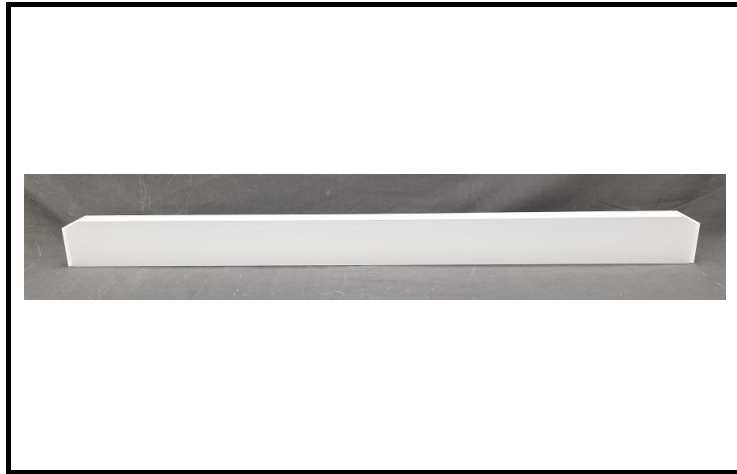




BSW215-4-35-ID-H-SM-SN-AW

Luminaire Description: White rectangular metal housing with diffuse rectangular plastic lens
Lamp: 192 White LEDs
Mounting: Surface – Ceiling
Ballast/Driver: One (1) Amperor ANP101-24P1-277-2500L-VD-1

Luminaire



Luminaire Characteristics

Luminous Length: 48.00 in.
Luminous Width: 3.000 in.
Luminous Height: 2.00 in.

Summary of Results

Integrating Sphere

Luminous Flux: 4765 Lumens
Efficacy: 119.41 lm/w
CCT: 3659 K
CRI (Ra): 84.2

Distribution

Total Luminaire Output: 4709 Lumens
Luminaire Efficacy: 119.1 lm/w
Maximum Candela: 1359 Candela

Electrical Data at 120 VAC

Test Temperature: 25.6 °C
Voltage: 120.0 VAC
Current: 0.3364 A
Power: 39.90 W
Power Factor: 0.989
Frequency: 60 Hz
Current THD: 7.78 %



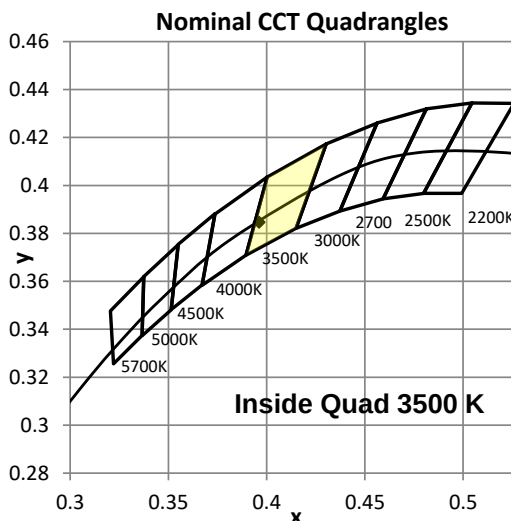
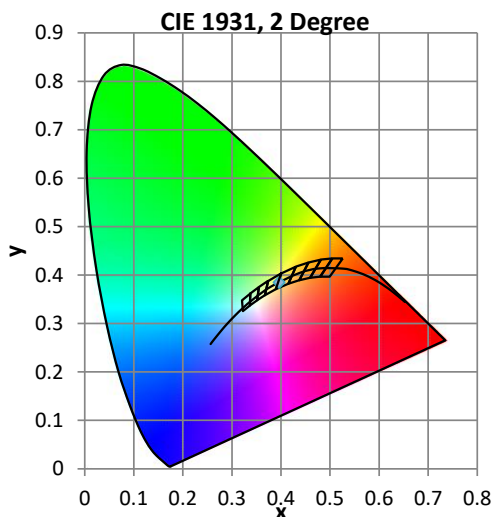
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.6 °C	120.0 VAC	0.3364 A	39.90 W	0.989	60 Hz	7.78 %

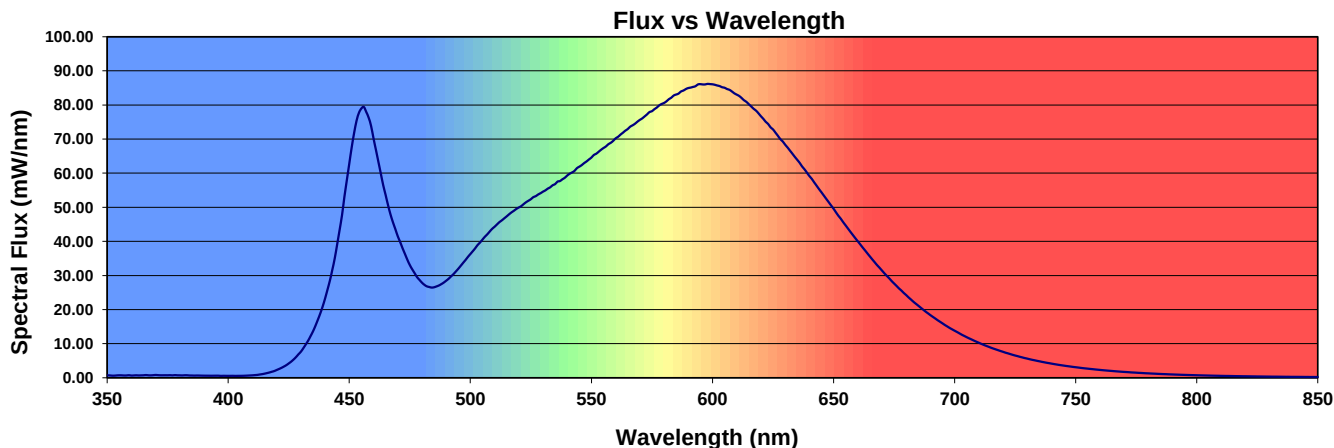
Summary of Results

Total Output:	4765 Lumens	Chromaticity (x):	0.3961
Efficacy:	119.4 lm/w	Chromaticity (y):	0.3846
CCT:	3659 K	Chromaticity (u'):	0.2322
CRI (Ra):	84.2	Chromaticity (v'):	0.5073
CRI (R9):	16.4	TM-30 Rf:	84.2
Peak Wavelength:	598 nm	TM-30 Rg:	94
Dominant Wavelength:	581 nm	Duv:	0.0012
S/P Ratio:	1.62		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
84.2	83.0	92.4	96.0	80.8	82.6	88.7	85.0	65.0	16.4	81.0	79.2	64.9	85.7	98.5	77.5





Distribution - Goniophotometer

Distribution Test Conditions

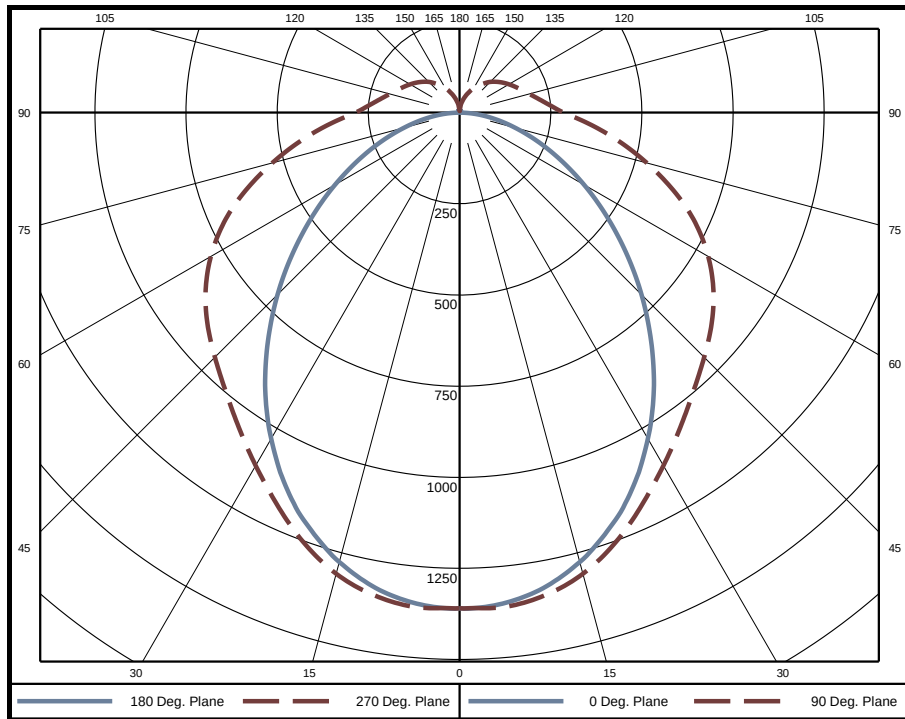
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	120.1 VAC	0.3330 A	39.54 W	0.989	60 Hz	7.69 %

Summary of Results

Spacing Criteria
 0-180: 1.14
 90-270: 1.23

Total Lumen Output: 4709 Lumens
 Luminaire Efficacy: 119.1 lm/w
 Maximum Candela: 1359 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	32.4	0.7%	60-65	276.2	5.9%	120-125	44.0	0.9%
5-10	96.1	2.0%	65-70	248.3	5.3%	125-130	37.2	0.8%
10-15	155.9	3.3%	70-75	215.6	4.6%	130-135	30.7	0.7%
15-20	208.5	4.4%	75-80	181.2	3.8%	135-140	24.6	0.5%
20-25	251.6	5.3%	80-85	147.0	3.1%	140-145	19.1	0.4%
25-30	284.0	6.0%	85-90	114.4	2.4%	145-150	14.1	0.3%
30-35	306.2	6.5%	90-95	93.5	2.0%	150-155	9.9	0.2%
35-40	319.0	6.8%	95-100	82.7	1.8%	155-160	6.5	0.1%
40-45	323.8	6.9%	100-105	73.4	1.6%	160-165	3.9	0.1%
45-50	321.6	6.8%	105-110	65.2	1.4%	165-170	2.0	0.0%
50-55	313.0	6.6%	110-115	57.8	1.2%	170-175	0.7	0.0%
55-60	297.8	6.3%	115-120	50.7	1.1%	175-180	0.1	0.0%

Zone	Lumens	% of Luminaire
0-40	1654	35.1%
0-60	2910	61.8%
0-90	4093	86.9%
90-180	616	13.1%



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	1356	1356	1356	1356	1356	1356	1356	1356	1356	1356	1356	1356	1356	1356	1356	1356
5	1348	1346	1354	1357	1358	1357	1354	1346	1348	1346	1354	1357	1358	1357	1354	1346
10	1321	1325	1336	1340	1341	1340	1336	1325	1321	1325	1336	1340	1341	1340	1336	1325
15	1272	1283	1300	1303	1306	1303	1300	1283	1272	1283	1300	1303	1306	1303	1300	1283
20	1206	1225	1242	1248	1250	1248	1242	1225	1206	1225	1242	1248	1250	1248	1242	1225
25	1126	1151	1170	1179	1182	1179	1170	1151	1126	1151	1170	1179	1182	1179	1170	1151
30	1030	1062	1089	1106	1115	1106	1089	1062	1030	1062	1089	1106	1115	1106	1089	1062
35	926	966	1004	1036	1051	1036	1004	966	926	966	1004	1036	1051	1036	1004	966
40	814	866	921	970	994	970	921	866	814	866	921	970	994	970	921	866
45	703	766	840	911	945	911	840	766	703	766	840	911	945	911	840	766
50	593	668	762	857	899	857	762	668	593	668	762	857	899	857	762	668
55	488	575	688	800	847	800	688	575	488	575	688	800	847	800	688	575
60	390	487	616	737	784	737	616	487	390	487	616	737	784	737	616	487
65	302	404	543	666	710	666	543	404	302	404	543	666	710	666	543	404
70	222	329	469	585	621	585	469	329	222	329	469	585	621	585	469	329
75	152	261	398	500	528	500	398	261	152	261	398	500	528	500	398	261
80	93	200	331	418	438	418	331	200	93	200	331	418	438	418	331	200
85	43	147	269	341	354	341	269	147	43	147	269	341	354	341	269	147
90	2	102	214	273	283	273	214	102	2	102	214	273	283	273	214	102
95	2	93	190	237	244	237	190	93	2	93	190	237	244	237	190	93
100	2	86	171	211	216	211	171	86	2	86	171	211	216	211	171	86
105	2	79	155	190	195	190	155	79	2	79	155	190	195	190	155	79
110	2	72	141	173	179	173	141	72	2	72	141	173	179	173	141	72
115	2	65	128	159	165	159	128	65	2	65	128	159	165	159	128	65
120	2	59	117	146	153	146	117	59	2	59	117	146	153	146	117	59
125	2	52	105	134	141	134	105	52	2	52	105	134	141	134	105	52
130	2	44	92	121	129	121	92	44	2	44	92	121	129	121	92	44
135	2	39	78	108	116	108	78	39	2	39	78	108	116	108	78	39
140	2	33	66	96	102	96	66	33	2	33	66	96	102	96	66	33
145	3	29	55	80	88	80	55	29	3	29	55	80	88	80	55	29
150	3	25	46	64	75	64	46	25	3	25	46	64	75	64	46	25
155	3	21	38	49	60	49	38	21	3	21	38	49	60	49	38	21
160	3	16	30	37	46	37	30	16	3	16	30	37	46	37	30	16
165	4	13	22	26	33	26	22	13	4	13	22	26	33	26	22	13
170	4	9	15	16	22	16	15	9	4	9	15	16	22	16	15	9
175	4	6	8	8	4	8	8	6	4	6	8	8	4	8	8	6
180	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	14600	14600	14600
45	10270	8515	8632
55	8638	7529	8137
65	7049	6666	7438
75	5480	5765	6293
85	3595	4933	5073



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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87
1	104	98	93	89	100	95	90	86	88	84	81	82	79	76	76	74	72	69
2	94	85	77	71	90	82	75	69	76	71	66	71	66	62	66	62	59	56
3	85	74	65	59	82	71	64	57	67	60	55	62	57	52	58	53	49	47
4	78	65	56	49	75	63	55	48	59	52	46	55	49	44	51	46	42	40
5	72	58	49	42	68	56	48	41	53	45	40	49	43	38	46	41	37	34
6	66	52	43	37	63	51	42	36	48	40	35	45	38	33	42	36	32	30
7	61	47	39	32	59	46	38	32	43	36	31	41	34	30	38	33	28	26
8	57	43	35	29	55	42	34	28	40	32	27	37	31	26	35	30	26	23
9	53	40	31	26	51	39	31	25	36	29	25	34	28	24	33	27	23	21
10	50	37	29	23	48	36	28	23	34	27	22	32	26	22	30	25	21	19

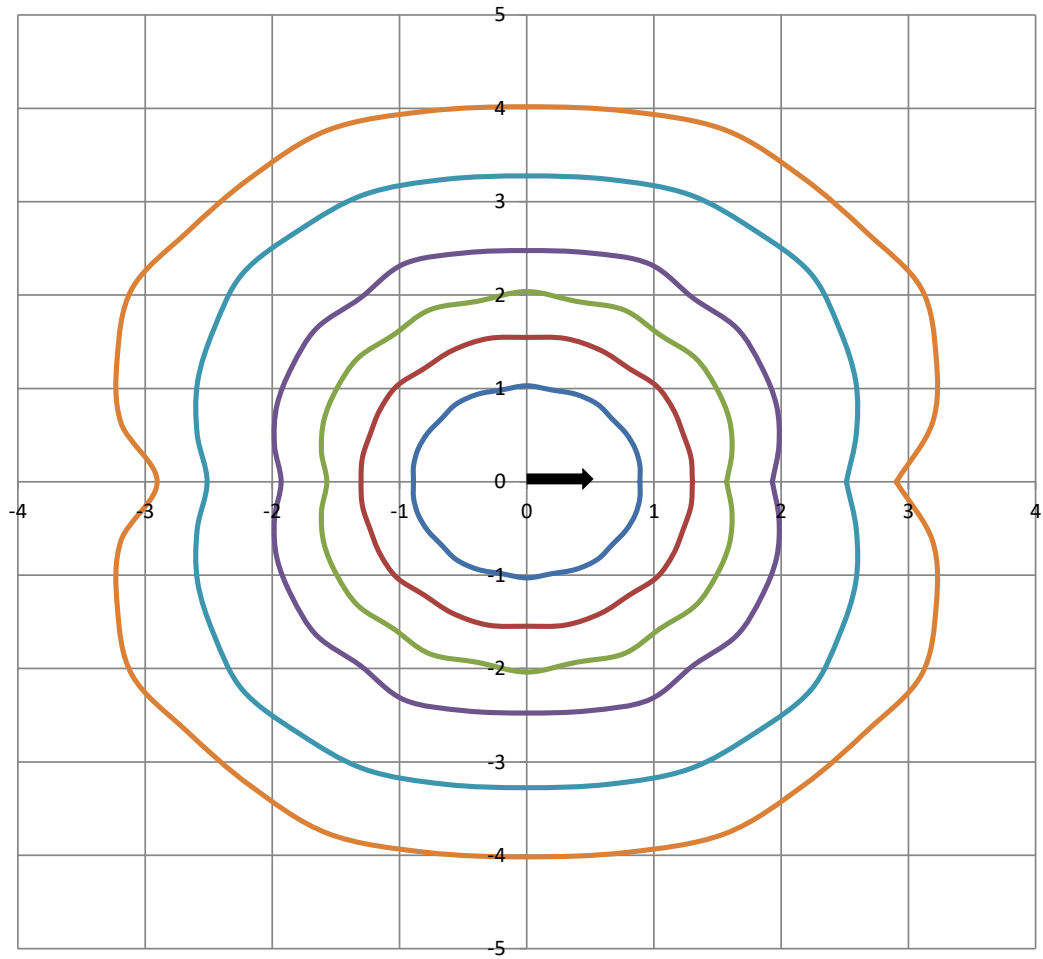
Beam and Field Information	
CIE Type:	Semi-Direct
Center Beam Intensity:	1356 Candela
Central Cone Intensity:	1355 Candela
Beam Flux:	2763.0 Lumens
Beam Angle (0-180):	92.3 Degrees
Beam Angle (90-270):	133.7 Degrees
Field Angle (0-180):	152.7 Degrees
Field Angle (90-270):	254.3 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		84.8	4.77
6.00		37.7	7.15
8.00		21.2	9.53
10.0		13.6	11.9
12.0		9.42	14.3
14.0		6.92	16.7
16.0		5.30	19.1



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

5 fc 2 fc 1 fc 0.5 fc 0.2 fc 0.1 fc