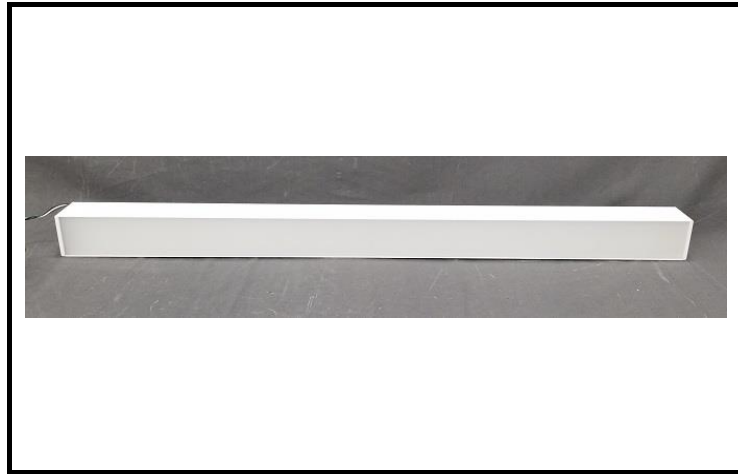




## BSS214-4-35-ND-R-SM-SN-AW

**Luminaire Description:** White rectangular metal housing with plastic diffuse lens  
**Lamp:** 96 White LEDs  
**Mounting:** Surface – Ceiling  
**Ballast/Driver:** One (1) Philips Advance XI040C110V054BST1

Luminaire



### Luminaire Characteristics

Luminous Length: 44.50 in.  
Luminous Width: 3.000 in.

### Summary of Results

#### Integrating Sphere

Luminous Flux: 2695 Lumens  
Efficacy: 93.51 lm/w  
CCT: 3540 K  
CRI (Ra): 93.9

#### Distribution

Total Luminaire Output: 2690 Lumens  
Luminaire Efficacy: 93.4 lm/w  
Maximum Candela: 1060 Candela

#### Electrical Data at 120 VAC

Test Temperature: 25.5 °C  
Voltage: 120.0 VAC  
Current: 0.2414 A  
Power: 28.82 W  
Power Factor: 0.994  
Frequency: 60 Hz  
Current THD: 8.71 %



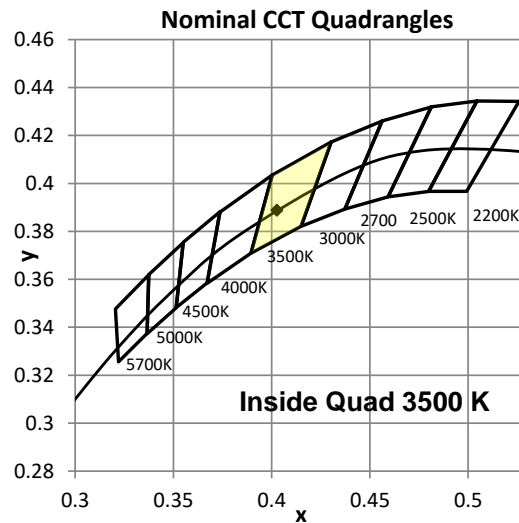
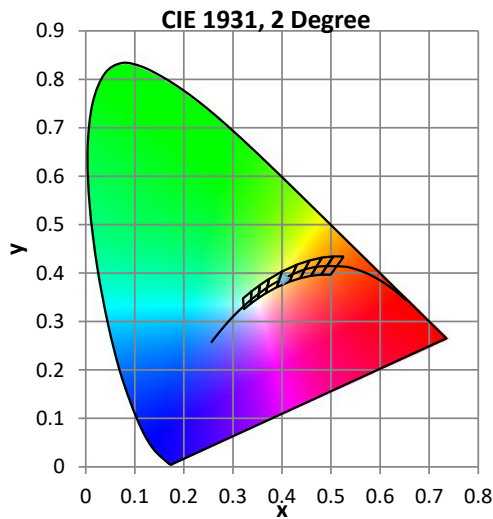
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.5 °C	120.0 VAC	0.2414 A	28.82 W	0.994	60 Hz	8.71 %

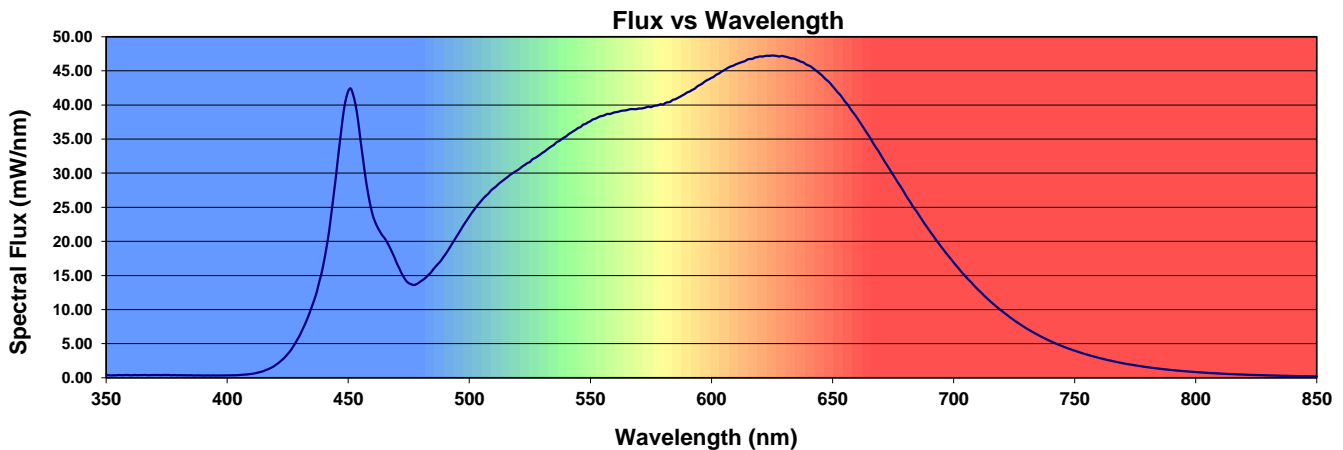
### Summary of Results

<b>Total Output:</b>	2695 Lumens	<b>Chromaticity (x):</b>	0.4027
<b>Efficacy:</b>	93.5 lm/w	<b>Chromaticity (y):</b>	0.3888
<b>CCT:</b>	3540 K	<b>Chromaticity (u'):</b>	0.2348
<b>CRI (Ra):</b>	93.9	<b>Chromaticity (v'):</b>	0.5101
<b>CRI (R9):</b>	75.4	<b>TM-30 Rf:</b>	92.2
<b>Peak Wavelength:</b>	625 nm	<b>TM-30 Rg:</b>	100.6
<b>Dominant Wavelength:</b>	581 nm	<b>Duv:</b>	0.0004
<b>S/P Ratio:</b>	1.62		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93.9	94.7	95.5	94.2	94.6	93.7	92.7	95.9	90.4	75.4	87.9	94.2	76.4	94.8	96.2	93.4





## Distribution - Goniophotometer

### Distribution Test Conditions

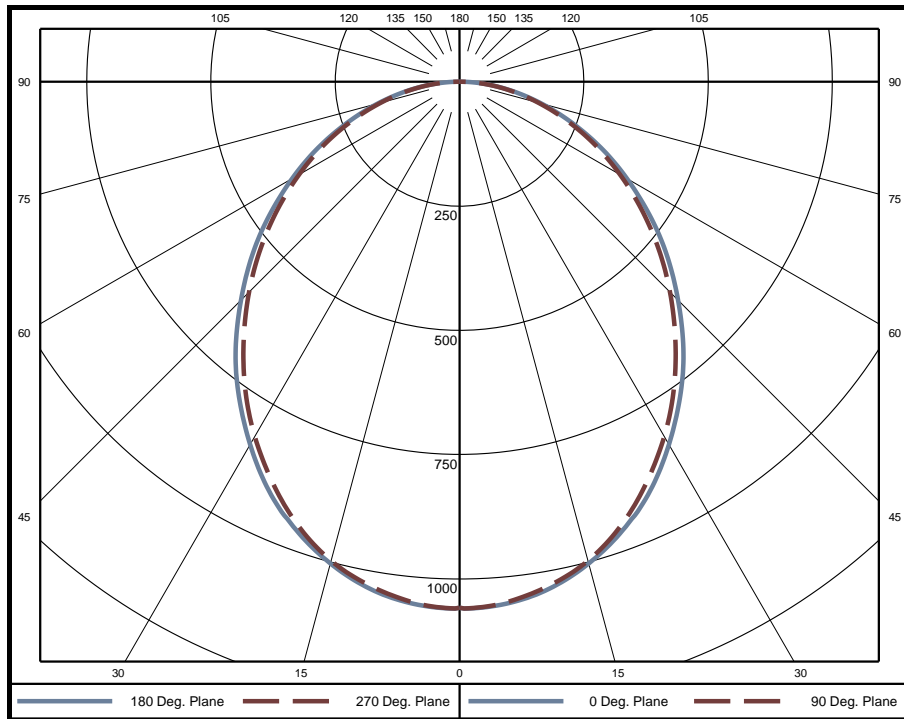
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.1 VAC	0.2412 A	28.80 W	0.994	60 Hz	8.74 %

### Summary of Results

**Spacing Criteria**  
 0-180: 1.19  
 90-270: 1.17

**Total Lumen Output:** 2690 Lumens  
**Luminaire Efficacy:** 93.4 lm/w  
**Maximum Candela:** 1060 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	25.2	0.9%	60-65	167.5	6.2%	120-125	0	0.0%
5-10	74.5	2.8%	65-70	137.4	5.1%	125-130	0	0.0%
10-15	120.4	4.5%	70-75	105.4	3.9%	130-135	0	0.0%
15-20	160.9	6.0%	75-80	73.1	2.7%	135-140	0	0.0%
20-25	194.1	7.2%	80-85	42.3	1.6%	140-145	0	0.0%
25-30	218.8	8.1%	85-90	13.7	0.5%	145-150	0	0.0%
30-35	234.7	8.7%	90-95	0	0.0%	150-155	0	0.0%
35-40	241.7	9.0%	95-100	0	0.0%	155-160	0	0.0%
40-45	240.2	8.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	231.3	8.6%	105-110	0	0.0%	165-170	0	0.0%
50-55	215.5	8.0%	110-115	0	0.0%	170-175	0	0.0%
55-60	193.8	7.2%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1270	47.2%
0-60	2151	80.0%
0-90	2691	100.0%
90-180	0	0.0%



**Candela Tabulation**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	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	1058	1058	1058	1058	1058	1058	1058	1058	1058	1058	1058	1058	1058	1058	1058	1058
5	1054	1048	1051	1051	1052	1051	1051	1048	1054	1048	1051	1051	1052	1051	1051	1048
10	1036	1029	1031	1030	1030	1030	1031	1029	1036	1029	1031	1030	1030	1030	1031	1029
15	1003	997	999	998	998	998	999	997	1003	997	999	998	998	998	999	997
20	960	954	955	951	950	951	955	954	960	954	955	951	950	951	955	954
25	907	901	898	892	889	892	898	901	907	901	898	892	889	892	898	901
30	842	838	833	826	823	826	833	838	842	838	833	826	823	826	833	838
35	773	769	762	755	752	755	762	769	773	769	762	755	752	755	762	769
40	700	696	688	679	675	679	688	696	700	696	688	679	675	679	688	696
45	622	620	612	602	598	602	612	620	622	620	612	602	598	602	612	620
50	545	543	536	526	522	526	536	543	545	543	536	526	522	526	536	543
55	466	465	459	450	446	450	459	465	466	465	459	450	446	450	459	465
60	388	389	383	375	372	375	383	389	388	389	383	375	372	375	383	389
65	313	313	309	303	301	303	309	313	313	313	309	303	301	303	309	313
70	240	240	237	232	230	232	237	240	240	240	237	232	230	232	237	240
75	171	171	168	166	165	166	168	171	171	171	168	166	165	166	168	171
80	108	108	106	105	104	105	106	108	108	108	106	105	104	105	106	108
85	52	51	51	50	50	50	51	51	52	51	51	50	50	50	51	51
90	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
100	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
110	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
120	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
130	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
140	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
150	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
160	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
170	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
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	12280	12280	12280
45	10210	10050	9824
55	9433	9281	9025
65	8609	8478	8260
75	7669	7542	7383
85	6873	6730	6616

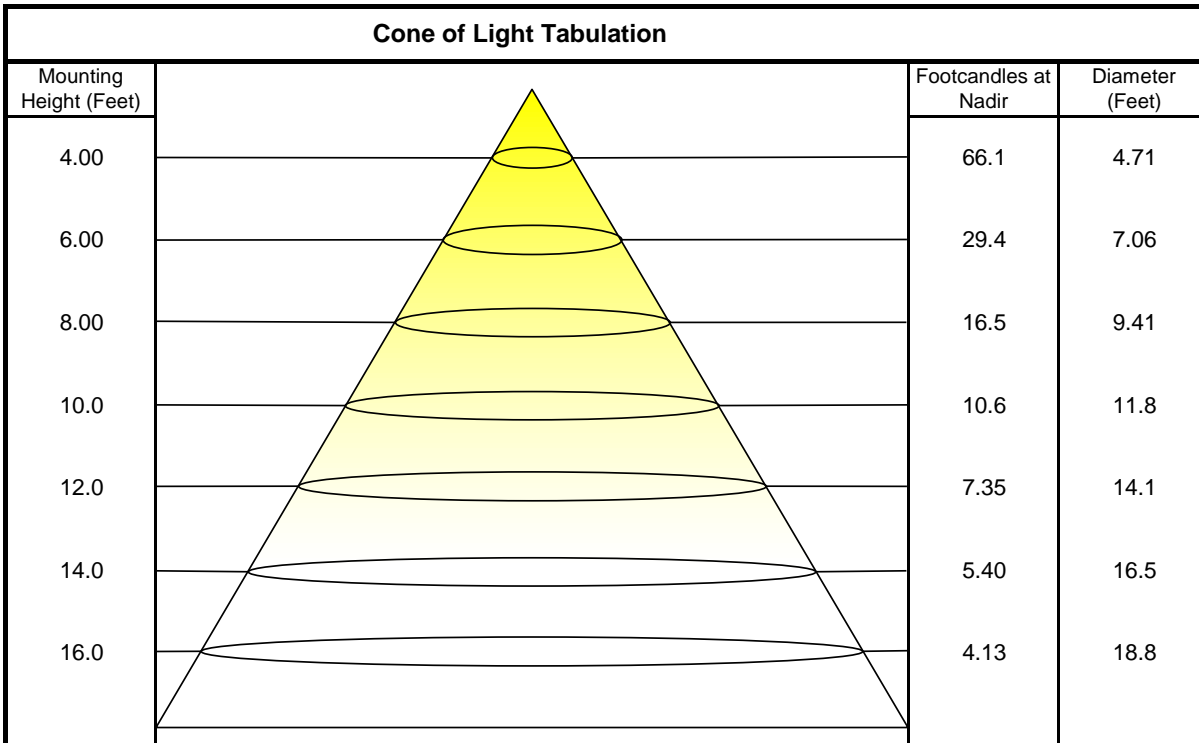


### Coefficients of Utilization - Zonal Cavity Method

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

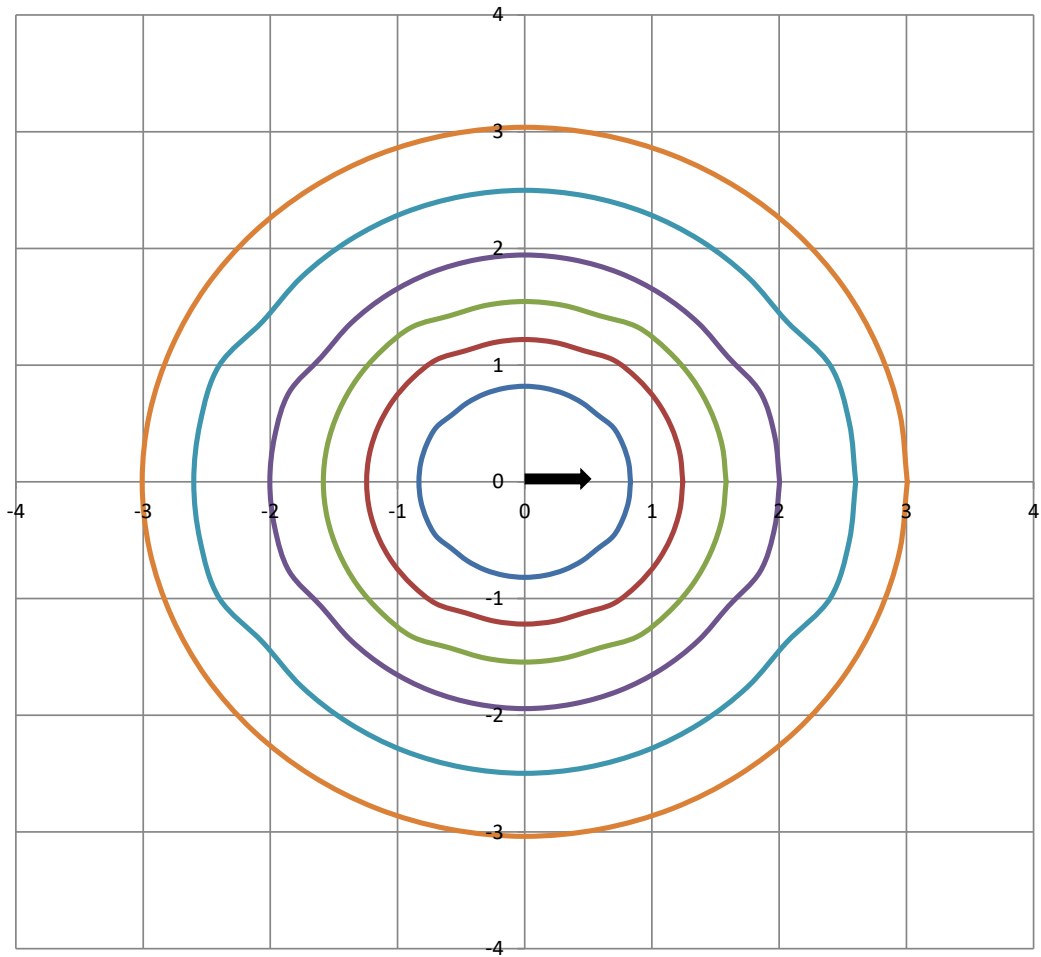
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1058 Candela
Central Cone Intensity:	1056 Candela
Beam Flux:	1758.3 Lumens
Beam Angle (0-180):	102.1 Degrees
Beam Angle (90-270):	99.1 Degrees
Field Angle (0-180):	160.4 Degrees
Field Angle (90-270):	159.7 Degrees





# ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

