



## BHR300-4-35-ND-L-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: 2511 Lumens  
Efficacy: 100.07 lm/w  
CCT: 3453 K  
CRI (Ra): 96.6

#### Distribution

Total Luminaire Output: 2450 Lumens  
Luminaire Efficacy: 97.4 lm/w  
Maximum Candela: 755 Candela

#### Electrical Data at 120 VAC

Test Temperature: 24.7 °C  
Voltage: 120.0 VAC  
Current: 0.2103 A  
Power: 25.09 W  
Power Factor: 0.994  
Frequency: 60 Hz  
Current THD: 8.66 %



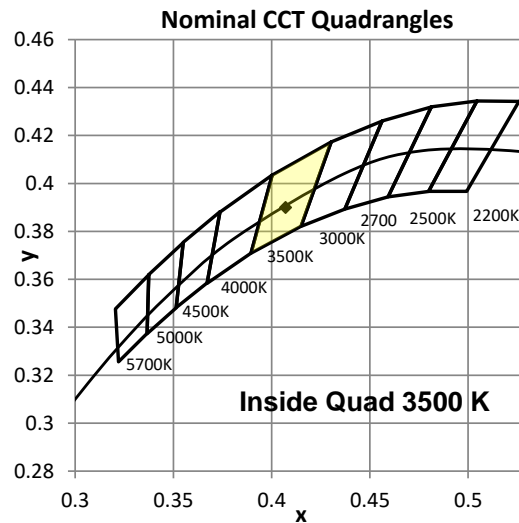
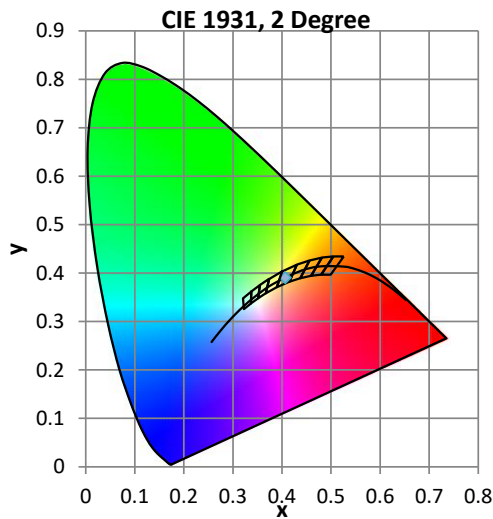
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	120.0 VAC	0.2103 A	25.09 W	0.994	60 Hz	8.66 %

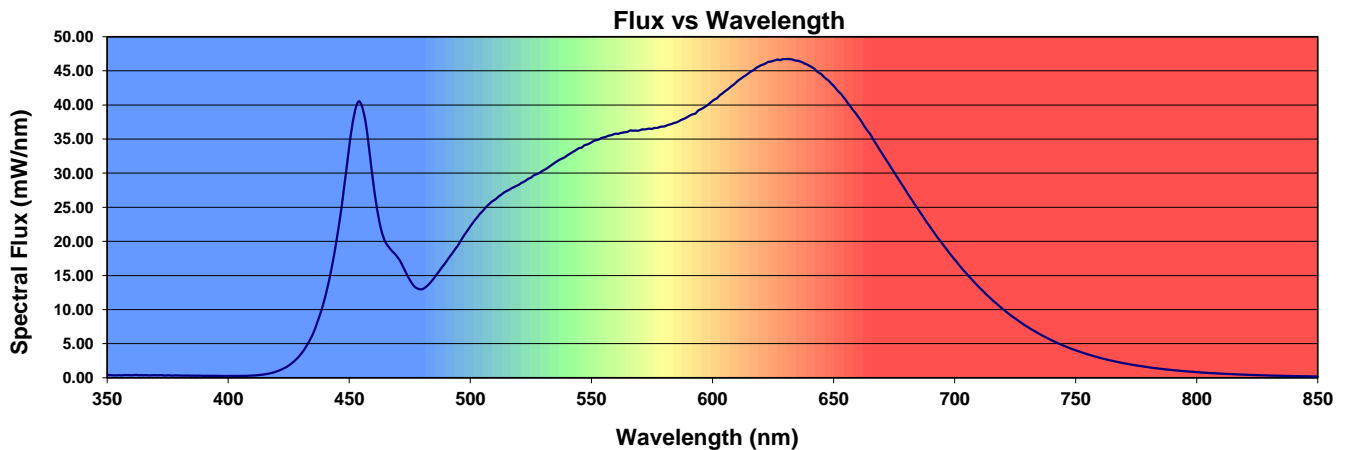
### Summary of Results

<b>Total Output:</b>	2511 Lumens	<b>Chromaticity (x):</b>	0.4071
<b>Efficacy:</b>	100.1 lm/w	<b>Chromaticity (y):</b>	0.3900
<b>CCT:</b>	3453 K	<b>Chromaticity (u'):</b>	0.2372
<b>CRI (Ra):</b>	96.6	<b>Chromaticity (v'):</b>	0.5112
<b>CRI (R9):</b>	87.2	<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>	0.0010
<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
96.6	97.8	97.8	95.5	97.2	96.5	95.3	97.7	94.9	87.2	93.1	96.6	76.8	98.0	96.8	96.8





## Distribution - Goniophotometer

### Distribution Test Conditions

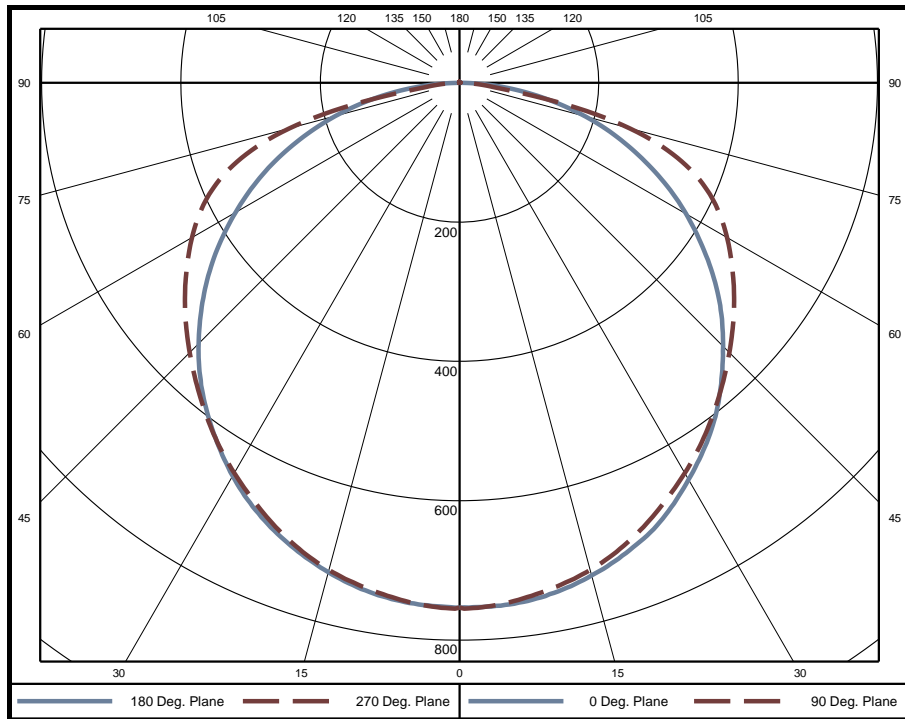
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.0 °C	120.1 VAC	0.2106 A	25.15 W	0.994	50 Hz	8.96 %

### Summary of Results

**Spacing Criteria**  
 0-180: 1.30  
 90-270: 1.28

**Total Lumen Output:** 2450 Lumens  
**Luminaire Efficacy:** 97.4 lm/w  
**Maximum Candela:** 755 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	18.0	0.7%	60-65	185.5	7.6%	120-125	0	0.0%
5-10	53.3	2.2%	65-70	168.1	6.9%	125-130	0	0.0%
10-15	87.0	3.6%	70-75	142.7	5.8%	130-135	0	0.0%
15-20	118.0	4.8%	75-80	102.8	4.2%	135-140	0	0.0%
20-25	145.3	5.9%	80-85	48.5	2.0%	140-145	0	0.0%
25-30	168.0	6.9%	85-90	10.7	0.4%	145-150	0	0.0%
30-35	185.9	7.6%	90-95	0	0.0%	150-155	0	0.0%
35-40	198.6	8.1%	95-100	0	0.0%	155-160	0	0.0%
40-45	205.9	8.4%	100-105	0	0.0%	160-165	0	0.0%
45-50	208.2	8.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	205.4	8.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	197.6	8.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	974	39.8%
0-60	1791	73.1%
0-90	2450	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	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5	753.5
5	752.4	749.0	749.9	749.6	750.2	750.1	750.1	749.3	750.4	749.3	750.1	750.1	750.2	749.6	749.9	749.0
10	745.4	739.8	740.2	739.0	738.8	739.6	741.0	741.4	742.4	741.4	741.0	739.6	738.8	739.0	740.2	739.8
15	732.2	725.5	724.9	724.9	724.2	724.6	725.9	727.1	727.4	727.1	725.9	724.6	724.2	724.9	724.9	725.5
20	714.0	706.0	705.4	704.2	702.9	703.5	704.8	707.0	707.4	707.0	704.8	703.5	702.9	704.2	705.4	706.0
25	690.3	680.5	678.1	676.7	676.0	676.8	678.5	682.3	682.2	682.3	678.5	676.8	676.0	676.7	678.1	680.5
30	657.7	648.3	645.7	645.9	646.9	647.1	647.6	651.2	651.5	651.2	647.6	647.1	646.9	645.9	645.7	648.3
35	622.9	611.8	611.2	614.0	615.6	613.7	612.4	614.9	614.8	614.9	612.4	613.7	615.6	614.0	611.2	611.8
40	581.4	572.1	573.5	578.8	581.6	578.5	573.6	574.1	575.0	574.1	573.6	578.5	581.6	578.8	573.5	572.1
45	535.3	527.0	533.4	543.1	547.9	542.1	533.6	530.2	529.5	530.2	533.6	542.1	547.9	543.1	533.4	527.0
50	486.9	477.9	490.8	507.4	514.1	506.6	492.0	482.6	479.8	482.6	492.0	506.6	514.1	507.4	490.8	477.9
55	432.1	426.1	446.8	469.6	479.0	470.2	449.5	431.5	427.6	431.5	449.5	470.2	479.0	469.6	446.8	426.1
60	375.3	371.8	403.1	432.3	443.3	433.0	405.6	377.5	370.6	377.5	405.6	433.0	443.3	432.3	403.1	371.8
65	315.0	317.1	360.0	392.5	402.8	393.3	361.7	322.2	312.1	322.2	361.7	393.3	402.8	392.5	360.0	317.1
70	252.0	262.7	314.4	340.5	345.7	341.7	316.1	267.5	249.1	267.5	316.1	341.7	345.7	340.5	314.4	262.7
75	187.6	210.0	257.7	258.6	253.2	261.4	260.4	214.5	185.0	214.5	260.4	261.4	253.2	258.6	257.7	210.0
80	120.4	159.4	160.6	120.9	107.4	126.0	166.5	163.7	119.3	163.7	166.5	126.0	107.4	120.9	160.6	159.4
85	56.1	72.0	34.5	32.6	32.6	33.7	36.3	81.2	54.1	81.2	36.3	33.7	32.6	32.6	34.5	72.0
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/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

	0	45	90
0	13200	13200	13200
45	13260	13210	13570
55	13190	13640	14630
65	13050	14920	16690
75	12700	17440	17130
85	11270	6924	6541

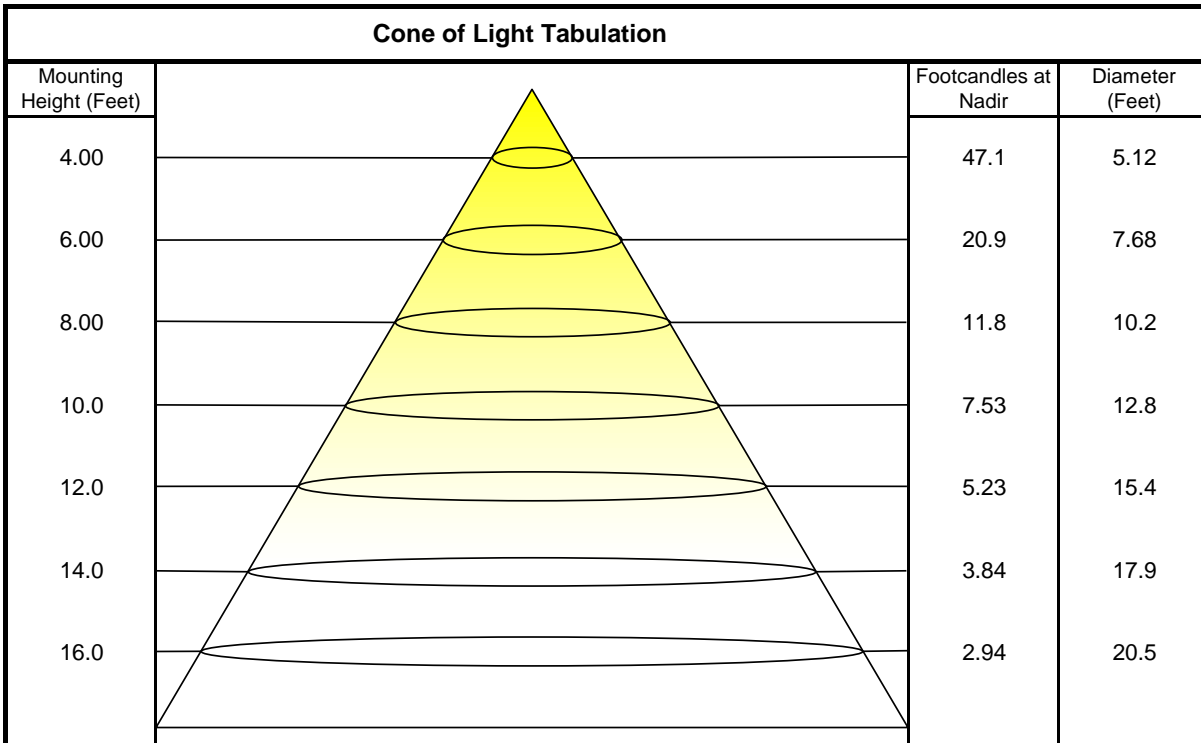


### Coefficients of Utilization - Zonal Cavity Method

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	38	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	24	34	28	23	22

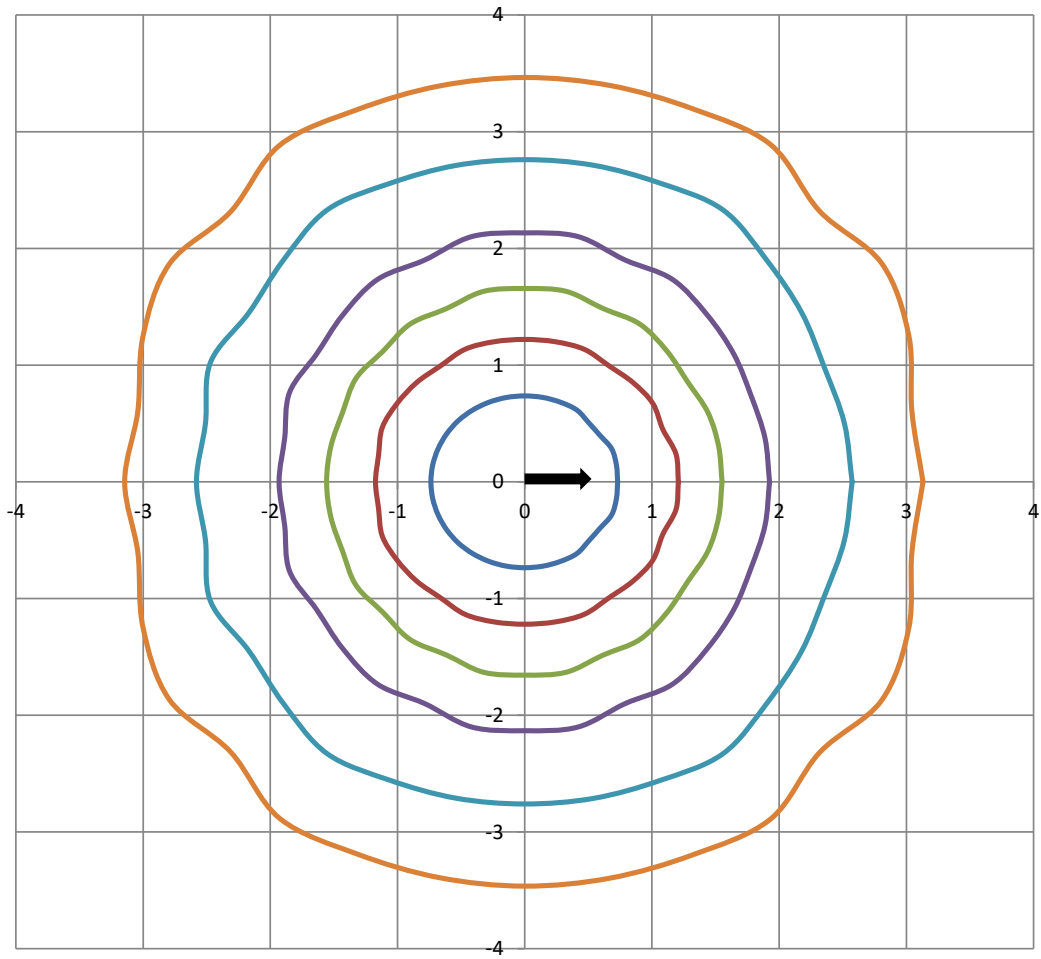
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	753.5 Candela
Central Cone Intensity:	752 Candela
Beam Flux:	1922.8 Lumens
Beam Angle (0-180):	119.4 Degrees
Beam Angle (90-270):	135.1 Degrees
Field Angle (0-180):	166.8 Degrees
Field Angle (90-270):	162.4 Degrees





# ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

