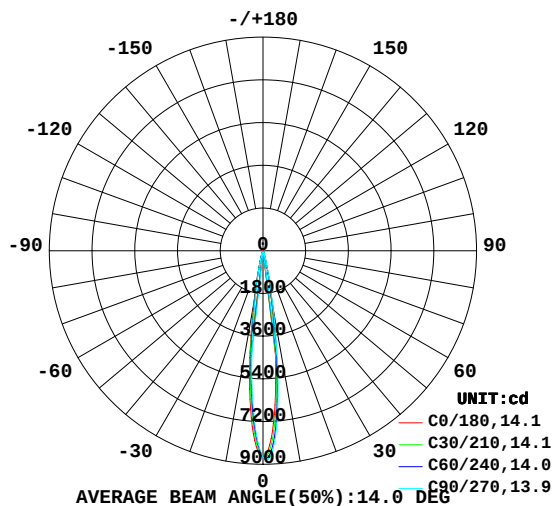


LUMINAIRE PHOTOMETRIC TEST REPORT

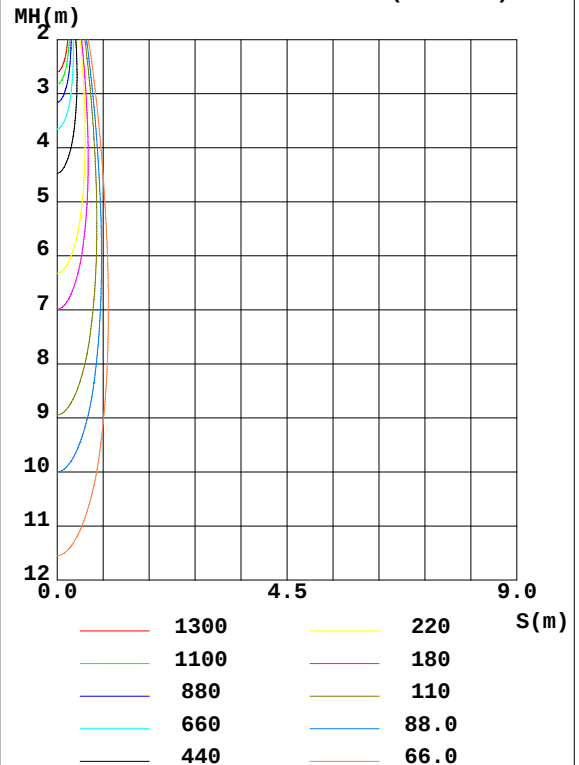
NAME: VN-TL0015-31 BLACK	TYPE: LED TRACK LIGHT	WEIGHT:
SPEC.: CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 45.33 lm/W			
MODEL	CMA1306	Imax(cd)	8869	S/MH(C0/180)	0.25
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	0.22
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	712.83	η UP, DN(C0-180)	0.7, 53.8
NOMINAL FLUX(lm)	712.834	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.6, 44.9
LAMPS INSIDE	1	η up(%)	1.3	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	98.7	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature: 23DEG
Operators: HTJ
Test Date: 2018-10-10

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity: 65.0%
Test Distance: 5.300m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

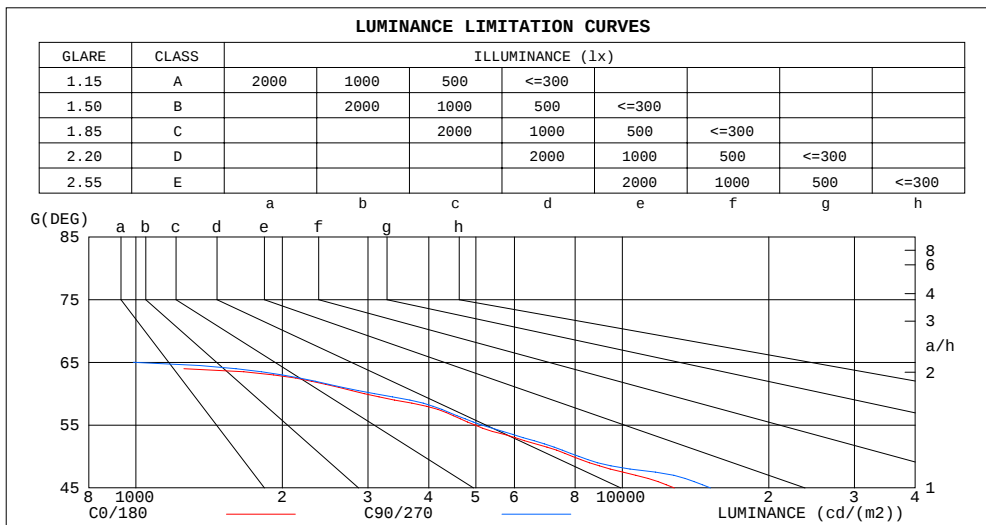
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2021	2263	2449	2605	2178	1952	1739	1670	0- 10	450.3	450.3	63.2, 63.2
20	153.7	163.2	171.9	173.0	158.2	149.4	140.1	138.0	10- 20	175.3	625.6	87.8, 87.8
30	46.29	48.85	49.77	51.03	47.39	44.03	42.20	42.29	20- 30	37.11	662.7	93, 93
40	25.33	27.23	28.60	29.76	28.17	27.31	26.00	25.97	30- 40	21.93	684.6	96, 96
50	9.075	9.251	9.441	9.761	8.990	9.138	8.699	9.039	40- 50	13.37	698.0	97.9, 97.9
60	2.635	2.750	2.791	3.038	2.512	2.446	2.314	2.536	50- 60	4.855	702.9	98.6, 98.6
70	0	0	0	0	0	0	0	0	60- 70	0.7830	703.7	98.7, 98.7
80	0	0	0	0	0	0	0	0	70- 80	0	703.7	98.7, 98.7
90	0	0	0	0	0	0	0	0	80- 90	0	703.7	98.7, 98.7
100	0	0	0	0	0	0	0	0	90-100	0	703.7	98.7, 98.7
110	0	0	0	0	0	0	0	0	100-110	0	703.7	98.7, 98.7
120	0	0	0	0	0	0	0	0	110-120	0	703.7	98.7, 98.7
130	0	0	0	0	0	0	0	0	120-130	0	703.7	98.7, 98.7
140	3.444	3.176	2.879	2.807	0.7414	0.9850	1.200	1.255	130-140	0.2979	704.0	98.8, 98.8
150	7.408	7.353	7.217	7.235	6.523	6.619	6.729	6.736	140-150	2.989	706.9	99.2, 99.2
160	8.240	8.012	8.234	8.167	8.349	8.214	8.307	8.050	150-160	3.590	710.5	99.7, 99.7
170	4.301	4.147	4.930	4.844	5.237	4.706	4.734	3.922	160-170	2.029	712.6	100, 100
180	0.8898	1.011	0.8682	0.8642	0.9073	1.003	0.8761	0.8523	170-180	0.2705	712.8	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature: 23DEG
 Operators: HTJ
 Test Date: 2018-10-10

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.300m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME: VN-TL0015-31 BLACK	TYPE: LED TRACK LIGHT	WEIGHT:
SPEC.: CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	0	0
80	0	0
75	0	0
70	0	0
65	18	988
60	2947	3095
55	4979	5141
50	7895	8142
45	12790	15177

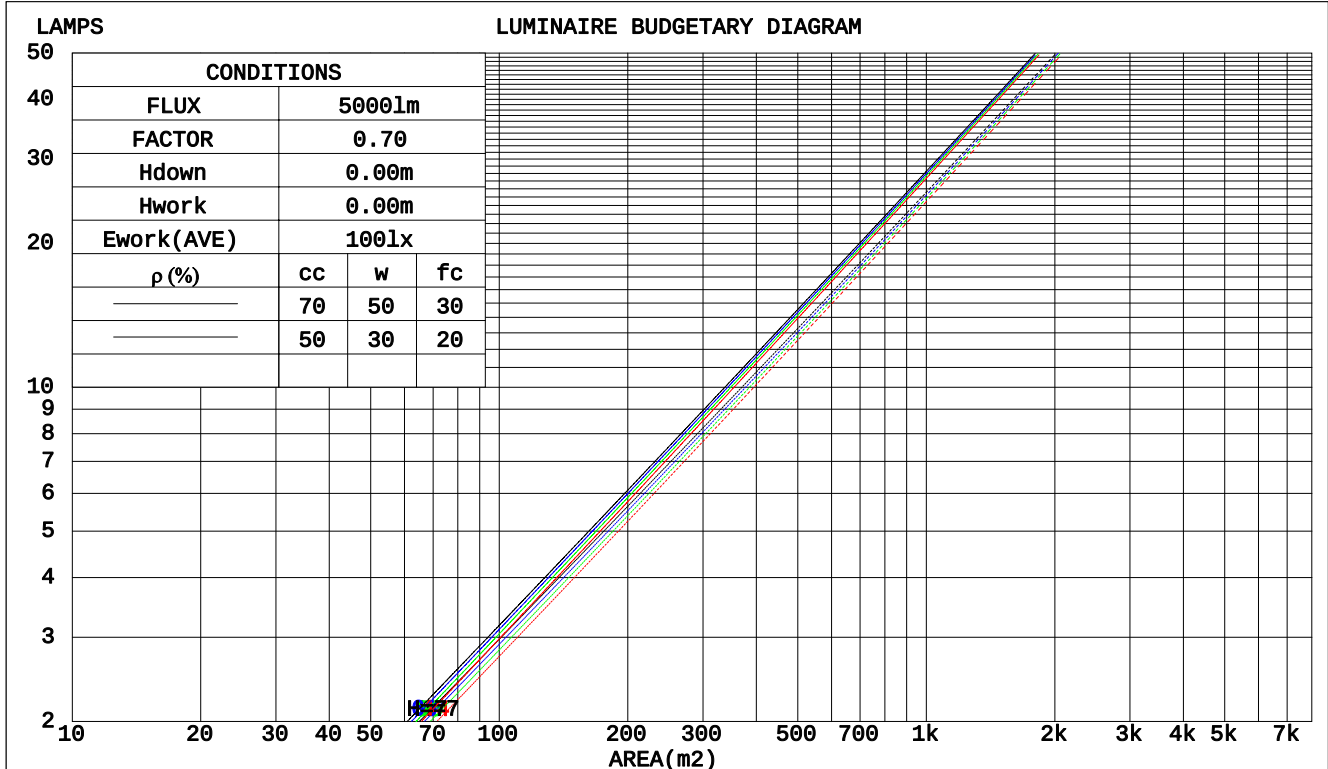
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature: 23DEG
 Operators: HTJ
 Test Date: 2018-10-10

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.300m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: VN-TL0015-31 BLACK	TYPE:LED TRACK LIGHT	WEIGHT:
SPEC.:CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.99
1.0	1.13	1.12	1.10	1.11	1.10	1.08	1.07	1.06	1.05	1.03	1.02	1.02	.99	.99	.98	.97
2.0	1.09	1.06	1.04	1.07	1.05	1.03	1.04	1.02	1.01	1.01	.99	.98	.98	.97	.96	.95
3.0	1.05	1.02	.99	1.04	1.01	.99	1.01	.99	.97	.99	.97	.96	.97	.95	.94	.93
4.0	1.02	.99	.96	1.01	.98	.96	.99	.97	.95	.97	.95	.93	.95	.94	.92	.91
5.0	.99	.96	.94	.99	.95	.93	.97	.94	.92	.95	.93	.91	.94	.92	.91	.90
6.0	.97	.94	.91	.96	.93	.91	.95	.92	.90	.94	.91	.90	.93	.91	.89	.88
7.0	.95	.92	.89	.94	.91	.89	.93	.91	.89	.92	.90	.88	.91	.89	.88	.87
8.0	.93	.90	.88	.93	.90	.87	.92	.89	.87	.91	.88	.87	.90	.88	.86	.85
9.0	.92	.88	.86	.91	.88	.86	.90	.88	.86	.90	.87	.85	.89	.87	.85	.84
10.0	.90	.87	.85	.90	.87	.85	.89	.86	.84	.88	.86	.84	.88	.86	.84	.83



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:23DEG
 Operators:HTJ
 Test Date:2018-10-10

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:5.300m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: VN-TL0015-31 BLACK	TYPE:LED TRACK LIGHT	WEIGHT:
SPEC.:CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0	
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.121	.069	.022	.114	.065	.021	.101	.058	.018	.089	.051	.016	.078	.045	.015		
2.0	.110	.060	.019	.105	.058	.018	.094	.052	.016	.084	.047	.015	.075	.042	.013		
3.0	.102	.054	.016	.097	.052	.016	.088	.048	.014	.080	.044	.013	.072	.040	.012		
4.0	.094	.049	.014	.090	.047	.014	.082	.044	.013	.075	.040	.012	.069	.037	.011		
5.0	.087	.044	.013	.084	.043	.013	.078	.040	.012	.072	.038	.011	.066	.035	.011		
6.0	.082	.041	.012	.079	.040	.011	.073	.038	.011	.068	.035	.010	.063	.033	.010		
7.0	.077	.038	.011	.074	.037	.011	.069	.035	.010	.065	.033	.010	.061	.032	.009		
8.0	.072	.035	.010	.070	.034	.010	.066	.033	.009	.062	.031	.009	.058	.030	.009		
9.0	.068	.033	.009	.066	.032	.009	.063	.031	.009	.059	.030	.009	.056	.028	.008		
10.0	.065	.031	.009	.063	.030	.009	.060	.029	.008	.057	.028	.008	.054	.027	.008		

ρ_{CC}	80%			70%			50%			30%			10%			0	
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.200	.200	.200	.171	.171	.171	.117	.117	.117	.067	.067	.067	.021	.021	.021		
1.0	.177	.168	.159	.152	.144	.137	.104	.099	.095	.060	.057	.055	.019	.018	.018		
2.0	.158	.143	.130	.135	.123	.112	.093	.085	.078	.053	.049	.046	.017	.016	.015		
3.0	.142	.123	.108	.122	.106	.094	.084	.074	.066	.048	.043	.039	.016	.014	.013		
4.0	.129	.108	.091	.110	.093	.079	.076	.065	.056	.044	.038	.033	.014	.012	.011		
5.0	.117	.095	.079	.101	.082	.068	.069	.057	.048	.040	.034	.029	.013	.011	.009		
6.0	.108	.085	.068	.093	.073	.059	.064	.051	.042	.037	.030	.025	.012	.010	.008		
7.0	.099	.076	.060	.086	.066	.052	.059	.046	.037	.034	.027	.022	.011	.009	.007		
8.0	.092	.069	.053	.079	.060	.047	.055	.042	.033	.032	.025	.020	.010	.008	.007		
9.0	.086	.063	.048	.074	.055	.042	.051	.039	.030	.030	.023	.018	.010	.007	.006		
10.0	.081	.058	.043	.070	.051	.038	.048	.036	.027	.028	.021	.016	.009	.007	.005		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:23DEG
Operators:HTJ
Test Date:2018-10-10

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:5.300m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME: VN-TL0015-31 BLACK						TYPE:LED TRACK LIGHT			WEIGHT:		
SPEC.:CRI90 3000K S						DIM.:			SERIAL No.:		
MFR.: 1						SUR.:			Shielding Angle:		
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		10.6	11.1	10.8	11.3	11.5	11.1	11.7	11.4	11.8	12.0
3H		10.5	11.0	10.7	11.2	11.4	11.0	11.5	11.3	11.7	11.9
4H		10.4	10.9	10.7	11.1	11.3	10.9	11.4	11.2	11.6	11.9
6H		10.3	10.8	10.6	11.0	11.3	10.8	11.3	11.1	11.5	11.8
8H		10.3	10.7	10.6	11.0	11.2	10.8	11.2	11.1	11.5	11.8
12H		10.2	10.6	10.5	10.9	11.2	10.7	11.2	11.1	11.4	11.7
4H 2H		10.5	11.0	10.8	11.2	11.4	11.0	11.5	11.3	11.7	11.9
3H		10.3	10.8	10.7	11.0	11.3	10.8	11.3	11.2	11.5	11.8
4H		10.2	10.6	10.6	10.9	11.2	10.7	11.1	11.1	11.4	11.8
6H		10.1	10.5	10.5	10.8	11.2	10.6	11.0	11.0	11.3	11.7
8H		10.1	10.4	10.5	10.8	11.1	10.6	10.9	11.0	11.3	11.6
12H		10.0	10.3	10.4	10.7	11.1	10.5	10.8	10.9	11.2	11.6
8H 4H		10.1	10.4	10.5	10.8	11.1	10.6	10.9	11.0	11.3	11.6
6H		9.9	10.2	10.4	10.6	11.1	10.4	10.7	10.9	11.1	11.6
8H		9.9	10.1	10.3	10.6	11.0	10.4	10.6	10.8	11.1	11.5
12H		9.8	10.0	10.3	10.5	11.0	10.3	10.5	10.8	11.0	11.5
12H 4H		10.0	10.3	10.4	10.7	11.1	10.5	10.8	10.9	11.2	11.6
6H		9.9	10.1	10.3	10.6	11.0	10.4	10.6	10.8	11.1	11.5
8H		9.8	10.0	10.3	10.5	11.0	10.3	10.5	10.8	11.0	11.5
Variations with the observer position at spacings:											
S = 1.0H		+ 2.1 / - 5.2					+ 2.2 / - 5.6				
1.5H		+ 2.5 / - 3.6					+ 2.5 / - 4.1				
2.0H		+ 4.5 / - 6.7					+ 5.1 / - 7.1				

CIE Pub.117, 712.8 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -1.2$)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:23DEG
Operators:HTJ
Test Date:2018-10-10

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:5.300m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: VN-TL0015-31 BLACK	TYPE:LED TRACK LIGHT	WEIGHT:
SPEC.:CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:

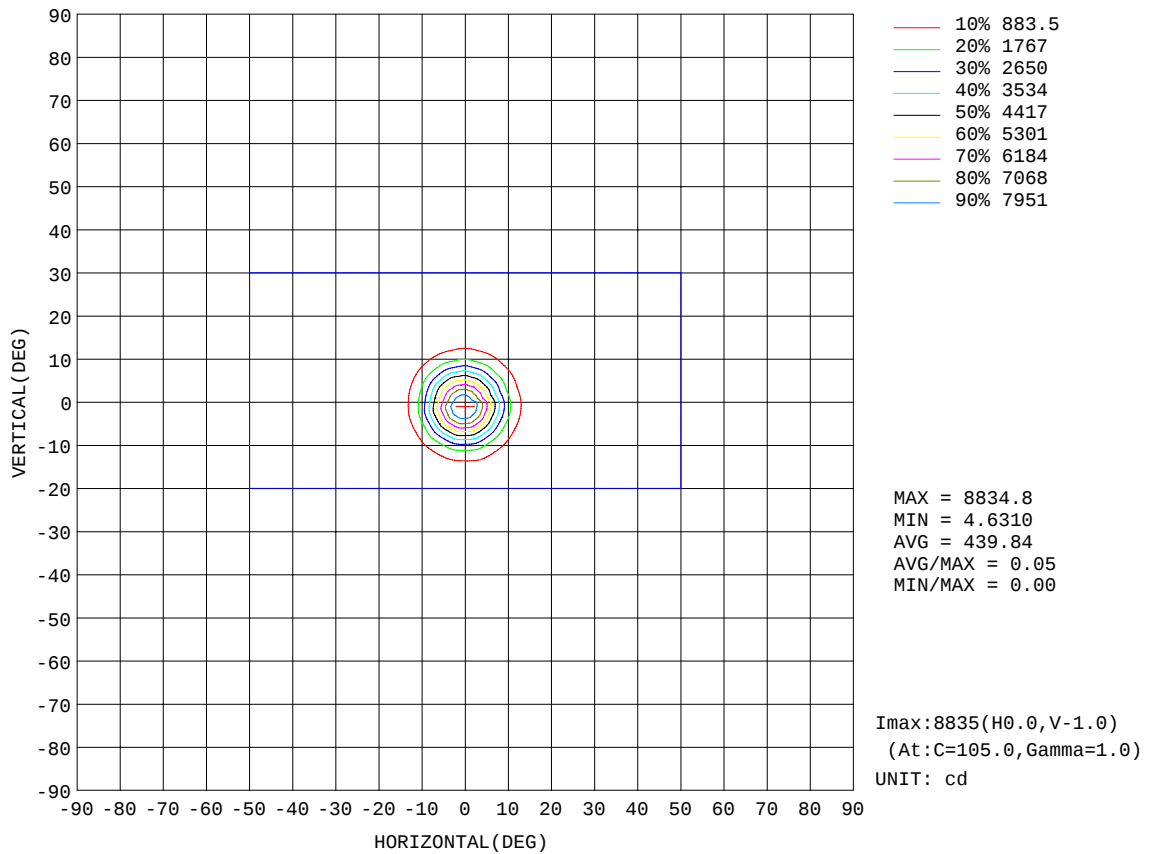
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	89	83	80	89	83	79	88	82	79	76
0.80	96	91	87	96	90	87	94	90	87	83
1.00	100	95	92	99	95	91	98	94	91	87
1.25	104	99	96	103	99	95	101	97	95	90
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	107	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	103	96
4.00	114	111	109	112	110	108	108	106	105	97
5.00	115	113	111	113	111	110	109	107	106	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNOM = 1.25										

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:23DEG
Operators:HTJ
Test Date:2018-10-10

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:5.300m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: VN-TL0015-31 BLACK	TYPE:LED TRACK LIGHT	WEIGHT:
SPEC.:CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:

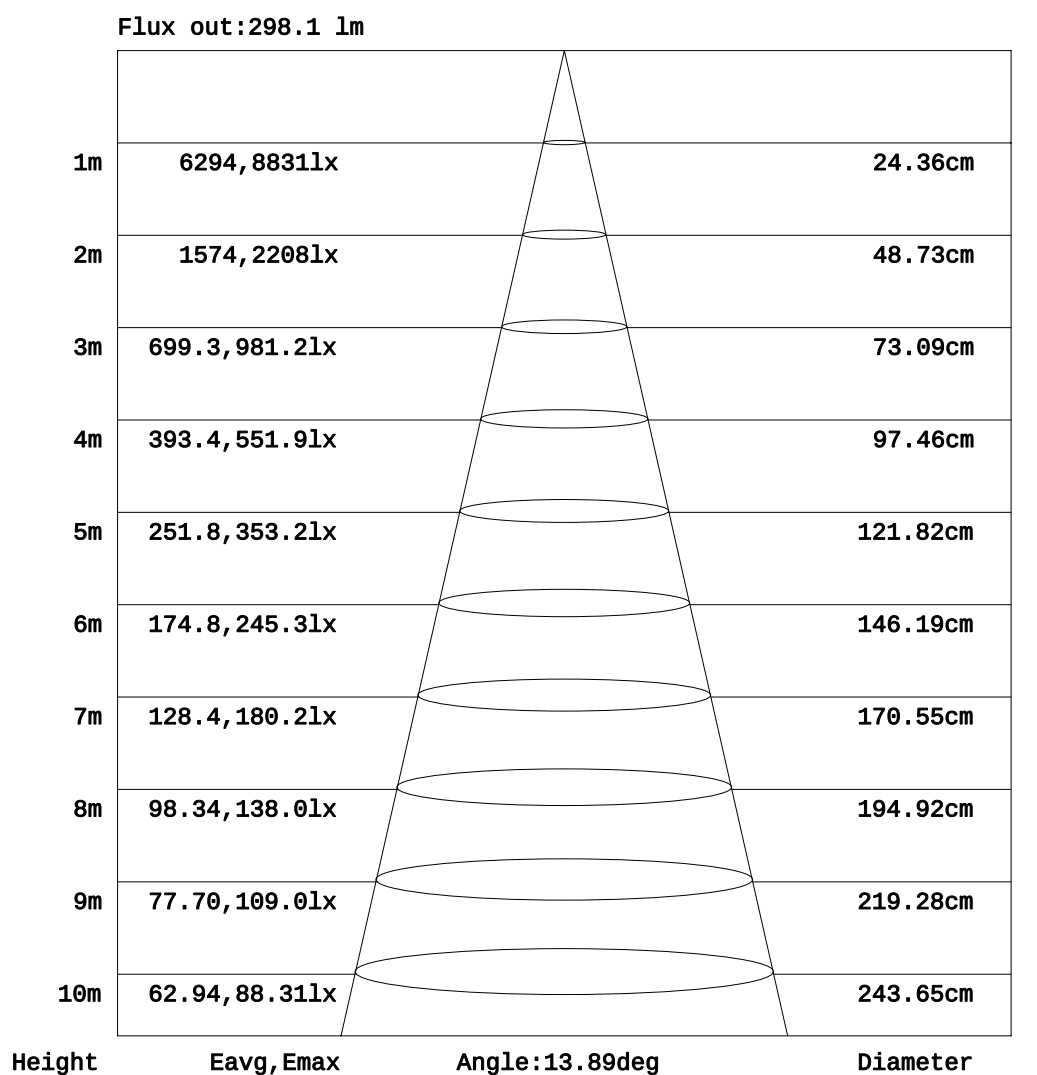


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature: 23DEG
Operators: HTJ
Test Date: 2018-10-10

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity: 65.0%
Test Distance: 5.300m [K=1.0000]
Remarks:

AAI Figure

NAME: VN-TL0015-31 BLACK	TYPE: LED TRACK LIGHT	WEIGHT:
SPEC.: CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:



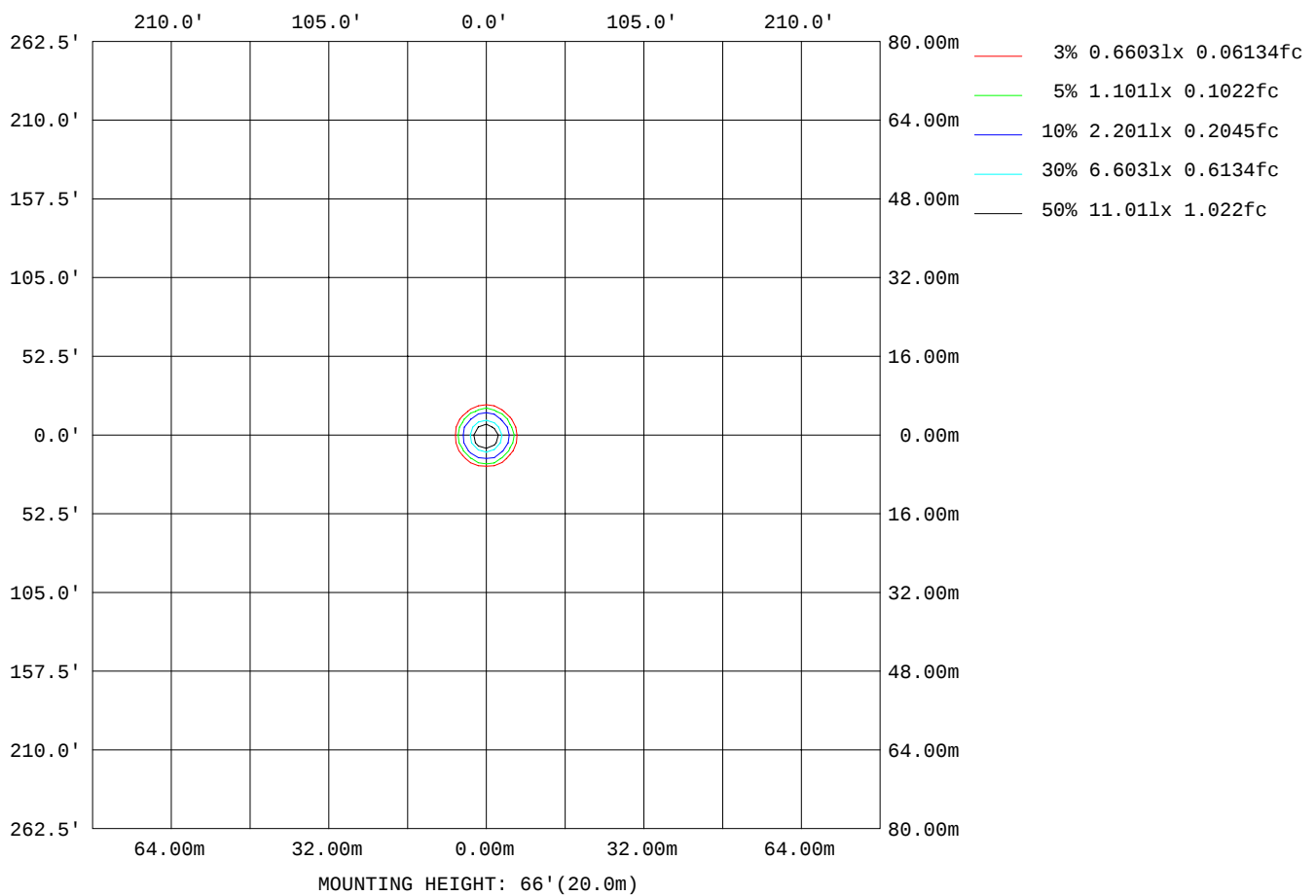
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature: 23DEG
 Operators: HTJ
 Test Date: 2018-10-10

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.300m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME: VN-TL0015-31 BLACK	TYPE: LED TRACK LIGHT	WEIGHT:
SPEC.: CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature: 23DEG
Operators: HTJ
Test Date: 2018-10-10

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity: 65.0%
Test Distance: 5.300m [K=1.0000]
Remarks:

LED Avg.L Report

NAME: VN-TL0015-31 BLACK	TYPE:LED TRACK LIGHT	WEIGHT:
SPEC.:CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:

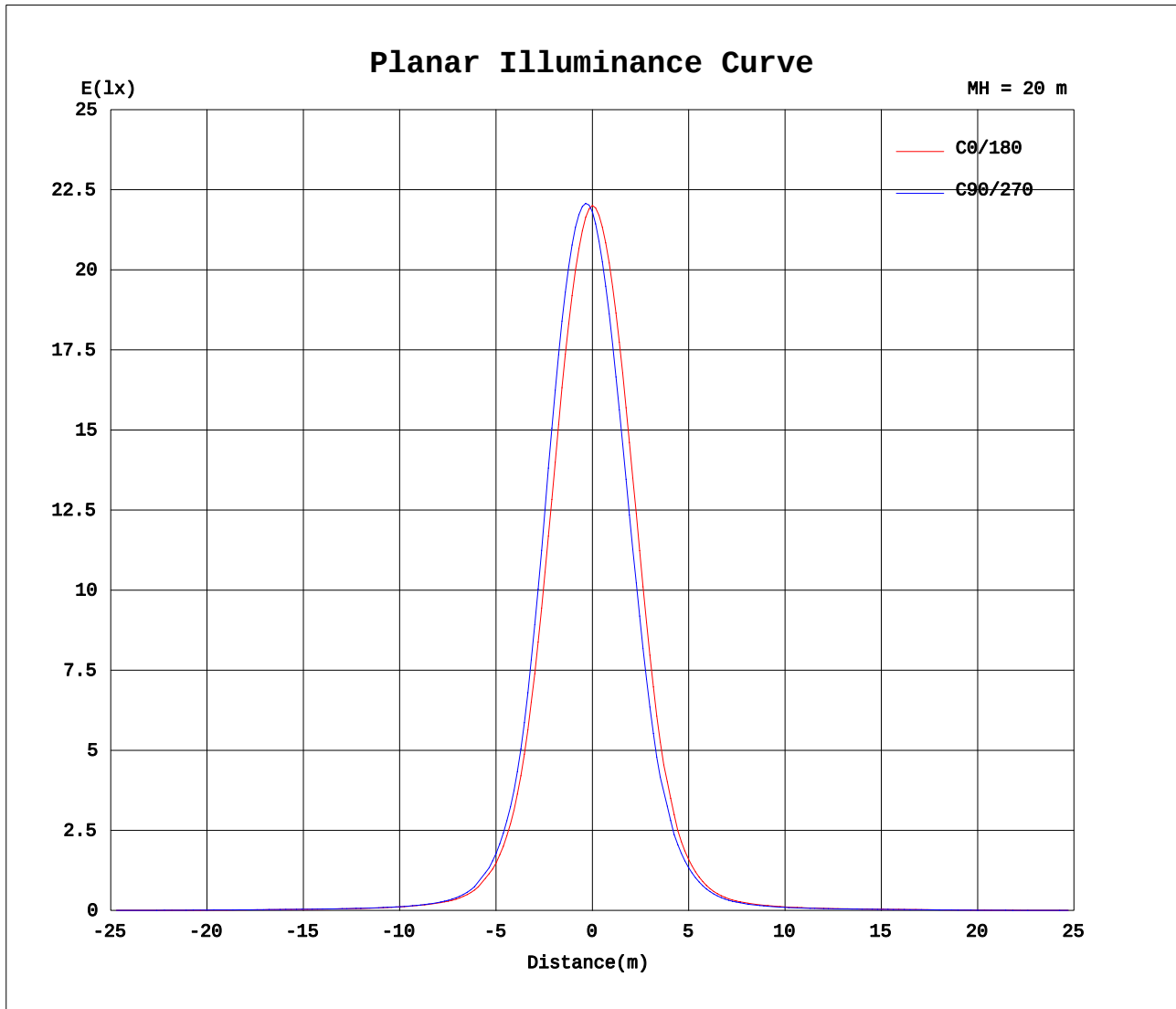
AvgL	cd/m2
L_0~180(65)av	228
L_0~180(75)av	0
L_0~180(85)av	0
L_90~270(65)av	493
L_90~270(75)av	0
L_90~270(85)av	0
L_45(65)av	490
L_45(75)av	0
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:23DEG
Operators:HTJ
Test Date:2018-10-10

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:5.300m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature: 23DEG
 Operators: HTJ
 Test Date: 2018-10-10

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.300m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: VN-TL0015-31 BLACK	TYPE:LED TRACK LIGHT	WEIGHT:
SPEC.:CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702	8702
5	6068	6367	6378	6739	6755	7052	7003	7250	7106	7263	6982	7017	6279	6040	5995	5737	5676	5418	5434
10	2021	2119	2076	2263	2301	2549	2449	2620	2486	2605	2407	2487	2178	2107	2100	1952	1870	1707	1739
15	506	507	519	537	554	620	591	616	578	594	550	561	529	539	522	508	471	452	453
20	154	158	157	163	165	177	172	178	170	173	163	165	158	156	155	149	145	137	140
25	77.7	79.3	77.4	79.6	79.7	82.9	81.2	84.1	82.2	83.7	80.0	80.5	76.9	74.1	73.4	71.7	70.4	67.0	67.3
30	46.3	47.6	47.5	48.9	49.2	50.4	49.8	50.9	50.3	51.0	49.5	49.3	47.4	45.4	44.7	44.0	43.3	42.0	42.2
35	33.3	33.9	34.1	35.2	35.8	36.3	35.8	36.3	36.2	36.8	36.2	35.9	35.1	34.0	33.6	33.7	32.9	32.3	32.8
40	25.3	25.4	25.8	27.2	28.4	29.0	28.6	29.2	29.0	29.8	29.3	28.7	28.2	27.6	27.5	27.3	26.3	25.4	26.0
45	16.2	16.2	16.5	17.7	19.0	19.9	19.4	19.8	19.5	19.6	19.1	18.3	17.5	17.1	17.2	16.6	15.7	15.0	15.4
50	9.07	9.17	9.18	9.25	9.37	9.69	9.44	9.68	9.64	9.76	9.34	9.10	8.99	9.20	9.39	9.14	8.77	8.46	8.70
55	5.11	5.13	5.15	5.18	5.24	5.46	5.32	5.57	5.55	5.68	5.39	5.22	5.07	5.19	5.24	5.06	4.83	4.67	4.84
60	2.64	2.68	2.68	2.75	2.76	2.90	2.79	2.96	2.90	3.04	2.79	2.73	2.51	2.54	2.61	2.45	2.31	2.19	2.31
65	0.01	0.29	0.26	0.59	0.57	0.84	0.75	0.91	0.81	0.91	0.72	0.74	0.34	0.12	0.12	0.00	0.00	0.00	0.00
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	0.00	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	0.00	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
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
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
135	0.31	0.23	0.20	0.06	0.00	0.00	0.00	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	3.44	3.37	3.31	3.18	3.05	2.86	2.88	2.79	2.85	2.81	2.91	2.89	0.74	0.83	0.84	0.98	1.06	1.25	1.20
145	6.06	6.03	5.99	5.92	5.81	5.69	5.70	5.67	5.69	5.69	5.73	5.74	3.98	4.05	4.07	4.22	4.28	4.48	4.42
150	7.41	7.40	7.36	7.35	7.27	7.22	7.22	7.23	7.21	7.23	7.24	7.26	6.52	6.55	6.56	6.62	6.66	6.77	6.73
155	8.04	8.04	7.97	8.00	7.92	7.95	7.92	7.97	7.90	7.94	7.91	7.97	7.80	7.80	7.80	7.82	7.82	7.88	7.86
160	8.24	8.18	8.01	8.01	8.09	8.24	8.23	8.27	8.16	8.17	8.16	8.28	8.35	8.31	8.25	8.21	8.22	8.30	8.31
165	7.16	7.03	6.66	6.81	7.14	7.53	7.59	7.63	7.40	7.31	7.30	7.64	7.76	7.63	7.39	7.29	7.42	7.49	7.57
170	4.30	4.20	4.06	4.15	4.36	4.81	4.93	4.98	4.74	4.84	4.93	5.18	5.24	5.14	5.00	4.71	4.62	4.66	4.73
175	1.63	1.62	1.58	1.76	1.93	2.05	2.06	2.15	2.12	2.22	2.22	2.30	2.31	2.32	2.35	2.26	2.07	1.91	1.84
180	0.89	0.88	0.86	1.01	0.87	0.84	0.87	0.77	0.73	0.86	0.73	0.70	0.91	0.87	0.88	1.00	0.88	0.84	0.88

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:23DEG
Operators:HTJ
Test Date:2018-10-10

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:5.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: VN-TL0015-31 BLACK	TYPE:LED TRACK LIGHT	WEIGHT:
SPEC.:CRI90 3000K S	DIM.:	SERIAL No.:
MFR.: 1	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	8702	8702	8702	8702	8702														
5	5272	5358	5284	5470	5440														
10	1648	1709	1670	1780	1762														
15	449	449	453	463	473														
20	137	140	138	144	144														
25	65.9	66.9	66.6	68.7	69.6														
30	42.1	42.3	42.3	43.0	43.5														
35	32.9	32.8	32.9	33.0	33.2														
40	25.9	25.9	26.0	26.5	26.3														
45	15.5	15.9	16.1	16.8	16.6														
50	8.79	9.01	9.04	9.33	9.21														
55	4.97	5.10	5.16	5.27	5.20														
60	2.39	2.51	2.54	2.63	2.60														
65	0.00	0.00	0.00	0.00	0.00														
70	0.00	0.00	0.00	0.00	0.00														
75	0.00	0.00	0.00	0.00	0.00														
80	0.00	0.00	0.00	0.00	0.00														
85	0.00	0.00	0.00	0.00	0.00														
90	0.00	0.00	0.00	0.00	0.00														
95	0.00	0.00	0.00	0.00	0.00														
100	0.00	0.00	0.00	0.00	0.00														
105	0.00	0.00	0.00	0.00	0.00														
110	0.00	0.00	0.00	0.00	0.00														
115	0.00	0.00	0.00	0.00	0.00														
120	0.00	0.00	0.00	0.00	0.00														
125	0.00	0.00	0.00	0.00	0.00														
130	0.00	0.00	0.00	0.00	0.00														
135	0.00	0.00	0.00	0.00	0.00														
140	1.29	1.20	1.26	1.11	1.13														
145	4.53	4.41	4.48	4.34	4.38														
150	6.79	6.69	6.74	6.63	6.67														
155	7.89	7.80	7.81	7.76	7.79														
160	8.29	8.13	8.05	8.02	8.13														
165	7.41	7.16	6.78	6.69	6.90														
170	4.48	4.18	3.92	3.96	3.97														
175	1.74	1.68	1.53	1.35	1.37														
180	0.77	0.74	0.85	0.74	0.68														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:23DEG
Operators:HTJ
Test Date:2018-10-10

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.401
Humidity:65.0%
Test Distance:5.300m [K=1.0000]
Remarks: