

10W

LumCAT: 10W	Luminaire: LED STRIP LIGHT
Report No:	Voltage(V): 12.000
Test No:	Current(A): 0.800
LampCAT: LED	Power (W): 9.600
Lamp flux(lm)	PF: 1.000
Number of Lamps: 1	Ballast type:
Length(mm): 1000	Width(mm): 2
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 770.21
Lumens(lm)/Power(W): 80.23
Central intensity(cd): 225.446
Maximum intensity(cd): 229.164
Angle of maximum intensity: C=150.0 γ =10.0
Beam Angle(50%Imax): [H]Left=56.2 Right=66.4
 [V]Left=57.3 Right=62.8
Field angle(10%Imax): [H]Left=83.8 Right=90.0
 [V]Left=78.4 Right=87.1
Beam angle of C150plane: 120.31

Equipment: GMS1800B
Temperature(°C): 25.0

Date:
Humidity(%): 60.0%

Operator:
Distance(m): 13.00

10W

Zonal flux distribution table

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	216.940	.000	.000	.000%	.000%
5.0	216.447	5.181	5.181	.673%	.673%
10.0	214.574	15.419	20.600	2.002%	2.675%
15.0	211.236	25.259	45.859	3.279%	5.954%
20.0	206.434	34.422	80.281	4.469%	10.423%
25.0	200.152	42.643	122.924	5.537%	15.960%
30.0	192.266	49.661	172.585	6.448%	22.408%
35.0	182.605	55.202	227.787	7.167%	29.575%
40.0	171.732	59.118	286.905	7.676%	37.250%
45.0	159.522	61.334	348.240	7.963%	45.214%
50.0	145.425	61.619	409.859	8.000%	53.214%
55.0	129.848	59.853	469.712	7.771%	60.985%
60.0	113.582	56.268	525.980	7.306%	68.291%
65.0	96.316	51.027	577.007	6.625%	74.916%
70.0	77.444	43.997	621.004	5.712%	80.628%
75.0	58.882	35.634	656.638	4.627%	85.255%
80.0	41.912	26.970	683.608	3.502%	88.757%
85.0	28.124	19.031	702.638	2.471%	91.227%
90.0	17.984	12.625	715.263	1.639%	92.867%
95.0	10.619	7.832	723.095	1.017%	93.883%
100.0	9.591	5.491	728.586	.713%	94.596%
105.0	6.605	4.334	732.920	.563%	95.159%
110.0	8.197	3.869	736.789	.502%	95.661%
115.0	10.140	4.643	741.432	.603%	96.264%
120.0	8.253	4.471	745.903	.581%	96.845%
125.0	7.661	3.679	749.582	.478%	97.322%
130.0	7.309	3.255	752.837	.423%	97.745%
135.0	6.126	2.715	755.552	.352%	98.097%
140.0	6.788	2.391	757.943	.310%	98.408%
145.0	6.732	2.256	760.199	.293%	98.701%
150.0	6.957	2.016	762.214	.262%	98.962%
155.0	8.281	1.928	764.143	.250%	99.213%
160.0	10.140	1.932	766.075	.251%	99.464%
165.0	11.464	1.780	767.855	.231%	99.695%
170.0	11.013	1.333	769.189	.173%	99.868%
175.0	10.464	.768	769.957	.100%	99.968%
180.0	10.365	.249	770.206	.032%	100.000%

Equipment: GMS1800B
 Temperature($^{\circ}$ C): 25.0

Date:
 Humidity(%): 60.0%

Operator:
 Distance(m): 13.00

Zonal flux distribution table**ZONAL LUMEN SUMMARY**

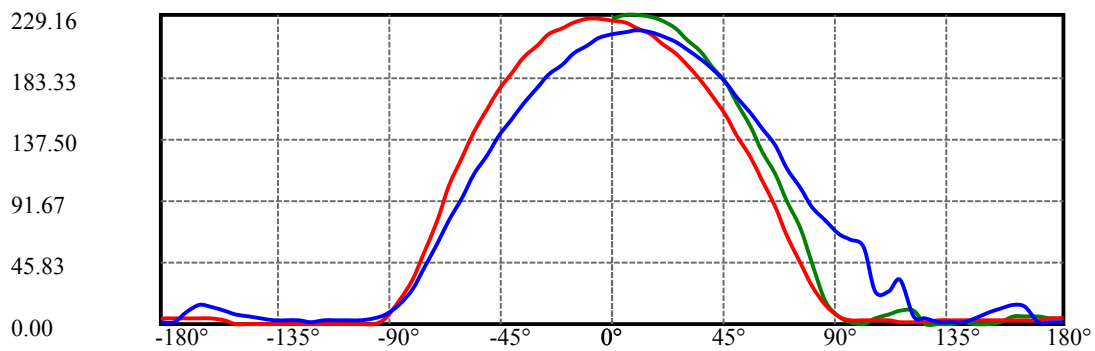
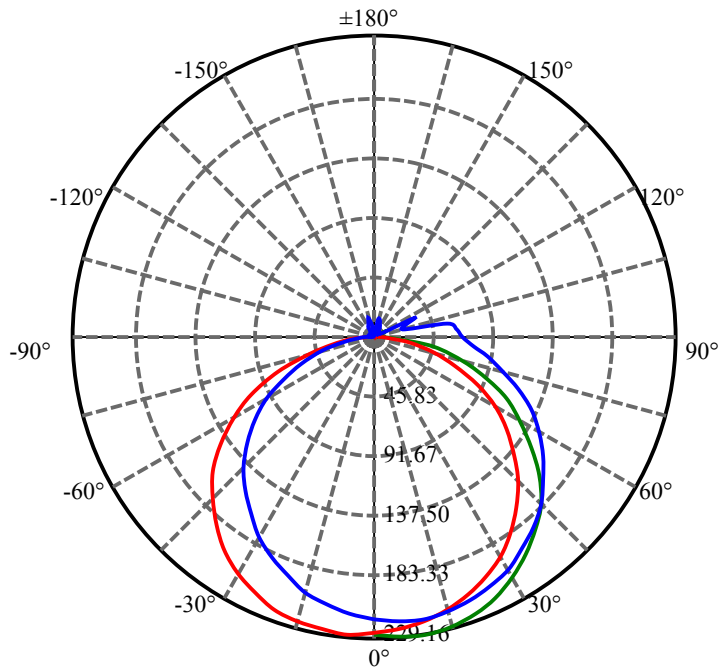
Zone	Lumens	%Fixt
0-30	172.58	22.41%
0-40	286.91	37.25%
0-60	525.98	68.29%
0-90	715.26	92.87%
90-120	30.64	3.98%
90-130	37.57	4.88%
90-150	46.95	6.10%
90-180	54.69	7.10%
0-180	770.21	100.00%

ZONAL LUMEN SUMMARY

0-10	20.60
10-20	59.68
20-30	92.30
30-40	114.32
40-50	122.95
50-60	116.12
60-70	95.02
70-80	62.60
80-90	31.66
90-100	13.32
100-110	8.20
110-120	9.11
120-130	6.93
130-140	5.11
140-150	4.27
150-160	3.86
160-170	3.11
170-180	0.77

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Light Distribution Curve [Unit: cd]



C150(Max): —
C0/C180: —
C90/C270: —

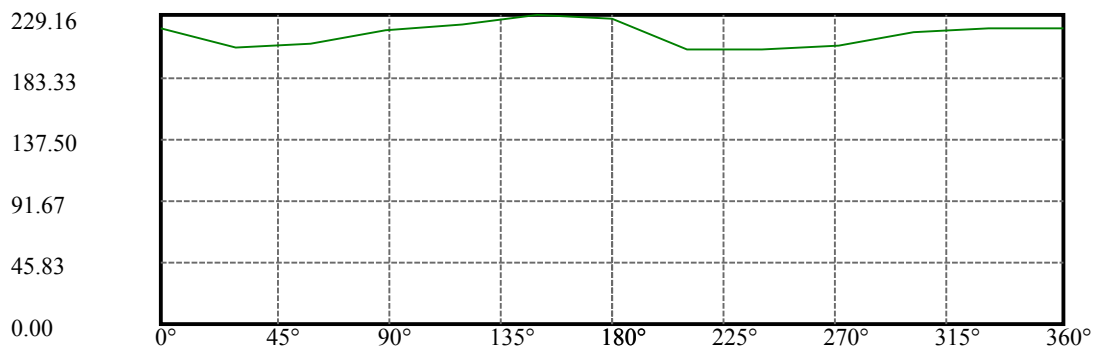
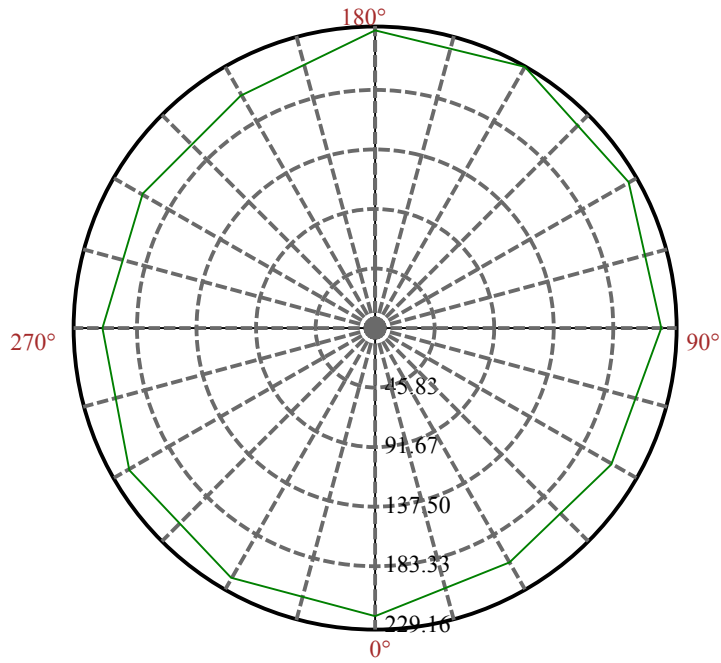
Equipment: GMS1800B
Temperature(°C): 25.0

Date:
Humidity(%): 60.0%

Operator:
Distance(m): 13.00

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Light Distribution Curve [Unit: cd]



MaxG=10

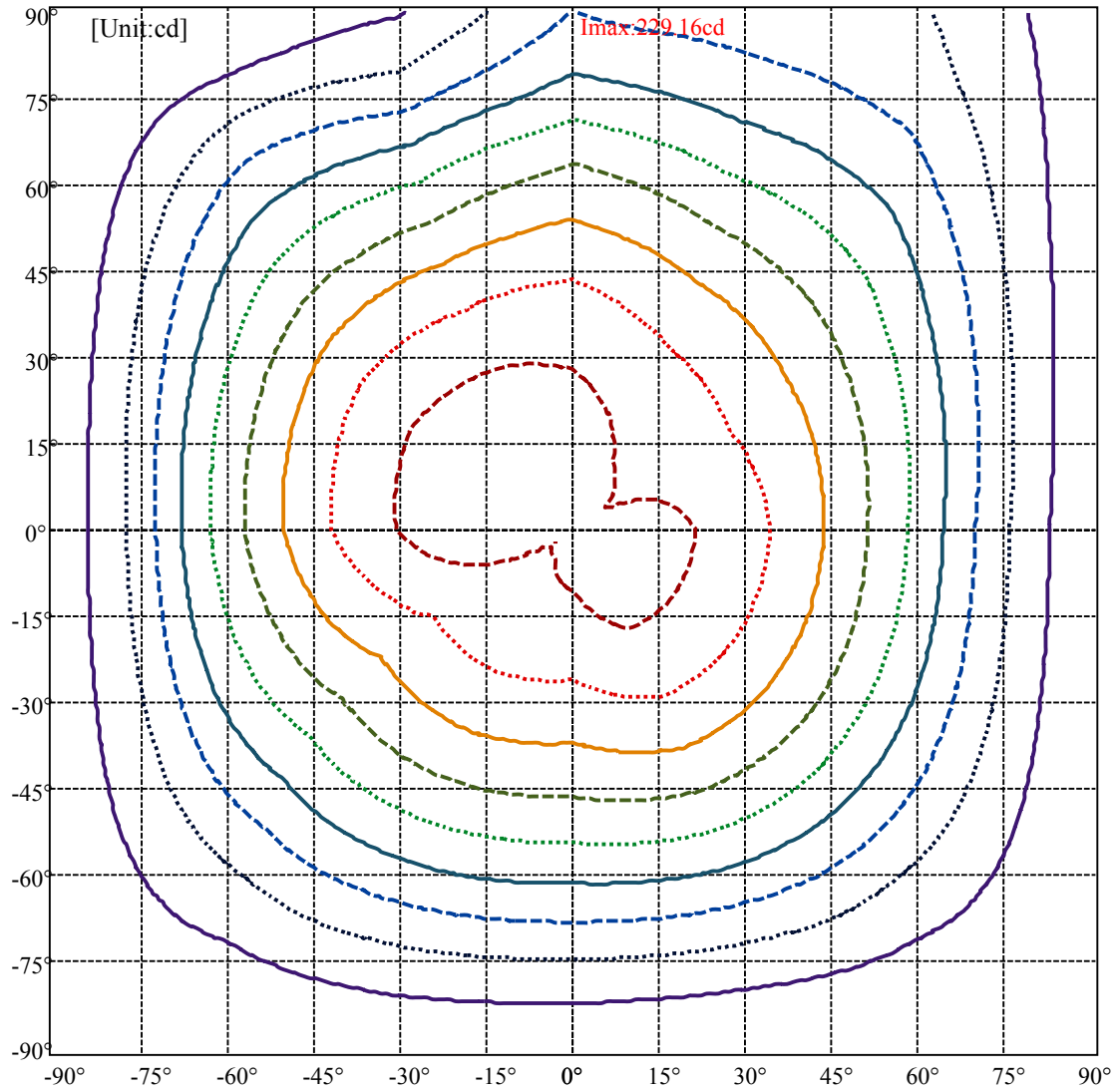
Equipment: GMS1800B
Temperature(°C): 25.0

Date:
Humidity(%): 60.0%

Operator:
Distance(m): 13.00

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ISO-Intensity(V-H)



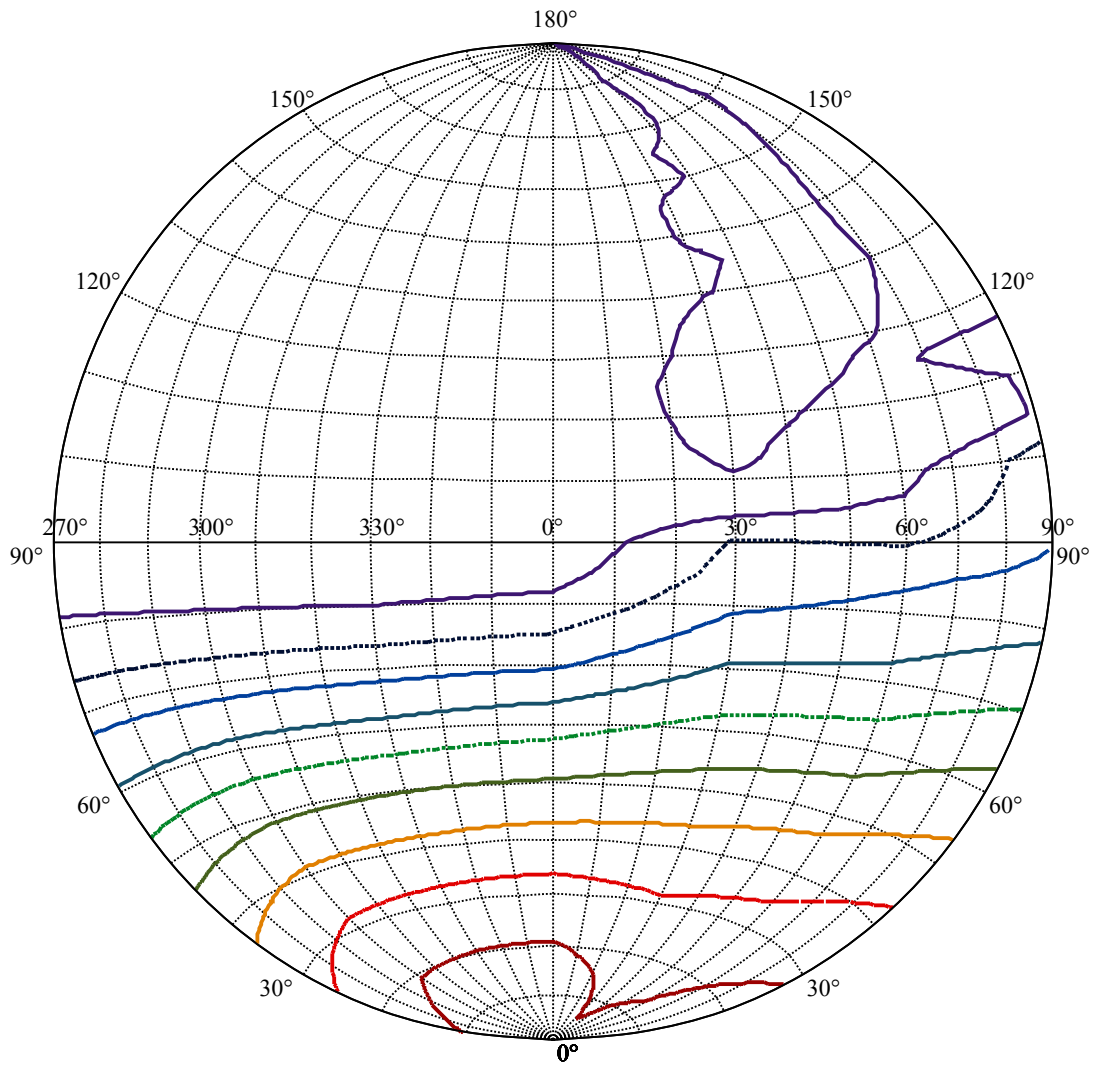
(10%Imax)	22.8994	———
(20%Imax)	45.7989
(30%Imax)	68.6983	- - - - -
(40%Imax)	91.5978	—————
(50%Imax)	114.497
(60%Imax)	137.397	- - - - -
(70%Imax)	160.296	—————
(80%Imax)	183.196
(90%Imax)	206.095	- - - - -

Equipment: GMS1800B
Temperature(°C): 25.0

Date:
Humidity(%): 60.0%

Operator:
Distance(m): 13.00

ISO candela diagram on circular web



House

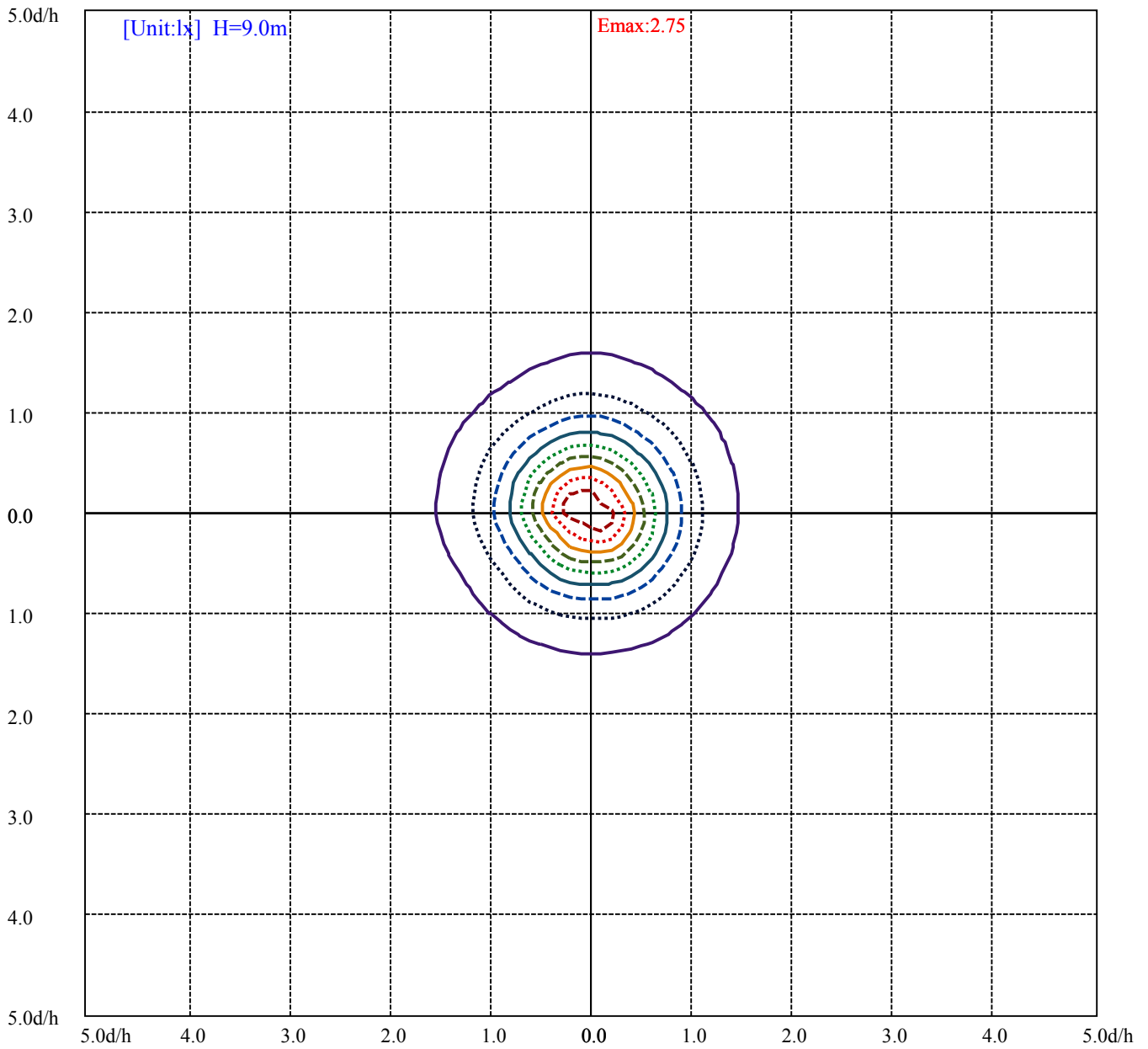
Road

I_{max}:229.16cd

(10%I _{max}) 22.9164	—
(20%I _{max}) 45.8328	·····
(30%I _{max}) 68.7492	- - - - -
(40%I _{max}) 91.6656	—
(50%I _{max}) 114.582	·····
(60%I _{max}) 137.498	- - - - -
(70%I _{max}) 160.415	—
(80%I _{max}) 183.331	·····
(90%I _{max}) 206.248	- - - - -

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ISO illuminance diagram



- (10%Emax) 0.2753457 ————
- (20%Emax) 0.5506914 ······
- (30%Emax) 0.826037 - - - -
- (40%Emax) 1.101381 ————
- (50%Emax) 1.376728 ······
- (60%Emax) 1.652074 - - - -
- (70%Emax) 1.92742 ————
- (80%Emax) 2.202765 ······
- (90%Emax) 2.478111 - - - -

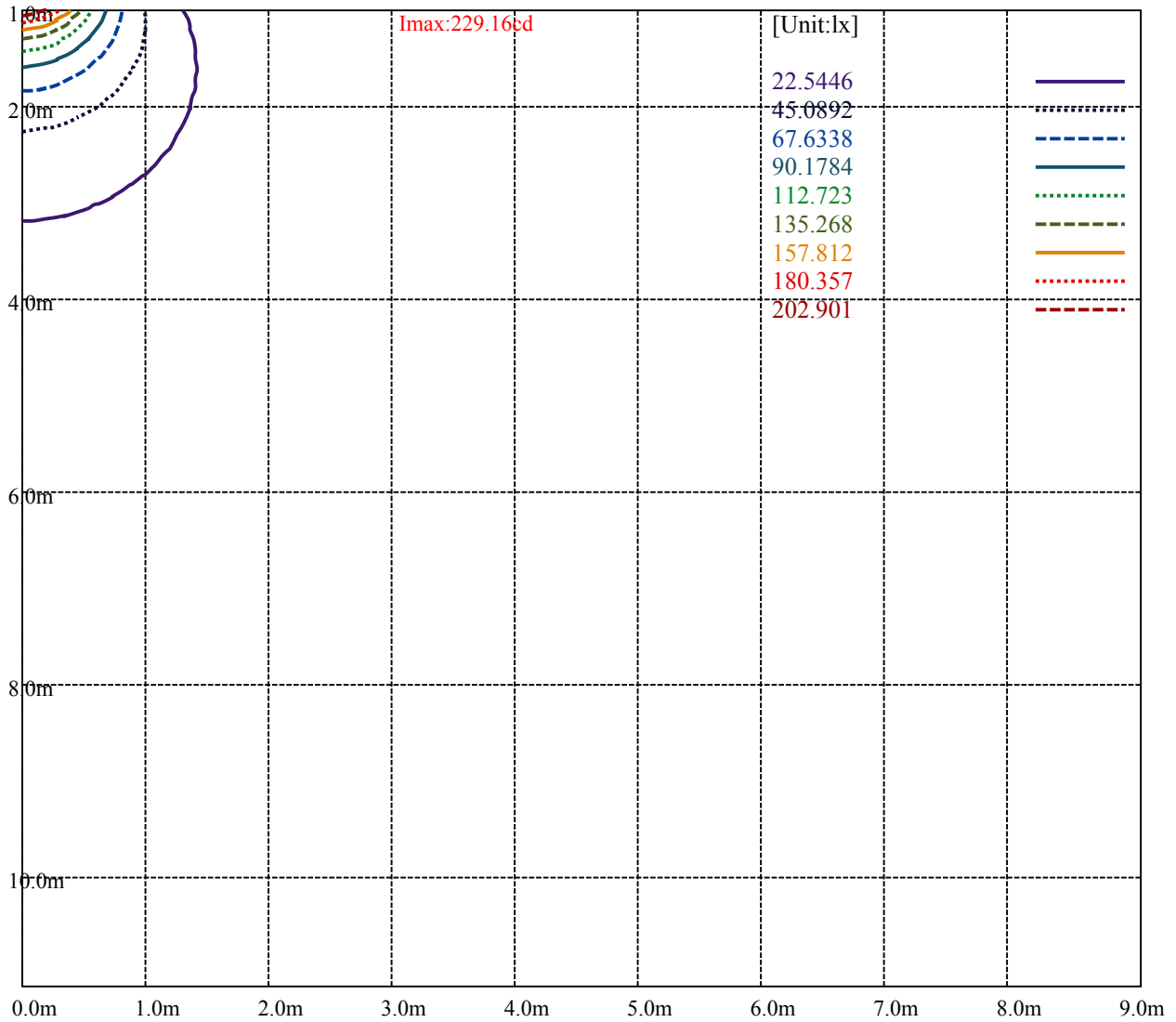
Equipment: GMS1800B
Temperature(°C): 25.0

Date:
Humidity(%): 60.0%

Operator:
Distance(m): 13.00

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Space ISO Lux diagram



Equipment: GMS1800B
Temperature(°C): 25.0

Date:
Humidity(%): 60.0%

Operator:
Distance(m): 13.00

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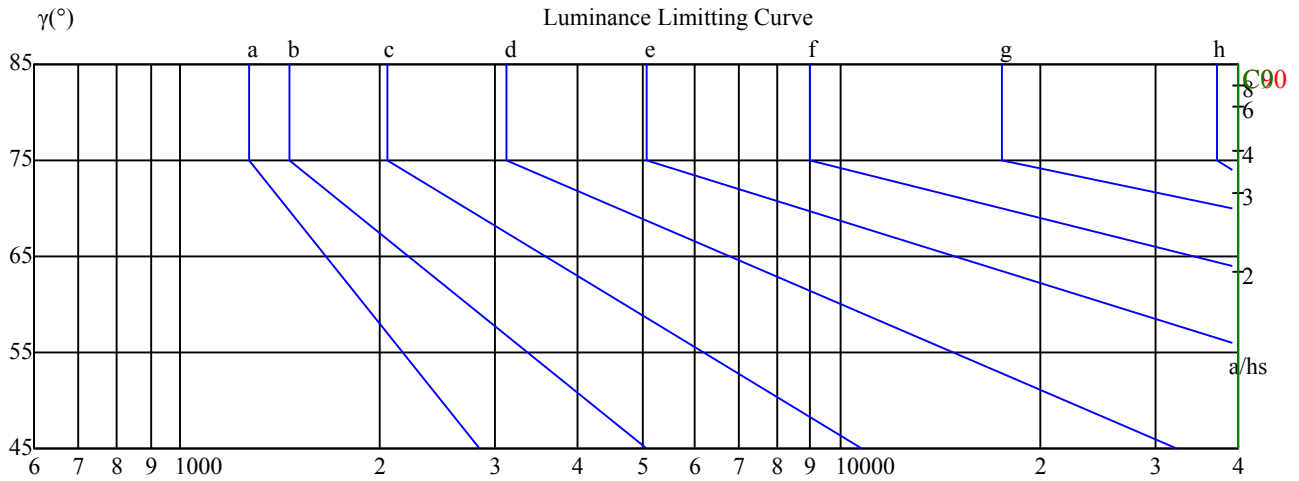
Luminance Limiting Curve(no luminous side)

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	109941	108716	107397	106301	102171	95366	89130	80778	84349
C45	0	0	0	0	0	0	0	0	0
C90	126910	130670	136714	145002	156356	169484	195237	250121	437257

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



Equipment: GMS1800B
 Temperature(°C): 25.0

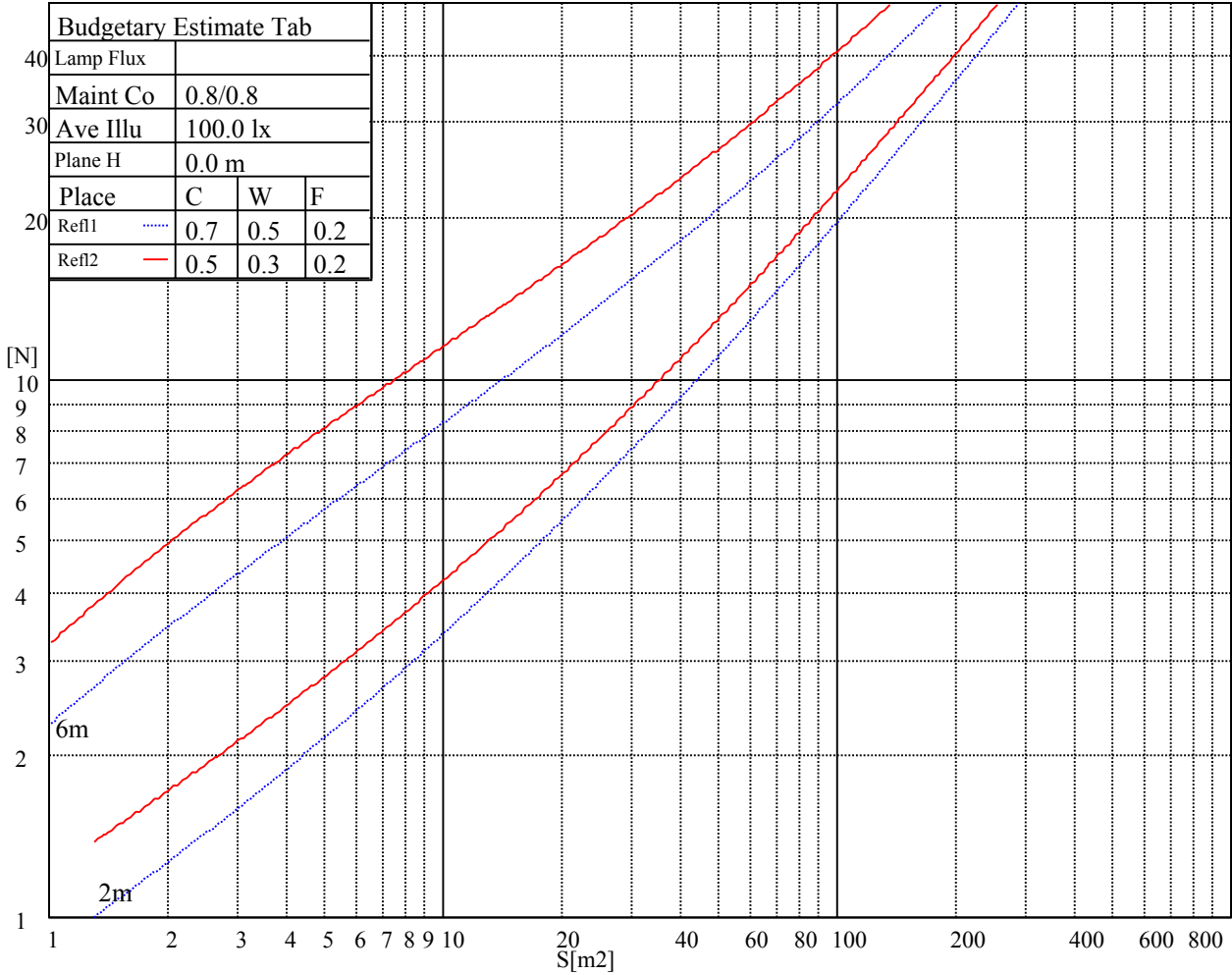
Date:
 Humidity(%): 60.0%

Operator:
 Distance(m): 13.00

UGR Glare

Illuminatin assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	29.6	31.0	30.0	31.4	31.8	30.6	32.0	31.0	32.3	32.7
	3H	31.4	32.7	31.9	33.1	33.5	33.1	34.3	33.5	34.7	35.1
	4H	32.0	33.0	32.5	33.5	34.0	34.2	35.2	34.7	35.7	36.2
	6H	32.7	33.7	33.2	34.1	34.6	35.7	36.7	36.2	37.1	37.6
	8H	32.9	34.0	33.4	34.4	34.9	36.5	37.5	37.0	38.0	38.5
	12H	32.9	33.7	33.5	34.2	34.8	37.2	38.0	37.7	38.5	39.1
4H	2H	30.4	31.5	30.9	31.9	32.4	31.1	32.2	31.6	32.6	33.1
	3H	32.5	33.3	33.1	33.8	34.4	33.8	34.6	34.3	35.1	35.6
	4H	33.6	34.4	34.1	34.9	35.5	35.3	36.1	35.9	36.6	37.2
	6H	34.5	35.3	35.0	35.8	36.4	37.0	37.8	37.5	38.3	38.8
	8H	34.7	35.1	35.3	35.7	36.4	37.7	38.2	38.3	38.8	39.4
	12H	35.0	35.4	35.6	36.0	36.7	38.8	39.2	39.4	39.8	40.5
8H	4H	34.3	34.8	34.9	35.4	36.0	35.7	36.2	36.3	36.8	37.4
	6H	35.6	36.1	36.2	36.6	37.3	37.6	38.1	38.2	38.7	39.3
	8H	36.2	36.7	36.8	37.3	37.9	38.7	39.2	39.3	39.8	40.4
	12H	36.7	37.2	37.4	37.8	38.5	40.0	40.5	40.6	41.1	41.7
12H	4H	34.5	35.0	35.1	35.6	36.3	35.8	36.3	36.4	36.9	37.5
	6H	36.0	36.5	36.6	37.0	37.7	37.8	38.3	38.4	38.9	39.5
	8H	36.8	37.2	37.4	37.8	38.5	39.0	39.5	39.6	40.1	40.8
Variation with the observer position at spacings:											
S = 1.0H		0.2/-0.7					0.2/-1.1				
S = 1.5H		0.4/-0.6					0.4/-1.0				
S = 2.0H		0.3/-0.7					0.2/-0.7				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		19.7					22.1				
According 1000lm											

Budgetary Estimate Table



Utilization factor table for indoor luminaire

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOF=20 CU															
0	1.17	1.17	1.17	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	0.95	0.95	0.95	0.93
1	1.00	0.96	0.91	0.97	0.93	0.89	0.92	0.88	0.85	0.87	0.84	0.81	0.82	0.80	0.78	0.75
2	0.87	0.79	0.73	0.84	0.77	0.72	0.79	0.74	0.69	0.75	0.70	0.66	0.71	0.67	0.64	0.61
3	0.76	0.67	0.60	0.73	0.66	0.59	0.69	0.63	0.57	0.66	0.60	0.55	0.62	0.57	0.53	0.51
4	0.67	0.57	0.50	0.65	0.56	0.50	0.61	0.54	0.48	0.58	0.52	0.47	0.55	0.50	0.45	0.43
5	0.59	0.50	0.43	0.58	0.49	0.43	0.55	0.47	0.41	0.52	0.45	0.40	0.49	0.44	0.39	0.37
6	0.53	0.44	0.37	0.52	0.43	0.37	0.49	0.42	0.36	0.47	0.40	0.35	0.45	0.39	0.34	0.32
7	0.48	0.39	0.33	0.47	0.38	0.32	0.45	0.37	0.32	0.43	0.36	0.31	0.41	0.35	0.30	0.28
8	0.44	0.35	0.29	0.43	0.35	0.29	0.41	0.33	0.28	0.39	0.32	0.28	0.37	0.31	0.27	0.25
9	0.40	0.32	0.26	0.39	0.31	0.26	0.37	0.30	0.25	0.36	0.29	0.25	0.34	0.29	0.24	0.22
10	0.37	0.29	0.23	0.36	0.28	0.23	0.35	0.28	0.23	0.33	0.27	0.22	0.32	0.26	0.22	0.20
RCR	COEFFICIENTS OF UTILIZATION RHOF=20 WLC															
1	0.34	0.19	0.06	0.33	0.19	0.06	0.32	0.18	0.06	0.30	0.17	0.06	0.28	0.17	0.05	
2	0.31	0.17	0.05	0.30	0.17	0.05	0.29	0.16	0.05	0.27	0.15	0.05	0.26	0.15	0.05	
3	0.28	0.15	0.05	0.28	0.15	0.04	0.26	0.14	0.04	0.25	0.14	0.04	0.24	0.13	0.04	
4	0.26	0.13	0.04	0.25	0.13	0.04	0.24	0.13	0.04	0.23	0.12	0.04	0.22	0.12	0.04	
5	0.24	0.12	0.03	0.23	0.12	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.20	0.11	0.03	
6	0.22	0.11	0.03	0.21	0.11	0.03	0.20	0.10	0.03	0.19	0.10	0.03	0.18	0.10	0.03	
7	0.20	0.10	0.03	0.20	0.10	0.03	0.19	0.10	0.03	0.18	0.09	0.03	0.17	0.09	0.03	
8	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.02	0.16	0.08	0.02	
9	0.18	0.09	0.02	0.17	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	
10	0.17	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.15	0.07	0.02	0.14	0.07	0.02	
RCR	COEFFICIENTS OF UTILIZATION RHOF=20 CCLU															
0	0.24	0.24	0.24	0.21	0.21	0.21	0.14	0.14	0.14	0.08	0.08	0.08	0.03	0.03	0.03	
1	0.20	0.19	0.18	0.18	0.17	0.16	0.13	0.12	0.11	0.08	0.07	0.06	0.03	0.02	0.02	
2	0.17	0.16	0.14	0.16	0.14	0.12	0.12	0.10	0.09	0.07	0.06	0.05	0.03	0.02	0.02	
3	0.15	0.13	0.12	0.14	0.12	0.10	0.11	0.09	0.07	0.07	0.06	0.05	0.03	0.02	0.02	
4	0.14	0.12	0.10	0.13	0.11	0.09	0.10	0.08	0.07	0.07	0.05	0.04	0.02	0.02	0.01	
5	0.13	0.11	0.09	0.12	0.10	0.08	0.10	0.08	0.06	0.07	0.05	0.04	0.02	0.02	0.01	
6	0.12	0.10	0.08	0.11	0.09	0.07	0.09	0.07	0.05	0.06	0.05	0.03	0.02	0.02	0.01	
7	0.11	0.09	0.08	0.11	0.09	0.07	0.09	0.07	0.05	0.06	0.04	0.03	0.02	0.02	0.01	
8	0.11	0.09	0.07	0.10	0.08	0.07	0.09	0.07	0.05	0.06	0.04	0.03	0.02	0.02	0.01	
9	0.10	0.08	0.07	0.10	0.08	0.06	0.08	0.06	0.05	0.06	0.04	0.03	0.02	0.02	0.01	
10	0.10	0.08	0.07	0.10	0.08	0.06	0.08	0.06	0.05	0.06	0.04	0.03	0.02	0.01	0.01	

Equipment: GMS1800B
 Temperature(°C): 25.0

Date:
 Humidity(%): 60.0%

Operator:
 Distance(m): 13.00

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	225.45	223.42	219.36	214.29	207.70	200.60	191.48	181.00	168.83
30.0	206.35	206.35	204.83	202.29	198.07	192.66	185.73	177.28	168.49
60.0	208.04	208.04	207.70	205.67	202.12	197.39	191.14	183.20	174.24
90.0	214.80	216.49	217.17	216.15	213.45	208.88	203.48	196.55	188.60
120.0	220.71	221.73	221.90	220.38	217.84	213.11	207.19	197.56	186.75
150.0	226.29	228.83	229.16	227.64	224.26	218.52	210.24	201.45	190.97
180.0	225.45	226.46	225.95	223.59	219.87	214.29	206.69	197.56	186.58
210.0	206.35	205.67	203.48	199.93	194.52	188.10	179.65	168.49	157.68
240.0	208.04	206.69	203.65	199.93	194.18	187.25	178.63	168.32	156.16
270.0	214.80	211.42	206.69	200.27	192.83	184.55	175.08	163.76	152.10
300.0	220.71	219.02	215.81	211.25	205.34	197.39	187.76	177.11	164.10
330.0	226.29	223.25	219.19	213.45	207.03	199.08	190.13	178.97	166.30
360.0	225.45	223.42	219.36	214.29	207.70	200.60	191.48	181.00	168.83
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	155.48	139.76	123.20	106.30	86.36	65.23	46.14	28.05	14.70
30.0	158.18	146.35	134.02	121.34	107.65	93.63	79.26	65.23	53.91
60.0	164.10	152.78	139.93	127.43	113.06	98.53	86.36	74.87	64.90
90.0	179.48	167.99	156.83	145.00	132.16	115.93	101.06	86.87	76.22
120.0	174.75	159.54	143.14	125.57	108.33	87.88	65.40	46.64	32.79
150.0	178.97	164.10	146.69	128.78	111.54	91.77	71.66	45.46	17.07
180.0	174.24	159.71	142.64	123.71	103.09	76.90	52.05	33.29	17.75
210.0	145.00	130.64	114.08	97.51	79.26	60.50	40.73	23.66	9.46
240.0	142.97	128.27	112.39	96.16	78.42	59.83	42.25	26.20	14.03
270.0	139.43	125.91	110.36	93.80	76.39	59.66	41.24	25.86	14.87
300.0	149.73	133.51	116.61	98.19	79.09	59.15	40.22	23.83	11.32
330.0	151.93	136.55	118.30	99.20	80.44	60.33	40.22	22.98	10.48
360.0	155.48	139.76	123.20	106.30	86.36	65.23	46.14	28.05	14.70
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	6.25	3.38	3.38	3.38	2.87	1.52	1.86	2.03	2.20
30.0	47.83	17.24	21.13	29.07	33.46	36.84	31.10	27.89	22.14
60.0	43.43	25.69	16.39	0.85	10.99	18.76	24.34	27.89	32.45
90.0	67.60	62.36	56.45	24.17	24.51	33.29	5.92	4.06	1.35
120.0	18.25	7.77	11.15	11.49	12.34	12.68	16.73	17.91	15.55
150.0	5.41	0.85	0.17	3.72	6.93	10.14	9.80	0.68	0.68
180.0	4.06	-0.17	-0.17	0.17	0.00	0.00	0.17	0.17	0.34
210.0	2.03	0.17	0.68	0.34	0.68	1.18	1.18	0.85	0.34
240.0	5.24	1.35	0.17	0.85	0.85	1.18	1.52	2.37	3.72
270.0	7.61	4.39	2.37	2.20	2.37	2.20	1.86	2.20	2.20
300.0	4.06	1.86	1.18	1.35	2.03	2.54	3.04	4.06	4.90
330.0	4.06	2.54	2.20	1.69	1.35	1.35	1.52	1.86	1.86
360.0	6.25	3.38	3.38	3.38	2.87	1.52	1.86	2.03	2.20
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	2.54	2.54	2.54	3.04	3.04	2.87	2.70	3.04	4.23
30.0	20.96	24.17	24.84	20.62	22.14	18.59	19.77	20.45	19.44
60.0	29.58	28.90	28.90	28.90	28.90	28.73	26.87	28.73	27.89
90.0	1.35	1.52	4.06	8.28	11.49	14.37	13.01	1.01	1.18
120.0	0.68	0.68	0.68	0.68	4.06	14.37	13.35	12.00	10.99
150.0	0.17	0.85	0.51	0.51	2.03	5.41	5.24	5.24	4.90
180.0	0.51	0.68	0.68	0.68	2.54	3.72	4.90	4.56	4.56
210.0	0.34	0.34	0.68	0.51	1.69	6.59	11.49	13.52	14.53
240.0	6.59	7.44	0.85	0.68	0.68	1.69	12.68	21.63	23.15
270.0	2.87	4.23	5.75	7.61	10.14	12.34	14.37	8.96	1.18
300.0	6.08	7.77	8.62	8.96	9.13	9.46	9.30	8.79	9.13
330.0	1.86	2.37	2.70	3.04	3.55	3.55	3.89	4.23	4.39
360.0	2.54	2.54	2.54	3.04	3.04	2.87	2.70	3.04	4.23

Equipment: GMS1800B
Temperature(°C): 25.0

Date:
Humidity(%): 60.0%

Operator:
Distance(m): 13.00

10W

Intensity data(cd)

C/ γ ($^{\circ}$)	180.0
0.0	4.23
30.0	16.22
60.0	25.86
90.0	1.18
120.0	10.14
150.0	4.56
180.0	4.23
210.0	16.22
240.0	25.86
270.0	1.18
300.0	10.14
330.0	4.56
360.0	4.23

Equipment: GMS1800B
Temperature($^{\circ}$ C): 25.0

Date:
Humidity(%): 60.0%

Operator:
Distance(m): 13.00