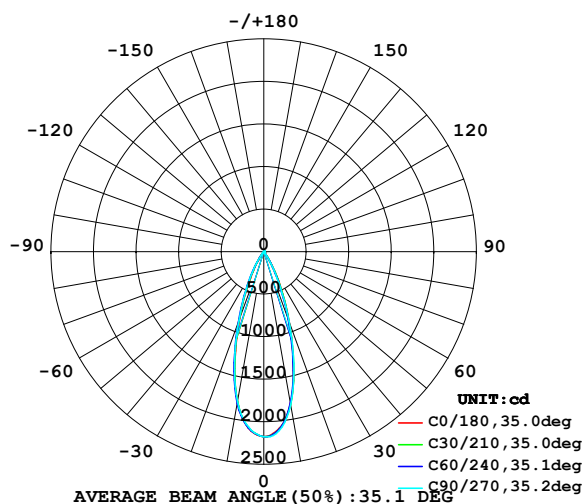


LUMINAIRE PHOTOMETRIC TEST REPORT

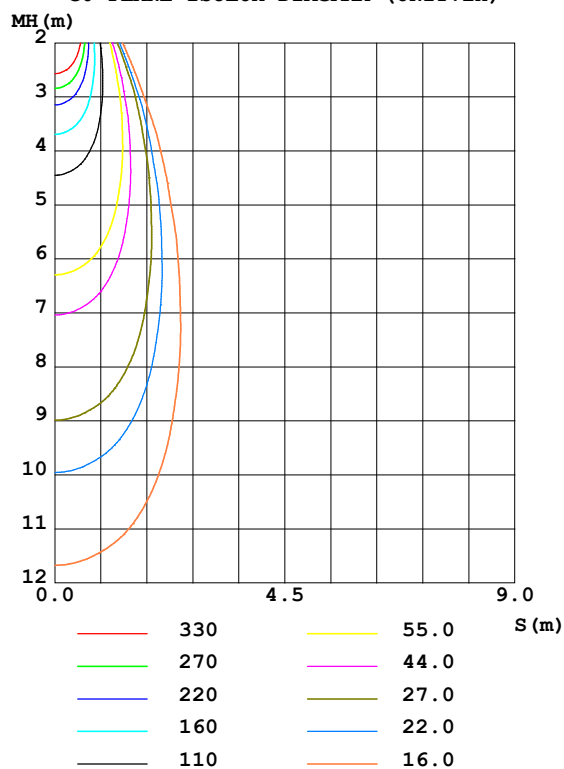
NAME: MCR-3 (8W, 36°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 108.64 lm/W			
MCR-3 (8W, 36°)		Imax(cd)	2181	S/MH(C0/180)	0.57
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.58
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	856.69	η UP,DN(C0-180)	0.7,47.4
NOMINAL FLUX(lm)	856.692	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.5,51.3
LAMPS INSIDE	1	η up(%)	1.3	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	η down(%)	98.7	CIBSE SHR MAX	0.60

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



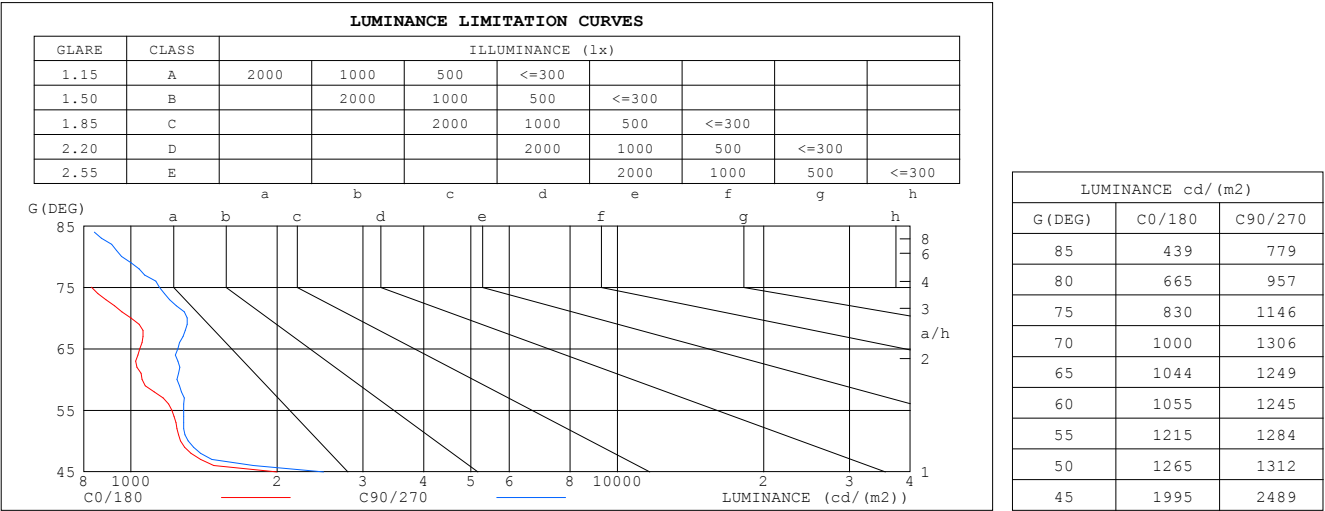
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

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	1814	1811	1826	1730	1790	1799	1791	1873	0- 10	190.3	190.3	22.2,22.2
20	871.0	853.5	869.3	764.1	832.7	856.8	857.2	954.7	10- 20	364.9	555.2	64.8,64.8
30	230.2	205.7	205.5	166.1	212.5	244.6	247.0	288.9	20- 30	223.6	778.8	90.9,90.9
40	17.72	14.76	14.53	13.93	17.24	20.87	22.61	24.04	30- 40	53.49	832.3	97.1,97.1
50	3.649	3.571	3.806	3.810	3.826	3.996	4.212	3.945	40- 50	7.018	839.3	98,98
60	2.367	2.539	2.808	2.808	2.711	2.611	2.343	2.303	50- 60	2.922	842.2	98.3,98.3
70	1.535	1.765	2.016	1.982	1.914	1.722	1.520	1.534	60- 70	2.125	844.3	98.6,98.6
80	0.5180	0.6072	0.7499	0.6991	0.6420	0.6025	0.5433	0.5225	70- 80	1.194	845.5	98.7,98.7
90	0	0	0	0	0	0	0	0	80- 90	0.2558	845.8	98.7,98.7
100	0	0.0001	0.0226	0.0001	0	0	0	0	90-100	0.0002	845.8	98.7,98.7
110	0.1343	0.1733	0.2084	0.2261	0.0361	0.0158	0.0090	0.0114	100-110	0.0379	845.8	98.7,98.7
120	0.7723	0.8475	0.8645	0.9680	0.3469	0.2969	0.2754	0.2490	110-120	0.2960	846.1	98.8,98.8
130	2.157	2.251	2.254	2.448	1.283	1.215	1.229	1.091	120-130	0.9788	847.1	98.9,98.9
140	4.050	4.128	4.158	4.352	2.948	2.870	2.897	2.690	130-140	1.993	849.1	99.1,99.1
150	5.683	5.739	5.776	5.868	4.791	4.700	4.729	4.555	140-150	2.750	851.8	99.4,99.4
160	6.305	6.249	6.260	6.262	5.797	5.698	5.734	5.730	150-160	2.640	854.5	99.7,99.7
170	5.910	5.865	5.865	5.814	5.679	5.654	5.689	5.728	160-170	1.684	856.1	99.9,99.9
180	5.693	5.757	5.729	5.801	5.698	5.759	5.711	5.801	170-180	0.5452	856.7	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



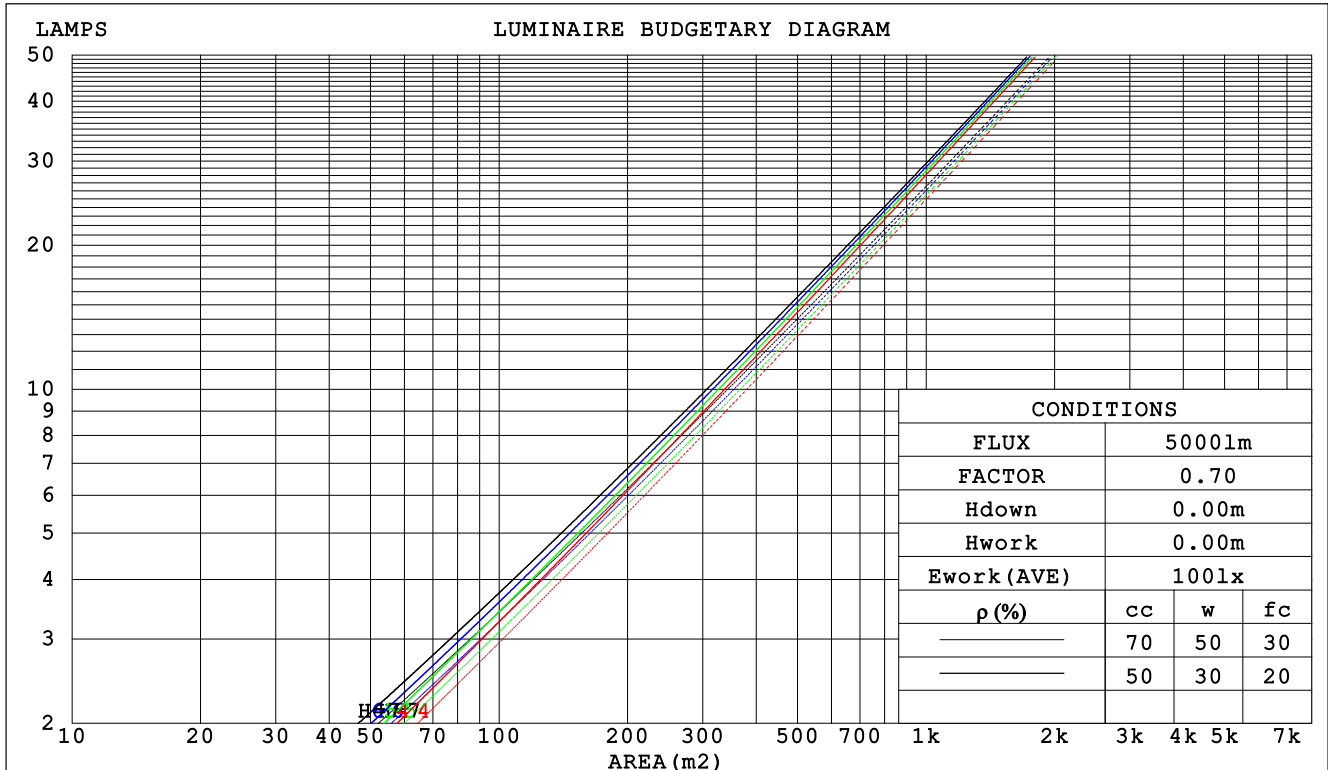
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

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 (8W, 36°)	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	RCR:Room Cavity Ratio						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	1.12	1.10	1.08	1.10	1.08	1.06	1.05	1.04	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.06	1.02	.99	1.04	1.01	.98	1.01	.98	.96	.97	.95	.94	.95	.93	.92	.90
3.0	1.00	.96	.93	.99	.95	.92	.96	.93	.91	.94	.91	.89	.91	.89	.88	.86
4.0	.95	.91	.88	.94	.90	.87	.92	.89	.86	.90	.87	.85	.88	.86	.84	.82
5.0	.91	.86	.83	.90	.86	.83	.88	.85	.82	.87	.83	.81	.85	.82	.80	.79
6.0	.87	.82	.79	.86	.82	.79	.85	.81	.78	.83	.80	.77	.82	.79	.77	.76
7.0	.84	.79	.75	.83	.78	.75	.82	.78	.75	.80	.77	.74	.79	.76	.74	.73
8.0	.80	.75	.72	.80	.75	.72	.79	.74	.72	.78	.74	.71	.77	.73	.71	.70
9.0	.77	.72	.69	.77	.72	.69	.76	.72	.69	.75	.71	.69	.74	.71	.68	.67
10.0	.74	.70	.67	.74	.69	.66	.73	.69	.66	.72	.69	.66	.72	.68	.66	.65



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 (8W, 36°)	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	.152 .087 .027	.145 .083 .026	.132 .076 .024	.120 .069 .022	.109 .063 .020	
2.0	.143 .078 .024	.137 .075 .023	.126 .070 .022	.115 .065 .020	.106 .060 .019	
3.0	.134 .071 .021	.129 .069 .021	.120 .065 .020	.111 .061 .019	.103 .057 .018	
4.0	.126 .066 .019	.122 .064 .019	.114 .061 .018	.107 .057 .017	.100 .054 .017	
5.0	.120 .061 .018	.116 .060 .017	.109 .057 .017	.103 .054 .016	.097 .052 .016	
6.0	.114 .057 .016	.111 .056 .016	.105 .054 .016	.099 .051 .015	.094 .049 .015	
7.0	.109 .054 .015	.106 .053 .015	.100 .051 .015	.095 .049 .014	.091 .047 .014	
8.0	.104 .051 .014	.101 .050 .014	.097 .048 .014	.092 .047 .013	.088 .045 .013	
9.0	.099 .048 .013	.097 .047 .013	.093 .046 .013	.089 .045 .013	.085 .043 .013	
10.0	.096 .046 .013	.094 .045 .013	.090 .044 .012	.086 .043 .012	.083 .042 .012	

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	.117 .117 .117	.067 .067 .067	.021 .021 .021	
1.0	.179 .167 .157	.153 .144 .135	.105 .099 .093	.060 .057 .054	.019 .018 .018	
2.0	.162 .142 .126	.139 .123 .109	.095 .085 .076	.055 .049 .045	.018 .016 .015	
3.0	.148 .123 .103	.127 .106 .090	.087 .074 .063	.050 .043 .037	.016 .014 .012	
4.0	.137 .108 .087	.117 .093 .075	.081 .065 .053	.047 .038 .031	.015 .012 .010	
5.0	.127 .096 .074	.109 .083 .064	.075 .058 .045	.043 .034 .027	.014 .011 .009	
6.0	.118 .086 .064	.102 .075 .055	.070 .052 .039	.041 .031 .023	.013 .010 .008	
7.0	.111 .079 .056	.096 .068 .048	.066 .048 .034	.038 .028 .020	.012 .009 .007	
8.0	.105 .072 .049	.091 .062 .043	.063 .044 .030	.036 .026 .018	.012 .008 .006	
9.0	.100 .067 .044	.086 .058 .038	.060 .041 .027	.035 .024 .016	.011 .008 .005	
10.0	.095 .062 .040	.082 .054 .035	.057 .038 .025	.033 .022 .015	.011 .007 .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 (8W, 36°)					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					9.9	10.7	10.1	10.8	11.0	9.0	9.7	9.2	9.9	10.1
3H					9.9	10.6	10.1	10.8	11.0	9.0	9.7	9.3	9.9	10.2
4H					9.8	10.5	10.1	10.7	11.0	9.1	9.7	9.4	10.0	10.2
6H					9.8	10.4	10.1	10.7	10.9	9.1	9.7	9.4	10.0	10.2
8H					9.8	10.3	10.1	10.6	10.9	9.1	9.7	9.4	9.9	10.2
12H					9.7	10.3	10.0	10.6	10.9	9.1	9.6	9.4	9.9	10.2
4H 2H					9.7	10.4	10.0	10.6	10.9	8.8	9.5	9.1	9.7	9.9
3H					9.7	10.3	10.1	10.6	10.9	8.9	9.5	9.3	9.8	10.1
4H					9.7	10.2	10.1	10.5	10.9	9.0	9.6	9.4	9.9	10.2
6H					9.7	10.1	10.1	10.5	10.9	9.1	9.6	9.5	9.9	10.3
8H					9.6	10.1	10.1	10.4	10.8	9.1	9.5	9.5	9.9	10.3
12H					9.6	10.0	10.0	10.4	10.8	9.1	9.5	9.5	9.9	10.3
8H 4H					9.6	10.0	10.0	10.4	10.8	9.0	9.4	9.4	9.7	10.1
6H					9.6	10.0	10.0	10.4	10.8	9.0	9.4	9.5	9.8	10.2
8H					9.6	9.9	10.0	10.3	10.8	9.1	9.4	9.5	9.8	10.3
12H					9.5	9.8	10.0	10.3	10.8	9.1	9.3	9.6	9.8	10.3
12H 4H					9.6	10.0	10.0	10.4	10.8	8.9	9.3	9.3	9.7	10.1
6H					9.6	9.9	10.0	10.3	10.8	9.0	9.3	9.5	9.7	10.2
8H					9.5	9.8	10.0	10.3	10.8	9.0	9.3	9.5	9.8	10.3
Variations with the observer position at spacings:														
S = 1.0H					+ 2.3 / - 1.9					+ 1.5 / - 1.3				
1.5H					+ 4.2 / - 1.8					+ 3.1 / - 1.4				
2.0H					+ 1.2 / - 0.4					+ 1.5 / - 0.3				

CIE Pub.117 Corrected 856.7 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.5)

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 (8W, 36°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:

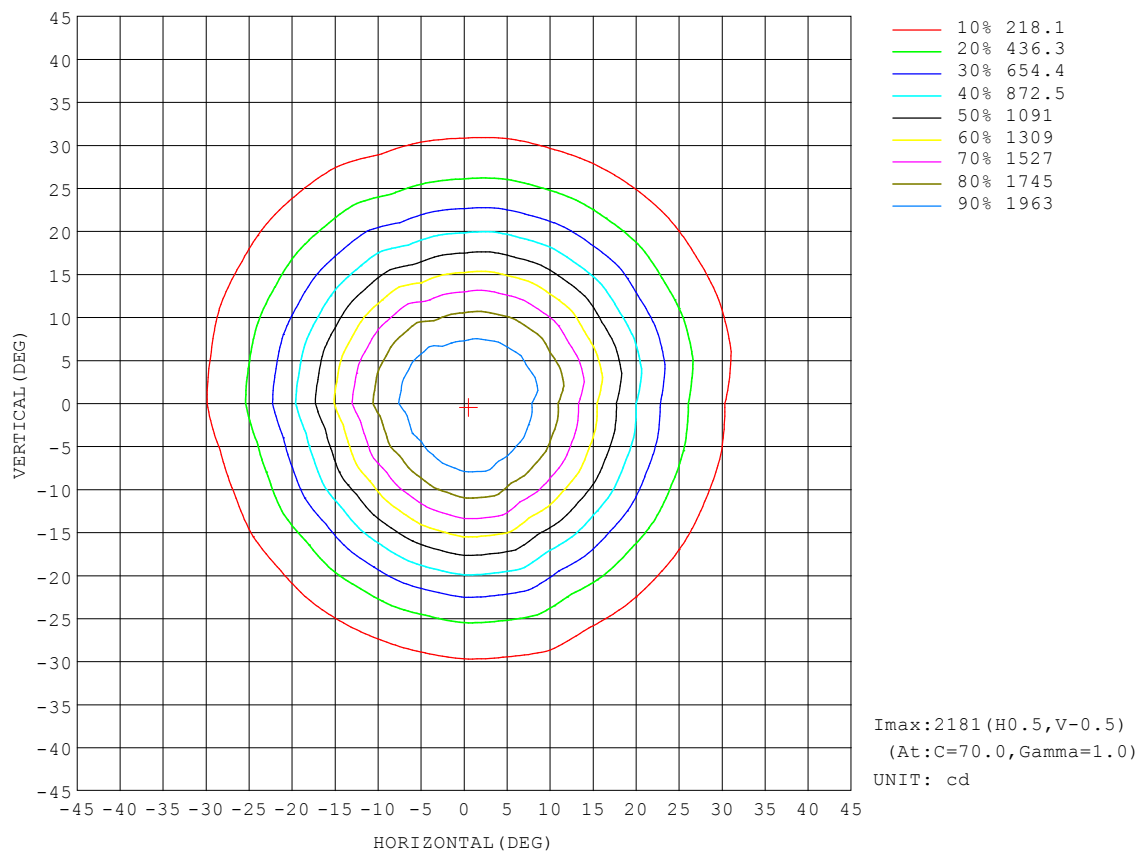
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	81	89	84	80	88	83	80	77
0.80	97	92	88	96	91	88	95	90	87	84
1.00	101	96	92	100	95	92	98	95	91	87
1.25	104	100	96	103	99	96	101	98	95	91
1.50	107	102	99	106	102	99	103	100	98	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	110	109	108	106	99
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 (8W, 36°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:

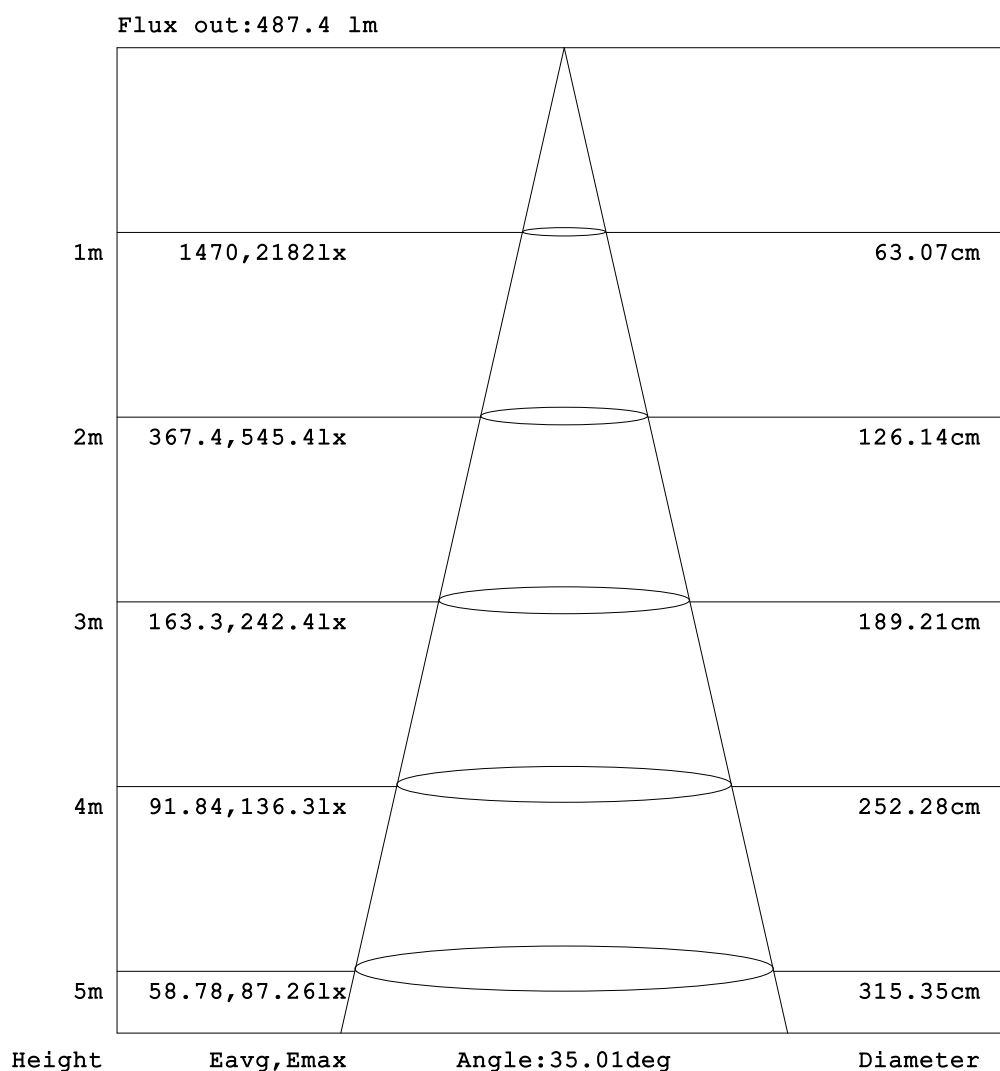


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-11-25

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 (8W, 36°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:



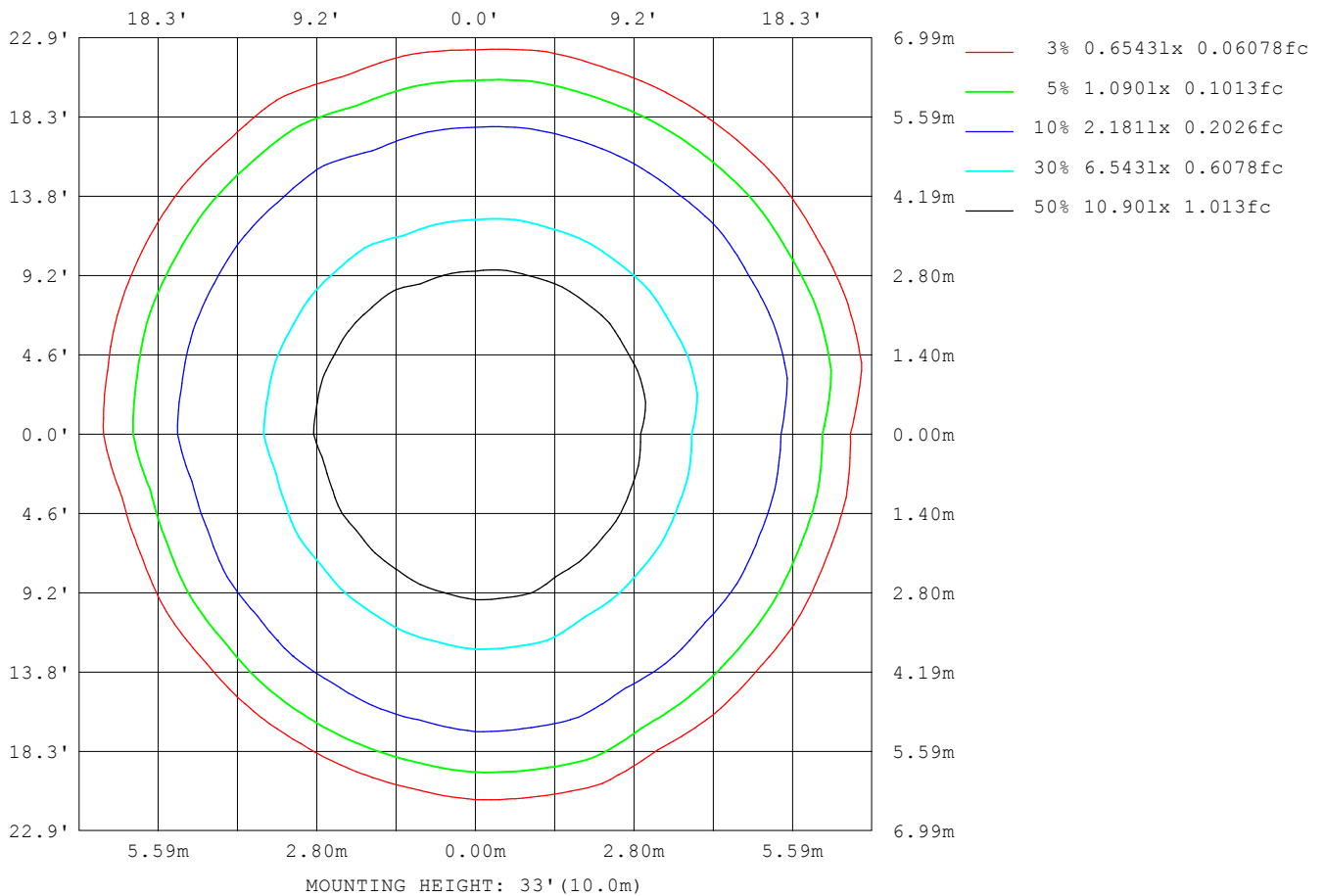
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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 (8W, 36°)	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 (8W, 36°)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Utopia Lighting	SUR.:	PROTECTION ANGLE:

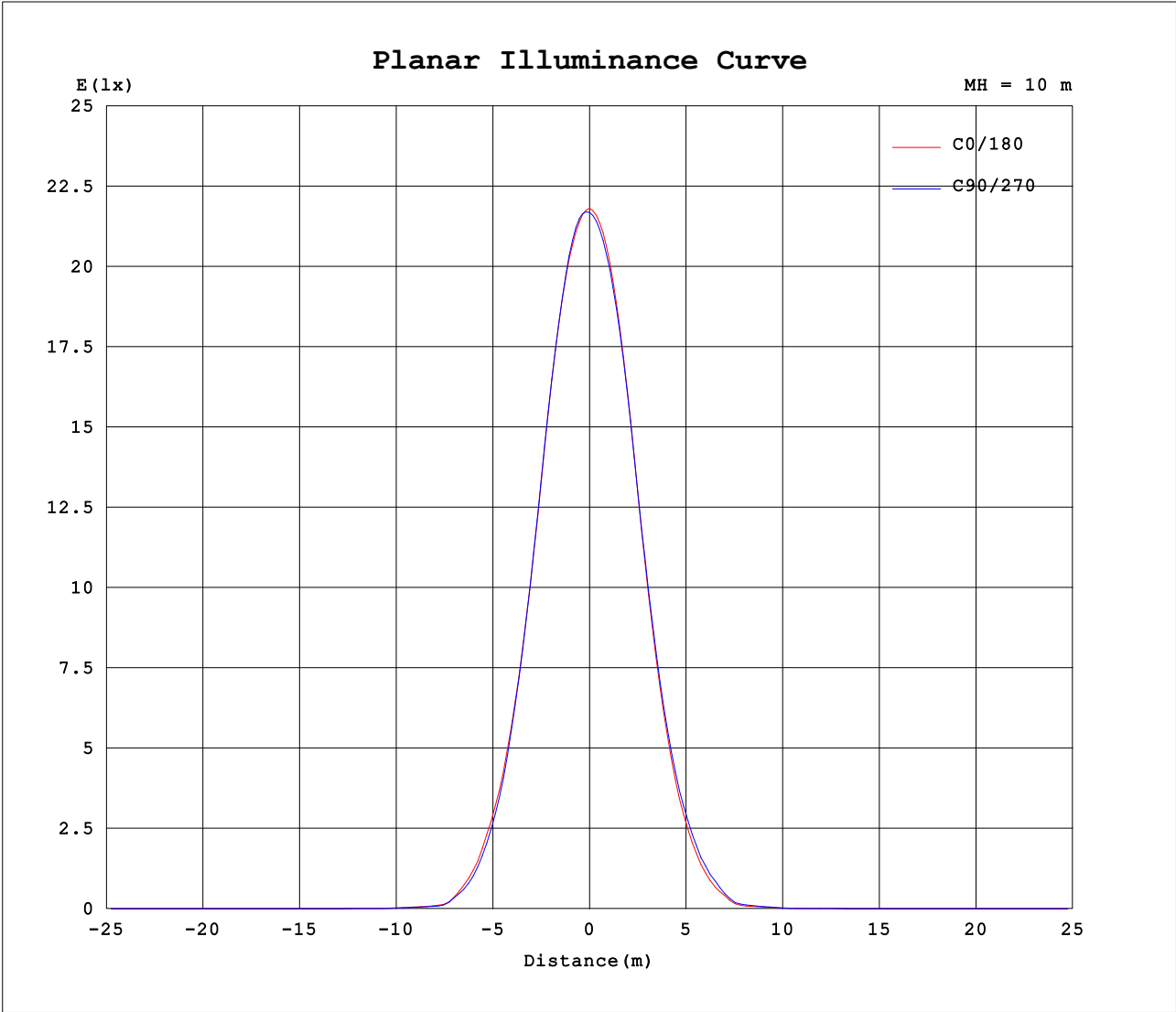
AvgL	cd/m2
L_0~180 (65) av	1140
L_0~180 (75) av	930
L_0~180 (85) av	487
L_90~270 (65) av	1122
L_90~270 (75) av	984
L_90~270 (85) av	674
L_45 (65) av	1122
L_45 (75) av	953
L_45 (85) av	450

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 (8W, 36°)	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	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175
5	2086	2092	2090	2096	2093	2100	2096	2123	2115	2112	2097	2092	2077	2070	2057	2066	2055	2056	2082
10	1814	1821	1812	1821	1808	1814	1802	1853	1835	1826	1796	1782	1752	1743	1718	1740	1722	1726	1790
15	1350	1361	1347	1358	1338	1349	1331	1401	1374	1366	1322	1306	1264	1254	1223	1244	1221	1230	1316
20	871	880	858	868	849	858	841	901	874	869	831	822	787	780	749	771	750	761	833
25	494	498	478	482	461	468	450	494	471	468	438	432	409	410	389	406	391	405	457
30	230	234	219	216	207	205	200	230	211	206	188	180	173	170	162	169	166	173	212
35	67.6	67.2	60.0	61.5	57.4	58.9	56.7	74.4	62.8	64.2	54.0	50.2	47.5	45.5	41.4	43.4	43.9	48.4	74.8
40	17.7	16.9	15.7	15.5	14.8	14.7	14.5	15.3	14.6	14.5	13.9	13.8	13.8	14.0	13.9	14.1	14.4	15.0	17.2
45	6.33	6.52	6.20	6.48	6.31	6.93	6.74	8.53	8.15	7.94	7.30	7.23	6.64	6.63	5.97	6.00	5.66	6.07	8.97
50	3.65	3.61	3.61	3.54	3.58	3.57	3.64	3.80	3.86	3.81	3.83	3.78	3.81	3.78	3.84	3.71	3.70	3.63	3.83
55	3.13	3.11	3.09	3.04	3.10	3.16	3.22	3.30	3.34	3.32	3.40	3.39	3.39	3.32	3.35	3.25	3.30	3.24	3.38
60	2.37	2.39	2.46	2.46	2.52	2.55	2.65	2.75	2.80	2.81	2.85	2.81	2.84	2.80	2.81	2.69	2.68	2.60	2.71
65	1.98	2.00	2.08	2.09	2.18	2.18	2.27	2.31	2.39	2.38	2.43	2.40	2.43	2.38	2.40	2.30	2.32	2.24	2.36
70	1.53	1.55	1.62	1.67	1.75	1.78	1.87	1.95	2.03	2.02	2.06	2.03	2.02	1.98	1.99	1.92	1.90	1.84	1.91
75	0.96	0.95	1.03	1.06	1.11	1.12	1.20	1.29	1.36	1.34	1.36	1.32	1.32	1.27	1.27	1.21	1.20	1.14	1.20
80	0.52	0.49	0.55	0.55	0.61	0.60	0.67	0.72	0.78	0.75	0.78	0.74	0.75	0.70	0.70	0.63	0.65	0.59	0.64
85	0.17	0.13	0.18	0.15	0.21	0.19	0.25	0.28	0.33	0.31	0.33	0.28	0.28	0.23	0.24	0.20	0.21	0.17	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	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	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.05	0.01	0.05	0.02	0.07	0.04	0.07	0.07	0.08	0.07	0.08	0.06	0.07	0.02	0.07	0.03	0.06	0.00
110	0.13	0.17	0.15	0.18	0.14	0.20	0.18	0.19	0.18	0.21	0.20	0.23	0.21	0.25	0.20	0.23	0.20	0.22	0.04
115	0.36	0.41	0.38	0.42	0.42	0.45	0.44	0.44	0.42	0.47	0.45	0.50	0.48	0.50	0.49	0.52	0.49	0.53	0.14
120	0.77	0.83	0.79	0.84	0.84	0.86	0.85	0.83	0.81	0.86	0.87	0.92	0.94	0.98	0.96	0.97	0.95	0.98	0.35
125	1.38	1.40	1.42	1.44	1.45	1.48	1.48	1.42	1.43	1.48	1.50	1.55	1.60	1.61	1.61	1.62	1.61	1.62	0.72
130	2.16	2.18	2.21	2.22	2.23	2.27	2.28	2.21	2.23	2.25	2.30	2.37	2.40	2.44	2.45	2.45	2.45	2.46	1.28
135	3.08	3.10	3.13	3.14	3.15	3.19	3.20	3.13	3.13	3.20	3.24	3.30	3.33	3.38	3.40	3.38	3.39	3.40	2.03
140	4.05	4.08	4.09	4.11	4.12	4.14	4.16	4.09	4.10	4.16	4.19	4.26	4.29	4.35	4.36	4.36	4.40	4.37	2.95
145	4.96	4.98	4.98	5.01	5.03	5.04	5.04	5.00	5.00	5.06	5.09	5.15	5.18	5.21	5.22	5.22	5.25	5.25	3.91
150	5.68	5.70	5.70	5.73	5.73	5.75	5.74	5.73	5.71	5.78	5.78	5.83	5.85	5.87	5.86	5.89	5.89	5.91	4.79
155	6.17	6.19	6.14	6.18	6.13	6.18	6.16	6.19	6.15	6.21	6.18	6.23	6.21	6.25	6.22	6.26	6.26	6.25	5.49
160	6.30	6.28	6.23	6.25	6.25	6.24	6.24	6.27	6.26	6.26	6.29	6.24	6.29	6.23	6.29	6.27	6.33	6.29	5.80
165	6.18	6.13	6.17	6.12	6.13	6.12	6.14	6.14	6.17	6.13	6.14	6.06	6.09	6.06	6.11	6.06	6.13	6.10	5.82
170	5.91	5.86	5.88	5.84	5.89	5.84	5.89	5.89	5.92	5.86	5.88	5.80	5.81	5.78	5.85	5.80	5.83	5.79	5.68
175	5.68	5.68	5.69	5.74	5.73	5.77	5.77	5.75	5.75	5.75	5.72	5.74	5.71	5.73	5.73	5.70	5.69	5.68	5.61
180	5.69	5.70	5.69	5.73	5.75	5.76	5.77	5.75	5.72	5.73	5.72	5.72	5.74	5.80	5.81	5.73	5.70	5.71	5.70

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 (8W, 36°)	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	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175	2175		
5	2076	2080	2075	2079	2076	2080	2060	2067	2069	2081	2087	2099	2103	2114	2106	2116	2116		
10	1781	1795	1787	1802	1796	1810	1762	1782	1791	1819	1828	1856	1862	1885	1867	1886	1880		
15	1306	1322	1313	1334	1330	1353	1295	1322	1331	1368	1379	1416	1423	1455	1429	1453	1443		
20	824	841	837	858	856	878	825	850	857	891	900	933	940	969	950	973	961		
25	455	471	469	487	486	506	469	490	494	520	524	544	549	573	558	575	565		
30	214	232	230	243	246	258	232	246	247	266	267	277	284	294	289	296	292		
35	71.9	84.8	83.5	94.1	97.1	102	79.5	90.0	87.4	103	99.8	106	111	116	112	114	109		
40	17.5	18.6	19.1	20.5	21.2	22.6	21.3	22.2	22.6	23.8	23.9	24.0	24.1	24.0	22.7	22.1	21.0		
45	8.41	8.89	8.93	9.57	9.16	9.81	6.38	6.80	7.09	9.86	10.3	9.95	10.3	11.3	10.9	11.3	10.5		
50	3.87	3.96	3.98	3.98	4.01	3.95	3.93	4.03	4.21	4.76	4.71	4.26	3.97	3.92	3.85	3.79	3.80		
55	3.42	3.43	3.47	3.47	3.54	3.37	3.28	3.22	3.37	3.84	3.96	3.40	3.22	3.16	3.12	3.11	3.18		
60	2.72	2.66	2.69	2.61	2.61	2.50	2.42	2.32	2.34	2.25	2.28	2.24	2.30	2.31	2.34	2.36	2.39		
65	2.33	2.23	2.22	2.11	2.08	2.02	1.95	1.87	1.89	1.83	1.87	1.83	1.88	1.86	1.89	1.88	1.96		
70	1.92	1.86	1.83	1.74	1.71	1.64	1.57	1.51	1.52	1.49	1.51	1.50	1.54	1.52	1.57	1.56	1.62		
75	1.20	1.15	1.16	1.09	1.10	1.03	0.99	0.93	0.96	0.93	0.95	0.93	0.97	0.94	0.98	0.97	1.02		
80	0.67	0.63	0.64	0.59	0.61	0.56	0.56	0.50	0.54	0.49	0.53	0.50	0.54	0.50	0.54	0.51	0.56		
85	0.24	0.20	0.24	0.11	0.10	0.16	0.21	0.17	0.22	0.16	0.20	0.16	0.20	0.16	0.19	0.15	0.20		
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	0.01	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	0.01	0.00	0.03	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00		
110	0.00	0.03	0.01	0.03	0.00	0.04	0.01	0.05	0.01	0.05	0.00	0.05	0.00	0.02	0.00	0.03	0.00		
115	0.09	0.14	0.08	0.12	0.08	0.12	0.12	0.15	0.10	0.14	0.09	0.10	0.07	0.10	0.07	0.11	0.08		
120	0.31	0.34	0.29	0.32	0.27	0.31	0.30	0.32	0.28	0.30	0.27	0.28	0.23	0.27	0.23	0.27	0.23		
125	0.69	0.69	0.66	0.66	0.65	0.66	0.68	0.69	0.63	0.64	0.59	0.61	0.58	0.58	0.57	0.57	0.56		
130	1.25	1.25	1.23	1.22	1.20	1.22	1.29	1.27	1.23	1.20	1.16	1.15	1.10	1.08	1.08	1.08	1.07		
135	2.00	2.00	1.98	1.98	1.95	1.96	2.04	2.03	1.98	1.94	1.89	1.85	1.79	1.78	1.78	1.78	1.78		
140	2.93	2.91	2.89	2.88	2.86	2.86	2.96	2.93	2.90	2.86	2.78	2.75	2.72	2.66	2.68	2.66	2.66		
145	3.88	3.87	3.86	3.83	3.81	3.81	3.91	3.89	3.84	3.81	3.74	3.71	3.65	3.62	3.63	3.64	3.63		
150	4.76	4.75	4.72	4.71	4.69	4.69	4.78	4.76	4.73	4.70	4.63	4.61	4.56	4.55	4.55	4.56	4.55		
155	5.45	5.43	5.38	5.39	5.36	5.37	5.42	5.43	5.39	5.39	5.36	5.34	5.29	5.31	5.30	5.33	5.32		
160	5.77	5.75	5.72	5.71	5.69	5.73	5.72	5.74	5.73	5.76	5.72	5.75	5.71	5.75	5.73	5.78	5.77		
165	5.82	5.77	5.73	5.73	5.76	5.73	5.72	5.74	5.74	5.76	5.79	5.77	5.78	5.79	5.82	5.85	5.87		
170	5.71	5.67	5.69	5.66	5.65	5.60	5.64	5.63	5.69	5.67	5.72	5.71	5.75	5.71	5.75	5.74	5.80		
175	5.61	5.64	5.63	5.66	5.66	5.63	5.59	5.61	5.60	5.64	5.67	5.70	5.70	5.69	5.64	5.66	5.67		
180	5.69	5.70	5.74	5.76	5.75	5.76	5.71	5.72	5.71	5.73	5.73	5.77	5.81	5.80	5.71	5.72	5.70		

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: