



BSW214-4-35-ID-R-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.

Summary of Results

Integrating Sphere

Luminous Flux: 4092 Lumens
Efficacy: 99.62 lm/w
CCT: 3656 K
CRI (Ra): 83.9

Distribution

Total Luminaire Output: 3995 Lumens
Luminaire Efficacy: 97.3 lm/w
Maximum Candela: 1582 Candela

Electrical Data at 120 VAC

Test Temperature: 25.0 °C
Voltage: 120.0 VAC
Current: 0.3459 A
Power: 41.07 W
Power Factor: 0.989
Frequency: 60 Hz
Current THD: 8.11 %



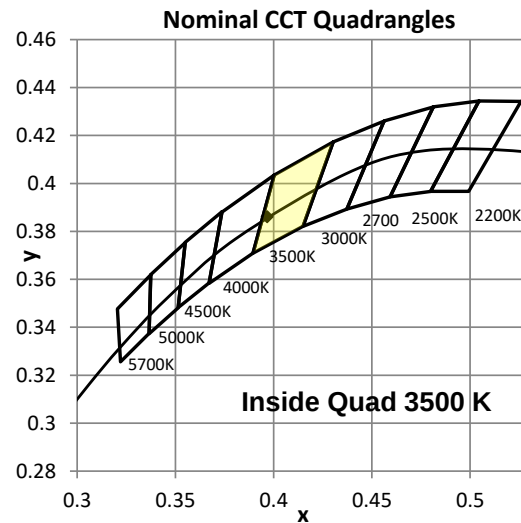
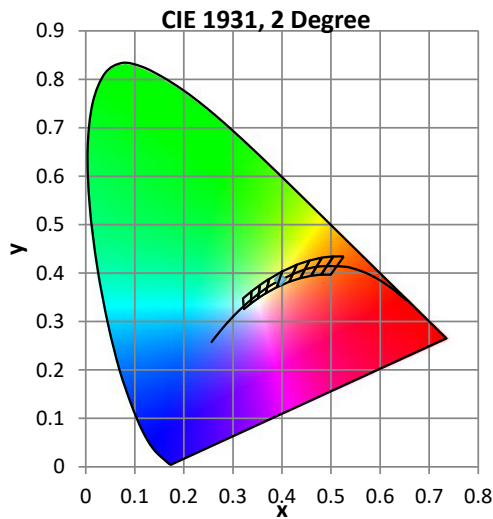
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	120.0 VAC	0.3459 A	41.07 W	0.989	60 Hz	8.11 %

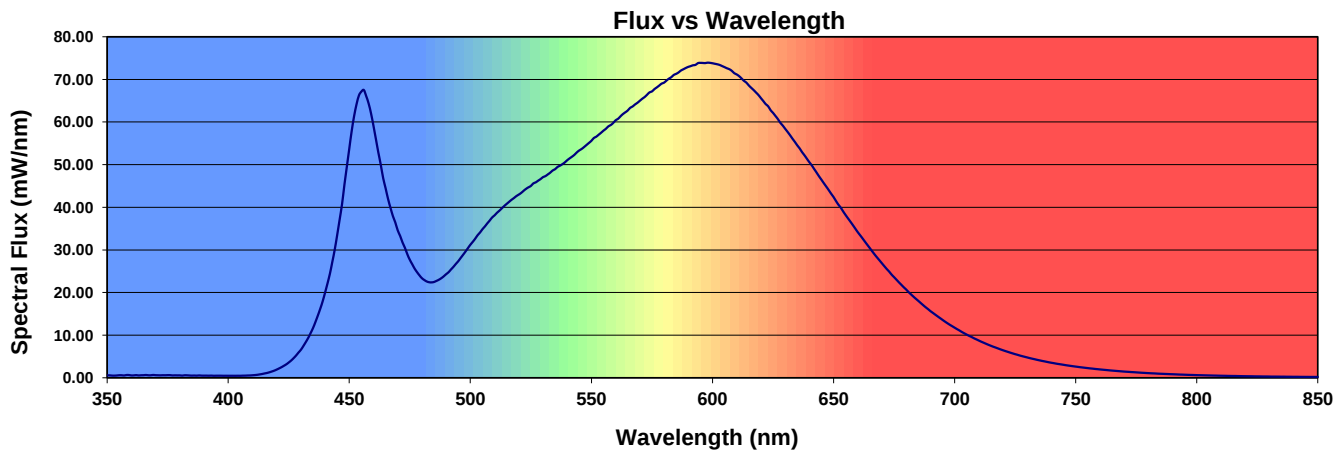
Summary of Results

Total Output:	4092 Lumens	Chromaticity (x):	0.3967
Efficacy:	99.6 lm/w	Chromaticity (y):	0.3861
CCT:	3656 K	Chromaticity (u'):	0.2320
CRI (Ra):	83.9	Chromaticity (v'):	0.5080
CRI (R9):	15.0	TM-30 Rf:	84.2
Peak Wavelength:	598 nm	TM-30 Rg:	93.9
Dominant Wavelength:	580 nm	Duv:	0.0007
S/P Ratio:	1.61		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
83.9	82.6	92.0	96.1	80.6	82.2	88.2	85.0	64.6	15.0	80.2	79.0	64.3	85.2	98.5	76.9





Distribution - Goniophotometer

Distribution Test Conditions

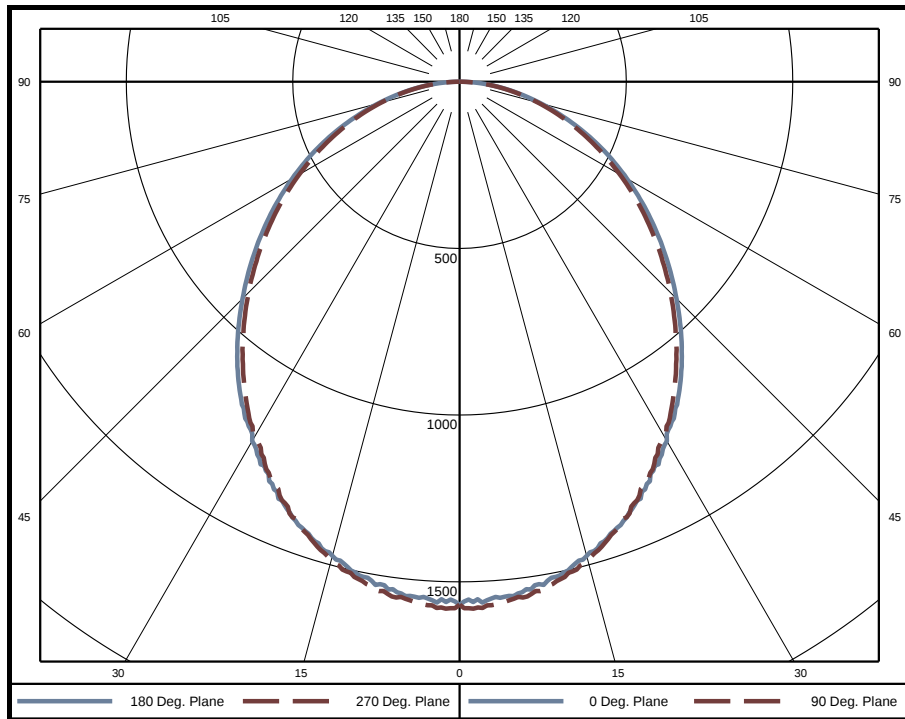
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.4 °C	120.0 VAC	0.3459 A	41.07 W	0.989	60 Hz	8.08 %

Summary of Results

Spacing Criteria
0-180: 1.18
90-270: 1.17

Total Lumen Output: 3995 Lumens
Luminaire Efficacy: 97.3 lm/w
Maximum Candela: 1582 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	37.4	0.9%	60-65	248.7	6.2%	120-125	0	0.0%
5-10	110.3	2.8%	65-70	204.1	5.1%	125-130	0	0.0%
10-15	178.1	4.5%	70-75	156.5	3.9%	130-135	0	0.0%
15-20	237.8	6.0%	75-80	108.6	2.7%	135-140	0	0.0%
20-25	287.0	7.2%	80-85	62.8	1.6%	140-145	0	0.0%
25-30	324.0	8.1%	85-90	20.4	0.5%	145-150	0	0.0%
30-35	348.5	8.7%	90-95	0	0.0%	150-155	0	0.0%
35-40	359.9	9.0%	95-100	0	0.0%	155-160	0	0.0%
40-45	357.9	9.0%	100-105	0	0.0%	160-165	0	0.0%
45-50	344.2	8.6%	105-110	0	0.0%	165-170	0	0.0%
50-55	320.5	8.0%	110-115	0	0.0%	170-175	0	0.0%
55-60	288.2	7.2%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1883	47.1%
0-60	3194	79.9%
0-90	3995	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	1569	1569	1569	1569	1569	1569	1569	1569	1569	1569	1569	1569	1569	1569	1569
	5	1551	1558	1556	1556	1566	1556	1556	1558	1551	1558	1556	1556	1566	1556	1558
	10	1520	1525	1525	1522	1536	1522	1525	1525	1520	1525	1525	1522	1536	1522	1525
	15	1473	1481	1477	1471	1485	1471	1477	1481	1473	1481	1477	1471	1485	1471	1477
	20	1415	1415	1404	1401	1414	1401	1404	1415	1415	1415	1404	1401	1414	1401	1404
	25	1331	1339	1317	1321	1327	1321	1317	1339	1331	1339	1317	1321	1327	1321	1317
	30	1245	1239	1233	1223	1226	1223	1233	1239	1245	1239	1233	1223	1226	1223	1233
	35	1147	1146	1133	1121	1125	1121	1133	1146	1147	1146	1133	1121	1125	1121	1133
	40	1038	1039	1024	1009	1011	1009	1024	1039	1038	1039	1024	1009	1011	1009	1024
	45	922	925	910	896	895	896	910	925	922	925	910	896	895	896	910
	50	806	810	795	781	781	781	795	810	806	810	795	781	781	781	795
	55	692	695	680	668	666	668	680	695	692	695	680	668	666	668	680
	60	579	580	566	557	554	557	566	580	579	580	566	557	554	557	566
	65	469	466	456	449	446	449	456	466	469	466	456	449	446	449	456
	70	358	356	350	345	343	345	350	356	358	356	350	345	343	345	350
	75	254	254	250	247	245	247	250	254	254	254	250	247	245	247	250
	80	160	160	158	156	154	156	158	160	160	160	158	156	154	156	158
	85	76	76	76	74	73	74	76	76	76	76	74	73	74	76	76
	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	16890	16890
	45	14030	13850
	55	12990	12760
	65	11950	11620
	75	10550	10410
	85	9405	9340



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	91	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	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	44
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	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	27	38	32	27	37	31	27	25

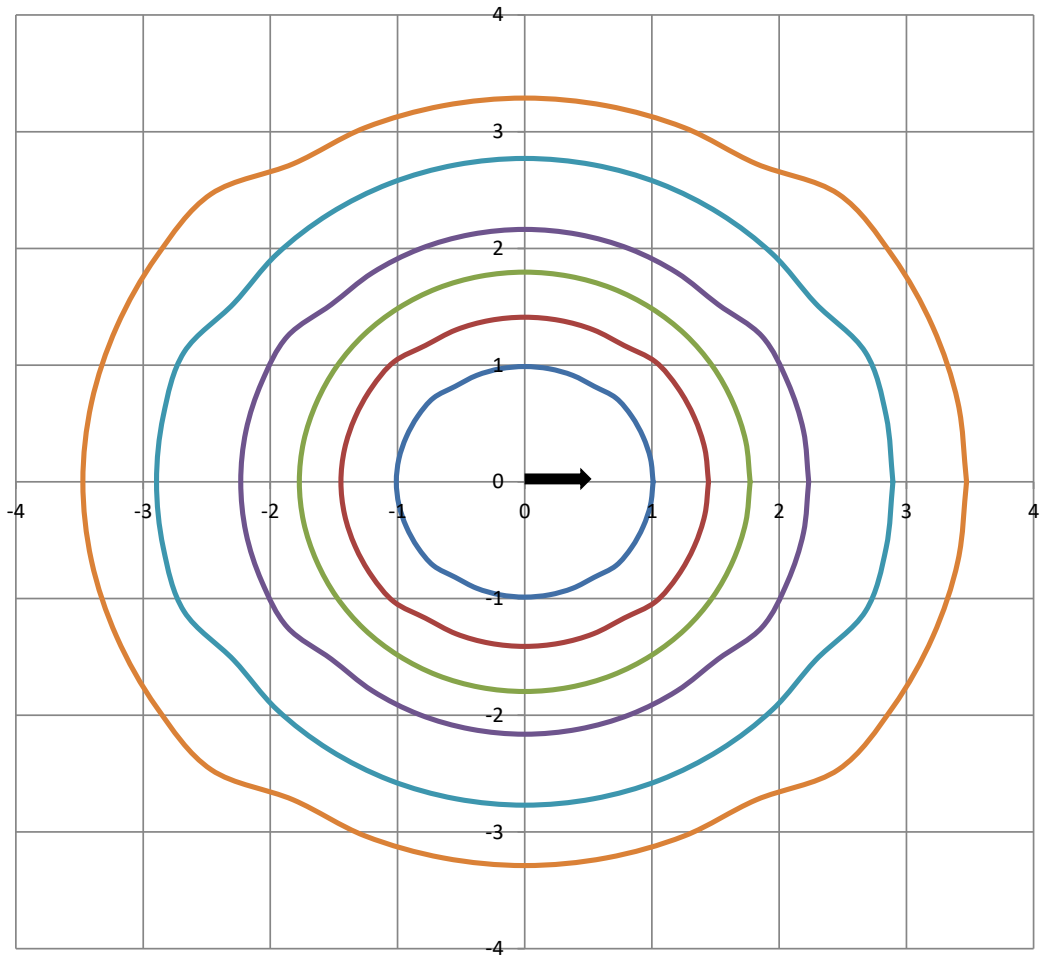
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1569 Candela
Central Cone Intensity:	1564 Candela
Beam Flux:	2615.9 Lumens
Beam Angle (0-180):	101.9 Degrees
Beam Angle (90-270):	99.7 Degrees
Field Angle (0-180):	160.3 Degrees
Field Angle (90-270):	159.7 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		98.1	4.70
6.00		43.6	7.06
8.00		24.5	9.41
10.0		15.7	11.8
12.0		10.9	14.1
14.0		8.01	16.5
16.0		6.13	18.8



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

