

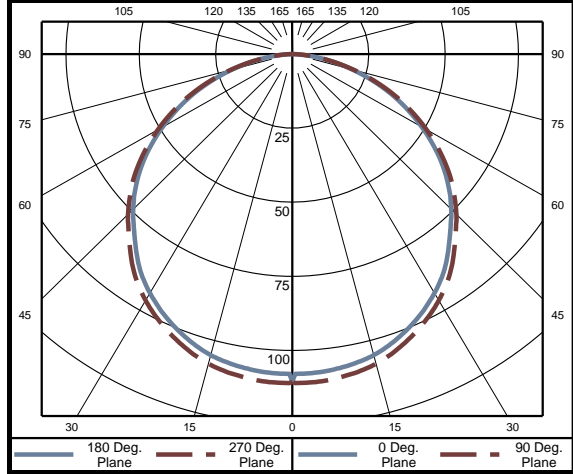


SIRS Electronics Inc
 Catalog Number
ACUVIVID-24CV55-4016



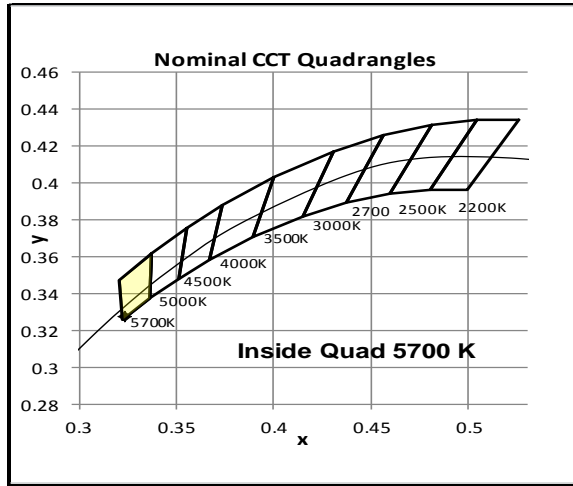
Electrical Test Conditions						
Temp	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	24.00 VDC	0.1709 A	4.102 W	N/A	N/A	N/A

Summary of Results	
Total Lumen Output	329.3 Lumens
Luminaire Efficacy	81.5 lm/w
Maximum Candela	111 Candela
CCT	5947 K
CRI	95.9
Duv	-0.0031
TM-30 Rf	91.4
TM-30 Rg	102.7



Intensity (Candlepower) Summary		
Angle	Mean CP	Lumens
0	111	
5	110	11
10	109	
15	107	30
20	105	
25	101	47
30	96	
35	91	57
40	84	
45	77	59
50	69	
55	61	54
60	52	
65	42	42
70	32	
75	22	23
80	13	
85	5	6
90	0	

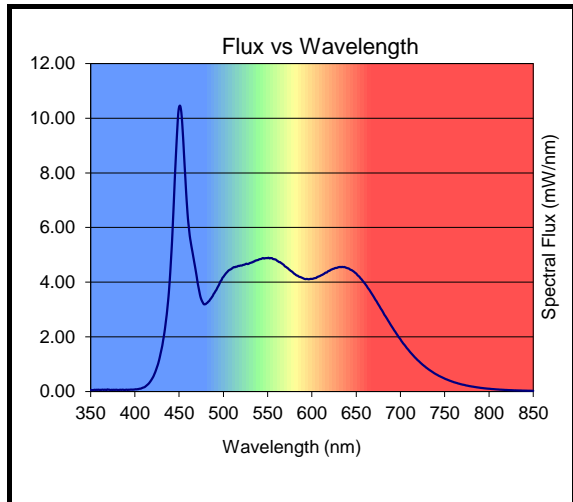
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	87	26.6%
0-40	144	43.9%
0-60	258	78.5%
0-90	329	100.0%
40-90	185	56.1%
60-90	71	21.5%
90-180	0	0.0%
0-180	329	100.0%



Spacing Criteria	
0-180	1.26
90-270	1.26

Color Rendering Index Details	
Ra (CRI)	95.9
R1	96.9
R2	97.9
R3	92.5
R4	96.9
R5	97.7
R6	93.2
R7	97.5
R8	94.4
R9	84.7
R10	94.3
R11	94.9
R12	75.7
R13	98
R14	95.5

Average Luminance cd/m ²	
Vertical Angle	Horizontal Angle 0°
0	29190
45	27940
55	27330
65	25510
75	21870
85	14640



Cone of Light Tabulation		
Mounting Height (Ft)	Footcandles at Nadir	Diameter (Ft)
4.00	6.91	5.17
6.00	3.07	7.75
8.00	1.73	10.3
10.0	1.11	12.9
12.0	0.768	15.5
14.0	0.564	18.1
16.0	0.432	20.7

Chromaticity Coordinates	
Chromaticity (x)	0.3233
Chromaticity (y)	0.3279
Chromaticity (u)	0.2057
Chromaticity (v)	0.3129
Chromaticity (u')	0.2057
Chromaticity (v')	0.4693
Duv	-0.0031

Testing was performed in accordance with LM-79-08
 The results contained in this summary pertain only to report #11714176.22



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Photometric Test Report

Relevant Standards

IES LM-79-2008, ANSI C82.77-2002, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2015, IES TM-30-2015

Prepared For

SIRS Electronics Inc

4705 Hwy 36 S
STE 5
Rosenberg, TX 77471
United States

Catalog Number

ACUVIVID-24CV55-4016

Order Number

11714176

Test Number

11714176.22

Test Date

2017-04-13

Prepared By

Dane Hernandez-Adams, Technician

Approved By

Justin Benner, Project Handler

The results contained in this report pertain only to the tested sample.
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This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



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ISOFootcandle Plot	Page 9

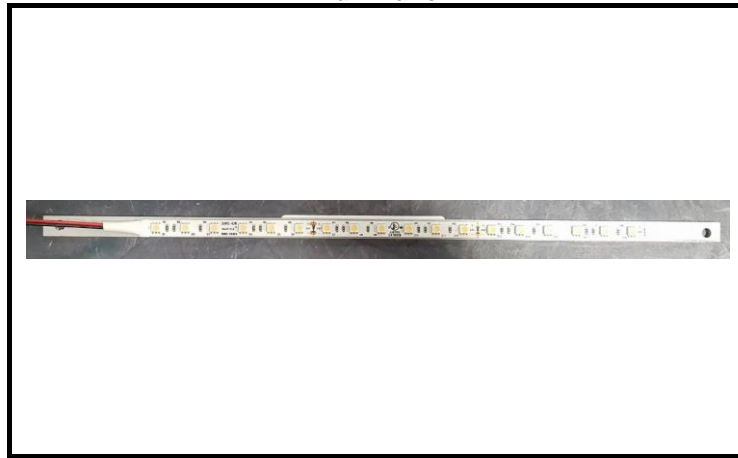
Laboratory results may not be representative of field performance
Ballast factors have not been applied

Testing was performed in a 2-meter integrating sphere using the 4π geometry method.
Absorption correction was employed for Sphere measurement



Luminaire Description: Formed aluminum backing plate, LED strip with no lens enclosure - 1' length (304.8mm)
Lamp: 18 white LEDs
Mounting: Surface – Ceiling
Ballast/Driver: None

Luminaire



Luminaire Characteristics

Luminous Length: 11.75 in.
Luminous Width: 0.5000 in.

Summary of Results

Integrating Sphere

Luminous Flux: 329 Lumens
Efficacy: 81.5 lm/w
CCT: 5947 K
CRI (Ra): 95.9

Distribution

Total Luminaire Output: 328.7 Lumens
Luminaire Efficacy: 80.1 lm/w
Maximum Candela: 111 Candela

Electrical Data at 24 VDC

Test Temperature: 25.1 °C
Voltage: 24.00 VDC
Current: 0.1684 A
Power: 4.043 W



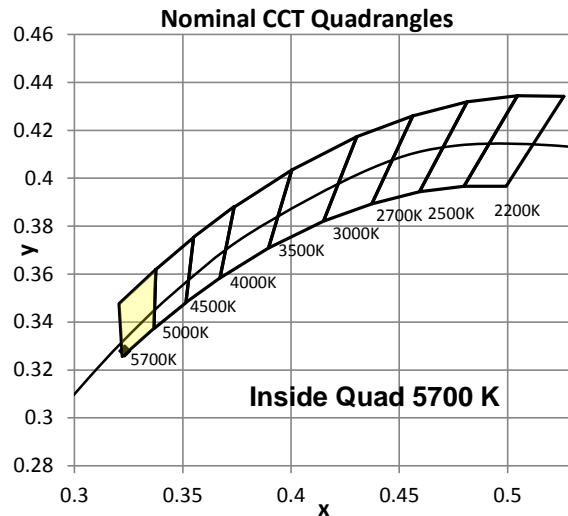
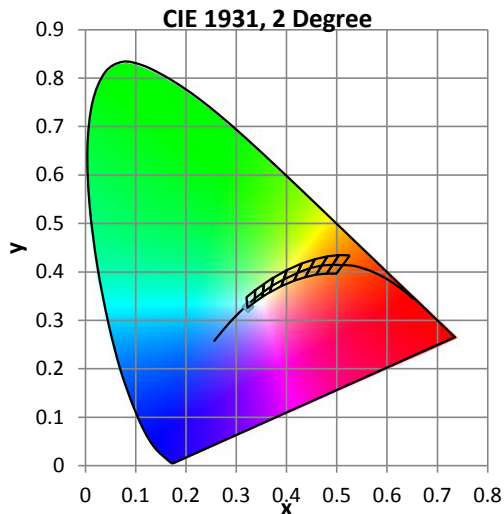
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	24.00 VAC	0.1684 A	4.043 W	N/A	N/A	N/A

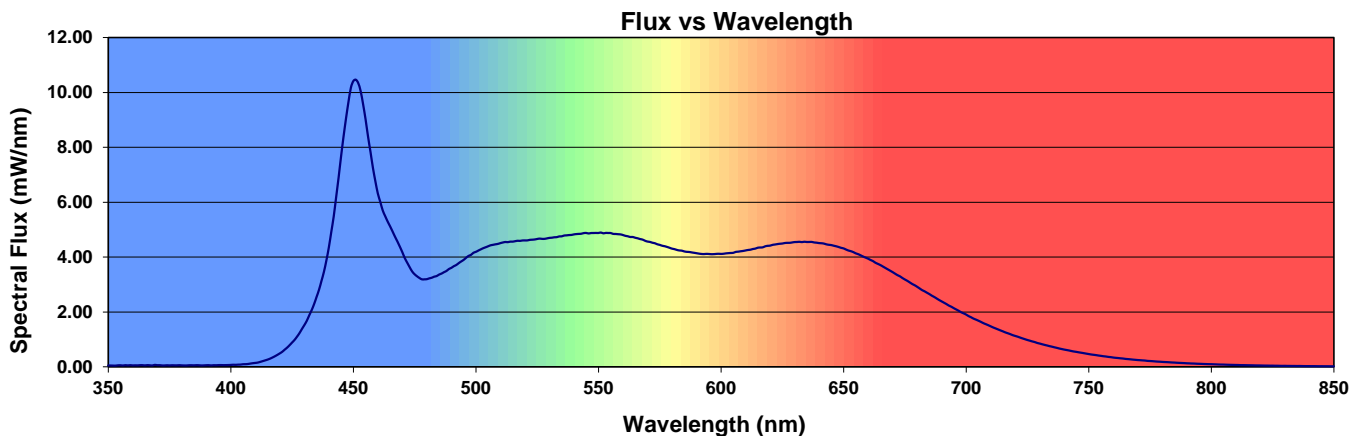
Summary of Results

Total Output:	329 Lumens	Chromaticity (x):	0.3233
Efficacy:	81.5 lm/w	Chromaticity (y):	0.3279
CCT:	5947 K	Chromaticity (u'):	0.2057
CRI (Ra):	95.9	Chromaticity (v'):	0.4693
CRI (R9):	84.7	TM-30 R_f:	91.4
Peak Wavelength:	450.8 nm	TM-30 R_g:	102.7
Dominant Wavelength:	484.4 nm	Duv:	-0.0031
S/P Ratio:	2.298		



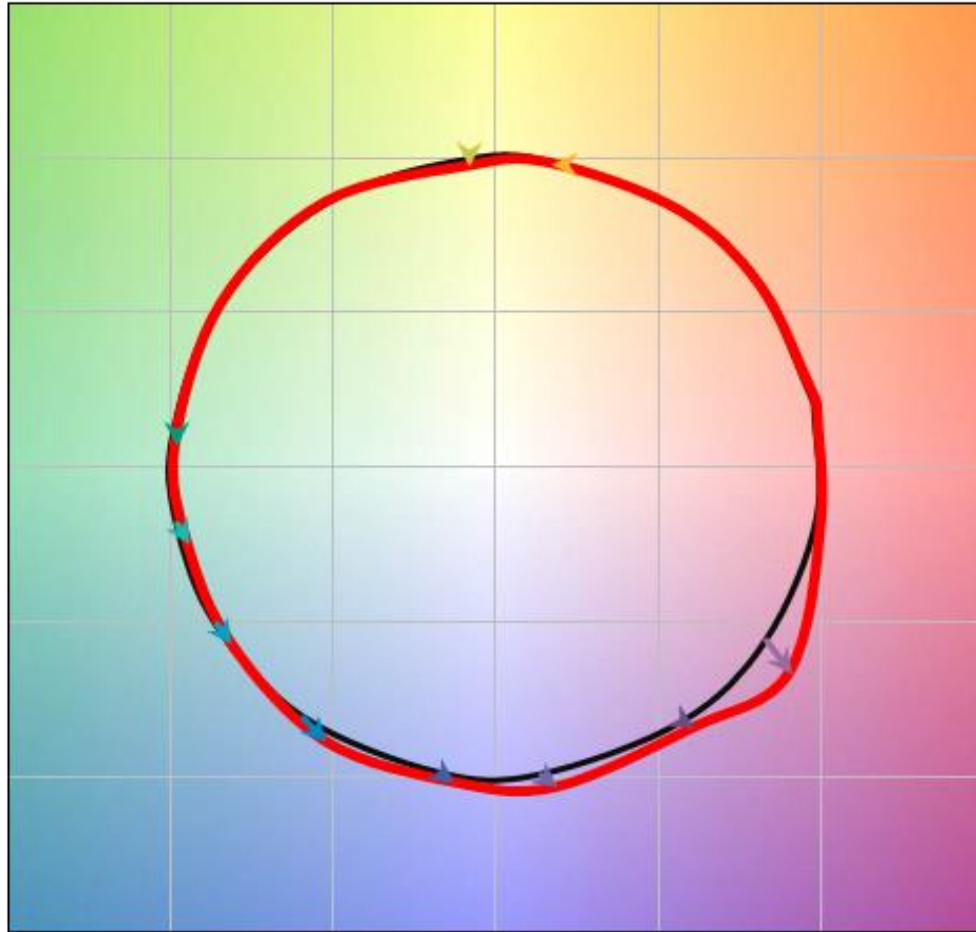
Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
95.9	96.9	97.9	92.5	96.9	97.7	93.2	97.5	94.4	84.7	94.3	94.9	75.7	98.0	95.5





COLOR VECTOR GRAPHIC



— Reference Illuminant — Test Source

HUE ANGLE ANALYSIS															
Hue Bin (<i>j</i>)	Count (<i>m</i>)	Average of Test SPD		Average of Ref SPD		Average ΔE	Average θ	Color Distortion Icon Parameters						R_{thj}	Change of Chroma
		<i>a'</i>	<i>b'</i>	<i>a'</i>	<i>b'</i>			<i>da</i> _{relative}	<i>db</i> _{relative}	<i>path_x</i> _{ref}	<i>path_y</i> _{ref}	<i>path_x</i> _{test}	<i>path_y</i> _{test}		
1	7	24.22	5.21	24.02	5.11	0.883	0.21	0.01	0.00	0.98	0.21	0.99	0.21	93	1%
2	6	18.70	12.19	18.74	12.01	0.488	0.62	0.00	0.01	0.82	0.58	0.81	0.59	96	0%
3	8	13.36	20.99	13.61	20.69	0.877	0.96	-0.01	0.01	0.57	0.82	0.56	0.83	93	0%
4	7	3.98	22.84	4.52	22.79	0.907	1.38	-0.02	0.00	0.19	0.98	0.16	0.98	93	0%
5	9	-1.60	20.85	-1.46	21.32	1.280	1.65	-0.01	-0.02	-0.08	1.00	-0.09	0.97	90	-2%
6	10	-10.41	16.55	-10.20	16.55	0.609	2.11	-0.01	0.00	-0.52	0.86	-0.53	0.86	95	1%
7	4	-17.89	11.32	-17.91	11.34	0.356	2.58	0.00	0.00	-0.85	0.53	-0.85	0.53	97	0%
8	5	-23.95	1.89	-24.11	2.58	0.806	3.04	0.01	-0.03	-0.99	0.10	-0.99	0.07	94	-1%
9	7	-15.10	-3.91	-15.63	-2.89	1.203	-2.96	0.03	-0.06	-0.98	-0.18	-0.95	-0.24	91	-2%
10	5	-18.93	-12.70	-20.05	-11.25	1.888	-2.61	0.05	-0.06	-0.86	-0.50	-0.82	-0.57	86	-1%
11	9	-11.64	-20.77	-13.24	-18.94	2.466	-2.21	0.07	-0.08	-0.60	-0.80	-0.53	-0.88	81	3%
12	2	-2.56	-21.41	-3.57	-20.76	1.230	-1.75	0.05	-0.03	-0.18	-0.98	-0.13	-1.02	91	2%
13	6	2.95	-16.40	2.13	-15.76	1.099	-1.44	0.05	-0.04	0.13	-0.99	0.18	-1.03	92	5%
14	3	13.62	-18.99	12.89	-18.54	1.029	-0.96	0.03	-0.02	0.57	-0.82	0.61	-0.84	92	3%
15	6	13.54	-9.74	12.45	-8.22	2.052	-0.59	0.07	-0.10	0.83	-0.56	0.90	-0.66	85	12%
16	5	23.02	-3.75	22.71	-3.60	0.559	-0.17	0.01	-0.01	0.99	-0.17	1.00	-0.17	96	1%



Distribution - Goniophotometer

Distribution Test Conditions

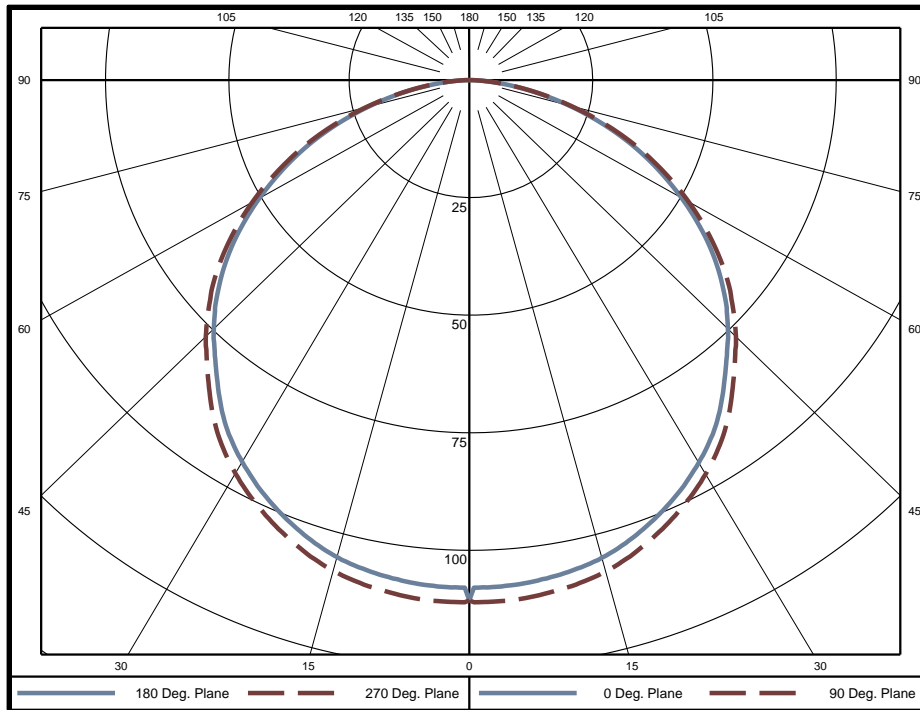
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	24.00 VDC	0.1709 A	4.102 W	N/A	N/A	N/A

Summary of Results

Spacing Criteria
 0-180: 1.26
 90-270: 1.26

Total Lumen Output: 328.7 Lumens
Luminaire Efficacy: 80.1 lm/w
Maximum Candela: 111 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	2.64	0.8%	60-65	22.78	6.9%	120-125	0	0.0%
5-10	7.87	2.4%	65-70	18.78	5.7%	125-130	0	0.0%
10-15	12.89	3.9%	70-75	14.10	4.3%	130-135	0	0.0%
15-20	17.52	5.3%	75-80	9.19	2.8%	135-140	0	0.0%
20-25	21.58	6.6%	80-85	4.66	1.4%	140-145	0	0.0%
25-30	24.98	7.6%	85-90	1.26	0.4%	145-150	0	0.0%
30-35	27.59	8.4%	90-95	0	0.0%	150-155	0	0.0%
35-40	29.12	8.9%	95-100	0	0.0%	155-160	0	0.0%
40-45	29.71	9.0%	100-105	0	0.0%	160-165	0	0.0%
45-50	29.57	9.0%	105-110	0	0.0%	165-170	0	0.0%
50-55	28.40	8.6%	110-115	0	0.0%	170-175	0	0.0%
55-60	26.06	7.9%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	144	43.9%
0-60	258	78.5%
0-90	329	100.0%
90-180	0	0.0%



Candela Tabulation
Horizontal Angle (Degrees)

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6	110.6
5	107.7	110.1	111.2	111.1	110.9	111.1	111.2	110.1	107.7	110.1	111.2	111.1	110.9	111.1	111.2	110.1
10	106.8	109.2	110.2	110.1	109.8	110.1	110.2	109.2	106.8	109.2	110.2	110.1	109.8	110.1	110.2	109.2
15	105.1	107.6	108.4	108.4	108.1	108.4	108.4	107.6	105.1	107.6	108.4	108.4	108.1	108.4	108.4	107.6
20	102.2	104.7	105.4	105.4	105.1	105.4	105.4	104.7	102.2	104.7	105.4	105.4	105.1	105.4	105.4	104.7
25	98.5	100.9	101.5	101.5	101.2	101.5	101.5	100.9	98.5	100.9	101.5	101.5	101.2	101.5	101.5	100.9
30	94.0	96.4	96.9	97.0	96.7	97.0	96.9	96.4	94.0	96.4	96.9	97.0	96.7	97.0	96.9	96.4
35	88.5	90.9	91.2	91.3	91.1	91.3	91.2	90.9	88.5	90.9	91.2	91.3	91.1	91.3	91.2	90.9
40	81.5	83.9	84.2	84.2	84.0	84.2	84.2	83.9	81.5	83.9	84.2	84.2	84.0	84.2	84.2	83.9
45	74.9	77.0	77.2	77.3	77.2	77.3	77.2	77.0	74.9	77.0	77.2	77.3	77.2	77.3	77.2	77.0
50	67.6	69.7	69.8	69.8	69.7	69.8	69.8	69.7	67.6	69.7	69.8	69.8	69.7	69.8	69.8	69.7
55	59.4	61.2	61.3	61.2	61.2	61.2	61.3	61.2	59.4	61.2	61.3	61.2	61.2	61.2	61.3	61.2
60	50.2	51.9	52.0	51.9	51.9	51.9	52.0	51.9	50.2	51.9	52.0	51.9	51.9	51.9	52.0	51.9
65	40.9	42.2	42.3	42.2	42.2	42.2	42.3	42.2	40.9	42.2	42.3	42.2	42.2	42.2	42.3	42.2
70	31.2	32.2	32.3	32.2	32.2	32.2	32.3	32.2	31.2	32.2	32.3	32.2	32.2	32.2	32.3	32.2
75	21.5	22.1	22.1	22.0	22.0	22.0	22.1	22.1	21.5	22.1	22.1	22.0	22.0	22.0	22.1	22.1
80	12.4	12.7	12.7	12.6	12.6	12.6	12.7	12.7	12.4	12.7	12.7	12.6	12.6	12.6	12.7	12.7
85	4.8	5.0	5.0	4.9	4.9	4.9	5.0	5.0	4.8	5.0	5.0	4.9	4.9	4.9	5.0	5.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

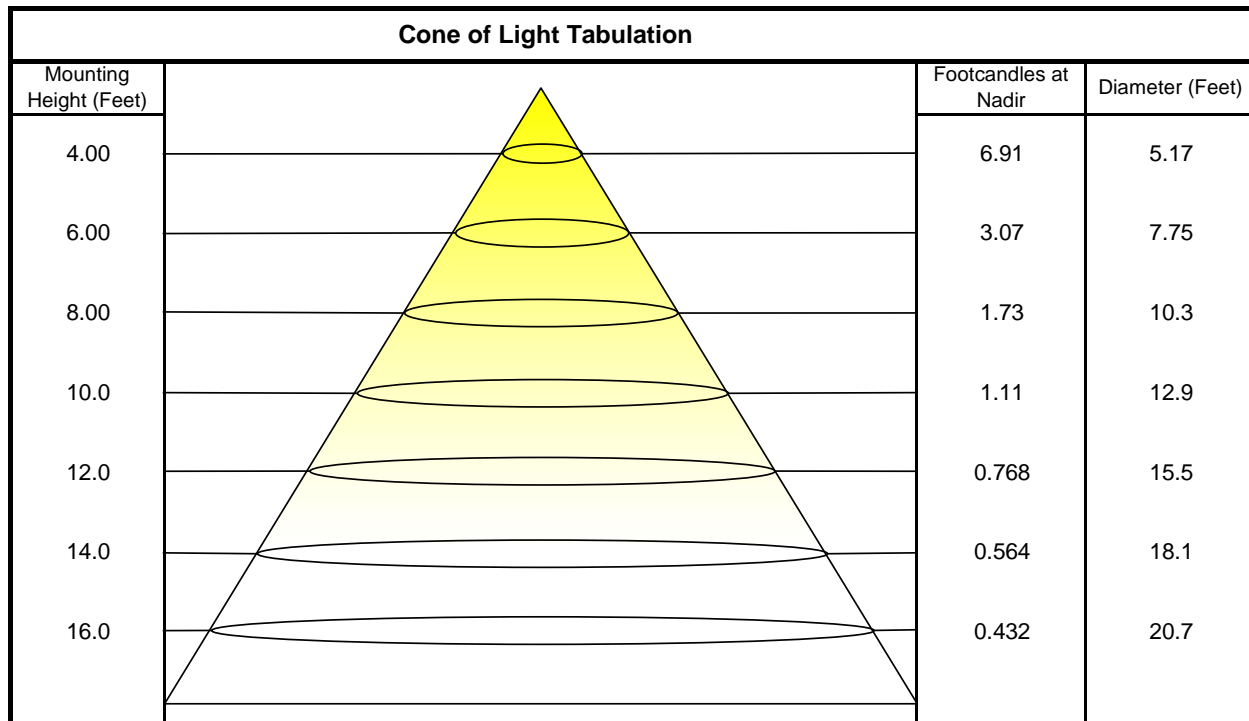
	0	45	90
0	29190	29190	29190
45	27940	28820	28790
55	27330	28200	28130
65	25510	26410	26320
75	21870	22520	22410
85	14640	15010	14730



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	391	391	391	391	382	382	382	382	365	365	365	350	350	350	335	335	335	329
1	357	341	327	314	348	334	321	309	320	309	299	307	298	290	295	288	281	275
2	324	297	274	255	316	291	270	252	279	261	246	268	253	240	258	246	235	228
3	295	260	233	211	287	255	230	209	245	223	205	236	217	202	227	212	198	191
4	270	230	201	178	262	226	198	177	217	193	175	209	189	172	202	185	170	163
5	248	205	175	153	241	201	173	152	194	170	151	188	166	149	182	163	147	140
6	229	184	155	133	222	181	153	133	175	150	131	170	147	130	164	145	129	122
7	212	167	138	117	206	164	137	117	159	134	116	154	132	115	150	130	114	108
8	197	152	124	105	192	150	123	104	146	121	104	141	119	103	137	117	102	96
9	184	140	112	94	179	138	111	94	134	110	93	130	108	93	127	107	92	86
10	173	129	102	85	168	127	102	85	124	100	84	121	99	84	118	98	84	78

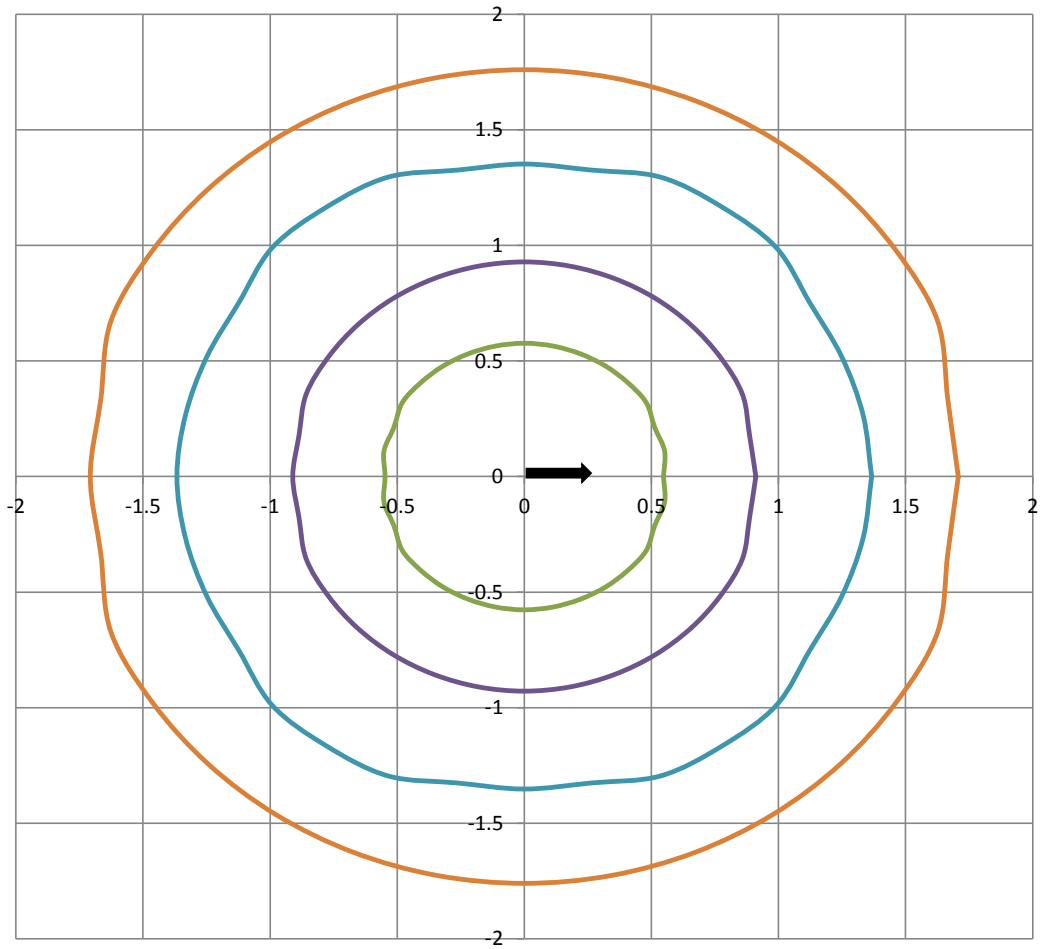
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	110.6 Candela
Central Cone Intensity:	111 Candela
Beam Flux:	248.3 Lumens
Beam Angle (0-180):	114.5 Degrees
Beam Angle (90-270):	116.4 Degrees
Field Angle (0-180):	161.6 Degrees
Field Angle (90-270):	161.8 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

