.00	0.00	0.00	0.00
130	1.43	1.46	1.41	1.45	1.39	1.39	1.23	1.13	0.88	0.71	0.44	0.29	0.10	0.05	0.00	0.00	0.00	0.00	0.00
135	1.72	1.74	1.69	1.71	1.63	1.60	1.42	1.29	1.03	0.84	0.56	0.38	0.18	0.11	0.00	0.00	0.00	0.00	0.00
140	1.98	2.01	1.94	1.95	1.85	1.78	1.59	1.45	1.17	0.97	0.67	0.51	0.27	0.19	0.06	0.06	0.00	0.00	0.04
145	2.19	2.23	2.14	2.14	2.01	1.94	1.73	1.58	1.31	1.10	0.80	0.61	0.38	0.29	0.15	0.13	0.03	0.07	0.10
150	2.33	2.35	2.28	2.25	2.12	2.04	1.83	1.68	1.41	1.21	0.92	0.74	0.50	0.40	0.25	0.22	0.13	0.16	0.18
155	2.39	2.38	2.35	2.26	2.19	2.06	1.90	1.74	1.49	1.32	1.04	0.87	0.64	0.54	0.38	0.35	0.25	0.27	0.31
160	2.38	2.37	2.33	2.28	2.19	2.07	1.91	1.74	1.55	1.41	1.16	1.01	0.80	0.71	0.55	0.52	0.41	0.43	0.48
165	2.33	2.28	2.29	2.19	2.17	2.01	1.91	1.74	1.59	1.47	1.26	1.16	0.97	0.89	0.75	0.73	0.64	0.65	0.69
170	2.17	2.11	2.14	2.05	2.03	1.91	1.85	1.71	1.60	1.52	1.37	1.31	1.16	1.11	0.99	0.98	0.89	0.93	0.97
175	1.92	1.88	1.91	1.83	1.84	1.75	1.74	1.64	1.60	1.56	1.45	1.45	1.34	1.34	1.25	1.27	1.20	1.24	1.28
180	1.63	1.60	1.61	1.60	1.60	1.59	1.59	1.57	1.58	1.57	1.53	1.53	1.52	1.54	1.52	1.53	1.52	1.54	1.58

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: washer27-3000k-Ra90	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	399	398	400	399	400	399	399	398	397	396	394	393	391	390	387	387	384		
5	525	519	511	497	482	462	441	419	397	375	354	336	318	305	292	283	277		
10	653	639	621	593	561	521	480	436	392	351	314	277	251	226	209	195	188		
15	764	746	720	679	631	573	511	447	384	326	275	228	195	166	148	135	126		
20	836	818	788	742	684	612	533	451	370	300	237	185	149	123	105	93.7	86.6		
25	845	833	809	770	712	634	543	447	353	269	202	150	114	91.1	75.3	65.8	60.0		
30	789	786	775	753	706	633	537	432	330	240	171	121	88.1	67.6	54.1	46.3	41.6		
35	690	694	696	692	663	603	512	407	302	211	142	96.4	67.3	49.6	38.4	31.9	28.1		
40	583	589	595	602	588	548	471	372	270	182	117	76.0	50.5	35.5	26.2	20.9	17.9		
45	478	487	496	504	498	477	418	331	236	154	94.7	58.4	36.5	24.0	16.6	12.6	10.4		
50	370	382	396	411	410	399	357	282	200	127	74.5	43.1	24.7	14.8	9.22	6.23	4.60		
55	284	289	301	320	329	322	291	232	164	101	56.1	29.6	14.9	7.54	3.55	1.49	0.43		
60	224	223	228	235	250	247	227	184	129	77.4	39.4	17.9	7.07	2.08	0.00	0.00	0.00		
65	176	174	174	173	179	182	170	139	97.3	55.4	24.6	8.53	1.32	0.00	0.00	0.00	0.00		
70	131	131	128	126	123	124	119	99.2	69.0	35.9	12.1	1.58	0.00	0.00	0.00	0.00	0.00		
75	92.7	91.9	88.2	86.0	81.5	77.8	75.0	65.0	44.3	19.2	2.87	0.00	0.00	0.00	0.00	0.00	0.00		
80	54.2	54.2	51.2	50.0	46.2	43.5	39.5	36.1	23.1	6.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
85	0.01	0.06	0.34	1.67	5.84	12.0	13.0	11.9	6.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.10	0.06	0.10	0.06	0.10	0.07		
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.12	0.20	0.17	0.23	0.17	0.22	0.17		
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.20	0.24	0.33	0.36	0.31	0.35	0.35	0.30		
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.15	0.32	0.38	0.49	0.49	0.54	0.49	0.52	0.46		
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.26	0.45	0.54	0.68	0.69	0.75	0.69	0.72	0.67		
120	0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.25	0.37	0.59	0.71	0.87	0.91	0.99	0.94	0.97	0.91		
125	0.00	0.00	0.00	0.00	0.00	0.07	0.14	0.34	0.50	0.76	0.89	1.08	1.14	1.23	1.19	1.22	1.17		
130	0.00	0.00	0.00	0.00	0.00	0.14	0.22	0.45	0.63	0.91	1.07	1.29	1.36	1.47	1.45	1.49	1.44		
135	0.00	0.00	0.00	0.05	0.07	0.21	0.32	0.56	0.76	1.05	1.23	1.48	1.57	1.70	1.70	1.76	1.72		
140	0.00	0.03	0.02	0.11	0.14	0.31	0.42	0.68	0.89	1.20	1.39	1.63	1.75	1.90	1.92	2.00	1.97		
145	0.05	0.10	0.10	0.19	0.24	0.41	0.54	0.81	1.02	1.32	1.51	1.77	1.89	2.05	2.09	2.19	2.17		
150	0.13	0.20	0.19	0.30	0.36	0.54	0.67	0.93	1.13	1.43	1.61	1.87	1.99	2.16	2.21	2.29	2.30		
155	0.26	0.33	0.33	0.43	0.50	0.68	0.81	1.06	1.24	1.52	1.69	1.90	2.04	2.16	2.26	2.31	2.35		
160	0.43	0.50	0.50	0.61	0.67	0.85	0.95	1.18	1.33	1.58	1.72	1.90	2.04	2.17	2.24	2.31	2.36		
165	0.65	0.70	0.71	0.82	0.86	1.02	1.10	1.29	1.41	1.58	1.72	1.87	2.03	2.10	2.22	2.22	2.29		
170	0.92	0.98	0.97	1.06	1.08	1.20	1.25	1.40	1.47	1.58	1.71	1.79	1.93	1.95	2.07	2.05	2.12		
175	1.23	1.28	1.25	1.33	1.31	1.40	1.40	1.50	1.51	1.57	1.67	1.68	1.77	1.76	1.84	1.82	1.88		
180	1.57	1.58	1.56	1.56	1.55	1.55	1.54	1.54	1.54	1.54	1.57	1.56	1.57	1.56	1.57	1.56	1.57		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks: