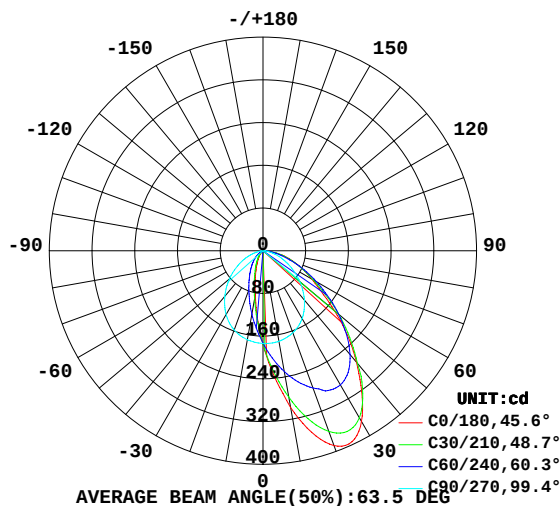


LUMINAIRE PHOTOMETRIC TEST REPORT

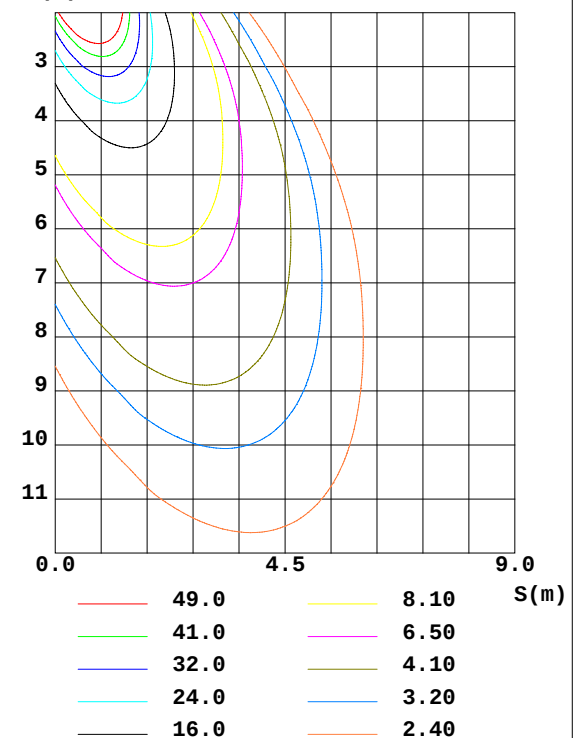
NAME:CL-Washer13 3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 57.26 lm/W			
MODEL		I _{max} (cd)	396.1	S/MH(C0/180)	1.72
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	480.99	η UP, DN(C0-180)	0.1, 52.7
NOMINAL FLUX(lm)	480.988	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1, 47.0
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	24	η down(%)	99.7	CIBSE SHR MAX	0.95

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	298.0	256.2	172.2	107.9	84.01	103.4	169.2	258.2	0- 10	17.03	17.03	3.54, 3.54
20	388.1	324.3	163.5	61.37	38.50	57.60	157.9	328.0	10- 20	52.96	69.99	14.6, 14.6
30	369.0	337.0	146.6	35.30	18.43	32.50	138.3	344.3	20- 30	86.07	156.1	32.4, 32.4
40	272.4	275.9	120.7	19.69	7.938	17.57	111.2	284.5	30- 40	99.74	255.8	53.2, 53.2
50	175.2	190.7	90.28	9.148	1.986	7.726	82.14	195.8	40- 50	89.93	345.7	71.9, 71.9
60	105.2	114.5	59.38	2.267	0	1.463	53.34	117.9	50- 60	66.83	412.6	85.8, 85.8
70	62.32	59.10	32.33	0	0	0	28.13	59.59	60- 70	42.28	454.8	94.6, 94.6
80	26.41	23.33	11.18	0	0	0	8.258	22.75	70- 80	21.33	476.2	99, 99
90	0	0	0	0	0	0	0	0	80- 90	3.529	479.7	99.7, 99.7
100	0	0	0	0.0119	0.0190	0.0142	0	0	90-100	0.0006	479.7	99.7, 99.7
110	0	0	0.0189	0.1463	0.1605	0.1486	0	0	100-110	0.0296	479.7	99.7, 99.7
120	0	0	0.1086	0.3562	0.3589	0.3422	0.0849	0	110-120	0.1037	479.8	99.8, 99.8
130	0	0	0.2267	0.5805	0.6091	0.5640	0.1982	0	120-130	0.1873	480.0	99.8, 99.8
140	0	0.0071	0.3399	0.7715	0.8591	0.7621	0.3160	0.0000	130-140	0.2507	480.3	99.9, 99.9
150	0	0.0684	0.4391	0.8597	0.9911	0.8534	0.4106	0.0003	140-150	0.2663	480.5	99.9, 99.9
160	0.0000	0.2006	0.5333	0.8645	0.9957	0.8558	0.4955	0.2242	150-160	0.2292	480.8	100, 100
170	0.3064	0.4058	0.5978	0.8093	0.8822	0.8022	0.5710	0.4130	160-170	0.1603	480.9	100, 100
180	0.6182	0.6135	0.6088	0.6560	0.6560	0.6489	0.6088	0.6182	170-180	0.0587	481.0	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

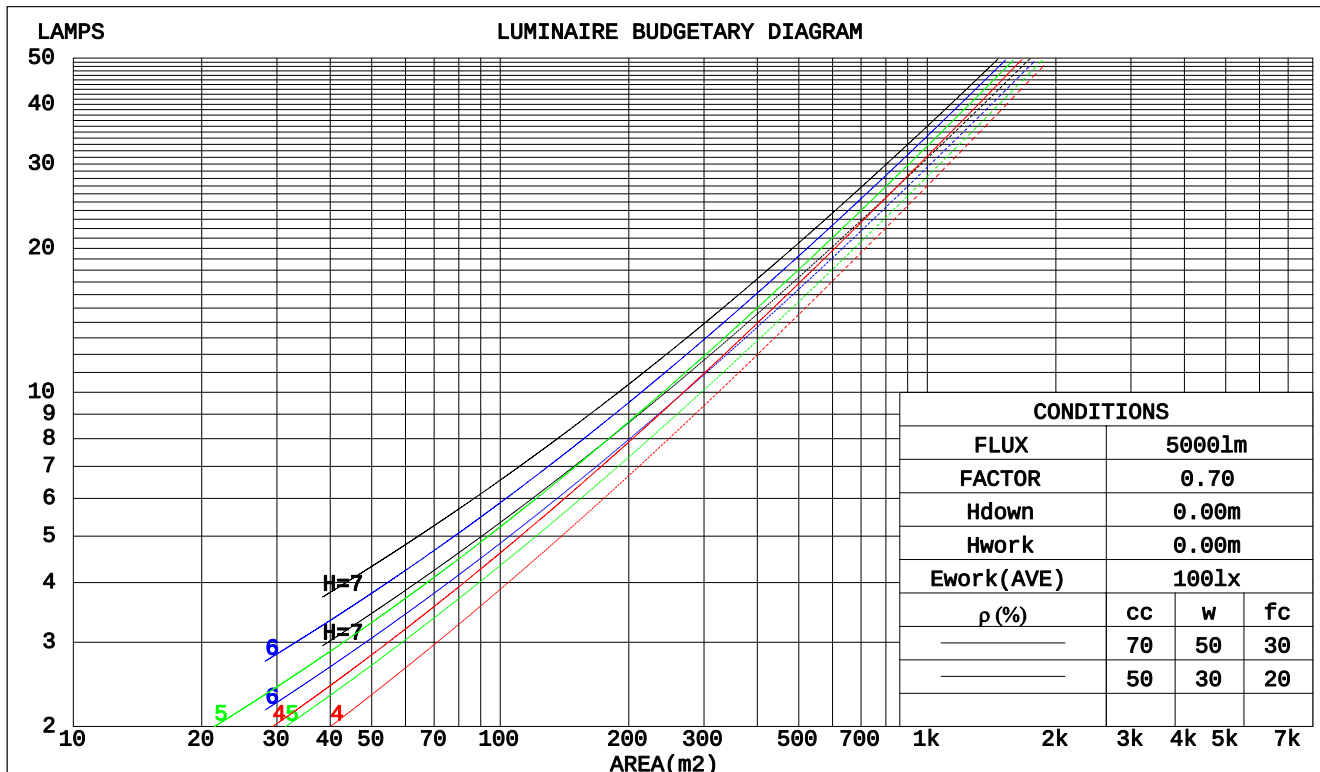
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

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: Washer13-3000k-Ra90	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						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	.81	.75	.69	.79	.73	.68	.76	.71	.67	.73	.69	.65	.63
4.0	.74	.66	.60	.73	.65	.59	.70	.64	.59	.68	.62	.58	.66	.61	.57	.55
5.0	.67	.58	.52	.66	.58	.52	.64	.57	.51	.62	.55	.51	.60	.54	.50	.48
6.0	.60	.52	.46	.59	.51	.46	.58	.51	.45	.56	.50	.45	.54	.49	.44	.42
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	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
9.0	.46	.38	.33	.46	.38	.33	.45	.38	.33	.43	.37	.33	.42	.37	.32	.31
10.0	.43	.35	.30	.42	.35	.30	.41	.34	.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: Washer13-3000k-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	.155	.049	.265	.151	.048	.252	.144	.046	.240	.138	.044	.228	.132	.043		
2.0	.262	.143	.044	.256	.141	.043	.244	.136	.042	.233	.131	.041	.223	.126	.040		
3.0	.246	.131	.039	.241	.129	.039	.230	.125	.038	.221	.121	.037	.212	.117	.036		
4.0	.230	.119	.035	.225	.118	.035	.216	.115	.034	.208	.112	.034	.200	.109	.033		
5.0	.215	.109	.032	.210	.108	.031	.202	.105	.031	.195	.103	.031	.188	.100	.030		
6.0	.201	.101	.029	.197	.099	.029	.190	.097	.028	.183	.095	.028	.177	.093	.028		
7.0	.188	.093	.026	.185	.092	.026	.178	.090	.026	.172	.088	.026	.167	.087	.025		
8.0	.177	.086	.024	.174	.086	.024	.168	.084	.024	.163	.082	.024	.158	.081	.024		
9.0	.167	.081	.022	.164	.080	.022	.159	.078	.022	.154	.077	.022	.149	.076	.022		
10.0	.157	.075	.021	.155	.075	.021	.150	.074	.021	.146	.072	.021	.142	.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	.112	.112	.112	.065	.065	.065	.021	.021	.021		
1.0	.180	.159	.139	.154	.136	.120	.105	.094	.083	.061	.054	.048	.019	.017	.016		
2.0	.170	.134	.104	.146	.115	.090	.100	.080	.063	.058	.046	.037	.018	.015	.012		
3.0	.162	.116	.080	.139	.100	.069	.095	.070	.049	.055	.041	.029	.018	.013	.009		
4.0	.154	.103	.063	.132	.089	.055	.091	.062	.039	.053	.036	.023	.017	.012	.008		
5.0	.147	.092	.052	.126	.080	.045	.087	.056	.032	.050	.033	.019	.016	.011	.006		
6.0	.140	.084	.043	.120	.072	.038	.083	.051	.027	.048	.030	.016	.016	.010	.005		
7.0	.134	.077	.037	.115	.066	.032	.079	.047	.023	.046	.027	.014	.015	.009	.004		
8.0	.127	.071	.032	.110	.061	.028	.076	.043	.020	.044	.025	.012	.014	.008	.004		
9.0	.122	.066	.028	.105	.057	.025	.073	.040	.017	.042	.024	.010	.014	.008	.003		
10.0	.116	.062	.025	.100	.054	.022	.070	.038	.016	.041	.022	.009	.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
 γ 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: Washer13-3000k-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	17.9	19.3	18.1	19.5	19.7	16.9	18.3	17.2	18.5	18.7					
3H	18.9	20.2	19.2	20.4	20.7	17.7	19.0	18.0	19.2	19.5					
4H	19.4	20.6	19.7	20.9	21.1	18.0	19.2	18.3	19.4	19.7					
6H	19.7	20.9	20.1	21.2	21.4	18.1	19.2	18.4	19.5	19.8					
8H	19.8	20.9	20.1	21.2	21.5	18.1	19.2	18.4	19.5	19.8					
12H	19.7	20.8	20.1	21.1	21.4	18.1	19.1	18.4	19.4	19.7					
4H 2H	18.3	19.5	18.6	19.8	20.0	17.5	18.8	17.9	19.0	19.3					
3H	19.5	20.6	19.9	20.9	21.2	18.6	19.7	18.9	20.0	20.3					
4H	20.1	21.1	20.5	21.4	21.7	19.0	20.0	19.4	20.3	20.6					
6H	20.6	21.4	21.0	21.8	22.2	19.2	20.1	19.6	20.4	20.8					
8H	20.7	21.5	21.1	21.8	22.2	19.3	20.1	19.7	20.4	20.8					
12H	20.6	21.4	21.1	21.7	22.2	19.3	20.0	19.7	20.4	20.8					
8H 4H	20.3	21.1	20.7	21.4	21.8	19.2	20.0	19.7	20.4	20.8					
6H	20.9	21.5	21.3	21.9	22.4	19.6	20.3	20.1	20.7	21.1					
8H	21.0	21.6	21.5	22.0	22.5	19.7	20.3	20.2	20.7	21.2					
12H	21.0	21.5	21.4	21.9	22.4	19.8	20.3	20.3	20.7	21.2					
12H 4H	20.2	21.0	20.7	21.4	21.8	19.3	20.0	19.7	20.4	20.8					
6H	20.9	21.5	21.4	21.9	22.4	19.7	20.3	20.1	20.7	21.1					
8H	21.0	21.5	21.5	22.0	22.5	19.8	20.3	20.3	20.8	21.3					
Variations with the observer position at spacings:															
S = 1.0H	+ 0.3 / - 0.4					+ 0.6 / - 0.6									
1.5H	+ 0.1 / - 0.3					+ 0.7 / - 1.4									
2.0H	+ 0.6 / - 0.6					+ 0.7 / - 1.9									

CIE Pub.117 Corrected 481.0 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.5)

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: Washer13-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

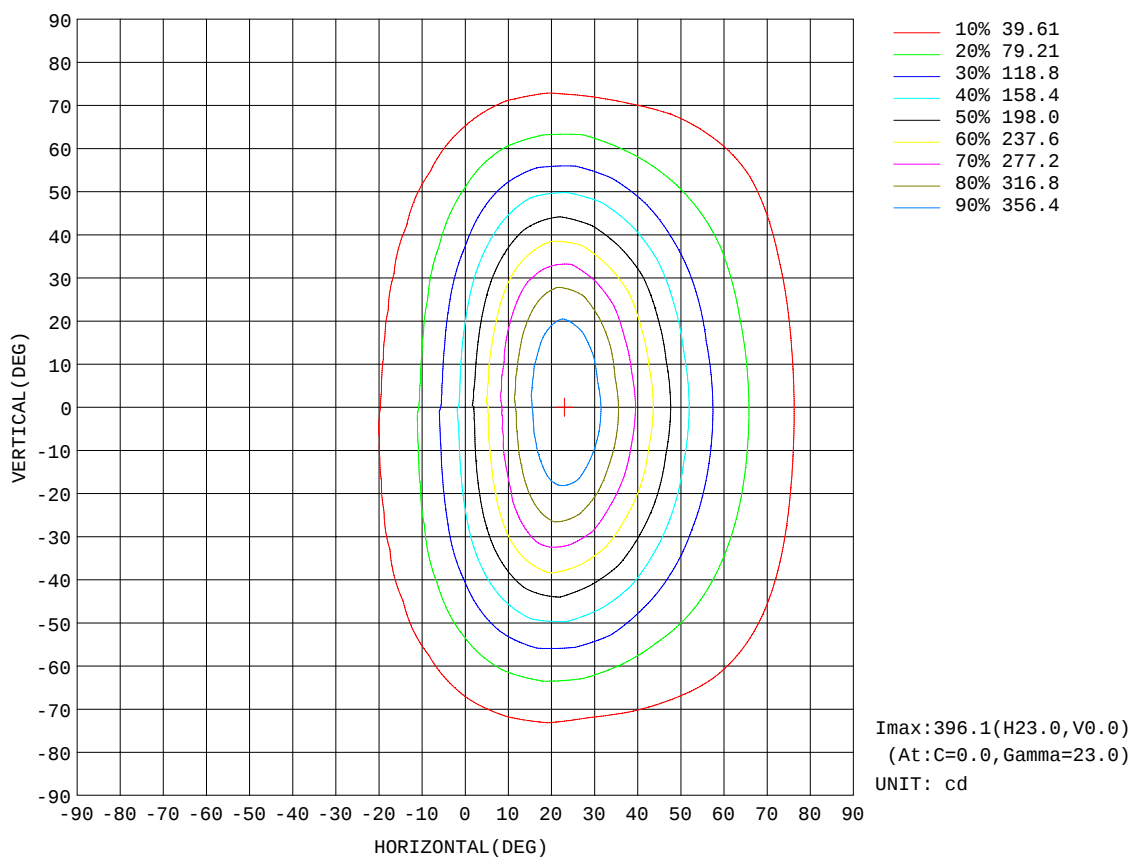
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	62	52	45	62	51	45	61	51	45	39
0.80	72	62	55	71	61	55	70	61	55	48
1.00	81	71	64	80	70	64	77	71	63	57
1.25	87	78	72	86	77	71	83	76	71	64
1.50	92	83	77	90	82	77	88	81	76	69
2.00	98	91	85	96	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										
SHRNOM = 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: Washer13-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

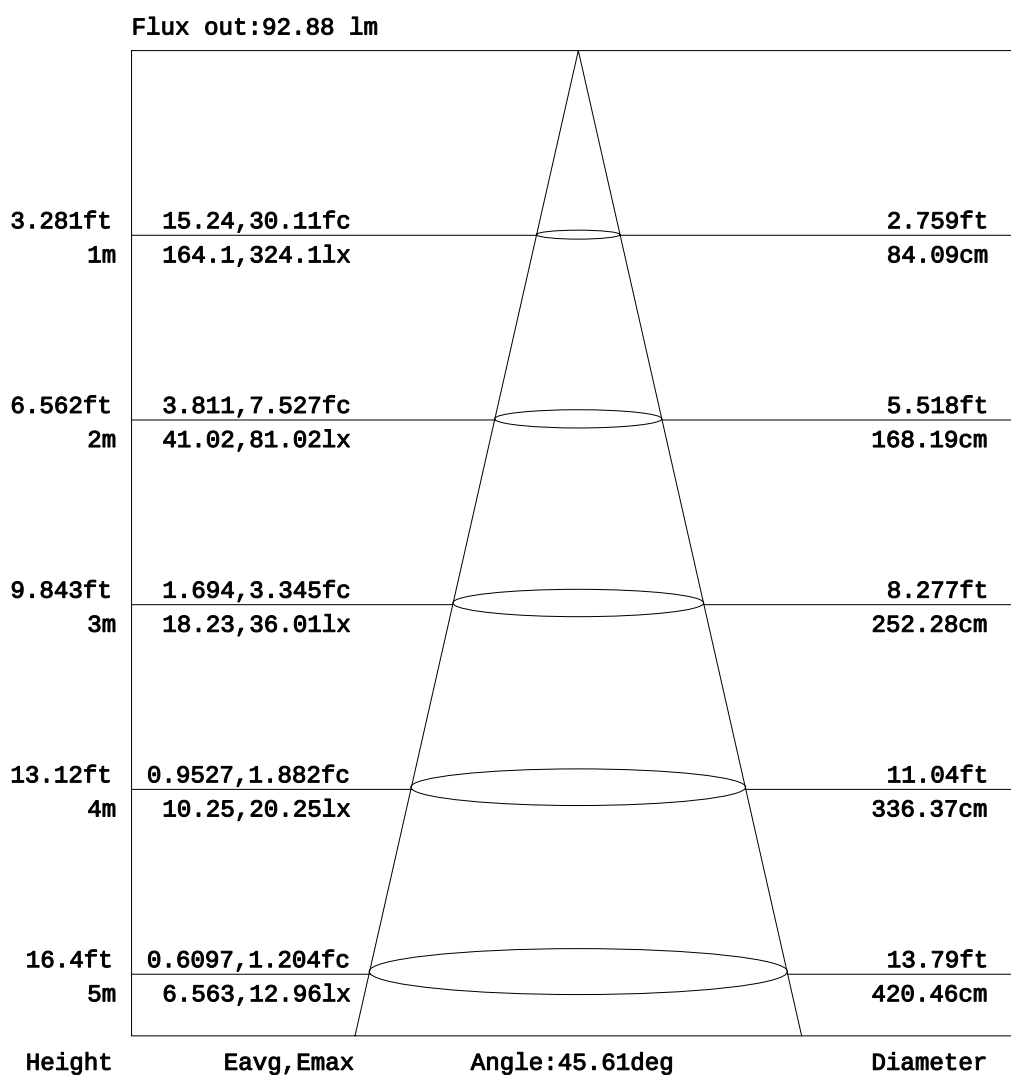


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

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: Washer13-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



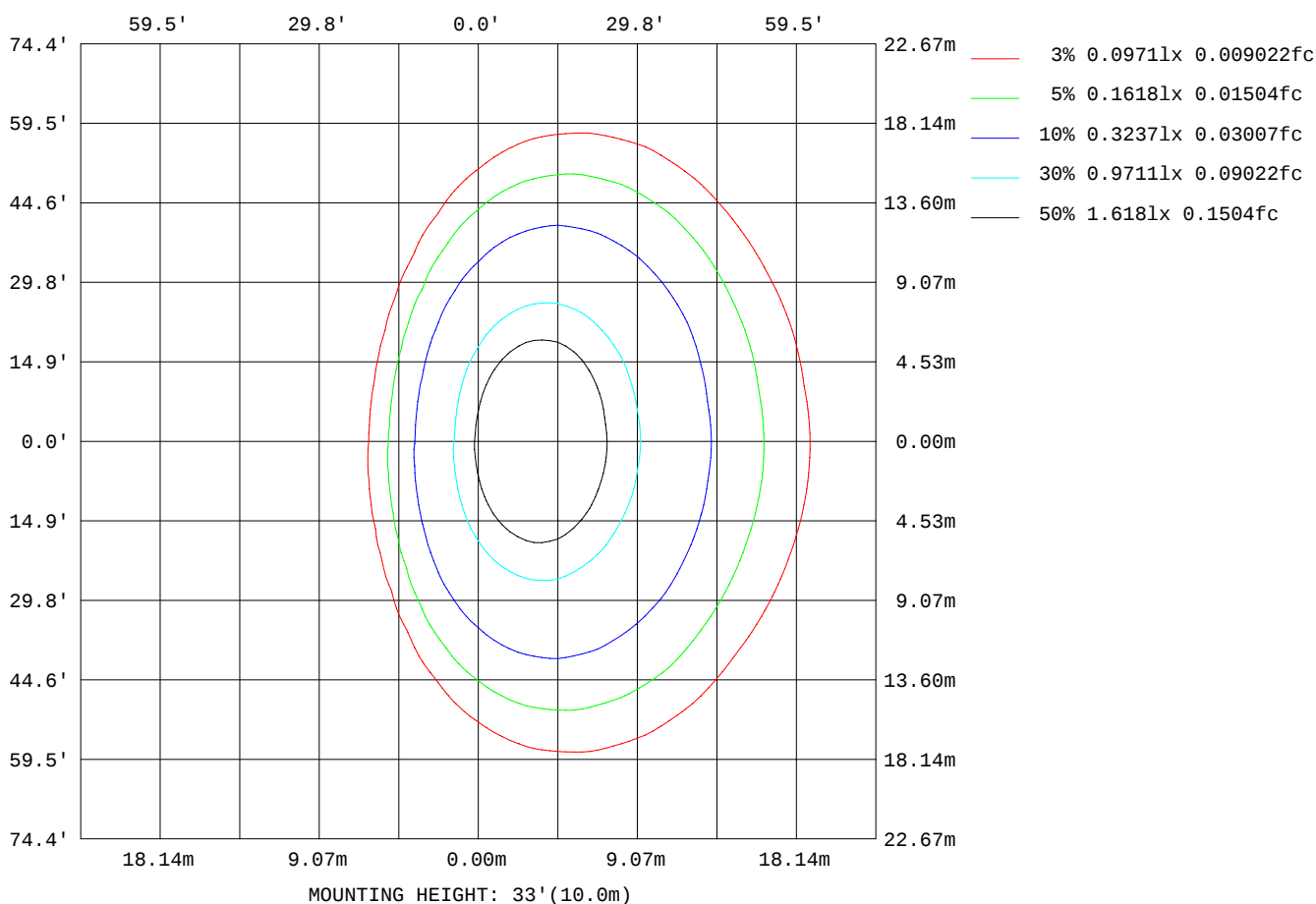
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: Washer13-3000k-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: Washer13-3000k-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	480.988	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	2328	2340	2374	2487	2627	2663	2588	2333	1860	1300	800	444	234	122	63	33	15	7	2
60	2104	2109	2110	2157	2228	2354	2302	2097	1700	1188	702	361	163	69	22	0	0	0	0
65	1953	1953	1939	1944	1937	2006	2024	1868	1529	1070	596	269	93	18	0	0	0	0	0
70	1822	1821	1798	1781	1736	1720	1708	1650	1348	945	476	166	23	0	0	0	0	0	0
75	1699	1703	1664	1635	1567	1519	1422	1406	1175	809	336	57	0	0	0	0	0	0	0
80	1521	1535	1491	1455	1375	1312	1202	1123	990	644	160	0	0	0	0	0	0	0	0
85	0	0	1	31	148	568	754	803	672	380	0	0	0	0	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 calculated	specified maximum	maximum measured	specified maximum
Category 1	55 to 90	2663	200	---	500
Category 2	65 to 90	2024	200	---	500
Category 3	75 to 90	1703	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: Washer13-3000k-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	480.988	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	2328	2340	2374	2487	2627	2663	2588	2333	1860	1300	800	444	234	122	63	33	15	7	2
60	2104	2109	2110	2157	2228	2354	2302	2097	1700	1188	702	361	163	69	22	0	0	0	0
65	1953	1953	1939	1944	1937	2006	2024	1868	1529	1070	596	269	93	18	0	0	0	0	0
70	1822	1821	1798	1781	1736	1720	1708	1650	1348	945	476	166	23	0	0	0	0	0	0
75	1699	1703	1664	1635	1567	1519	1422	1406	1175	809	336	57	0	0	0	0	0	0	0
80	1521	1535	1491	1455	1375	1312	1202	1123	990	644	160	0	0	0	0	0	0	0	0
85	0	0	1	31	148	568	754	803	672	380	0	0	0	0	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	2663	1000	1500	200	500
65 to 90	2024	1000	1500	200	500

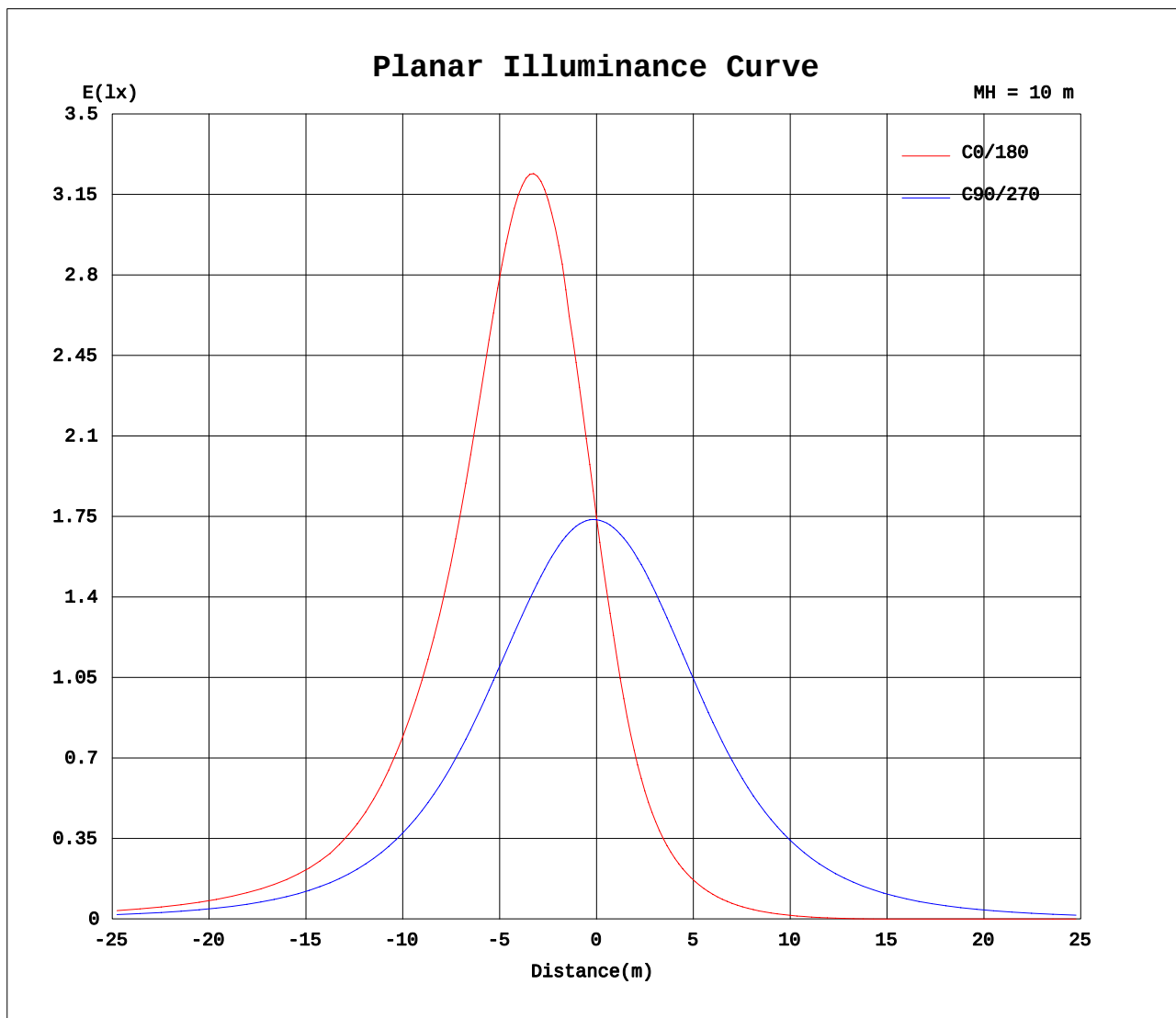
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

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: Washer13-3000k-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	175	176	174	175	173	175	173	173	173	174	174	175	177	176	178	178	180	179	175
5	234	234	229	226	218	212	202	192	183	174	165	156	151	143	137	133	130	129	125
10	298	294	287	278	263	250	230	210	191	172	154	139	125	113	103	95.8	90.2	87.7	84.0
15	352	348	340	325	307	283	254	226	197	169	143	122	102	87.2	75.5	67.7	62.0	59.3	56.4
20	388	384	376	360	339	310	273	237	200	164	132	105	82.8	67.1	55.6	48.2	43.1	40.6	38.5
25	395	392	385	373	354	325	289	243	199	156	120	89.6	67.0	51.8	41.3	34.7	30.4	28.2	26.6
30	369	368	365	361	348	326	290	242	193	147	108	76.0	53.9	39.9	30.7	25.1	21.4	19.7	18.4
35	322	323	323	326	322	308	278	232	182	135	94.9	63.7	43.2	30.6	22.6	17.9	14.9	13.4	12.4
40	272	269	274	275	280	271	254	214	167	121	81.9	52.6	34.1	23.1	16.3	12.3	9.85	8.69	7.94
45	224	222	227	230	235	230	221	191	149	106	69.3	42.7	26.3	16.8	11.1	7.95	6.03	5.15	4.57
50	175	174	180	186	192	190	185	164	129	90.3	57.3	33.8	19.4	11.4	6.89	4.52	3.09	2.43	1.99
55	134	134	136	143	151	153	148	134	107	74.6	45.9	25.5	13.4	7.01	3.59	1.87	0.87	0.39	0.11
60	105	105	106	108	111	118	115	105	85.0	59.4	35.1	18.0	8.15	3.46	1.08	0.00	0.00	0.00	0.00
65	82.5	82.6	82.0	82.1	81.9	84.8	85.6	78.9	64.6	45.2	25.2	11.3	3.91	0.77	0.00	0.00	0.00	0.00	0.00
70	62.3	62.3	61.5	60.9	59.4	58.8	58.4	56.4	46.1	32.3	16.3	5.68	0.79	0.00	0.00	0.00	0.00	0.00	0.00
75	44.0	44.1	43.1	42.3	40.6	39.3	36.8	36.4	30.4	20.9	8.70	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	26.4	26.7	25.9	25.3	23.9	22.8	20.9	19.5	17.2	11.2	2.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.01	0.27	1.29	4.95	6.57	7.00	5.86	3.31	0.00	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	0.00	0.00	0.00	0.00	0.00
95	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
100	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	0.01	0.02
105	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	0.04	0.09
110	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	0.07	0.09
115	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	0.12	0.15
120	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	0.15	0.16
125	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	0.24	0.25
130	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	0.32	0.36
135	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	0.35	0.36
140	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	0.48	0.48
145	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	0.51	0.51
150	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	0.58	0.58
155	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	0.61	0.61
160	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	0.61	0.61
165	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	0.61	0.61
170	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	0.61	0.61
175	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	0.61	0.61
180	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	0.61	0.61

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: Washer13-3000k-Ra90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(°)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
γ (°)	176	174	175	173	175	173	173	173	174	174	175	177	176	178	178	180	179		
0	124	126	129	133	138	145	153	162	172	182	193	205	212	223	228	235	237		
5	83.9	87.0	91.2	98.8	108	121	134	151	169	189	210	232	249	268	281	292	299		
10	56.6	59.6	64.0	72.0	82.3	97.3	116	139	165	194	224	257	284	310	330	343	352		
15	38.8	41.3	45.4	52.6	62.6	77.9	98.6	126	158	195	235	277	313	343	365	379	387		
20	26.9	29.0	32.5	38.7	47.7	62.1	82.9	113	149	193	240	290	330	360	379	389	392		
25	18.7	20.4	23.3	28.5	36.5	49.4	69.1	99.6	138	186	238	292	331	357	368	370	366		
30	12.7	14.0	16.5	20.8	27.6	39.0	57.1	86.1	125	175	228	276	315	332	333	328	320		
35	8.07	9.17	11.1	14.7	20.4	30.3	46.5	73.4	111	159	210	252	281	288	286	275	270		
40	4.68	5.52	6.97	9.80	14.6	22.9	37.1	61.3	96.8	142	187	221	238	240	239	229	223		
45	2.08	2.69	3.78	5.93	9.52	16.5	28.7	50.1	82.1	122	161	186	196	196	193	182	174		
50	0.18	0.56	1.33	2.86	5.55	10.9	21.1	39.5	67.5	101	132	150	157	155	148	139	133		
55	0.00	0.00	0.00	0.54	2.38	6.32	14.3	29.6	53.3	80.6	103	116	120	116	110	108	104		
60	0.00	0.00	0.00	0.00	0.11	2.62	8.31	20.6	40.2	61.2	76.8	86.6	86.4	84.2	83.3	83.1	81.2		
65	0.00	0.00	0.00	0.00	0.00	0.02	3.52	12.6	28.1	43.8	54.6	59.8	58.8	60.4	61.0	61.9	60.8		
70	0.00	0.00	0.00	0.00	0.00	0.00	0.20	5.79	17.4	28.4	35.3	37.0	38.5	40.9	41.7	43.1	42.4		
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	8.26	15.8	18.5	20.5	21.8	23.7	24.1	25.1	24.3		
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73	5.30	6.31	6.22	3.24	0.77	0.01	0.00	0.00		
85	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		
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		
95	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		
100	0.00	0.02	0.00	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
105	0.04	0.09	0.05	0.09	0.05	0.09	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
110	0.12	0.17	0.12	0.17	0.13	0.16	0.08	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
115	0.20	0.26	0.21	0.26	0.21	0.24	0.16	0.15	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
120	0.31	0.36	0.33	0.37	0.32	0.33	0.24	0.21	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
125	0.44	0.49	0.45	0.49	0.43	0.43	0.32	0.29	0.15	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
130	0.57	0.61	0.57	0.60	0.52	0.52	0.39	0.35	0.20	0.15	0.02	0.00	0.00	0.00	0.00	0.00	0.00		
135	0.70	0.74	0.69	0.71	0.63	0.60	0.47	0.41	0.26	0.19	0.06	0.04	0.00	0.00	0.00	0.00	0.00		
140	0.81	0.85	0.79	0.81	0.71	0.68	0.54	0.47	0.32	0.25	0.11	0.08	0.00	0.00	0.00	0.00	0.00		
145	0.90	0.94	0.88	0.88	0.77	0.74	0.59	0.53	0.37	0.30	0.16	0.13	0.03	0.03	0.00	0.00	0.00		
150	0.96	0.97	0.92	0.90	0.81	0.75	0.63	0.57	0.41	0.35	0.21	0.18	0.08	0.08	0.01	0.03	0.00		
155	1.00	0.97	0.95	0.89	0.82	0.75	0.66	0.60	0.46	0.41	0.28	0.24	0.15	0.15	0.07	0.09	0.03		
160	0.99	0.96	0.94	0.89	0.82	0.75	0.67	0.63	0.50	0.46	0.34	0.32	0.23	0.22	0.15	0.16	0.10		
165	0.97	0.92	0.93	0.85	0.82	0.74	0.68	0.64	0.54	0.51	0.41	0.40	0.31	0.32	0.25	0.27	0.20		
170	0.92	0.85	0.88	0.80	0.81	0.72	0.68	0.64	0.57	0.57	0.48	0.48	0.40	0.42	0.36	0.39	0.33		
175	0.80	0.75	0.78	0.71	0.74	0.67	0.68	0.64	0.60	0.60	0.54	0.56	0.51	0.54	0.48	0.51	0.48		
180	0.66	0.65	0.65	0.65	0.65	0.64	0.65	0.64	0.61	0.61	0.61	0.62	0.61	0.62	0.62	0.63	0.63		

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: