
Access Lighting

Client:

LumCAT: 20508LEDD

Luminaire: ceiling light

Report No:

Ballast type:

Test No:

Voltage(V): 120.000

LampCAT:

Current(A): 0.225

Lamp flux(lm): 1460.0

Power (W): 25.090

Number of Lamps: 1

PF: 0.929

Length(mm): -300 Phm

Width(mm): -300

Type: C

Height(mm): 60

Photometric Results

Lumens(lm): 1459.98, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 58.19

Central intensity(cd): 414.799, Maximum intensity(cd): 414.799

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=119.2

[C90/270]Total=119.2

Field angle(10%Imax): [C0/180]Total=183.8

[C90/270]Total=185.6

Maximum s/h(1/2): C0_180=1.28 C90_270=1.29

Maximum s/h(1/4): C0_180=1.41 C90_270=1.41

Up flux rate of lamp(%): 8.55%

Down flux rate of lamp(%): 91.45%

Up flux rate of LUM(%): 8.55%

Down flux rate of LUM(%): 91.45%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 66.738%

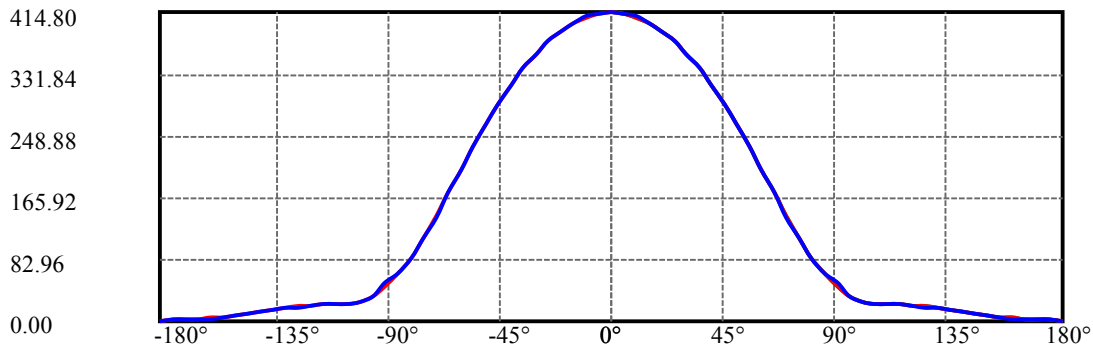
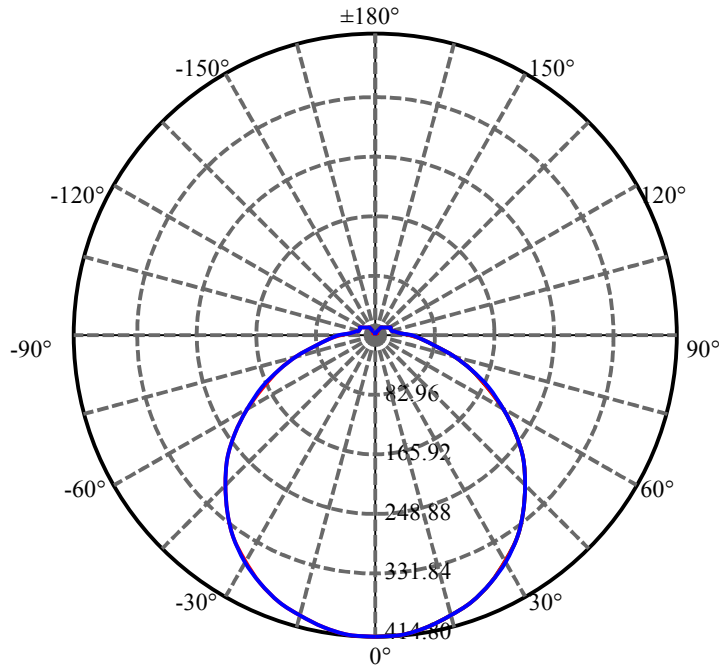
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	414.799	0.000	0	0.00%	0.00%
5.0	413.215	9.899	9.899	0.68%	0.68%
10.0	408.568	29.398	39.296	2.01%	2.69%
15.0	400.677	48.004	87.3	3.29%	5.98%
20.0	389.687	65.137	152.437	4.46%	10.44%
25.0	375.563	80.261	232.698	5.50%	15.94%
30.0	358.972	92.956	325.654	6.37%	22.31%
35.0	339.238	102.816	428.47	7.04%	29.35%
40.0	317.001	109.489	537.959	7.50%	36.85%
45.0	292.813	112.912	650.871	7.73%	44.58%
50.0	264.893	112.693	763.564	7.72%	52.30%
55.0	235.759	108.858	872.422	7.46%	59.76%
60.0	205.264	101.941	974.363	6.98%	66.74%
65.0	172.183	91.758	1066.121	6.28%	73.02%
70.0	140.505	79.174	1145.296	5.42%	78.45%
75.0	111.816	65.952	1211.248	4.52%	82.96%
80.0	85.669	52.841	1264.089	3.62%	86.58%
85.0	64.169	40.715	1304.804	2.79%	89.37%
90.0	46.875	30.405	1335.209	2.08%	91.45%
95.0	33.708	22.064	1357.273	1.51%	92.97%
100.0	26.072	16.244	1373.516	1.11%	94.08%
105.0	23.601	13.291	1386.808	0.91%	94.99%
110.0	23.269	12.251	1399.059	0.84%	95.83%
115.0	22.495	11.588	1410.646	0.79%	96.62%
120.0	21.204	10.623	1421.27	0.73%	97.35%
125.0	19.323	9.368	1430.637	0.64%	97.99%
130.0	17.221	7.946	1438.583	0.54%	98.53%
135.0	15.046	6.520	1445.103	0.45%	98.98%
140.0	12.612	5.121	1450.225	0.35%	99.33%
145.0	10.031	3.778	1454.002	0.26%	99.59%
150.0	7.412	2.569	1456.571	0.18%	99.77%
155.0	5.126	1.587	1458.158	0.11%	99.88%
160.0	3.503	0.905	1459.063	0.06%	99.94%
165.0	2.655	0.508	1459.57	0.03%	99.97%
170.0	1.843	0.267	1459.837	0.02%	99.99%
175.0	1.475	0.119	1459.956	0.01%	100.00%
180.0	0.443	0.023	1459.979	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	325.65	22.31%	22.31%
0-40	537.96	36.85%	36.85%
0-60	974.36	66.74%	66.74%
0-90	1335.21	91.45%	91.45%
0-120	1421.27	97.35%	97.35%
0-180	1459.98	100.00%	100.00%
60-90	360.85	24.72%	24.72%
90-120	86.06	5.89%	5.89%
90-130	103.37	7.08%	7.08%
90-150	121.36	8.31%	8.31%
90-180	124.75	8.54%	8.54%
0-71.72	1167.98	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	39.30
10-20	113.14
20-30	173.22
30-40	212.30
40-50	225.60
50-60	210.80
60-70	170.93
70-80	118.79
80-90	71.12
90-100	38.31
100-110	25.54
110-120	22.21
120-130	17.31
130-140	11.64
140-150	6.35
150-160	2.49
160-170	0.77
170-180	0.12



C0(Max): ———

C0/C180: ———

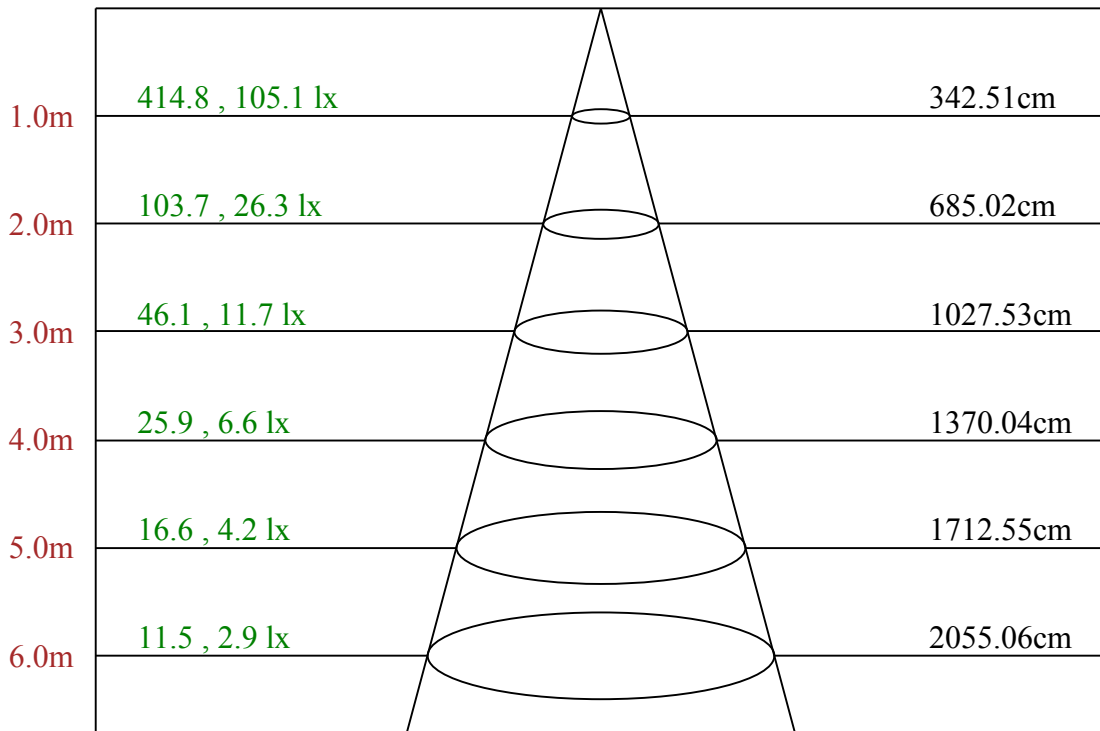
C90/C270: ———

Field angle(10%Imax):C0/180Left:91.9 Right:91.9

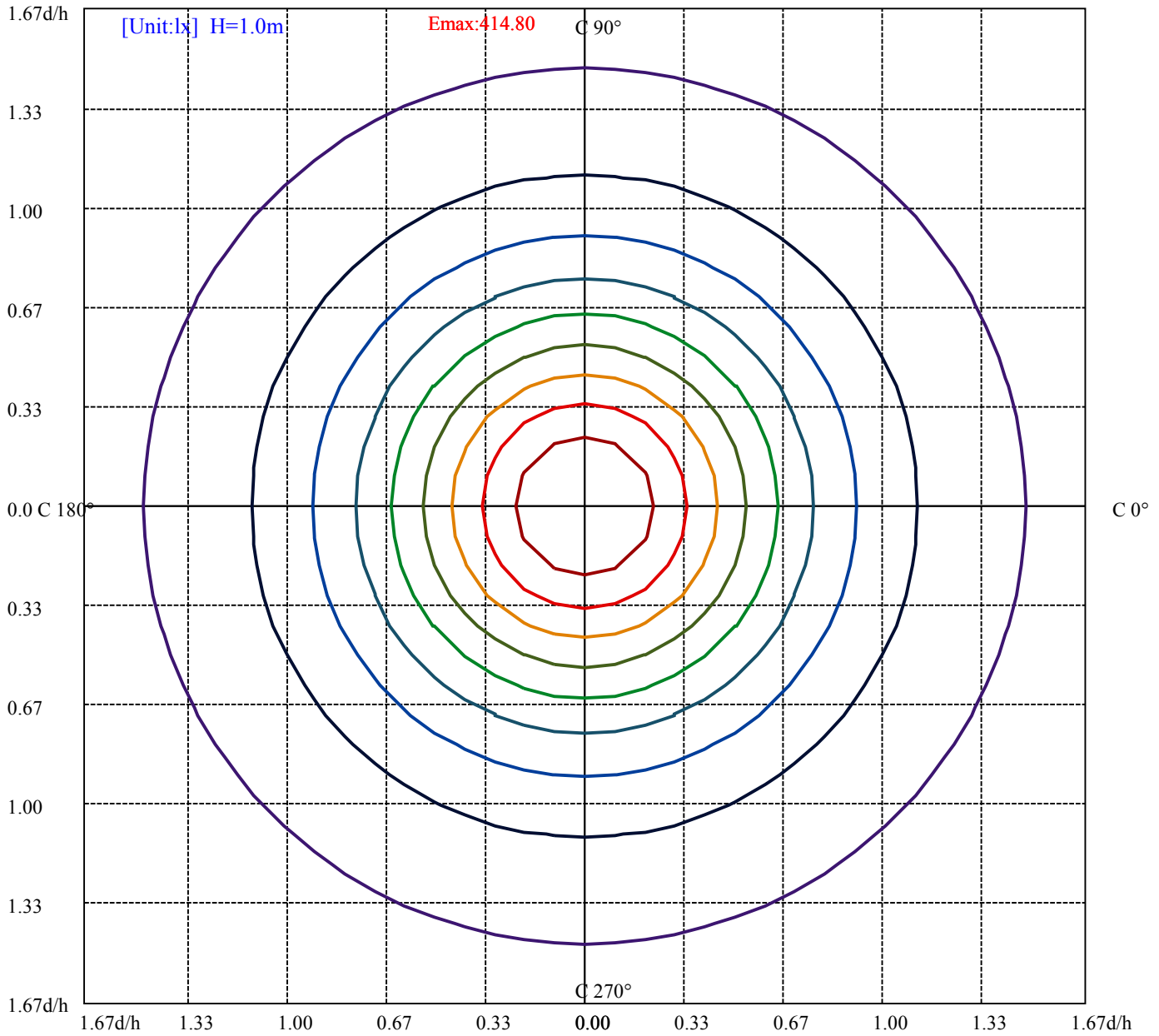
:C90/270Left:92.8 Right:92.8

Beam Angle(50%Imax):C0/180Left:59.6 Right:59.6

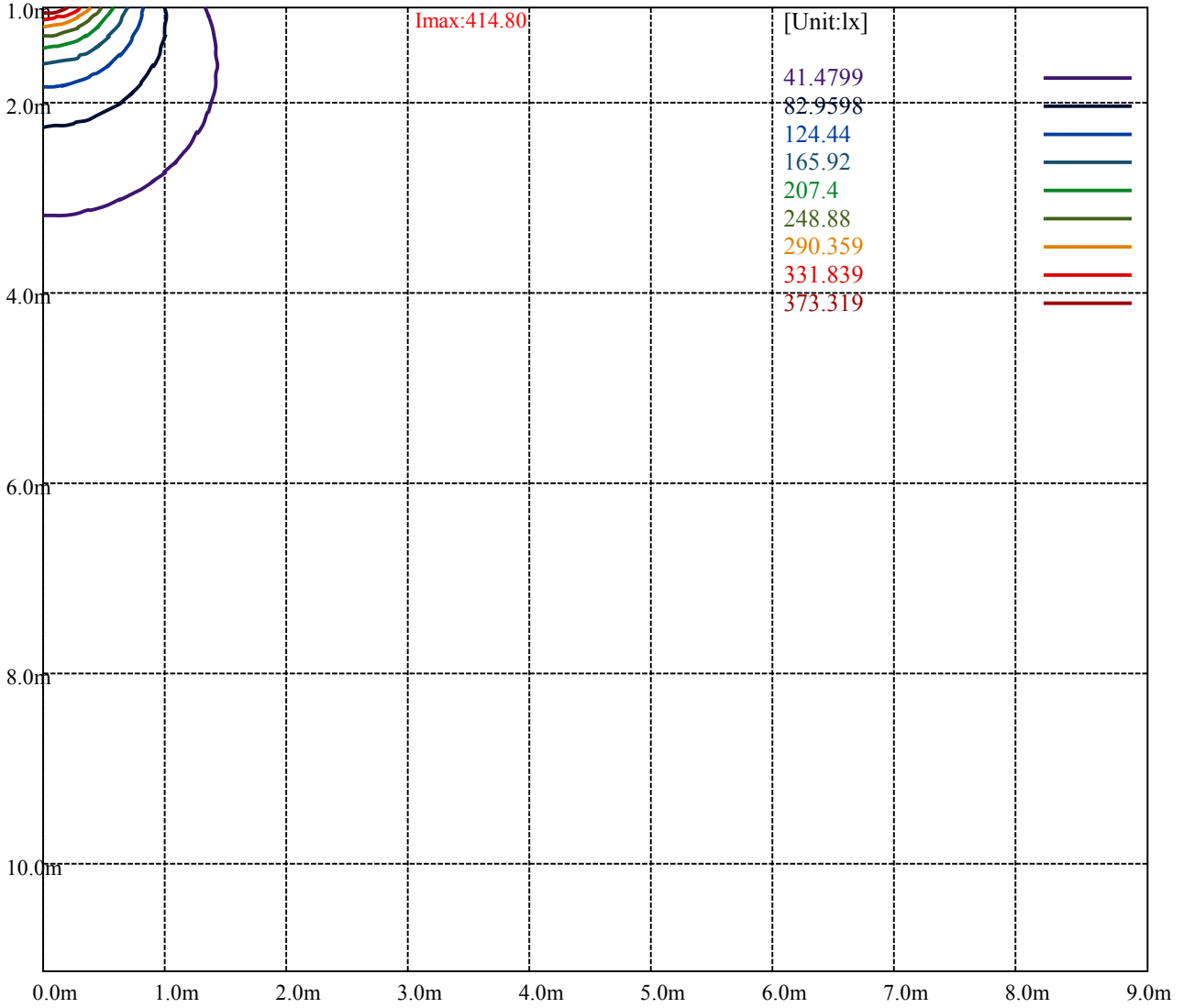
:C90/270Left:59.6 Right:59.6



Max , Ave Beam angle of C0 plane 119.44



- (10%Emax) 41.4799
- (20%Emax) 82.9598
- (30%Emax) 124.44
- (40%Emax) 165.92
- (50%Emax) 207.4
- (60%Emax) 248.88
- (70%Emax) 290.359
- (80%Emax) 331.839
- (90%Emax) 373.319



Luminance Table

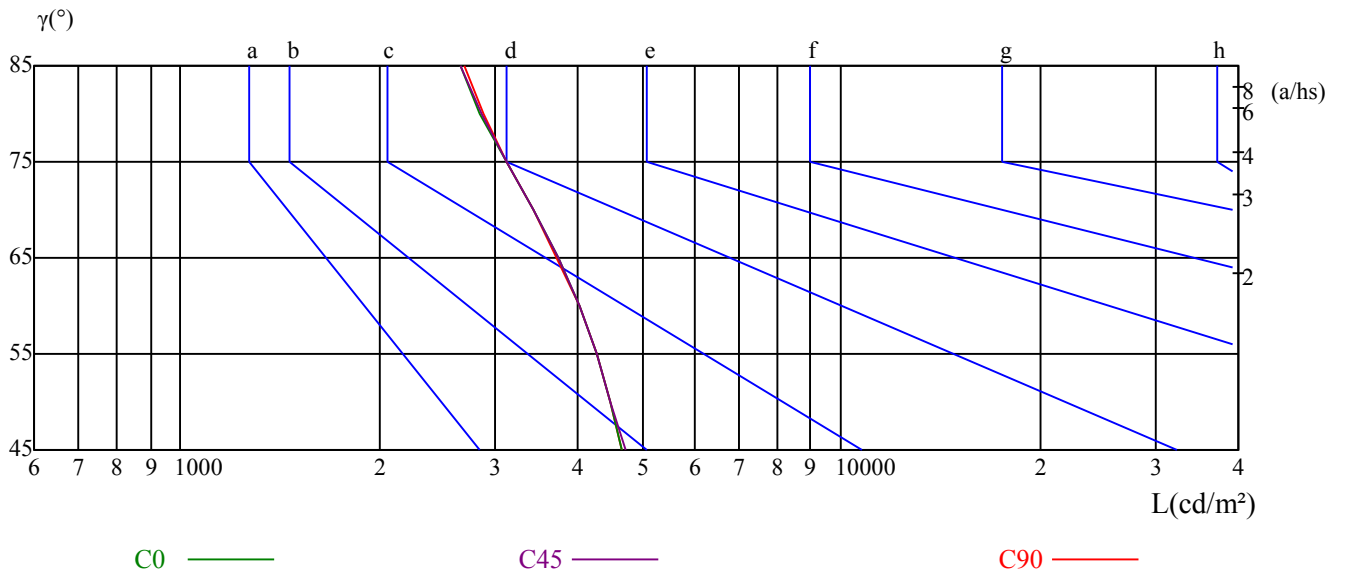
γ	45	50	55	60	65	70	75	80	85
C0	4652	4471	4262	4021	3728	3418	3120	2841	2653
C45	4708	4476	4265	4029	3727	3417	3121	2861	2652
C90	4660	4469	4257	4020	3721	3415	3124	2872	2691

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5764	5753	5762	6084	6093	6087	10375	10525	10370

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

Luminance Limiting Curve



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 RHOFC=20 CU															
0	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	1.00	1.00	1.00	0.94	0.94	0.94	0.91
1	1.00	0.95	0.91	0.97	0.92	0.88	0.91	0.87	0.84	0.85	0.82	0.80	0.80	0.78	0.76	0.73
2	0.86	0.79	0.73	0.84	0.77	0.71	0.79	0.73	0.68	0.74	0.69	0.65	0.70	0.66	0.63	0.60
3	0.75	0.67	0.60	0.73	0.65	0.59	0.69	0.62	0.56	0.65	0.59	0.54	0.61	0.56	0.52	0.50
4	0.66	0.57	0.50	0.64	0.56	0.49	0.61	0.54	0.48	0.57	0.51	0.46	0.54	0.49	0.45	0.42
5	0.59	0.50	0.43	0.57	0.49	0.42	0.54	0.47	0.41	0.51	0.45	0.40	0.49	0.43	0.39	0.36
6	0.53	0.44	0.37	0.52	0.43	0.37	0.49	0.41	0.36	0.46	0.40	0.35	0.44	0.38	0.34	0.31
7	0.48	0.39	0.33	0.47	0.38	0.32	0.44	0.37	0.31	0.42	0.36	0.31	0.40	0.34	0.30	0.28
8	0.44	0.35	0.29	0.43	0.34	0.29	0.41	0.33	0.28	0.39	0.32	0.27	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	0.28	0.24	0.22
10	0.37	0.29	0.24	0.36	0.28	0.23	0.34	0.28	0.23	0.33	0.27	0.22	0.32	0.26	0.22	0.20

Access Lighting IN-100616SN

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	414.80	413.93	409.58	401.76	392.19	378.28	361.75	343.49	322.62
15.0	414.80	413.05	409.54	401.64	391.12	377.97	360.43	342.01	320.09
30.0	414.80	413.04	408.63	400.71	390.14	376.93	359.32	340.82	318.81
45.0	414.80	413.03	408.61	400.65	390.04	375.88	359.08	339.62	317.51
60.0	414.80	413.03	408.59	400.62	389.10	374.91	358.07	338.58	316.42
75.0	414.80	413.91	408.58	400.59	389.04	374.83	357.95	338.41	315.32
90.0	414.80	413.02	407.69	399.70	388.15	373.94	356.18	336.64	314.43
105.0	414.80	413.02	407.69	399.70	388.15	373.94	356.18	335.75	313.54
120.0	414.80	412.13	407.69	399.70	388.15	373.94	357.06	336.64	314.43
135.0	414.80	413.91	408.57	400.56	389.88	375.63	357.83	339.14	316.89
150.0	414.80	413.91	408.57	401.45	390.77	376.52	359.61	340.03	318.67
165.0	414.80	413.91	409.46	402.34	391.66	377.41	361.39	342.70	320.45
180.0	414.80	412.19	406.97	398.28	386.97	372.19	353.93	334.80	311.32
195.0	414.80	412.17	407.78	399.01	387.61	372.71	355.17	335.87	313.07
210.0	414.80	412.16	407.75	398.95	388.38	373.41	356.67	336.42	314.40
225.0	414.80	413.03	408.61	400.65	389.15	375.00	358.20	338.74	315.74
240.0	414.80	413.03	408.59	401.50	389.98	375.80	358.96	339.46	317.30
255.0	414.80	413.91	409.47	401.48	390.82	376.61	360.62	341.08	318.87
270.0	414.80	413.91	409.47	401.48	391.71	377.49	361.51	341.97	318.87
285.0	414.80	413.91	409.47	401.48	390.82	377.49	360.62	341.97	319.76
300.0	414.80	413.02	408.58	401.48	390.82	376.61	360.62	341.97	319.76
315.0	414.80	413.91	409.46	401.45	390.77	376.52	360.50	340.92	318.67
330.0	414.80	413.02	408.57	400.56	388.99	375.63	366.73	338.25	316.89
345.0	414.80	413.02	407.68	400.56	388.10	373.85	356.94	336.47	314.21
360.0	414.80	413.93	409.58	401.76	392.19	378.28	361.75	343.49	322.62
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	297.40	271.32	242.62	212.18	179.14	146.96	117.40	90.44	68.70
15.0	296.41	269.22	241.16	209.59	178.02	145.57	115.76	89.45	67.53
30.0	294.15	266.85	238.66	206.96	175.25	143.55	113.61	88.07	66.05
45.0	292.75	265.33	236.14	206.07	173.35	141.51	112.32	86.67	65.45
60.0	292.49	264.12	235.76	203.85	171.06	140.04	111.68	85.97	64.70
75.0	291.34	262.91	233.60	202.51	170.54	139.45	110.14	85.27	64.84
90.0	289.56	261.14	231.83	201.63	168.76	137.67	109.25	84.38	63.95
105.0	288.67	261.14	231.83	199.85	167.87	137.67	108.36	83.49	63.95
120.0	289.56	262.03	232.71	200.74	169.65	137.67	109.25	84.38	63.95
135.0	291.96	264.37	234.99	203.84	171.79	139.75	111.27	85.45	64.09
150.0	293.74	267.04	236.77	206.51	174.46	141.53	112.16	87.23	64.98
165.0	296.41	268.82	239.44	208.29	176.25	144.20	114.83	88.12	65.87
180.0	286.10	258.27	228.70	197.40	165.22	133.92	105.22	80.00	59.13
195.0	287.64	259.58	230.64	199.07	165.74	135.05	106.99	80.68	59.63
210.0	288.86	261.56	232.50	200.79	168.21	136.51	107.44	81.90	60.77
225.0	290.98	264.45	234.37	203.42	169.81	137.97	108.79	84.02	61.03
240.0	293.37	265.01	236.65	204.74	172.83	140.04	110.79	85.09	62.93
255.0	294.00	267.35	237.16	206.96	174.09	142.12	111.92	86.16	63.95
270.0	294.89	268.24	238.93	207.84	174.98	143.00	113.69	87.93	65.73
285.0	295.78	268.24	239.82	208.73	176.76	144.78	127.90	88.82	66.62
300.0	294.89	268.24	238.93	222.94	174.98	143.89	113.69	87.93	65.73
315.0	305.31	266.15	237.66	207.40	173.57	142.42	113.05	87.23	64.98
330.0	291.07	264.37	234.99	203.84	170.90	139.75	110.38	84.56	64.09
345.0	290.18	261.70	232.32	201.17	169.12	137.08	107.71	82.78	61.42
360.0	297.40	271.32	242.62	212.18	179.14	146.96	117.40	90.44	68.70

Access Lighting IN-100616SN

Intensity data(cd)

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	50.44	36.52	27.83	24.35	23.48	23.48	22.61	20.87	19.13
15.0	49.11	35.96	28.06	24.55	24.55	23.68	22.80	21.05	19.29
30.0	48.44	35.23	28.18	25.54	25.54	24.66	23.78	22.02	20.26
45.0	48.64	36.26	28.30	25.65	25.65	25.65	23.88	22.11	20.34
60.0	47.86	35.45	27.48	25.70	25.70	25.70	23.93	22.16	20.39
75.0	47.08	35.53	27.53	25.76	25.76	25.76	23.98	22.21	19.54
90.0	47.08	34.64	27.53	25.76	25.76	24.87	23.09	21.32	19.54
105.0	47.08	34.64	27.53	25.76	24.87	23.98	23.09	21.32	19.54
120.0	47.08	34.64	26.65	24.87	24.87	23.98	22.21	20.43	18.65
135.0	48.07	34.71	26.70	24.03	24.03	23.14	22.25	20.47	17.80
150.0	47.18	34.71	26.70	24.03	23.14	22.25	21.36	19.58	17.80
165.0	48.07	34.71	25.81	23.14	23.14	22.25	20.47	18.69	16.91
180.0	42.61	30.44	24.35	23.48	22.61	21.74	20.00	18.26	15.65
195.0	42.09	30.69	24.55	22.80	22.80	21.05	19.29	17.54	14.91
210.0	42.27	30.82	23.78	22.02	22.02	21.14	19.37	16.73	14.97
225.0	43.34	30.96	23.88	22.11	21.23	20.34	18.57	16.80	14.15
240.0	44.32	31.02	23.93	21.27	20.39	19.50	19.50	16.84	14.18
255.0	46.19	31.98	23.98	22.21	20.43	19.54	18.65	16.88	14.21
270.0	55.07	32.86	24.87	21.32	21.32	20.43	18.65	16.88	15.10
285.0	47.96	33.75	25.76	21.32	21.32	20.43	19.54	16.88	15.10
300.0	47.96	33.75	24.87	21.32	21.32	20.43	19.54	17.76	15.99
315.0	47.18	33.82	25.81	22.25	22.25	21.36	20.47	18.69	16.02
330.0	45.40	32.93	25.81	23.14	23.14	22.25	20.47	18.69	16.91
345.0	44.51	32.93	25.81	24.03	23.14	22.25	21.36	19.58	16.91
360.0	50.44	36.52	27.83	24.35	23.48	23.48	22.61	20.87	19.13
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	16.52	13.91	11.30	8.70	6.09	4.35	2.61	2.61	1.74
15.0	16.66	14.03	11.40	8.77	6.14	4.38	2.63	2.63	1.75
30.0	17.61	14.97	11.45	8.81	6.16	3.52	2.64	1.76	1.76
45.0	17.69	15.04	12.38	8.84	6.19	3.54	2.65	1.77	1.77
60.0	17.73	15.07	12.41	8.86	6.20	3.55	2.66	1.77	1.77
75.0	17.76	15.10	12.44	8.88	5.33	4.44	2.66	1.78	1.78
90.0	16.88	14.21	11.55	7.99	5.33	3.55	2.66	1.78	1.78
105.0	16.88	14.21	11.55	7.99	5.33	3.55	2.66	1.78	1.78
120.0	15.99	13.32	10.66	7.99	5.33	3.55	2.66	1.78	1.78
135.0	16.02	13.35	10.68	8.01	5.34	3.56	2.67	1.78	1.78
150.0	15.13	12.46	10.68	7.12	5.34	3.56	2.67	1.78	1.78
165.0	15.13	12.46	9.79	7.12	5.34	3.56	2.67	1.78	1.78
180.0	13.91	11.30	8.70	6.09	4.35	3.48	2.61	1.74	1.74
195.0	13.15	10.52	7.89	6.14	4.38	2.63	2.63	1.75	0.88
210.0	12.33	10.57	7.93	7.05	4.40	2.64	2.64	1.76	0.88
225.0	13.27	10.61	7.96	6.19	3.54	2.65	2.65	1.77	0.88
240.0	12.41	10.64	7.98	6.20	4.43	2.66	2.66	1.77	0.89
255.0	12.44	10.66	7.99	6.22	4.44	3.55	2.66	1.78	0.89
270.0	13.32	10.66	8.88	6.22	4.44	3.55	2.66	1.78	0.89
285.0	13.32	11.55	8.88	6.22	4.44	3.55	2.66	1.78	0.89
300.0	13.32	11.55	8.88	7.11	4.44	3.55	2.66	1.78	0.89
315.0	14.24	11.57	9.79	7.12	5.34	3.56	2.67	1.78	1.78
330.0	14.24	12.46	9.79	7.12	5.34	3.56	2.67	1.78	1.78
345.0	15.13	12.46	9.79	7.12	5.34	3.56	2.67	1.78	1.78
360.0	16.52	13.91	11.30	8.70	6.09	4.35	2.61	2.61	1.74

Intensity data(cd)

C/γ(°)	180.0
0.0	0.87
15.0	0.88
30.0	0.88
45.0	0.88
60.0	0.89
75.0	0.89
90.0	0.89
105.0	0.89
120.0	0.89
135.0	0.89
150.0	0.89
165.0	0.89
180.0	0.00
195.0	0.00
210.0	0.00
225.0	0.00
240.0	0.00
255.0	0.00
270.0	0.00
285.0	0.00
300.0	0.00
315.0	0.00
330.0	0.00
345.0	0.00
360.0	0.87