

JK lighting LED Luminaire Optical Testing Report



Fujian Juan Kuang Yaming Electric Ltd

LumCAT:	Luminaire: GC201-150W-P540-D1-PCD-HK
Report No: GC201-150W-P540-D1-PCD-HK	Voltage(V): 0.000
Test No: JK Lighting lab 2016 0921	Current(A): 0.000
LampCAT: :	Power (W): 165.400
Lamp flux(lm)	PF: 0.000
Number of Lamps: 1	Ballast type:
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 19803.54
Lumens(lm)/Power(W): 119.73
Central intensity(cd): 6428.790
Maximum intensity(cd): 6454.170
Angle of maximum intensity: C=112.5 =1.0
Beam Angle(50% lmax): [C0__180]Left=56.7 Right=57.7
[C90__270]Left=55.6 Right=58.9
Field angle(10% lmax): [C0__180]Left=87.0 Right=88.0
[C90__270]Left=85.8 Right=89.2
Effective flux(lm): 19673.15
IES Nema Type : Type7H×7V



Equipment: GMS2200
Temperature(°C): 25

Date:
Humidity(%): 60%

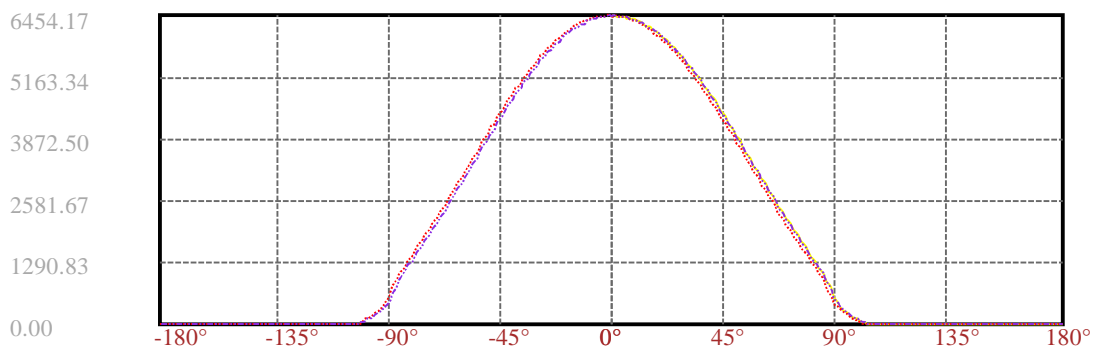
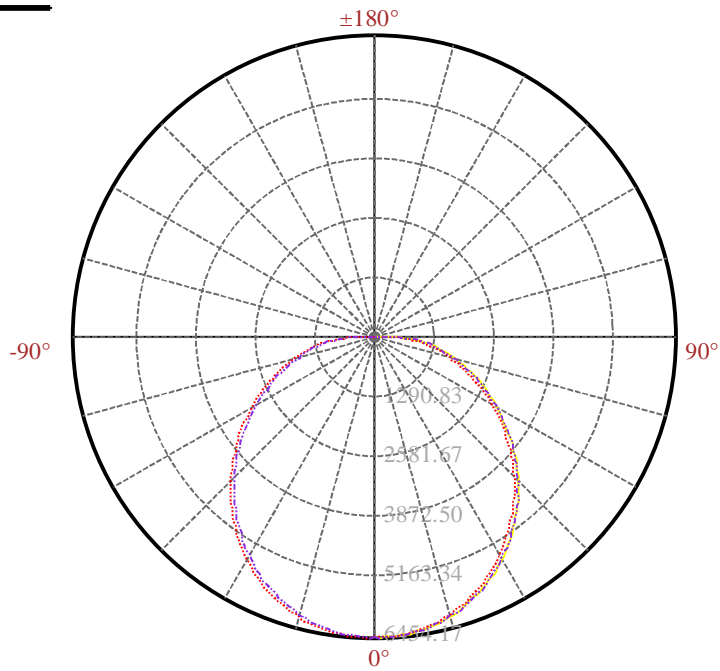
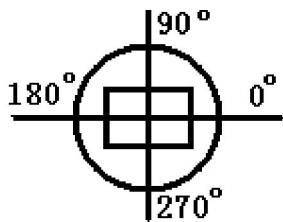
Operator:
Distance(m): 13.72

V \ H		H																			Total	
V		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	---	---
	-90	1.4	4.6	8.5	12.7	16.7	20.4	23.3	25.2	25.9	25.4	23.9	21.4	18.2	14.4	10.4	6.6	3.5	1.0		263.5	
	-80	1.7	6.9	14.0	21.9	30.0	37.7	44.3	48.9	51.0	50.5	47.6	42.5	35.8	28.0	20.0	12.2	5.6	1.3		499.8	
	-70	2.0	8.8	18.1	29.3	41.6	53.7	64.2	71.9	75.7	75.2	70.5	62.3	51.4	39.3	27.3	16.5	7.6	1.6		717.1	
	-60	2.3	10.2	21.9	36.7	53.3	70.1	85.0	96.1	101.9	101.5	94.9	83.2	67.8	50.9	34.4	20.2	9.2	1.8		941.4	
	-50	2.5	11.5	25.4	43.6	64.6	86.2	105.6	120.3	127.9	127.4	118.9	103.6	83.8	62.2	41.3	23.6	10.5	2.1		1161.2	
	-40	2.7	12.6	28.5	49.9	75.0	101.0	124.6	142.3	151.6	151.1	140.7	122.3	98.4	72.3	47.5	26.7	11.5	2.3		1360.9	
	-30	2.8	13.4	31.1	55.0	83.6	113.3	140.2	160.4	171.3	170.9	159.0	137.7	110.4	80.8	52.6	29.2	12.4	2.4		1526.5	
	-20	2.9	14.1	32.9	58.8	89.8	122.1	151.4	173.5	185.2	184.9	172.0	149.0	119.1	86.9	56.3	31.0	13.0	2.5		1645.3	
	-10	3.0	14.4	33.8	60.8	93.2	127.0	157.7	180.5	192.4	192.1	178.9	155.2	124.0	90.2	58.3	31.9	13.3	2.6		1709.3	
	0	3.0	14.4	33.9	60.9	93.4	127.2	158.0	181.0	192.9	192.3	179.3	155.4	124.1	90.3	58.4	32.0	13.3	2.6		1712.4	
	10	2.9	14.1	33.0	59.1	90.3	122.8	152.4	174.6	186.5	185.6	172.8	149.7	119.7	87.4	56.6	31.1	13.0	2.5		1653.9	
	20	2.8	13.5	31.3	55.5	84.3	114.4	141.6	162.3	173.2	172.3	160.3	138.9	111.4	81.5	53.1	29.4	12.5	2.4		1540.6	
	30	2.7	12.7	28.8	50.5	75.9	102.5	126.5	144.6	154.0	153.3	142.5	123.8	99.6	73.2	48.1	27.0	11.7	2.3		1379.8	
	40	2.5	11.6	25.7	44.3	65.7	87.8	107.7	122.8	130.7	130.0	120.9	105.3	85.2	63.2	42.0	24.0	10.6	2.1		1182.2	
	50	2.3	10.3	22.2	37.4	54.5	71.7	87.1	98.6	104.5	104.0	97.0	84.9	69.2	51.9	35.1	20.6	9.4	1.9		962.6	
	60	2.0	8.9	18.4	30.1	42.8	55.3	66.2	74.3	78.4	77.9	72.8	64.0	52.8	40.3	28.0	17.0	7.8	1.6		738.7	
70	1.7	7.1	14.4	22.6	31.2	39.3	46.1	51.1	53.5	53.1	49.8	44.3	37.2	29.1	20.7	12.7	5.8	1.3		520.8		
80	1.4	4.8	9.0	13.6	18.2	22.2	25.4	27.6	28.6	28.2	26.4	23.5	19.9	15.7	11.3	7.1	3.6	1.0		287.6		
90																						
Total	---	42.6	193.8	431.0	742.6	1104.1	1474.8	1807.5	2055.7	2185.2	2175.7	2028.3	1767.0	1428.0	1057.6	701.5	398.8	174.2	35.3		19803.6	

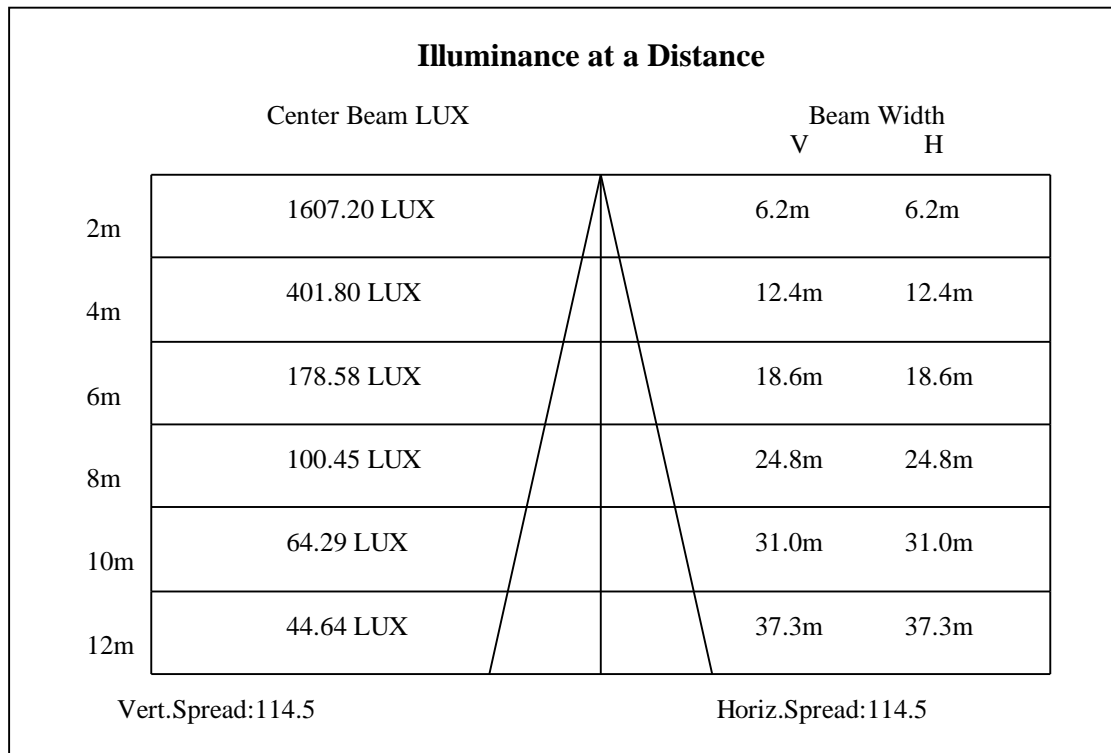
Equipment: GMS2200
Temperature(°C): 25

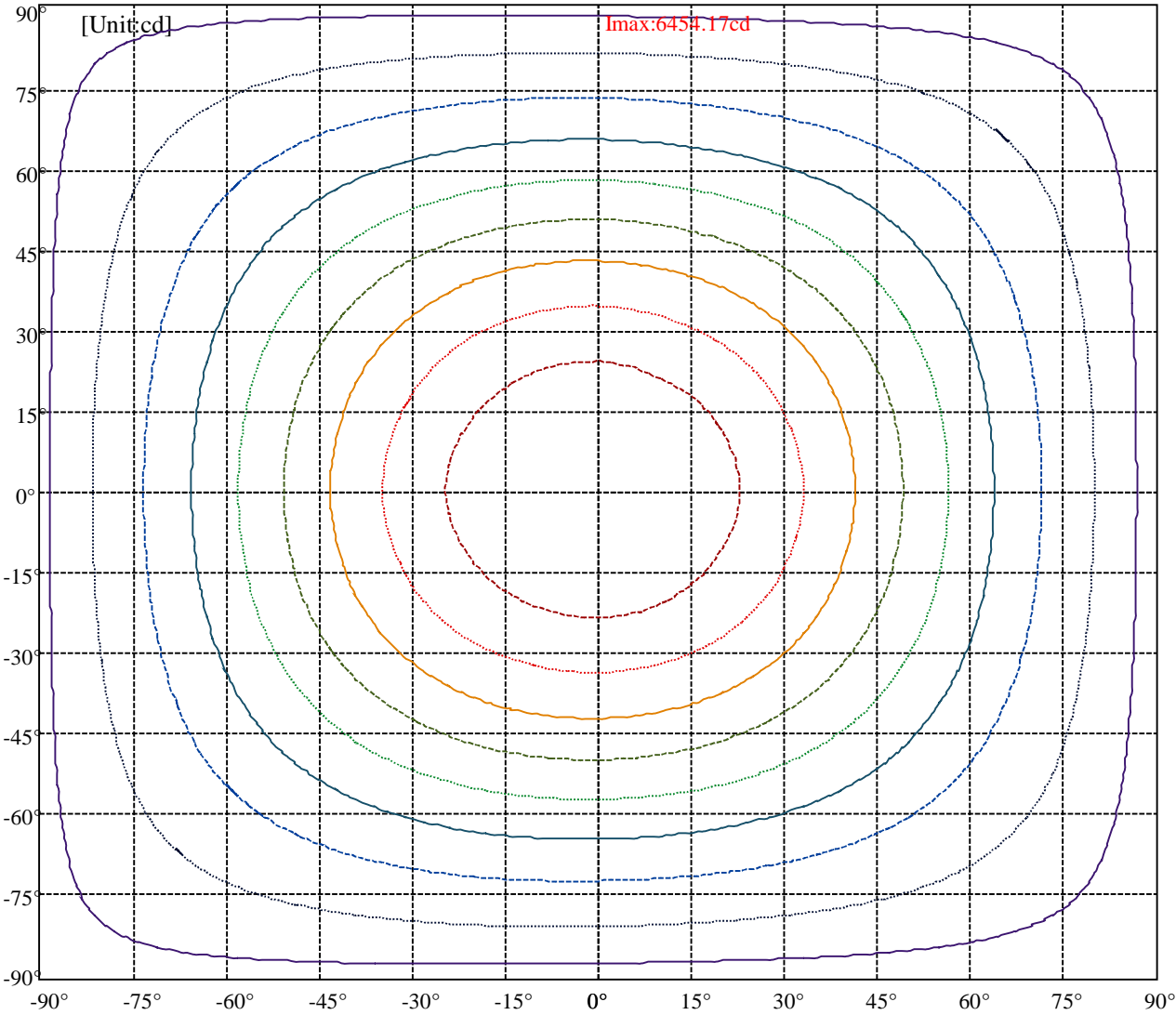
Date:
Humidity(%): 60%

Operator:
Distance(m): 13.72



C112.5(Max): —————
C0/C180:
C90/C270: - - - - -



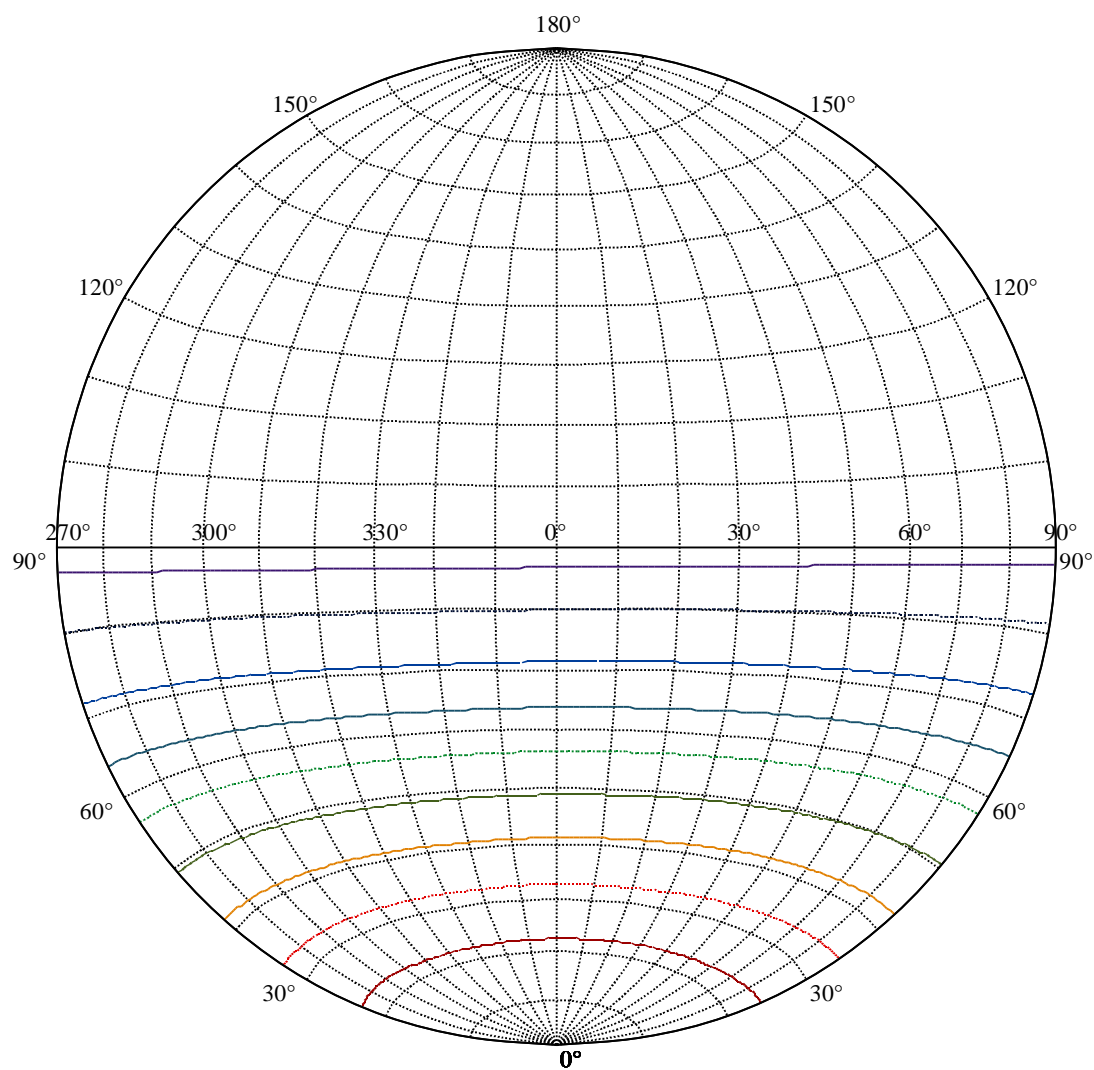


(10% I _{max}) 644.608	—
(20% I _{max}) 1289.22	---
(30% I _{max}) 1933.82	- - -
(40% I _{max}) 2578.43	—
(50% I _{max}) 3223.04	---
(60% I _{max}) 3867.65	- - -
(70% I _{max}) 4512.26	—
(80% I _{max}) 5156.86	---
(90% I _{max}) 5801.47	- - -

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Temperature(°C): 25

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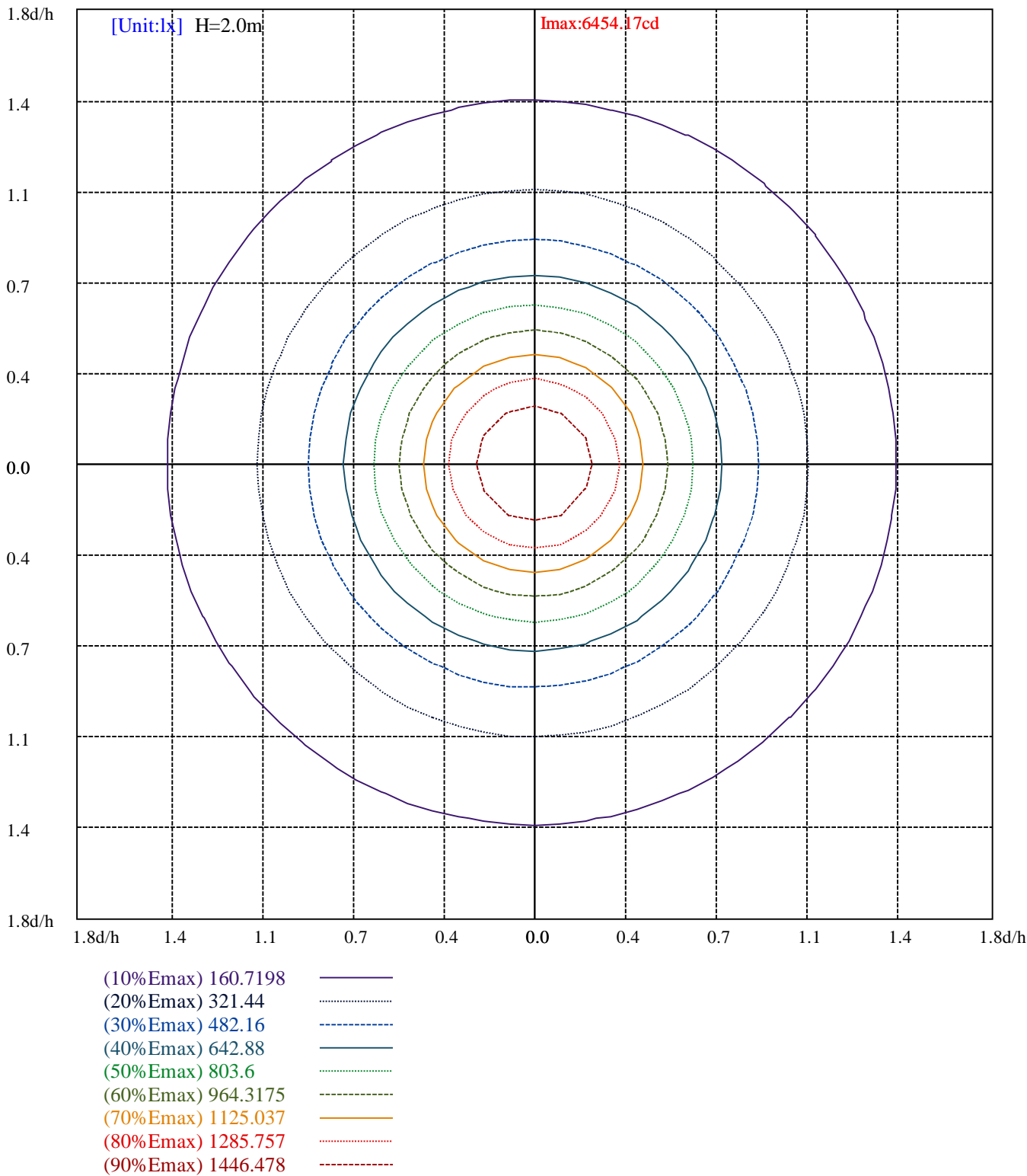


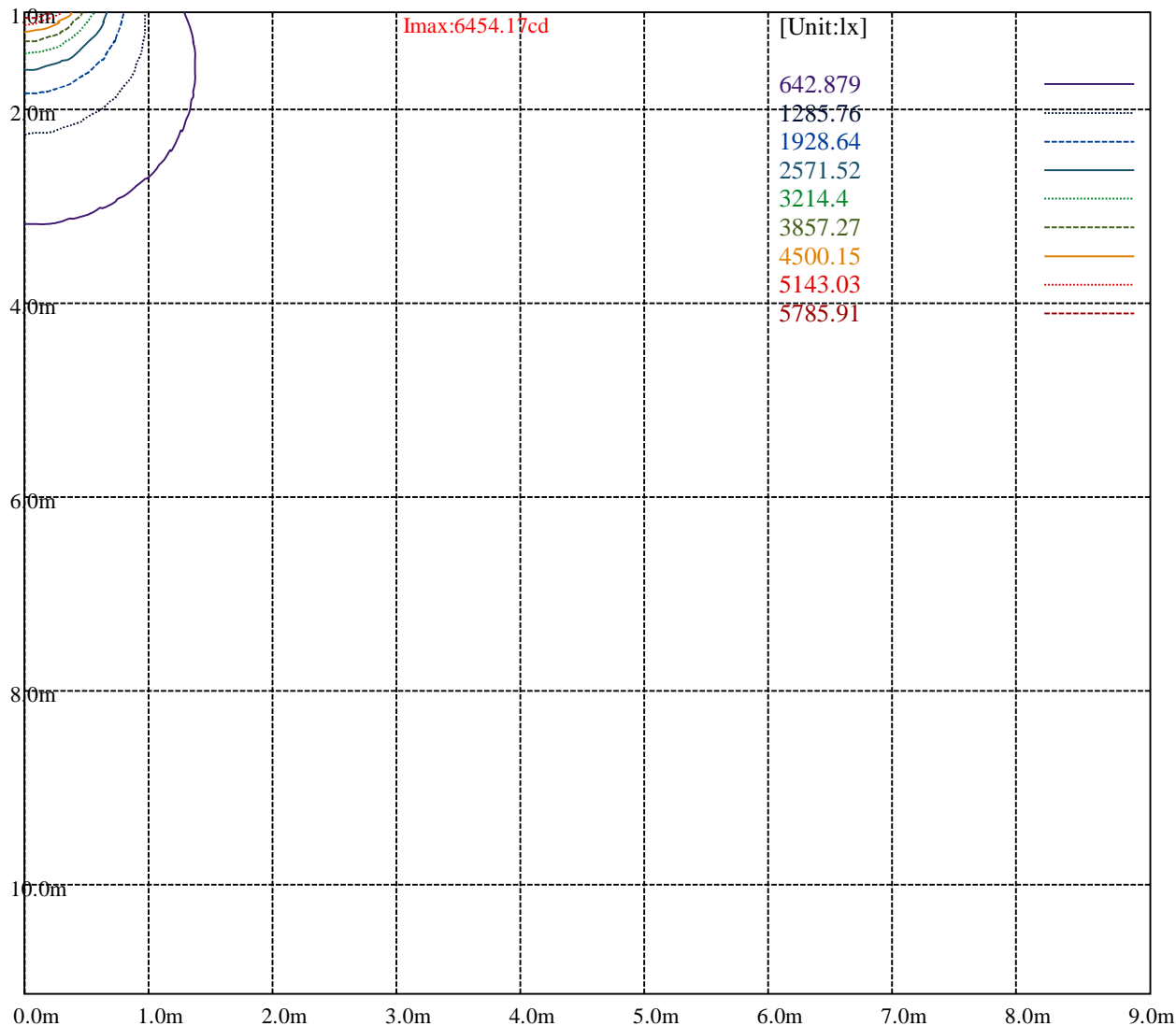
House

Road

Imax:6454.17cd

(10% Imax)	645.38	—
(20% Imax)	1290.76	---
(30% Imax)	1936.14	- - -
(40% Imax)	2581.52	—
(50% Imax)	3226.9	---
(60% Imax)	3872.28	- - -
(70% Imax)	4517.66	—
(80% Imax)	5163.04	---
(90% Imax)	5808.42	- - -



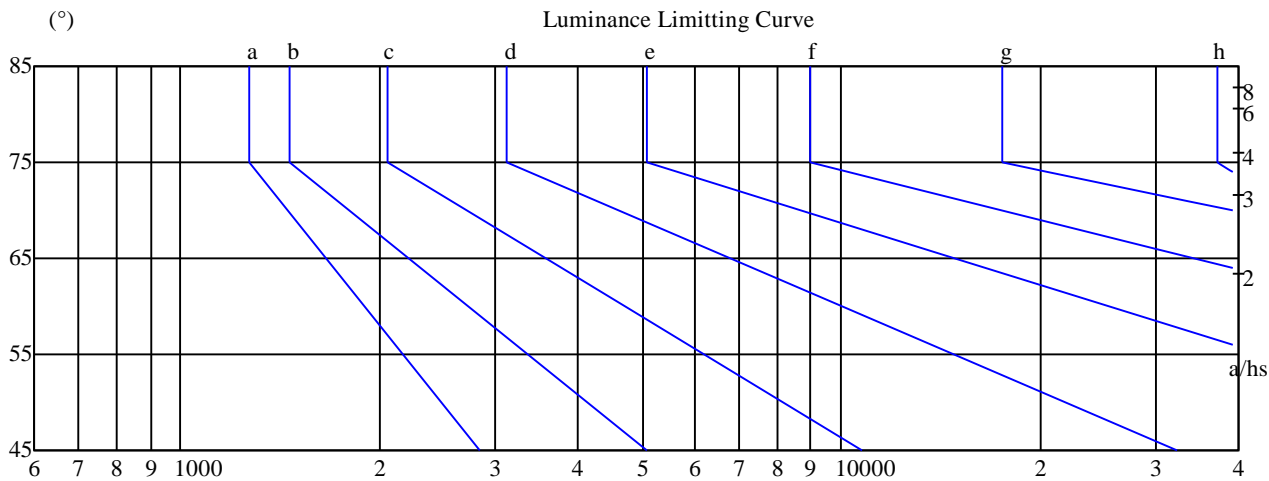


Luminance Table

	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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



Intensity data(cd)									Page: 10 Total:16	
C/ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	
0.0	6428.79	6425.69	6436.96	6419.99	6423.18	6415.73	6398.46	6378.34	6351.71	
22.5	6428.79	6422.10	6414.22	6399.98	6401.70	6380.21	6371.09	6357.31	6360.16	
45.0	6428.79	6429.56	6415.82	6394.17	6409.17	6398.18	6374.48	6346.40	6340.76	
67.5	6428.79	6411.25	6421.03	6415.31	6409.45	6410.15	6390.10	6363.05	6350.95	
90.0	6428.79	6437.62	6412.87	6423.53	6426.43	6416.17	6401.42	6388.63	6362.42	
112.5	6428.79	6454.17	6420.01	6430.13	6430.15	6414.18	6386.91	6408.63	6371.61	
135.0	6428.79	6433.59	6418.07	6398.55	6406.05	6404.97	6392.41	6374.71	6370.70	
157.5	6428.79	6424.72	6423.09	6414.54	6412.33	6406.44	6384.34	6377.74	6372.61	
180.0	6428.79	6446.08	6439.36	6432.68	6424.11	6422.09	6413.84	6395.30	6388.79	
202.5	6428.79	6408.97	6426.19	6416.30	6410.96	6409.55	6397.89	6373.22	6361.01	
225.0	6428.79	6411.89	6424.26	6415.50	6401.97	6377.44	6362.48	6353.45	6344.03	
247.5	6428.79	6422.63	6404.89	6410.66	6397.91	6381.42	6367.68	6347.78	6333.41	
270.0	6428.79	6436.06	6431.58	6431.79	6405.19	6416.78	6386.60	6366.27	6357.86	
292.5	6428.79	6430.37	6414.42	6393.88	6405.51	6380.97	6397.80	6377.63	6347.80	
315.0	6428.79	6426.94	6414.74	6407.69	6393.62	6380.89	6376.82	6357.19	6339.37	
337.5	6428.79	6417.59	6416.97	6409.59	6404.57	6385.18	6369.62	6358.43	6333.93	
360.0	6428.79	6425.69	6436.96	6419.99	6423.18	6415.73	6398.46	6378.34	6351.71	
C/ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	
0.0	6339.75	6315.80	6294.49	6262.60	6228.21	6194.10	6151.28	6121.49	6069.22	
22.5	6327.18	6298.92	6270.80	6258.92	6217.37	6180.36	6143.92	6109.54	6068.37	
45.0	6335.06	6312.16	6275.15	6239.03	6217.67	6186.91	6155.63	6121.21	6078.42	
67.5	6333.29	6307.06	6289.72	6262.33	6218.67	6194.69	6170.43	6136.80	6094.55	
90.0	6351.97	6326.34	6308.16	6280.31	6266.00	6223.15	6180.27	6176.55	6132.57	
112.5	6362.25	6334.61	6323.33	6288.52	6268.61	6224.31	6197.78	6182.75	6139.60	
135.0	6342.77	6329.01	6320.77	6287.79	6251.52	6217.53	6190.14	6161.02	6131.93	
157.5	6346.90	6337.24	6318.85	6291.53	6268.66	6236.18	6210.01	6176.79	6141.39	
180.0	6362.50	6345.50	6319.17	6295.47	6274.07	6250.04	6207.67	6177.82	6146.15	
202.5	6346.66	6326.67	6293.87	6268.11	6232.43	6203.47	6191.07	6146.50	6113.93	
225.0	6333.74	6304.31	6284.82	6255.19	6237.23	6196.12	6155.33	6143.78	6098.72	
247.5	6326.57	6324.58	6278.03	6254.62	6222.23	6192.09	6168.28	6123.39	6086.75	
270.0	6337.86	6314.20	6272.76	6258.94	6223.35	6187.01	6161.88	6117.97	6079.46	
292.5	6337.10	6304.06	6285.23	6255.37	6218.14	6192.38	6155.69	6110.89	6071.01	
315.0	6317.69	6300.12	6264.63	6241.71	6181.68	6153.03	6131.70	6096.00	6055.74	
337.5	6303.74	6277.22	6259.74	6230.85	6205.03	6164.79	6140.19	6091.57	6057.42	
360.0	6339.75	6315.80	6294.49	6262.60	6228.21	6194.10	6151.28	6121.49	6069.22	
C/ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	
0.0	6032.66	6001.37	5940.00	5890.32	5838.00	5793.59	5744.59	5683.32	5618.73	
22.5	6034.86	5987.23	5935.39	5880.64	5841.07	5791.64	5736.89	5685.21	5618.43	
45.0	6042.26	6002.92	5943.91	5900.27	5865.59	5798.12	5733.86	5691.27	5640.48	
67.5	6041.14	6011.31	5965.45	5910.00	5863.41	5817.97	5767.74	5713.46	5639.77	
90.0	6091.20	6039.03	6008.27	5954.72	5903.39	5879.20	5820.72	5738.42	5686.12	
112.5	6092.90	6059.94	6008.34	5966.02	5922.50	5870.05	5822.61	5765.19	5711.75	
135.0	6089.47	6045.79	6011.35	5959.58	5908.17	5863.79	5813.60	5750.24	5718.31	
157.5	6095.14	6060.57	6010.07	5963.05	5926.81	5874.84	5822.89	5769.16	5706.32	
180.0	6099.96	6060.30	6024.50	5983.47	5936.43	5884.36	5832.67	5783.35	5725.08	
202.5	6059.50	6043.66	5995.74	5947.13	5907.77	5857.25	5798.42	5740.90	5690.80	
225.0	6067.95	6022.08	5973.73	5918.05	5874.22	5835.94	5762.28	5713.18	5662.36	
247.5	6043.47	5991.59	5955.04	5912.14	5855.61	5813.87	5753.79	5702.17	5650.19	
270.0	6036.30	5994.41	5956.37	5897.63	5852.02	5806.55	5751.11	5703.89	5633.33	
292.5	6033.25	5986.15	5949.15	5871.21	5834.04	5800.65	5730.20	5660.10	5611.02	
315.0	6017.86	5968.02	5923.17	5876.92	5829.23	5764.90	5733.22	5651.53	5600.45	
337.5	6019.40	5946.98	5916.47	5876.01	5824.55	5770.37	5715.45	5662.87	5601.34	
360.0	6032.66	6001.37	5940.00	5890.32	5838.00	5793.59	5744.59	5683.32	5618.73	

Intensity data(cd)									Page: 11 Total:16	
C/ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	
0.0	5563.45	5500.35	5433.66	5372.10	5303.58	5230.43	5163.72	5079.95	5016.13	
22.5	5554.82	5492.10	5423.25	5363.09	5289.70	5225.77	5156.02	5077.27	5007.43	
45.0	5572.70	5515.32	5455.22	5396.22	5321.93	5257.34	5174.32	5103.98	5028.09	
67.5	5602.08	5535.27	5469.23	5418.61	5328.92	5280.20	5205.88	5137.01	5059.23	
90.0	5638.03	5574.07	5524.35	5446.32	5381.26	5314.40	5256.68	5194.19	5111.27	
112.5	5659.70	5591.87	5532.94	5469.90	5398.69	5341.49	5269.11	5200.62	5133.38	
135.0	5653.31	5605.09	5544.22	5461.37	5394.15	5338.71	5266.83	5202.07	5133.13	
157.5	5654.90	5586.37	5541.53	5474.65	5404.05	5346.86	5274.87	5198.01	5127.90	
180.0	5661.71	5596.18	5539.56	5472.80	5406.70	5334.35	5274.85	5209.64	5146.67	
202.5	5629.91	5563.38	5498.82	5448.14	5370.24	5313.86	5245.80	5173.48	5098.55	
225.0	5610.23	5554.44	5480.72	5421.39	5355.09	5288.49	5218.86	5148.53	5073.29	
247.5	5582.37	5512.28	5455.29	5382.35	5314.81	5263.70	5186.61	5121.09	5036.59	
270.0	5569.21	5516.30	5445.06	5382.83	5314.19	5237.25	5172.56	5107.04	5035.56	
292.5	5552.59	5489.31	5427.54	5373.80	5293.77	5231.17	5155.34	5083.18	5002.73	
315.0	5542.70	5484.30	5417.42	5352.20	5268.69	5212.32	5135.72	5057.34	4989.10	
337.5	5539.63	5478.71	5407.98	5345.27	5274.44	5205.64	5137.50	5065.78	4991.07	
360.0	5563.45	5500.35	5433.66	5372.10	5303.58	5230.43	5163.72	5079.95	5016.13	
C/ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	
0.0	4930.39	4854.40	4781.80	4708.64	4625.80	4543.04	4459.65	4378.96	4303.56	
22.5	4939.48	4861.77	4785.74	4710.15	4624.51	4552.91	4470.22	4389.15	4305.04	
45.0	4958.71	4886.20	4811.71	4736.48	4649.95	4578.33	4498.09	4422.12	4331.22	
67.5	4990.45	4925.07	4844.23	4768.68	4693.54	4607.39	4520.15	4446.43	4358.35	
90.0	5046.13	4965.28	4896.50	4820.50	4748.23	4668.38	4577.54	4488.68	4419.52	
112.5	5053.43	4986.15	4896.64	4828.16	4762.28	4679.92	4599.56	4527.42	4441.74	
135.0	5062.39	4984.64	4909.83	4844.45	4770.00	4681.35	4610.11	4515.57	4459.86	
157.5	5063.25	4990.02	4911.11	4843.22	4762.54	4678.34	4596.28	4523.77	4437.60	
180.0	5050.21	4977.58	4926.42	4844.99	4761.65	4672.26	4602.85	4523.40	4455.50	
202.5	5032.55	4961.47	4888.13	4803.75	4730.45	4644.98	4573.80	4483.58	4408.87	
225.0	4998.33	4927.34	4852.90	4778.65	4700.33	4617.63	4538.54	4459.05	4380.95	
247.5	4972.36	4905.18	4835.16	4758.17	4671.37	4600.19	4516.06	4448.03	4349.37	
270.0	4949.90	4885.69	4810.47	4726.15	4652.27	4564.21	4496.31	4405.67	4322.37	
292.5	4934.76	4853.15	4777.50	4702.28	4619.33	4547.38	4470.95	4376.23	4302.60	
315.0	4912.99	4842.08	4765.97	4678.62	4603.33	4532.84	4443.43	4360.33	4275.70	
337.5	4916.27	4836.01	4758.86	4678.16	4602.49	4521.36	4441.26	4366.47	4276.85	
360.0	4930.39	4854.40	4781.80	4708.64	4625.80	4543.04	4459.65	4378.96	4303.56	
C/ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	
0.0	4216.42	4134.32	4048.92	3958.98	3871.71	3783.79	3695.76	3612.93	3522.88	
22.5	4225.85	4146.18	4060.71	3976.35	3889.83	3796.21	3708.46	3622.64	3538.50	
45.0	4253.50	4170.09	4073.40	3993.58	3909.86	3821.24	3737.98	3651.14	3557.77	
67.5	4276.48	4197.29	4110.80	4029.82	3944.59	3856.81	3769.71	3679.50	3592.62	
90.0	4341.73	4250.09	4161.35	4077.96	3991.21	3903.97	3827.97	3732.02	3640.58	
112.5	4357.92	4270.85	4179.24	4091.38	4005.03	3920.87	3829.22	3744.84	3653.33	
135.0	4364.12	4270.88	4186.30	4108.66	4026.23	3934.95	3849.20	3762.98	3666.65	
157.5	4356.17	4276.82	4193.47	4094.05	4017.40	3934.00	3843.33	3754.58	3672.49	
180.0	4359.59	4269.96	4177.69	4111.76	4013.38	3934.29	3833.83	3759.47	3667.57	
202.5	4318.91	4233.97	4161.91	4065.85	3988.01	3896.70	3815.11	3723.05	3636.13	
225.0	4284.88	4204.21	4117.23	4047.91	3943.86	3865.39	3785.86	3689.52	3605.65	
247.5	4267.77	4172.66	4098.92	4013.22	3919.29	3839.41	3750.28	3664.86	3571.22	
270.0	4243.38	4157.36	4067.14	3984.03	3899.58	3816.06	3728.52	3643.11	3552.41	
292.5	4212.23	4136.09	4049.50	3955.23	3876.77	3781.88	3697.78	3615.49	3522.65	
315.0	4196.76	4114.99	4027.87	3944.17	3856.26	3767.33	3679.71	3595.77	3504.67	
337.5	4188.47	4106.58	4025.52	3939.59	3848.25	3757.57	3679.31	3591.42	3500.40	
360.0	4216.42	4134.32	4048.92	3958.98	3871.71	3783.79	3695.76	3612.93	3522.88	

Intensity data(cd)									Page: 12 Total:16	
C/ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	
0.0	3432.14	3342.97	3255.56	3167.75	3080.30	2991.69	2905.27	2817.60	2731.43	
22.5	3449.36	3362.27	3268.70	3178.16	3090.67	3008.75	2922.11	2835.23	2745.32	
45.0	3471.61	3387.86	3295.91	3207.10	3124.43	3033.59	2948.10	2856.45	2771.52	
67.5	3507.11	3416.06	3325.42	3237.57	3147.45	3059.81	2973.26	2886.13	2803.16	
90.0	3553.93	3461.29	3372.40	3284.57	3194.21	3112.45	3026.42	2939.61	2847.65	
112.5	3567.98	3482.08	3393.98	3302.97	3217.41	3131.52	3045.44	2953.30	2869.03	
135.0	3579.67	3489.20	3402.99	3315.20	3226.28	3140.48	3049.13	2965.59	2880.69	
157.5	3581.58	3490.46	3405.75	3321.29	3229.07	3142.45	3056.13	2968.17	2882.53	
180.0	3583.63	3489.28	3401.52	3309.73	3222.89	3141.14	3049.09	2966.21	2876.93	
202.5	3538.55	3457.63	3375.07	3280.59	3190.69	3105.75	3022.40	2932.26	2846.46	
225.0	3506.24	3427.86	3335.20	3246.62	3163.97	3078.90	2992.21	2909.27	2813.77	
247.5	3483.17	3391.57	3309.48	3223.13	3139.09	3047.16	2960.28	2874.24	2791.02	
270.0	3457.38	3373.94	3280.51	3191.65	3106.14	3014.63	2930.03	2847.41	2753.92	
292.5	3434.65	3350.74	3259.30	3172.54	3082.59	3000.04	2910.00	2823.75	2733.13	
315.0	3413.88	3327.71	3235.97	3154.09	3067.70	2980.45	2886.27	2800.57	2715.11	
337.5	3411.91	3323.42	3235.36	3149.33	3062.13	2971.27	2886.20	2798.47	2714.30	
360.0	3432.14	3342.97	3255.56	3167.75	3080.30	2991.69	2905.27	2817.60	2731.43	
C/ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0	
0.0	2643.77	2555.68	2467.80	2382.74	2298.77	2214.06	2128.37	2046.86	1964.51	
22.5	2658.80	2570.69	2486.50	2400.48	2312.51	2227.95	2145.20	2062.34	1981.12	
45.0	2683.42	2600.95	2509.66	2420.70	2337.31	2252.77	2168.22	2083.80	2002.84	
67.5	2714.79	2627.69	2542.52	2455.26	2366.86	2283.77	2201.02	2117.58	2032.89	
90.0	2762.02	2680.27	2592.45	2514.13	2421.00	2342.30	2250.94	2172.20	2090.51	
112.5	2784.08	2693.09	2613.30	2523.78	2440.30	2356.00	2274.62	2187.44	2107.62	
135.0	2791.01	2699.51	2615.74	2536.29	2451.63	2369.25	2283.37	2199.92	2116.83	
157.5	2800.28	2710.45	2622.33	2541.68	2452.13	2369.68	2290.14	2201.98	2120.12	
180.0	2795.65	2704.98	2619.93	2531.93	2455.41	2367.65	2282.44	2199.04	2121.20	
202.5	2763.71	2675.36	2587.10	2503.30	2421.35	2337.98	2255.30	2171.27	2090.34	
225.0	2729.94	2644.24	2559.67	2477.01	2394.79	2305.44	2224.99	2142.78	2059.41	
247.5	2710.70	2620.54	2536.52	2444.08	2362.09	2277.93	2201.47	2115.05	2030.54	
270.0	2670.16	2580.92	2496.09	2411.29	2325.60	2245.38	2157.62	2073.79	1991.31	
292.5	2647.05	2557.83	2472.90	2383.07	2301.94	2215.92	2132.01	2049.64	1967.99	
315.0	2629.96	2542.92	2453.22	2373.03	2283.89	2201.33	2115.65	2035.96	1954.71	
337.5	2622.94	2538.61	2451.82	2365.30	2278.79	2192.27	2106.01	2024.92	1944.84	
360.0	2643.77	2555.68	2467.80	2382.74	2298.77	2214.06	2128.37	2046.86	1964.51	
C/ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0	
0.0	1883.71	1806.78	1727.31	1651.34	1573.50	1501.07	1424.85	1351.94	1277.78	
22.5	1904.06	1823.56	1746.05	1667.58	1592.04	1518.43	1441.63	1367.78	1293.92	
45.0	1921.74	1841.01	1764.38	1685.20	1610.04	1533.75	1460.72	1383.75	1311.19	
67.5	1951.67	1872.61	1799.57	1723.05	1642.05	1567.79	1488.67	1416.18	1341.13	
90.0	2009.37	1925.04	1845.91	1766.02	1686.33	1606.63	1526.99	1449.97	1376.29	
112.5	2024.88	1944.60	1864.33	1786.98	1706.53	1626.08	1545.63	1464.59	1391.33	
135.0	2037.65	1956.57	1878.39	1798.94	1719.38	1640.33	1561.29	1482.28	1406.30	
157.5	2037.83	1954.10	1873.81	1797.01	1717.75	1638.49	1559.24	1479.98	1402.59	
180.0	2037.02	1954.60	1867.00	1789.69	1712.10	1634.50	1556.87	1477.09	1403.39	
202.5	2007.37	1927.51	1845.82	1768.03	1689.53	1611.02	1532.54	1456.11	1379.51	
225.0	1979.55	1897.85	1814.72	1738.51	1659.51	1580.51	1501.46	1421.19	1345.59	
247.5	1952.47	1869.69	1792.77	1717.60	1638.87	1560.15	1481.49	1406.19	1331.19	
270.0	1909.68	1831.88	1754.01	1673.55	1598.93	1524.65	1447.50	1374.23	1298.28	
292.5	1889.46	1807.33	1728.59	1648.45	1575.02	1499.47	1424.83	1350.36	1274.74	
315.0	1873.96	1794.61	1716.26	1641.96	1565.47	1488.86	1413.21	1339.89	1264.93	
337.5	1865.40	1785.93	1707.19	1633.21	1555.40	1483.23	1407.00	1333.21	1258.17	
360.0	1883.71	1806.78	1727.31	1651.34	1573.50	1501.07	1424.85	1351.94	1277.78	

C/ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1204.39	1124.27	1040.75	947.01	835.60	723.61	611.63	502.70	404.57
22.5	1218.99	1141.43	1059.09	969.66	860.01	747.55	635.06	528.37	424.90
45.0	1237.81	1159.21	1084.75	996.91	890.91	779.63	668.19	556.75	451.92
67.5	1267.59	1197.86	1112.40	1026.05	930.95	818.82	706.24	593.66	486.63
90.0	1301.44	1227.40	1151.33	1068.29	979.81	871.64	756.48	642.22	530.89
112.5	1315.07	1240.96	1165.19	1085.97	1002.27	896.76	782.53	665.38	554.61
135.0	1329.66	1254.07	1180.62	1097.32	1012.31	913.97	800.67	683.72	570.32
157.5	1325.51	1251.51	1176.31	1099.09	1013.57	911.91	798.63	682.20	568.97
180.0	1327.13	1250.68	1173.87	1094.48	1009.84	903.86	790.80	674.80	562.33
202.5	1305.50	1230.45	1152.79	1071.18	982.82	875.69	762.56	646.25	537.51
225.0	1272.48	1196.69	1122.83	1041.48	947.87	837.91	722.54	609.13	502.08
247.5	1254.98	1180.25	1099.41	1015.92	916.85	802.92	689.20	577.74	472.14
270.0	1222.82	1145.45	1064.82	973.26	866.08	754.18	642.20	532.56	428.87
292.5	1201.14	1122.26	1041.03	946.92	835.63	723.84	612.04	503.59	402.87
315.0	1188.68	1106.75	1028.26	933.23	821.54	709.56	597.58	491.58	393.96
337.5	1183.94	1105.46	1022.87	928.87	817.33	705.72	594.11	487.36	390.47
360.0	1204.39	1124.27	1040.75	947.01	835.60	723.61	611.63	502.70	404.57
C/ (°)	90.0	91.0	92.0	93.0	94.0	95.0	96.0	97.0	98.0
0.0	351.07	310.48	271.50	231.62	192.84	156.40	123.11	93.26	66.47
22.5	361.49	320.93	280.96	241.13	201.57	164.83	130.13	99.52	64.21
45.0	371.25	330.97	290.76	250.03	210.64	173.76	139.71	108.50	79.98
67.5	392.79	345.60	305.42	265.59	225.45	185.62	150.11	116.93	86.88
90.0	431.28	363.89	319.47	277.68	237.78	200.43	164.08	131.39	100.63
112.5	451.05	370.02	326.96	283.88	243.88	205.80	169.97	136.11	105.22
135.0	465.90	378.86	334.06	290.79	249.40	210.11	172.85	138.35	106.11
157.5	463.84	376.59	331.19	288.82	248.02	210.01	172.79	139.14	101.81
180.0	457.91	376.45	332.19	288.84	248.72	209.40	172.22	137.86	106.85
202.5	437.10	367.98	323.38	281.41	240.87	203.23	166.27	132.85	99.99
225.0	406.04	351.36	308.26	267.39	228.52	191.78	157.05	125.45	96.89
247.5	385.14	339.75	297.71	256.30	217.42	181.41	146.84	115.32	87.39
270.0	363.12	321.33	279.80	240.54	201.90	165.62	132.14	101.35	73.85
292.5	350.46	308.99	268.38	229.44	191.89	156.87	123.48	94.30	67.52
315.0	346.86	305.16	265.19	225.57	187.61	152.11	118.42	89.12	62.61
337.5	342.64	303.29	263.31	224.24	186.62	151.25	119.26	90.24	56.64
360.0	351.07	310.48	271.50	231.62	192.84	156.40	123.11	93.26	66.47
C/ (°)	99.0	100.0	101.0	102.0	103.0	104.0	105.0	106.0	107.0
0.0	40.35	4.43	4.12	4.12	4.12	4.20	4.26	4.26	4.29
22.5	8.05	3.92	3.95	3.92	3.97	3.97	4.00	4.11	4.19
45.0	55.06	34.83	18.60	7.51	3.88	3.81	3.86	3.94	4.02
67.5	60.83	39.04	22.30	10.19	3.96	3.71	3.70	3.68	3.83
90.0	73.64	50.67	30.82	15.91	6.86	5.33	5.38	5.47	5.64
112.5	77.96	54.13	33.62	17.69	7.61	5.49	5.52	5.66	5.77
135.0	78.03	53.79	33.84	18.48	8.39	5.52	5.76	6.00	6.22
157.5	27.45	5.52	5.58	6.19	8.38	6.03	6.17	6.28	6.44
180.0	76.93	8.81	5.94	5.99	6.13	6.24	6.40	6.57	6.73
202.5	41.97	5.39	5.55	5.80	7.95	6.06	6.19	6.36	6.52
225.0	70.95	48.37	29.45	14.84	6.48	5.70	5.93	6.19	6.44
247.5	62.15	41.07	24.37	11.97	5.70	5.65	5.84	6.11	6.35
270.0	49.90	30.91	16.11	6.48	3.93	3.82	3.84	3.84	3.84
292.5	44.67	26.44	12.34	4.43	3.64	3.60	3.78	3.92	4.19
315.0	40.71	23.96	11.44	4.24	3.71	3.84	3.84	4.10	4.19
337.5	7.39	3.66	3.62	3.86	3.87	3.87	3.95	4.06	4.13
360.0	40.35	4.43	4.12	4.12	4.12	4.20	4.26	4.26	4.29

Intensity data(cd)									Page: 14 Total:16		
C/ (°)	108.0	109.0	110.0	111.0	112.0	113.0	114.0	115.0	116.0		
0.0	4.29	4.55	4.75	5.01	5.07	5.07	5.26	5.51	5.67		
22.5	4.22	4.35	4.65	4.76	5.00	5.11	5.32	5.51	5.54		
45.0	4.03	4.13	4.50	4.70	4.99	5.05	5.08	5.19	5.30		
67.5	3.84	3.92	4.11	4.16	4.29	4.43	4.64	4.76	4.97		
90.0	5.91	6.25	6.61	6.96	7.25	7.55	7.85	8.15	8.44		
112.5	5.98	6.23	6.44	6.69	6.94	7.17	7.48	7.71	7.96		
135.0	6.41	6.60	6.76	7.03	7.36	7.62	7.95	8.17	8.38		
157.5	6.60	6.65	6.63	6.74	7.11	7.35	7.33	7.30	7.30		
180.0	6.84	6.90	7.08	7.17	7.46	7.57	7.73	7.87	7.84		
202.5	6.71	6.85	7.00	7.14	7.30	7.30	7.30	7.30	7.22		
225.0	6.70	6.98	7.28	7.60	7.90	8.16	8.38	8.60	8.81		
247.5	6.68	6.98	7.25	7.58	7.89	8.20	8.54	8.84	9.09		
270.0	3.87	4.08	4.30	4.62	5.00	5.22	5.48	5.54	5.83		
292.5	4.46	4.68	4.79	5.08	5.14	5.41	5.52	5.73	5.98		
315.0	4.35	4.68	4.81	5.08	5.43	5.57	5.68	5.78	5.87		
337.5	4.22	4.45	4.67	4.70	4.89	5.08	5.06	5.19	5.24		
360.0	4.29	4.55	4.75	5.01	5.07	5.07	5.26	5.51	5.67		
C/ (°)	117.0	118.0	119.0	120.0	121.0	122.0	123.0	124.0	125.0		
0.0	5.70	5.51	5.32	5.29	5.29	5.29	5.61	5.99	6.13		
22.5	5.54	5.54	5.54	5.57	5.68	5.84	6.03	6.29	6.46		
45.0	5.51	5.57	5.72	5.92	5.97	6.29	6.41	6.48	6.75		
67.5	5.08	5.16	5.29	5.49	5.54	5.62	5.91	6.16	6.43		
90.0	8.74	9.05	9.39	9.63	9.87	10.12	10.37	10.61	10.91		
112.5	8.21	8.42	8.61	8.82	9.02	9.20	9.42	9.70	10.10		
135.0	8.55	8.68	8.76	8.84	8.98	9.06	9.30	9.57	9.79		
157.5	7.30	7.30	7.38	7.46	7.63	7.74	7.90	8.01	8.36		
180.0	7.86	7.39	6.89	6.81	6.81	6.86	7.06	7.58	8.00		
202.5	7.14	7.14	7.11	7.19	7.39	7.68	7.93	8.17	8.44		
225.0	9.06	9.22	9.33	9.44	9.54	9.62	9.73	10.00	10.24		
247.5	9.38	9.62	9.84	10.03	10.16	10.30	10.49	10.73	11.01		
270.0	6.06	6.35	6.49	6.74	6.84	6.92	7.24	7.30	7.33		
292.5	6.33	6.49	6.74	6.82	6.82	6.82	6.93	7.22	7.36		
315.0	5.94	6.05	6.37	6.38	6.54	6.73	6.86	7.21	7.30		
337.5	5.27	5.56	5.62	5.60	5.60	5.62	5.86	6.13	6.41		
360.0	5.70	5.51	5.32	5.29	5.29	5.29	5.61	5.99	6.13		
C/ (°)	126.0	127.0	128.0	129.0	130.0	131.0	132.0	133.0	134.0		
0.0	6.37	6.75	6.99	7.24	7.64	8.16	8.57	8.76	8.97		
22.5	6.71	6.76	6.92	7.29	7.78	8.42	8.72	8.95	8.95		
45.0	6.81	6.97	7.21	7.38	7.73	8.31	8.48	8.49	8.49		
67.5	6.72	7.05	7.34	7.70	8.05	8.43	8.51	8.65	8.89		
90.0	11.17	11.36	11.56	11.93	12.38	12.96	13.58	13.77	13.80		
112.5	10.48	10.73	11.02	11.34	11.72	12.08	12.45	12.72	12.97		
135.0	9.98	10.08	10.11	10.14	10.22	10.49	10.65	10.62	10.46		
157.5	8.85	9.52	10.01	10.39	10.77	11.33	11.90	11.95	11.95		
180.0	8.23	8.60	9.07	9.69	10.29	10.79	11.48	11.69	11.64		
202.5	8.83	9.48	10.10	10.68	11.04	11.42	11.92	11.95	11.89		
225.0	10.49	10.57	10.54	10.60	10.68	10.90	11.08	11.05	11.05		
247.5	11.33	11.65	11.93	12.17	12.39	12.65	12.76	12.76	12.87		
270.0	7.44	7.74	8.13	8.57	9.26	9.90	10.68	10.92	10.93		
292.5	7.66	8.03	8.28	8.57	8.90	9.17	9.33	9.34	9.23		
315.0	7.56	7.67	7.78	8.05	8.48	9.10	9.29	9.30	9.35		
337.5	6.67	7.11	7.48	7.86	8.45	9.00	9.16	9.19	9.19		
360.0	6.37	6.75	6.99	7.24	7.64	8.16	8.57	8.76	8.97		

Intensity data(cd)

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C/ (°)	135.0	136.0	137.0	138.0	139.0	140.0	141.0	142.0	143.0
0.0	9.00	9.01	9.03	8.93	8.87	9.00	9.36	9.81	9.95
22.5	9.00	9.03	9.06	9.30	9.38	9.54	9.52	9.60	10.20
45.0	8.51	8.67	8.92	8.97	9.29	9.56	9.96	10.22	10.30
67.5	9.00	9.21	9.40	9.62	9.92	10.24	10.38	10.54	10.70
90.0	13.96	14.04	14.04	14.23	14.48	14.76	15.10	15.45	15.77
112.5	13.18	13.43	13.67	13.89	14.07	14.24	14.40	14.53	14.64
135.0	10.46	10.49	10.55	10.76	11.06	11.35	11.71	12.12	12.49
157.5	11.95	11.95	11.95	11.95	11.95	12.15	12.41	12.80	13.27
180.0	11.36	10.98	10.65	10.22	9.93	9.93	9.93	10.10	10.62
202.5	11.82	11.79	11.79	11.79	11.82	11.82	12.01	12.09	12.25
225.0	11.05	11.11	11.22	11.44	11.76	12.05	12.41	12.71	12.98
247.5	12.95	13.03	13.06	13.06	13.06	13.06	13.06	13.14	13.22
270.0	10.93	10.93	10.96	10.96	11.09	11.23	11.52	11.55	11.58
292.5	9.17	9.17	9.33	9.36	9.71	9.90	10.01	10.28	10.31
315.0	9.38	9.41	9.43	9.49	9.59	9.81	9.94	10.31	10.62
337.5	9.19	9.22	9.27	9.33	9.33	9.35	9.46	10.09	10.86
360.0	9.00	9.01	9.03	8.93	8.87	9.00	9.36	9.81	9.95

C/ (°)	144.0	145.0	146.0	147.0	148.0	149.0	150.0	151.0	152.0
0.0	10.67	11.37	12.00	12.15	12.15	12.15	11.94	11.70	11.64
22.5	11.20	11.86	12.16	12.43	12.46	12.68	12.81	12.84	12.87
45.0	10.32	10.62	10.78	11.13	11.56	11.94	12.50	13.18	13.79
67.5	10.89	11.05	11.19	11.48	11.88	12.35	12.62	12.92	13.24
90.0	15.74	15.74	15.74	15.74	15.74	15.77	15.61	15.55	15.39
112.5	14.67	14.67	14.67	14.67	14.67	14.58	14.53	14.37	14.28
135.0	12.71	12.92	12.98	13.06	13.17	13.30	13.60	13.96	14.42
157.5	13.96	14.41	14.60	14.71	14.91	15.22	15.53	15.90	16.20
180.0	11.42	12.06	12.93	13.62	13.76	13.93	14.43	14.82	15.24
202.5	12.51	13.01	13.36	13.74	14.07	14.53	15.06	15.44	15.60
225.0	13.25	13.38	13.60	13.66	13.84	14.42	15.35	16.15	16.75
247.5	13.33	13.38	13.43	13.47	13.68	13.84	14.23	14.54	14.51
270.0	11.53	11.44	11.47	11.47	11.66	11.93	12.30	12.52	12.92
292.5	10.42	10.66	10.98	11.48	11.89	12.33	12.55	12.80	13.04
315.0	10.84	11.03	11.16	11.14	11.16	11.22	11.66	12.27	13.14
337.5	11.46	11.73	12.02	12.41	12.52	12.49	12.49	12.52	12.60
360.0	10.67	11.37	12.00	12.15	12.15	12.15	11.94	11.70	11.64

C/ (°)	153.0	154.0	155.0	156.0	157.0	158.0	159.0	160.0	161.0
0.0	11.29	10.78	10.39	10.18	10.15	10.23	10.36	10.77	10.88
22.5	13.25	13.25	13.30	13.30	13.20	13.19	12.79	12.29	12.01
45.0	14.20	14.72	15.10	15.32	15.32	14.77	14.26	13.98	13.58
67.5	13.30	13.35	13.43	13.57	14.07	14.24	14.00	13.81	13.33
90.0	15.28	15.31	15.48	15.67	15.83	16.12	16.16	16.61	16.23
112.5	13.99	13.88	13.91	14.02	14.07	14.05	14.15	14.12	14.07
135.0	15.03	15.47	15.68	15.98	16.41	16.60	16.72	16.30	16.10
157.5	16.45	16.77	17.13	17.90	18.85	19.14	19.06	19.00	18.82
180.0	15.52	15.57	15.59	15.22	15.22	15.30	15.38	15.43	15.43
202.5	15.49	15.43	15.11	15.03	14.90	14.63	14.55	14.46	14.19
225.0	17.43	18.01	18.43	18.54	18.53	18.24	17.73	17.18	16.70
247.5	14.54	14.57	14.61	15.20	16.23	16.92	17.32	17.27	16.97
270.0	13.04	13.01	12.72	12.03	11.47	11.15	11.62	11.77	11.93
292.5	13.02	13.04	12.85	12.83	13.28	13.31	13.37	13.16	12.68
315.0	13.77	14.24	15.09	15.51	14.90	14.50	14.04	13.71	13.52
337.5	12.84	13.22	13.30	13.33	13.33	13.09	12.72	12.30	12.19
360.0	11.29	10.78	10.39	10.18	10.15	10.23	10.36	10.77	10.88

Intensity data(cd)										Page: 16 Total:16	
C/ (°)	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0	170.0		
0.0	10.90	10.93	10.58	10.12	10.01	10.25	10.49	11.06	11.45		
22.5	11.95	11.66	11.39	10.78	10.55	10.38	10.36	10.36	10.36		
45.0	13.17	13.14	12.74	11.96	11.52	11.19	11.14	11.08	11.08		
67.5	13.22	12.71	12.44	11.85	11.43	11.06	10.92	10.89	10.95		
90.0	16.45	16.25	15.98	15.49	14.63	13.90	13.71	13.41	13.12		
112.5	15.02	15.48	15.42	15.09	14.50	13.83	13.74	13.45	13.10		
135.0	15.52	15.13	14.92	14.67	14.04	13.32	12.83	12.37	11.94		
157.5	18.87	18.89	18.36	17.35	16.13	15.17	14.35	13.86	13.35		
180.0	15.30	15.35	15.62	15.58	14.56	14.33	13.74	13.26	12.67		
202.5	14.16	13.79	13.71	13.65	13.49	13.49	13.52	13.46	13.36		
225.0	16.32	16.32	16.10	15.81	15.20	14.59	14.35	14.04	13.43		
247.5	16.75	16.45	15.85	15.36	14.64	14.24	14.11	13.86	13.30		
270.0	12.74	12.85	12.45	11.58	11.08	10.67	10.63	10.52	10.79		
292.5	12.21	11.99	11.53	11.27	10.99	10.85	10.72	10.66	10.74		
315.0	12.73	12.52	12.30	11.50	11.17	11.11	11.00	11.00	10.92		
337.5	12.04	11.87	11.24	10.49	10.22	10.17	10.14	10.17	10.19		
360.0	10.90	10.93	10.58	10.12	10.01	10.25	10.49	11.06	11.45		
C/ (°)	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0		
0.0	11.66	11.64	11.64	11.66	11.74	11.93	11.93	11.93	11.93		
22.5	10.44	10.52	10.62	10.63	11.05	11.30	11.60	11.81	11.87		
45.0	11.08	11.11	11.11	11.03	11.11	11.46	11.70	11.89	11.94		
67.5	11.11	11.08	10.87	10.71	10.65	11.05	11.11	11.11	11.11		
90.0	12.77	12.44	11.55	11.25	11.23	11.14	10.87	10.85	10.96		
112.5	12.80	12.35	11.63	11.36	11.30	11.07	10.88	10.85	10.92		
135.0	11.68	11.49	11.19	11.19	11.16	11.22	11.22	11.13	10.92		
157.5	12.92	12.48	12.03	11.79	11.82	11.84	11.87	11.67	11.27		
180.0	12.45	12.07	11.83	11.85	11.87	12.26	12.20	12.15	11.96		
202.5	13.27	13.06	12.92	12.82	12.84	12.79	12.59	12.30	11.71		
225.0	13.19	12.81	12.51	12.49	12.51	12.54	12.46	12.36	11.95		
247.5	12.94	12.64	12.38	12.19	12.22	12.40	12.24	12.02	11.84		
270.0	11.09	11.25	11.17	11.12	11.57	11.85	11.93	11.96	11.64		
292.5	10.74	10.77	10.56	10.53	10.53	10.77	11.12	11.10	11.09		
315.0	10.84	10.84	10.87	10.76	10.76	11.00	11.11	11.30	11.27		
337.5	10.67	11.08	11.09	11.09	11.48	11.65	11.89	12.00	11.98		
360.0	11.66	11.64	11.64	11.66	11.74	11.93	11.93	11.93	11.93		
C/ (°)	180.0										
0.0	11.90										
22.5	11.90										
45.0	11.90										
67.5	11.90										
90.0	11.90										
112.5	11.90										
135.0	11.90										
157.5	11.90										
180.0	11.90										
202.5	11.90										
225.0	11.90										
247.5	11.90										
270.0	11.90										
292.5	11.90										
315.0	11.90										
337.5	11.90										
360.0	11.90										