

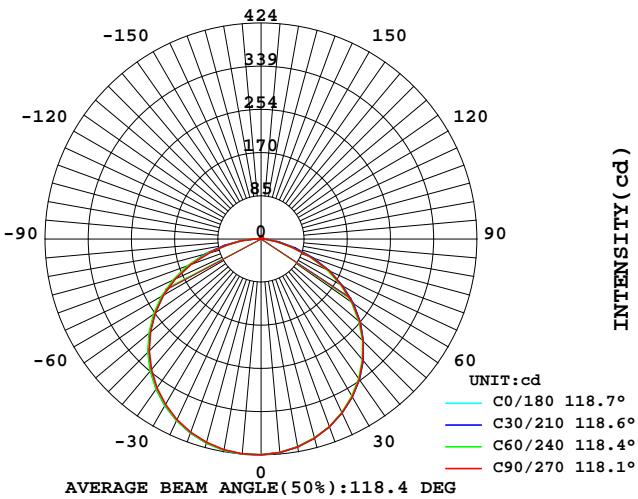
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number: KVS-RP20240120-5

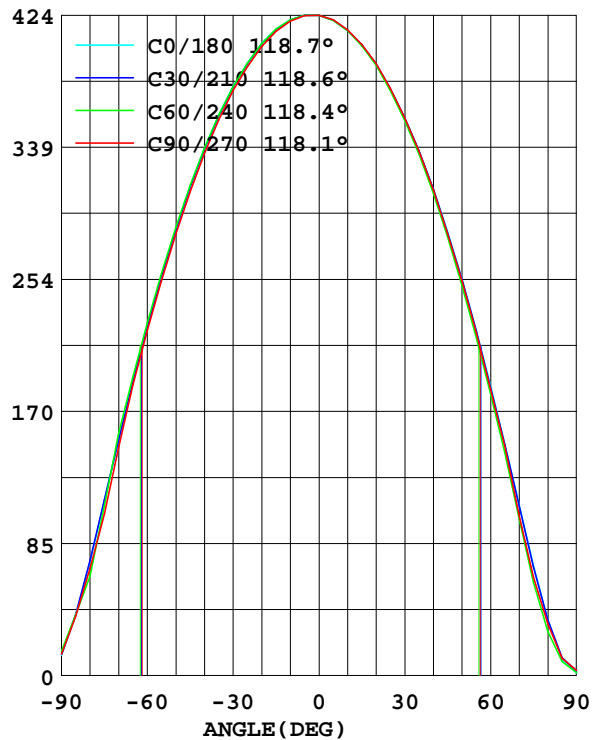
MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	DIMENSION: 8x 1000mm	SERIAL No.: 01

DATA OF LAMP		Imax(cd)	423.8	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)	1305.3	Voltage(V)	24.02
RATED VOLTAGE(V)	24	EFFICIENCY(lm/W)	129.5	Current(A)	0.420
NOMINAL FLUX(lm)	1305.0	η up(%)	1.9	Power(W)	10.08
LAMPS QUANTITY	1	η down(%)	98.1	Power Factor(PF)	1.000
TEST VOLTAGE(V)	24.0	Effictive Flux(lm)	1265.2	EEI	0.108

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



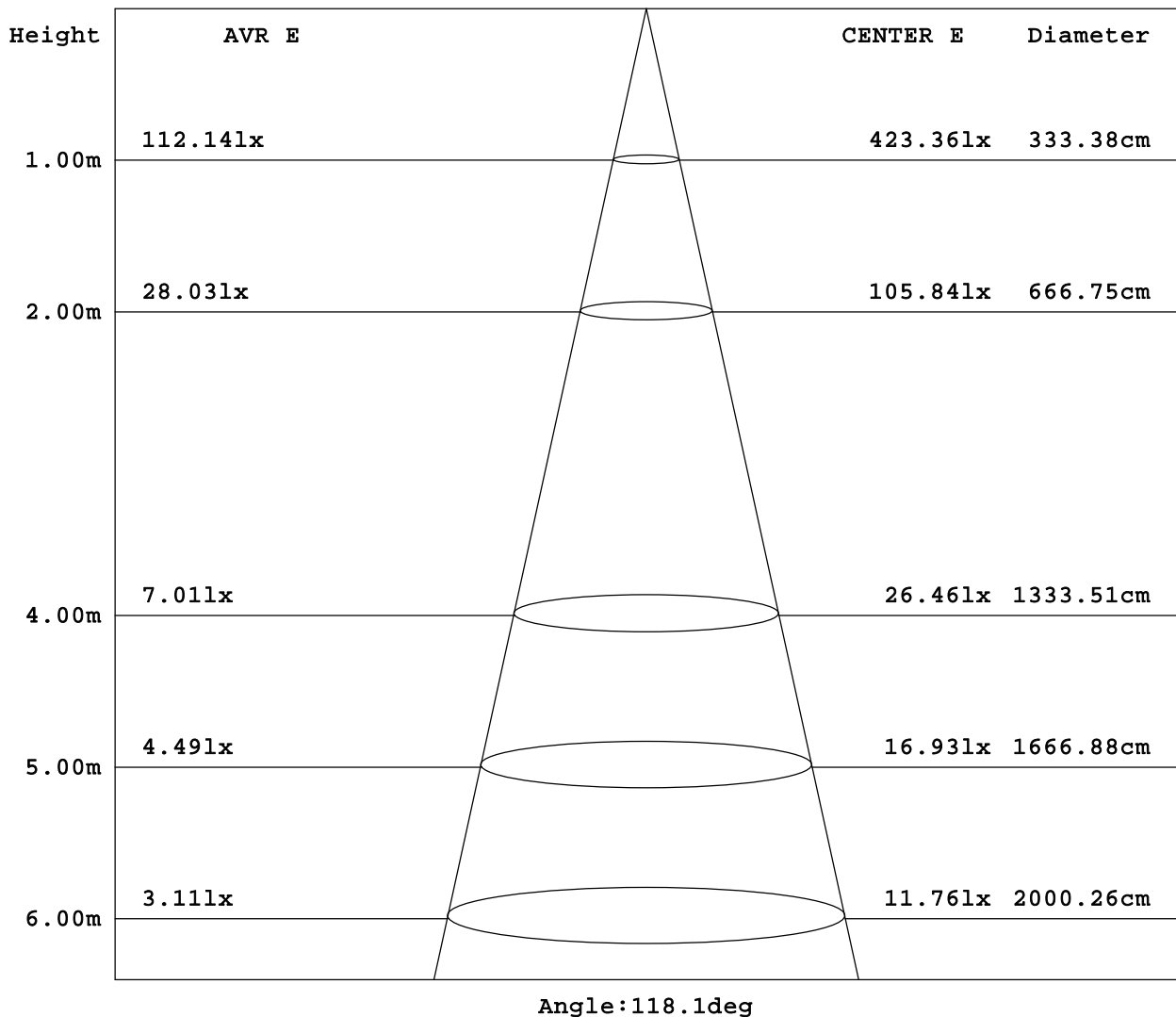
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012458

AVERAGE AND CENTER E Figure

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	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: 91012458

KVS Valaistussuunnittelu Oy IES TEST REPORT

ZONAL FLUX DIAGRAM

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	DIMENSION: 8x 1000mm	SERIAL No.: 01

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
10.0	420.7	420.7	419.9	419.5	414.0	414.0	414.5	415.2	0- 10	40.14	40.14
20.0	405.6	405.3	403.6	402.9	392.2	392.0	392.6	394.3	10- 20	115.6	155.7
30.0	378.1	377.7	375.3	374.3	357.7	357.1	357.9	360.4	20- 30	177.2	333.0
40.0	338.0	337.7	334.6	333.3	311.8	310.5	311.4	314.7	30- 40	217.2	550.3
50.0	286.6	286.7	283.2	281.4	254.3	252.3	253.4	257.3	40- 50	229.9	780.3
60.0	224.0	224.9	221.3	218.8	186.1	183.0	183.9	188.7	50- 60	212.3	992.6
70.0	150.7	152.8	146.0	146.3	109.2	104.5	102.3	110.5	60- 70	165.1	1158
80.0	72.82	68.83	68.81	64.09	35.86	32.17	33.38	37.39	70- 80	93.14	1251
90.0	13.00	14.66	13.68	11.54	1.665	2.497	3.389	2.974	80- 90	29.24	1280
100.0	3.074	2.465	1.854	2.462	2.241	2.593	2.877	2.622	90-100	4.291	1284
110.0	3.394	2.881	2.430	2.878	2.818	3.073	3.325	3.070	100-110	2.894	1287
120.0	3.842	3.425	3.069	3.422	3.458	3.617	3.837	3.678	110-120	3.233	1291
130.0	4.419	4.033	3.773	4.030	4.163	4.225	4.412	4.286	120-130	3.455	1294
140.0	4.931	4.642	4.412	4.637	4.739	4.802	4.924	4.829	130-140	3.439	1298
150.0	5.380	5.154	4.988	5.117	5.187	5.250	5.371	5.277	140-150	3.122	1301
160.0	5.764	5.538	5.435	5.501	5.508	5.602	5.691	5.629	150-160	2.496	1303
170.0	6.020	5.826	5.819	5.821	5.828	5.826	6.011	5.885	160-170	1.621	1305
180.0	6.148	5.986	6.011	5.981	6.084	5.954	6.075	5.949	170-180	0.565	1305
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: 91012458

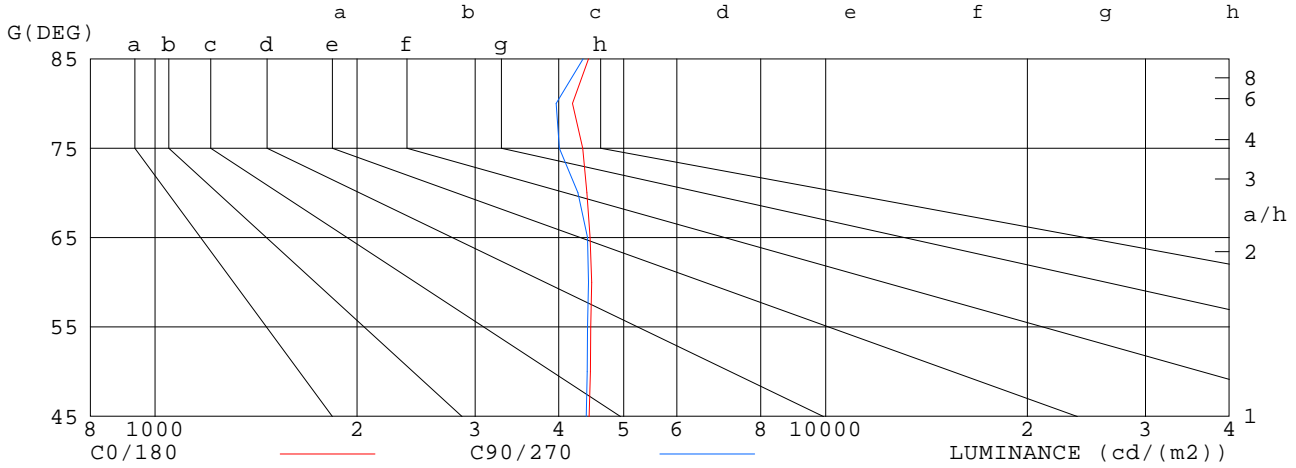
LUMINANCE LIMITATION CURVES

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	DIMENSION: 8x 1000mm	SERIAL No.: 01

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
		2000	1000	500	<=300				
1.15	A	2000	1000	500	<=300				
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



G (DEG)	LUMINANCE cd/m2	
	C0/180	C90/270
85	4428	4347
80	4191	3966
75	4345	4006
70	4405	4272
65	4455	4413
60	4477	4430
55	4464	4416
50	4457	4410
45	4439	4396

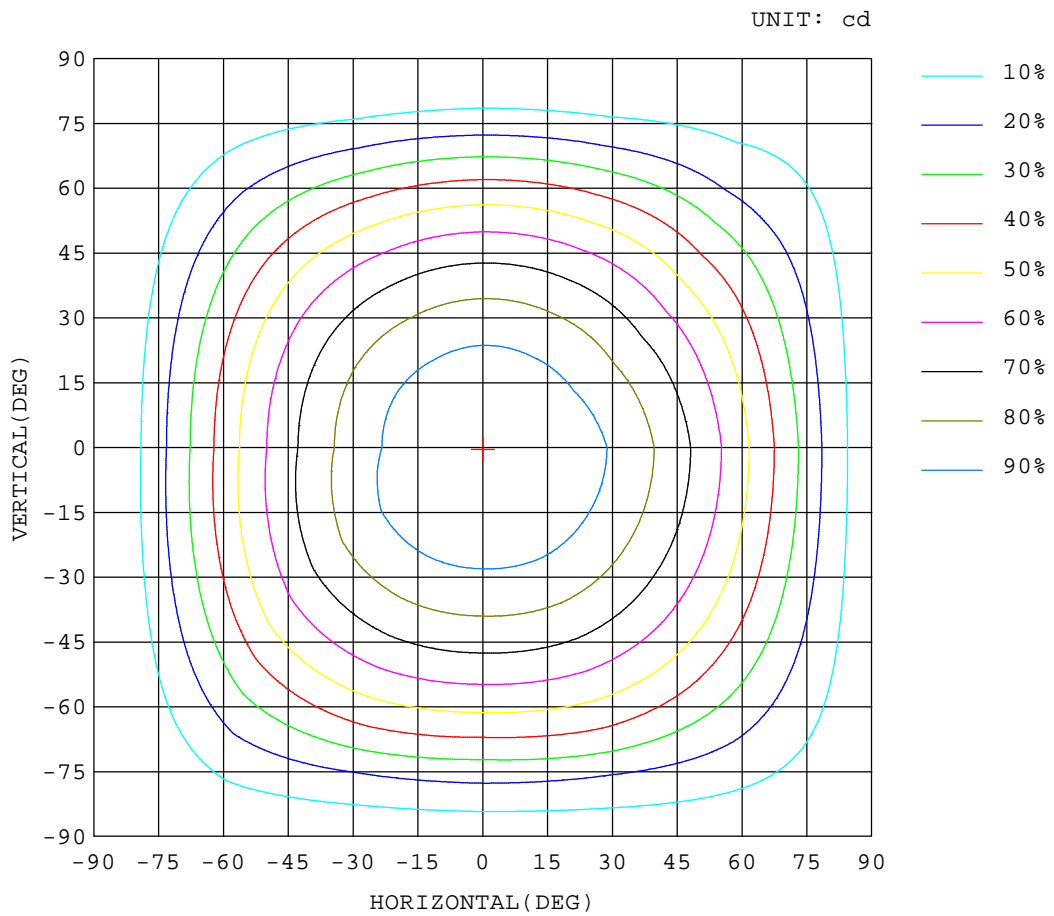
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012458

ISOCANDELA DIAGRAM

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	DIMENSION: 8x 1000mm	SERIAL No.: 01



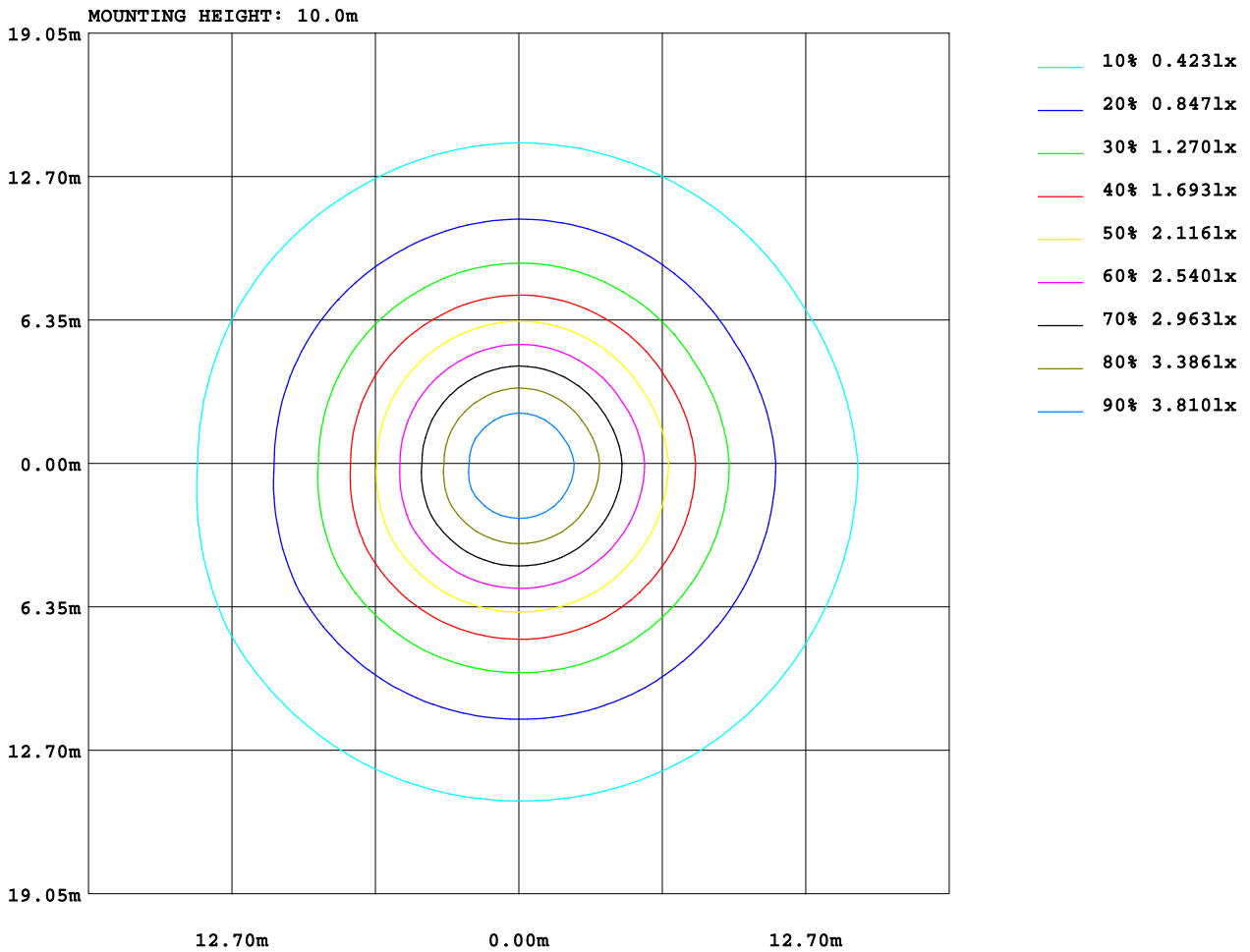
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012458

ISOLUX DIAGRAM

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	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: 91012458

KVS Valaistussuunnittelu Oy IES TEST REPORT

AREA LUMINOUS FLUX

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	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	0.19	0.24	0.30	0.37	0.43	0.44	0.40	0.34	0.29	0.24	0.18	0.14	0.10	0.04	3.96	0.00
80	0.01	0.07	0.23	0.50	0.80	1.11	1.44	1.76	1.95	1.96	1.80	1.50	1.19	0.89	0.59	0.35	0.18	0.05	16.4	11.6
70	0.02	0.15	0.51	1.10	1.82	2.61	3.35	3.98	4.34	4.37	4.05	3.46	2.72	1.91	1.17	0.67	0.29	0.06	36.6	35.8
60	0.02	0.24	0.83	1.79	2.96	4.16	5.24	6.10	6.58	6.61	6.17	5.35	4.30	3.10	1.93	1.02	0.41	0.08	56.9	56.5
50	0.03	0.34	1.15	2.44	3.96	5.50	6.86	7.92	8.51	8.53	7.99	6.98	5.63	4.11	2.64	1.40	0.54	0.09	74.6	74.4
40	0.04	0.43	1.44	2.98	4.79	6.61	8.21	9.41	10.0	10.1	9.49	8.32	6.75	4.97	3.26	1.75	0.65	0.10	89.5	89.3
30	0.05	0.51	1.67	3.41	5.43	7.46	9.25	10.5	11.3	11.3	10.6	9.36	7.63	5.71	3.77	2.04	0.76	0.12	101	101
20	0.05	0.56	1.83	3.70	5.86	8.04	9.95	11.3	12.1	12.2	11.4	10.1	8.33	6.27	4.15	2.25	0.84	0.13	109	109
10	0.05	0.59	1.91	3.84	6.08	8.32	10.3	11.7	12.6	12.6	11.9	10.6	8.79	6.63	4.40	2.39	0.90	0.13	114	114
0	0.05	0.60	1.95	3.90	6.16	8.43	10.4	11.9	12.7	12.7	12.1	10.7	8.90	6.71	4.45	2.43	0.91	0.13	115	115
-10	0.05	0.60	1.93	3.87	6.11	8.36	10.3	11.7	12.4	12.4	11.8	10.4	8.64	6.51	4.32	2.35	0.88	0.13	113	113
-20	0.05	0.57	1.83	3.70	5.85	8.00	9.79	11.1	11.7	11.8	11.1	9.89	8.15	6.12	4.05	2.20	0.82	0.12	107	107
-30	0.05	0.51	1.66	3.38	5.37	7.28	8.92	10.1	10.7	10.7	10.1	9.02	7.41	5.55	3.66	1.98	0.74	0.11	97.5	97.3
-40	0.04	0.43	1.42	2.94	4.66	6.31	7.76	8.80	9.35	9.37	8.88	7.87	6.44	4.80	3.15	1.69	0.64	0.10	84.7	84.5
-50	0.03	0.33	1.13	2.37	3.74	5.12	6.32	7.18	7.62	7.65	7.25	6.44	5.26	3.89	2.53	1.36	0.51	0.09	68.8	68.6
-60	0.03	0.23	0.81	1.69	2.66	3.70	4.62	5.26	5.58	5.61	5.33	4.74	3.84	2.81	1.83	0.99	0.39	0.07	50.2	49.8
-70	0.02	0.14	0.48	0.98	1.49	2.02	2.53	2.94	3.17	3.19	3.02	2.64	2.14	1.61	1.09	0.62	0.26	0.06	28.4	27.4
-80	0.01	0.08	0.22	0.41	0.59	0.78	0.95	1.08	1.17	1.19	1.13	1.01	0.87	0.69	0.49	0.31	0.16	0.04	11.2	4.47
-90	0.01	0.08	0.22	0.41	0.59	0.78	0.95	1.08	1.17	1.19	1.13	1.01	0.87	0.69	0.49	0.31	0.16	0.04	11.2	4.47
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)	20	30	40	50	60	70	80	90			
Φ t	0.62	6.41	21.1	43.1	68.6	94.1	117	133	143	143	135	119	97.3	72.5	47.7	25.9	9.99	1.65	1305	
Φ a	0.00	4.93	20.0	42.0	67.5	93.0	115	132	142	142	134	118	96.2	71.4	46.6	24.9	8.97	0.78		1265

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

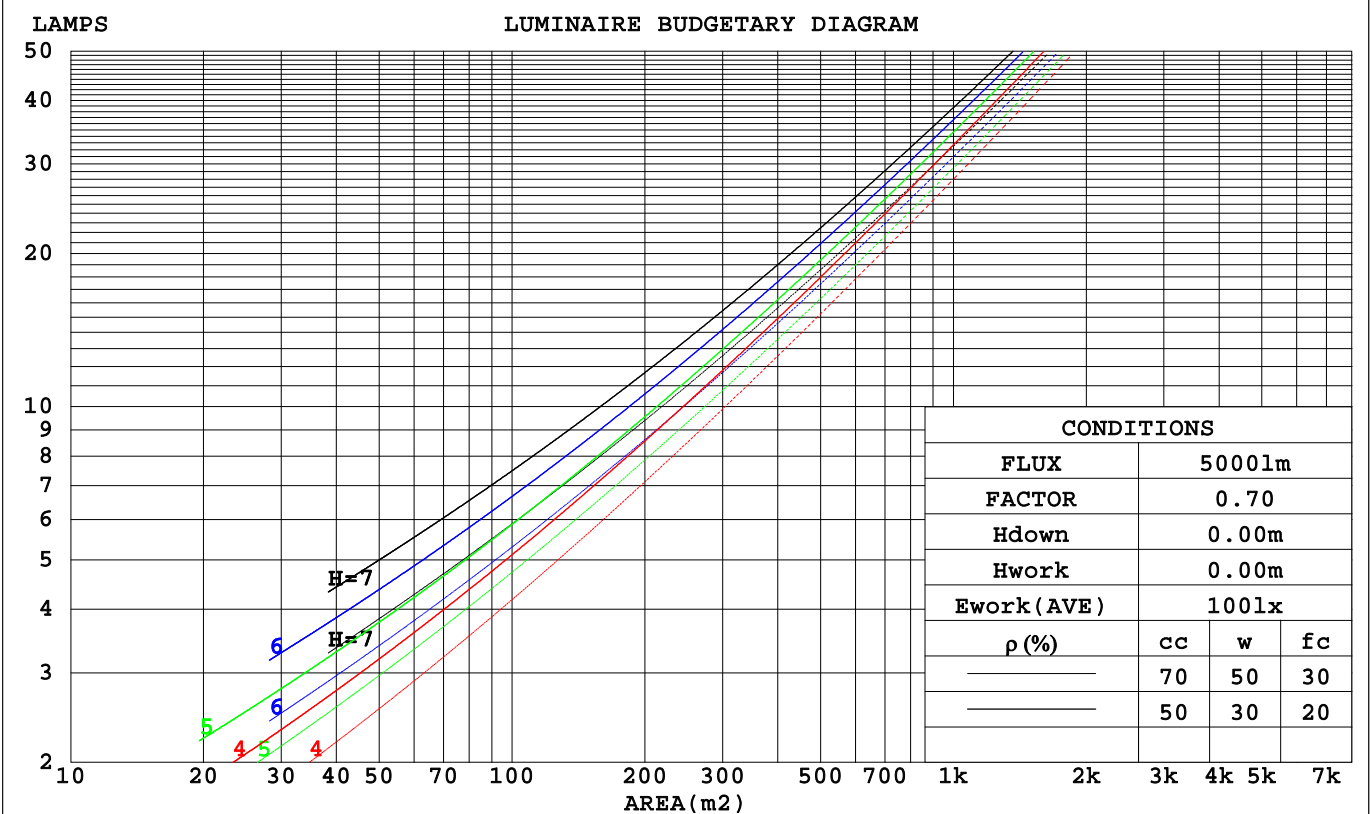
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012458

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	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	.90	.83	.77	.87	.81	.76	.84	.78	.74	.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	.32	.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: 91012458

KVS Valaistussuunnittelu Oy IES TEST REPORT

WEC AND CCEC

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	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	.281	.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	.126	.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: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: 91012458

KVS Valaistussuunnittelu Oy IES TEST REPORT

Uncorrected UGR Table

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy										
Address: FI										
NAME: 2835 LED Strip					TYPE: 91012458			WEIGHT:		
SPECIFICATION: 2835 CRI90					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	18.4	19.9	18.7	20.1	20.4	18.4	19.9	18.7	20.1	20.4
3H	20.1	21.5	20.5	21.8	22.1	20.1	21.5	20.4	21.8	22.1
4H	20.9	22.2	21.2	22.5	22.8	20.8	22.1	21.1	22.4	22.7
6H	21.4	22.7	21.8	23.0	23.3	21.3	22.5	21.6	22.8	23.1
8H	21.6	22.8	22.0	23.2	23.5	21.4	22.6	21.8	23.0	23.3
12H	21.8	22.9	22.2	23.3	23.6	21.6	22.8	22.0	23.1	23.4
4H 2H	19.1	20.4	19.4	20.7	21.0	19.1	20.4	19.4	20.7	21.0
3H	21.0	22.2	21.4	22.5	22.9	21.0	22.2	21.4	22.5	22.9
4H	21.9	22.9	22.3	23.3	23.7	21.8	22.8	22.2	23.2	23.5
6H	22.6	23.5	23.0	23.9	24.3	22.4	23.3	22.8	23.7	24.1
8H	22.8	23.7	23.3	24.1	24.5	22.6	23.5	23.0	23.9	24.3
12H	23.0	23.9	23.5	24.3	24.7	22.8	23.6	23.3	24.1	24.5
8H 4H	22.2	23.1	22.6	23.5	23.9	22.0	22.9	22.5	23.3	23.8
6H	23.0	23.8	23.5	24.2	24.7	22.8	23.5	23.3	24.0	24.4
8H	23.4	24.0	23.9	24.5	25.0	23.2	23.8	23.6	24.3	24.8
12H	23.7	24.3	24.2	24.8	25.3	23.5	24.1	24.0	24.5	25.1
12H 4H	22.2	23.0	22.7	23.4	23.9	22.1	22.9	22.5	23.3	23.7
6H	23.1	23.8	23.6	24.2	24.7	22.9	23.5	23.4	24.0	24.5
8H	23.5	24.1	24.0	24.6	25.1	23.3	23.9	23.8	24.3	24.9
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 1305 lm Total Lamp Luminous Flux. (8log(F/F0) = 0.9)

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: 91012458

KVS Valaistussuunnittelu Oy IES TEST REPORT

UTILIZATION FACTORS TABLE

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	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	69	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	84	96	88	82	91	85	80	72
3.00	101	94	88	99	92	87	95	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			

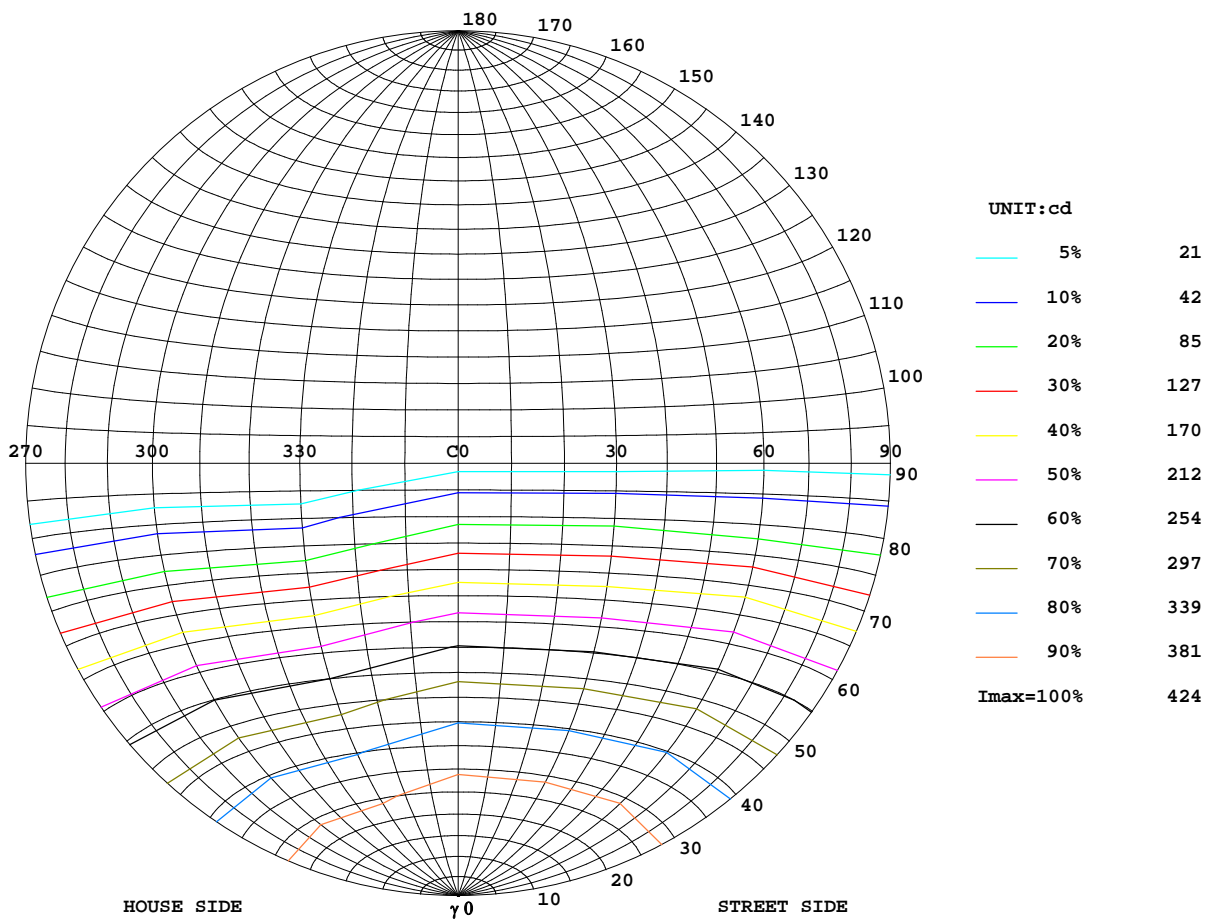
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012458

ISOCANDELA DIAGRAM

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	DIMENSION: 8x 1000mm	SERIAL No.: 01



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

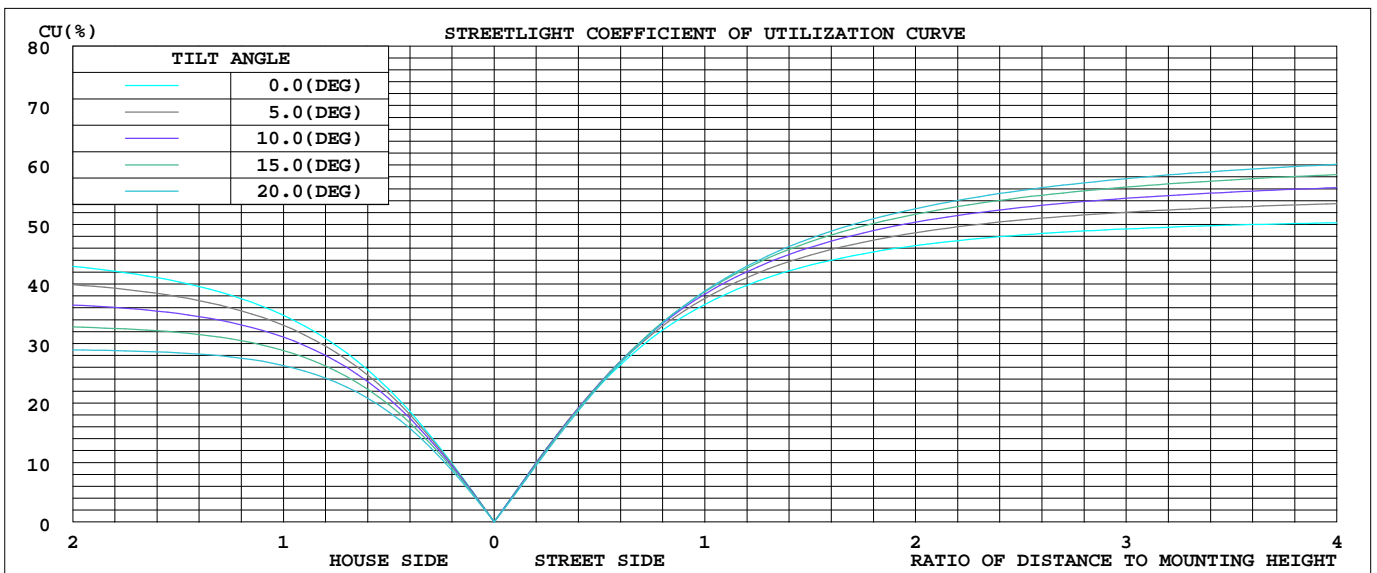
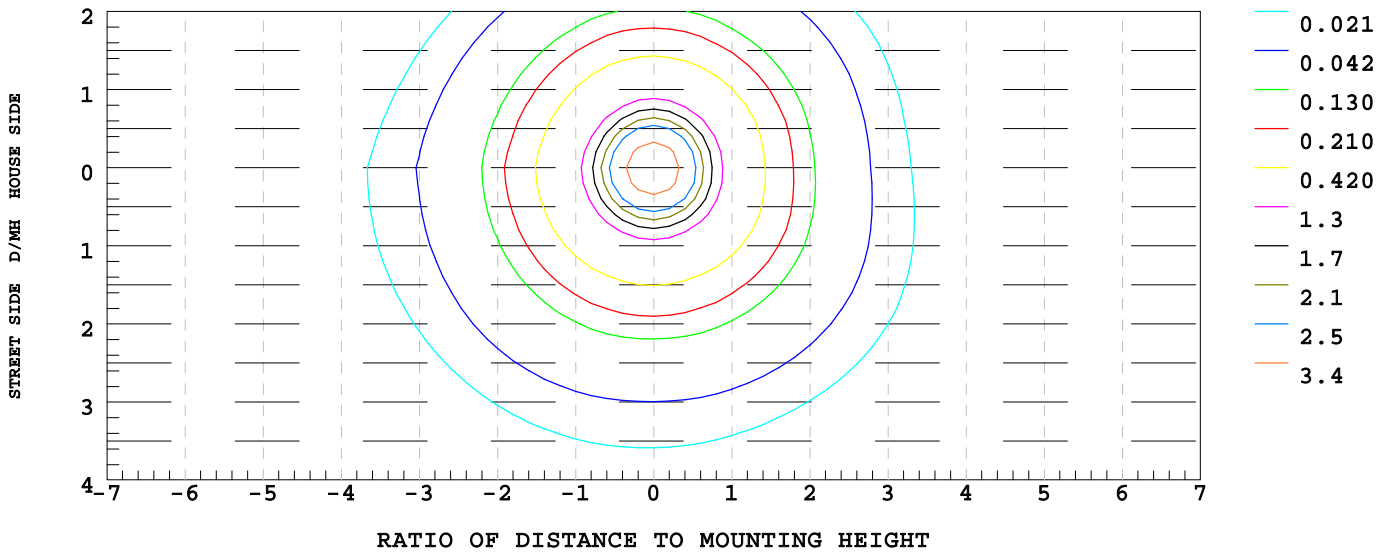
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012458

ISOLUX DIAGRAM

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	DIMENSION: 8x 1000mm	SERIAL No.: 01

ILLUMINANCE AT MH=10 m, Enadir = 4.23 lx



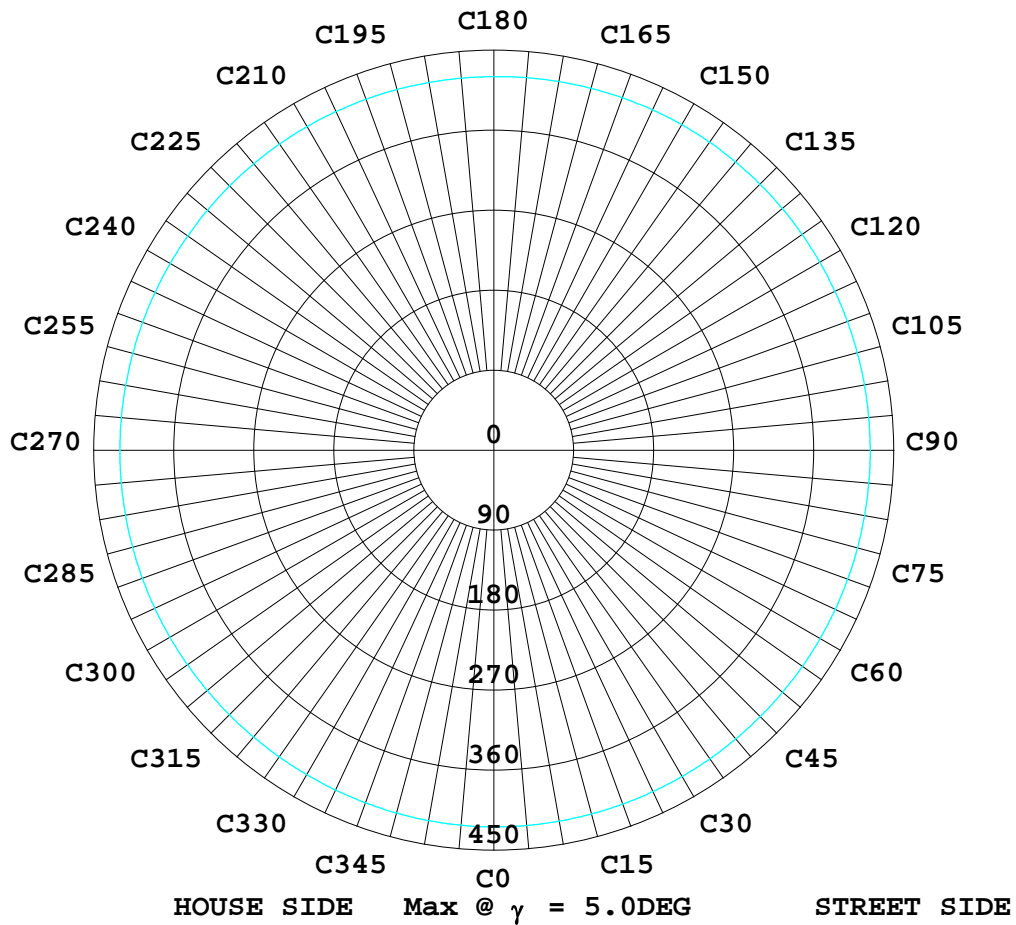
Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:RD
 Test Date:01-20-2024

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:8.000 m
 Remarks: 91012458

ISOCANDELA DIAGRAM

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	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: 91012458

KVS Valaistussuunnittelu Oy IES TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: KVS-RP20240120-5

MANUFACTURER: KVS Valaistussuunnittelu Oy		
Address: FI		
NAME: 2835 LED Strip	TYPE: 91012458	WEIGHT:
SPECIFICATION: 2835 CRI90	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	424	424	424	424	424	424	424	424	424	424	424	424
5.0	424	424	424	423	423	423	420	421	420	421	421	421
10.0	421	421	421	420	420	419	414	414	414	415	415	416
15.0	415	415	415	413	413	412	405	405	404	405	406	407
20.0	406	405	405	404	404	402	392	392	392	393	393	395
25.0	393	393	393	391	391	389	377	377	376	377	378	380
30.0	378	378	378	375	375	373	358	358	356	358	359	362
35.0	360	359	360	356	357	354	337	337	335	336	337	341
40.0	338	337	338	335	335	332	312	312	309	311	312	317
45.0	314	313	315	311	311	307	285	284	282	283	285	290
50.0	287	286	287	283	284	279	254	254	250	253	254	261
55.0	256	256	258	253	254	249	221	221	217	220	220	228
60.0	224	224	226	221	222	216	186	185	181	184	185	192
65.0	188	188	192	186	187	180	148	148	143	147	147	156
70.0	151	151	155	146	150	142	109	109	100	102	104	117
75.0	113	113	109	104	102	105	70.8	69.9	59.9	63.3	61.0	72.3
80.0	72.8	73.8	63.8	68.8	62.3	65.8	35.8	35.8	28.4	33.3	32.3	42.4
85.0	38.6	38.8	38.8	37.8	34.8	32.1	10.1	11.4	8.83	10.9	10.8	15.4
90.0	13.0	13.5	15.7	13.6	13.3	9.72	1.66	3.07	1.92	3.38	2.30	3.64
95.0	3.01	2.04	4.09	3.06	3.26	1.79	1.98	2.88	1.85	2.74	1.85	2.94
100.0	3.07	2.04	2.88	1.85	2.87	2.04	2.24	3.00	2.17	2.87	2.17	3.07
105.0	3.20	2.30	3.00	2.11	2.94	2.30	2.49	3.13	2.43	3.06	2.43	3.19
110.0	3.39	2.62	3.13	2.43	3.13	2.62	2.81	3.39	2.75	3.32	2.75	3.38
115.0	3.65	2.94	3.39	2.74	3.39	2.87	3.13	3.64	3.07	3.51	3.07	3.64
120.0	3.84	3.26	3.58	3.06	3.64	3.19	3.45	3.84	3.39	3.83	3.45	3.90
125.0	4.16	3.58	3.90	3.45	3.90	3.51	3.84	4.16	3.77	4.09	3.77	4.15
130.0	4.41	3.90	4.16	3.77	4.15	3.90	4.16	4.41	4.03	4.41	4.09	4.47
135.0	4.67	4.22	4.48	4.09	4.41	4.22	4.41	4.67	4.35	4.66	4.41	4.73
140.0	4.93	4.54	4.73	4.41	4.73	4.54	4.73	4.93	4.67	4.92	4.67	4.98
145.0	5.18	4.80	4.99	4.73	4.99	4.79	4.93	5.18	4.86	5.11	4.99	5.18
150.0	5.38	5.05	5.25	4.98	5.18	5.05	5.18	5.37	5.12	5.37	5.18	5.37
155.0	5.57	5.25	5.44	5.24	5.37	5.24	5.38	5.50	5.31	5.56	5.43	5.56
160.0	5.76	5.44	5.63	5.43	5.56	5.43	5.50	5.69	5.50	5.69	5.56	5.69
165.0	5.89	5.63	5.76	5.62	5.75	5.62	5.70	5.82	5.63	5.88	5.69	5.82
170.0	6.02	5.76	5.89	5.81	5.88	5.75	5.82	5.89	5.76	6.01	5.82	5.94
175.0	6.08	5.82	5.95	5.94	5.95	5.82	5.95	5.95	5.89	6.07	5.88	6.01
180.0	6.14	5.95	6.01	6.01	6.01	5.94	6.08	6.01	5.89	6.07	5.88	6.01

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
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