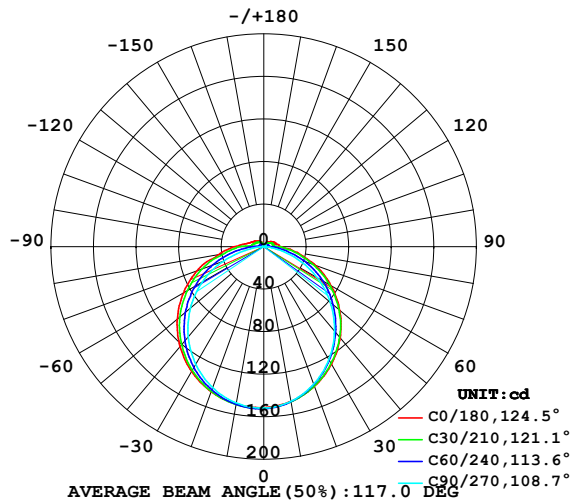


LUMINAIRE PHOTOMETRIC TEST REPORT

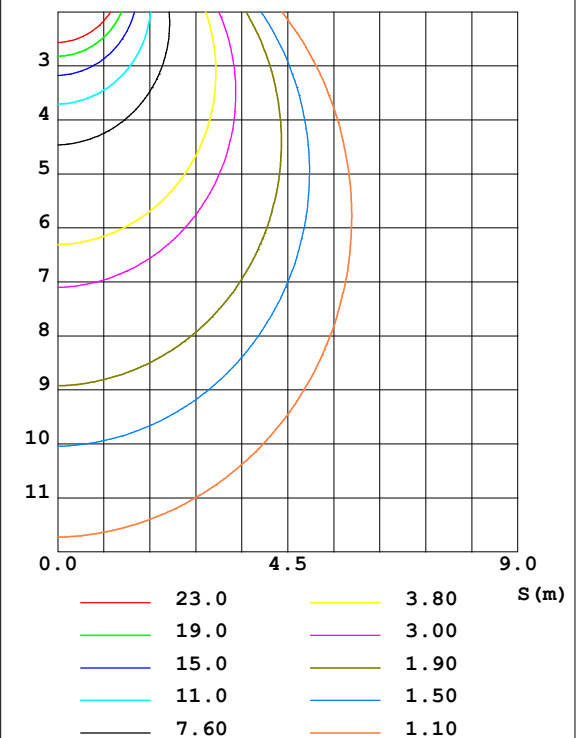
Test:U:24.00V I:0.2820A P:6.768W PF:1.000 Lamp Flux:505.784x1 lm		
NAME: LB-TW3050K	TYPE: LED Light Bar	WEIGHT:
SPEC: 6.5W	DIM.: 500*16.5*12.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs Inc.	SUR.:0.488*0.02	PROTECTION ANGLE: 120

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 74.73 lm/W
MODEL	LB-TW3050K-24V-20IN	Imax(cd)	152.6	S/MH(C0/180)	1.25	
NOMINAL POWER(W)	6.7	LOR(%)	100.0	S/MH(C90/270)	1.21	
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	505.78	η UP,DN(C0-180)	3.3,45.0	
NOMINAL FLUX(lm)	505.784	CIE CLASS	DIRECT	η UP,DN(C180-360)	3.5,48.1	
LAMPS INSIDE	1	η up(%)	6.9	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	0.0	η down(%)	93.1	CIBSE SHR MAX	1.35	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2025-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.400m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	147.7	148.1	147.7	148.7	150.3	150.7	149.3	148.8	0- 10	14.35	14.35	2.84,2.84
20	139.7	138.7	137.5	140.9	145.1	144.1	141.0	140.9	10- 20	41.10	55.45	11,11
30	127.5	125.0	122.6	129.0	135.7	133.0	127.9	128.5	20- 30	62.41	117.9	23.3,23.3
40	111.9	108.1	103.6	113.9	122.7	117.9	110.5	112.3	30- 40	75.79	193.6	38.3,38.3
50	93.23	88.73	81.88	96.13	106.3	99.68	90.05	92.98	40- 50	79.96	273.6	54.1,54.1
60	72.84	67.59	57.90	75.83	87.16	78.90	67.02	71.44	50- 60	74.71	348.3	68.9,68.9
70	52.00	45.35	32.76	54.11	67.06	56.73	40.58	48.88	60- 70	60.96	409.3	80.9,80.9
80	32.15	24.77	9.669	31.31	43.36	33.00	12.98	27.87	70- 80	40.74	450.0	89,89
90	15.81	11.67	1.245	15.41	27.76	16.81	0.7960	11.57	80- 90	20.99	471.0	93.1,93.1
100	13.17	6.503	1.269	8.309	17.05	7.786	0.8653	6.139	90-100	10.01	481.0	95.1,95.1
110	11.10	6.336	1.403	7.043	12.60	6.749	0.9945	6.473	100-110	7.454	488.5	96.6,96.6
120	9.333	5.443	1.506	6.307	10.40	5.973	1.142	5.635	110-120	6.159	494.6	97.8,97.8
130	7.429	3.725	1.584	5.256	8.195	4.993	1.297	3.754	120-130	4.594	499.2	98.7,98.7
140	5.435	2.625	1.672	3.935	6.358	3.857	1.454	2.568	130-140	3.101	502.3	99.3,99.3
150	1.850	1.823	1.757	2.904	4.834	2.909	1.609	1.634	140-150	1.747	504.1	99.7,99.7
160	1.956	1.895	1.858	1.906	2.615	1.903	1.759	1.772	150-160	0.9978	505.1	99.9,99.9
170	1.943	1.925	1.930	1.935	1.865	1.900	1.886	1.891	160-170	0.5369	505.6	100,100
180	1.930	1.957	1.966	1.959	1.927	1.957	1.966	1.959	170-180	0.1840	505.8	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Test Date:2025-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:6.400m [K=1.0000]
 Remarks:

```

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.400m [K=1.0000]
Remarks:

```

WEC AND CCEC

Test:U:24.00V I:0.2820A P:6.768W PF:1.000 Lamp Flux:505.784x1 lm		
NAME: LB-TW3050K	TYPE: LED Light Bar	WEIGHT:
SPEC: 6.5W	DIM.: 500*16.5*12.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs Inc.	SUR.:0.488*0.02	PROTECTION ANGLE: 120

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.341	.194	.061	.331	.189	.060	.314	.180	.058	.298	.172	.055	.284	.164	.053		
2.0	.309	.169	.052	.301	.166	.051	.285	.159	.049	.271	.152	.048	.258	.146	.046		
3.0	.281	.150	.045	.274	.147	.044	.260	.141	.043	.247	.135	.042	.235	.130	.040		
4.0	.257	.133	.039	.250	.131	.039	.238	.126	.038	.226	.121	.037	.215	.117	.036		
5.0	.235	.120	.035	.230	.118	.034	.218	.114	.033	.208	.110	.033	.198	.106	.032		
6.0	.217	.109	.031	.212	.107	.031	.202	.103	.030	.192	.100	.029	.184	.097	.029		
7.0	.201	.100	.028	.197	.098	.028	.188	.095	.027	.179	.092	.027	.171	.089	.026		
8.0	.188	.092	.026	.183	.090	.025	.175	.087	.025	.167	.085	.024	.160	.082	.024		
9.0	.175	.085	.024	.171	.084	.023	.164	.081	.023	.157	.079	.022	.150	.076	.022		
10.0	.165	.079	.022	.161	.078	.022	.154	.075	.021	.148	.073	.021	.141	.071	.020		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.243	.243	.243	.208	.208	.208	.142	.142	.142	.081	.081	.081	.026	.026	.026		
1.0	.235	.209	.185	.201	.179	.159	.138	.123	.110	.079	.071	.064	.025	.023	.021		
2.0	.228	.185	.149	.195	.159	.129	.134	.110	.090	.077	.064	.053	.025	.021	.017		
3.0	.220	.168	.126	.189	.145	.109	.130	.101	.077	.075	.059	.045	.024	.019	.015		
4.0	.212	.155	.111	.182	.134	.096	.125	.093	.068	.072	.055	.040	.023	.018	.013		
5.0	.205	.145	.100	.176	.125	.087	.121	.087	.062	.070	.051	.037	.023	.017	.012		
6.0	.198	.136	.093	.170	.118	.081	.117	.083	.057	.068	.049	.034	.022	.016	.011		
7.0	.191	.130	.087	.164	.112	.076	.113	.079	.054	.066	.046	.032	.021	.015	.011		
8.0	.184	.124	.083	.158	.108	.072	.110	.076	.051	.064	.045	.030	.021	.015	.010		
9.0	.178	.119	.079	.153	.103	.069	.106	.073	.049	.062	.043	.029	.020	.014	.010		
10.0	.172	.115	.077	.148	.100	.067	.103	.070	.048	.060	.041	.028	.019	.014	.009		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2025-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.400m [K=1.0000]
Remarks:

Uncorrected UGR Table

Test:U:24.00V I:0.2820A P:6.768W PF:1.000 Lamp Flux:505.784x1 lm										
NAME: LB-TW3050K					TYPE: LED Light Bar			WEIGHT:		
SPEC: 6.5W					DIM.: 500*16.5*12.5 (MM)			SERIAL No.: 001		
MFR.: Flexfire LEDs Inc.					SUR.:0.488*0.02			PROTECTION ANGLE: 120		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	21.8	23.2	22.1	23.6	23.9	20.9	22.3	21.2	22.7	23.0
3H	23.6	25.0	24.0	25.3	25.7	22.2	23.6	22.6	23.9	24.3
4H	24.5	25.8	24.9	26.2	26.6	22.7	24.0	23.1	24.3	24.7
6H	25.4	26.6	25.8	27.0	27.4	22.9	24.1	23.3	24.5	24.9
8H	25.8	26.9	26.2	27.4	27.8	22.9	24.1	23.4	24.5	24.9
12H	26.2	27.3	26.7	27.8	28.2	22.9	24.0	23.3	24.4	24.9
4H 2H	22.3	23.6	22.7	24.0	24.4	21.6	22.9	22.1	23.3	23.7
3H	24.4	25.5	24.8	25.9	26.4	23.2	24.3	23.6	24.7	25.2
4H	25.4	26.5	25.9	26.9	27.4	23.8	24.8	24.3	25.3	25.7
6H	26.5	27.4	27.0	27.9	28.4	24.2	25.1	24.7	25.6	26.1
8H	27.0	27.8	27.5	28.3	28.9	24.2	25.1	24.7	25.6	26.1
12H	27.5	28.3	28.1	28.8	29.4	24.2	25.0	24.8	25.5	26.1
8H 4H	25.7	26.5	26.2	27.0	27.6	24.3	25.1	24.8	25.6	26.2
6H	27.0	27.7	27.5	28.2	28.8	24.9	25.6	25.4	26.1	26.7
8H	27.7	28.3	28.2	28.8	29.4	25.1	25.7	25.6	26.3	26.9
12H	28.4	28.9	29.0	29.5	30.1	25.2	25.7	25.8	26.3	26.9
12H 4H	25.7	26.5	26.2	27.0	27.5	24.4	25.2	24.9	25.7	26.2
6H	27.0	27.7	27.6	28.2	28.8	25.1	25.7	25.6	26.3	26.9
8H	27.8	28.4	28.4	28.9	29.5	25.4	25.9	26.0	26.5	27.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 505.8 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.4)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2025-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.400m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.2820A P:6.768W PF:1.000 Lamp Flux:505.784x1 lm		
NAME: LB-TW3050K	TYPE: LED Light Bar	WEIGHT:
SPEC: 6.5W	DIM.: 500*16.5*12.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs Inc.	SUR.:0.488*0.02	PROTECTION ANGLE: 120

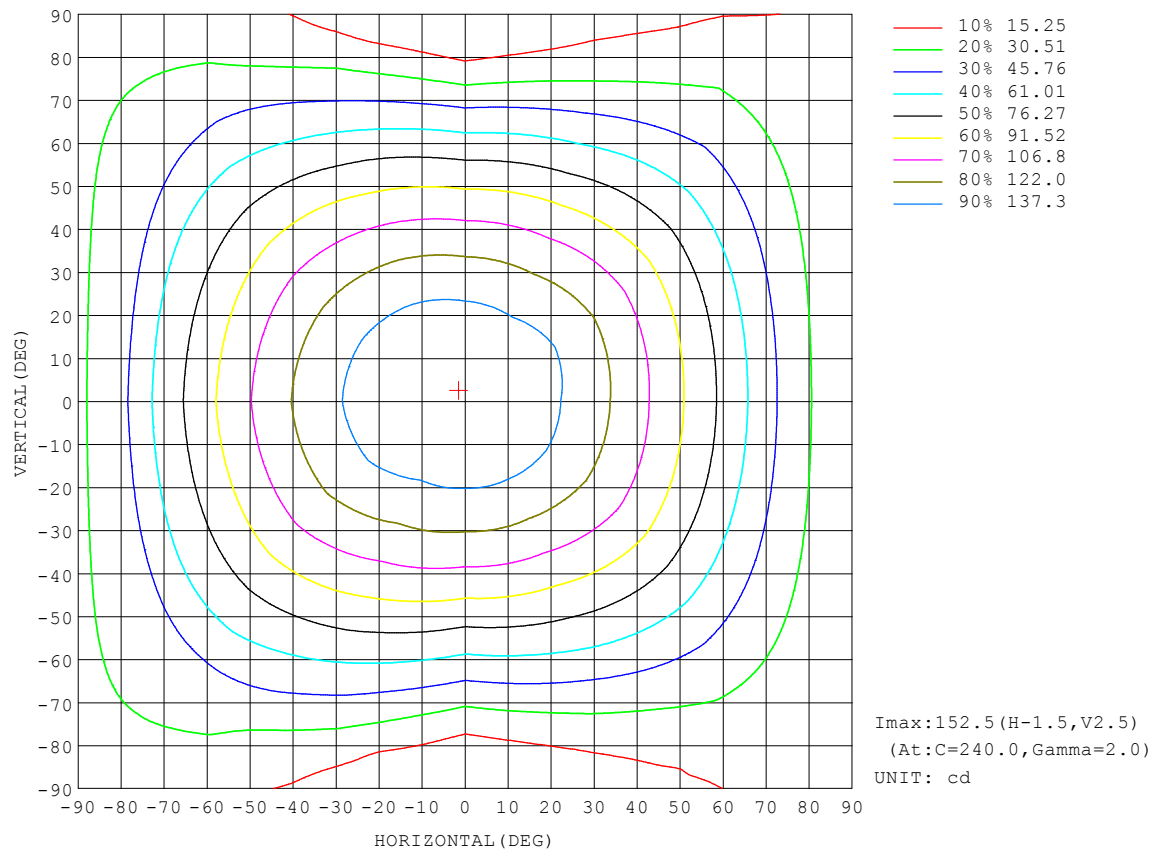
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	54	42	35	53	41	34	51	41	34	28
0.80	63	51	44	62	51	43	60	50	43	35
1.00	72	60	52	70	59	52	67	60	51	43
1.25	79	67	60	77	66	59	73	64	58	50
1.50	84	73	65	82	72	64	78	69	63	54
2.00	91	81	74	88	80	73	84	77	71	61
2.50	95	86	79	92	84	78	87	81	76	66
3.00	98	90	84	96	88	83	90	85	80	69
4.00	103	96	91	100	94	89	94	89	85	74
5.00	105	100	95	102	97	93	96	92	89	77
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2025-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity: 65.0%
 Test Distance: 6.400m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.2820A P:6.768W PF:1.000 Lamp Flux:505.784x1 lm		
NAME: LB-TW3050K	TYPE: LED Light Bar	WEIGHT:
SPEC: 6.5W	DIM.: 500*16.5*12.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs Inc.	SUR.:0.488*0.02	PROTECTION ANGLE: 120

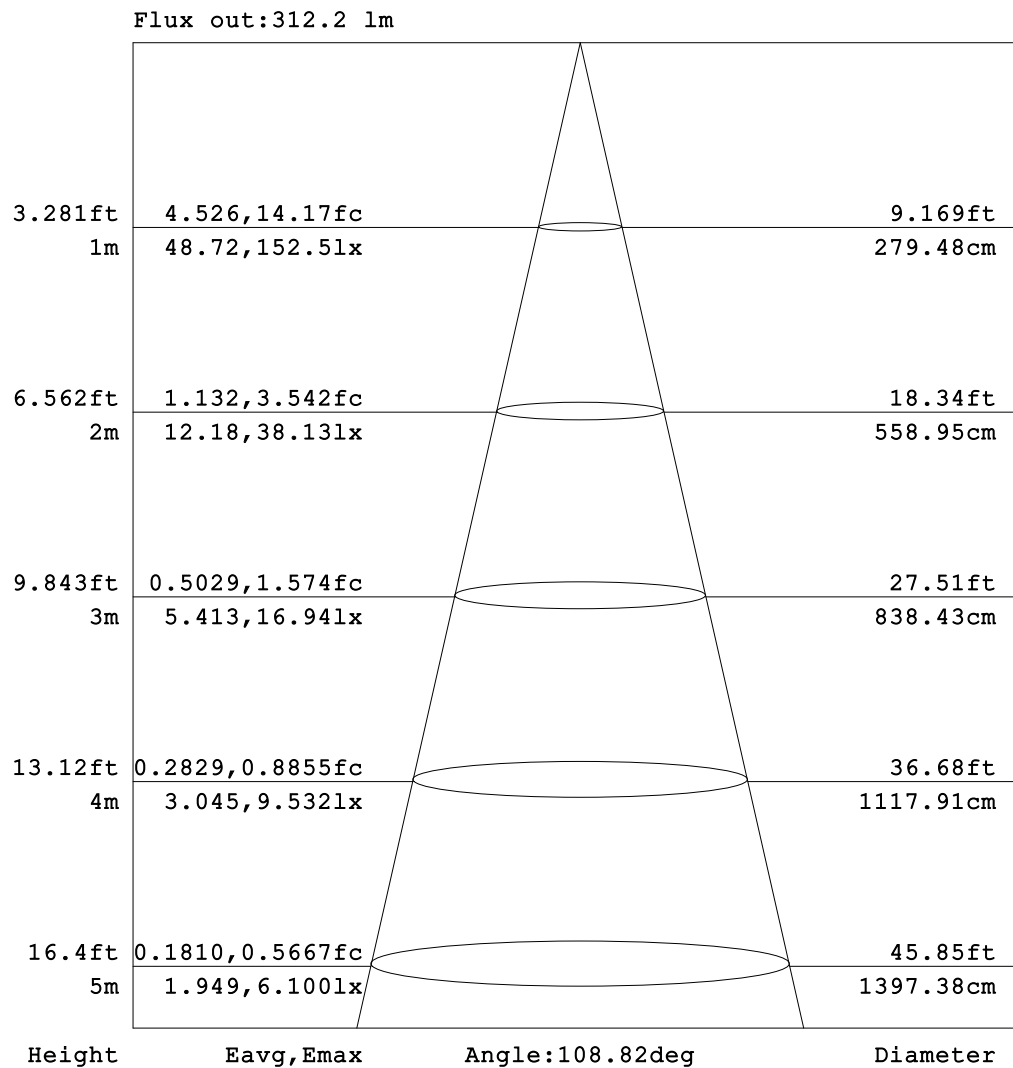


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2025-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.400m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.00V I:0.2820A P:6.768W PF:1.000 Lamp Flux:505.784x1 lm		
NAME: LB-TW3050K	TYPE: LED Light Bar	WEIGHT:
SPEC: 6.5W	DIM.: 500*16.5*12.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs Inc.	SUR.:0.488*0.02	PROTECTION ANGLE: 120



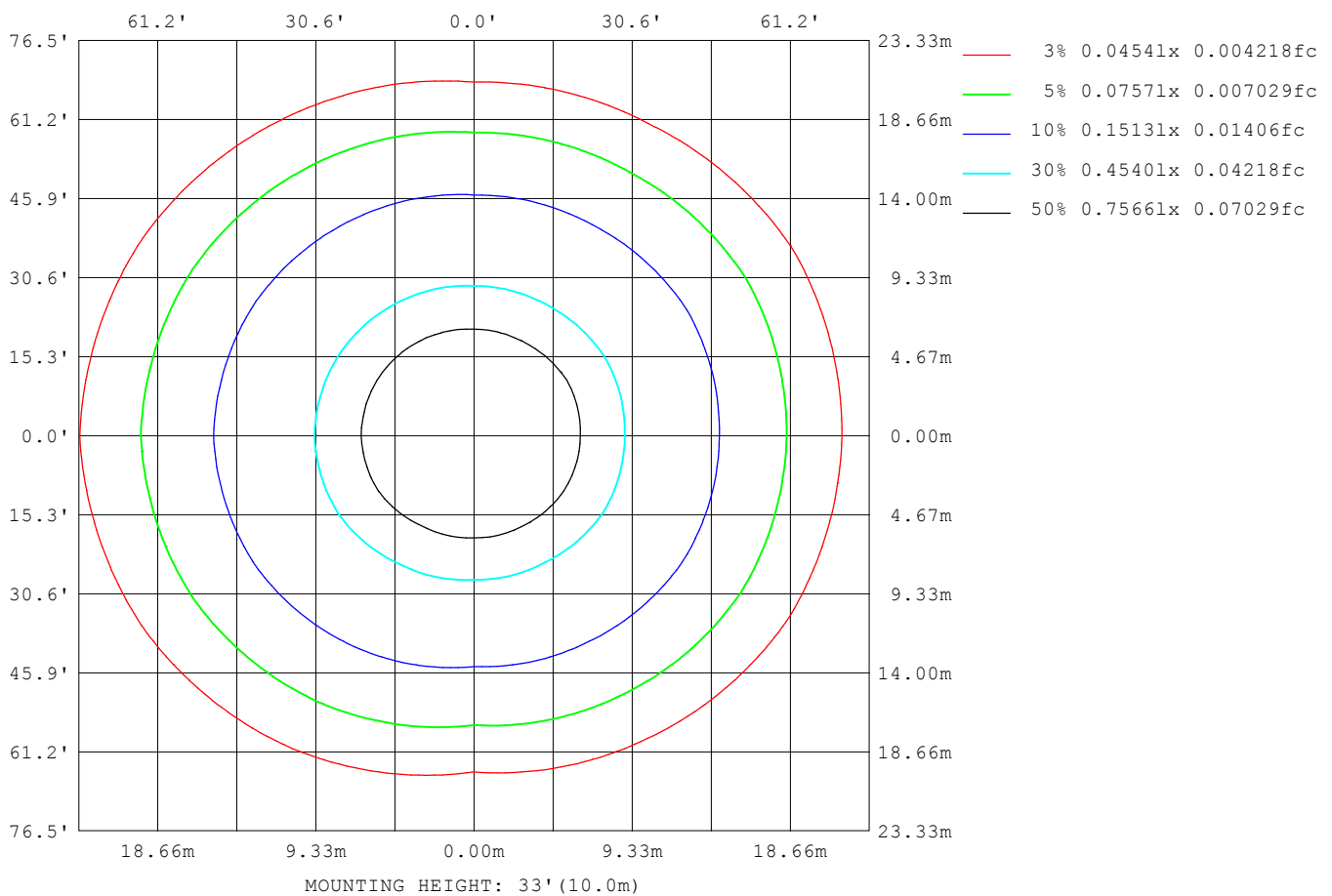
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2025-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.400m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

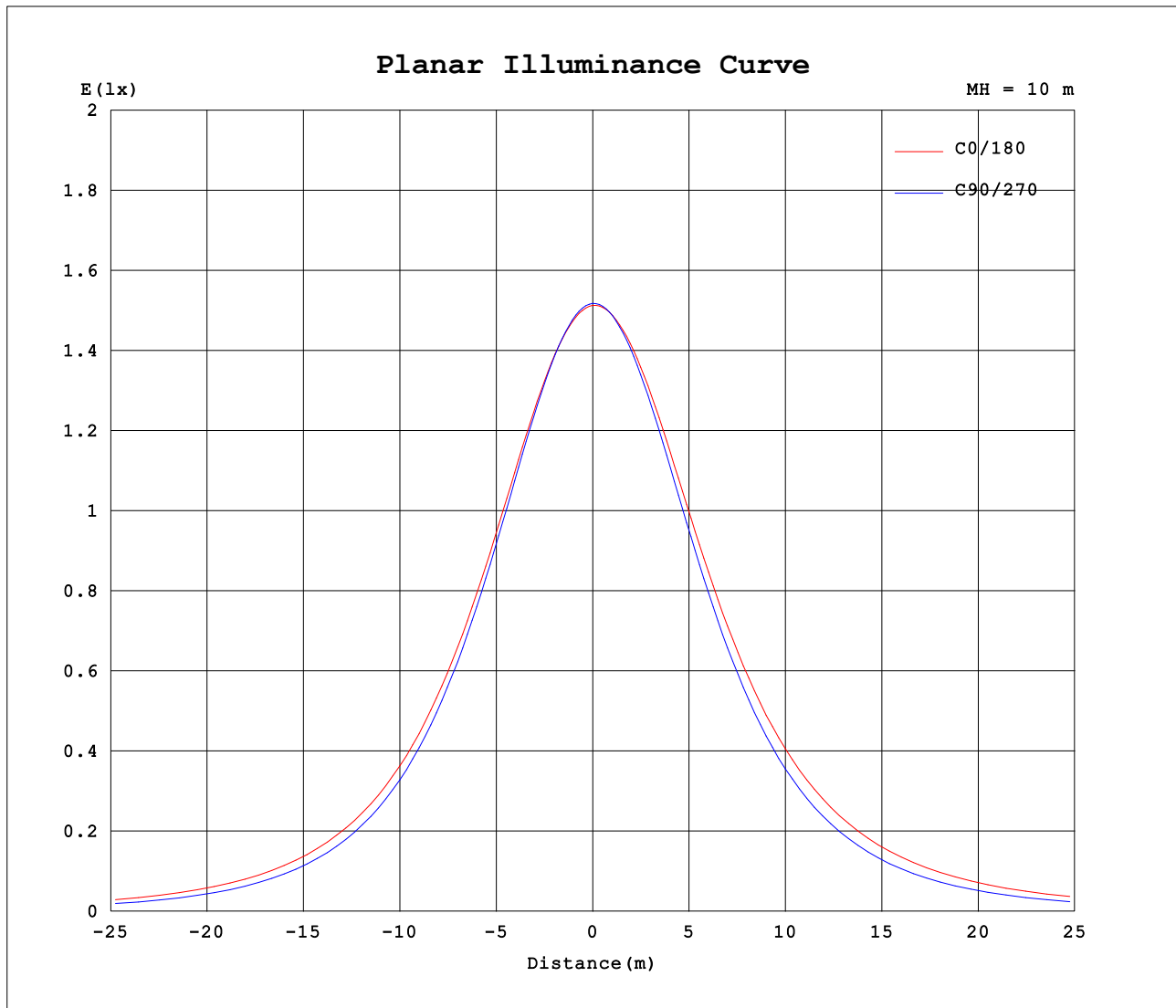
Test:U:24.00V I:0.2820A P:6.768W PF:1.000 Lamp Flux:505.784x1 lm		
NAME: LB-TW3050K	TYPE: LED Light Bar	WEIGHT:
SPEC: 6.5W	DIM.: 500*16.5*12.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs Inc.	SUR.:0.488*0.02	PROTECTION ANGLE: 120



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2025-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.400m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Test Date: 2025-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity: 65.0%
 Test Distance: 6.400m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.2820A P:6.768W PF:1.000 Lamp Flux:505.784x1 lm		
NAME: LB-TW3050K	TYPE: LED Light Bar	WEIGHT:
SPEC: 6.5W	DIM.: 500*16.5*12.5 (MM)	SERIAL No.: 001
MFR.: Flexfire LEDs Inc.	SUR.:0.488*0.02	PROTECTION ANGLE: 120

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	151	152	152	152	151	153	151	152	152	152	151	153						
5	150	151	151	151	150	152	151	152	152	151	150	152						
10	148	148	148	148	147	150	150	151	151	149	148	150						
15	144	144	144	143	143	147	148	148	148	146	144	146						
20	140	139	138	138	138	143	145	145	143	141	140	142						
25	134	134	131	131	132	139	141	140	138	135	134	136						
30	128	127	123	123	125	133	136	134	131	128	127	130						
35	120	119	115	113	117	126	130	128	124	120	119	122						
40	112	111	105	104	109	119	123	120	116	111	111	114						
45	103	102	95.3	93.0	100	110	115	112	106	101	101	105						
50	93.2	92.3	85.1	81.9	90.8	101	106	103	96.3	90.1	90.8	95.2						
55	83.3	81.9	74.8	70.1	81.0	91.7	97.0	93.4	85.8	78.8	79.9	85.0						
60	72.8	71.3	63.9	57.9	70.2	81.5	87.2	83.3	74.5	67.0	68.6	74.3						
65	62.5	60.4	52.7	45.4	59.3	71.0	77.3	72.7	63.3	54.6	57.0	63.4						
70	52.0	49.4	41.3	32.8	48.0	60.2	67.1	61.9	51.6	40.6	45.4	52.4						
75	40.4	38.6	30.1	20.5	36.9	48.2	55.5	51.2	39.8	26.2	33.9	41.9						
80	32.1	29.5	20.0	9.67	26.0	36.6	43.4	37.5	28.5	13.0	23.3	32.5						
85	20.4	20.8	12.4	2.25	16.0	28.4	34.9	29.3	17.4	3.18	14.8	22.7						
90	15.8	15.3	8.03	1.25	10.4	20.4	27.8	22.6	11.1	0.80	8.34	14.8						
95	14.5	9.02	4.76	1.22	5.74	12.4	21.3	12.1	6.15	0.82	4.97	8.46						
100	13.2	8.80	4.20	1.27	4.79	11.8	17.0	11.3	4.30	0.87	4.12	8.16						
105	10.4	8.87	4.28	1.35	5.07	10.5	14.2	10.1	4.44	0.93	4.25	8.74						
110	11.1	8.56	4.11	1.40	4.80	9.29	12.6	9.21	4.29	0.99	4.19	8.75						
115	10.2	8.03	3.81	1.45	4.53	9.24	11.3	8.76	4.07	1.07	3.94	8.24						
120	9.33	7.40	3.48	1.51	4.25	8.37	10.4	8.10	3.84	1.14	3.63	7.64						
125	8.40	6.56	2.10	1.54	3.98	7.53	9.27	7.27	3.64	1.22	2.82	6.80						
130	7.43	5.81	1.65	1.58	3.72	6.80	8.19	6.56	3.42	1.30	1.38	6.12						
135	6.32	4.75	1.68	1.63	3.30	6.07	7.27	5.88	3.11	1.38	1.41	5.24						
140	5.44	3.53	1.72	1.67	2.47	5.40	6.36	5.27	2.44	1.45	1.48	3.66						
145	3.04	1.81	1.75	1.71	2.05	4.77	5.56	4.75	2.00	1.53	1.54	1.62						
150	1.85	1.85	1.79	1.76	1.77	4.04	4.83	4.14	1.67	1.61	1.61	1.66						
155	1.91	1.89	1.83	1.80	1.81	2.75	3.97	2.88	1.74	1.68	1.68	1.73						
160	1.96	1.92	1.87	1.86	1.85	1.96	2.61	2.01	1.80	1.76	1.75	1.79						
165	1.95	1.92	1.89	1.89	1.90	1.95	1.85	1.88	1.85	1.83	1.81	1.85						
170	1.94	1.92	1.93	1.93	1.92	1.95	1.87	1.90	1.90	1.89	1.88	1.90						
175	1.95	1.92	1.96	1.96	1.95	1.96	1.89	1.92	1.95	1.93	1.92	1.93						
180	1.93	1.94	1.98	1.97	1.95	1.97	1.93	1.94	1.98	1.97	1.95	1.97						

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2025-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:6.400m [K=1.0000]
Remarks: