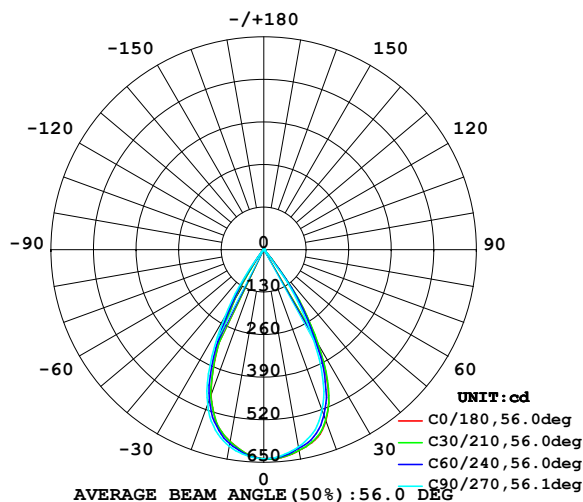


LUMINAIRE PHOTOMETRIC TEST REPORT

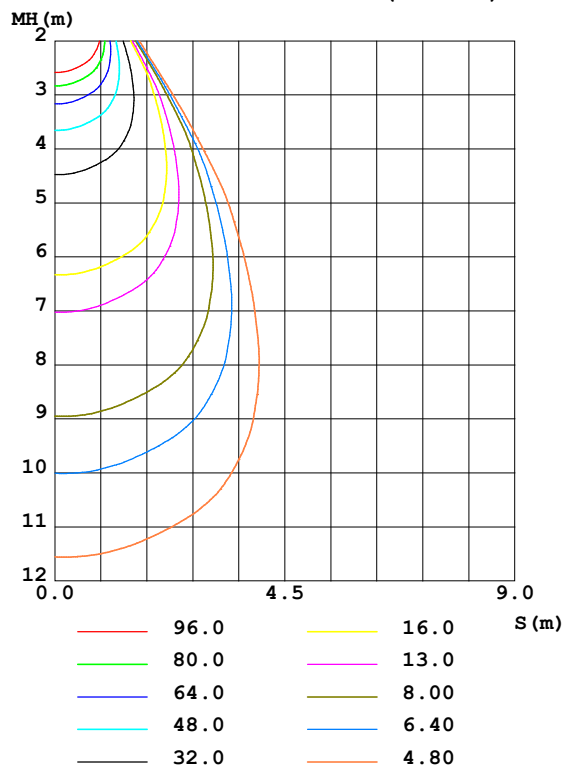
NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 96.17 lm/W
MCR-3 (5W, 60°)		I _{max} (cd)	640.3	S/MH(C0/180)	0.76	
NOMINAL POWER(W)	5	LOR(%)	100.0	S/MH(C90/270)	0.81	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	495.42	η UP,DN(C0-180)	0.7,50.9	
NOMINAL FLUX(lm)	495.42	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.5,47.9	
LAMPS INSIDE	1	η up(%)	1.2	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	120	η down(%)	98.8	CIBSE SHR MAX	0.85	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



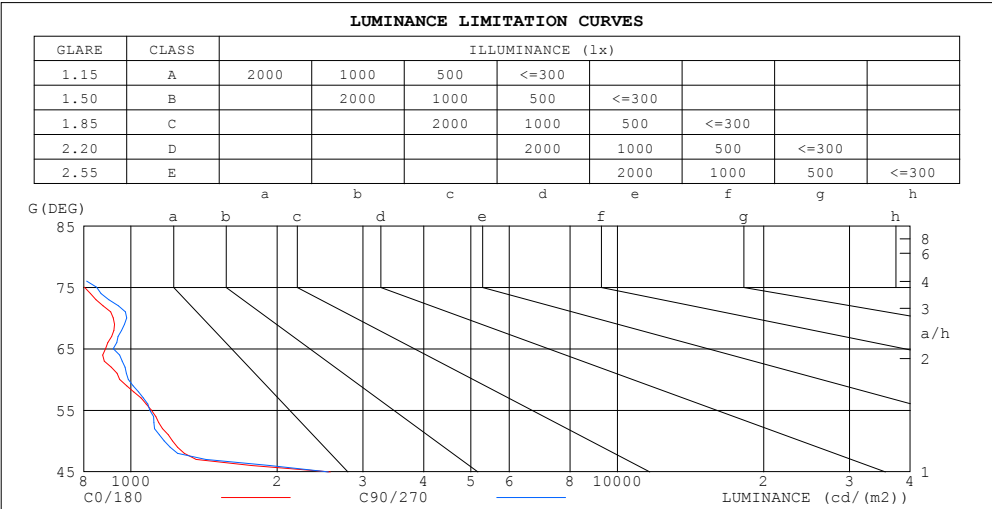
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2025-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity: 65.0%
Test Distance: 8.050m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	623.2	620.0	612.1	599.7	594.7	598.4	610.0	620.4	0- 10	59.54	59.54	12,12
20	554.8	546.3	520.4	487.7	471.9	480.8	502.7	537.0	10- 20	160.4	219.9	44.4,44.4
30	329.9	325.0	283.4	219.9	184.5	192.4	242.0	300.0	20- 30	180.5	400.4	80.8,80.8
40	35.50	36.39	25.50	16.79	14.05	14.30	18.90	27.53	30- 40	76.74	477.1	96.3,96.3
50	3.514	3.496	3.389	3.433	3.242	3.175	3.338	3.382	40- 50	6.776	483.9	97.7,97.7
60	2.128	2.184	2.225	2.376	2.427	2.424	2.199	2.066	50- 60	2.498	486.4	98.2,98.2
70	1.413	1.415	1.512	1.578	1.514	1.465	1.432	1.386	60- 70	1.817	488.2	98.5,98.5
80	0.5315	0.5342	0.5679	0.5398	0.4805	0.4551	0.4700	0.5012	70- 80	1.009	489.2	98.7,98.7
90	0	0	0	0	0	0	0	0	80- 90	0.2067	489.4	98.8,98.8
100	0	0	0	0	0	0	0	0	90-100	0.0000	489.4	98.8,98.8
110	0.0674	0.1059	0.1718	0.2166	0.0677	0.0406	0	0.0023	100-110	0.0273	489.5	98.8,98.8
120	0.4896	0.5204	0.6279	0.7134	0.4278	0.4012	0.3559	0.2529	110-120	0.2544	489.7	98.8,98.8
130	1.137	1.167	1.296	1.431	1.058	1.019	0.9382	0.7859	120-130	0.6871	490.4	99,99
140	1.937	1.951	2.077	2.229	1.813	1.760	1.642	1.508	130-140	1.136	491.5	99.2,99.2
150	2.698	2.693	2.795	2.884	2.506	2.421	2.320	2.209	140-150	1.389	492.9	99.5,99.5
160	3.179	3.130	3.169	3.200	2.968	2.849	2.767	2.705	150-160	1.292	494.2	99.8,99.8
170	3.412	3.362	3.377	3.364	3.333	3.252	3.187	3.155	160-170	0.8857	495.1	99.9,99.9
180	3.526	3.545	3.498	3.536	3.530	3.538	3.485	3.525	170-180	0.3237	495.4	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	531	504
80	682	726
75	803	851
70	921	981
65	887	920
60	949	988
55	1101	1094
50	1218	1170
45	2571	2549

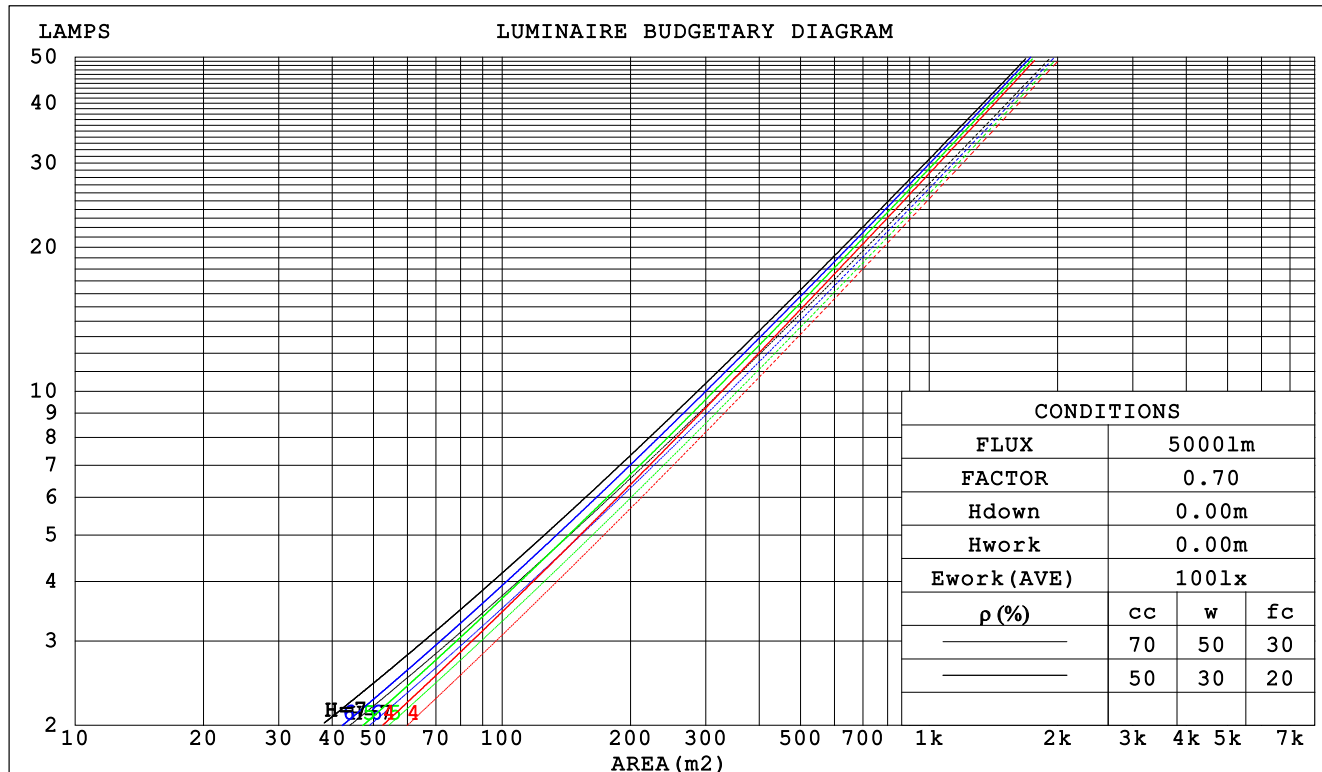
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.050m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	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	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.99
1.0	1.11	1.09	1.06	1.09	1.06	1.05	1.04	1.03	1.01	1.00	.99	.98	.97	.96	.95	.93
2.0	1.04	.90	.97	1.02	.98	.96	.99	.96	.93	.95	.93	.91	.92	.91	.89	.87
3.0	.97	.93	.89	.96	.92	.88	.93	.90	.87	.91	.88	.85	.88	.86	.84	.82
4.0	.92	.86	.82	.90	.86	.82	.88	.84	.81	.86	.82	.80	.84	.81	.79	.77
5.0	.86	.81	.77	.85	.80	.76	.83	.79	.76	.82	.78	.75	.80	.77	.74	.73
6.0	.81	.76	.72	.81	.75	.72	.79	.74	.71	.78	.73	.70	.76	.73	.70	.68
7.0	.77	.71	.67	.76	.71	.67	.75	.70	.67	.74	.70	.66	.73	.69	.66	.65
8.0	.73	.67	.64	.72	.67	.63	.71	.66	.63	.70	.66	.63	.69	.65	.62	.61
9.0	.69	.64	.60	.69	.63	.60	.68	.63	.60	.67	.62	.59	.66	.62	.59	.58
10.0	.66	.60	.57	.65	.60	.57	.65	.60	.56	.64	.59	.56	.63	.59	.56	.55



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.050m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	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					Wall Exitance Coefficients(WEC)
0.0						
1.0	.170 .097 .031	.163 .093 .030	.150 .086 .027	.137 .079 .025	.126 .073 .024	
2.0	.161 .088 .027	.155 .086 .026	.144 .080 .025	.134 .075 .024	.124 .070 .022	
3.0	.153 .081 .024	.148 .079 .024	.138 .075 .023	.130 .071 .022	.121 .067 .021	
4.0	.145 .076 .022	.141 .074 .022	.133 .070 .021	.125 .067 .020	.118 .064 .020	
5.0	.139 .071 .020	.135 .069 .020	.128 .066 .020	.121 .064 .019	.115 .061 .018	
6.0	.132 .066 .019	.129 .065 .019	.123 .063 .018	.117 .061 .018	.111 .059 .017	
7.0	.127 .063 .018	.124 .062 .018	.118 .060 .017	.113 .058 .017	.108 .056 .016	
8.0	.121 .059 .017	.119 .058 .017	.114 .057 .016	.109 .055 .016	.104 .054 .016	
9.0	.116 .056 .016	.114 .056 .016	.109 .054 .015	.105 .053 .015	.101 .051 .015	
10.0	.112 .054 .015	.110 .053 .015	.106 .052 .015	.102 .051 .014	.098 .049 .014	

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					Ceiling Cavity Exitance Coefficients(CCEC)
0.0	.200 .200 .200	.171 .171 .171	.116 .116 .116	.067 .067 .067	.021 .021 .021	
1.0	.180 .167 .155	.154 .143 .133	.105 .098 .092	.061 .057 .054	.019 .018 .017	
2.0	.164 .142 .123	.141 .122 .106	.096 .085 .074	.056 .049 .044	.018 .016 .014	
3.0	.151 .123 .100	.130 .106 .087	.089 .074 .061	.051 .043 .036	.017 .014 .012	
4.0	.141 .108 .083	.121 .093 .072	.083 .065 .051	.048 .038 .030	.015 .012 .010	
5.0	.132 .096 .070	.113 .083 .061	.078 .058 .043	.045 .034 .026	.015 .011 .008	
6.0	.124 .087 .060	.107 .075 .053	.074 .053 .037	.043 .031 .022	.014 .010 .007	
7.0	.118 .079 .053	.101 .069 .046	.070 .048 .032	.041 .028 .019	.013 .009 .006	
8.0	.112 .073 .046	.096 .063 .041	.067 .045 .029	.039 .026 .017	.013 .009 .006	
9.0	.107 .068 .042	.092 .059 .036	.064 .041 .026	.037 .024 .015	.012 .008 .005	
10.0	.102 .064 .038	.088 .055 .033	.061 .039 .023	.036 .023 .014	.012 .008 .005	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2025-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.050m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

NAME: MCR-3 (5W, 60°)					TYPE:LED					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:1				
MFR.: Utopia Lighting					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					17.0	17.9	17.2	18.1	18.2	16.1	17.0	16.4	17.2	17.4
3H					16.8	17.7	17.1	17.9	18.1	16.0	16.8	16.2	17.0	17.2
4H					16.8	17.5	17.1	17.8	18.0	15.9	16.7	16.2	16.9	17.1
6H					16.7	17.4	17.0	17.7	17.9	15.8	16.5	16.1	16.8	17.1
8H					16.6	17.3	17.0	17.6	17.9	15.8	16.5	16.1	16.7	17.0
12H					16.6	17.3	16.9	17.5	17.8	15.7	16.4	16.1	16.7	17.0
4H 2H					16.7	17.5	17.0	17.7	18.0	15.9	16.6	16.2	16.9	17.1
3H					16.6	17.2	16.9	17.5	17.8	15.7	16.4	16.1	16.7	17.0
4H					16.5	17.1	16.9	17.4	17.8	15.7	16.3	16.0	16.6	16.9
6H					16.4	16.9	16.8	17.3	17.7	15.6	16.1	16.0	16.5	16.8
8H					16.4	16.9	16.8	17.2	17.6	15.5	16.0	15.9	16.4	16.8
12H					16.3	16.8	16.8	17.2	17.6	15.5	15.9	15.9	16.3	16.7
8H 4H					16.4	16.9	16.8	17.2	17.6	15.5	16.0	15.9	16.4	16.8
6H					16.3	16.7	16.7	17.1	17.5	15.4	15.8	15.9	16.3	16.7
8H					16.2	16.6	16.7	17.0	17.5	15.4	15.7	15.9	16.2	16.6
12H					16.2	16.5	16.7	16.9	17.4	15.3	15.6	15.8	16.1	16.6
12H 4H					16.3	16.8	16.7	17.2	17.6	15.5	15.9	15.9	16.3	16.7
6H					16.2	16.6	16.7	17.0	17.5	15.4	15.7	15.9	16.2	16.6
8H					16.2	16.5	16.7	16.9	17.4	15.3	15.6	15.8	16.1	16.6
Variations with the observer position at spacings:														
S = 1.0H					+ 4.9 / - 8.3					+ 4.3 / - 7.3				
1.5H					+ 7.6 / - 8.0					+ 7.0 / - 7.0				
2.0H					+ 2.6 / - 0.8					+ 2.4 / - 0.7				

CIE Pub.117 Corrected 495.4 lm Total Lamp Luminous Flux. (8log(F/F0) = -2.4)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2025-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.050m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:

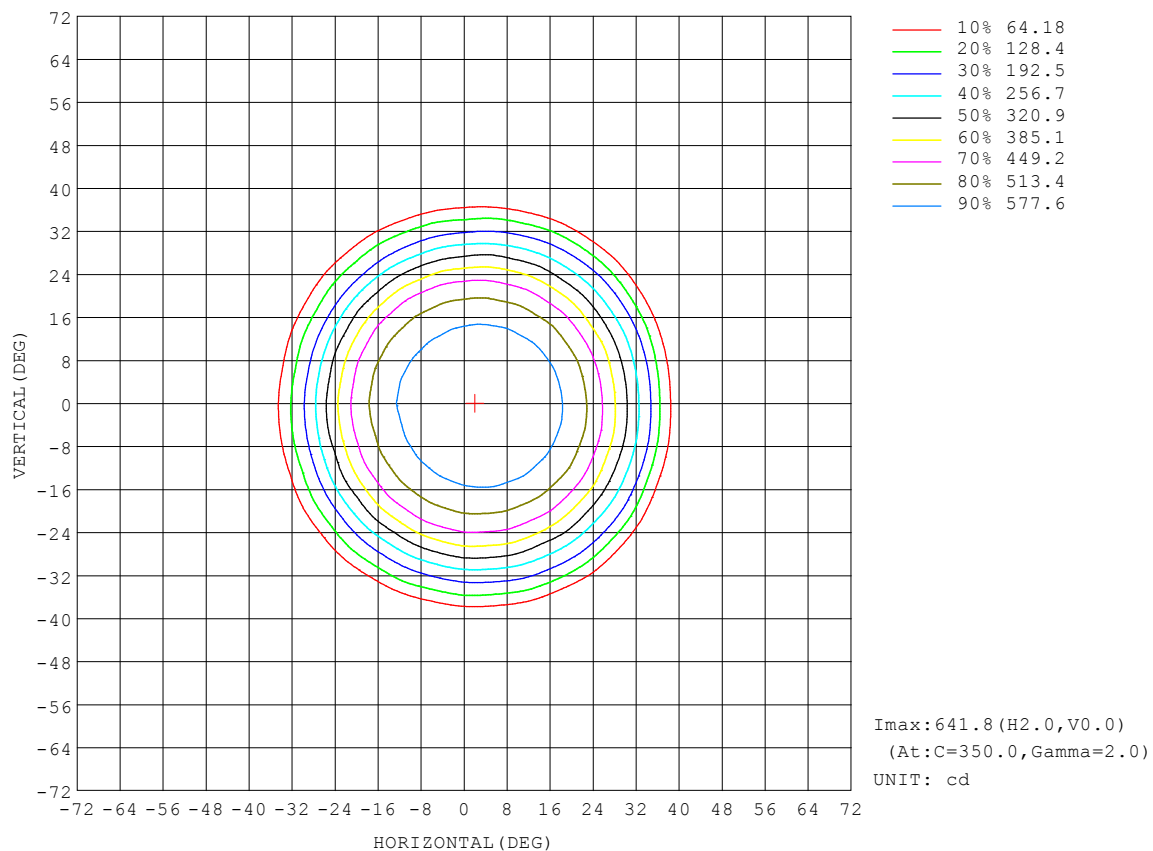
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	80	89	83	80	88	83	80	76
0.80	96	91	87	96	91	87	94	90	87	83
1.00	100	95	92	99	95	91	98	94	91	87
1.25	104	99	96	103	99	95	101	97	95	90
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	103	96
4.00	114	111	109	112	110	108	108	106	105	97
5.00	115	113	111	113	111	110	109	107	106	98
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: DAMIN
 Test Date: 2025-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity: 65.0%
 Test Distance: 8.050m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:

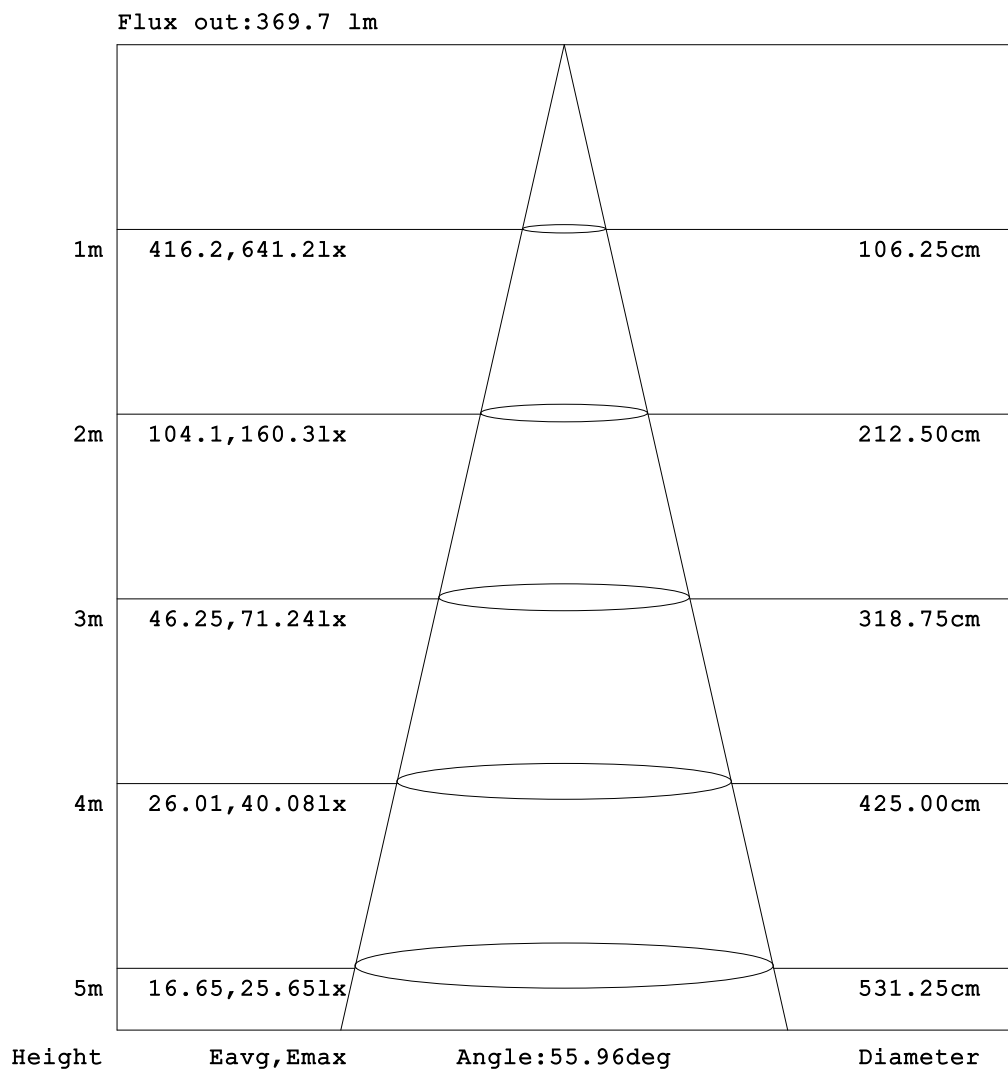


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.050m [K=1.0000]
Remarks:

AAI Figure

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:



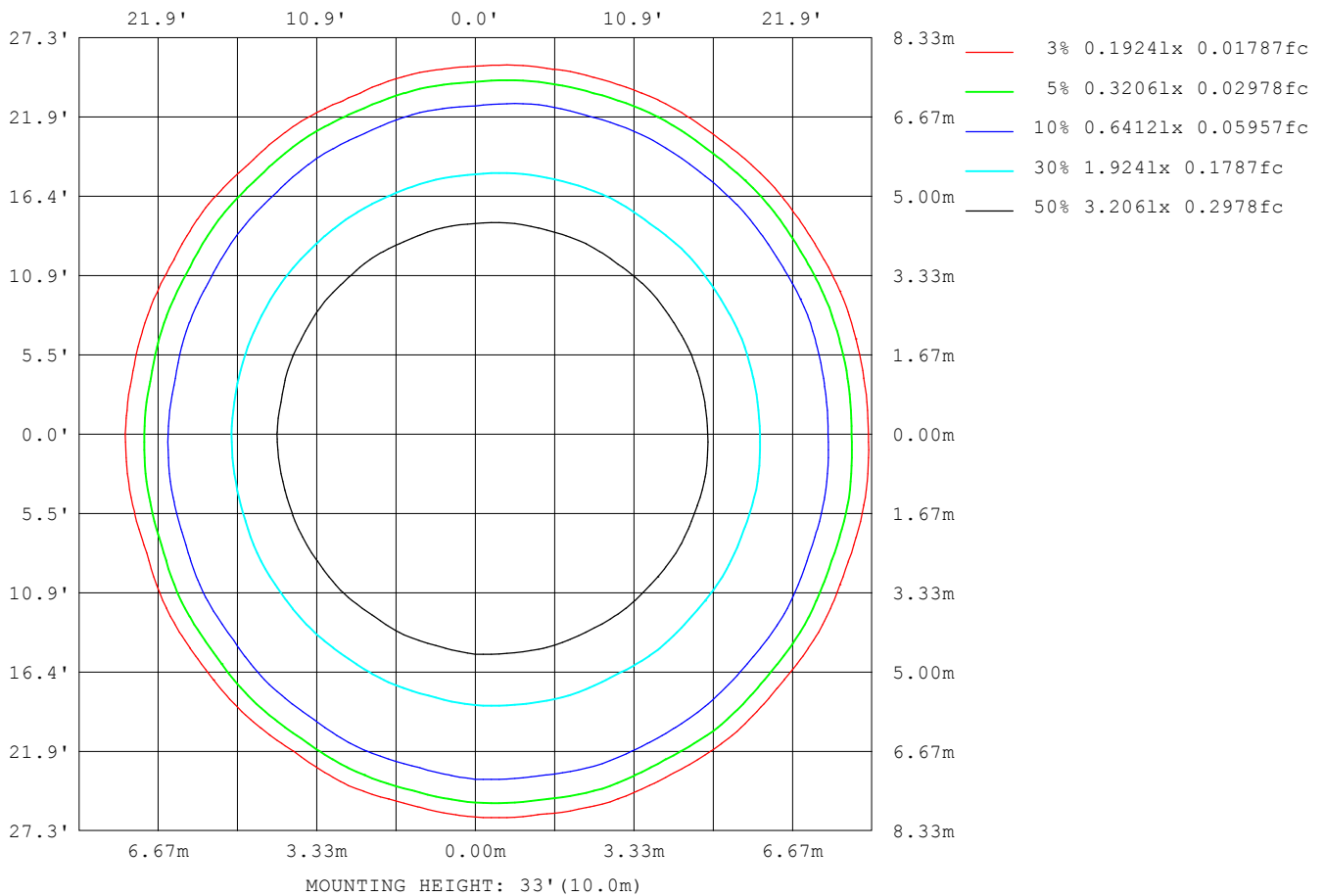
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2025-11-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.050m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.050m [K=1.0000]
Remarks:

LED Avg.L Report

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:

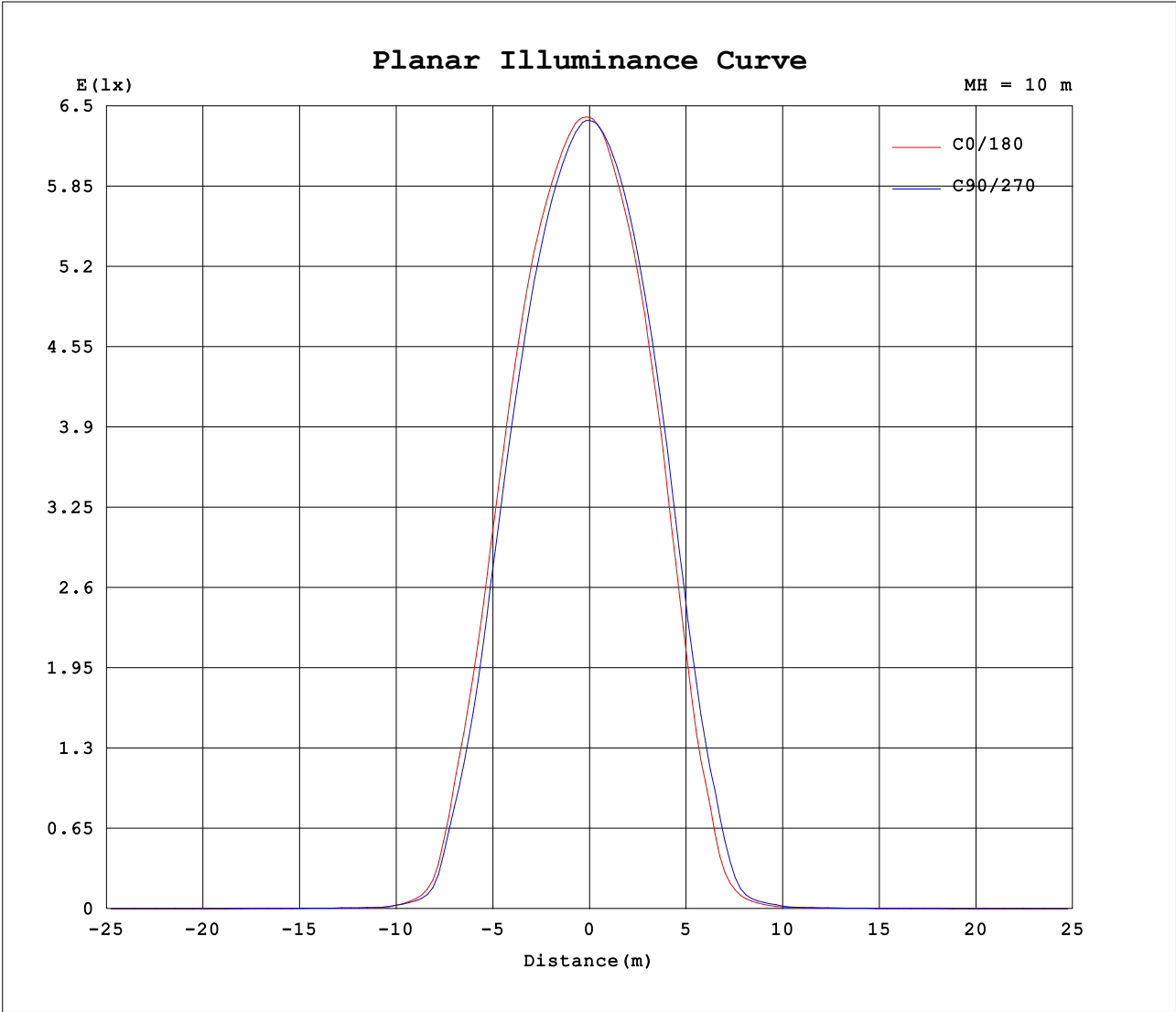
AvgL	cd/m2
L_0~180 (65) av	974
L_0~180 (75) av	803
L_0~180 (85) av	390
L_90~270 (65) av	934
L_90~270 (75) av	808
L_90~270 (85) av	449
L_45 (65) av	954
L_45 (75) av	810
L_45 (85) av	409

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.050m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.050m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	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	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639
5	637	637	637	637	636	635	634	633	632	631	630	629	628	627	626	626	625	625	625
10	623	624	622	622	621	619	616	615	614	612	609	606	603	601	598	597	595	595	595
15	603	603	601	601	598	596	592	589	584	580	574	571	564	562	556	555	551	552	552
20	555	557	555	554	547	545	537	533	525	520	511	505	495	492	484	481	473	473	472
25	465	470	468	468	461	459	446	443	431	425	408	400	383	376	362	355	342	343	339
30	330	335	332	331	325	325	308	307	294	283	266	255	237	229	211	202	192	188	185
35	183	191	189	192	186	184	177	171	158	150	130	123	102	91.2	72.7	68.5	57.4	55.6	54.3
40	35.5	36.7	35.5	38.2	35.5	37.3	33.9	31.9	26.8	25.5	21.9	21.3	18.2	17.7	15.9	15.5	14.2	14.2	14.1
45	8.16	7.98	7.73	8.76	9.12	9.61	8.80	9.21	9.05	8.12	7.59	7.80	6.08	5.52	4.93	4.63	4.55	4.45	4.56
50	3.51	3.51	3.57	3.56	3.52	3.47	3.37	3.37	3.67	3.39	3.43	3.38	3.38	3.46	3.40	3.36	3.32	3.26	3.24
55	2.83	2.86	2.89	2.83	2.80	2.72	2.71	2.73	2.85	2.83	2.84	2.88	2.82	2.85	2.88	2.84	2.85	2.81	2.80
60	2.13	2.08	2.09	2.13	2.20	2.17	2.12	2.10	2.17	2.22	2.35	2.32	2.34	2.32	2.43	2.60	2.60	2.59	2.43
65	1.68	1.64	1.67	1.64	1.69	1.67	1.70	1.70	1.76	1.75	1.84	1.84	1.91	1.92	2.00	2.00	2.06	2.04	2.02
70	1.41	1.39	1.45	1.44	1.43	1.40	1.46	1.45	1.52	1.51	1.57	1.53	1.58	1.57	1.59	1.56	1.59	1.56	1.51
75	0.93	0.93	0.95	0.92	0.97	0.95	0.99	0.99	1.01	0.99	1.01	0.98	1.01	1.01	1.01	1.00	1.00	0.97	0.94
80	0.53	0.50	0.54	0.51	0.55	0.52	0.56	0.53	0.57	0.57	0.58	0.54	0.56	0.52	0.56	0.51	0.54	0.49	0.48
85	0.21	0.18	0.21	0.18	0.21	0.19	0.22	0.22	0.23	0.20	0.24	0.19	0.21	0.15	0.18	0.13	0.16	0.12	0.10
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	0.00	0.00
105	0.00	0.01	0.00	0.01	0.00	0.02	0.01	0.04	0.00	0.05	0.01	0.06	0.02	0.07	0.05	0.08	0.05	0.10	0.00
110	0.07	0.11	0.07	0.12	0.08	0.13	0.11	0.14	0.13	0.17	0.14	0.20	0.18	0.23	0.21	0.24	0.22	0.26	0.07
115	0.28	0.28	0.24	0.28	0.27	0.30	0.27	0.33	0.31	0.37	0.35	0.40	0.39	0.44	0.42	0.47	0.45	0.50	0.21
120	0.49	0.53	0.49	0.53	0.49	0.55	0.53	0.58	0.56	0.63	0.64	0.67	0.66	0.72	0.71	0.76	0.74	0.79	0.43
125	0.79	0.81	0.80	0.82	0.80	0.85	0.84	0.88	0.87	0.94	0.93	0.99	0.99	1.06	1.06	1.10	1.08	1.13	0.72
130	1.14	1.17	1.13	1.18	1.14	1.19	1.19	1.24	1.24	1.30	1.29	1.37	1.36	1.43	1.43	1.48	1.47	1.51	1.06
135	1.51	1.54	1.51	1.56	1.52	1.58	1.57	1.62	1.61	1.68	1.69	1.75	1.75	1.83	1.81	1.87	1.88	1.92	1.44
140	1.94	1.94	1.91	1.94	1.93	1.97	1.96	2.02	2.02	2.08	2.08	2.15	2.16	2.22	2.24	2.27	2.27	2.32	1.81
145	2.32	2.34	2.30	2.35	2.32	2.37	2.36	2.40	2.39	2.46	2.45	2.52	2.53	2.59	2.58	2.63	2.62	2.68	2.18
150	2.70	2.71	2.66	2.69	2.67	2.72	2.69	2.74	2.74	2.79	2.78	2.84	2.82	2.89	2.88	2.94	2.93	2.99	2.51
155	2.99	3.01	2.96	2.99	2.94	2.98	2.96	3.00	2.99	3.04	3.02	3.07	3.05	3.09	3.08	3.14	3.13	3.19	2.78
160	3.18	3.21	3.16	3.17	3.11	3.15	3.12	3.16	3.13	3.17	3.14	3.18	3.15	3.20	3.20	3.24	3.24	3.29	2.97
165	3.31	3.33	3.26	3.28	3.23	3.27	3.26	3.27	3.26	3.27	3.26	3.26	3.26	3.28	3.25	3.31	3.31	3.35	3.15
170	3.41	3.43	3.38	3.40	3.35	3.38	3.34	3.39	3.34	3.38	3.34	3.36	3.36	3.37	3.36	3.40	3.39	3.42	3.33
175	3.49	3.50	3.47	3.49	3.45	3.49	3.45	3.49	3.45	3.47	3.45	3.47	3.47	3.48	3.46	3.49	3.46	3.48	3.46
180	3.53	3.53	3.52	3.53	3.54	3.55	3.53	3.53	3.50	3.50	3.48	3.49	3.49	3.54	3.54	3.52	3.52	3.54	3.53

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.050m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: MCR-3 (5W, 60°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	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	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639	639		
5	624	625	625	626	627	628	629	630	631	632	633	634	635	636	636	637	637		
10	593	595	596	598	599	602	605	608	610	614	616	618	620	621	621	623	623		
15	550	552	552	555	555	559	561	567	571	577	581	587	590	595	597	601	602		
20	469	473	475	480	482	487	490	499	503	512	517	526	532	542	544	552	555		
25	334	339	339	349	352	364	367	382	388	402	411	425	431	444	449	458	463		
30	180	183	184	190	195	208	216	233	242	258	272	287	292	308	314	323	329		
35	51.4	52.6	53.4	59.4	62.8	73.4	80.6	94.9	102	121	130	149	152	166	171	179	184		
40	13.5	13.7	13.7	14.3	14.3	15.4	16.4	18.2	18.9	20.9	21.5	24.6	25.8	29.2	30.8	33.6	34.3		
45	4.40	4.64	4.46	4.57	4.63	5.03	5.23	6.33	6.61	7.13	7.78	8.54	7.97	8.28	8.13	8.06	7.85		
50	3.33	3.23	3.24	3.15	3.20	3.24	3.33	3.34	3.34	3.31	3.37	3.43	3.38	3.38	3.36	3.41	3.43		
55	2.81	2.76	2.84	2.91	2.90	2.84	2.76	2.72	2.74	2.66	2.74	2.67	2.73	2.72	2.71	2.72	2.77		
60	2.36	2.30	2.37	2.43	2.42	2.37	2.25	2.16	2.20	2.17	2.20	2.19	2.09	2.04	2.06	2.09	2.13		
65	2.06	2.00	2.02	1.94	1.95	1.87	1.87	1.79	1.80	1.72	1.75	1.67	1.69	1.64	1.68	1.65	1.68		
70	1.53	1.50	1.50	1.46	1.47	1.43	1.44	1.45	1.43	1.43	1.44	1.39	1.41	1.37	1.40	1.38	1.42		
75	0.96	0.93	0.93	0.91	0.91	0.87	0.89	0.86	0.89	0.85	0.90	0.87	0.91	0.88	0.92	0.92	0.93		
80	0.50	0.46	0.49	0.44	0.47	0.43	0.47	0.43	0.47	0.43	0.49	0.46	0.51	0.49	0.52	0.49	0.53		
85	0.13	0.08	0.13	0.08	0.13	0.09	0.13	0.11	0.15	0.13	0.17	0.13	0.19	0.15	0.20	0.18	0.21		
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	0.00	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		
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		
110	0.02	0.07	0.02	0.06	0.02	0.05	0.01	0.05	0.00	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00		
115	0.18	0.21	0.18	0.21	0.16	0.20	0.15	0.18	0.14	0.15	0.09	0.12	0.07	0.10	0.07	0.09	0.04		
120	0.40	0.44	0.41	0.43	0.37	0.40	0.35	0.39	0.36	0.34	0.29	0.29	0.24	0.26	0.20	0.24	0.21		
125	0.71	0.72	0.69	0.70	0.66	0.68	0.66	0.64	0.59	0.60	0.53	0.54	0.48	0.50	0.44	0.47	0.42		
130	1.03	1.06	1.02	1.04	1.00	1.01	0.96	0.97	0.94	0.91	0.87	0.84	0.78	0.79	0.73	0.75	0.71		
135	1.43	1.44	1.42	1.42	1.37	1.38	1.32	1.33	1.28	1.26	1.22	1.19	1.14	1.13	1.08	1.09	1.05		
140	1.80	1.81	1.77	1.79	1.74	1.75	1.69	1.69	1.64	1.63	1.57	1.57	1.51	1.51	1.45	1.47	1.43		
145	2.15	2.17	2.15	2.14	2.09	2.10	2.05	2.06	2.03	1.99	1.95	1.92	1.86	1.87	1.81	1.83	1.80		
150	2.46	2.48	2.44	2.45	2.39	2.41	2.37	2.38	2.32	2.32	2.25	2.26	2.20	2.22	2.16	2.19	2.16		
155	2.72	2.74	2.67	2.69	2.65	2.66	2.61	2.63	2.61	2.59	2.54	2.54	2.48	2.51	2.46	2.50	2.47		
160	2.90	2.92	2.87	2.88	2.81	2.84	2.83	2.82	2.77	2.79	2.73	2.75	2.69	2.72	2.68	2.73	2.71		
165	3.10	3.12	3.10	3.07	3.02	3.04	2.98	3.01	2.96	2.99	2.94	2.96	2.90	2.93	2.90	2.94	2.91		
170	3.32	3.31	3.25	3.28	3.22	3.24	3.19	3.23	3.19	3.21	3.18	3.19	3.15	3.16	3.12	3.16	3.12		
175	3.45	3.47	3.43	3.46	3.40	3.43	3.38	3.41	3.39	3.42	3.39	3.41	3.37	3.39	3.33	3.38	3.34		
180	3.53	3.54	3.54	3.54	3.53	3.53	3.54	3.52	3.48	3.50	3.49	3.49	3.51	3.54	3.51	3.51	3.50		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.050m [K=1.0000]
Remarks: