



# BSS746-48-35-ND-R-I-C4-SN-AW

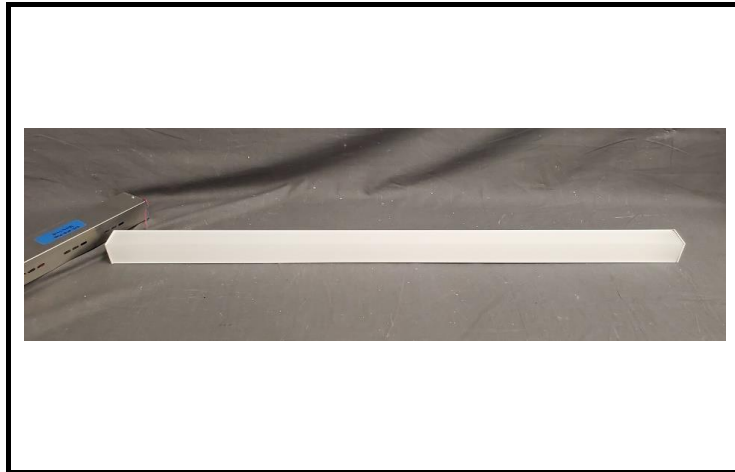
**Luminaire Description:** Wedge 2"x2" Luminaire, 48" nom., 3500°K, Remote 120-277V Non-dimming Driver, Regular Output, Indirect Orientation, 4' cable mount, Single configuration, Architectural White Finish

**Lamp:** 112 White LEDs

**Mounting:** Surface – Ceiling

**Ballast/Driver:** One (1) Signify North America / XI040C110V054BST2

Luminaire



### Luminaire Characteristics

Luminous Length: 2.00 in.  
Luminous Width: 48.00 in.  
Luminous Height: 2.00 in.

### Summary of Results

#### Integrating Sphere

Luminous Flux: 3418 Lumens  
Efficacy: 119.42 lm/w  
CCT: 3431 K  
CRI (Ra): 92.4

#### Distribution

Total Luminaire Output: 3271 Lumens  
Luminaire Efficacy: 114.4 lm/w  
Maximum Candela: 856 Candela

#### Electrical Data at 120 VAC

Test Temperature: 25.4 °C  
Voltage: 120.1 VAC  
Current: 0.2412 A  
Power: 28.62 W  
Power Factor: 0.989  
Frequency: 60 Hz  
Current THD: 12.1 %



## Color Quality - Integrating Sphere

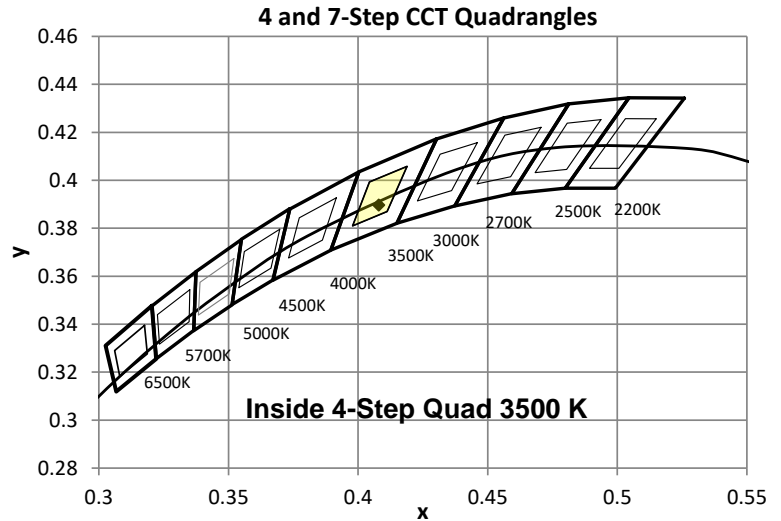
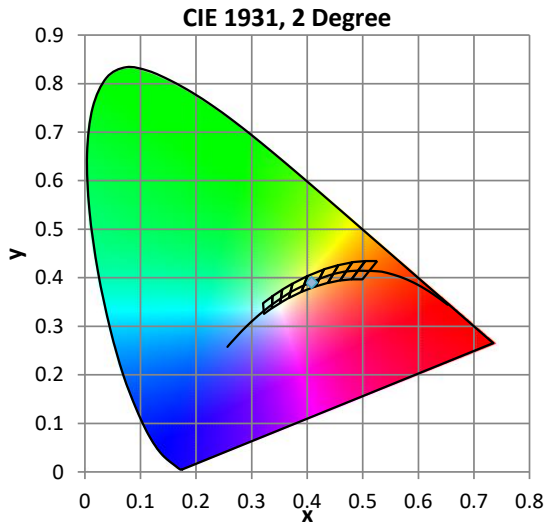
### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.4 °C	120.1 VAC	0.2412 A	28.62 W	0.989	60 Hz	12.1 %

### Summary of Results

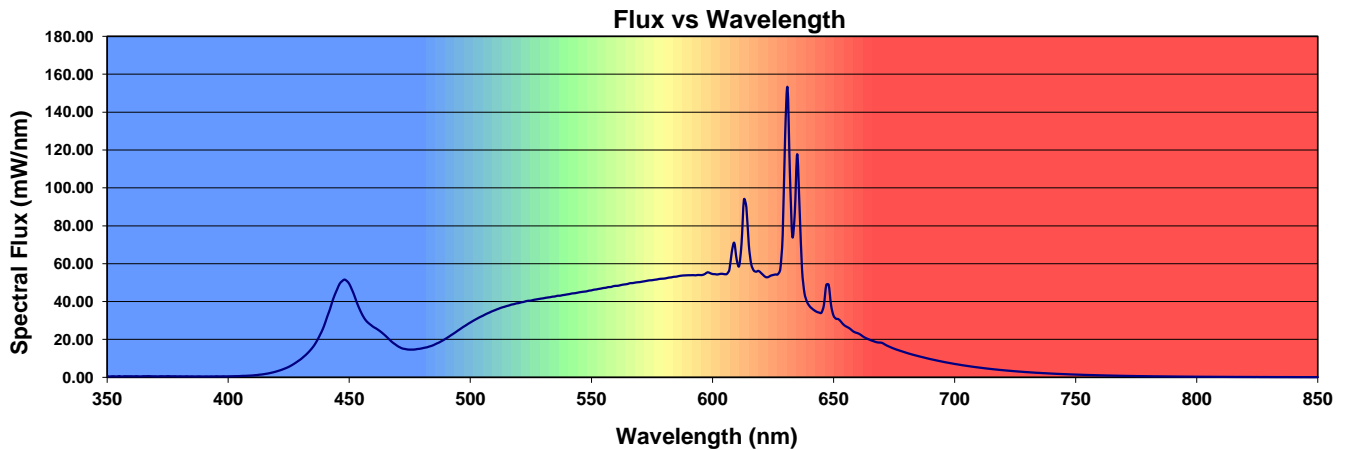
<b>Total Output:</b>	3418 Lumens	<b>Chromaticity (x):</b>	0.4080
<b>Efficacy:</b>	119.4 lm/w	<b>Chromaticity (y):</b>	0.3897
<b>CCT:</b>	3431 K	<b>Chromaticity (u'):</b>	0.2379
<b>CRI (Ra):</b>	92.4	<b>Chromaticity (v'):</b>	0.5112
<b>CRI (R9):</b>	59.6	<b>TM-30 Rf:</b>	90
<b>Peak Wavelength:</b>	631 nm	<b>TM-30 Rg:</b>	102
<b>Dominant Wavelength:</b>	582 nm	<b>TM-30 Rcs,h1:</b>	-5%
<b>S/P Ratio:</b>	1.57	<b>Duv:</b>	-0.0011
<b>M/P Ratio:</b>	0.61		

WELL Building Standard v2



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92.4	93.8	94.7	94.1	93.5	93.2	93.4	92.6	84.0	59.6	86.1	94.2	79.6	93.8	95.8	90.2





## Distribution - Goniophotometer

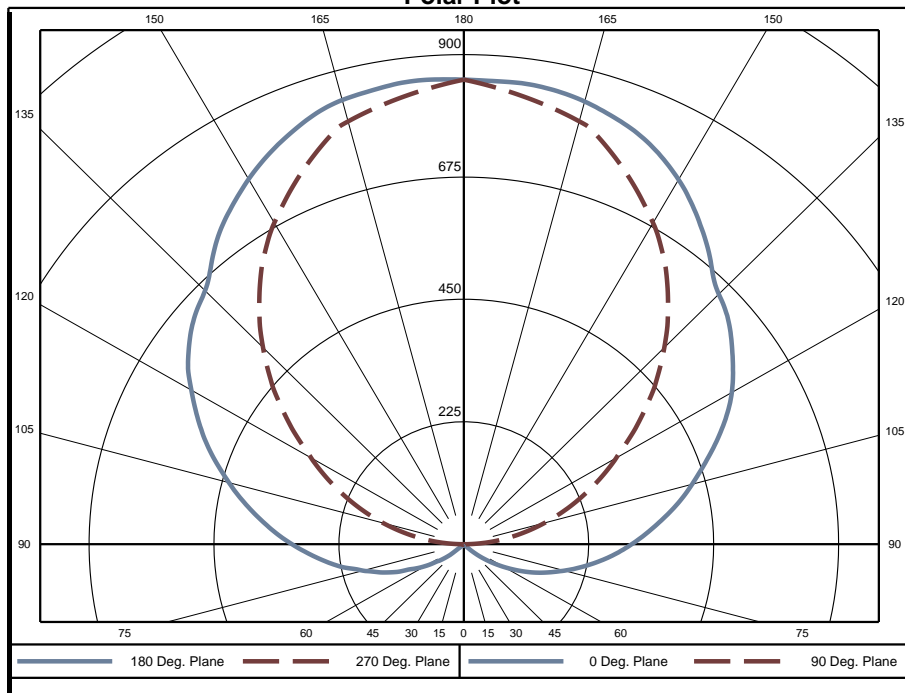
### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.3 °C	120.1 VAC	0.2402 A	28.59 W	0.991	60 Hz	11.1 %

### Summary of Results

<b>Total Lumen Output:</b>	3271 Lumens
<b>Luminaire Efficacy:</b>	114.4 lm/w
<b>Maximum Candela:</b>	856 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.0	0.0%	60-65	19.5	0.6%	120-125	212.7	6.5%
5-10	0.1	0.0%	65-70	29.8	0.9%	125-130	219.7	6.7%
10-15	0.1	0.0%	70-75	43.7	1.3%	130-135	223.2	6.8%
15-20	0.2	0.0%	75-80	60.4	1.8%	135-140	223.0	6.8%
20-25	0.2	0.0%	80-85	77.7	2.4%	140-145	218.1	6.7%
25-30	0.3	0.0%	85-90	94.9	2.9%	145-150	206.8	6.3%
30-35	0.3	0.0%	90-95	113.6	3.5%	150-155	188.2	5.8%
35-40	0.4	0.0%	95-100	133.6	4.1%	155-160	163.3	5.0%
40-45	0.5	0.0%	100-105	152.9	4.7%	160-165	133.0	4.1%
45-50	1.3	0.0%	105-110	170.6	5.2%	165-170	97.9	3.0%
50-55	5.0	0.2%	110-115	186.9	5.7%	170-175	60.0	1.8%
55-60	11.1	0.3%	115-120	201.9	6.2%	175-180	20.3	0.6%

Zone	Lumens	% of Luminaire
0-40	2	0.0%
0-60	20	0.6%
0-90	346	10.6%
90-180	2926	89.4%



**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	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
5	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.0	0.9	0.9
10	0.7	0.8	0.8	1.0	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.1	1.0	0.8	0.8
15	0.5	0.6	0.8	0.9	1.1	1.3	1.4	1.4	1.4	1.4	1.4	1.3	1.1	0.9	0.8	0.6
20	0.5	0.6	0.7	0.9	1.1	1.3	1.5	1.5	1.5	1.5	1.5	1.3	1.1	0.9	0.7	0.6
25	0.5	0.6	0.7	0.8	1.1	1.3	1.6	1.6	1.6	1.6	1.6	1.3	1.1	0.8	0.7	0.6
30	0.7	0.7	0.7	0.7	1.0	1.3	1.6	1.8	1.6	1.8	1.6	1.3	1.0	0.7	0.7	0.7
35	0.8	0.9	0.8	0.7	0.9	1.3	1.7	2.0	1.6	2.0	1.7	1.3	0.9	0.7	0.8	0.9
40	1.1	1.1	0.9	0.7	0.9	1.3	1.7	2.0	1.7	2.0	1.7	1.3	0.9	0.7	0.9	1.1
45	2.5	1.6	1.1	0.7	0.8	1.2	2.0	3.0	2.6	3.0	2.0	1.2	0.8	0.7	1.1	1.6
50	25.1	14.2	1.5	0.8	0.8	1.3	2.4	12.0	11.2	12.0	2.4	1.3	0.8	0.8	1.5	14.2
55	53.2	40.4	4.0	0.9	0.7	1.6	3.8	28.9	51.1	28.9	3.8	1.6	0.7	0.9	4.0	40.4
60	84.1	69.4	25.5	1.1	0.8	1.9	24.0	48.3	80.8	48.3	24.0	1.9	0.8	1.1	25.5	69.4
65	118.2	101.3	51.0	1.5	1.0	2.1	45.9	72.3	110.5	72.3	45.9	2.1	1.0	1.5	51.0	101.3
70	152.8	135.4	79.1	5.6	1.3	6.8	72.6	105.7	152.0	105.7	72.6	6.8	1.3	5.6	79.1	135.4
75	187.8	170.4	110.0	26.4	1.5	31.4	105.0	150.7	188.0	150.7	105.0	31.4	1.5	26.4	110.0	170.4
80	225.2	207.0	143.1	50.0	1.8	57.3	138.1	198.6	229.8	198.6	138.1	57.3	1.8	50.0	143.1	207.0
85	264.2	244.7	177.3	76.2	2.1	84.5	173.9	239.1	268.5	239.1	173.9	84.5	2.1	76.2	177.3	244.7
90	302.6	283.8	212.7	104.9	2.8	113.2	210.0	277.7	309.6	277.7	210.0	113.2	2.8	104.9	212.7	283.8
95	341.9	322.9	248.8	135.3	48.4	142.4	248.7	317.8	351.8	317.8	248.7	142.4	48.4	135.3	248.8	322.9
100	384.3	363.6	285.8	167.6	98.2	171.5	287.9	360.1	394.4	360.1	287.9	171.5	98.2	167.6	285.8	363.6
105	425.8	405.1	323.5	200.7	150.5	204.5	327.2	403.9	438.2	403.9	327.2	204.5	150.5	200.7	323.5	405.1
110	469.2	446.1	362.4	234.8	205.0	237.9	365.1	448.2	483.4	448.2	365.1	237.9	205.0	234.8	362.4	446.1
115	515.6	489.7	400.6	292.1	260.9	286.7	401.3	488.2	526.0	488.2	401.3	286.7	260.9	292.1	400.6	489.7
120	557.5	530.7	436.0	351.5	317.6	345.7	432.4	528.5	566.8	528.5	432.4	345.7	317.6	351.5	436.0	530.7
125	591.5	565.9	469.6	411.5	381.7	405.8	463.8	559.4	605.7	559.4	463.8	405.8	381.7	411.5	469.6	565.9
130	624.7	595.7	528.0	468.1	448.8	466.3	513.4	584.1	636.2	584.1	513.4	466.3	448.8	468.1	528.0	595.7
135	649.6	629.9	580.4	526.8	511.4	526.9	570.5	613.1	659.1	613.1	570.5	526.9	511.4	526.8	580.4	629.9
140	689.4	672.8	630.6	587.8	572.9	585.2	623.9	660.8	700.7	660.8	623.9	585.2	572.9	587.8	630.6	672.8
145	733.9	719.5	681.0	643.0	631.9	641.7	677.3	701.7	740.9	701.7	677.3	641.7	631.9	643.0	681.0	719.5
150	773.6	755.9	728.2	698.0	682.2	692.4	728.9	739.9	774.8	739.9	728.9	692.4	682.2	698.0	728.2	755.9
155	804.9	790.1	762.8	738.6	726.7	738.3	763.4	774.8	804.2	774.8	763.4	738.3	726.7	738.6	762.8	790.1
160	826.6	811.4	795.9	777.3	769.6	782.5	788.6	804.7	829.0	804.7	788.6	782.5	769.6	777.3	795.9	811.4
165	842.0	828.1	818.3	811.9	804.4	805.5	810.2	824.1	845.1	824.1	810.2	805.5	804.4	811.9	818.3	828.1
170	851.2	840.2	831.1	825.8	821.3	823.9	829.8	838.9	852.0	838.9	829.8	823.9	821.3	825.8	831.1	840.2
175	853.0	847.2	842.5	839.0	837.6	839.3	843.5	849.3	856.0	849.3	843.5	839.3	837.6	839.0	842.5	847.2
180	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6

Vertical Angle (Degrees)



**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 20%

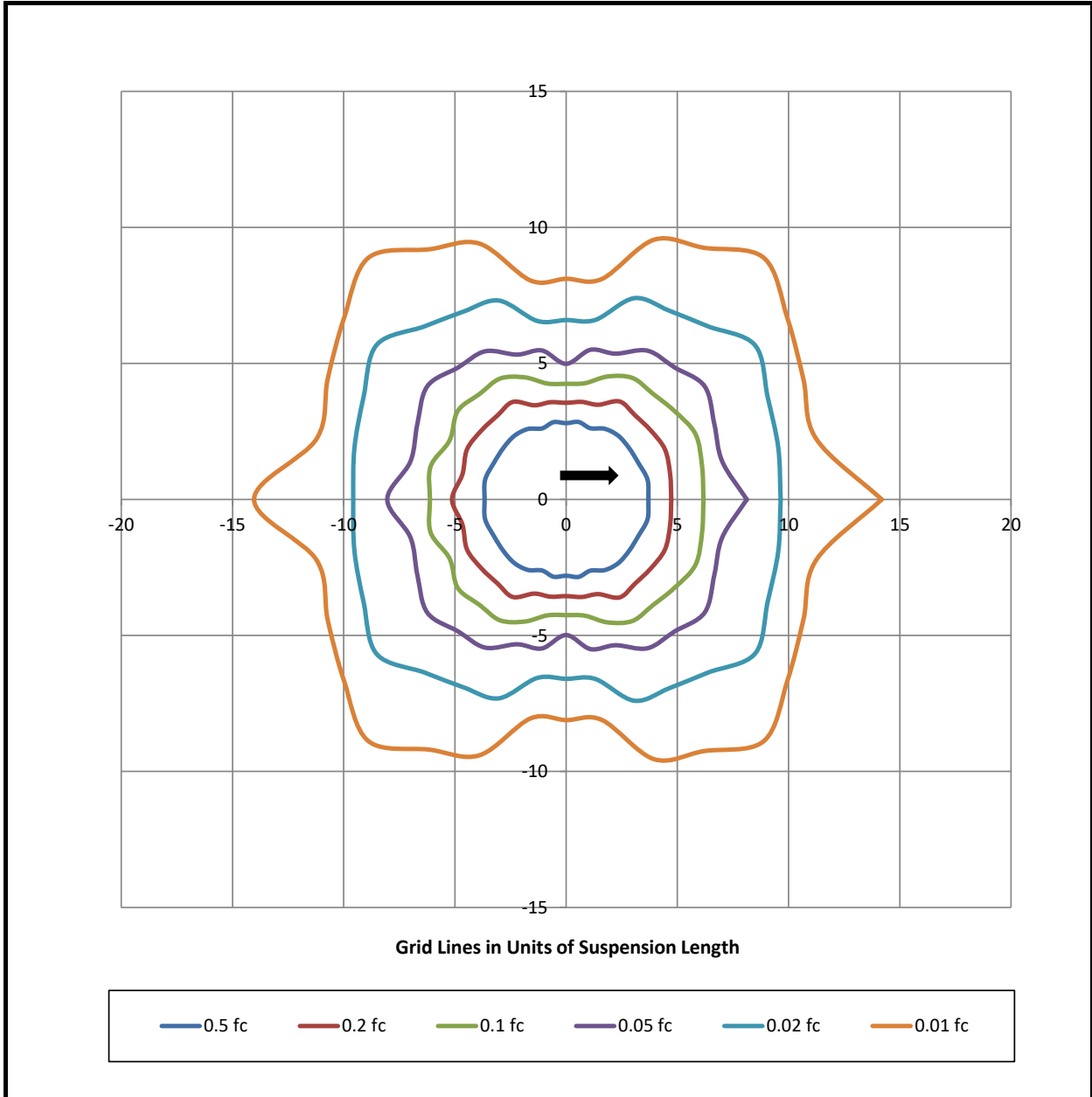
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	98	98	98	98	85	85	85	85	61	61	61	40	40	40	20	20	20	11
1	87	81	77	73	75	70	67	63	50	47	45	31	29	28	14	13	12	4
2	78	70	63	58	67	61	55	50	43	39	36	26	24	22	11	10	9	2
3	71	61	53	47	61	53	46	41	37	33	29	23	20	18	9	8	7	1
4	64	54	46	40	55	46	40	34	33	28	25	20	17	15	8	7	6	1
5	59	47	39	33	51	41	34	29	29	24	21	18	15	13	7	6	5	0
6	54	42	34	28	46	36	30	25	26	21	18	16	13	11	7	5	4	0
7	50	38	30	25	43	33	26	21	23	19	15	14	11	9	6	4	3	0
8	46	34	26	21	39	29	23	19	21	16	13	13	10	8	5	4	3	0
9	43	31	24	19	37	27	21	16	19	15	12	12	9	7	5	4	3	0
10	40	28	21	16	34	24	18	14	17	13	10	11	8	6	5	3	2	0

Up Light Beam and Field Information	
CIE Type:	Semi-Indirect
Center Beam Intensity:	853.6 Candela
Central Cone Intensity:	849 Candela
Beam Flux:	2926.5 Lumens
Beam Angle (0-180):	151.2 Degrees
Beam Angle (90-270):	103.2 Degrees
Field Angle (0-180):	239.1 Degrees
Field Angle (90-270):	162.5 Degrees



### Ceiling ISOFootcandle Plot

Suspension Length - 4 Feet



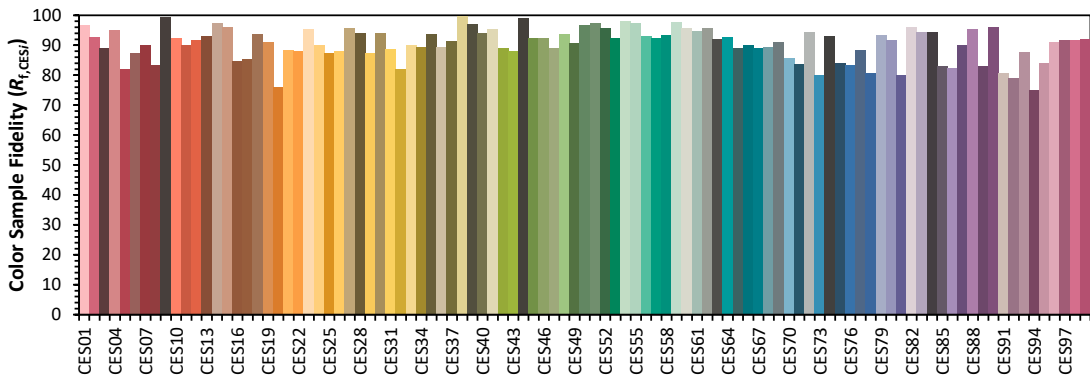
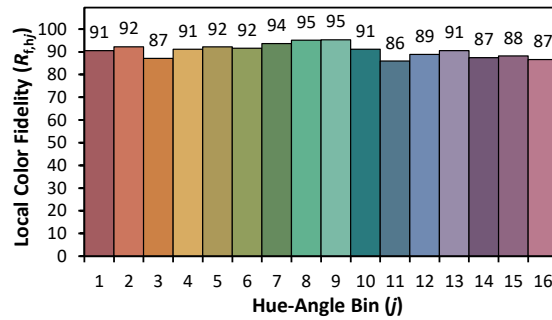
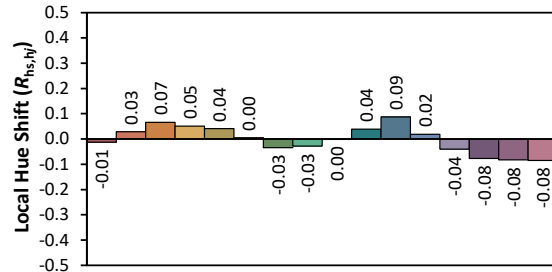
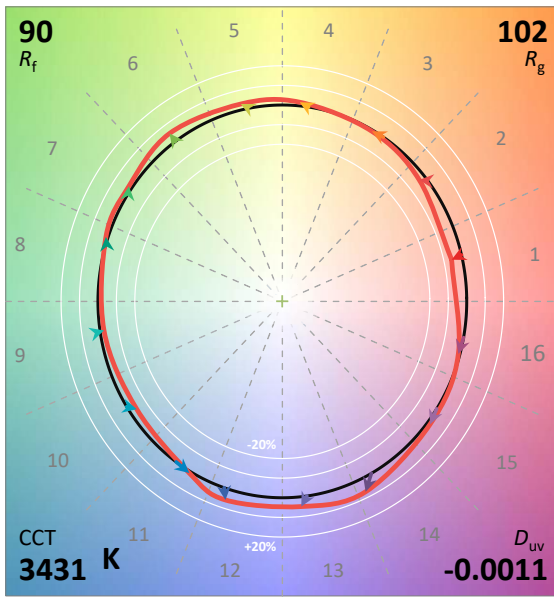
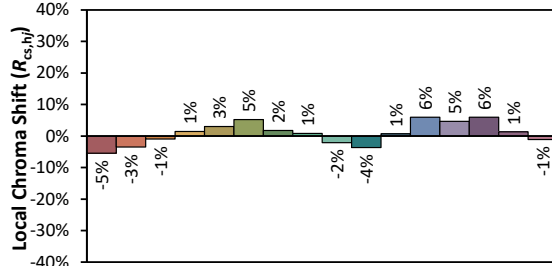
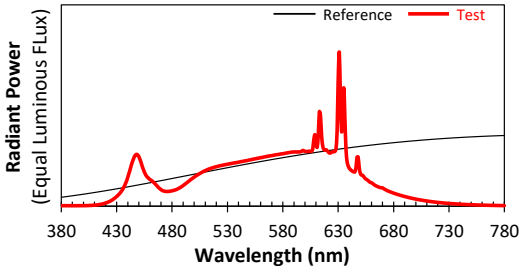
# ANSI/IES TM-30-18 Color Rendition Report

Date: 2021-07-29

Manufacturer: BARTCO LIGHTING INC

Model:

BSS746-48-35-ND-R-I-C4-SN-AW



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x **0.4080**  
 y **0.3897**  
 u' **0.2379**  
 v' **0.5112**

CIE 13.3-1995 (CRI)	
$R_a$	92
$R_9$	60

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.

