



BSW208-4-35-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: 3790 Lumens
Efficacy: 88.87 lm/w
CCT: 3709 K
CRI (Ra): 84.0

Distribution

Total Luminaire Output: 3694 Lumens
Luminaire Efficacy: 86.8 lm/w
Maximum Candela: 1372 Candela

Electrical Data at 120 VAC

Test Temperature: 25.1 °C
Voltage: 120.1 VAC
Current: 0.3587 A
Power: 42.65 W
Power Factor: 0.990
Frequency: 60 Hz
Current THD: 7.50 %



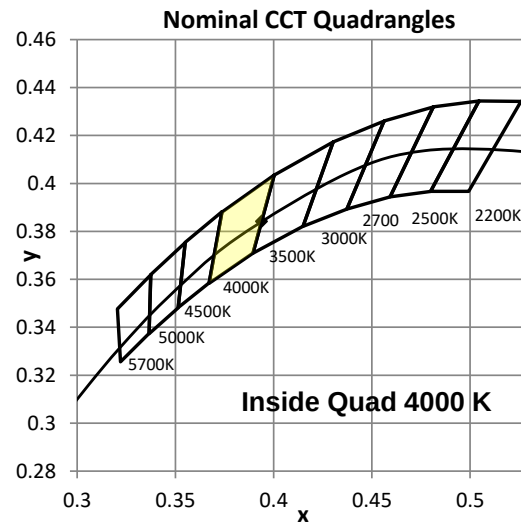
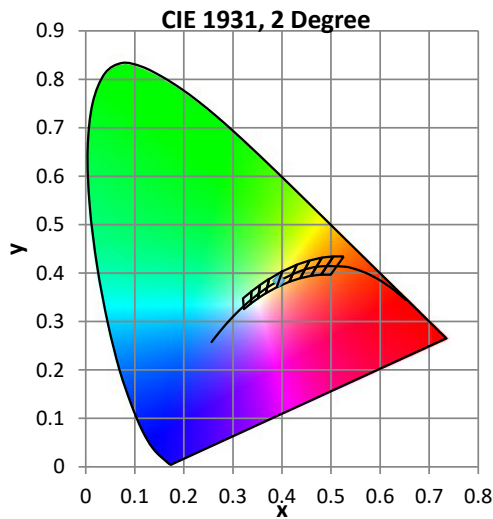
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.1 VAC	0.3587 A	42.65 W	0.990	60 Hz	7.50 %

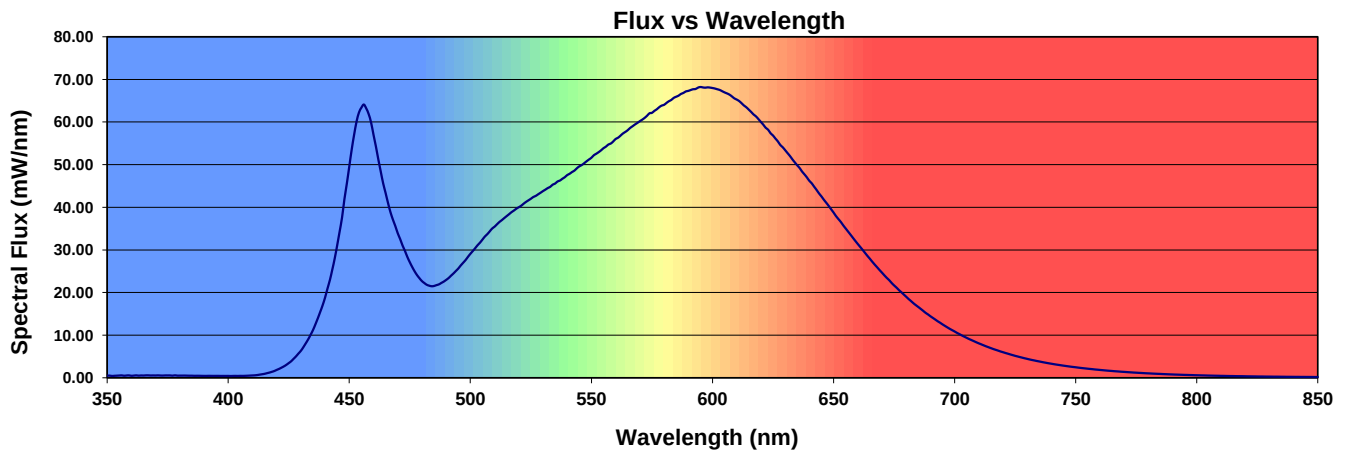
Summary of Results

Total Output:	3790 Lumens	Chromaticity (x):	0.3938
Efficacy:	88.9 lm/w	Chromaticity (y):	0.3842
CCT:	3709 K	Chromaticity (u'):	0.2309
CRI (Ra):	84.0	Chromaticity (v'):	0.5068
CRI (R9):	15.3	TM-30 Rf:	84.1
Peak Wavelength:	596 nm	TM-30 Rg:	93.8
Dominant Wavelength:	580 nm	Duv:	0.0007
S/P Ratio:	1.63		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
84.0	82.7	92.2	96.0	80.5	82.3	88.4	85.0	64.7	15.3	80.5	78.8	64.2	85.4	98.5	77.0





Distribution - Goniophotometer

Distribution Test Conditions

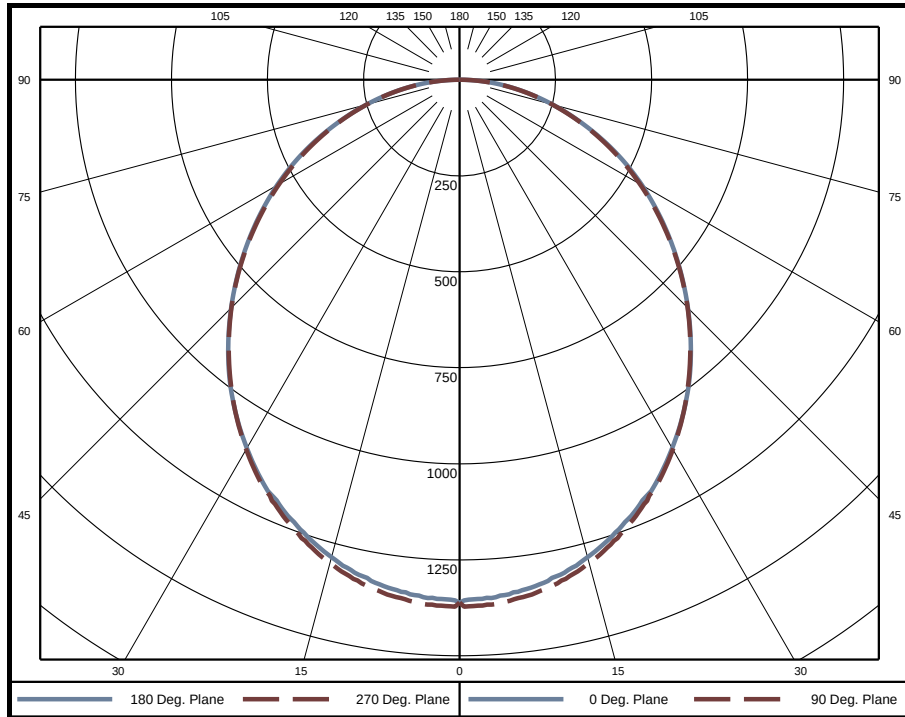
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.4 °C	120.0 VAC	0.3583 A	42.56 W	0.990	60 Hz	7.42 %

Summary of Results

Spacing Criteria
0-180: 1.21
90-270: 1.21

Total Lumen Output: 3694 Lumens
Luminaire Efficacy: 86.8 lm/w
Maximum Candela: 1372 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	32.5	0.9%	60-65	240.1	6.5%	120-125	0	0.0%
5-10	96.0	2.6%	65-70	199.9	5.4%	125-130	0	0.0%
10-15	155.6	4.2%	70-75	155.9	4.2%	130-135	0	0.0%
15-20	208.8	5.7%	75-80	110.4	3.0%	135-140	0	0.0%
20-25	253.8	6.9%	80-85	65.1	1.8%	140-145	0	0.0%
25-30	289.7	7.8%	85-90	21.1	0.6%	145-150	0	0.0%
30-35	313.9	8.5%	90-95	0	0.0%	150-155	0	0.0%
35-40	326.9	8.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	328.7	8.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	320.0	8.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	301.5	8.2%	110-115	0	0.0%	170-175	0	0.0%
55-60	274.4	7.4%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1677	45.4%
0-60	2902	78.6%
0-90	3694	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	1361	1361	1361	1361	1361	1361	1361	1361	1361	1361	1361	1361	1361	1361	1361
	5	1346	1353	1353	1353	1364	1353	1353	1353	1346	1353	1353	1353	1364	1353	1353
	10	1325	1330	1330	1330	1342	1330	1330	1330	1325	1330	1330	1330	1342	1330	1330
	15	1286	1292	1292	1292	1302	1292	1292	1292	1286	1292	1292	1292	1302	1292	1292
	20	1236	1241	1240	1240	1249	1240	1240	1241	1236	1241	1240	1240	1249	1240	1241
	25	1181	1183	1181	1179	1185	1179	1181	1183	1181	1183	1181	1179	1185	1179	1181
	30	1107	1111	1107	1104	1111	1104	1107	1111	1107	1111	1107	1104	1111	1104	1107
	35	1026	1029	1024	1020	1025	1020	1024	1029	1026	1029	1024	1020	1025	1020	1024
	40	936	941	935	930	934	930	935	941	936	941	935	930	934	930	935
	45	841	847	841	835	839	835	841	847	841	847	841	835	839	835	841
	50	743	751	743	738	741	738	743	751	743	751	743	738	741	738	743
	55	645	651	643	639	641	639	643	651	645	651	643	639	641	639	643
	60	548	550	543	539	541	539	543	550	548	550	543	539	541	539	543
	65	449	449	443	441	442	441	443	449	449	449	443	441	442	441	443
	70	347	349	346	344	344	344	346	349	347	349	346	344	344	344	346
	75	252	253	253	250	250	250	253	253	252	253	253	250	250	250	253
	80	162	164	163	161	161	161	163	164	162	164	163	161	161	161	163
	85	79	80	78	78	77	78	78	80	79	80	78	78	77	78	78
	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	21980	21980
	45	19190	19200
	55	18160	18110
	65	17130	16930
	75	15700	15750
	85	14600	14530



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	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38
7	65	51	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	36	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

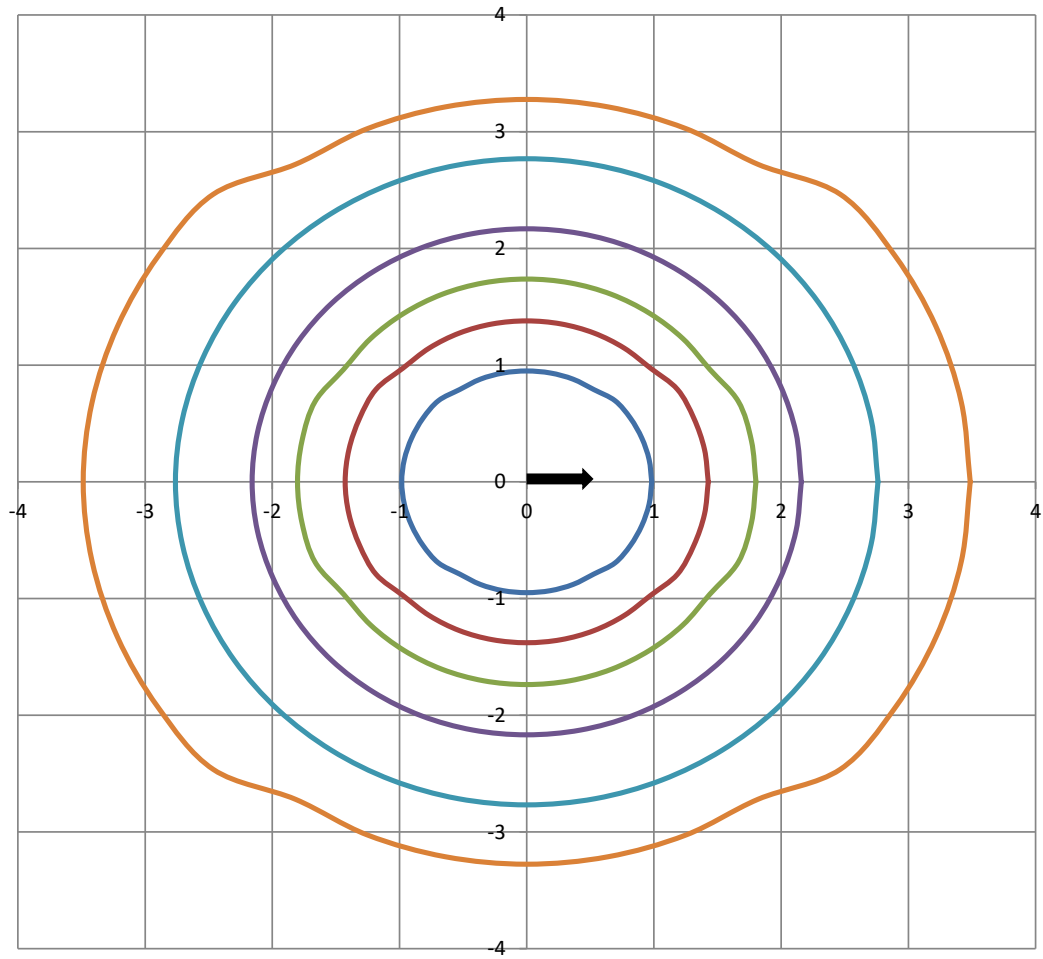
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1361 Candela
Central Cone Intensity:	1359 Candela
Beam Flux:	2519.2 Lumens
Beam Angle (0-180):	106.4 Degrees
Beam Angle (90-270):	106.0 Degrees
Field Angle (0-180):	163.1 Degrees
Field Angle (90-270):	162.9 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		85.1	4.85
6.00		37.8	7.27
8.00		21.3	9.70
10.0		13.6	12.1
12.0		9.45	14.5
14.0		6.95	17.0
16.0		5.32	19.4



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