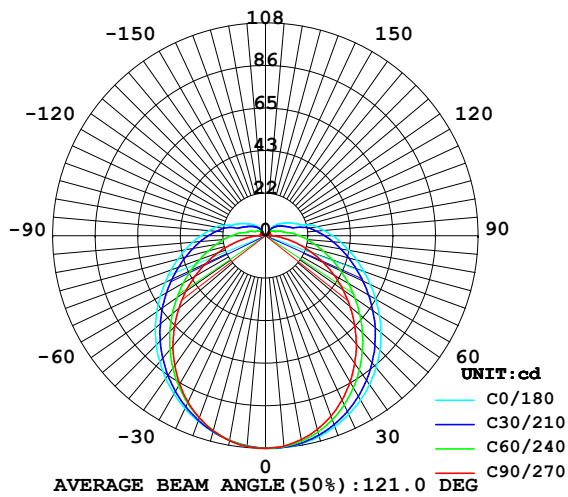
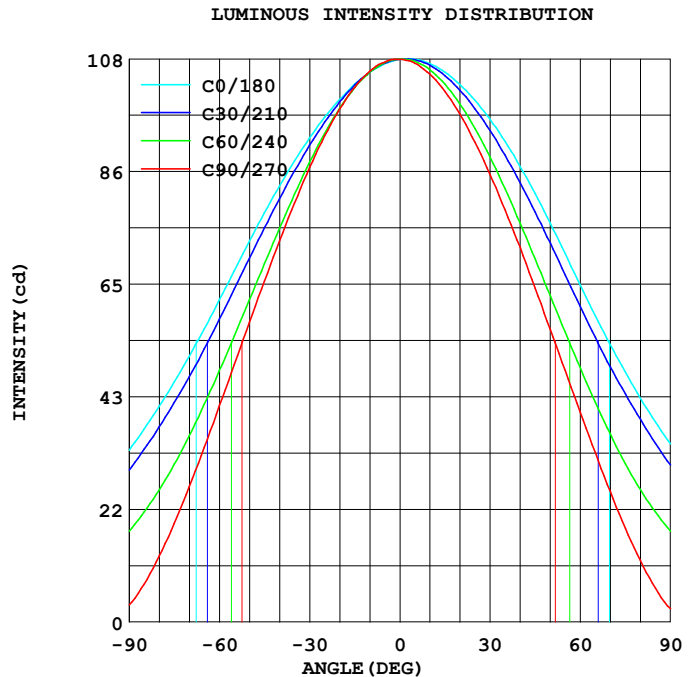


STREETLIGHT PHOTOMETRIC TEST REPORT

Report number: 2016000064

MANUFACTURER: FIBERLI	Address: PSL ELEKTRONIK ANTALYA	
NAME: LLB33 T60 CW 120D 4.8W 220V AC IP44	TYPE: LED LINE	WEIGHT:
SPECIFICATION: LED LINE BOLD 33	DIMENSION: 1010x45x33	SERIAL No.:

TEST DATA:					
MODEL:	LLB33	Imax (cd) :	107.9	η street_up (%) :	6.1
NOMINAL POWER (W) :	4.8	MAXIMUM (C, γ :	165,2.0	η street_down (%) :	46.1
RATED VOLTAGE (V) :	220	TOTAL FLUX (lm) :	402.1	η house_up (%) :	6.2
NOMINAL FLUX (lm) :	402.2	EFFICIENCY (%) :	100.0	η house_down (%) :	41.6
TEST FLUX (lm) :	402.1	η up (%) :	12.3		
LAMPS QUANTITY:	1	η down (%) :	87.7		

INTENSITY DISTRIBUTION DIAGRAM
IN C PLANSINTENSITY DISTRIBUTION DIAGRAM
IN C PLANS

Test: U:220.6V I:0.101A P:4.800W PF:0.493

Test System: LSG-1600
 Temperature: 23.3 DEG
 Operators: REGAIP DASTAN
 Test Date: 03-05-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
 Humidity: 54.0%
 Test Distance: 9.545 m
 Remarks: LLB33 T60 CW 120D 4.8W 220V AC IP44

ZONAL FLUX DIAGRAM

Report number: 2016000064

MANUFACTURER: FIBERLI	Address:PSL ELEKTRONIK ANTALYA	
NAME: LLB33 T60 CW 120D 4.8W 220V AC IP44	TYPE:LED LINE	WEIGHT:
SPECIFICATION:LED LINE BOLD 33	DIMENSION: 1010x45x33	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total
5.0	106.8	106.7	107.1	107.4	107.6	107.5	106.9	106.9	0- 5	2.567	2.567
10.0	105.2	104.7	105.4	106.0	106.8	106.4	104.8	105.2	5- 10	7.601	10.16
15.0	102.9	101.8	102.3	103.5	105.2	104.2	101.5	102.3	10- 15	12.34	22.51
20.0	100.0	98.12	98.21	100.1	102.8	101.1	97.21	98.66	15- 20	16.63	39.15
25.0	96.57	93.56	93.02	95.84	99.85	97.21	91.83	94.29	20- 25	20.34	59.49
30.0	92.65	88.55	87.00	90.74	96.20	92.56	85.64	89.19	25- 30	23.36	82.85
35.0	88.28	82.90	80.17	85.09	92.01	87.28	78.89	83.72	30- 35	25.61	108.4
40.0	83.45	77.07	72.88	78.89	87.18	81.54	71.79	77.80	35- 40	27.08	135.5
45.0	78.35	70.88	65.23	72.43	81.99	75.43	63.86	71.70	40- 45	27.76	163.3
50.0	72.88	64.50	57.30	65.87	76.34	69.15	56.03	65.50	45- 50	27.68	191.0
55.0	67.23	58.21	49.28	59.21	70.51	62.77	48.10	59.21	50- 55	26.92	217.9
60.0	61.67	52.11	41.36	52.84	64.50	56.39	40.08	53.02	55- 60	25.58	243.5
65.0	56.12	46.28	33.43	46.64	58.58	50.29	32.43	47.19	60- 65	23.77	267.2
70.0	50.83	40.63	25.87	40.81	53.02	44.46	24.96	41.54	65- 70	21.64	288.9
75.0	45.91	35.62	18.85	35.62	47.83	38.99	17.94	36.35	70- 75	19.34	308.2
80.0	41.27	30.97	12.57	30.88	42.82	34.16	11.75	31.70	75- 80	16.99	325.2
85.0	36.89	26.87	7.197	26.60	38.26	29.70	6.468	27.33	80- 85	14.70	339.9
90.0	32.88	22.95	3.279	22.77	34.07	25.69	2.550	23.50	85- 90	12.58	352.5
95.0	29.06	19.58	2.733	19.40	29.97	22.04	2.095	20.04	90- 95	10.72	363.2
100.0	25.41	15.94	2.733	15.39	26.32	18.22	2.186	16.30	95-100	8.990	372.2
105.0	20.86	12.39	2.642	12.39	21.41	14.30	2.186	12.57	100-105	7.208	379.4
110.0	16.85	9.475	2.642	9.748	17.58	11.20	2.186	10.02	105-110	5.366	384.8
115.0	14.57	7.835	2.550	7.561	15.30	9.110	2.277	7.926	110-115	4.401	389.2
120.0	12.48	6.741	2.550	6.741	13.21	7.744	2.277	6.833	115-120	3.677	392.9
125.0	10.56	5.921	2.550	6.013	11.29	6.833	2.277	6.013	120-125	3.077	396.0
130.0	8.837	5.101	2.550	5.101	9.475	5.921	2.368	5.193	125-130	2.525	398.5
135.0	7.288	4.282	2.550	4.373	8.017	4.919	2.459	4.282	130-135	2.026	400.5
140.0	5.921	3.644	2.550	3.735	6.468	4.190	2.459	3.644	135-140	1.584	402.1
145.0	0	0	0	0	0	0	0	0	140-145	0	402.1
150.0	0	0	0	0	0	0	0	0	145-150	0	402.1
155.0	0	0	0	0	0	0	0	0	150-155	0	402.1
160.0	0	0	0	0	0	0	0	0	155-160	0	402.1
165.0	0	0	0	0	0	0	0	0	160-165	0	402.1
170.0	0	0	0	0	0	0	0	0	165-170	0	402.1
175.0	0	0	0	0	0	0	0	0	170-175	0	402.1
180.0	0	0	0	0	0	0	0	0	175-180	0	402.1
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

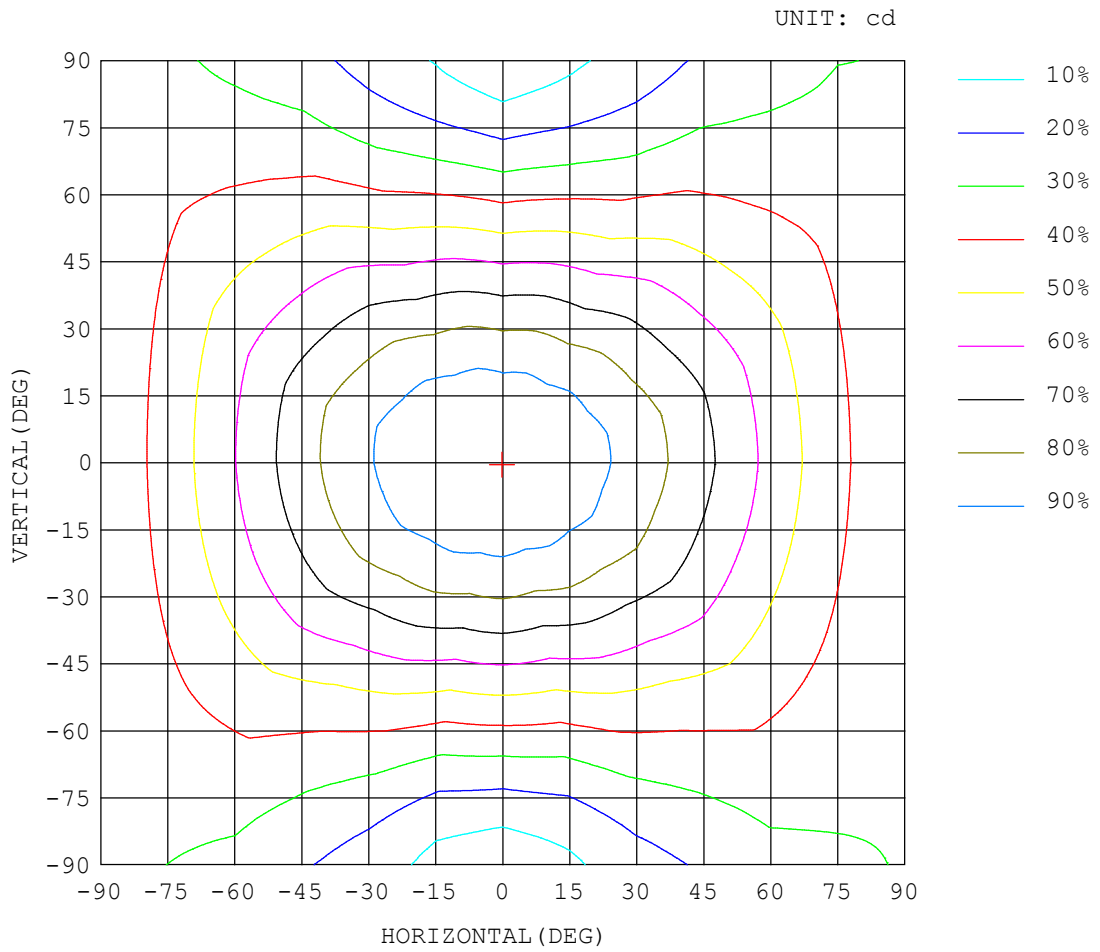
Test System:LSG-1600
Temperature:23.3DEG
Operators:REGAIP DASTAN
Test Date:03-05-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
Humidity:54.0%
Test Distance:9.545 m
Remarks: LLB33 T60 CW 120D 4.8W 220V AC IP44

ISOCANDELA DIAGRAM

Report number: 2016000064

MANUFACTURER: FIBERLI	Address: PSL ELEKTRONIK ANTALYA	
NAME: LLB33 T60 CW 120D 4.8W 220V AC IP44	TYPE: LED LINE	WEIGHT:
SPECIFICATION: LED LINE BOLD 33	DIMENSION: 1010x45x33	SERIAL No.:



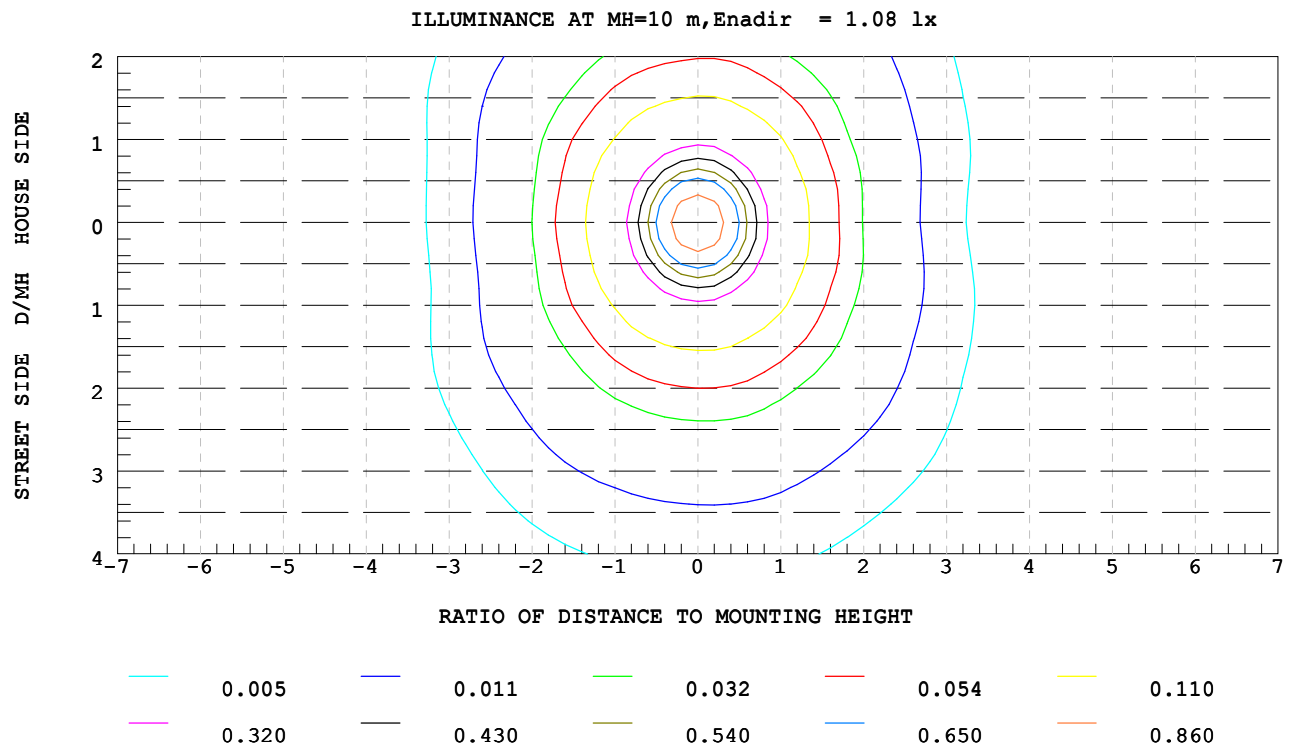
Test System: LSG-1600
Temperature: 23.3 DEG
Operators: REGAIP DASTAN
Test Date: 03-05-2016

Test Set: 2.0 deg/s C-Gamma (TYPE C)
Humidity: 54.0%
Test Distance: 9.545 m
Remarks: LLB33 T60 CW 120D 4.8W 220V AC IP44

ISOLUX DIAGRAM

Report number: 2016000064

MANUFACTURER: FIBERLI	Address: PSL ELEKTRONIK ANTALYA	
NAME: LLB33 T60 CW 120D 4.8W 220V AC IP44	TYPE: LED LINE	WEIGHT:
SPECIFICATION: LED LINE BOLD 33	DIMENSION: 1010x45x33	SERIAL No.:



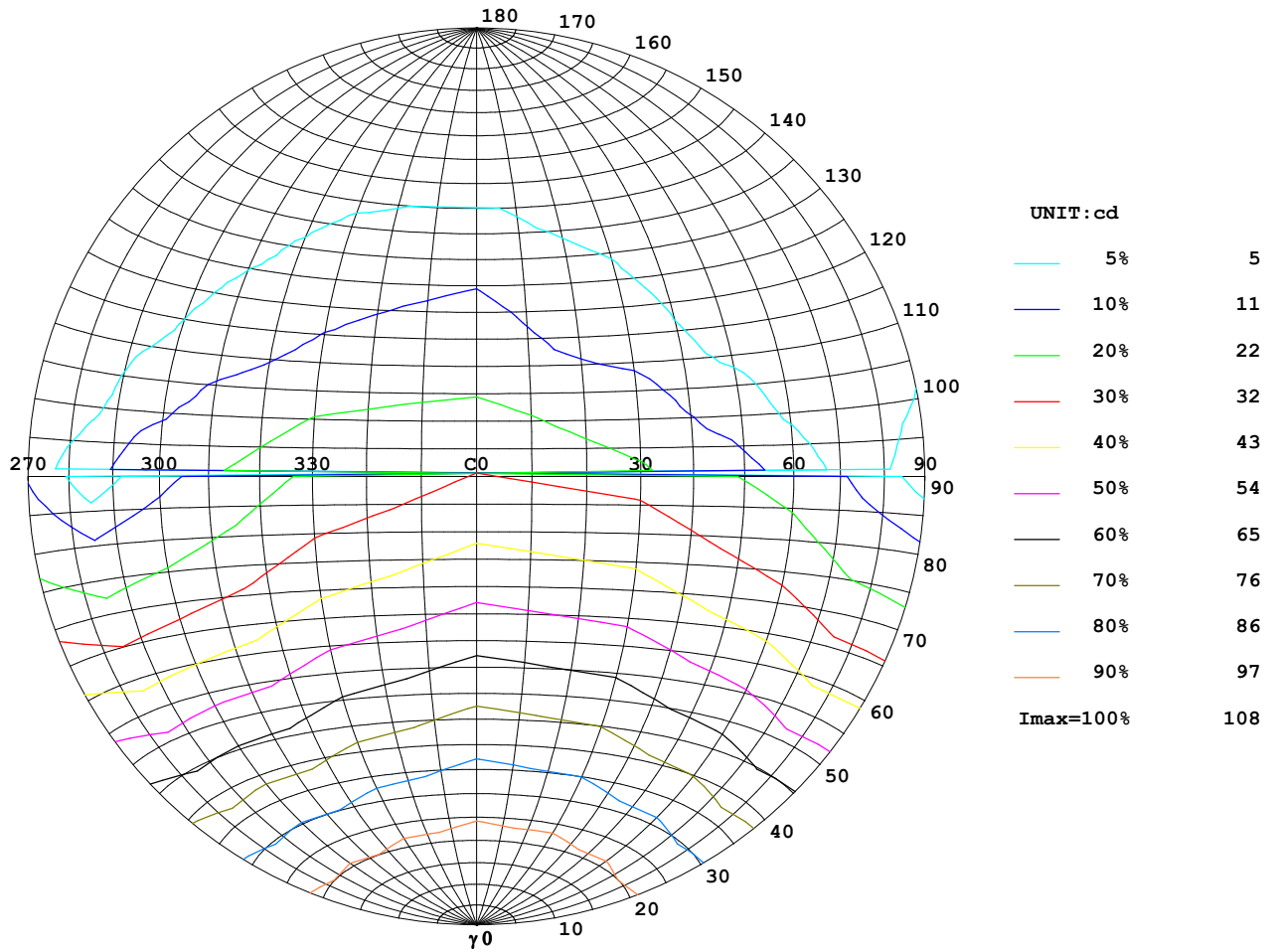
Test System: LSG-1600
 Temperature: 23.3 DEG
 Operators: REGAIP DASTAN
 Test Date: 03-05-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
 Humidity: 54.0%
 Test Distance: 9.545 m
 Remarks: LLB33 T60 CW 120D 4.8W 220V AC IP44

ISOCANDELA DIAGRAM

Report number: 2016000064

MANUFACTURER: FIBERLI	Address: PSL ELEKTRONIK ANTALYA	
NAME: LLB33 T60 CW 120D 4.8W 220V AC IP44	TYPE: LED LINE	WEIGHT:
SPECIFICATION: LED LINE BOLD 33	DIMENSION: 1010x45x33	SERIAL No.:



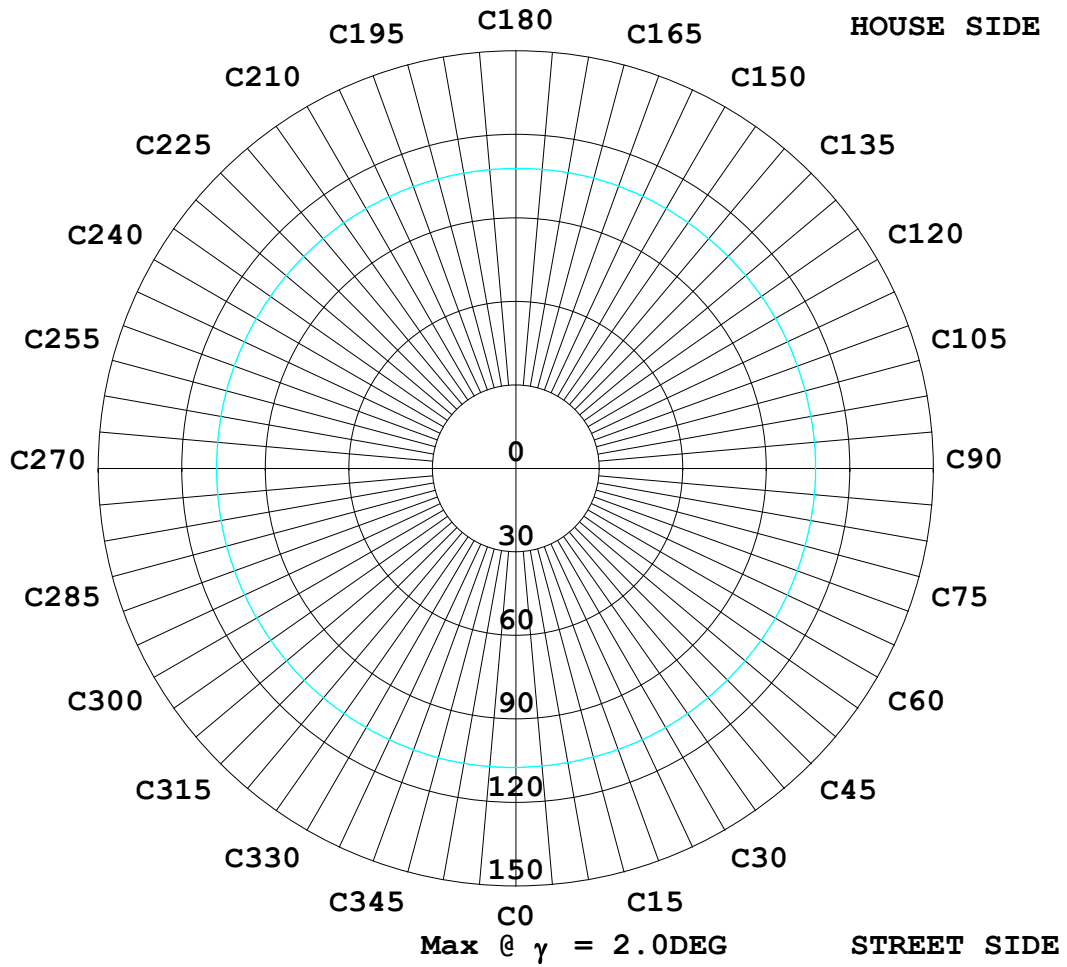
Test System: LSG-1600
 Temperature: 23.3 DEG
 Operators: REGAIP DASTAN
 Test Date: 03-05-2016

Test Set: 2.0 deg/s C-Gamma (TYPE C)
 Humidity: 54.0%
 Test Distance: 9.545 m
 Remarks: LLB33 T60 CW 120D 4.8W 220V AC IP44

ISOCANDELA DIAGRAM

Report number: 2016000064

MANUFACTURER: FIBERLI	Address: PSL ELEKTRONIK ANTALYA	
NAME: LLB33 T60 CW 120D 4.8W 220V AC IP44	TYPE: LED LINE	WEIGHT:
SPECIFICATION: LED LINE BOLD 33	DIMENSION: 1010x45x33	SERIAL No.:



Test System: LSG-1600
 Temperature: 23.3DEG
 Operators: REGAIP DASTAN
 Test Date: 03-05-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
 Humidity: 54.0%
 Test Distance: 9.545 m
 Remarks: LLB33 T60 CW 120D 4.8W 220V AC IP44

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: 2016000064

MANUFACTURER: FIBERLI	Address:PSL ELEKTRONIK ANTALYA	
NAME: LLB33 T60 CW 120D 4.8W 220V AC IP44	TYPE:LED LINE	WEIGHT:
SPECIFICATION:LED LINE BOLD 33	DIMENSION: 1010x45x33	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210
0.0	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108
5.0	107	107	107	107	107	107	107	107	108	107	108	108	108	108	108
10.0	105	105	105	105	105	105	105	105	106	106	107	107	107	107	107
15.0	103	102	103	102	102	101	102	102	103	104	105	105	105	105	105
20.0	100	99.3	99.5	98.1	98.3	97.1	98.2	97.8	99.6	100	102	102	103	103	102
25.0	96.5	95.6	95.6	93.5	93.4	91.8	93.0	92.6	94.9	95.8	98.3	99.0	99.8	100	98.2
30.0	92.6	91.4	91.2	88.5	88.0	85.7	87.0	86.5	89.4	90.7	94.1	95.2	96.2	96.5	94.1
35.0	88.2	86.8	86.3	82.9	81.9	79.0	80.1	79.7	83.1	85.0	89.1	90.6	92.0	92.2	89.3
40.0	83.4	81.8	80.9	77.0	75.3	71.8	72.8	72.4	76.4	78.8	83.8	85.6	87.1	87.5	84.0
45.0	78.3	76.5	75.4	70.8	68.6	64.4	65.2	64.7	69.4	72.4	78.0	80.2	81.9	82.3	78.4
50.0	72.8	70.9	69.6	64.5	61.6	56.8	57.3	57.0	62.1	65.8	72.0	74.4	76.3	76.8	72.6
55.0	67.2	65.1	63.7	58.2	54.7	49.1	49.2	49.1	54.9	59.2	65.8	68.4	70.5	70.8	66.4
60.0	61.6	59.5	57.9	52.1	48.1	41.7	41.3	41.4	47.9	52.8	59.8	62.4	64.5	64.9	60.4
65.0	56.1	54.0	52.2	46.2	41.7	34.5	33.4	33.9	41.2	46.6	53.8	56.6	58.5	59.0	54.4
70.0	50.8	48.7	46.9	40.6	35.6	27.7	25.8	26.8	34.9	40.8	48.1	51.1	53.0	53.3	48.8
75.0	45.9	43.8	42.0	35.6	30.1	21.6	18.8	20.5	29.2	35.6	43.0	46.0	47.8	48.1	43.6
80.0	41.2	39.2	37.3	30.9	25.2	16.3	12.5	15.0	24.2	30.8	38.2	41.0	42.8	43.1	38.8
85.0	36.8	34.9	33.0	26.8	21.0	12.1	7.19	10.6	19.9	26.6	33.8	36.5	38.2	38.5	34.1
90.0	32.8	30.8	29.0	22.9	17.4	8.83	3.27	7.56	16.3	22.7	29.7	32.3	34.0	34.2	30.0
95.0	29.0	27.1	25.3	19.5	14.2	6.46	2.73	5.55	13.3	19.4	25.9	28.5	29.9	30.1	26.1
100.0	25.4	23.6	21.9	15.9	10.0	4.73	2.73	4.09	9.56	15.3	22.5	24.8	26.3	26.4	22.6
105.0	20.8	18.9	14.5	12.3	8.74	3.91	2.64	3.46	8.10	12.3	16.1	19.7	21.4	21.4	16.4
110.0	16.8	14.2	12.7	9.47	6.55	3.27	2.64	2.91	6.28	9.74	13.3	14.6	17.5	16.0	13.0
115.0	14.5	12.6	10.9	7.83	5.37	2.82	2.55	2.55	5.37	7.56	11.3	13.1	15.3	14.3	11.2
120.0	12.4	11.0	9.56	6.74	4.82	2.45	2.55	2.36	4.64	6.74	10.0	11.5	13.2	12.6	9.93
125.0	10.5	9.47	8.38	5.92	4.19	2.36	2.55	2.27	4.09	6.01	8.74	10.1	11.2	10.9	8.74
130.0	8.83	8.01	7.19	5.10	3.64	2.36	2.55	2.36	3.55	5.10	7.56	8.65	9.47	9.29	7.47
135.0	7.28	6.65	6.01	4.28	3.09	2.45	2.55	2.45	3.09	4.37	6.19	7.19	8.01	7.83	6.19
140.0	5.92	5.46	4.91	3.64	2.73	2.55	2.55	2.45	2.73	3.73	5.28	5.83	6.46	6.19	5.19
145.0	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
150.0	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
155.0	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
160.0	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
165.0	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
170.0	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
175.0	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
180.0	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

Test System:LSG-1600
Temperature:23.3DEG
Operators:REGAIP DASTAN
Test Date:03-05-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
Humidity:54.0%
Test Distance:9.545 m
Remarks: LLB33 T60 CW 120D 4.8W 220V AC IP44

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: 2016000064

MANUFACTURER: FIBERLI	Address:PSL ELEKTRONIK ANTALYA	
NAME: LLB33 T60 CW 120D 4.8W 220V AC IP44	TYPE:LED LINE	WEIGHT:
SPECIFICATION:LED LINE BOLD 33	DIMENSION: 1010x45x33	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	108	108	108	108	108	108	108	108	108
5.0	108	107	107	107	107	107	107	107	107
10.0	106	106	106	105	105	105	105	105	105
15.0	104	103	103	102	102	101	102	102	103
20.0	101	99.1	98.8	97.2	97.8	97.2	98.6	98.7	100
25.0	97.2	94.4	93.8	91.8	92.7	92.1	94.2	94.7	96.5
30.0	92.5	89.0	88.1	85.6	86.7	86.4	89.1	90.1	92.5
35.0	87.2	82.9	81.6	78.8	80.1	80.1	83.7	85.1	88.1
40.0	81.5	76.3	74.6	71.7	73.0	73.5	77.8	79.7	83.1
45.0	75.4	69.5	67.2	63.8	65.5	66.5	71.7	74.0	77.8
50.0	69.1	62.4	59.6	56.0	58.2	59.6	65.5	68.3	72.5
55.0	62.7	55.4	52.0	48.1	50.4	52.7	59.2	62.4	66.7
60.0	56.3	48.6	44.4	40.0	43.0	46.0	53.0	56.6	61.2
65.0	50.2	42.0	37.1	32.4	35.7	39.6	47.1	51.1	55.5
70.0	44.4	35.9	30.1	24.9	28.6	33.6	41.5	45.7	50.2
75.0	38.9	30.2	23.6	17.9	22.3	28.0	36.3	40.7	45.2
80.0	34.1	25.3	18.1	11.7	16.7	23.2	31.7	36.0	40.6
85.0	29.7	21.0	13.5	6.46	12.1	19.0	27.3	31.7	36.1
90.0	25.6	17.4	10.1	2.55	8.74	15.3	23.5	27.7	32.1
95.0	22.0	14.2	7.65	2.09	6.46	12.3	20.0	24.1	28.3
100.0	18.2	10.1	5.64	2.18	4.82	8.56	16.3	20.7	24.6
105.0	14.3	8.74	4.73	2.18	4.00	7.37	12.5	14.3	19.9
110.0	11.2	6.83	3.91	2.18	3.27	5.55	10.0	11.7	14.5
115.0	9.11	5.37	3.27	2.27	2.91	4.64	7.92	10.1	13.0
120.0	7.74	4.91	2.91	2.27	2.64	4.19	6.83	8.83	11.3
125.0	6.83	4.19	2.64	2.27	2.55	3.55	6.01	7.65	9.74
130.0	5.92	3.64	2.64	2.36	2.64	3.09	5.19	6.55	8.29
135.0	4.91	3.18	2.55	2.45	2.55	2.64	4.28	5.55	7.01
140.0	4.19	2.82	2.55	2.45	2.55	2.45	3.64	4.55	5.64
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Test System:LSG-1600
 Temperature:23.3DEG
 Operators:REGAIP DASTAN
 Test Date:03-05-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
 Humidity:54.0%
 Test Distance:9.545 m
 Remarks: LLB33 T60 CW 120D 4.8W 220V AC IP44