

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	348.6 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	157.4V x 164.6H
	At 50% of Imax	117.5V x 101.4H
	At 90% of Imax	75.1V x 30.9H

Beam Flux	Total	1000.0 lumens per klm.
	To 10% of Imax	962.8 lumens per klm.
	To 50% of Imax	726.2 lumens per klm.
	To 90% of Imax	171.3 lumens per klm.

Upward LOR	17.2 %
Downward LOR	82.8 %

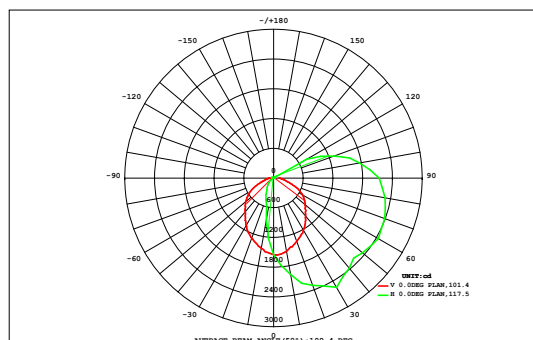
Luminaire Efficiency (Light Output Ratio)	100.7 %
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H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2016-10-28

V(B) Range:-120 - 120DEG
V(B) Interval: 5.0DEG
Test System: GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 44320B-60-4K	TYPE:LED	WEIGHT:
SPEC.: 60W	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:114.95lm/W	
MODEL	WP-60D-4000K(PC)	Imax(cd)	2564
NOMINAL POWER(W)	60	AVAILABILITY(%)	97.0
RATED VOLTAGE(V)	277	Avai. FLUX(lm)	7134
NOMINAL FLUX(lm)	7354.08	LOR(%)	100.7
LAMPS INSIDE	1	TOTAL FLUX(lm)	7403
TEST VOLTAGE(V)	277	θ @50% (H,V)	101,117DEG

VERTICAL(DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.20	0.36	0.57	0.63	0.62	0.65	0.79	0.94	1.03	1.03	0.93	0.78	0.62	0.58	0.60	0.54	0.40	0.24	11.5	0.00
90	0.20	0.36	0.57	0.63	0.62	0.65	0.79	0.94	1.03	1.03	0.93	0.78	0.62	0.58	0.60	0.54	0.40	0.24	11.5	0.00
80	0.24	0.54	0.83	0.87	0.74	0.63	0.70	0.82	0.89	0.89	0.81	0.68	0.59	0.71	0.85	0.80	0.57	0.25	12.4	0.00
70	0.27	0.75	1.17	1.29	1.19	1.14	1.15	1.21	1.30	1.29	1.20	1.11	1.10	1.17	1.25	1.12	0.75	0.26	18.7	0.00
60	0.30	0.94	1.51	1.80	1.84	1.91	1.94	2.06	2.21	2.20	2.08	1.94	1.87	1.82	1.75	1.44	0.90	0.28	28.8	0.00
50	0.32	1.08	1.87	2.54	2.91	3.21	3.48	3.89	4.15	4.14	3.92	3.51	3.15	2.84	2.41	1.77	1.00	0.29	46.5	0.00
40	0.35	1.25	2.32	3.37	4.26	5.11	5.90	6.49	6.97	6.97	6.50	5.84	5.05	4.14	3.17	2.11	1.11	0.31	71.2	5.02
30	0.37	1.42	2.86	4.52	6.20	7.93	9.36	10.2	10.9	10.9	10.1	9.15	7.81	6.00	4.23	2.58	1.27	0.33	106	85.8
	0.38	1.62	3.62	6.34	9.35	12.6	14.9	16.0	17.0	16.9	15.7	14.4	12.3	8.96	5.83	3.25	1.48	0.35	161	155
	0.41	2.00	5.61	10.6	15.8	22.1	28.1	32.8	36.4	36.3	32.6	27.7	21.5	15.1	9.84	5.17	1.82	0.36	304	301
	0.43	2.46	7.89	14.9	22.4	31.2	40.5	47.9	53.4	53.3	47.7	40.0	30.5	21.5	14.0	7.26	2.27	0.38	438	436
	0.45	3.09	10.6	19.2	28.7	39.4	50.5	58.9	65.2	65.6	59.7	51.0	39.6	28.2	18.5	9.90	2.91	0.40	552	550
	0.48	3.81	12.5	22.0	31.9	41.7	51.2	64.8	72.2	72.3	64.6	50.6	41.0	30.2	20.9	11.6	3.48	0.42	595	594
-30	0.51	4.42	13.9	23.6	33.4	42.3	53.0	67.8	75.0	74.7	66.4	51.2	42.7	31.6	22.5	13.0	3.98	0.44	620	619
-40	0.51	4.74	14.3	23.1	31.4	41.9	55.4	63.8	69.3	69.0	63.7	55.3	43.2	31.6	22.7	13.8	4.36	0.45	608	607
-50	0.52	4.80	14.2	23.8	34.8	45.2	59.5	70.3	72.9	72.6	70.3	59.9	45.0	34.1	23.7	13.5	4.33	0.44	650	649
-60	0.51	4.70	13.8	23.8	35.1	46.9	62.1	73.1	74.2	74.1	73.1	61.7	46.2	34.9	23.2	13.0	4.19	0.43	665	664
-70	0.48	4.28	12.5	20.9	30.0	45.8	60.1	68.5	71.4	71.0	68.1	59.8	46.1	30.9	20.6	11.9	3.85	0.41	627	626
-80	0.45	3.72	11.0	19.0	28.4	41.7	54.9	63.5	66.8	66.6	63.4	54.7	41.3	28.0	18.8	10.4	3.26	0.38	576	575
-90	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL(DEG)	20	30	40	50	60	70	80	90			
Φ t	7.18	46.0	131	222	319	431	553	653	701	700	651	549	429	312	215	123	41.9	6.42	6092	---
Φ a	1.46	34.9	119	210	306	418	539	638	686	685	636	535	415	298	203	111	30.3	0.83	---	5868

one-half-peak spread: U:52.2,D:35.6 , L:51.3,R:50.9

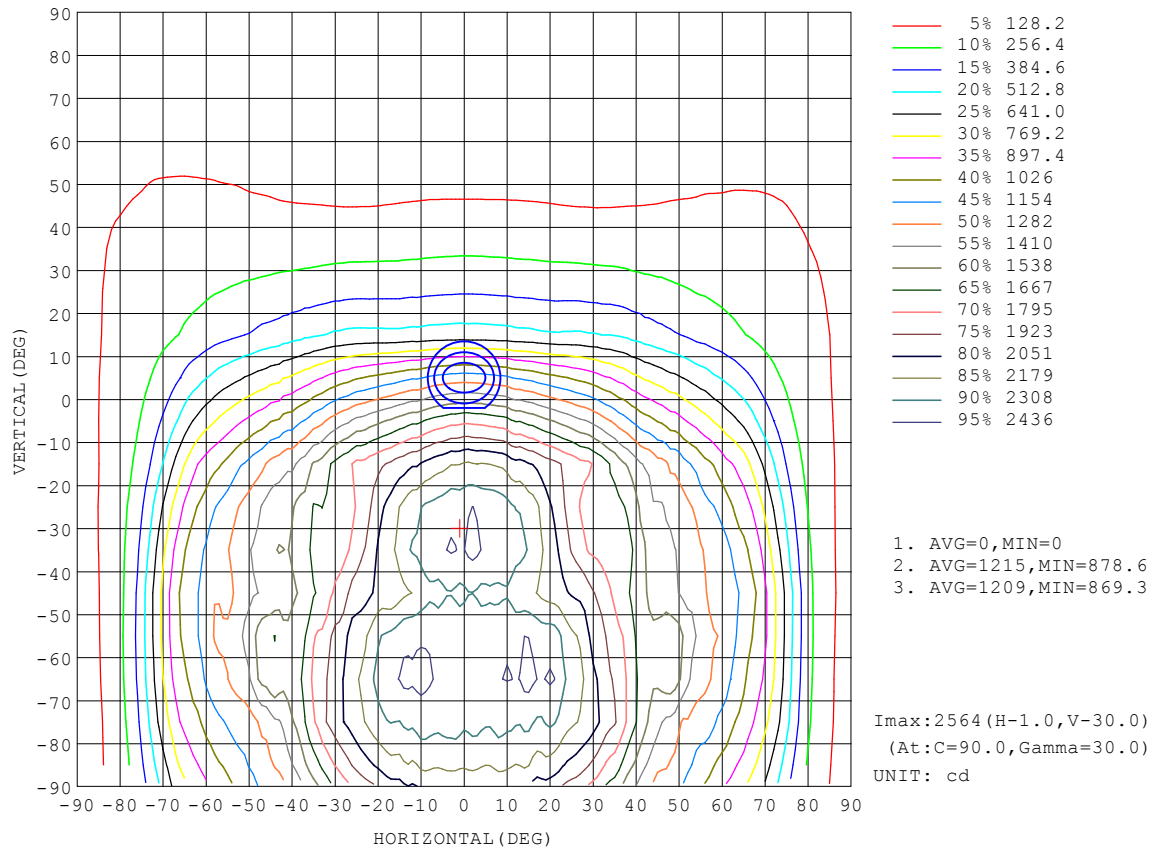
NEMA Beam Type: Type 7

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2016-10-28

V(B) Range:-120 - 120DEG
V(B) Interval: 5.0DEG
Test System: GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: 44320B-60-4K	TYPE:LED	WEIGHT:
SPEC.: 60W	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

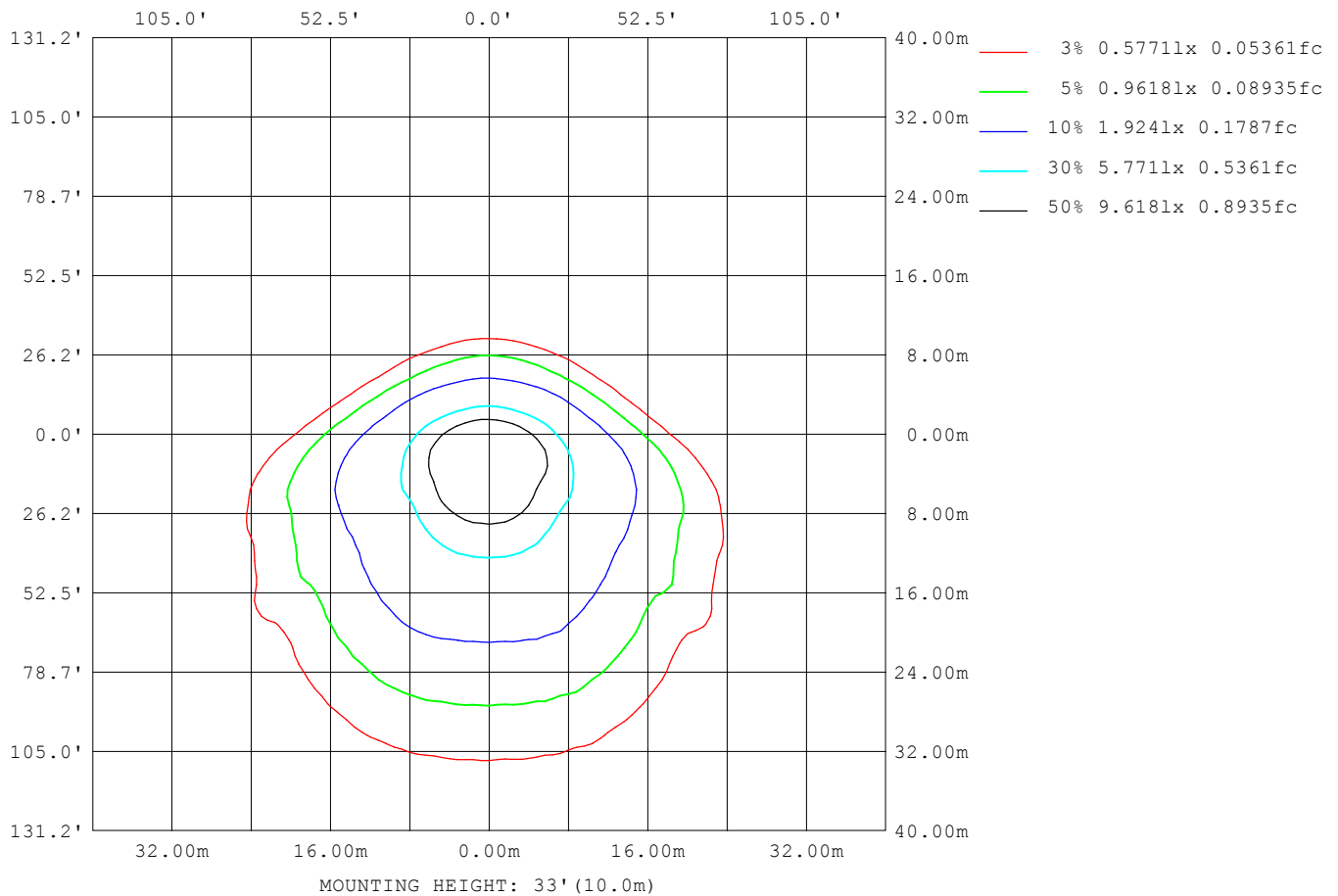


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Test Speed: HIGH
Temperature:25.3DEG
Test Date:2016-10-28

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Test System: GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

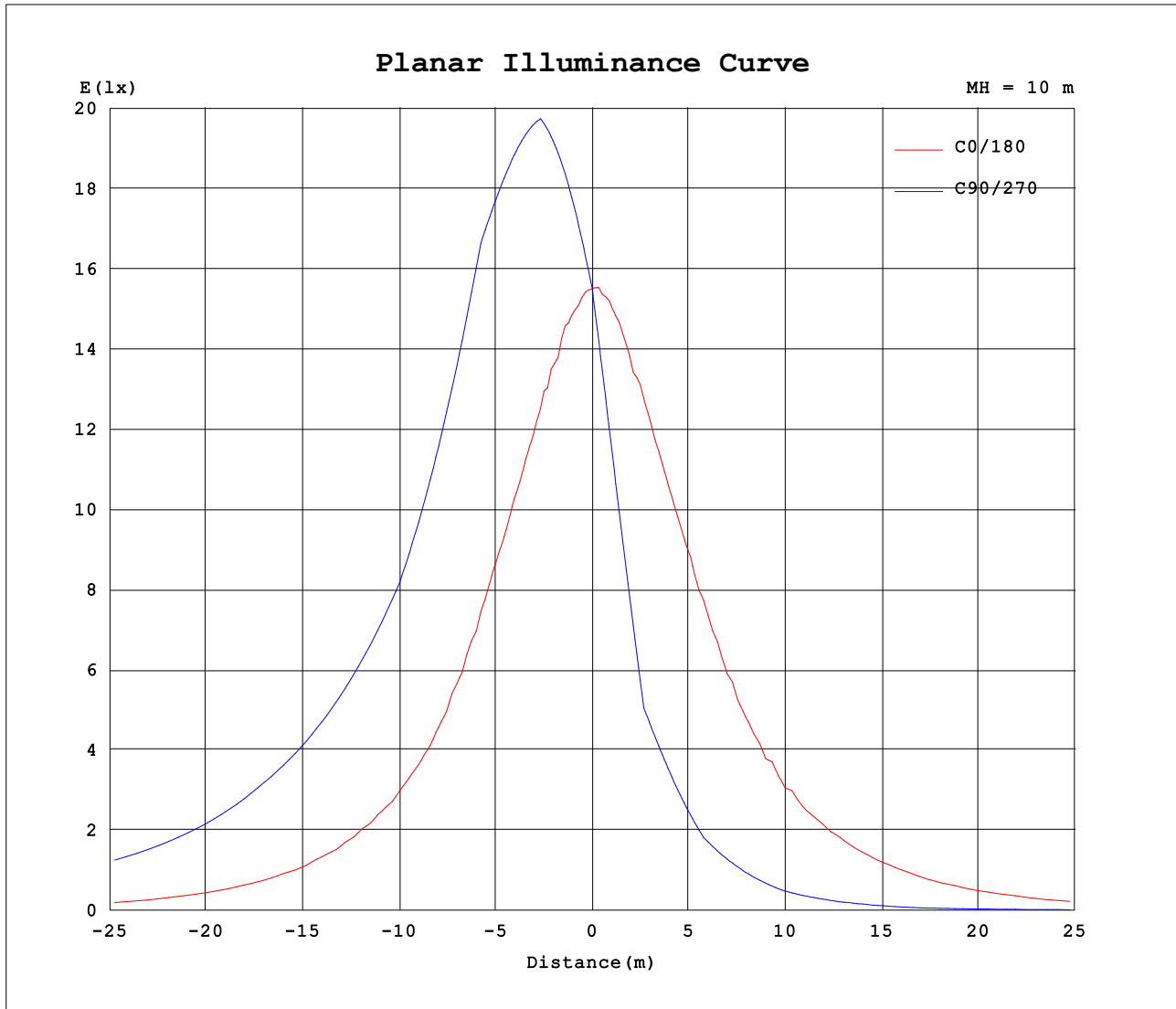
NAME: 44320B-60-4K	TYPE:LED	WEIGHT:
SPEC.: 60W	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2016-10-28

V(B) Range:-120 - 120DEG
V(B) Interval: 5.0DEG
Test System: GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

Planar Illuminance Curve

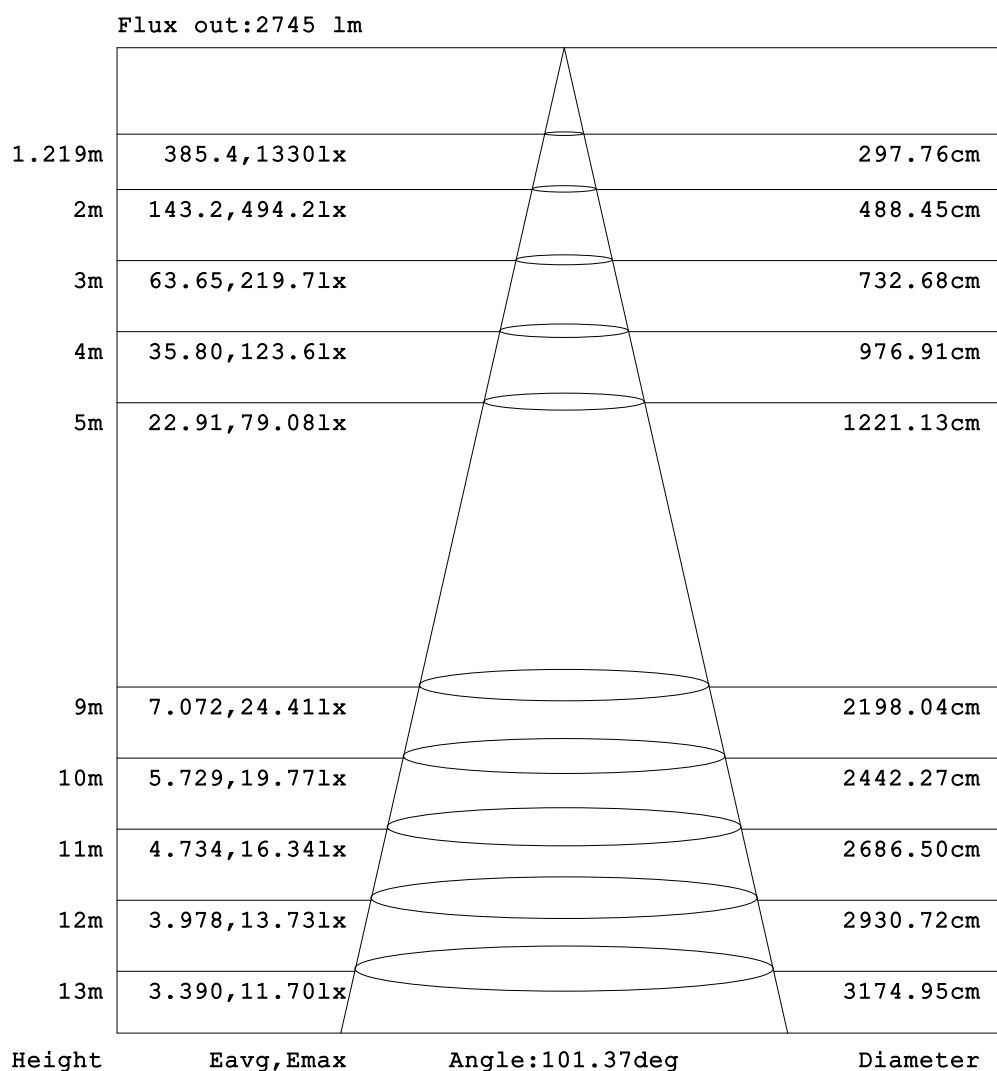


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Test Date:2016-10-28

V(B) Range:-120 - 120DEG
V(B) Interval: 5.0DEG
Test System: GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

AAI Figure

NAME: 44320B-60-4K	TYPE:LED	WEIGHT:
SPEC.:60W	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding 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: 25.3DEG
Test Date: 2016-10-28

V(B) Range:-120 - 120DEG
V(B) Interval: 5.0DEG
Test System: GO-2000B_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 8.600m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 44320B-60-4K	TYPE:LED	WEIGHT:
SPEC.: 60W	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

H (DEG) V (DEG)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-180	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
-170	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
-160	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
-150	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
-140	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
-130	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
-120	80.9	115	155	203	268	345	418	468	532	564	609	629	663	708	742	740	759	770	772
-110	89.5	126	188	283	406	523	623	694	782	840	885	1016	1095	1140	1235	1292	1337	1323	1315
-100	94.7	139	226	369	547	689	803	899	1005	1080	1167	1349	1476	1552	1673	1738	1791	1778	1768
-90	96.6	153	269	462	690	841	957	1084	1201	1285	1453	1628	1806	1943	2057	2077	2120	2136	2131
-80	98.2	161	301	549	798	947	1075	1165	1271	1381	1593	1826	1986	2121	2226	2246	2274	2292	2281
-70	100	170	330	618	895	1049	1194	1276	1441	1505	1679	1921	2094	2237	2363	2395	2392	2397	2385
-60	102	181	356	668	981	1149	1313	1417	1711	1658	1712	1913	2131	2288	2467	2522	2474	2449	2443
-50	104	180	346	666	986	1147	1288	1374	1519	1521	1614	1787	1990	2116	2210	2295	2341	2341	2343
-40	106	180	332	639	956	1130	1267	1358	1450	1496	1589	1721	1854	1998	2116	2250	2336	2364	2377
-30	109	180	312	584	889	1096	1251	1367	1504	1583	1639	1715	1721	1934	2183	2387	2461	2516	2546
-20	110	171	276	478	742	962	1091	1219	1335	1439	1521	1655	1750	1885	2022	2153	2230	2287	2302
-10	111	163	243	383	585	782	899	1016	1110	1220	1311	1457	1578	1671	1748	1836	1911	1963	1968
0	114	156	212	300	419	557	675	757	831	926	1009	1120	1204	1292	1361	1436	1502	1542	1547
10	113	147	190	242	307	381	452	503	554	607	661	716	761	791	813	844	872	889	890
20	114	141	172	201	230	263	298	324	352	377	405	426	445	447	447	455	462	468	468
30	115	136	156	174	190	203	213	221	225	234	238	248	256	259	261	267	274	279	280
40	114	128	139	151	159	166	170	171	168	167	166	168	169	171	174	178	182	184	184
50	112	119	123	130	132	133	130	125	117	110	106	104	101	100	102	105	107	108	108
60	111	110	108	111	109	103	93.8	82.4	71.3	63.4	57.6	55.1	51.7	48.1	47.2	47.6	48.6	50.0	50.0
70	108	102	80.9	82.8	80.9	77.1	68.6	58.5	50.0	42.4	36.8	34.2	33.5	33.3	33.8	34.7	35.6	36.4	36.4
80	105	92.6	57.1	57.5	56.3	54.3	48.1	40.7	35.1	29.8	26.0	24.7	25.8	27.5	29.0	30.2	31.3	31.9	31.9
90	103	81.9	36.1	34.7	35.2	34.9	32.4	28.9	26.7	25.5	25.1	26.5	28.6	30.7	32.7	34.3	35.5	36.3	36.4
100	100	76.2	21.9	21.7	22.1	22.8	23.1	23.1	23.8	24.8	26.2	28.3	30.7	33.0	35.1	36.9	38.2	39.0	39.1
110	98.2	67.5	13.8	14.4	15.0	16.3	18.0	19.9	21.9	24.0	26.3	28.8	31.3	33.7	35.8	37.6	39.0	39.8	39.9
120	96.7	56.0	11.8	12.7	13.9	15.4	17.1	19.0	21.0	23.0	25.4	27.9	30.4	32.7	34.7	36.3	37.7	38.6	38.7
130	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
140	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
150	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
160	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
170	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
180	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
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Humidity:65.0%
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LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 44320B-60-4K	TYPE:LED	WEIGHT:
SPEC.: 60W	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding 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	
-180	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	
-170	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	
-160	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	
-150	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	
-140	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	
-130	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	
-120	761	748	735	709	670	624	583	566	513	474	405	335	263	196	147	110	79.0	67.3	
-110	1334	1312	1247	1153	1084	1029	912	832	794	711	628	527	416	291	194	128	87.2	74.1	
-100	1796	1768	1687	1570	1479	1381	1216	1084	1028	922	814	699	564	394	242	145	92.9	79.2	
-90	2147	2115	2055	1962	1855	1680	1495	1322	1216	1108	961	850	707	504	291	160	96.2	82.6	
-80	2289	2249	2212	2156	2055	1883	1683	1457	1324	1198	1103	967	820	610	344	178	99.1	83.5	
-70	2394	2378	2358	2295	2163	1977	1778	1551	1500	1316	1220	1070	912	686	383	191	102	83.9	
-60	2464	2502	2493	2380	2179	1963	1779	1605	1744	1461	1310	1159	984	734	408	197	103	83.8	
-50	2337	2317	2265	2181	2061	1878	1714	1546	1535	1413	1267	1177	1010	734	409	200	107	84.3	
-40	2345	2284	2173	2040	1908	1786	1693	1508	1434	1376	1239	1147	987	700	387	196	109	85.0	
-30	2486	2403	2219	1957	1719	1685	1715	1492	1441	1350	1227	1067	916	631	343	187	109	86.0	
-20	2272	2199	2075	1926	1789	1693	1592	1426	1317	1214	1089	946	772	526	298	177	111	87.3	
-10	1945	1878	1790	1705	1621	1499	1353	1227	1107	1009	892	772	607	414	253	165	111	89.1	
0	1505	1443	1365	1292	1214	1105	999	896	810	733	636	545	422	295	207	151	110	91.3	
10	871	843	808	781	754	708	657	592	538	483	423	366	297	234	186	145	111	93.4	
20	461	451	440	437	434	422	402	369	340	308	278	246	213	188	164	137	110	95.2	
30	275	268	263	258	252	246	236	227	218	209	199	185	171	157	142	126	107	96.7	
40	183	180	176	172	168	165	164	162	161	160	158	154	148	140	129	117	106	97.3	
50	107	106	104	102	100	101	103	106	111	116	121	124	125	122	117	109	104	97.6	
60	48.9	47.8	47.1	46.9	49.3	52.6	55.3	59.1	68.0	77.4	86.4	95.1	102	105	106	102	101	97.7	
70	35.8	34.8	33.8	32.9	32.8	32.9	34.6	38.8	46.2	55.0	63.5	71.2	77.0	79.8	83.4	97.0	98.0	97.0	
80	31.4	30.4	29.2	27.7	26.0	24.3	24.4	27.2	32.0	38.2	44.8	50.5	54.4	56.3	61.8	90.6	95.3	96.1	
90	35.8	34.6	33.0	31.1	29.0	26.8	24.8	24.5	25.4	27.1	30.3	32.9	34.5	34.9	41.1	82.8	92.8	95.1	
100	38.6	37.3	35.6	33.6	31.3	28.9	26.5	24.7	23.5	22.7	22.5	22.3	22.0	21.6	25.8	76.6	91.1	94.2	
110	39.4	38.1	36.4	34.4	32.2	29.7	27.0	24.5	22.2	20.2	18.3	16.7	15.2	14.3	15.9	70.1	89.5	93.2	
120	38.2	37.0	35.5	33.7	31.6	29.1	26.4	23.8	21.6	19.5	17.7	16.0	14.4	12.8	11.3	63.3	87.9	92.0	
130	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	
140	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	
150	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	
160	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	
170	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	
180	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:25.3DEG
Test Date:2016-10-28

V(B) Range:-120 - 120DEG
V(B) Interval: 5.0DEG
Test System: GO-2000B_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks: