



BSW225-4-35-RD-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: 2.000 in.

Summary of Results

Integrating Sphere

Luminous Flux: 3746 Lumens
Efficacy: 88.79 lm/w
CCT: 3713 K
CRI (Ra): 84.4

Distribution

Total Luminaire Output: 3574 Lumens
Luminaire Efficacy: 85.1 lm/w
Maximum Candela: 1304 Candela

Electrical Data at 120 VAC

Test Temperature: 24.5 °C
Voltage: 120.1 VAC
Current: 0.3548 A
Power: 42.19 W
Power Factor: 0.990
Frequency: 60 Hz
Current THD: 7.87 %



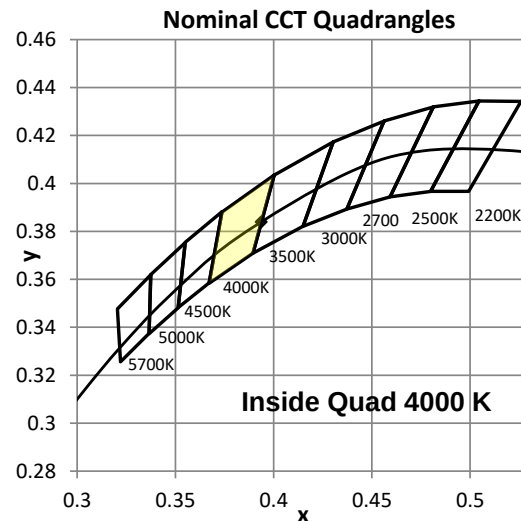
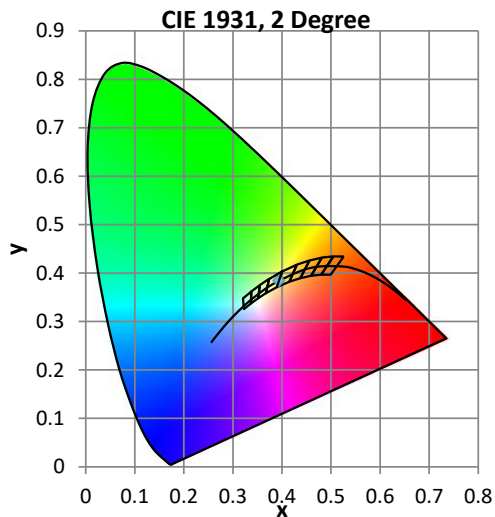
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.1 VAC	0.3548 A	42.19 W	0.990	60 Hz	7.87 %

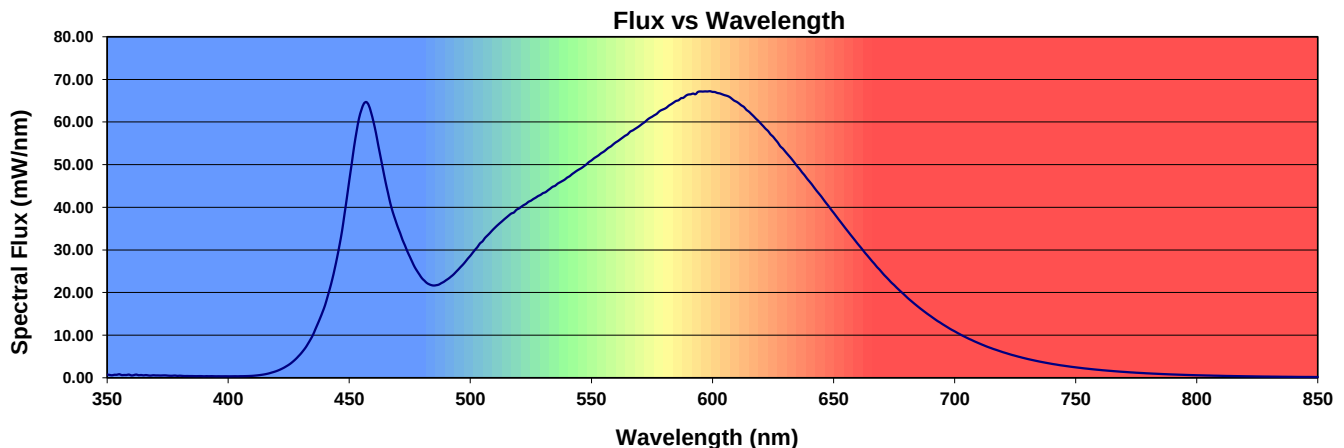
Summary of Results

Total Output:	3746 Lumens	Chromaticity (x):	0.3937
Efficacy:	88.8 lm/w	Chromaticity (y):	0.3840
CCT:	3713 K	Chromaticity (u'):	0.2309
CRI (Ra):	84.4	Chromaticity (v'):	0.5067
CRI (R9):	17.6	TM-30 Rf:	84
Peak Wavelength:	598 nm	TM-30 Rg:	93.5
Dominant Wavelength:	580 nm	Duv:	0.0007
S/P Ratio:	1.64		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
84.4	83.4	92.9	96.0	80.7	82.8	89.1	85.0	65.4	17.6	81.9	79.1	64.3	86.2	98.5	77.7





Distribution - Goniophotometer

Distribution Test Conditions

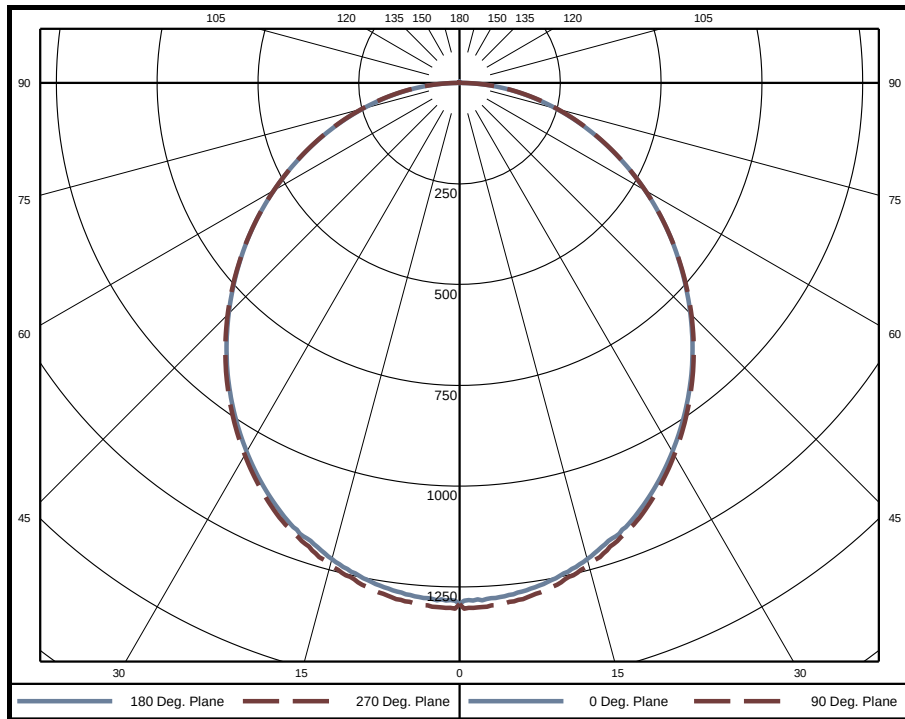
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.6 °C	120.0 VAC	0.3534 A	41.97 W	0.990	60 Hz	7.79 %

Summary of Results

Spacing Criteria
0-180: 1.22
90-270: 1.23

Total Lumen Output: 3574 Lumens
Luminaire Efficacy: 85.1 lm/w
Maximum Candela: 1304 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	30.8	0.9%	60-65	234.5	6.6%	120-125	0	0.0%
5-10	91.2	2.6%	65-70	196.5	5.5%	125-130	0	0.0%
10-15	147.7	4.1%	70-75	154.8	4.3%	130-135	0	0.0%
15-20	198.6	5.6%	75-80	111.1	3.1%	135-140	0	0.0%
20-25	242.6	6.8%	80-85	67.1	1.9%	140-145	0	0.0%
25-30	276.5	7.7%	85-90	23.8	0.7%	145-150	0	0.0%
30-35	300.3	8.4%	90-95	0	0.0%	150-155	0	0.0%
35-40	313.7	8.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	316.5	8.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	309.1	8.6%	105-110	0	0.0%	165-170	0	0.0%
50-55	292.3	8.2%	110-115	0	0.0%	170-175	0	0.0%
55-60	267.0	7.5%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1601	44.8%
0-60	2786	78.0%
0-90	3574	100.0%
90-180	0	0.0%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical 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	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292	1292
	5	1279	1285	1283	1283	1295	1283	1283	1285	1279	1285	1283	1283	1295	1283	1283
	10	1257	1264	1261	1262	1273	1262	1261	1264	1257	1264	1261	1262	1273	1262	1261
	15	1223	1229	1225	1225	1237	1225	1225	1229	1223	1229	1225	1225	1237	1225	1225
	20	1180	1186	1182	1184	1192	1184	1182	1186	1180	1186	1182	1184	1192	1184	1182
	25	1124	1128	1125	1126	1136	1126	1125	1128	1124	1128	1125	1126	1136	1126	1125
	30	1056	1059	1057	1057	1065	1057	1057	1059	1056	1059	1057	1057	1065	1057	1059
	35	980	983	981	980	987	980	981	983	980	983	981	980	987	980	981
	40	898	901	898	897	903	897	898	901	898	901	898	897	903	897	898
	45	810	814	811	808	814	808	811	814	810	814	811	808	814	808	811
	50	719	723	719	716	721	716	719	723	719	723	719	716	721	716	719
	55	626	629	624	623	627	623	624	629	626	629	624	623	627	623	624
	60	530	534	529	528	531	528	529	534	530	534	529	528	531	528	529
	65	435	437	435	434	436	434	435	437	435	437	435	434	436	434	435
	70	341	342	342	342	344	342	342	342	341	342	342	342	344	342	342
	75	250	251	251	252	253	252	251	251	250	251	251	252	253	252	251
	80	164	164	165	166	166	166	165	164	164	164	165	166	166	166	165
	85	81	82	83	83	84	83	83	82	81	82	83	83	84	83	83
	90	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
	100	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
	110	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
	120	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
	130	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
	140	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
	150	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
	160	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
	170	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
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	20870	20870
	45	18480	18510
	55	17610	17570
	65	16610	16620
	75	15590	15670
	85	15010	15440



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	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	61	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

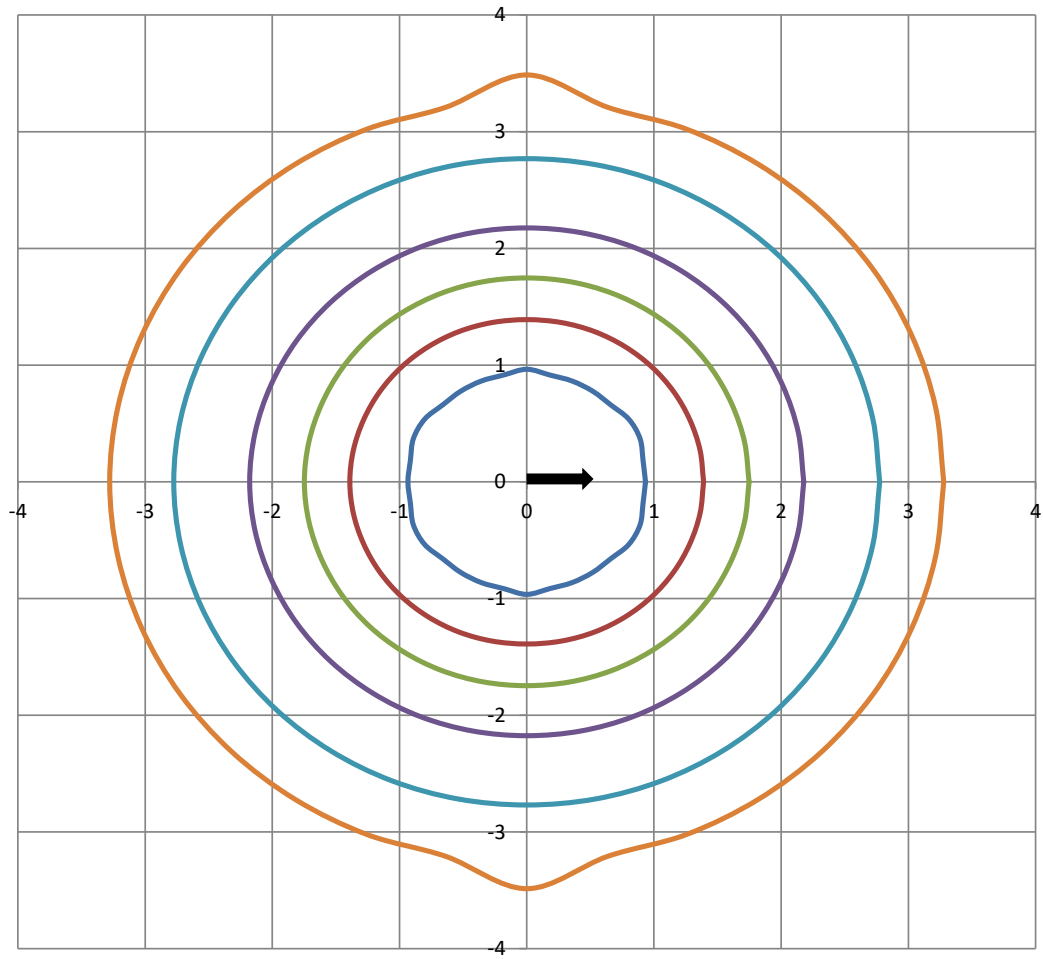
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1292 Candela
Central Cone Intensity:	1290 Candela
Beam Flux:	2456.8 Lumens
Beam Angle (0-180):	107.8 Degrees
Beam Angle (90-270):	107.9 Degrees
Field Angle (0-180):	164.2 Degrees
Field Angle (90-270):	164.5 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		80.8	4.88
6.00		35.9	7.32
8.00		20.2	9.75
10.0		12.9	12.2
12.0		8.97	14.6
14.0		6.59	17.1
16.0		5.05	19.5



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