

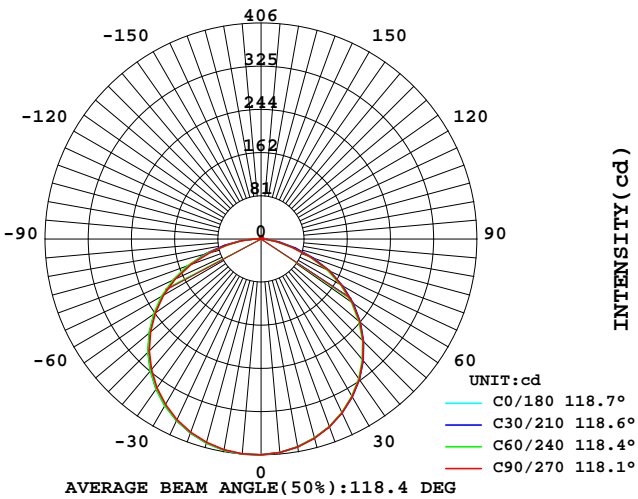
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number: KVS-RP20240120-6

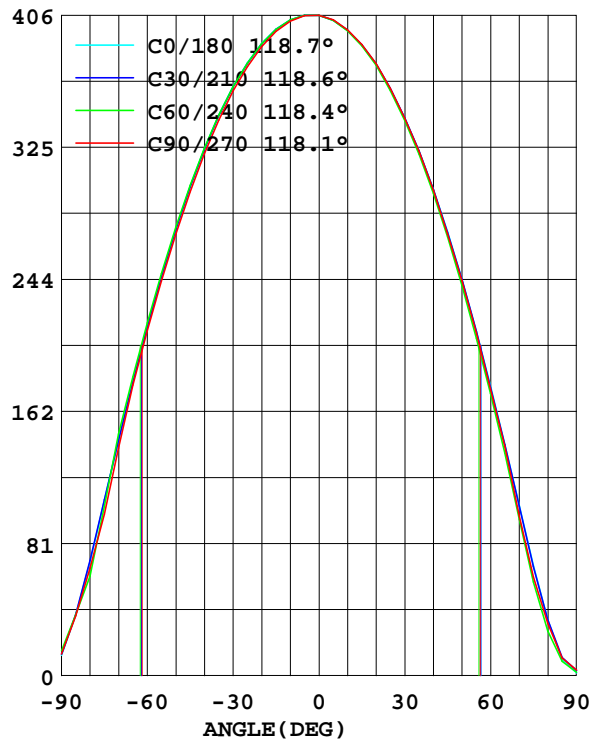
MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

DATA OF LAMP		Imax(cd)	406.1	S/MH(C0/180)	1.33
MODEL	2835 120LEDs	EFFICIENCY(%)	100.0	S/MH(C90/270)	1.32
NOMINAL POWER(W)	10	TOTAL FLUX(lm)	1251.1	Voltage(V)	24.02
RATED VOLTAGE(V)	24	EFFICIENCY(lm/W)	123.9	Current(A)	0.420
NOMINAL FLUX(lm)	1251.0	η up(%)	1.9	Power(W)	10.10
LAMPS QUANTITY	1	η down(%)	98.1	Power Factor(PF)	1.000
TEST VOLTAGE(V)	24.0	Effictive Flux(lm)	1212.6	EEI	0.112

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



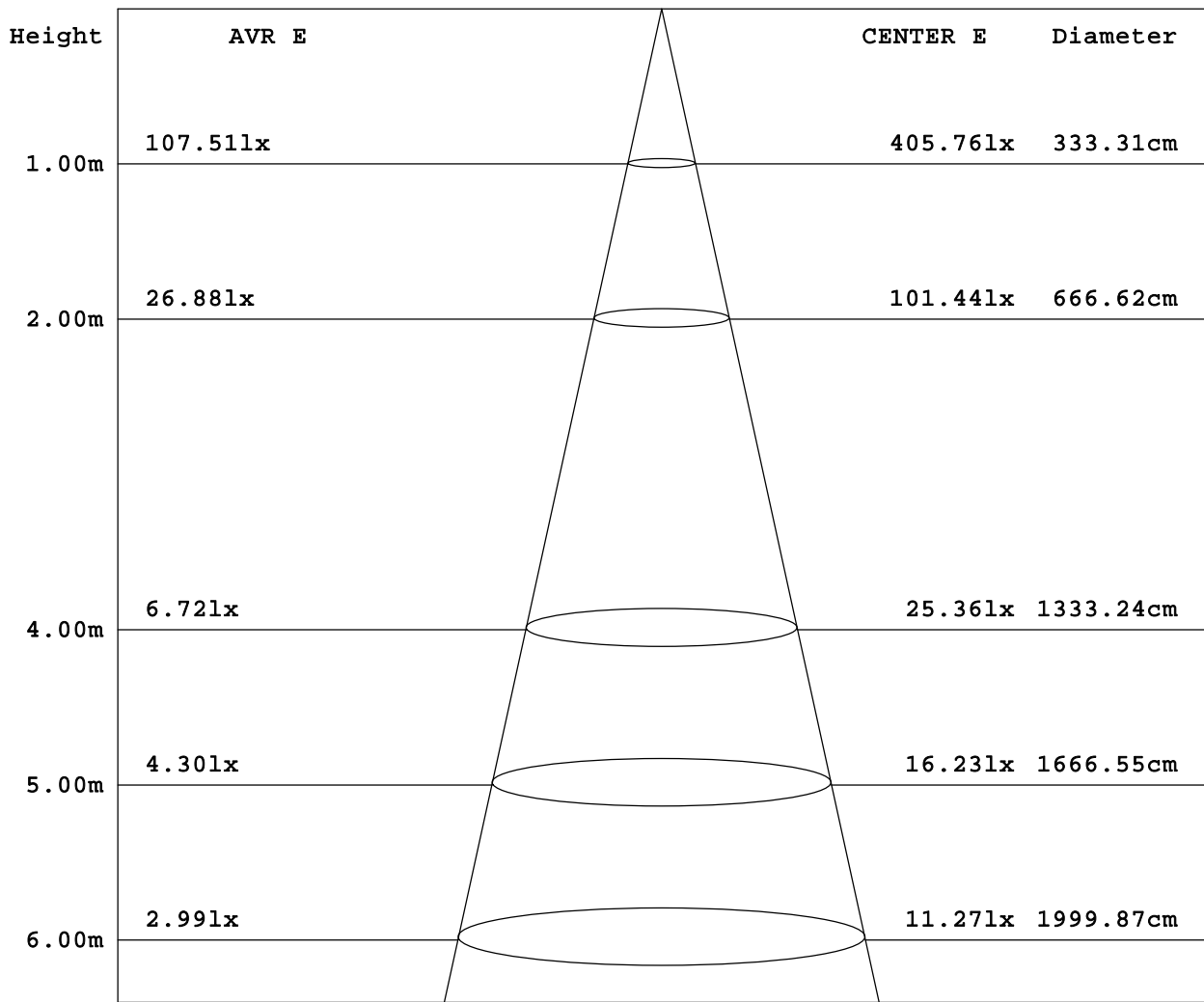
Test System:HOPPO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

AVERAGE AND CENTER E Figure

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01



Angle:118.1deg

Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

KVS Valaistussuunnittelu Oy IES TEST REPORT

ZONAL FLUX DIAGRAM

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
10.0	403.3	403.2	402.4	402.0	396.8	396.9	397.2	397.9	0- 10	38.47	38.47
20.0	388.7	388.4	386.8	386.2	375.8	375.7	376.3	377.9	10- 20	110.8	149.3
30.0	362.4	362.1	359.6	358.7	342.8	342.2	342.9	345.4	20- 30	169.8	319.2
40.0	324.0	323.7	320.7	319.4	298.7	297.6	298.4	301.6	30- 40	208.2	527.4
50.0	274.7	274.9	271.4	269.7	243.6	241.8	242.8	246.6	40- 50	220.4	747.8
60.0	214.7	215.6	212.1	209.7	178.3	175.4	176.2	180.9	50- 60	203.4	951.3
70.0	144.5	146.5	139.9	140.2	104.5	100.2	98.09	105.9	60- 70	158.2	1110
80.0	69.87	65.94	66.05	61.42	34.39	30.95	32.10	35.95	70- 80	89.28	1199
90.0	12.48	14.18	13.36	11.16	1.601	2.496	3.453	2.879	80- 90	28.13	1227
100.0	2.946	2.336	1.790	2.335	2.113	2.464	2.749	2.495	90-100	4.139	1231
110.0	3.266	2.752	2.366	2.751	2.689	2.945	3.133	2.943	100-110	2.774	1234
120.0	3.714	3.297	2.941	3.263	3.330	3.489	3.644	3.518	110-120	3.091	1237
130.0	4.227	3.873	3.580	3.838	3.970	4.065	4.220	4.094	120-130	3.305	1240
140.0	4.739	4.449	4.220	4.414	4.547	4.577	4.668	4.606	130-140	3.291	1244
150.0	5.187	4.961	4.795	4.926	4.931	4.993	5.115	5.086	140-150	2.988	1247
160.0	5.508	5.313	5.179	5.278	5.315	5.345	5.435	5.374	150-160	2.393	1249
170.0	5.764	5.569	5.563	5.566	5.572	5.601	5.755	5.630	160-170	1.552	1251
180.0	5.828	5.729	5.755	5.726	5.828	5.697	5.819	5.694	170-180	0.542	1251
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

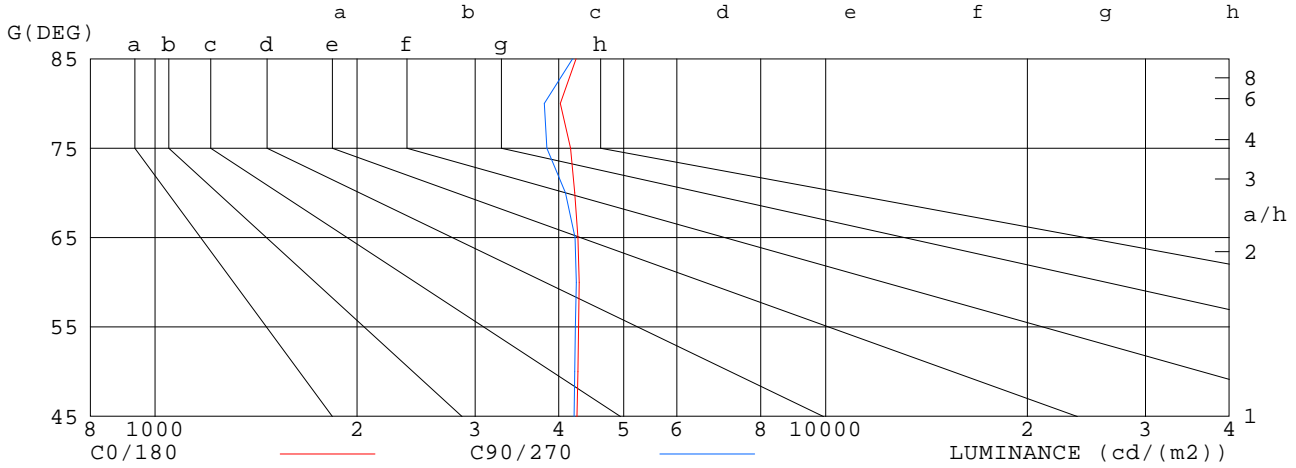
LUMINANCE LIMITATION CURVES

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
		2000	1000	500	<=300				
1.15	A								
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/m2		
G (DEG)	C0/180	C90/270
85	4244	4193
80	4021	3807
75	4167	3840
70	4223	4094
65	4272	4230
60	4292	4246
55	4280	4233
50	4271	4227
45	4256	4213

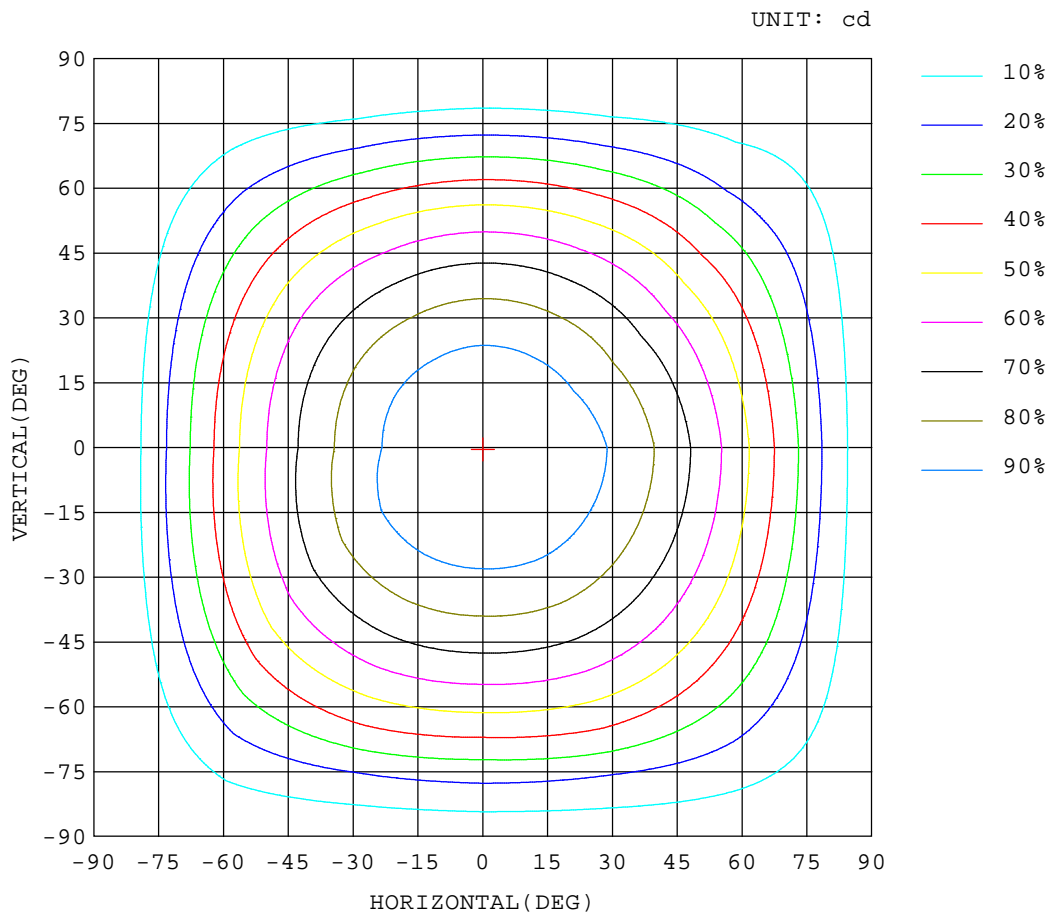
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

ISOCANDELA DIAGRAM

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01



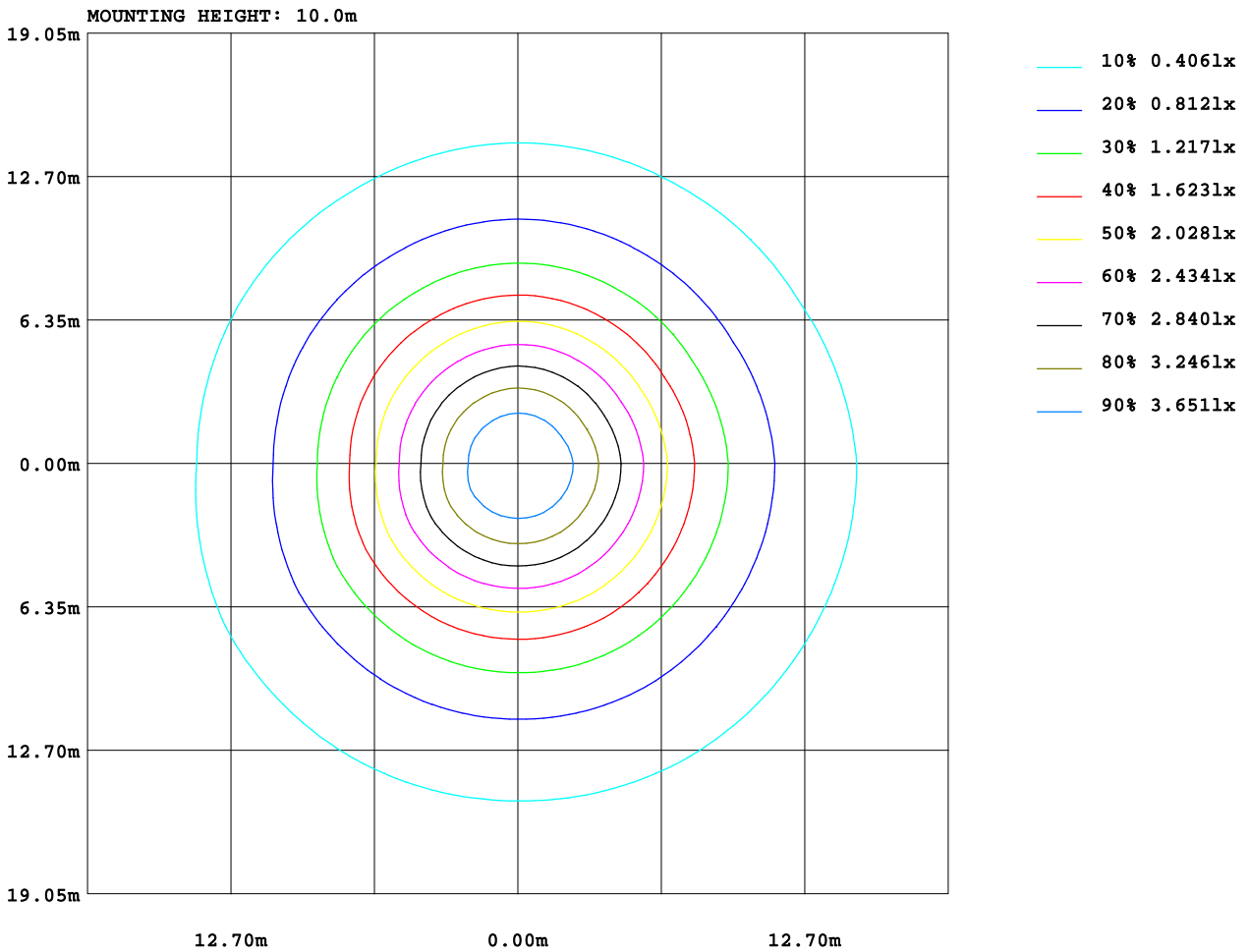
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

ISOLUX DIAGRAM

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01



Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

KVS Valaistussuunnittelu Oy IES TEST REPORT

AREA LUMINOUS FLUX

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

VERTICAL (DEG)	AREA FLUX DIAGRAM																	UNIT:lm	Φ t	Φ a
	90	80	70	60	50	40	30	20	10	0	10	20	30	40	50	60	70	80	90	
90	0.01	0.04	0.08	0.13	0.18	0.23	0.29	0.36	0.42	0.43	0.39	0.33	0.28	0.23	0.17	0.14	0.10	0.03	3.84	0.00
80	0.01	0.07	0.22	0.48	0.77	1.07	1.38	1.69	1.87	1.88	1.72	1.44	1.14	0.86	0.56	0.34	0.18	0.05	15.7	11.2
70	0.02	0.14	0.49	1.05	1.75	2.50	3.21	3.82	4.16	4.18	3.88	3.31	2.60	1.83	1.12	0.64	0.28	0.06	35.1	34.3
60	0.02	0.23	0.80	1.72	2.83	3.99	5.02	5.84	6.31	6.33	5.91	5.13	4.12	2.97	1.85	0.98	0.40	0.07	54.5	54.2
50	0.03	0.32	1.11	2.34	3.79	5.27	6.58	7.59	8.15	8.18	7.66	6.68	5.40	3.93	2.53	1.34	0.52	0.09	71.5	71.3
40	0.04	0.41	1.38	2.86	4.60	6.34	7.87	9.02	9.67	9.70	9.09	7.97	6.47	4.76	3.12	1.68	0.63	0.10	85.7	85.6
30	0.04	0.49	1.60	3.26	5.21	7.16	8.86	10.1	10.8	10.8	10.2	8.97	7.31	5.47	3.61	1.95	0.73	0.11	96.8	96.7
20	0.05	0.54	1.75	3.54	5.62	7.70	9.54	10.9	11.6	11.6	10.9	9.69	7.98	6.00	3.98	2.16	0.81	0.12	105	105
10	0.05	0.57	1.83	3.68	5.83	7.97	9.87	11.3	12.1	12.1	11.4	10.2	8.43	6.35	4.22	2.29	0.86	0.13	109	109
0	0.05	0.58	1.86	3.74	5.91	8.07	9.99	11.4	12.2	12.2	11.6	10.3	8.53	6.43	4.27	2.33	0.87	0.13	111	111
-10	0.05	0.57	1.85	3.71	5.86	8.01	9.90	11.2	11.9	11.9	11.3	10.0	8.29	6.24	4.14	2.25	0.85	0.12	108	108
-20	0.05	0.54	1.76	3.54	5.61	7.66	9.38	10.6	11.2	11.3	10.7	9.48	7.81	5.87	3.89	2.11	0.79	0.12	103	102
-30	0.04	0.49	1.59	3.24	5.15	6.98	8.54	9.69	10.2	10.3	9.76	8.65	7.11	5.32	3.51	1.89	0.71	0.11	93.4	93.3
-40	0.04	0.41	1.36	2.82	4.46	6.04	7.43	8.44	8.96	8.98	8.51	7.54	6.18	4.61	3.02	1.62	0.61	0.10	81.1	81.0
-50	0.03	0.32	1.08	2.27	3.59	4.91	6.06	6.88	7.31	7.33	6.95	6.17	5.04	3.73	2.43	1.30	0.49	0.08	66.0	65.8
-60	0.03	0.22	0.77	1.62	2.55	3.54	4.43	5.04	5.35	5.38	5.11	4.54	3.68	2.70	1.75	0.95	0.37	0.07	48.1	47.7
-70	0.02	0.14	0.46	0.94	1.43	1.94	2.42	2.82	3.04	3.06	2.89	2.53	2.05	1.55	1.05	0.60	0.25	0.06	27.2	26.3
-80	0.01	0.08	0.21	0.39	0.57	0.75	0.91	1.04	1.13	1.14	1.08	0.98	0.84	0.66	0.48	0.30	0.15	0.04	10.7	4.31
-90	0.01	0.08	0.21	0.39	0.57	0.75	0.91	1.04	1.13	1.14	1.08	0.98	0.84	0.66	0.48	0.30	0.15	0.04	10.7	4.31
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)	20	30	40	50	60	70	80	90			
Φ t	0.60	6.15	20.2	41.3	65.7	90.2	112	128	137	137	129	114	93.3	69.5	45.7	24.9	9.58	1.58	1251	
Φ a	0.00	4.72	19.1	40.3	64.6	89.1	111	127	136	136	128	113	92.2	68.5	44.7	23.9	8.61	0.75		1213

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

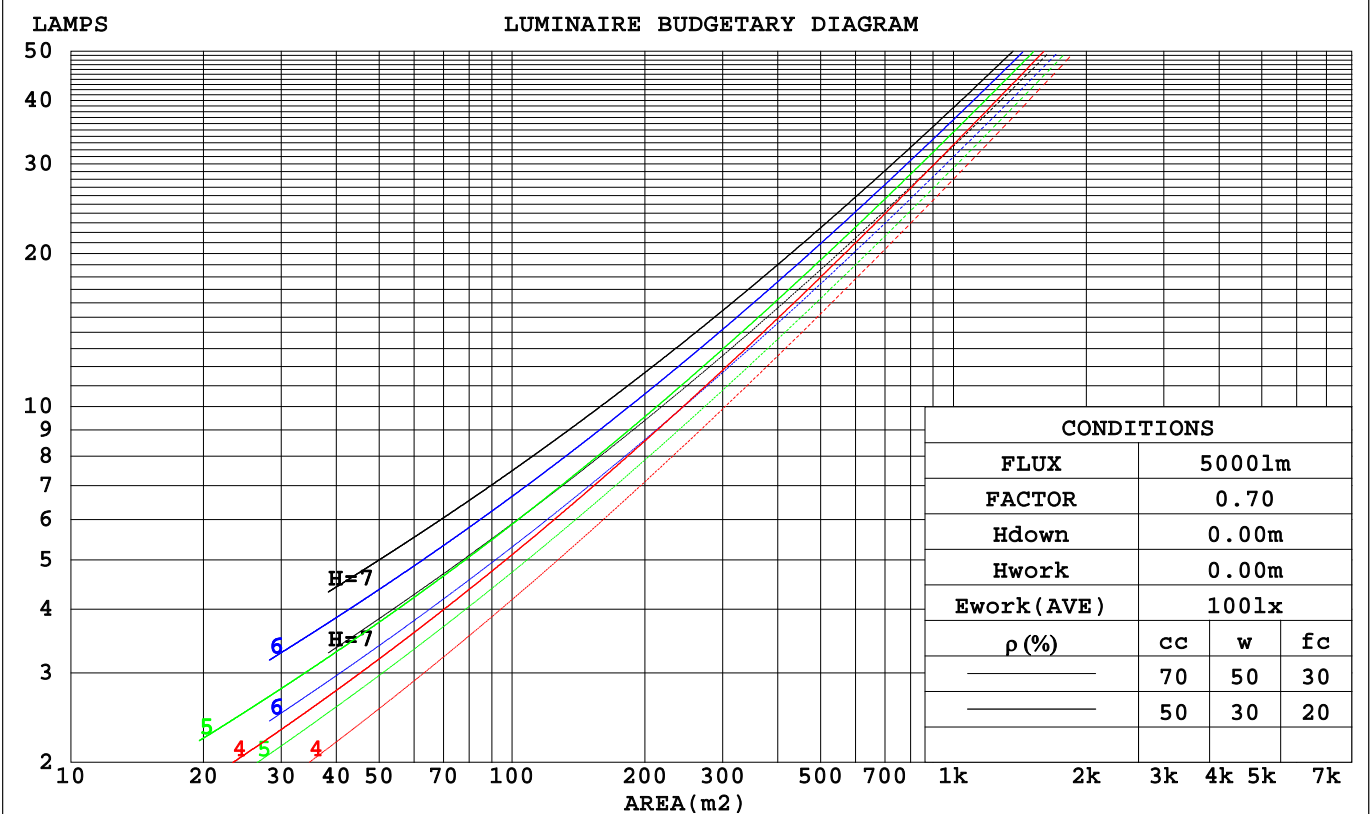
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
ρw	20%			20%			20%			20%			20%			0
ρfc	20%			20%			20%			20%			20%			
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	1.00	1.00	1.00	.98
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.81
2.0	.89	.83	.77	.87	.81	.76	.84	.78	.73	.80	.75	.72	.77	.73	.70	.67
3.0	.78	.70	.63	.77	.69	.63	.73	.67	.61	.70	.65	.60	.67	.63	.59	.56
4.0	.69	.60	.53	.68	.59	.53	.65	.58	.52	.62	.56	.51	.60	.55	.50	.48
5.0	.62	.53	.46	.60	.52	.45	.58	.51	.45	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.40	.54	.46	.40	.52	.45	.39	.50	.44	.39	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.34	.46	.39	.34	.44	.38	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.31	.27	.25
10.0	.39	.31	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.25	.23



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

KVS Valaistussuunnittelu Oy IES TEST REPORT

WEC AND CCEC

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.317	.180	.057	.309	.176	.056	.295	.169	.054	.282	.162	.052	.269	.156	.050	
2.0	.297	.163	.050	.290	.160	.049	.277	.154	.048	.265	.149	.047	.254	.144	.045	
3.0	.274	.146	.044	.268	.143	.043	.256	.139	.042	.246	.135	.041	.236	.131	.040	
4.0	.252	.131	.039	.247	.129	.038	.237	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.233	.119	.034	.228	.117	.034	.219	.114	.034	.211	.111	.033	.203	.108	.033	
6.0	.216	.108	.031	.211	.107	.031	.203	.104	.030	.196	.102	.030	.189	.099	.029	
7.0	.200	.099	.028	.197	.098	.028	.189	.096	.028	.183	.094	.027	.176	.092	.027	
8.0	.187	.091	.026	.184	.090	.026	.177	.088	.025	.171	.087	.025	.165	.085	.025	
9.0	.175	.085	.024	.172	.084	.024	.166	.082	.023	.161	.081	.023	.155	.079	.023	
10.0	.165	.079	.022	.162	.078	.022	.156	.077	.022	.151	.075	.021	.147	.074	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.205	.205	.205	.175	.175	.175	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.196	.171	.149	.167	.147	.128	.114	.101	.088	.066	.058	.051	.021	.019	.017	
2.0	.188	.147	.112	.161	.126	.097	.110	.087	.068	.064	.051	.040	.020	.016	.013	
3.0	.180	.129	.089	.154	.112	.077	.106	.077	.054	.061	.045	.032	.020	.015	.010	
4.0	.173	.116	.073	.148	.100	.063	.102	.070	.045	.059	.041	.026	.019	.013	.009	
5.0	.165	.106	.062	.142	.092	.054	.098	.064	.038	.057	.038	.023	.018	.012	.007	
6.0	.158	.097	.054	.136	.084	.047	.094	.059	.033	.054	.035	.020	.018	.011	.007	
7.0	.151	.091	.048	.130	.079	.042	.090	.055	.030	.052	.032	.018	.017	.011	.006	
8.0	.145	.085	.044	.125	.074	.038	.086	.052	.027	.050	.030	.016	.016	.010	.005	
9.0	.139	.080	.040	.119	.069	.035	.083	.049	.025	.048	.029	.015	.016	.009	.005	
10.0	.133	.076	.038	.115	.066	.033	.079	.046	.023	.046	.027	.014	.015	.009	.005	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

KVS Valaistussuunnittelu Oy IES TEST REPORT

Uncorrected UGR Table

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy										
Address: FI										
NAME: 2835 LED Strip					TYPE: 91012459			WEIGHT:		
SPECIFICATION: 2835 CRI90 3000K					DIMENSION: 8x 1000mm			SERIAL No.: 01		
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	18.2	19.7	18.5	20.0	20.2	18.2	19.7	18.5	20.0	20.2
3H	20.0	21.4	20.3	21.7	21.9	20.0	21.4	20.3	21.6	21.9
4H	20.7	22.1	21.1	22.4	22.6	20.6	21.9	21.0	22.2	22.5
6H	21.3	22.5	21.7	22.9	23.2	21.1	22.4	21.5	22.7	23.0
8H	21.5	22.7	21.9	23.0	23.3	21.3	22.5	21.7	22.8	23.2
12H	21.6	22.8	22.0	23.1	23.5	21.5	22.6	21.8	23.0	23.3
4H 2H	18.9	20.3	19.3	20.5	20.8	18.9	20.3	19.3	20.6	20.9
3H	20.9	22.0	21.3	22.4	22.7	20.9	22.0	21.2	22.4	22.7
4H	21.7	22.8	22.1	23.2	23.5	21.6	22.7	22.0	23.0	23.4
6H	22.4	23.4	22.9	23.8	24.2	22.2	23.2	22.6	23.5	23.9
8H	22.7	23.6	23.1	24.0	24.4	22.5	23.3	22.9	23.7	24.2
12H	22.9	23.7	23.4	24.1	24.6	22.7	23.5	23.1	23.9	24.4
8H 4H	22.0	22.9	22.5	23.3	23.7	21.9	22.8	22.3	23.2	23.6
6H	22.9	23.6	23.4	24.1	24.5	22.7	23.4	23.1	23.8	24.3
8H	23.2	23.9	23.7	24.4	24.8	23.0	23.7	23.5	24.1	24.6
12H	23.6	24.1	24.1	24.6	25.1	23.4	23.9	23.9	24.4	24.9
12H 4H	22.0	22.9	22.5	23.3	23.7	21.9	22.7	22.4	23.2	23.6
6H	23.0	23.6	23.5	24.1	24.6	22.7	23.4	23.2	23.8	24.3
8H	23.4	23.9	23.9	24.4	24.9	23.1	23.7	23.7	24.2	24.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1251 lm Total Lamp Luminous Flux. (8log(F/F0) = 0.8)

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

KVS Valaistussuunnittelu Oy IES TEST REPORT

UTILIZATION FACTORS TABLE

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

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) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	43	37	30
0.80	66	54	47	65	54	47	63	53	46	39
1.00	75	63	56	73	62	55	71	64	55	47
1.25	82	71	64	80	70	63	77	68	62	55
1.50	87	77	69	85	76	69	82	74	68	60
2.00	94	85	78	92	84	77	88	81	76	67
2.50	98	90	83	96	88	82	91	85	80	72
3.00	101	94	88	99	92	87	94	89	85	76
4.00	105	99	95	103	97	93	98	94	90	81
5.00	108	103	99	105	101	97	100	97	94	84
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

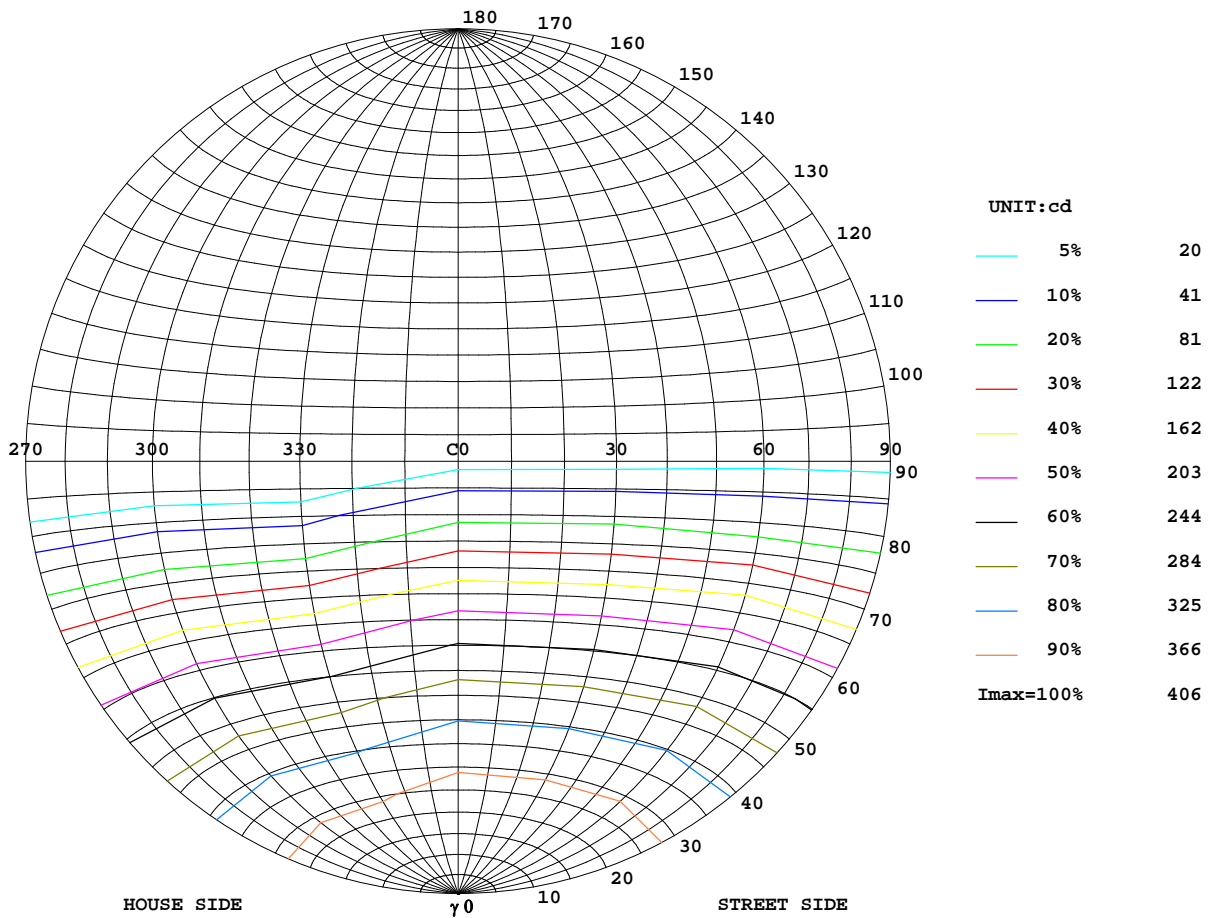
Test System:HOPPO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

ISOCANDELA DIAGRAM

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

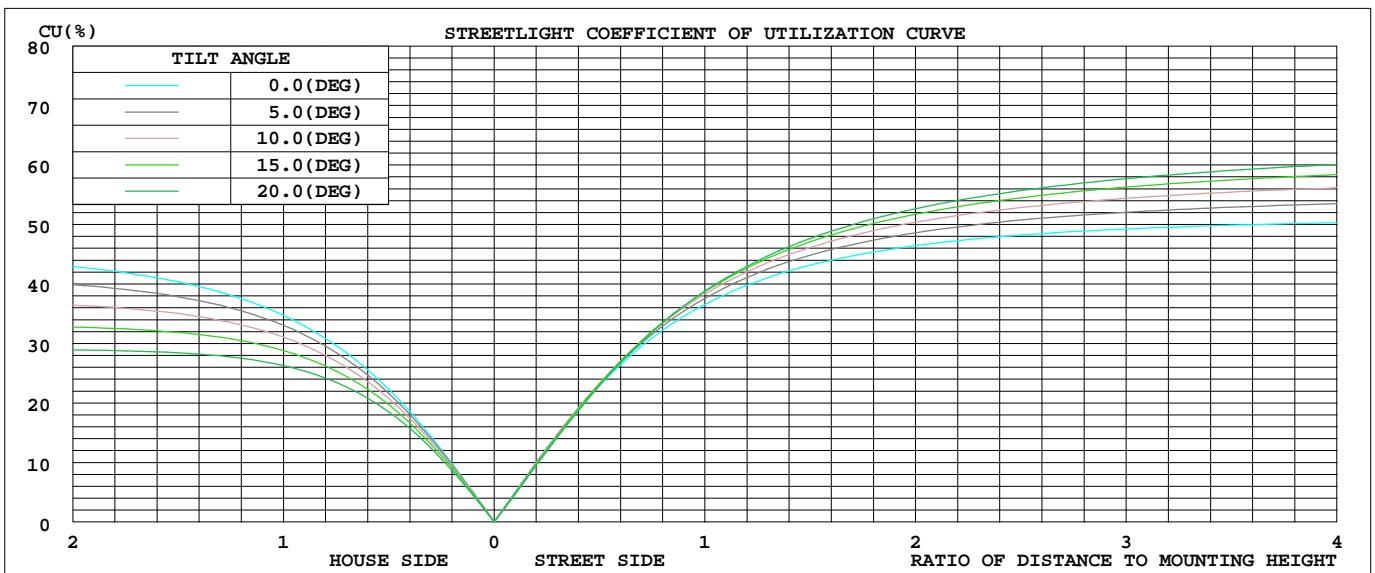
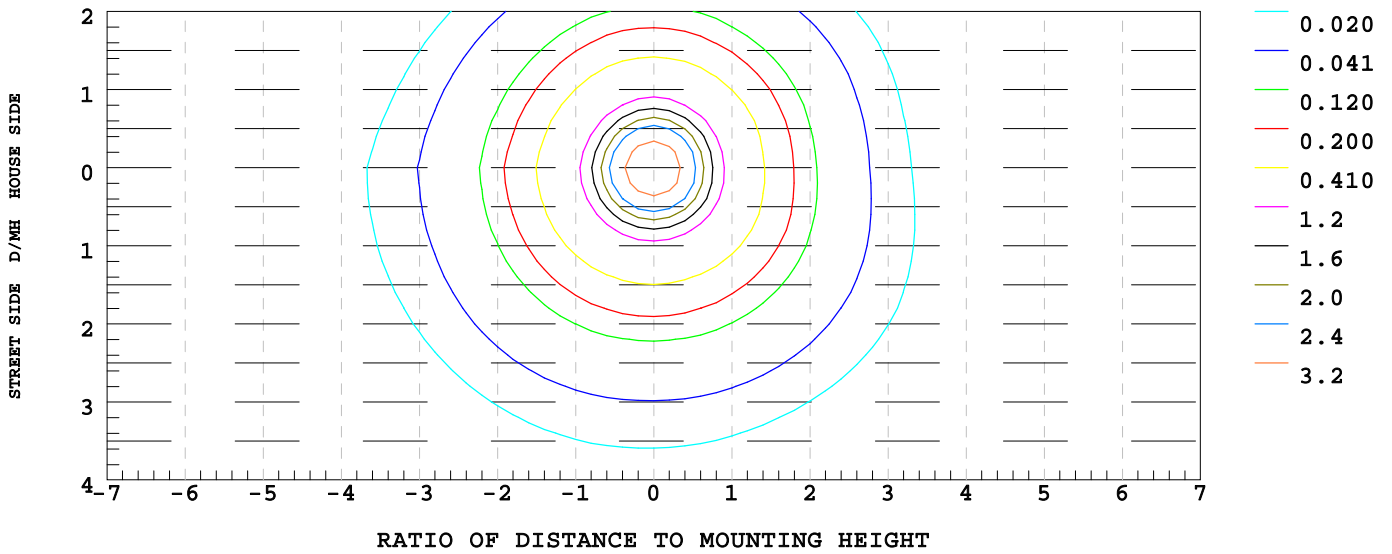
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

ISOLUX DIAGRAM

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

ILLUMINANCE AT MH=10 m, Enadir = 4.06 lx



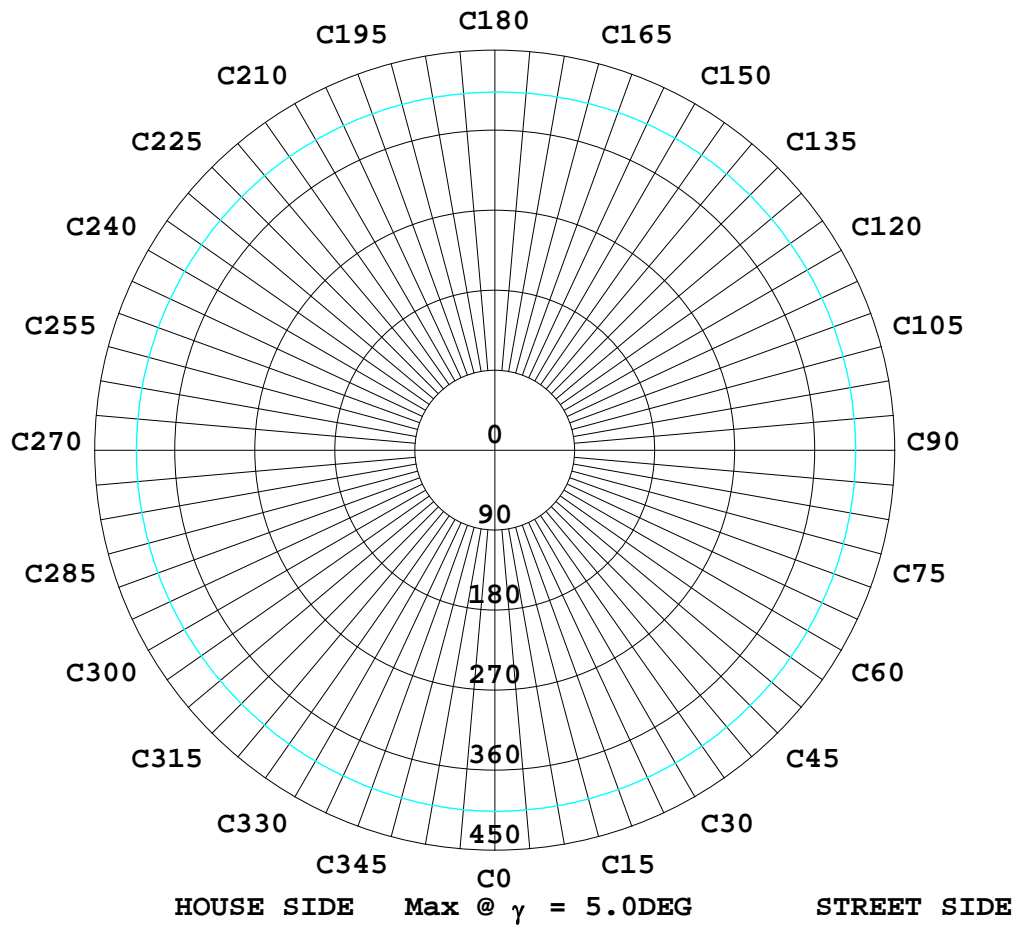
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

ISOCANDELA DIAGRAM

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01



Test System:HOP00 HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459

KVS Valaistussuunnittelu Oy IES TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: KVS-RP20240120-6

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012459	WEIGHT:
SPECIFICATION: 2835 CRI90 3000K	DIMENSION: 8x 1000mm	SERIAL No.: 01

UNIT: cd

γ (DEG)	C (DEG)											
	0	30	60	90	120	150	180	210	240	270	300	330
0.0	406	406	406	406	406	406	406	406	406	406	406	406
5.0	406	406	406	406	406	405	403	403	403	403	403	404
10.0	403	403	403	402	402	402	397	397	397	397	398	398
15.0	398	397	397	396	396	395	388	388	387	388	389	390
20.0	389	388	389	387	387	386	376	376	375	376	377	379
25.0	377	376	377	375	375	373	361	361	360	361	362	364
30.0	362	362	362	360	360	358	343	343	341	343	344	347
35.0	345	344	345	342	342	339	323	323	321	322	323	327
40.0	324	323	324	321	321	318	299	299	296	298	299	304
45.0	301	300	301	298	298	294	273	272	270	272	273	278
50.0	275	274	276	271	272	268	244	244	240	243	243	250
55.0	246	245	247	243	243	238	212	212	207	211	211	218
60.0	215	214	217	212	213	207	178	177	173	176	177	184
65.0	181	180	184	179	179	173	142	142	137	141	141	149
70.0	145	145	149	140	144	137	105	104	96.1	98.0	100	112
75.0	108	108	104	99.3	97.6	100	67.8	67.1	57.5	60.7	58.5	69.3
80.0	69.8	70.8	61.0	66.0	59.7	63.0	34.3	34.4	27.4	32.1	31.1	40.7
85.0	37.0	37.3	37.2	36.5	33.4	30.8	9.92	11.0	8.77	10.7	10.5	14.7
90.0	12.4	13.1	15.2	13.3	12.9	9.40	1.60	3.00	1.98	3.45	2.30	3.45
95.0	2.88	1.92	3.96	3.00	3.19	1.72	1.85	2.75	1.79	2.62	1.79	2.81
100.0	2.94	1.92	2.75	1.79	2.75	1.91	2.11	2.88	2.04	2.74	2.04	2.94
105.0	3.07	2.24	2.88	2.04	2.87	2.17	2.43	3.00	2.30	2.94	2.36	3.07
110.0	3.26	2.49	3.00	2.36	3.00	2.49	2.68	3.26	2.62	3.13	2.62	3.26
115.0	3.45	2.81	3.20	2.62	3.19	2.75	3.01	3.45	2.94	3.38	2.94	3.51
120.0	3.71	3.13	3.45	2.94	3.45	3.07	3.33	3.71	3.26	3.64	3.26	3.77
125.0	3.97	3.45	3.71	3.32	3.71	3.39	3.65	3.96	3.58	3.90	3.58	4.03
130.0	4.22	3.71	4.03	3.58	3.96	3.71	3.97	4.22	3.90	4.22	3.90	4.28
135.0	4.48	4.03	4.28	3.96	4.22	4.03	4.22	4.48	4.16	4.47	4.22	4.54
140.0	4.73	4.35	4.54	4.22	4.47	4.35	4.54	4.73	4.41	4.66	4.47	4.73
145.0	4.93	4.60	4.80	4.54	4.73	4.60	4.73	4.93	4.67	4.92	4.73	4.99
150.0	5.18	4.86	5.05	4.79	4.99	4.86	4.93	5.12	4.86	5.11	4.99	5.18
155.0	5.37	5.05	5.24	4.98	5.18	5.05	5.12	5.31	5.12	5.30	5.18	5.31
160.0	5.50	5.25	5.37	5.17	5.31	5.24	5.31	5.44	5.24	5.43	5.31	5.43
165.0	5.70	5.37	5.56	5.37	5.43	5.37	5.44	5.57	5.44	5.62	5.43	5.62
170.0	5.76	5.50	5.63	5.56	5.63	5.50	5.57	5.69	5.50	5.75	5.56	5.69
175.0	5.82	5.63	5.69	5.69	5.69	5.62	5.70	5.76	5.63	5.81	5.63	5.75
180.0	5.82	5.69	5.76	5.75	5.75	5.69	5.82	5.76	5.63	5.81	5.63	5.75

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012459