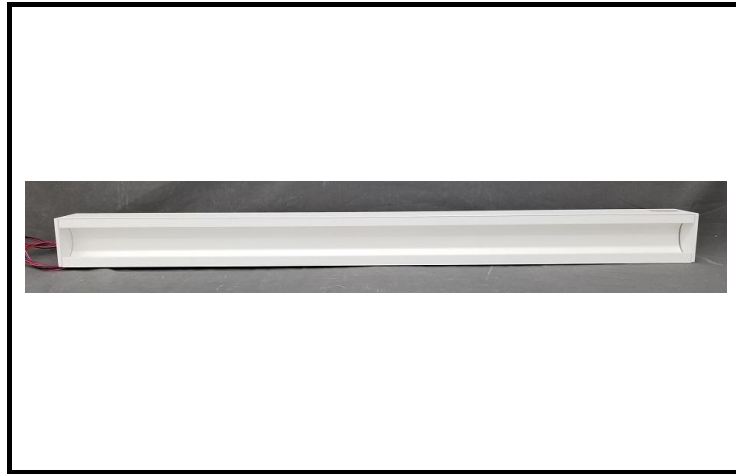




## BHR300-4-35-ND-R-SM-SN-1-AW

**Luminaire Description:** White rectangular metal housing with white plastic reflector  
**Lamp:** 312 White LEDs  
**Mounting:** Surface – Ceiling  
**Ballast/Driver:** One (1) Philips Advance XI040C110V054BST1

Luminaire



### Luminaire Characteristics

Luminous Length: 44.25 in.  
Luminous Width: 2.000 in.

### Summary of Results

#### Integrating Sphere

Luminous Flux: 3336 Lumens  
Efficacy: 100.46 lm/w  
CCT: 3453 K  
CRI (Ra): 96.5

#### Distribution

Total Luminaire Output: 3251 Lumens  
Luminaire Efficacy: 97.9 lm/w  
Maximum Candela: 1002 Candela

#### Electrical Data at 120 VAC

Test Temperature: 25.5 °C  
Voltage: 120.1 VAC  
Current: 0.2778 A  
Power: 33.21 W  
Power Factor: 0.995  
Frequency: 60 Hz  
Current THD: 7.84 %



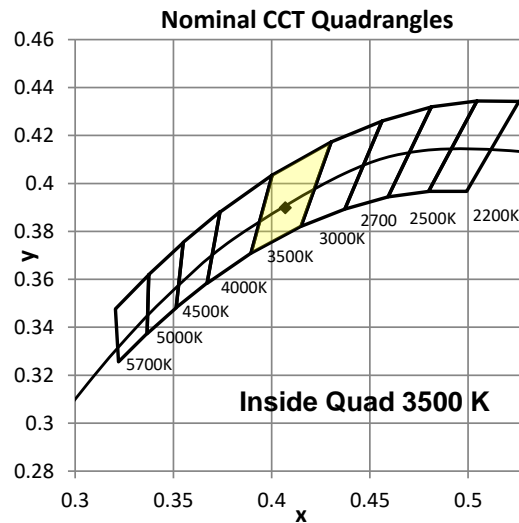
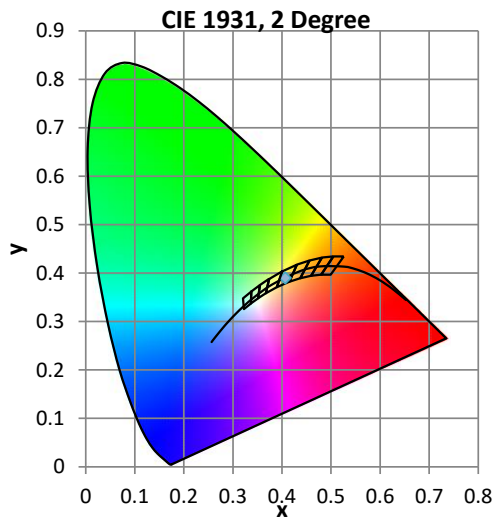
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.5 °C	120.1 VAC	0.2778 A	33.21 W	0.995	60 Hz	7.84 %

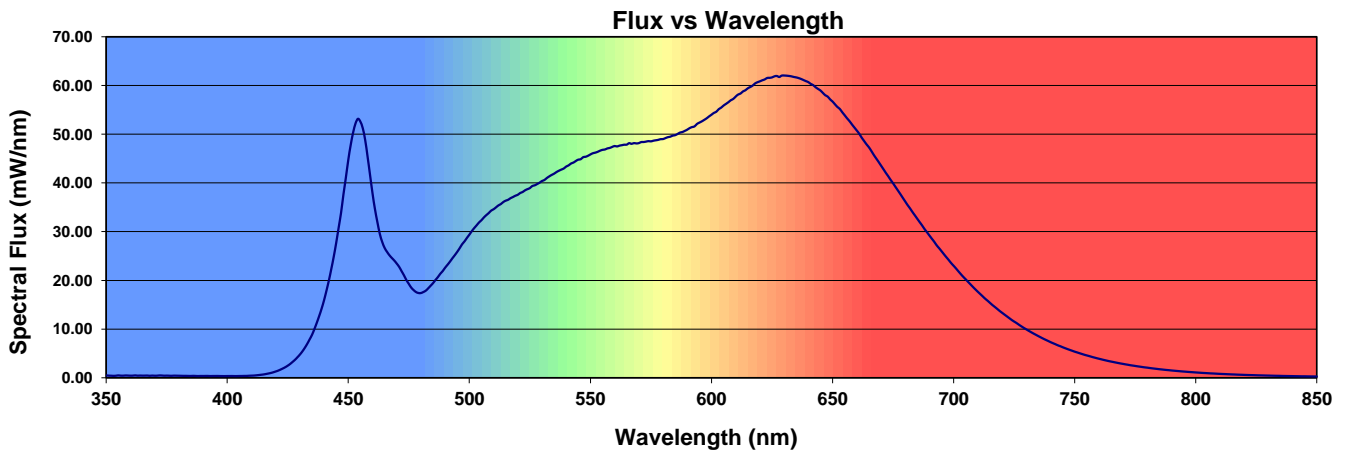
### Summary of Results

<b>Total Output:</b>	3336 Lumens	<b>Chromaticity (x):</b>	0.4070
<b>Efficacy:</b>	100.5 lm/w	<b>Chromaticity (y):</b>	0.3899
<b>CCT:</b>	3453 K	<b>Chromaticity (u'):</b>	0.2372
<b>CRI (Ra):</b>	96.5	<b>Chromaticity (v'):</b>	0.5112
<b>CRI (R9):</b>	86.7	<b>TM-30 Rf:</b>	92.9
<b>Peak Wavelength:</b>	630 nm	<b>TM-30 Rg:</b>	100.4
<b>Dominant Wavelength:</b>	581 nm	<b>Duv:</b>	0.0011
<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
96.5	97.7	97.8	95.5	97.1	96.5	95.3	97.6	94.7	86.7	93.1	96.6	77.0	97.9	96.8	96.7





## Distribution - Goniophotometer

### Distribution Test Conditions

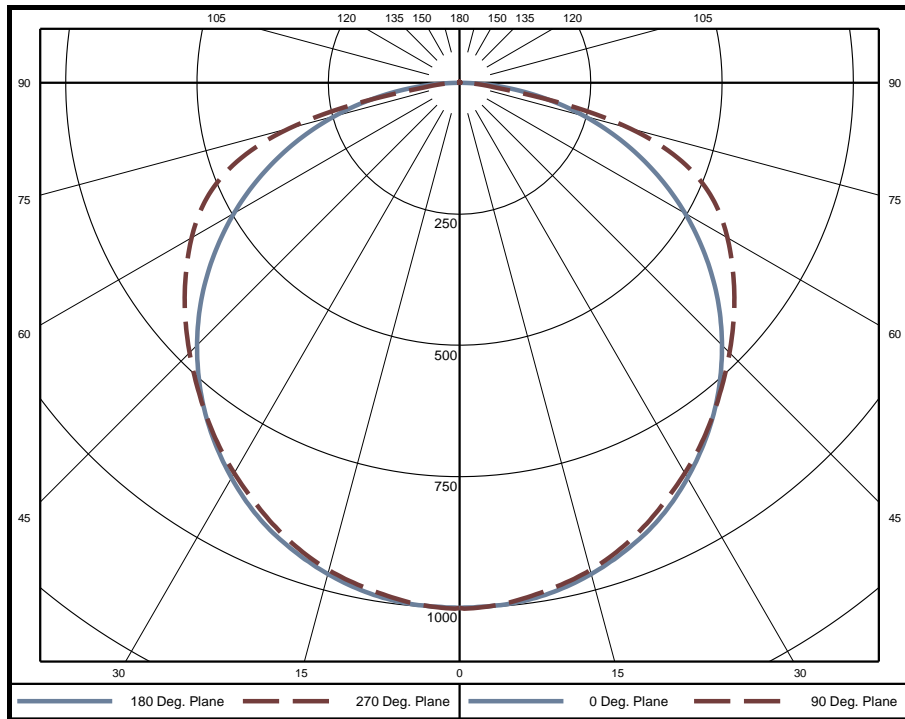
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.0 °C	120.1 VAC	0.2780 A	33.21 W	0.995	50 Hz	8.38 %

### Summary of Results

**Spacing Criteria**  
 0-180: 1.29  
 90-270: 1.28

**Total Lumen Output:** 3251 Lumens  
**Luminaire Efficacy:** 97.9 lm/w  
**Maximum Candela:** 1002 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	23.9	0.7%	60-65	246.2	7.6%	120-125	0	0.0%
5-10	70.8	2.2%	65-70	223.2	6.9%	125-130	0	0.0%
10-15	115.4	3.5%	70-75	189.6	5.8%	130-135	0	0.0%
15-20	156.5	4.8%	75-80	136.7	4.2%	135-140	0	0.0%
20-25	192.7	5.9%	80-85	64.5	2.0%	140-145	0	0.0%
25-30	222.9	6.9%	85-90	14.3	0.4%	145-150	0	0.0%
30-35	246.7	7.6%	90-95	0	0.0%	150-155	0	0.0%
35-40	263.5	8.1%	95-100	0	0.0%	155-160	0	0.0%
40-45	273.3	8.4%	100-105	0	0.0%	160-165	0	0.0%
45-50	276.3	8.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	272.5	8.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	262.3	8.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1292	39.8%
0-60	2377	73.1%
0-90	3251	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5	997	994	995	995	995	995	995	994	997	994	995	995	995	995	995	994
10	987	983	983	981	980	981	983	983	987	983	983	981	980	981	983	983
15	969	964	962	962	961	962	962	964	969	964	962	962	961	962	962	964
20	943	938	935	934	933	934	935	938	943	938	935	934	933	934	935	938
25	910	904	900	898	897	898	900	904	910	904	900	898	897	898	900	904
30	869	863	858	858	858	858	858	863	869	863	858	858	858	858	858	863
35	821	814	812	814	817	814	812	814	821	814	812	814	817	814	812	814
40	767	761	761	767	772	767	761	761	767	761	761	767	772	767	761	761
45	707	702	708	720	727	720	708	702	707	702	708	720	727	720	708	702
50	642	638	652	673	682	673	652	638	642	638	652	673	682	673	652	638
55	571	569	594	624	636	624	594	569	571	569	594	624	636	624	594	569
60	495	497	536	574	589	574	536	497	495	497	536	574	589	574	536	497
65	416	424	479	522	535	522	479	424	416	424	479	522	535	522	479	424
70	333	352	419	453	460	453	419	352	333	352	419	453	460	453	419	352
75	247	282	344	346	336	346	344	282	247	282	344	346	336	346	344	282
80	160	215	218	164	141	164	218	215	160	215	218	164	141	164	218	215
85	74	103	47	44	43	44	47	103	74	103	47	44	43	44	47	103
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)

	0	45	90
0	17520	17520	17520
45	17510	17530	18010
55	17430	18150	19430
65	17240	19830	22180
75	16730	23280	22760
85	14830	9422	8645

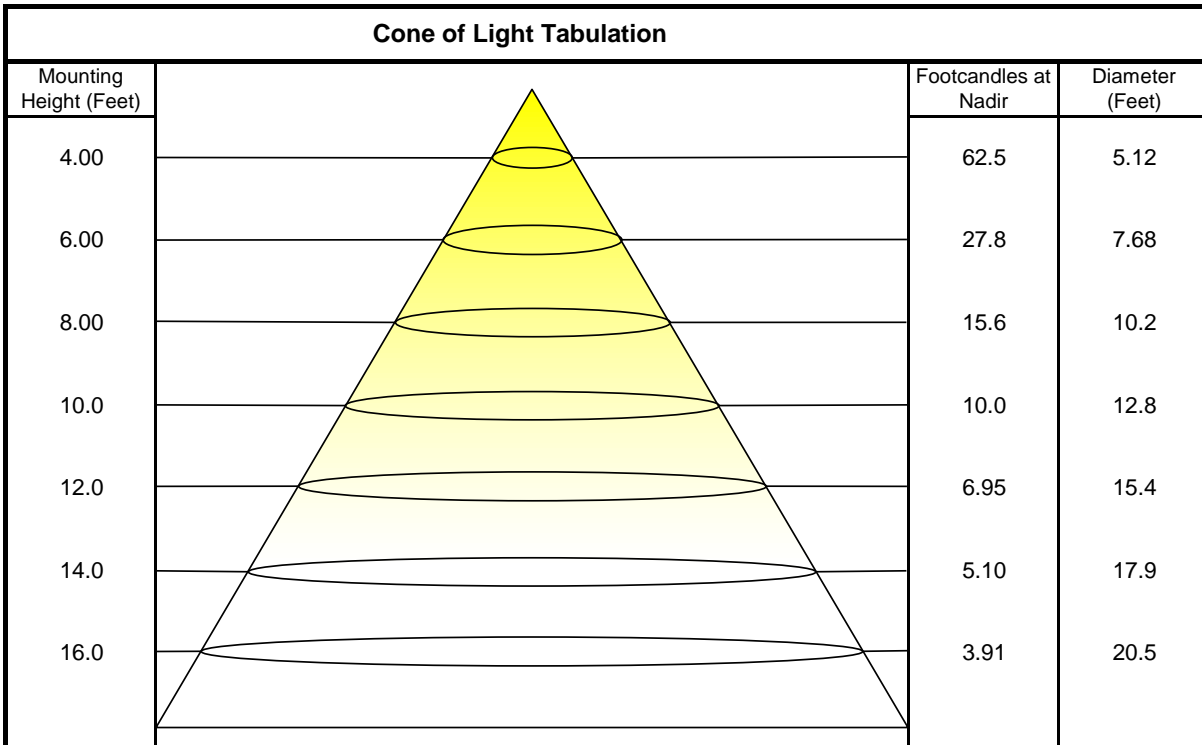


### Coefficients of Utilization - Zonal Cavity Method

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	108	102	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	94	86	79	74	83	77	72	79	74	70	76	72	69	66
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	67	61	57	55
4	80	67	58	51	78	66	57	51	64	56	50	61	55	49	59	53	48	46
5	74	60	50	43	71	59	50	43	57	49	43	55	48	42	53	47	42	40
6	68	54	44	38	66	53	44	37	51	43	37	49	42	37	48	41	36	34
7	63	49	39	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30
8	58	44	35	29	57	44	35	29	42	35	29	41	34	29	40	33	29	27
9	54	41	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24
10	51	37	29	24	50	37	29	24	36	29	24	35	28	23	34	28	23	22

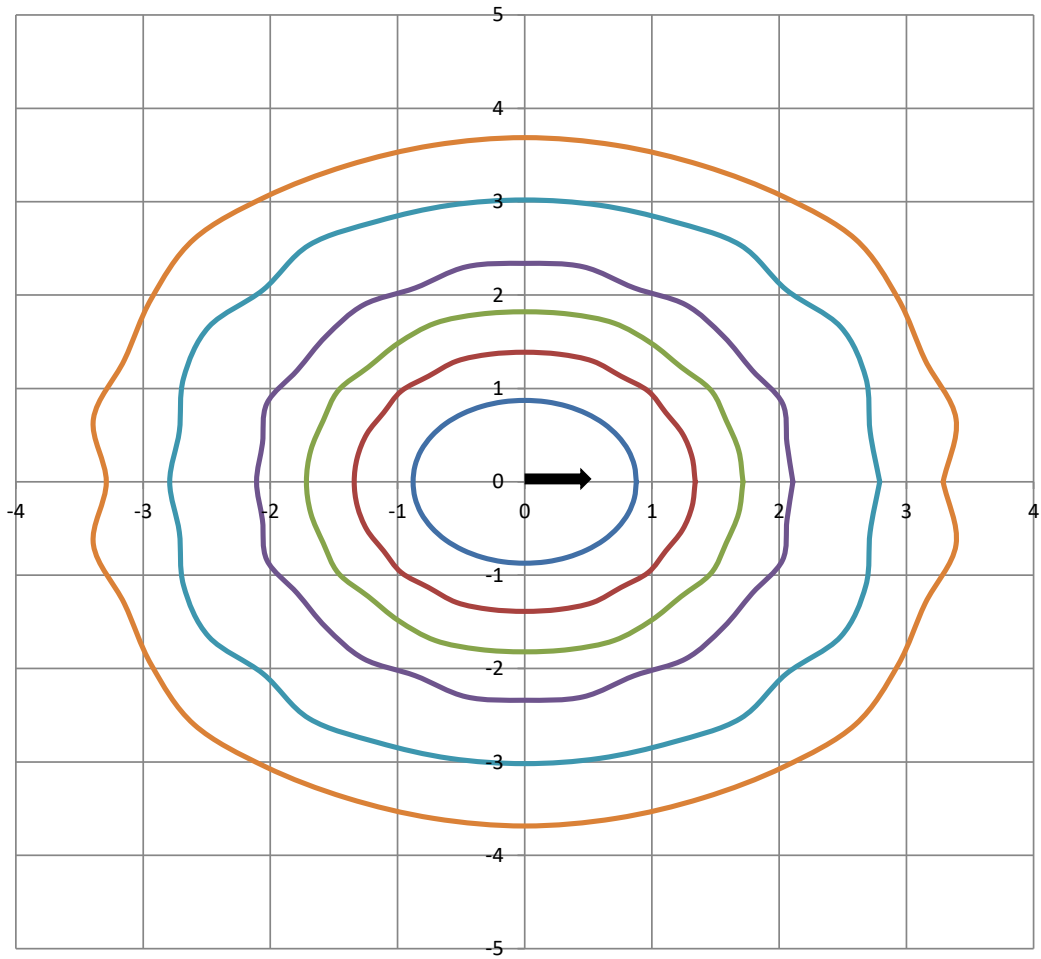
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1000 Candela
Central Cone Intensity:	998 Candela
Beam Flux:	2550.8 Lumens
Beam Angle (0-180):	119.4 Degrees
Beam Angle (90-270):	135.1 Degrees
Field Angle (0-180):	166.9 Degrees
Field Angle (90-270):	162.3 Degrees





# ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

