

200W QUATTRO EXPLOSION PROOF FLOOD LIGHT

VOL-EPF-200-CW

SECTION 1: SPECIFICATIONS

POWER	200W
VOLTAGE	85-120V
MATERIAL	ALUMINUM ALLOY
CCT	5000-6500K (CW)
AMBIENT TEMPERATURE	-40°-60°C
HUE	COOL/WARM
IP RATING	66
LED CHIP BRAND	BRIDGELUX
LIGHT OUTPUT	80-90 lm/W
BEAM ANGLE	90°/120°
FIXTURE LIFESPAN	50,000 HOURS
CORROSION PROOF GRADE	WF2
INPUT FREQUENCY	50/60 HZ
WEIGHT	9 kg
EXPLOSION MARK	2G Ex d IIC T4 Gb / II 2D Ex tb IIIC T4 Db IP66
DIVISION & CLASS CLASSIFICATION	CLASS 2, DIVISION 2



CERTIFICATIONS

RoHS
Compliant



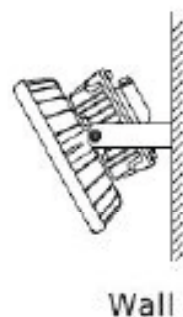
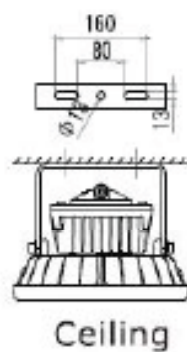
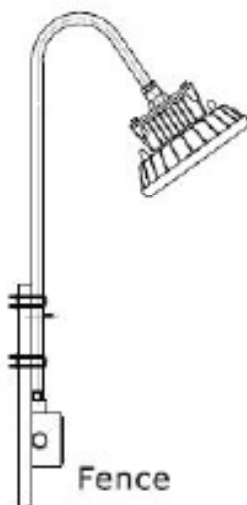
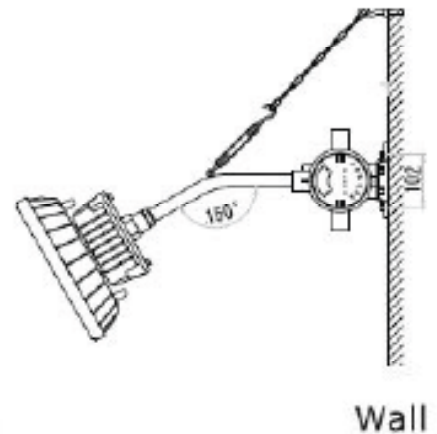
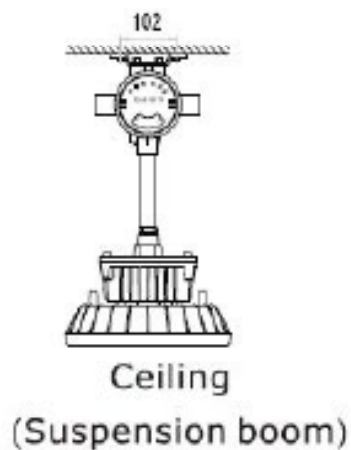
SECTION 2: COMPARABLE OLDER LIGHT SOURCE

LOW POWER CONSUMPTION WHILE HIGH LIGHT EFFICIENCY

POWER CONSUMPTION JUST 20% AS MUCH AS HIGH PRESSURE SODIUM LAMP AT THE SAME LUMINOUS CONDITION

SAVES MORE THAN 75% ENERGY THAN TRADITIONAL LIGHT

SECTION 3: INSTALLATION



SECTION 4: GONIOPHOTOMETER SYSTEM TEST REPORT

FLOODLIGHT SUMMARY

Report based on lamp delivering 1000 lumens.

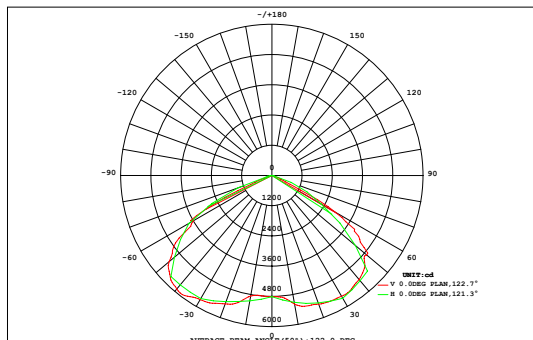
Maximum Intensity (Luminaire orientation as tested.)		344.3 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
Beam Spread	At 10% of I _{max}	130.2V x 134.0H
	At 50% of I _{max}	105.0V x 122.7H
	At 90% of I _{max}	65.0V x 91.8H
Beam Flux	Total	1039.5 lumens per klm.
	To 10% of I _{max}	1024.3 lumens per klm.
	To 50% of I _{max}	938.1 lumens per klm.
	To 90% of I _{max}	541.3 lumens per klm.
Upward LOR		0.0 %
Downward LOR		103.9 %
Luminaire Efficiency (Light Output Ratio)		104.2 %

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.0DEG
Operators:
Test Date:2017-08-07

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.800m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:217.9V I:0.7010A P:148.5W PF:0.9720 Lamp Flux:17182.3x1 lm		
NAME: LED Explosion-proof Light	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



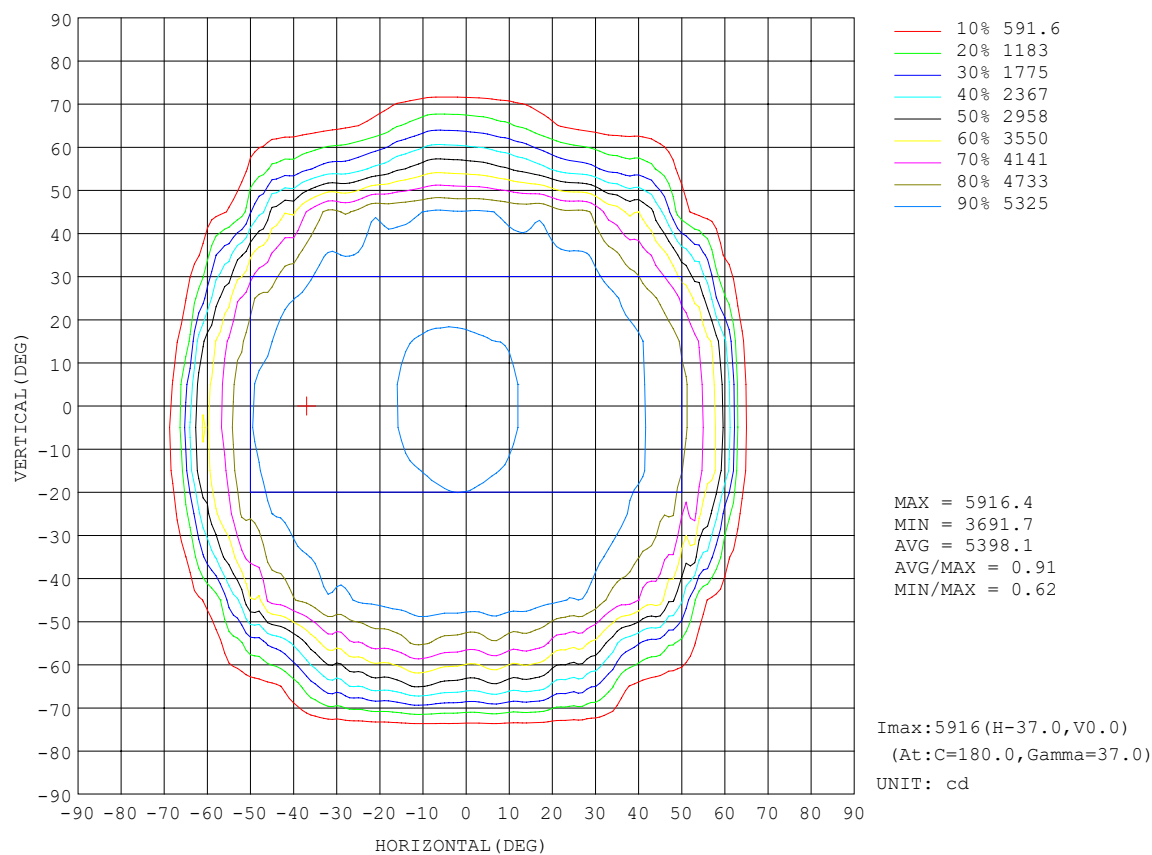
DATA OF LAMP		Eff:120.59lm/W	
MODEL	VOLLNER	Imax(cd)	5916
NOMINAL POWER(W)	150	AVAILABILITY(%)	102.8
RATED VOLTAGE(V)	220	Avai. FLUX(lm)	17670
NOMINAL FLUX(lm)	17182.3	LOR(%)	104.2
LAMPS INSIDE	1	TOTAL FLUX(lm)	17907
TEST VOLTAGE(V)	217.9	θ @50%(H,V)	123,105DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.01	0.02	0.03	0.07	0.14	0.36	0.52	0.69	0.76	0.83	0.80	0.58	0.37	0.14	0.07	0.04	0.02	0.01	5.47	0.00
90	0.01	0.01	0.03	0.13	0.34	1.17	1.70	2.08	2.58	2.86	2.64	1.97	1.22	0.32	0.12	0.03	0.01	0.01	17.2	0.00
80	0.01	0.02	0.19	1.17	5.33	8.90	16.5	34.2	47.6	42.8	28.3	13.2	7.74	5.34	1.47	0.16	0.03	0.01	213	165
70	0.01	0.05	0.54	4.65	22.0	38.1	54.1	80.3	98.9	92.6	72.2	48.9	33.0	19.5	3.87	0.63	0.06	0.01	569	540
60	0.01	0.11	1.26	13.0	62.1	110	137	154	163	162	153	133	95.8	51.8	8.39	1.78	0.10	0.02	1246	1234
50	0.01	0.18	4.57	41.0	89.9	127	149	162	168	168	162	148	120	80.9	31.3	3.49	0.18	0.03	1456	1448
40	0.01	0.26	9.65	63.1	110	140	156	165	168	169	167	157	136	102	51.7	6.29	0.27	0.04	1602	1596
30	0.01	0.37	18.2	73.2	115	142	154	158	159	161	161	155	137	109	67.2	11.3	0.40	0.06	1622	1617
20	0.02	0.53	24.5	77.4	120	144	154	154	150	153	158	153	137	110	70.6	13.4	0.40	0.07	1620	1615
10	0.02	0.61	27.6	79.6	122	145	154	153	148	150	158	152	137	111	72.2	14.3	0.42	0.08	1626	1622
0	0.03	0.54	24.3	77.8	119	145	155	159	158	160	161	155	138	110	69.8	12.9	0.46	0.09	1646	1642
-10	0.03	0.47	17.6	71.7	113	141	157	163	166	168	165	157	136	105	59.0	8.01	0.37	0.09	1629	1624
-20	0.04	0.39	10.9	59.3	104	135	155	166	172	173	167	156	130	94.9	43.1	4.29	0.30	0.09	1570	1563
-30	0.04	0.29	3.97	34.0	89.3	126	148	164	172	172	164	147	113	75.2	17.3	2.81	0.28	0.08	1428	1420
-40	0.04	0.23	1.75	15.0	40.8	82.5	114	134	139	138	128	103	62.6	31.2	8.49	1.29	0.23	0.08	1000	988
-50	0.04	0.17	0.38	2.32	7.52	40.8	69.5	87.6	89.6	87.6	79.9	56.6	22.7	3.57	2.24	0.32	0.19	0.07	551	533
-60	0.04	0.13	0.30	0.79	2.00	6.23	9.96	12.7	13.7	13.4	12.2	9.10	4.79	1.46	0.59	0.25	0.16	0.06	87.8	63.1
-70	0.05	0.13	0.25	0.41	0.66	1.13	1.69	2.28	2.76	2.70	2.43	1.96	1.40	0.68	0.34	0.23	0.16	0.06	19.3	0.00
-80	0.05	0.13	0.25	0.41	0.66	1.13	1.69	2.28	2.76	2.70	2.43	1.96	1.40	0.68	0.34	0.23	0.16	0.06	19.3	0.00
-90	0.05	0.13	0.25	0.41	0.66	1.13	1.69	2.28	2.76	2.70	2.43	1.96	1.40	0.68	0.34	0.23	0.16	0.06	19.3	0.00
-90 -80 -70 -60 -50 -40 -30 -20 HORIZONTAL (DEG) 20 30 40 50 60 70 80 90																				
Φ t	0.40	4.53	146	615	1123	1535	1786	1953	2019	2016	1942	1747	1413	1013	508	81.5	4.07	0.97	17907	---
Φ a	0.00	0.00	127	599	1104	1517	1774	1945	2012	2008	1931	1730	1389	996	486	50.1	0.00	0.00	---	17670

one-half-peak spread: U:55.3,D:50.0 , L:26.0,R:27.8

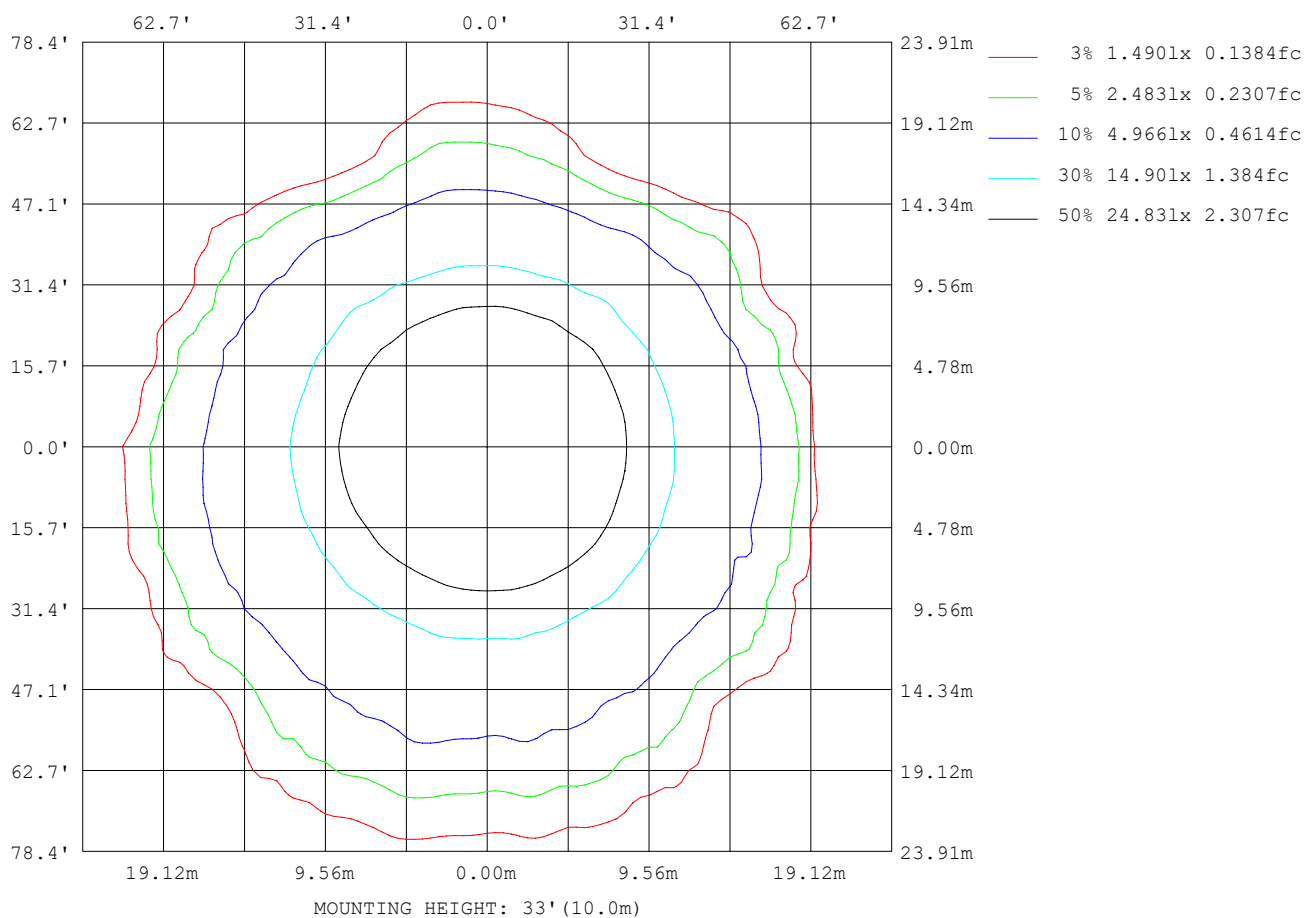
ISOCANDELA DIAGRAM

Test:U:217.9V I:0.7010A P:148.5W PF:0.9720 Lamp Flux:17182.3x1 lm		
NAME: LED Explosion-proof Light	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



ISOLUX DIAGRAM

Test:U:217.9V I:0.7010A P:148.5W PF:0.9720 Lamp Flux:17182.3x1 lm		
NAME: LED Explosion-proof Light	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



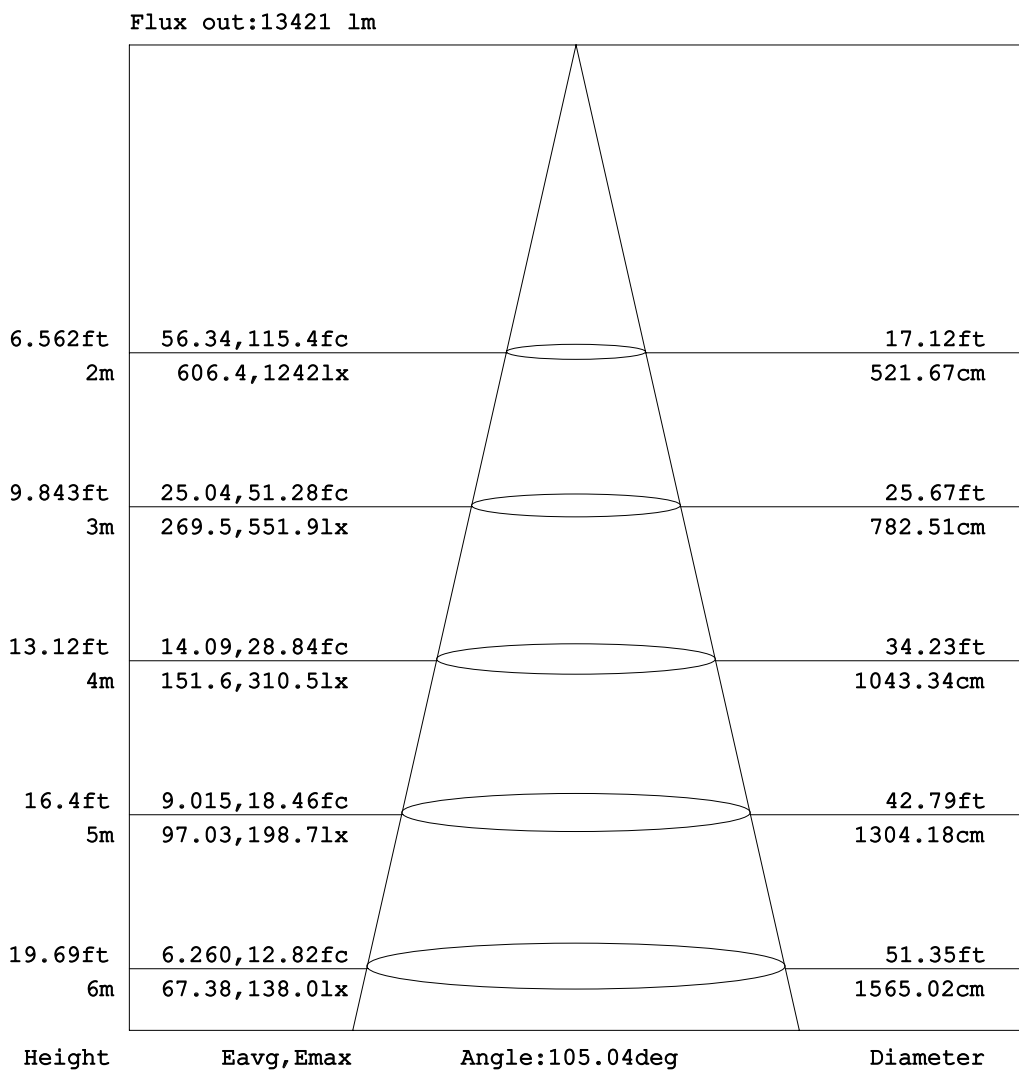
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.0DEG
Operators:
Test Date:2017-08-07

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.800m [K=1.0000]
Remarks:

AAI FIGURE

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Test:U:217.9V I:0.7010A P:148.5W PF:0.9720 Lamp Flux:17182.3x1 lm		
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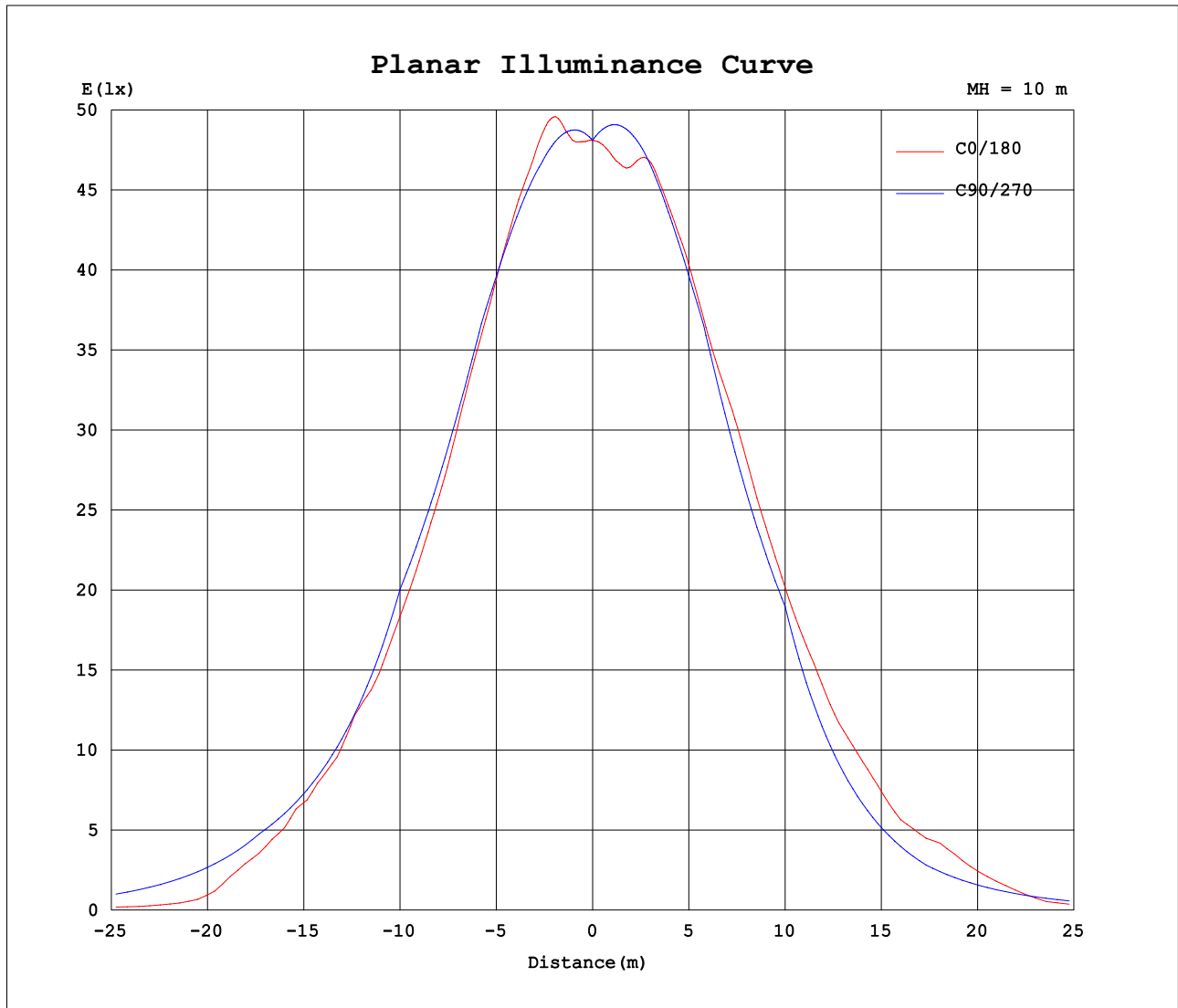


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.0DEG
Operators:
Test Date:2017-08-07

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.800m [K=1.0000]
Remarks:

PLANAR ILLUMINANCE CURVE



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.0DEG
Operators:
Test Date:2017-08-07

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.800m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:217.9V I:0.7010A P:148.5W PF:0.9720 Lamp Flux:17182.3x1 lm		
NAME: LED Explosion-proof Light	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION 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
-90	17.9	18.3	17.6	17.1	17.3	17.8	17.7	17.2	16.7	16.2	15.9	15.2	14.8	14.6	14.5	14.4	14.3	14.2	14.3
-85	17.7	17.7	17.0	16.4	17.8	19.7	21.0	23.0	27.4	30.6	35.1	45.9	53.9	60.9	69.2	78.5	84.0	92.7	92.6
-80	17.5	17.1	16.3	15.8	18.4	21.5	24.4	28.9	38.2	45.0	54.4	76.5	93.1	107	124	143	154	171	171
-75	17.3	16.5	15.7	15.1	18.9	23.4	27.7	34.7	48.9	59.3	73.7	107	132	154	179	207	223	250	249
-70	17.2	16.2	15.7	18.0	24.5	32.7	43.8	140	195	271	496	891	1086	1258	1388	1482	1598	1493	1436
-65	17.2	15.9	15.6	21.0	30.2	42.0	59.9	245	340	482	918	1675	2041	2362	2597	2757	2972	2736	2623
-60	17.2	15.6	15.6	23.9	35.9	51.4	76.1	350	486	694	1341	2459	2995	3466	3807	4033	4347	3979	3810
-55	16.5	14.8	16.5	27.2	43.1	109	280	888	1496	1911	2461	3322	3741	4107	4360	4543	4785	4541	4430
-50	15.9	14.1	17.5	30.4	50.4	166	483	1427	2506	3127	3580	4185	4487	4748	4913	5053	5223	5103	5050
-45	15.2	13.3	18.4	33.7	57.6	224	687	1965	3517	4344	4700	5048	5233	5389	5466	5564	5661	5665	5670
-40	14.0	12.1	19.3	36.9	88.4	406	1340	2575	3883	4624	4941	5211	5382	5507	5538	5584	5649	5652	5661
-35	12.8	11.0	20.2	40.1	119	588	1993	3184	4248	4903	5182	5374	5531	5624	5609	5604	5638	5640	5652
-30	11.5	9.84	21.1	43.4	150	770	2646	3794	4614	5183	5423	5537	5680	5742	5681	5625	5626	5627	5643
-25	10.2	8.55	20.7	44.3	182	1059	2859	3981	4797	5325	5525	5655	5701	5710	5622	5555	5522	5488	5486
-20	8.90	7.27	20.3	45.3	213	1347	3072	4168	4981	5467	5627	5772	5721	5679	5564	5485	5418	5349	5330
-15	7.58	5.99	19.9	46.2	245	1636	3285	4355	5164	5608	5730	5889	5741	5647	5506	5416	5314	5210	5173
-10	6.73	5.23	19.2	46.1	272	1776	3389	4460	5216	5640	5779	5874	5724	5629	5478	5351	5161	5071	5052
-5	5.88	4.47	18.6	45.9	300	1916	3493	4565	5269	5673	5828	5860	5707	5611	5451	5286	5008	4932	4931
0	5.03	3.72	18.0	45.7	327	2056	3597	4670	5321	5705	5877	5845	5690	5593	5423	5222	4855	4793	4811
5	4.84	3.51	15.8	42.4	266	1674	3461	4519	5208	5577	5796	5803	5688	5586	5455	5275	4998	4943	4960
10	4.64	3.30	13.6	39.1	206	1291	3324	4369	5094	5449	5715	5761	5686	5579	5486	5329	5141	5094	5109
15	4.45	3.09	11.5	35.8	146	908	3187	4218	4981	5321	5634	5718	5684	5572	5518	5383	5284	5244	5258
20	4.27	2.92	9.83	31.7	115	742	2603	3797	4767	5119	5473	5644	5661	5577	5561	5469	5399	5370	5380
25	4.08	2.76	8.18	27.7	83.4	576	2019	3376	4553	4917	5313	5570	5638	5582	5604	5555	5514	5497	5502
30	3.90	2.59	6.52	23.7	52.3	410	1434	2955	4339	4715	5153	5495	5614	5587	5647	5640	5628	5624	5625
35	3.74	2.48	5.11	19.5	44.6	291	1059	2181	3472	4194	4590	5156	5350	5356	5520	5506	5528	5547	5538
40	3.58	2.37	3.69	15.4	37.0	172	684	1406	2606	3672	4028	4816	5085	5125	5394	5372	5428	5471	5452
45	3.42	2.25	2.28	11.2	29.4	53.2	308	632	1739	3151	3466	4476	4820	4894	5267	5238	5328	5394	5366
50	3.26	2.20	2.17	8.19	22.5	41.5	218	443	1238	2227	2451	3150	3430	3547	3902	4076	4276	4373	4331
55	3.10	2.14	2.05	5.14	15.7	29.9	128	255	738	1303	1437	1823	2041	2200	2538	2913	3223	3351	3297
60	2.93	2.08	1.94	2.09	8.92	18.2	38.3	66.2	238	378	422	497	651	853	1173	1750	2170	2329	2262
65	2.79	2.07	1.88	1.95	6.56	12.8	26.7	46.6	162	257	291	348	453	589	803	1191	1473	1581	1539
70	2.64	2.07	1.82	1.81	4.20	7.32	15.2	26.9	86.2	136	159	199	256	325	434	631	775	833	816
75	2.49	2.06	1.76	1.67	1.84	1.89	3.61	7.26	10.4	14.2	27.8	49.5	58.0	61.7	65.2	71.0	77.3	85.2	92.4
80	2.43	2.17	2.01	2.00	2.16	2.23	3.43	5.89	8.05	10.6	19.7	34.2	39.9	42.6	46.0	50.1	53.6	58.6	63.1
85	2.37	2.29	2.27	2.33	2.48	2.58	3.24	4.52	5.65	6.98	11.6	18.9	21.8	23.4	26.8	29.1	29.9	32.0	33.9
90	2.31	2.40	2.53	2.66	2.79	2.93	3.05	3.15	3.25	3.35	3.46	3.54	3.63	4.25	7.59	8.10	6.24	5.41	4.61

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Humidity:65.0%
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