

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)	372.7 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
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Beam Spread	At 10% of Imax	157.0V x 123.1H
	At 50% of Imax	119.1V x 108.5H
	At 90% of Imax	58.7V x 51.7H

Beam Flux	Total	997.5 lumens per klm.
	To 10% of Imax	979.8 lumens per klm.
	To 50% of Imax	854.3 lumens per klm.
	To 90% of Imax	239.6 lumens per klm.

Upward LOR	0.0 %
Downward LOR	99.7 %

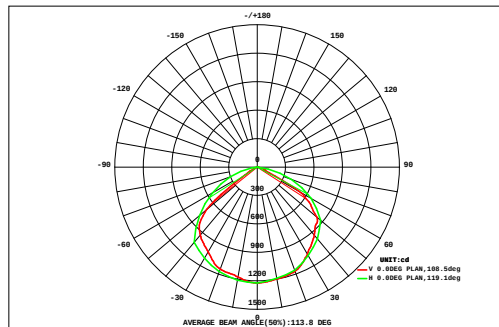
Luminaire Efficiency(Light Output Ratio)	100.0 %
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H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:1.530A P:36.72W PF:1.000 Lamp Flux:3278.57x1 lm		
NAME: 8.02.038.0015 LLS-WZB-W40-L12-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100039
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:



DATA OF LAMP		Eff:89.28lm/W	
MODEL LLS-WZB-W40-L12-S	Imax(cd)	1222	
NOMINAL POWER(W)	36	AVAILABILITY(%)	98.4
RATED VOLTAGE(V)	24	Avai. FLUX(lm)	3225
NOMINAL FLUX(lm)	3278.57	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	3279
TEST VOLTAGE(V)	24.0	θ @50%(H,V)	109,119DEG

AREA FLUX DIAGRAM																		UNIT:lm	Φ t	Φ a
90	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	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.01	0.11	0.41	1.77	4.87	7.69	7.39	6.58	4.24	1.56	1.02	0.54	0.08	0.00	0.00	36.3	31.1
70	0.00	0.00	0.01	0.11	0.74	3.04	9.22	15.8	15.1	15.7	14.9	13.7	7.23	2.27	1.11	0.37	0.01	0.00	99.4	94.0
60	0.00	0.00	0.04	0.46	2.42	10.6	20.3	21.6	22.6	23.1	22.0	19.0	16.1	7.39	1.53	0.75	0.06	0.00	168	164
50	0.00	0.00	0.11	1.07	6.33	19.0	23.2	26.7	28.0	28.2	26.9	22.7	18.7	13.5	3.70	0.97	0.16	0.00	219	216
40	0.00	0.01	0.22	1.92	12.4	21.0	25.2	29.0	30.8	31.1	29.5	25.5	20.7	15.8	7.56	1.08	0.27	0.00	252	249
30	0.00	0.02	0.36	3.42	16.1	22.8	27.6	31.2	33.3	33.6	31.8	27.9	22.5	17.2	10.1	1.41	0.37	0.00	280	278
20	0.00	0.03	0.50	5.14	17.7	23.9	29.2	32.9	35.2	35.5	33.7	29.7	23.9	18.2	11.3	1.99	0.44	0.00	299	297
10	0.00	0.02	0.56	5.96	18.2	24.4	29.9	33.7	36.1	36.3	34.4	30.6	24.6	18.8	11.9	2.44	0.48	0.00	308	306
0	0.00	0.02	0.55	5.81	18.1	24.5	30.1	34.0	36.5	36.7	34.8	30.9	24.8	18.9	11.9	2.40	0.48	0.00	310	308
-10	0.00	0.01	0.45	4.65	17.4	23.9	29.3	33.2	35.6	36.0	34.1	30.1	24.2	18.4	11.3	1.99	0.44	0.00	301	299
-20	0.00	0.01	0.30	3.02	15.5	22.8	27.9	31.8	34.0	34.5	32.8	28.6	22.9	17.4	9.68	1.32	0.32	0.00	283	280
-30	0.00	0.00	0.16	1.59	11.9	21.2	25.8	29.9	31.9	32.3	30.7	26.3	21.1	15.5	6.49	0.96	0.17	0.00	256	253
-40	0.00	0.00	0.07	0.94	6.48	18.3	22.9	26.2	27.7	28.1	26.8	22.7	18.6	11.7	2.51	0.76	0.06	0.00	214	211
-50	0.00	0.00	0.01	0.38	1.64	10.8	18.1	19.4	19.9	20.3	19.4	17.2	13.8	5.57	0.93	0.51	0.01	0.00	148	144
-60	0.00	0.00	0.00	0.05	0.58	1.77	9.04	12.5	12.4	12.7	11.8	10.1	5.46	0.80	0.86	0.15	0.00	0.00	78.3	74.0
-70	0.00	0.00	0.00	0.00	0.05	0.25	0.39	5.16	5.19	5.44	4.81	2.81	0.34	0.62	0.29	0.01	0.00	0.00	25.4	19.5
-80	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.26	0.23	0.01	0.00	0.17	0.08	0.00	0.00	0.00	0.00	0.77	0.00
-90	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL(DEG)	20	30	40	50	60	70	80	90			
Φ t	0.00	0.14	3.34	34.5	146	249	330	388	412	417	395	342	267	183	91.6	17.2	3.28	0.00	3279	---
Φ a	0.00	0.00	0.00	26.1	141	246	328	387	411	416	394	341	264	179	85.1	7.27	0.00	0.00	---	3225

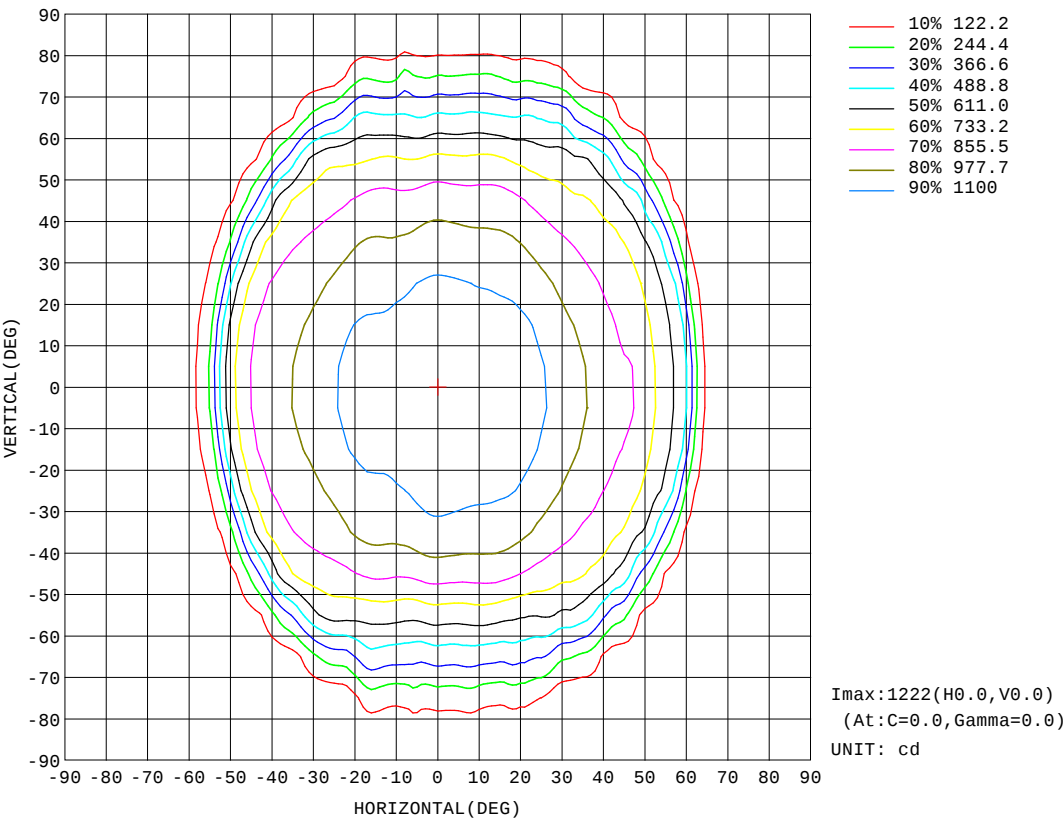
one-half-peak spread: U:57.7,D:61.9 , L:51.5, ~~MEAN~~ Beam Type: Type 6 x 7 (H x V)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:1.530A P:36.72W PF:1.000 Lamp Flux:3278.57x1 lm		
NAME: 8.02.038.0015 LLS-WZB-W40-L12-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100039
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

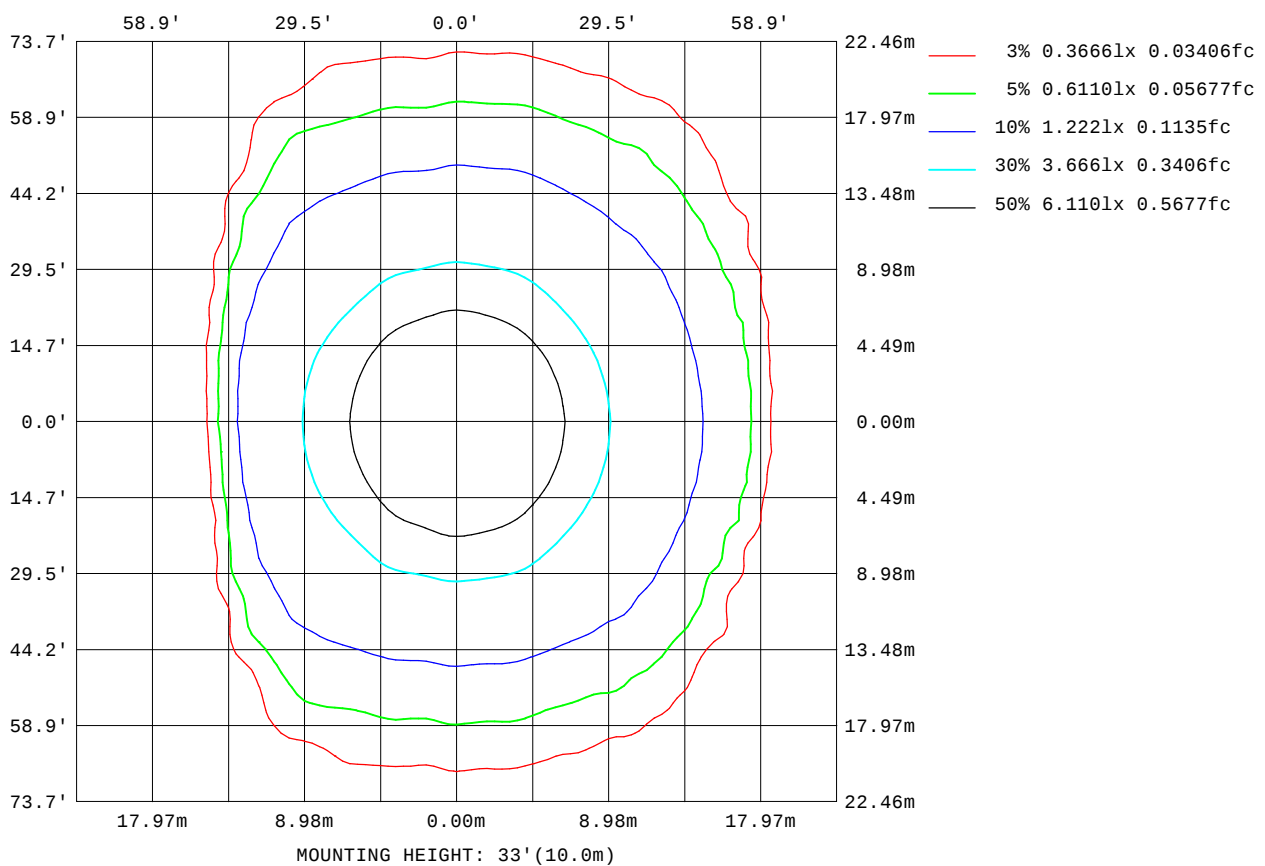


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Test Speed: HIGH
Temperature:24.0DEG
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Test Date:2024-03-25

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V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:1.530A P:36.72W PF:1.000 Lamp Flux:3278.57x1 lm		
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DIM.:	SPEC.:	SERIAL No.:20240100039
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

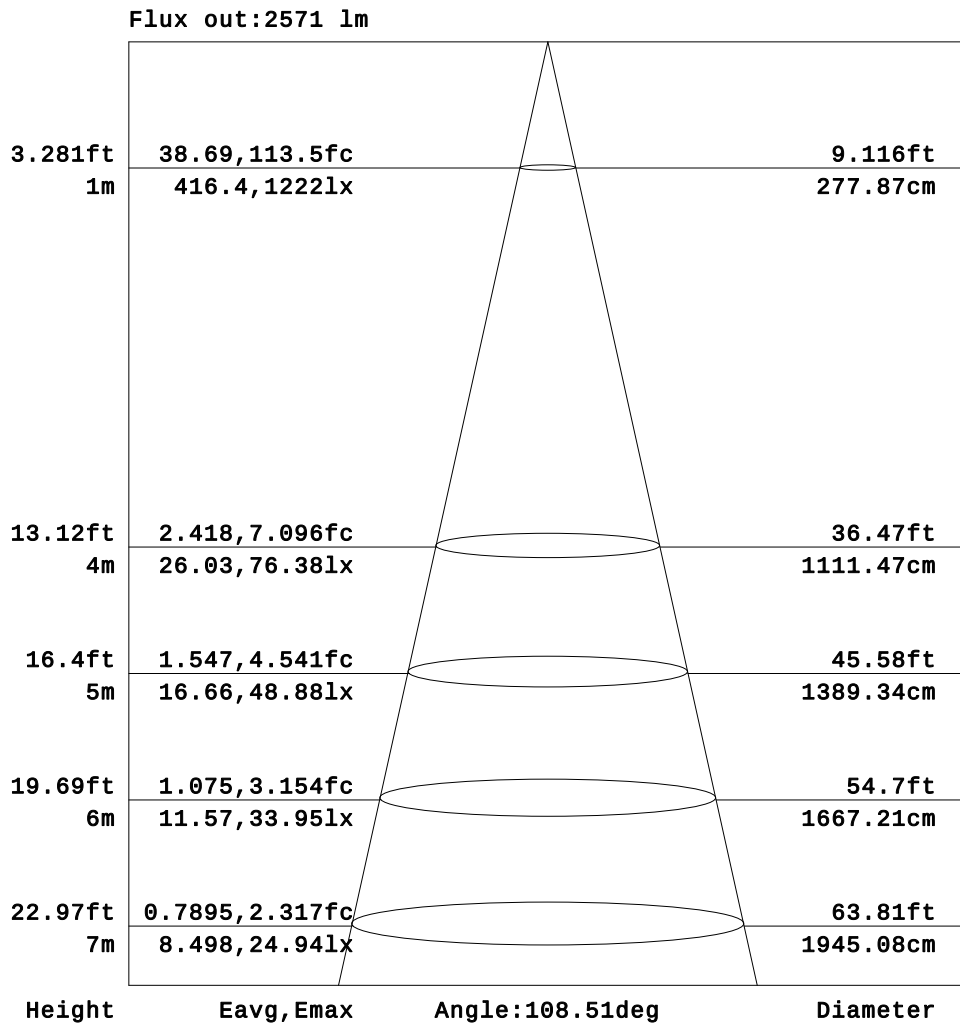


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.00V I:1.530A P:36.72W PF:1.000 Lamp Flux:3278.57x1 lm		
NAME: 8.02.038.0015 LLS-WZB-W40-L12-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100039
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

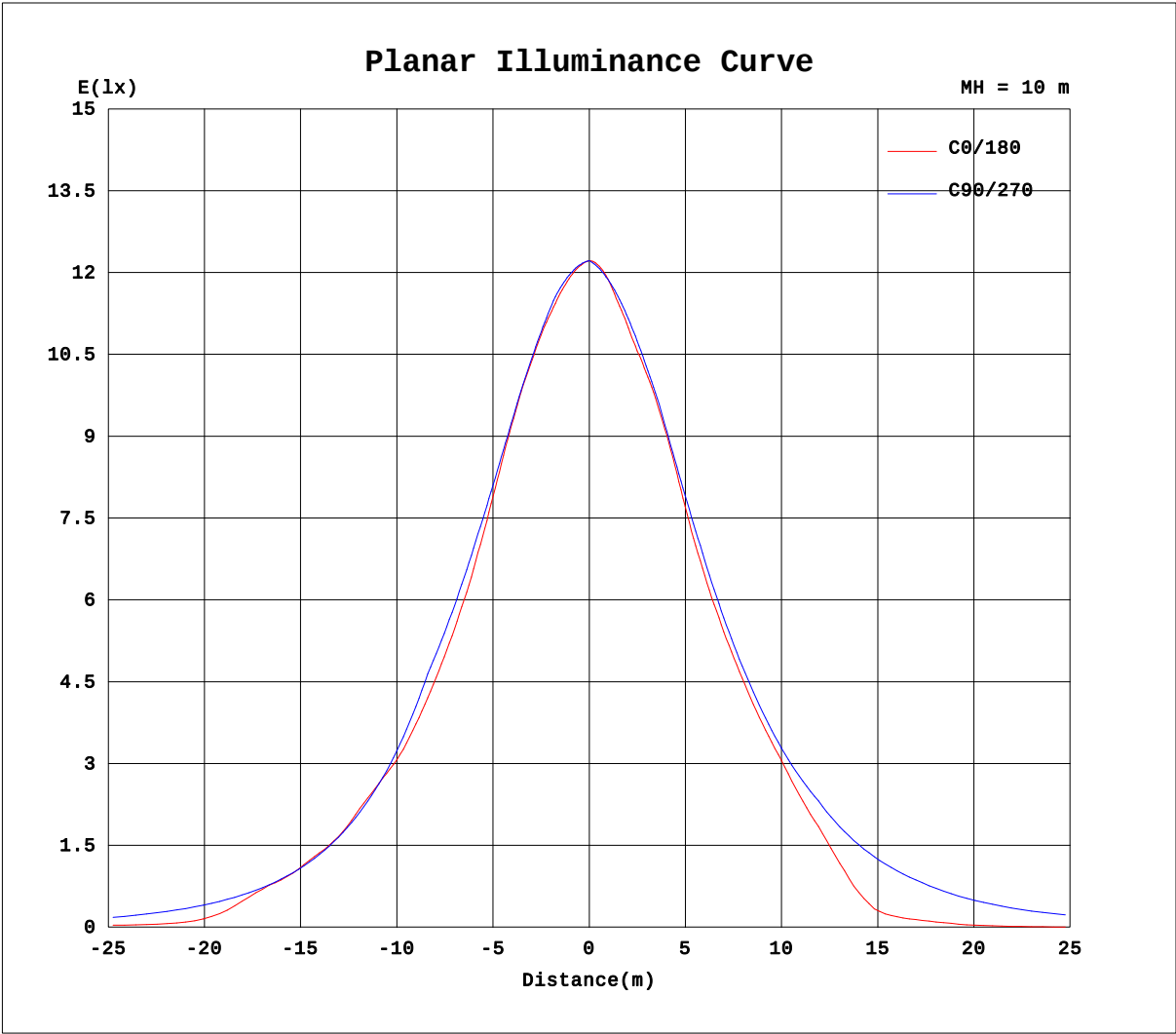


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:1.530A P:36.72W PF:1.000 Lamp Flux:3278.57x1 lm		
NAME: 8.02.038.0015 LLS-WZB-W40-L12-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100039
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

H(°) \ V(°)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-90	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	0.00	0.00	0.00	0.00
-85	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	0.00	0.00	0.00	0.00
-80	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	4.21	3.61	4.81	6.40	94.5
-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81	5.33	7.20	20.2	16.2	22.6	96.1	185	152	188	179
-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.62	10.7	14.4	40.4	32.4	40.9	189	366	297	281	302
-65	0.00	0.00	0.00	0.00	0.00	0.00	0.44	3.43	13.8	35.2	38.1	73.7	219	304	367	447	420	399	425
-60	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.87	24.0	59.8	61.8	107	405	568	546	529	543	517	547
-55	0.00	0.00	0.00	0.00	0.00	0.76	4.28	18.2	49.4	81.7	217	377	577	661	651	657	655	645	672
-50	0.00	0.00	0.00	0.00	0.00	1.51	7.68	29.6	74.9	104	372	647	750	755	755	785	767	774	796
-45	0.00	0.00	0.00	0.00	0.00	2.61	17.9	52.5	99.4	277	541	733	803	821	851	885	873	892	916
-40	0.00	0.00	0.00	0.00	0.00	3.71	28.1	75.4	124	450	709	818	855	886	947	985	980	1011	1035
-35	0.00	0.00	0.00	0.00	0.46	8.78	36.1	90.4	212	561	769	852	891	928	990	1020	1019	1051	1074
-30	0.00	0.00	0.00	0.00	0.92	13.9	44.0	105	300	672	830	886	927	969	1034	1056	1059	1091	1112
-25	0.00	0.00	0.00	0.00	2.77	19.6	58.6	125	420	730	860	914	954	1004	1063	1082	1090	1122	1142
-20	0.00	0.00	0.00	0.00	4.62	25.2	73.2	145	541	789	890	941	981	1039	1092	1107	1122	1153	1173
-15	0.00	0.00	0.00	0.70	5.00	28.2	84.6	181	598	818	907	957	1000	1059	1110	1125	1142	1173	1192
-10	0.00	0.00	0.00	1.41	5.37	31.1	96.0	216	655	846	925	973	1019	1079	1127	1144	1163	1193	1211
-5	0.00	0.00	0.00	2.40	6.09	33.2	99.6	250	676	856	930	979	1027	1088	1135	1150	1170	1201	1216
0	0.00	0.00	0.00	3.40	6.81	35.3	103	285	696	866	935	986	1035	1097	1142	1157	1177	1209	1222
5	0.00	0.00	0.00	3.65	6.61	34.4	101	264	687	860	930	977	1024	1085	1130	1144	1162	1193	1207
10	0.00	0.00	0.00	3.91	6.41	33.4	97.8	244	679	855	924	968	1014	1073	1117	1130	1148	1177	1191
15	0.00	0.00	0.00	3.44	6.16	31.2	91.7	208	634	832	910	955	998	1056	1101	1114	1131	1159	1173
20	0.00	0.00	0.00	2.98	5.91	29.0	85.5	173	589	809	895	941	982	1038	1085	1098	1113	1141	1156
25	0.00	0.00	0.00	1.79	5.40	23.2	69.8	144	479	753	864	913	949	997	1049	1063	1073	1101	1117
30	0.00	0.00	0.00	0.61	4.89	17.4	54.2	116	369	698	834	884	916	956	1012	1028	1033	1060	1078
35	0.00	0.00	0.00	0.37	4.69	12.4	42.9	99.9	254	588	772	841	876	912	966	989	989	1013	1032
40	0.00	0.00	0.00	0.14	4.50	7.39	31.7	83.8	139	479	710	799	835	868	920	950	945	966	987
45	0.00	0.00	0.00	0.11	2.25	6.20	21.5	60.3	111	302	569	740	802	828	865	901	894	906	929
50	0.00	0.00	0.00	0.07	0.01	5.02	11.3	36.9	82.2	125	429	680	769	789	809	852	844	847	872
55	0.00	0.00	0.00	0.04	0.09	2.51	8.27	23.6	55.8	99.7	254	435	643	710	713	737	744	732	764
60	0.00	0.00	0.00	0.00	0.17	0.00	5.26	10.4	29.4	74.4	79.5	189	517	632	617	622	644	618	655
65	0.00	0.00	0.00	0.00	0.09	0.00	2.63	5.19	17.9	43.5	51.1	118	282	358	494	517	512	490	518
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.49	12.7	22.8	47.4	46.7	85.4	370	412	380	361	381
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.24	6.33	11.4	24.0	26.3	51.4	191	214	219	242	249
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	5.83	17.4	11.7	15.0	57.9	123	117
85	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	0.00	0.00	0.00	0.00
90	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	0.00	0.00	0.00	0.00

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:1.530A P:36.72W PF:1.000 Lamp Flux:3278.57x1 lm		
NAME: 8.02.038.0015 LLS-WZB-W40-L12-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100039
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

Table--2																	UNIT: cd	
H(DEG) V(DEG)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
-90	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	0.00	0.00	0.00
-85	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	0.00	0.00	0.00
-80	51.4	51.3	7.59	6.64	7.48	6.95	19.8	21.4	11.8	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-75	177	169	147	156	121	30.0	27.9	25.9	27.4	31.0	14.1	7.41	0.00	0.00	0.00	0.00	0.00	0.00
-70	302	286	286	305	234	53.0	35.9	30.3	43.1	56.5	28.3	14.8	0.00	0.00	0.00	0.00	0.00	0.00
-65	418	417	399	404	375	266	216	103	54.8	54.9	51.6	29.7	11.4	0.32	0.00	0.00	0.00	0.00
-60	533	549	512	502	515	478	397	175	66.4	53.3	74.9	44.6	22.8	0.65	0.00	0.00	0.00	0.00
-55	662	675	653	626	623	588	548	389	266	85.3	70.7	59.4	35.1	10.6	0.00	0.00	0.00	0.00
-50	791	802	795	750	730	697	700	603	466	117	66.6	74.2	47.4	20.5	0.00	0.00	0.00	0.00
-45	907	909	902	856	815	774	745	685	558	321	111	72.9	64.5	28.5	3.02	0.00	0.00	0.00
-40	1024	1015	1009	961	899	850	790	768	650	525	156	71.6	81.6	36.5	6.03	0.00	0.00	0.00
-35	1063	1055	1047	1010	949	895	837	796	721	599	346	103	77.3	55.2	14.3	0.00	0.00	0.00
-30	1102	1094	1085	1059	1000	939	885	824	793	674	536	135	73.1	73.8	22.7	0.00	0.00	0.00
-25	1134	1123	1114	1090	1035	971	918	856	819	707	574	234	78.8	84.1	32.7	0.01	0.00	0.00
-20	1166	1151	1142	1122	1070	1003	950	887	845	740	612	333	84.5	94.4	42.7	0.02	0.00	0.00
-15	1184	1169	1159	1139	1089	1024	966	906	853	772	646	406	93.4	91.1	47.4	2.70	0.00	0.00
-10	1202	1187	1176	1157	1109	1045	982	924	862	805	680	479	102	87.8	52.0	5.39	0.00	0.00
-5	1207	1192	1181	1163	1115	1052	989	931	865	814	685	494	106	86.7	52.6	5.54	0.00	0.00
0	1211	1197	1186	1168	1122	1059	997	937	869	823	690	509	109	85.5	53.1	5.68	0.00	0.00
5	1197	1182	1171	1154	1109	1046	985	927	861	811	682	496	106	86.3	52.4	5.31	0.00	0.00
10	1183	1167	1156	1139	1095	1034	974	917	852	800	673	484	104	87.0	51.7	4.94	0.00	0.00
15	1165	1151	1140	1122	1075	1010	953	895	842	769	645	427	95.2	89.1	48.6	3.82	0.00	0.00
20	1148	1134	1124	1104	1054	987	933	873	833	738	617	370	86.6	91.3	45.5	2.70	0.00	0.00
25	1109	1094	1084	1063	1011	950	901	842	811	706	582	281	80.7	89.1	40.8	1.66	0.00	0.00
30	1069	1054	1043	1021	968	913	869	811	789	675	547	192	74.8	86.9	36.1	0.61	0.00	0.00
35	1023	1011	1004	975	920	872	826	787	731	618	440	139	75.7	74.4	29.0	0.30	0.00	0.00
40	977	968	965	928	872	831	784	763	674	561	333	87.3	76.6	61.9	21.9	0.00	0.00	0.00
45	918	913	911	868	816	776	748	697	599	442	211	76.4	78.8	50.8	14.7	0.00	0.00	0.00
50	859	858	858	807	759	721	713	630	525	323	89.7	65.5	81.0	39.7	7.51	0.00	0.00	0.00
55	752	760	746	708	674	669	625	534	339	195	73.2	70.8	61.1	28.0	3.76	0.00	0.00	0.00
60	646	663	635	608	589	618	538	438	153	66.9	56.7	76.0	41.2	16.3	0.00	0.00	0.00	0.00
65	513	523	505	499	482	449	309	243	96.9	62.9	56.1	54.2	27.9	8.17	0.00	0.00	0.00	0.00
70	380	384	374	390	374	281	80.9	48.4	40.5	58.9	55.5	32.3	14.7	0.00	0.00	0.00	0.00	0.00
75	248	255	239	206	196	149	47.9	41.3	38.2	40.3	33.9	16.2	7.35	0.00	0.00	0.00	0.00	0.00
80	115	126	104	22.5	19.0	16.7	14.9	34.2	35.8	21.7	12.3	0.11	0.00	0.00	0.00	0.00	0.00	0.00
85	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	0.00	0.00	0.00
90	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	0.00	0.00	0.00

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks: