

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)	1273.5 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
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Beam Spread	At 10% of Imax	90.1V x 89.2H
	At 50% of Imax	47.4V x 46.9H
	At 90% of Imax	18.0V x 18.9H

Beam Flux	Total	999.7 lumens per klm.
	To 10% of Imax	892.0 lumens per klm.
	To 50% of Imax	480.3 lumens per klm.
	To 90% of Imax	95.8 lumens per klm.

Upward LOR	0.0 %
Downward LOR	100.0 %

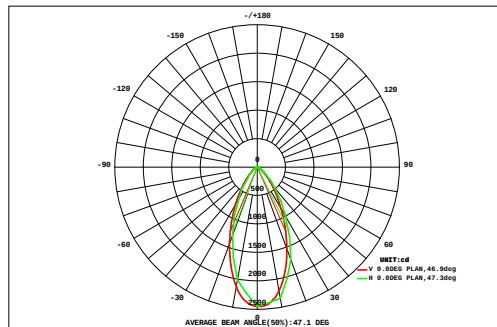
Luminaire Efficiency(Light Output Ratio)	100.0 %
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H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:QC1
Test Date:2023-04-18

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:77%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:221.0V I:0.2773A P:38.21W PF:0.6234 Lamp Flux:1922.81x1 lm		
NAME: 8.03.012.0101 40° SP-EA-R225A-12P-RDM	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2023040018
MFR.: TPK	SUR.:	PROTECTION ANGLE:



DATA OF LAMP		Eff:50.33lm/W	
MODEL	SP-EA-R225A-12P-RDM	Imax(cd)	2449
NOMINAL POWER(W)	38	AVAILABILITY(%)	89.4
RATED VOLTAGE(V)	220	Avai. FLUX(lm)	1719
NOMINAL FLUX(lm)	1922.81	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	1923
TEST VOLTAGE(V)	220.6	θ @50%(H,V)	47,47DEG

		AREA FLUX DIAGRAM																UNIT:lm				Φ t	Φ a
VERTICAL (DEG)	72	0.00	0.00	0.01	0.08	0.20	0.33	0.46	0.57	0.63	0.64	0.59	0.49	0.36	0.22	0.09	0.01	0.00	0.00	4.69	0.00		
	64	0.00	0.02	0.15	0.34	0.58	0.85	1.13	1.36	1.50	1.52	1.41	1.20	0.92	0.63	0.38	0.17	0.03	0.00	12.2	0.00		
	56	0.01	0.10	0.31	0.63	1.07	1.63	2.25	2.83	3.21	3.26	2.98	2.44	1.81	1.22	0.73	0.37	0.13	0.01	25.0	0.00		
	48	0.02	0.19	0.50	1.00	1.77	2.87	4.25	5.58	6.49	6.61	5.94	4.71	3.30	2.08	1.18	0.60	0.24	0.04	47.4	25.3		
	40	0.06	0.30	0.74	1.51	2.85	4.94	7.66	10.3	12.2	12.4	10.9	8.33	5.54	3.25	1.71	0.83	0.33	0.08	83.9	71.9		
	32	0.10	0.38	0.97	2.11	4.31	7.87	12.5	17.3	20.8	21.3	18.4	13.6	8.74	4.88	2.40	1.10	0.44	0.11	137	128		
	24	0.12	0.45	1.17	2.71	5.86	11.1	18.3	26.4	32.2	33.2	28.4	20.3	12.5	6.80	3.21	1.37	0.53	0.15	205	197		
		0.13	0.49	1.28	3.10	6.87	13.3	22.7	33.4	41.4	42.8	36.9	26.3	16.0	8.47	3.90	1.61	0.61	0.17	259	252		
		0.14	0.51	1.36	3.35	7.49	14.7	25.3	37.3	46.2	47.5	40.9	29.2	17.6	9.18	4.18	1.69	0.63	0.18	287	281		
		0.15	0.54	1.41	3.44	7.63	14.8	25.2	36.5	44.5	45.1	38.4	27.2	16.3	8.48	3.85	1.56	0.58	0.16	276	269		
		0.13	0.48	1.24	2.94	6.35	12.1	20.2	29.2	35.6	36.4	31.1	22.4	13.8	7.36	3.40	1.43	0.54	0.15	225	217		
	-24	0.10	0.39	1.00	2.22	4.64	8.62	14.0	19.6	23.8	24.3	21.2	15.8	10.1	5.60	2.71	1.20	0.47	0.13	156	147		
	-32	0.06	0.30	0.76	1.61	3.17	5.68	8.90	12.2	14.5	14.9	13.2	10.1	6.68	3.83	1.98	0.93	0.37	0.09	99.2	88.4		
	-40	0.03	0.21	0.55	1.12	2.03	3.38	5.03	6.63	7.67	7.79	6.96	5.47	3.78	2.30	1.29	0.65	0.26	0.05	55.2	39.5		
	-48	0.01	0.13	0.37	0.73	1.22	1.84	2.55	3.20	3.60	3.60	3.22	2.58	1.88	1.27	0.76	0.38	0.14	0.01	27.5	1.67		
	-56	0.00	0.04	0.17	0.37	0.64	0.94	1.23	1.48	1.63	1.65	1.54	1.31	1.02	0.71	0.43	0.21	0.06	0.00	13.5	0.00		
-64	0.00	0.00	0.03	0.14	0.27	0.43	0.58	0.70	0.78	0.80	0.74	0.63	0.48	0.32	0.18	0.06	0.01	0.00	6.16	0.00			
-72	0.00	0.00	0.00	0.02	0.05	0.08	0.13	0.17	0.20	0.20	0.18	0.14	0.10	0.06	0.03	0.01	0.00	0.00	1.37	0.00			
	-72	-64	-56	-48	-40	-32	-24	-16	HORIZONTAL(DEG)				16	24	32	40	48	56	64	72			
Φ t	1.04	4.52	12.0	27.4	57.0	106	172	245	297	304	263	192	121	66.7	32.4	14.2	5.39	1.34	1922	---			
Φ a	0.00	0.00	0.00	6.71	42.0	92.6	161	233	285	292	251	182	108	53.0	13.3	0.00	0.00	0.00	---	1719			

one-half-peak spread: U:20.9,D:26.8 , L:23.0,R:24.3

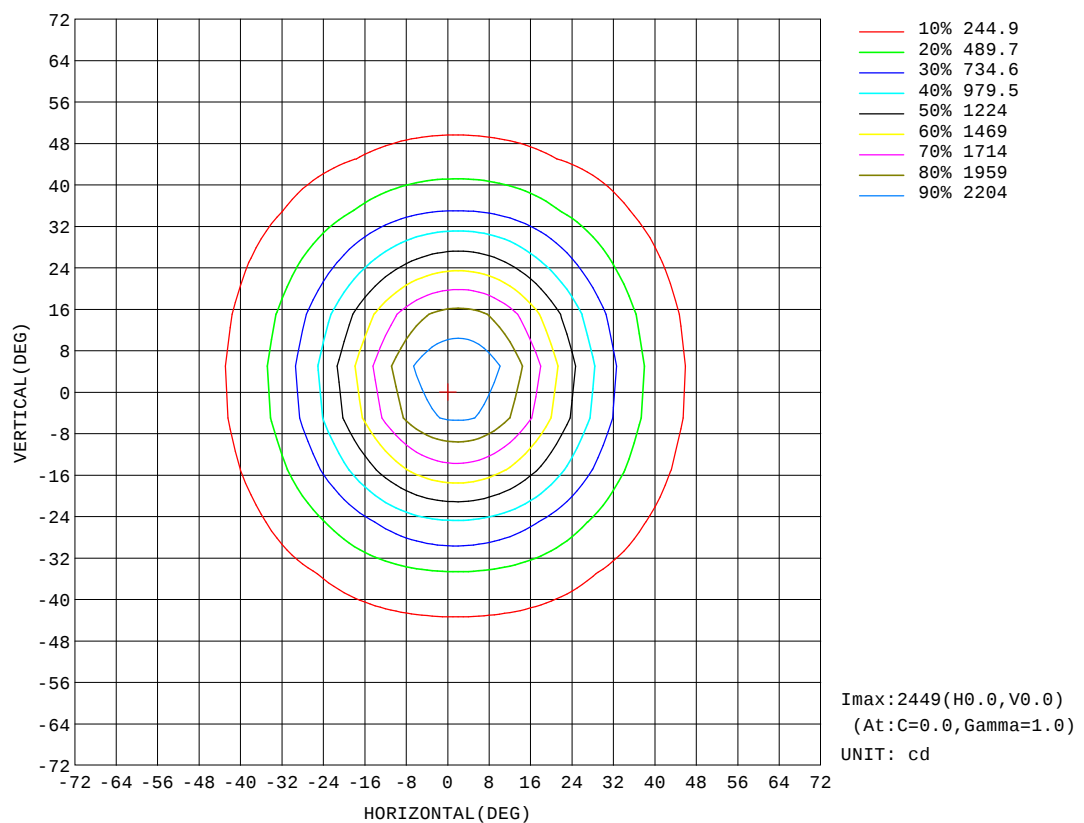
NEMA Beam Type: Type 5

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:QC1
Test Date:2023-04-18

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:77%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:221.0V I:0.2773A P:38.21W PF:0.6234 Lamp Flux:1922.81x1 lm		
NAME: 8.03.012.0101 40° SP-EA-R225A-12P-RDM	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2023040018
MFR.: TPK	SUR.:	PROTECTION ANGLE:

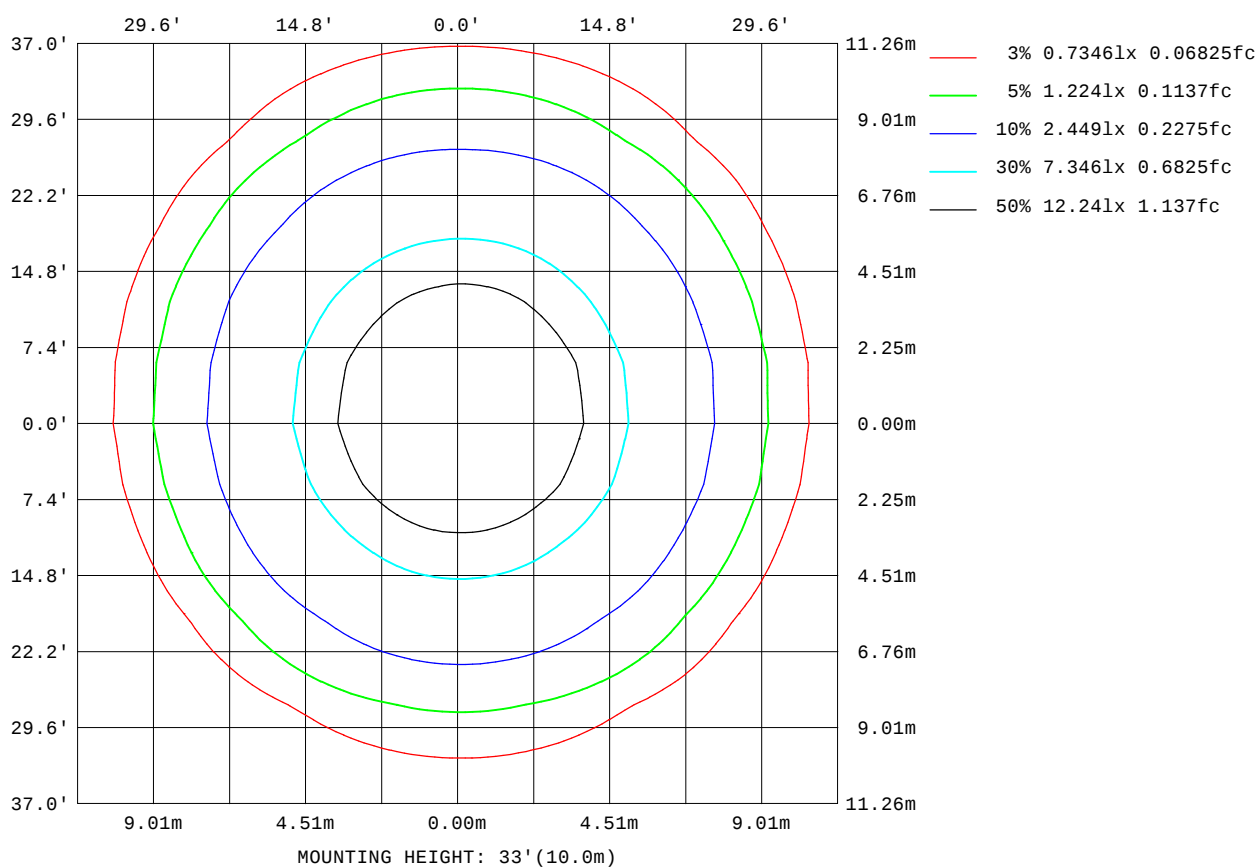


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H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:QC1
Test Date:2023-04-18

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:77%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

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NAME: 8.03.012.0101 40° SP-EA-R225A-12P-RDM	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2023040018
MFR.: TPK	SUR.:	PROTECTION ANGLE:

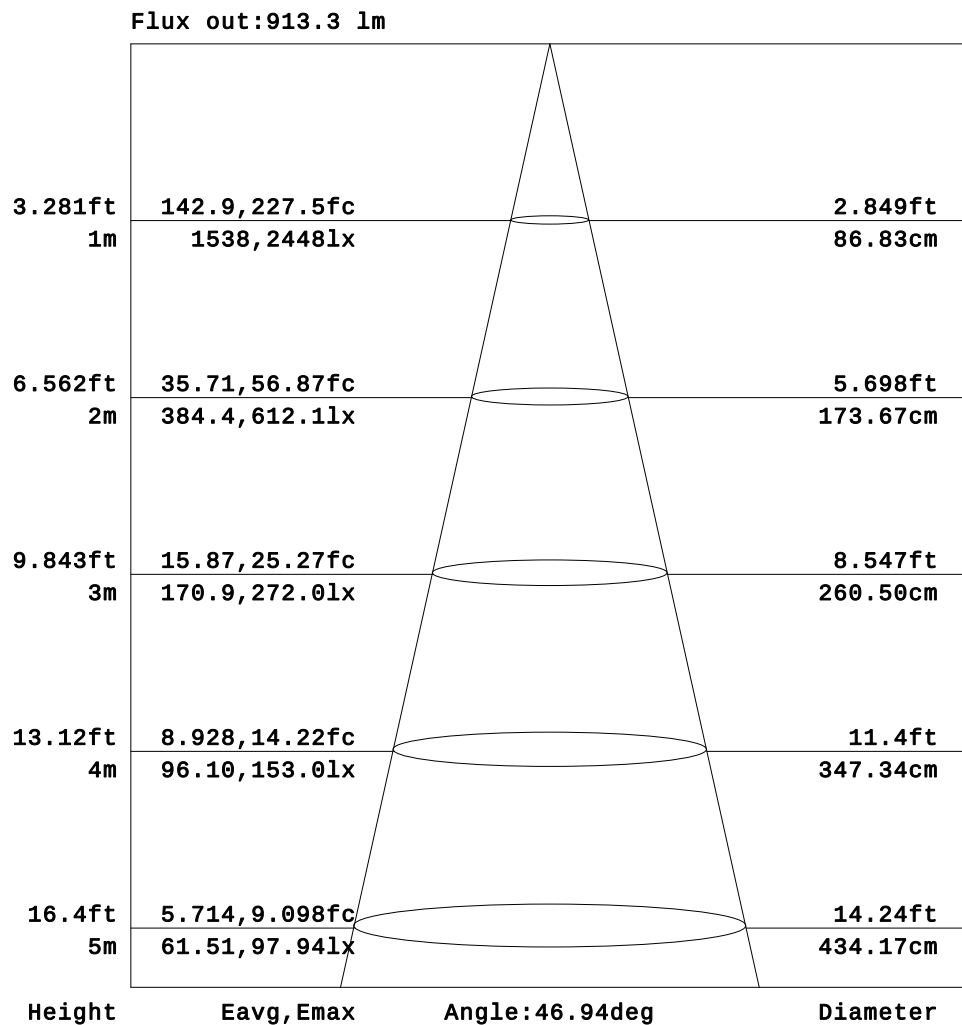


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H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:QC1
Test Date:2023-04-18

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:77%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:221.0V I:0.2773A P:38.21W PF:0.6234 Lamp Flux:1922.81x1 lm		
NAME: 8.03.012.0101 40° SP-EA-R225A-12P-RDM	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2023040018
MFR.: TPK	SUR.:	PROTECTION ANGLE:

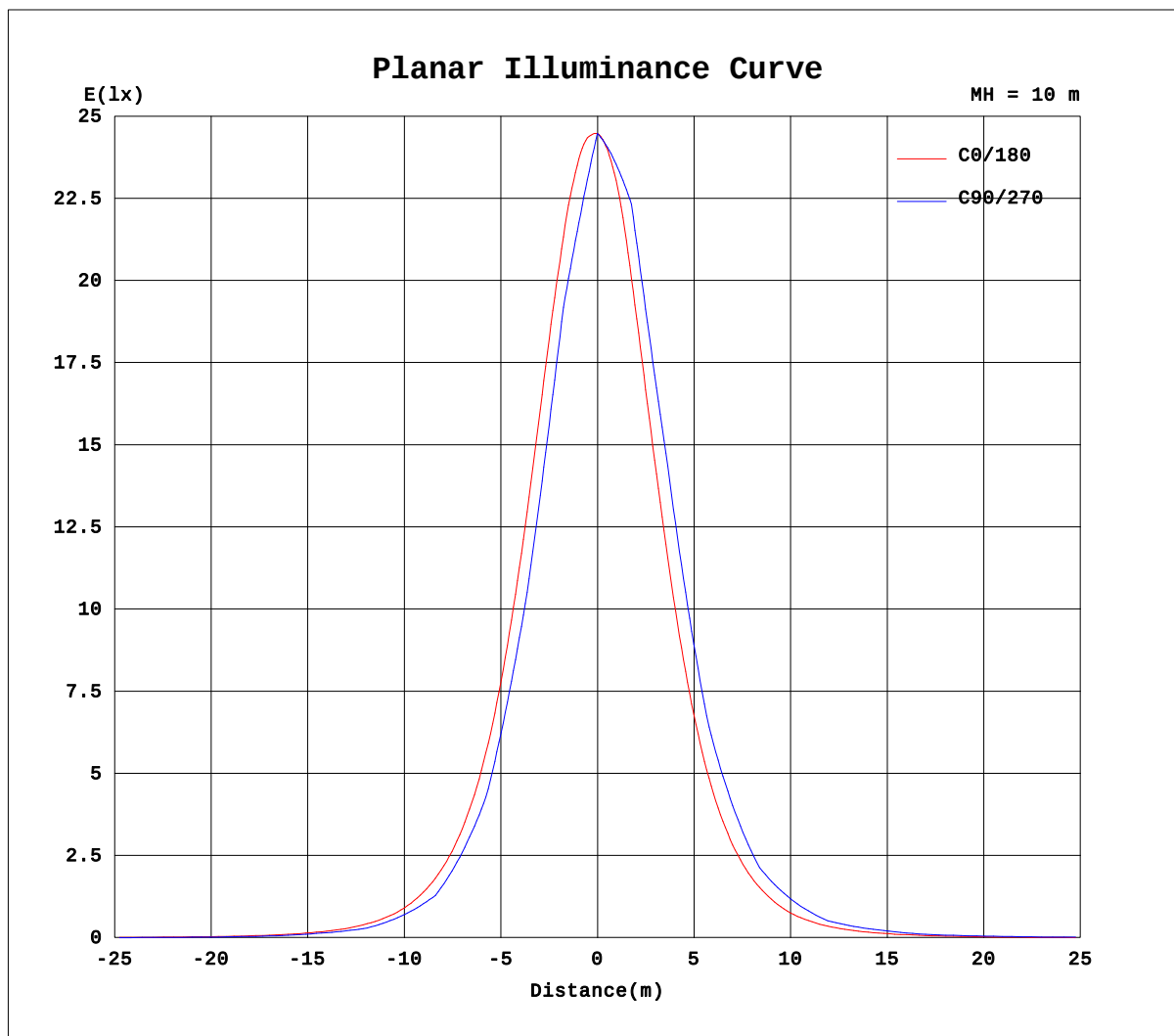


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:QC1
Test Date:2023-04-18

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:77%
Test Distance:8.300m [K=1.0000]
Remarks:

Planar Illuminance Curve



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V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:77%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.0V I:0.2773A P:38.21W PF:0.6234 Lamp Flux:1922.81x1 lm																	
NAME: 8.03.012.0101 40° SP-EA-R225A-12P-RDM									TYPE:LED						WEIGHT:		
DIM.:									SPEC.:						SERIAL No.:2023040018		
MFR.: TPK									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	0.00	0.00	0.00	0.00	0.00
-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.89	1.69	2.30	2.63	2.64
-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	2.12	3.66	4.79	5.31	5.24
-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.07	4.42	6.70	9.07	11.5	13.9	16.9	19.4	21.3	22.6	23.2
-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	5.09	9.74	14.3	19.1	24.0	28.6	32.7	36.0	38.5	40.3	41.2
-55	0.00	0.00	0.00	0.00	0.00	0.00	2.27	6.02	12.2	19.0	26.2	34.2	42.5	50.6	58.4	65.3	71.1	75.1	77.1
-50	0.00	0.00	0.00	0.00	0.00	0.01	6.00	13.6	21.9	31.0	41.1	52.6	64.3	75.9	87.0	97.0	106	111	113
-45	0.00	0.00	0.00	0.00	0.00	2.79	10.1	19.7	30.8	43.8	58.8	76.2	95.9	118	140	162	181	194	201
-40	0.00	0.00	0.00	0.00	0.00	7.46	17.8	30.0	44.4	62.3	83.1	107	136	169	202	235	262	281	288
-35	0.00	0.00	0.00	0.00	0.86	9.22	21.1	35.5	53.7	76.8	106	144	192	247	306	365	417	455	473
-30	0.00	0.00	0.00	0.00	3.80	15.3	29.7	47.6	71.2	102	143	199	269	350	434	517	590	639	660
-25	0.00	0.00	0.00	0.00	3.97	16.3	32.0	52.4	79.7	118	171	247	344	459	585	715	832	921	962
-20	0.00	0.00	0.00	0.00	8.73	22.9	41.6	66.7	101	152	225	331	461	618	789	962	1117	1227	1269
-15	0.00	0.00	0.00	0.00	7.57	22.0	41.0	67.5	105	161	245	365	522	715	937	1169	1388	1554	1636
-10	0.00	0.00	0.00	0.08	11.6	27.8	49.8	80.9	126	199	307	457	653	899	1177	1469	1736	1929	2011
-5	0.00	0.00	0.00	0.00	9.77	25.5	47.1	77.8	122	194	305	459	666	929	1239	1565	1878	2118	2225
0	0.00	0.00	0.00	0.72	13.5	30.7	55.0	89.5	142	225	357	536	775	1077	1429	1791	2133	2368	2449
5	0.00	0.00	0.00	0.00	10.3	26.3	48.5	80.2	127	202	320	483	703	984	1317	1674	2012	2272	2388
10	0.00	0.00	0.00	0.46	12.7	29.6	53.1	86.4	136	217	339	509	733	1017	1345	1697	2012	2243	2342
15	0.00	0.00	0.00	0.00	9.13	24.4	45.2	74.3	116	182	282	425	613	849	1124	1424	1703	1917	2028
20	0.00	0.00	0.00	0.00	11.0	26.6	47.5	76.6	118	181	276	410	580	784	1021	1266	1493	1654	1732
25	0.00	0.00	0.00	0.00	6.50	20.1	38.0	62.1	95.3	143	214	316	447	604	785	973	1149	1285	1355
30	0.00	0.00	0.00	0.00	6.96	20.0	37.0	59.2	88.8	129	189	270	374	493	624	754	868	955	990
35	0.00	0.00	0.00	0.00	2.59	13.8	28.1	46.2	69.5	100	143	199	273	358	455	550	634	700	731
40	0.00	0.00	0.00	0.00	2.11	12.8	25.8	41.5	61.1	85.6	116	156	204	261	324	380	431	464	476
45	0.00	0.00	0.00	0.00	0.27	6.43	17.2	29.9	45.0	63.3	85.7	113	146	184	226	265	299	325	336
50	0.00	0.00	0.00	0.00	0.00	4.15	13.3	23.8	35.5	49.4	65.4	82.8	102	123	144	164	180	192	196
55	0.00	0.00	0.00	0.00	0.00	1.18	5.97	14.5	23.7	34.0	45.6	58.2	71.7	86.0	100	114	125	134	137
60	0.00	0.00	0.00	0.00	0.00	0.00	1.88	8.79	15.7	23.1	30.7	38.8	46.9	55.1	62.4	68.9	74.0	77.4	78.8
65	0.00	0.00	0.00	0.00	0.00	0.00	0.30	3.71	7.17	11.9	17.7	23.4	29.2	35.0	40.2	44.7	48.5	51.0	52.3
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.10	6.90	10.4	13.8	17.0	19.8	22.2	24.1	25.4	26.0
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	3.08	4.87	6.55	8.20	9.65	10.9	11.9	12.6	13.0
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	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
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:24.9DEG
 Operators:QC1
 Test Date:2023-04-18

V(B) Range:-80 - 80DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
 Humidity:77%
 Test Distance:8.300m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

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NAME: 8.03.012.0101 40° SP-EA-R225A-12P-RDM									TYPE:LED						WEIGHT:		
DIM.:									SPEC.:						SERIAL No.:2023040018		
MFR.: TPK									SUR.:						PROTECTION ANGLE:		

Table--2

UNIT: cd

H(°) \ V(°)	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-75	2.50	2.22	1.83	1.33	0.74	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-70	4.91	4.29	3.46	2.45	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-65	23.1	22.1	20.5	18.4	15.9	13.1	10.7	8.27	5.73	3.15	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-60	41.0	39.4	36.8	33.4	29.5	25.1	20.4	15.6	10.4	5.32	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-55	76.9	74.4	69.7	63.5	56.2	48.3	40.0	31.7	23.8	16.2	9.14	4.32	0.55	0.00	0.00	0.00	0.00	0.00
-50	112	108	100	90.7	79.9	68.1	56.3	44.7	34.1	24.2	15.2	7.10	0.18	0.00	0.00	0.00	0.00	0.00
-45	199	190	175	155	133	111	89.3	70.1	53.3	38.5	25.7	14.9	5.56	0.32	0.00	0.00	0.00	0.00
-40	284	268	242	211	177	144	114	88.3	66.3	47.3	31.6	18.8	8.03	0.00	0.00	0.00	0.00	0.00
-35	469	444	402	348	288	229	174	130	94.6	67.1	45.4	28.1	14.7	3.61	0.00	0.00	0.00	0.00
-30	647	607	541	461	376	289	214	155	111	77.3	51.6	31.7	16.6	4.30	0.00	0.00	0.00	0.00
-25	952	894	796	673	543	418	306	216	149	101	66.9	41.7	23.3	8.95	0.00	0.00	0.00	0.00
-20	1241	1149	1005	834	658	497	357	246	165	109	70.8	43.4	23.7	8.60	0.00	0.00	0.00	0.00
-15	1621	1510	1325	1100	864	648	464	318	208	135	86.9	54.0	30.6	13.3	0.60	0.00	0.00	0.00
-10	1971	1809	1561	1272	980	719	506	342	218	139	88.0	53.7	29.8	12.2	0.00	0.00	0.00	0.00
-5	2208	2054	1789	1467	1134	833	587	396	255	161	100	62.0	35.2	16.0	1.48	0.00	0.00	0.00
0	2404	2206	1896	1527	1161	839	581	387	247	154	94.8	57.8	32.1	13.4	0.22	0.00	0.00	0.00
5	2373	2209	1923	1566	1204	881	618	416	267	167	104	63.9	36.5	16.7	1.84	0.00	0.00	0.00
10	2302	2113	1813	1458	1109	806	563	376	239	150	94.0	57.3	32.0	13.5	0.27	0.00	0.00	0.00
15	2017	1877	1632	1332	1031	763	541	368	239	152	96.0	59.5	34.0	15.3	1.28	0.00	0.00	0.00
20	1697	1560	1334	1083	838	622	442	300	197	127	81.0	49.9	27.6	10.7	0.01	0.00	0.00	0.00
25	1348	1258	1100	912	721	546	396	274	184	122	79.4	49.7	28.3	11.9	0.33	0.00	0.00	0.00
30	973	903	792	663	530	405	295	206	142	96.8	64.4	39.8	21.8	7.45	0.00	0.00	0.00	0.00
35	727	684	611	521	424	330	248	177	125	87.2	58.8	37.1	20.5	7.19	0.00	0.00	0.00	0.00
40	468	440	396	340	279	220	169	125	91.2	65.0	43.5	27.1	13.5	2.11	0.00	0.00	0.00	0.00
45	333	317	289	253	213	172	135	103	76.8	55.5	37.8	23.4	11.5	2.14	0.00	0.00	0.00	0.00
50	194	185	170	151	130	108	88.3	69.8	53.2	38.5	25.8	14.8	5.24	0.00	0.00	0.00	0.00	0.00
55	137	132	123	110	96.5	81.8	67.4	53.8	41.2	29.7	19.4	10.4	3.53	0.00	0.00	0.00	0.00	0.00
60	78.1	75.4	70.9	64.9	57.5	49.3	40.9	32.6	24.4	16.6	9.27	2.61	0.00	0.00	0.00	0.00	0.00	0.00
65	52.1	50.5	47.7	43.8	38.9	33.3	27.3	21.2	15.2	9.23	5.34	1.98	0.00	0.00	0.00	0.00	0.00	0.00
70	25.8	24.8	23.2	20.9	18.1	14.9	11.4	7.45	3.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	12.9	12.5	11.8	10.7	9.34	7.80	6.05	4.13	2.14	0.18	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	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

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:24.9DEG
 Operators:QC1
 Test Date:2023-04-18

$V(\beta)$ Range:-80 - 80DEG
 $V(\beta)$ Interval: 5.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
 Humidity:77%
 Test Distance:8.300m [K=1.0000]
 Remarks: