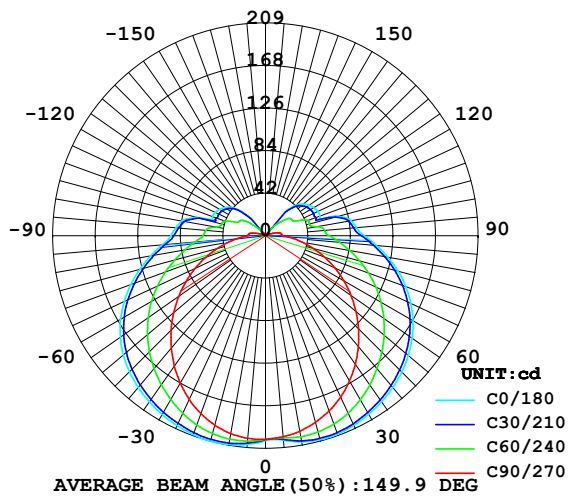
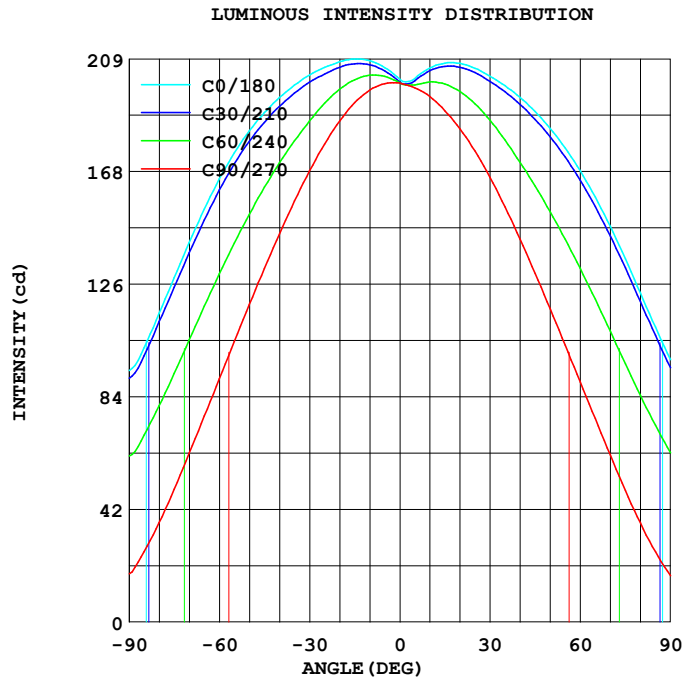


STREETLIGHT PHOTOMETRIC TEST REPORT

Report number: 2016000093

MANUFACTURER: FIBERLI	Address: PSL ELEKTRONIK ANTALYA	
NAME: LLKS PT45 CW 120D 18W 24V DC IP44D	TYPE: LED LINE	WEIGHT:
SPECIFICATION: LED LINE KS	DIMENSION: 1005x25x20mm	SERIAL No.:

TEST DATA:					
MODEL:	LLKS	Imax (cd) :	209.4	η street_up (%) :	8.7
NOMINAL POWER (W) :	18	MAXIMUM (C, γ) :	0,14.0	η street_down (%) :	43.3
RATED VOLTAGE (V) :	24	TOTAL FLUX (lm) :	1185.2	η house_up (%) :	9.1
NOMINAL FLUX (lm) :	1185.2	EFFICIENCY (%) :	100.0	η house_down (%) :	38.9
TEST FLUX (lm) :	1185	η up (%) :	17.8		
LAMPS QUANTITY:	1	η down (%) :	82.2		

INTENSITY DISTRIBUTION DIAGRAM
IN C PLANSINTENSITY DISTRIBUTION DIAGRAM
IN C PLANS

Test: U:24.00V I:0.144A P:18.00W PF:0.527

Test System: LSG-1600
 Temperature: 25.3 DEG
 Operators: REGAIP DASTAN
 Test Date: 03-29-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
 Humidity: 50.0%
 Test Distance: 9.545 m
 Remarks: LLKS PT45 CW 120D 18W 24V DC IP44D

ZONAL FLUX DIAGRAM

Report number: 2016000093

MANUFACTURER: FIBERLI	Address:PSL ELEKTRONIK ANTALYA	
NAME: LLKS PT45 CW 120D 18W 24V DC IP44D	TYPE:LED LINE	WEIGHT:
SPECIFICATION:LED LINE KS	DIMENSION: 1005x25X20mm	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total
5.0	206.1	204.0	200.2	199.3	202.1	200.5	198.7	202.6	0- 5	4.814	4.814
10.0	208.8	205.4	197.7	198.6	206.0	203.3	195.4	202.4	5- 10	14.45	19.27
15.0	209.4	204.8	193.1	196.4	207.9	204.1	190.1	200.0	10- 15	23.88	43.15
20.0	208.4	202.4	186.3	192.2	207.8	203.1	183.4	195.7	15- 20	32.74	75.90
25.0	206.2	198.5	177.7	186.1	205.9	200.2	175.1	189.6	20- 25	40.75	116.6
30.0	203.4	193.7	167.8	178.7	202.9	195.8	165.3	182.0	25- 30	47.70	164.3
35.0	199.7	188.2	156.6	169.9	199.5	190.5	154.4	173.2	30- 35	53.47	217.8
40.0	195.0	181.6	144.3	160.0	195.1	184.5	142.4	163.5	35- 40	57.96	275.8
45.0	189.5	174.1	131.5	149.5	189.8	177.6	129.6	153.2	40- 45	61.12	336.9
50.0	182.6	165.6	118.1	138.7	183.5	170.0	116.5	142.3	45- 50	62.89	399.8
55.0	174.4	156.1	104.4	127.2	176.2	161.4	102.9	130.4	50- 55	63.24	463.0
60.0	164.8	145.6	90.46	115.4	167.8	151.9	89.28	118.0	55- 60	62.16	525.2
65.0	153.6	134.1	76.62	103.2	158.0	141.7	75.70	105.3	60- 65	59.69	584.9
70.0	141.2	121.8	62.86	90.83	147.1	130.5	62.04	92.38	65- 70	55.96	640.8
75.0	128.0	109.4	49.38	78.62	135.1	118.7	48.92	79.53	70- 75	51.21	692.1
80.0	114.8	97.21	36.98	66.87	122.3	106.6	36.80	67.32	75- 80	45.75	737.8
85.0	101.9	85.36	26.14	56.12	109.6	94.84	26.14	56.21	80- 85	40.02	777.8
90.0	93.47	77.53	17.94	46.46	97.57	83.45	17.21	48.01	85- 90	34.55	812.4
95.0	88.73	73.97	16.85	43.73	90.28	77.25	16.03	45.82	90- 95	31.34	843.7
100.0	83.81	68.60	14.94	33.52	86.00	73.52	15.21	35.53	95-100	29.02	872.8
105.0	70.88	56.21	10.02	34.80	74.43	60.95	11.57	35.16	100-105	25.03	897.8
110.0	55.57	44.91	5.010	30.06	57.30	50.56	6.924	30.24	105-110	19.99	917.8
115.0	54.66	40.72	3.644	26.23	57.03	44.36	3.826	26.14	110-115	17.19	935.0
120.0	52.20	39.17	3.553	23.32	55.21	42.72	3.370	20.49	115-120	15.00	950.0
125.0	48.56	37.08	3.553	17.49	52.47	41.36	3.097	13.02	120-125	13.16	963.2
130.0	43.45	31.52	3.462	12.20	48.65	38.35	3.279	7.561	125-130	10.99	974.1
135.0	34.16	22.04	3.370	7.015	42.72	32.06	3.279	4.099	130-135	8.394	982.5
140.0	22.23	13.11	3.370	3.370	33.16	22.86	3.370	3.917	135-140	5.652	1185.2
145.0	0	0	0	0	0	0	0	0	140-145	0	
150.0	0	0	0	0	0	0	0	0	145-150	0	
155.0	0	0	0	0	0	0	0	0	150-155	0	
160.0	0	0	0	0	0	0	0	0	155-160	0	
165.0	0	0	0	0	0	0	0	0	160-165	0	
170.0	0	0	0	0	0	0	0	0	165-170	0	
175.0	0	0	0	0	0	0	0	0	170-175	0	
180.0	0	0	0	0	0	0	0	0	175-180	0	
DEG	LUMINOUS INTENSITY:cd									UNIT: lm	

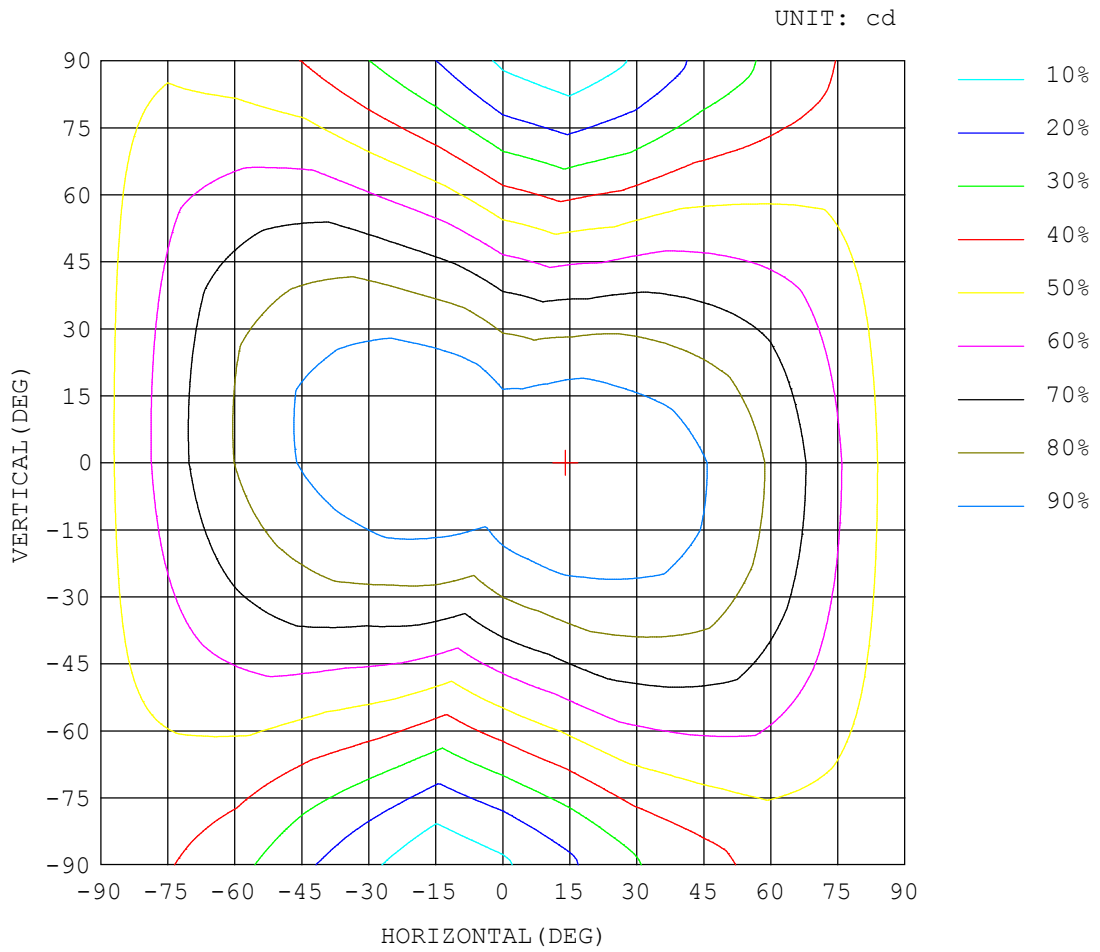
Test System:LSG-1600
Temperature:25.3DEG
Operators:REGAIP DASTAN
Test Date:03-29-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
Humidity:50.0%
Test Distance:9.545 m
Remarks: LLKS PT45 CW 120D 18W 24V DC IP44D

ISOCANDELA DIAGRAM

Report number: 2016000093

MANUFACTURER: FIBERLI	Address: PSL ELEKTRONIK ANTALYA	
NAME: LLKS PT45 CW 120D 18W 24V DC IP44D	TYPE: LED LINE	WEIGHT:
SPECIFICATION: LED LINE KS	DIMENSION: 1005x25x20mm	SERIAL No.:



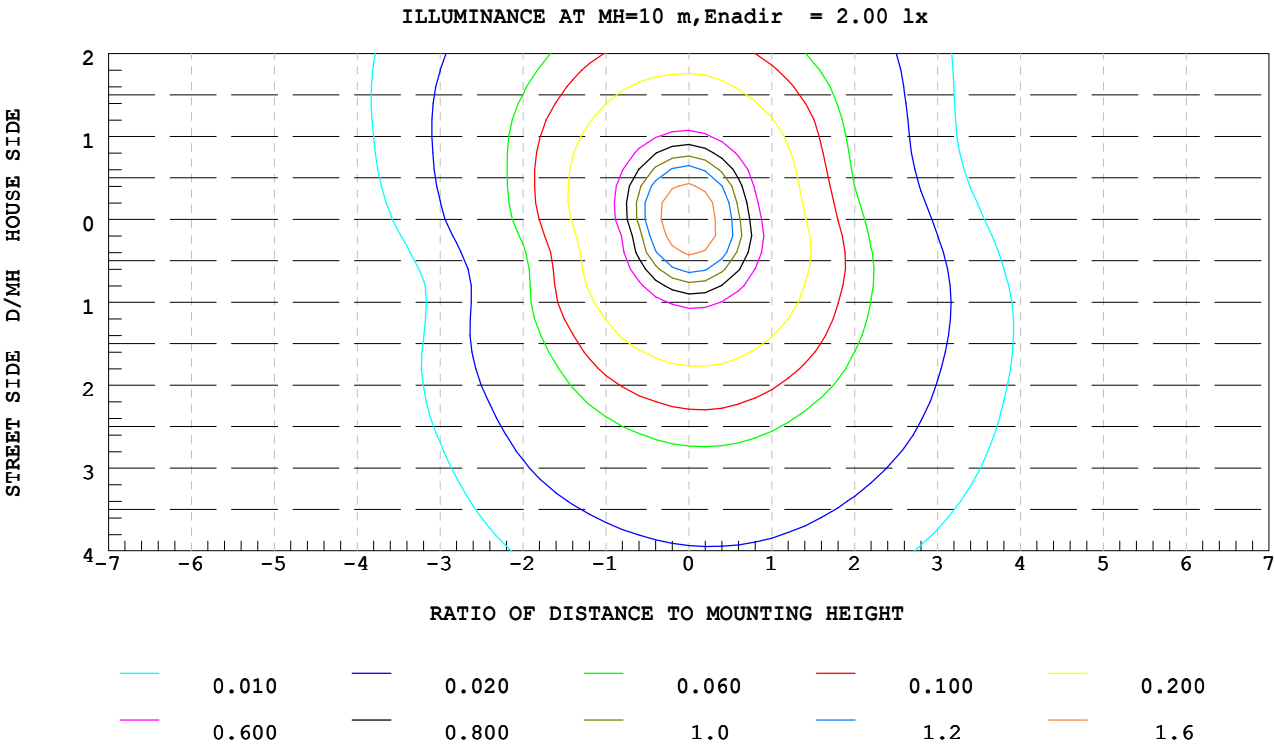
Test System: LSG-1600
Temperature: 25.3 DEG
Operators: REGAIP DASTAN
Test Date: 03-29-2016

Test Set: 2.0 deg/s C-Gamma (TYPE C)
Humidity: 50.0%
Test Distance: 9.545 m
Remarks: LLKS PT45 CW 120D 18W 24V DC IP44D

ISOLUX DIAGRAM

Report number: 2016000093

MANUFACTURER: FIBERLI	Address:PSL ELEKTRONIK ANTALYA	
NAME: LLKS PT45 CW 120D 18W 24V DC IP44D	TYPE:LED LINE	WEIGHT:
SPECIFICATION:LED LINE KS	DIMENSION: 1005x25X20mm	SERIAL No.:



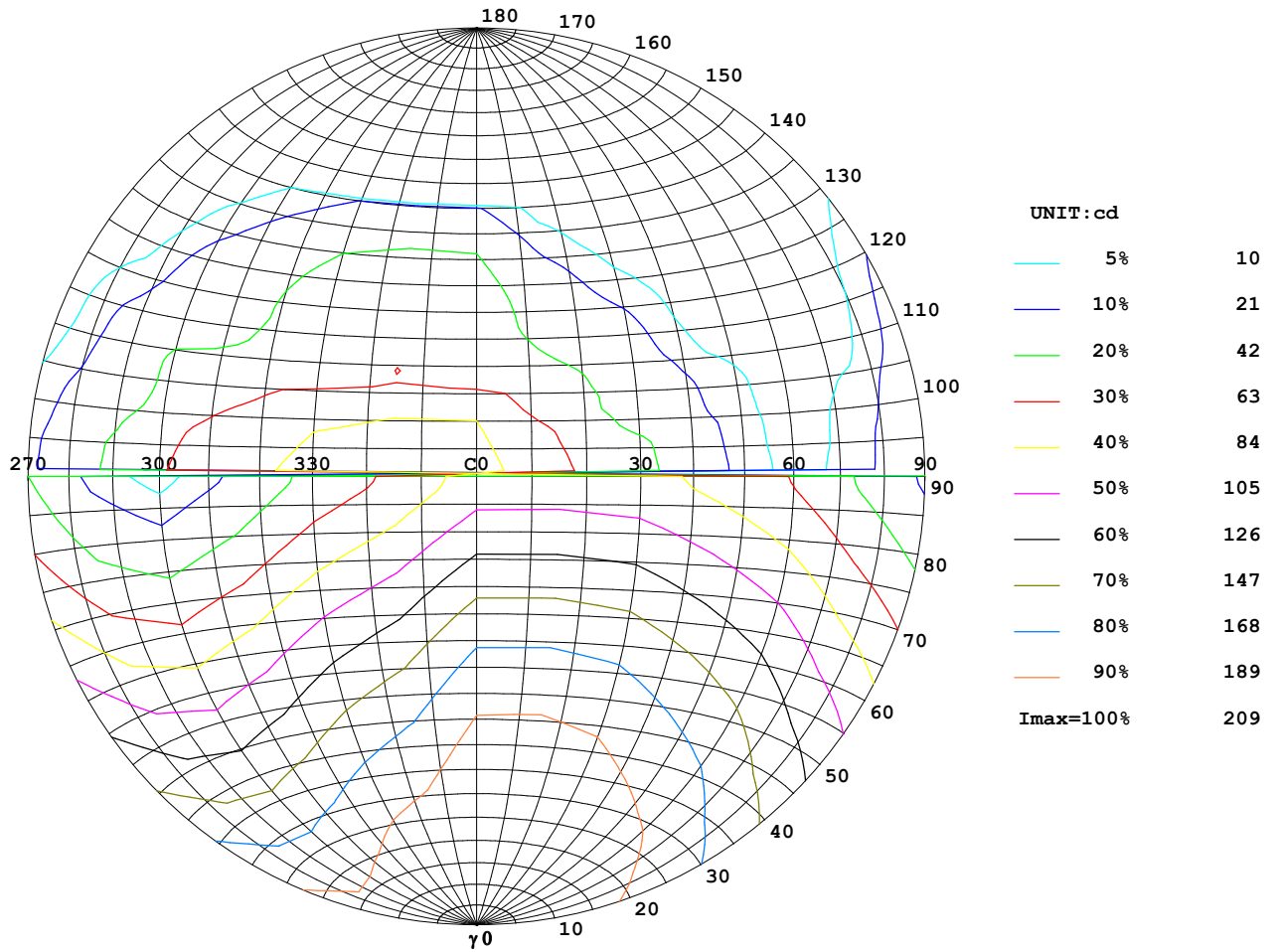
Test System:LSG-1600
Temperature:25.3DEG
Operators:REGAIP DASTAN
Test Date:03-29-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
Humidity:50.0%
Test Distance:9.545 m
Remarks: LLKS PT45 CW 120D 18W 24V DC IP44D

ISOCANDELA DIAGRAM

Report number: 2016000093

MANUFACTURER: FIBERLI	Address: PSL ELEKTRONIK ANTALYA	
NAME: LLKS PT45 CW 120D 18W 24V DC IP44D	TYPE: LED LINE	WEIGHT:
SPECIFICATION: LED LINE KS	DIMENSION: 1005x25x20mm	SERIAL No.:



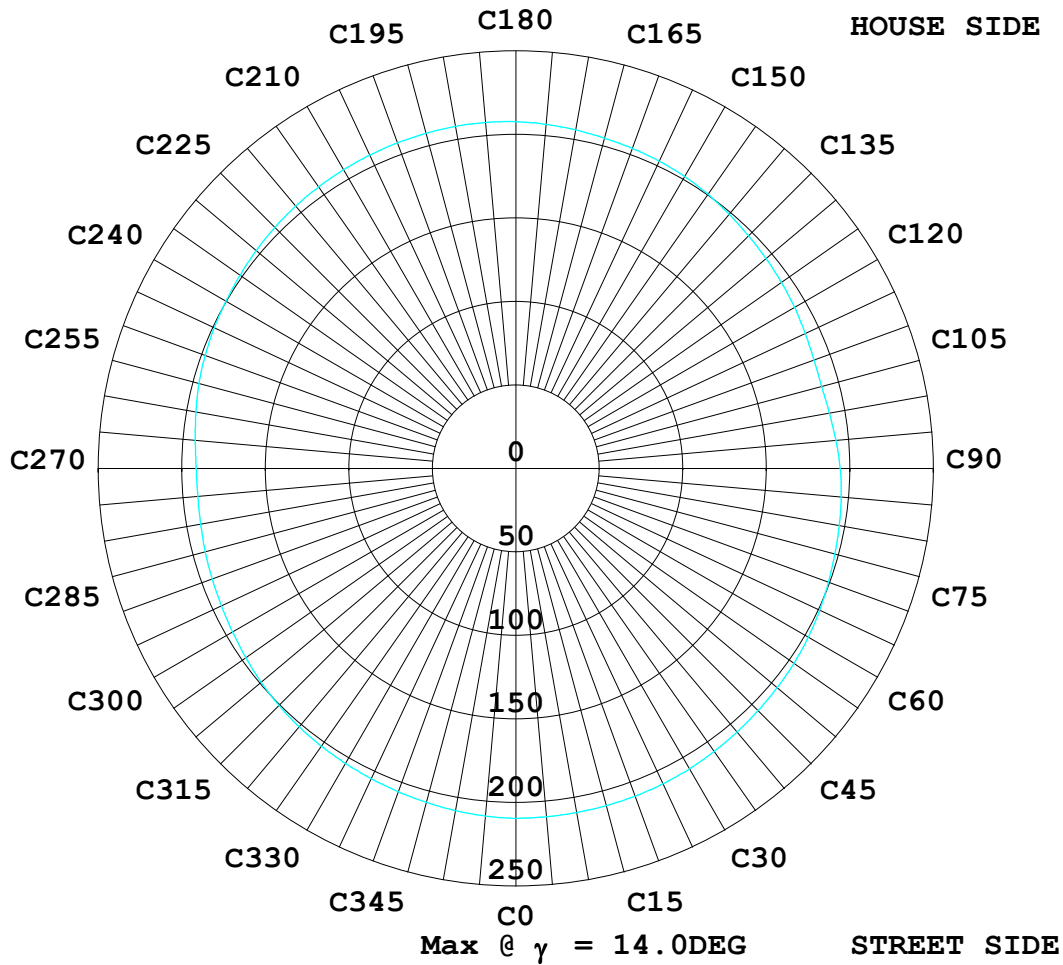
Test System: LSG-1600
Temperature: 25.3 DEG
Operators: REGAIP DASTAN
Test Date: 03-29-2016

Test Set: 2.0 deg/s C-Gamma (TYPE C)
Humidity: 50.0%
Test Distance: 9.545 m
Remarks: LLKS PT45 CW 120D 18W 24V DC IP44D

ISOCANDELA DIAGRAM

Report number: 2016000093

MANUFACTURER: FIBERLI	Address:PSL ELEKTRONIK ANTALYA	
NAME: LLKS PT45 CW 120D 18W 24V DC IP44D	TYPE:LED LINE	WEIGHT:
SPECIFICATION:LED LINE KS	DIMENSION: 1005x25X20mm	SERIAL No.:



Test System:LSG-1600
Temperature:25.3DEG
Operators:REGAIP DASTAN
Test Date:03-29-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
Humidity:50.0%
Test Distance:9.545 m
Remarks: LLKS PT45 CW 120D 18W 24V DC IP44D

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: 2016000093

MANUFACTURER: FIBERLI	Address:PSL ELEKTRONIK ANTALYA	
NAME: LLKS PT45 CW 120D 18W 24V DC IP44D	TYPE:LED LINE	WEIGHT:
SPECIFICATION:LED LINE KS	DIMENSION: 1005x25X20mm	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	202	201	201	201	201	201	200	200	201	201	201	201	202	201	201
5.0	206	206	205	204	203	202	200	199	199	199	200	201	202	202	201
10.0	209	208	207	205	203	200	198	194	196	199	202	204	206	206	205
15.0	209	209	208	205	202	197	193	188	192	196	202	205	208	208	207
20.0	208	208	206	202	198	192	186	180	186	192	199	204	208	208	206
25.0	206	206	204	199	193	184	178	170	178	186	195	201	206	207	204
30.0	203	203	201	194	186	176	168	158	169	179	190	197	203	204	201
35.0	200	200	197	188	179	166	157	146	159	170	183	192	200	201	197
40.0	195	195	192	182	171	155	144	132	147	160	176	186	195	197	193
45.0	190	190	186	174	162	144	132	119	135	150	167	179	190	192	187
50.0	183	183	179	166	152	133	118	104	123	139	159	172	184	187	180
55.0	174	175	170	156	141	120	104	90.1	110	127	149	164	176	180	173
60.0	165	165	161	146	130	108	90.4	75.9	96.4	115	138	154	168	172	164
65.0	154	154	150	134	117	94.4	76.6	61.8	83.1	103	127	144	158	162	155
70.0	141	142	137	122	105	81.4	62.8	48.1	69.8	90.8	116	133	147	151	144
75.0	128	128	125	109	92.4	68.8	49.3	35.2	57.0	78.6	104	121	135	139	132
80.0	115	115	112	97.2	80.4	56.9	36.9	23.3	44.9	66.8	91.7	109	122	127	119
85.0	102	102	99.0	85.3	69.4	46.4	26.1	13.1	34.1	56.1	80.5	96.9	110	114	107
90.0	93.4	94.1	90.6	77.5	61.7	38.9	17.9	4.37	25.0	46.4	69.8	85.3	97.5	102	94.5
95.0	88.7	89.3	86.1	73.9	59.0	37.0	16.8	3.00	23.5	43.7	65.1	79.3	90.2	93.7	87.4
100.0	83.8	84.3	81.4	68.6	49.0	30.3	14.9	2.82	21.8	33.5	59.2	75.6	86.0	89.2	83.3
105.0	70.8	71.4	67.7	56.2	44.6	26.8	10.0	2.73	19.9	34.8	50.3	59.6	74.4	78.3	71.7
110.0	55.5	62.5	51.2	44.9	42.0	24.4	5.01	2.82	15.9	30.0	46.7	47.7	57.3	66.9	52.6
115.0	54.6	58.6	50.6	40.7	31.3	21.1	3.64	2.82	9.74	26.2	38.0	45.3	57.0	63.5	52.0
120.0	52.2	54.5	49.3	39.1	29.3	13.7	3.55	2.91	5.19	23.3	34.8	44.7	55.2	59.5	51.5
125.0	48.5	50.0	46.4	37.0	26.2	7.83	3.55	3.00	3.73	17.4	33.8	43.5	52.4	55.5	49.4
130.0	43.4	44.4	41.7	31.5	17.7	3.46	3.46	3.09	3.64	12.2	30.1	40.6	48.6	50.8	46.0
135.0	34.1	35.9	32.5	22.0	10.6	3.37	3.37	3.09	3.55	7.01	21.7	34.0	42.7	44.9	40.3
140.0	22.2	23.5	21.1	13.1	4.73	3.46	3.37	3.18	3.46	3.37	14.6	24.5	33.1	34.7	30.5
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:25.3DEG
Operators:REGAIP DASTAN
Test Date:03-29-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
Humidity:50.0%
Test Distance:9.545 m
Remarks: LLKS PT45 CW 120D 18W 24V DC IP44D

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: 2016000093

MANUFACTURER: FIBERLI	Address:PSL ELEKTRONIK ANTALYA	
NAME: LLKS PT45 CW 120D 18W 24V DC IP44D	TYPE:LED LINE	WEIGHT:
SPECIFICATION:LED LINE KS	DIMENSION: 1005x25X20mm	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	225	240	255	270	285	300	315	330	345
0.0	201	201	201	200	200	201	201	201	201
5.0	201	200	199	199	200	201	203	204	205
10.0	203	201	198	195	197	199	202	205	207
15.0	204	200	196	190	191	195	200	204	207
20.0	203	197	192	183	184	189	196	201	205
25.0	200	193	185	175	174	181	190	196	202
30.0	196	187	178	165	164	171	182	190	198
35.0	191	179	169	154	152	160	173	183	194
40.0	185	171	159	142	138	148	164	176	188
45.0	178	162	148	130	125	136	153	167	181
50.0	170	153	136	117	111	123	142	157	173
55.0	161	142	124	103	96.2	109	130	147	164
60.0	152	131	112	89.2	81.5	95.4	118	136	154
65.0	142	120	99.6	75.7	67.0	81.9	105	124	143
70.0	131	108	87.0	62.0	52.6	68.0	92.3	111	131
75.0	119	96.0	74.5	48.9	38.9	54.7	79.5	98.5	118
80.0	107	84.2	62.6	36.8	26.2	42.5	67.3	86.3	106
85.0	94.8	73.1	51.7	26.1	15.1	31.7	56.2	74.8	93.1
90.0	83.4	62.9	42.0	17.2	5.55	23.5	48.0	66.9	84.3
95.0	77.2	58.5	39.0	16.0	4.09	22.3	45.8	63.8	80.3
100.0	73.5	51.0	32.5	15.2	3.73	20.1	35.5	56.2	75.7
105.0	60.9	44.6	30.5	11.5	3.55	17.4	35.1	48.3	57.1
110.0	50.5	44.4	27.5	6.92	3.37	11.7	30.2	44.0	47.2
115.0	44.3	35.7	25.3	3.82	3.46	5.83	26.1	35.0	44.2
120.0	42.7	30.7	20.3	3.37	3.27	3.46	20.4	31.6	43.6
125.0	41.3	29.7	13.7	3.09	3.27	3.37	13.0	28.8	41.4
130.0	38.3	24.3	8.83	3.27	3.27	3.37	7.56	21.3	36.5
135.0	32.0	17.1	4.46	3.27	3.27	3.27	4.09	13.0	26.5
140.0	22.8	11.0	4.00	3.37	3.27	3.27	3.91	6.46	16.3
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:25.3DEG
Operators:REGAIP DASTAN
Test Date:03-29-2016

Test Set: 2.0deg/s C-Gamma (TYPE C)
Humidity:50.0%
Test Distance:9.545 m
Remarks: LLKS PT45 CW 120D 18W 24V DC IP44D