



IES INDOOR REPORT

PHOTOMETRIC FILENAME : SR_6V_2W.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[ISSUEDATE] 27 February 2019

[TESTLAB] Spectra Lux Industries Inc.

[TEST] S1902271-R1

[LUMINAIRE] SR (PAR18) HEAD

[LAMP] SR (PAR18)-6V-2W Clusters of (3) 5000K LEDs c/w Integrated Driver @ 6.00VDC

[BURNING] Axial (124 Luminaire Lumens)

[REFLECTOR] None

[LENS] Polycarbonate Diffuser

[HOUSING] Molded Polymer

[REPORTMODULE] IES LM-35-1989 Floodlight Report

[DISTRIBUTION] IES Type 4Hx4V (Max. CP at 0.0H,-20.0V)

[MANUFAC] BeLuce Canada Inc.

[SEARCH_SOURCETYPE] LED

[SEARCH_APPLICATION] Indoor, Emergency

[SEARCH_MOUNTING] Ceiling, Wall

[SEARCH_CERTIFICATION] CSA

Note: Candela values converted from Type-B to Type-C

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	124
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	67
Total Luminaire Watts	1.84
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.34
Spacing Criterion (90-270)	0.72
Spacing Criterion (Diagonal)	1.00
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.20 ft (Diameter)
Luminous Width (90-270)	0.20 ft (Diameter)
Luminous Height	0.00 ft

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1452	1452	3873
55	597	1194	2387
65	0	0	2430
75	0	0	1323
85	0	0	0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

CANDELA TABULATION

	<u>0.0</u>	<u>2.5</u>	<u>5.0</u>	<u>7.5</u>	<u>10.0</u>	<u>12.5</u>	<u>15.0</u>	<u>17.5</u>	<u>20.0</u>	<u>22.5</u>
0.0	79	79	79	79	79	79	79	79	79	79
2.5	67	67	67	67	67	68	68	68	68	68
5.0	56	56	56	57	57	57	58	58	59	59
7.5	47	47	47	48	48	48	49	49	50	50
10.0	39	39	39	39	40	40	40	41	41	42
12.5	31	31	32	32	32	33	33	34	34	35
15.0	25	25	25	25	26	26	27	27	28	28
17.5	20	20	20	20	21	21	21	22	22	23
20.0	15	15	16	16	16	17	17	17	18	18
22.5	13	13	13	13	13	14	14	14	14	14
25.0	10	10	10	10	10	11	11	11	11	11
27.5	8	8	8	8	8	8	9	9	9	9
30.0	7	7	7	7	7	7	7	7	7	7
32.5	6	6	6	6	6	6	6	6	6	6
35.0	5	5	5	5	5	5	5	5	5	5
37.5	4	4	4	4	4	4	4	5	5	5
40.0	4	4	4	4	4	4	4	4	4	4
42.5	3	3	3	3	3	3	3	3	3	3
45.0	3	3	3	3	3	3	3	3	3	3
47.5	2	2	2	2	3	3	2	3	3	3
50.0	2	2	2	2	2	2	2	2	2	2
52.5	2	2	2	2	2	2	2	2	2	2
55.0	1	1	1	1	1	1	1	2	2	2
57.5	1	1	1	1	1	1	1	1	1	1
60.0	1	1	1	1	1	1	1	1	1	1
62.5	0	0	1	1	1	0	0	0	1	1
65.0	0	0	0	0	0	0	0	0	0	0
67.5	0	0	0	0	0	0	0	0	0	0
70.0	0	0	0	0	0	0	0	0	0	0
72.5	0	0	0	0	0	0	0	0	0	0
75.0	0	0	0	0	0	0	0	0	0	0
77.5	0	0	0	0	0	0	0	0	0	0
80.0	0	0	0	0	0	0	0	0	0	0
82.5	0	0	0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles

	<u>25.0</u>	<u>27.5</u>	<u>30.0</u>	<u>32.5</u>	<u>35.0</u>	<u>37.5</u>	<u>40.0</u>	<u>42.5</u>	<u>45.0</u>	<u>47.5</u>
0.0	79	79	79	79	79	79	79	79	79	79
2.5	69	69	69	69	70	70	70	71	71	72
5.0	60	60	61	61	62	62	63	64	64	65
7.5	51	52	52	53	54	55	56	57	57	58
10.0	43	44	45	45	46	46	47	47	48	49
12.5	36	36	36	37	37	38	38	39	39	40
15.0	29	29	30	30	30	30	31	31	32	33
17.5	23	23	23	23	23	24	25	25	26	27
20.0	18	18	18	18	19	19	20	20	21	22
22.5	14	14	14	15	15	16	16	17	17	18
25.0	11	11	12	12	12	12	12	13	13	14
27.5	9	9	9	10	10	10	11	11	11	12
30.0	7	7	8	8	8	8	8	9	9	9

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

CANDELA TABULATION - (Cont.)

32.5	6	6	6	7	7	7	7	7	7	8
35.0	5	5	6	6	5	5	6	6	6	6
37.5	4	4	5	5	5	5	5	5	5	5
40.0	4	4	4	4	4	4	4	4	5	5
42.5	3	3	4	4	4	4	4	4	4	4
45.0	3	3	3	3	3	3	3	3	3	3
47.5	3	2	3	3	3	3	3	3	3	3
50.0	2	2	2	2	2	3	2	2	3	3
52.5	2	2	2	2	2	2	2	2	2	2
55.0	2	1	2	2	2	2	2	2	2	2
57.5	1	1	1	1	1	1	1	1	1	1
60.0	1	1	1	1	1	1	1	1	1	1
62.5	1	0	0	1	1	1	1	1	1	1
65.0	0	0	0	0	0	0	0	0	0	0
67.5	0	0	0	0	0	0	0	0	0	0
70.0	0	0	0	0	0	0	0	0	0	0
72.5	0	0	0	0	0	0	0	0	0	0
75.0	0	0	0	0	0	0	0	0	0	0
77.5	0	0	0	0	0	0	0	0	0	0
80.0	0	0	0	0	0	0	0	0	0	0
82.5	0	0	0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>50.0</u>	<u>52.5</u>	<u>55.0</u>	<u>57.5</u>	<u>60.0</u>	<u>62.5</u>	<u>65.0</u>	<u>67.5</u>	<u>70.0</u>	<u>72.5</u>
0.0	79	79	79	79	79	79	79	79	79	79
2.5	72	72	73	73	74	74	75	75	76	76
5.0	66	66	67	68	69	70	71	72	73	74
7.5	58	59	60	61	61	62	63	64	65	66
10.0	49	50	51	52	53	54	55	56	57	58
12.5	40	41	42	43	44	46	47	49	50	52
15.0	33	35	36	37	38	39	40	42	43	45
17.5	28	29	29	30	31	33	34	35	37	38
20.0	23	23	24	25	26	27	28	30	31	33
22.5	18	19	20	21	22	23	24	25	26	28
25.0	15	15	16	17	17	18	19	20	21	23
27.5	12	12	13	13	14	15	15	16	17	19
30.0	10	10	11	11	12	12	13	14	15	15
32.5	8	8	9	9	9	10	10	11	12	13
35.0	6	7	7	7	7	8	8	8	9	10
37.5	5	6	6	6	6	6	7	7	8	8
40.0	5	5	5	5	5	6	6	6	7	7
42.5	4	4	4	5	5	5	5	5	5	6
45.0	4	4	4	4	4	4	4	4	5	5
47.5	3	3	3	4	4	4	4	4	4	4
50.0	3	3	3	3	3	3	3	3	4	4
52.5	2	2	2	2	2	3	3	3	3	3
55.0	2	2	2	2	2	2	2	2	3	3
57.5	2	2	2	2	2	2	2	2	2	3
60.0	1	1	1	1	1	1	2	2	2	2
62.5	1	1	1	1	1	1	1	1	1	2
65.0	0	1	1	1	1	1	1	1	1	1
67.5	0	0	0	0	0	0	0	1	1	1

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

CANDELA TABULATION - (Cont.)

70.0	0	0	0	0	0	0	0	0	0	0
72.5	0	0	0	0	0	0	0	0	0	0
75.0	0	0	0	0	0	0	0	0	0	0
77.5	0	0	0	0	0	0	0	0	0	0
80.0	0	0	0	0	0	0	0	0	0	0
82.5	0	0	0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0

Vert. Horizontal Angles
Angles

	<u>75.0</u>	<u>77.5</u>	<u>80.0</u>	<u>82.5</u>	<u>85.0</u>	<u>87.5</u>	<u>90.0</u>	<u>92.5</u>	<u>95.0</u>	<u>97.5</u>
0.0	79	79	79	79	79	79	79	79	79	79
2.5	77	77	78	78	79	79	80	81	81	82
5.0	75	76	77	78	79	80	81	82	83	84
7.5	67	68	69	71	72	74	75	76	78	80
10.0	59	61	62	63	65	66	68	70	72	74
12.5	53	55	56	58	60	62	64	66	68	70
15.0	46	48	50	52	53	55	57	59	61	64
17.5	40	42	44	46	48	50	52	54	57	59
20.0	35	37	38	40	42	44	46	49	51	54
22.5	29	31	32	34	36	39	41	43	45	47
25.0	24	26	27	29	31	33	35	37	40	42
27.5	20	22	23	25	26	28	30	32	34	36
30.0	16	17	19	20	22	23	25	27	30	32
32.5	13	14	15	17	18	19	21	22	24	26
35.0	11	11	12	13	14	16	17	18	20	22
37.5	8	9	10	11	12	13	14	16	17	18
40.0	7	7	8	9	9	10	12	13	14	15
42.5	6	6	7	7	8	9	10	11	12	13
45.0	5	6	6	6	7	8	8	9	10	11
47.5	5	5	5	5	6	6	7	8	8	9
50.0	4	4	4	5	5	6	6	6	7	8
52.5	4	4	4	4	4	5	5	5	6	6
55.0	3	3	3	4	4	5	4	5	5	6
57.5	2	3	3	3	3	4	4	4	5	5
60.0	2	2	2	2	3	3	4	4	4	5
62.5	2	2	2	2	2	3	3	3	4	4
65.0	1	1	2	2	2	2	3	3	3	4
67.5	1	1	1	1	2	2	2	2	3	4
70.0	1	1	1	1	1	2	2	3	3	3
72.5	0	0	0	1	1	1	2	2	2	3
75.0	0	0	0	0	1	1	1	2	2	3
77.5	0	0	0	0	0	1	1	2	2	3
80.0	0	0	0	0	0	0	1	2	2	2
82.5	0	0	0	0	0	0	1	1	2	2
85.0	0	0	0	0	0	0	0	1	2	2
87.5	0	0	0	0	0	0	1	2	2	2
90.0	0	0	0	0	0	0	0	2	2	2

Vert. Horizontal Angles
Angles

	<u>100.0</u>	<u>102.5</u>	<u>105.0</u>	<u>107.5</u>	<u>110.0</u>	<u>112.5</u>	<u>115.0</u>	<u>117.5</u>	<u>120.0</u>	<u>122.5</u>
0.0	79	79	79	79	79	79	79	79	79	79
2.5	82	83	83	84	84	85	85	86	86	87

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

CANDELA TABULATION - (Cont.)

5.0	85	87	88	89	90	91	92	93	94	95
7.5	81	83	84	86	88	90	92	95	97	99
10.0	75	77	80	82	85	87	90	93	96	99
12.5	72	75	77	80	82	85	88	91	94	97
15.0	66	69	72	75	78	81	85	88	92	97
17.5	61	64	67	70	73	76	79	82	87	91
20.0	56	59	62	65	68	71	75	78	82	87
22.5	50	53	56	59	62	66	70	73	77	82
25.0	45	48	50	53	56	59	62	66	70	75
27.5	39	41	44	47	50	53	57	60	63	67
30.0	34	36	39	42	45	47	50	54	57	61
32.5	28	31	34	37	40	42	45	48	51	55
35.0	24	26	28	31	33	36	39	42	45	48
37.5	20	22	24	26	29	31	34	36	39	42
40.0	17	19	20	23	25	26	29	32	34	36
42.5	14	16	17	19	21	23	25	27	29	31
45.0	12	13	14	16	18	19	20	23	25	26
47.5	10	11	13	14	15	16	18	19	21	22
50.0	8	9	11	12	13	14	15	16	17	19
52.5	7	8	9	10	11	12	13	14	15	16
55.0	6	7	8	8	9	10	11	12	13	13
57.5	6	6	7	8	8	9	9	10	10	12
60.0	5	5	6	7	7	8	8	9	9	9
62.5	5	5	5	6	6	7	7	7	8	8
65.0	4	4	5	5	6	6	7	7	7	7
67.5	4	4	5	5	5	6	6	6	6	6
70.0	4	4	4	5	5	5	5	5	5	6
72.5	3	4	4	4	5	4	5	5	5	5
75.0	3	3	4	4	4	4	4	4	4	5
77.5	3	3	4	4	4	4	4	4	4	4
80.0	3	3	3	3	4	3	4	4	4	4
82.5	3	3	3	3	3	3	3	3	3	3
85.0	3	3	3	3	3	3	3	3	3	3
87.5	3	3	3	3	3	3	3	3	3	3
90.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	Horizontal Angles									
	<u>125.0</u>	<u>127.5</u>	<u>130.0</u>	<u>132.5</u>	<u>135.0</u>	<u>137.5</u>	<u>140.0</u>	<u>142.5</u>	<u>145.0</u>	<u>147.5</u>
0.0	79	79	79	79	79	79	79	79	79	79
2.5	87	88	88	89	89	90	90	90	91	91
5.0	96	97	98	99	100	101	102	103	104	105
7.5	102	104	106	109	112	115	117	119	121	123
10.0	103	106	110	114	118	123	127	133	138	144
12.5	101	105	110	116	122	129	136	145	152	161
15.0	102	106	111	117	123	130	139	150	161	174
17.5	97	103	109	116	123	131	140	150	161	177
20.0	92	97	103	110	118	128	137	148	161	175
22.5	86	91	97	103	111	118	129	141	153	167
25.0	80	85	90	96	102	110	119	128	140	152
27.5	71	77	82	87	93	100	107	115	123	133
30.0	65	68	72	78	84	89	95	101	108	115
32.5	58	62	66	69	73	79	83	88	93	99
35.0	51	54	58	62	65	68	72	77	81	85
37.5	45	48	50	53	57	60	63	66	69	73
40.0	39	41	44	46	49	52	54	56	59	62

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

CANDELA TABULATION - (Cont.)

42.5	33	35	37	40	42	44	47	49	50	52
45.0	28	30	32	34	36	38	39	41	42	43
47.5	24	25	26	28	29	32	33	34	35	36
50.0	20	21	23	23	24	26	27	28	29	30
52.5	17	18	18	19	21	21	22	23	23	24
55.0	14	15	15	16	16	17	18	19	19	20
57.5	12	12	13	13	13	14	15	15	15	16
60.0	10	10	11	11	11	11	12	12	12	12
62.5	8	9	9	9	9	9	10	10	10	10
65.0	7	8	8	8	7	8	8	8	8	9
67.5	6	7	7	7	7	7	7	7	7	7
70.0	6	6	6	6	6	6	6	6	6	6
72.5	5	5	5	5	5	5	5	5	5	5
75.0	5	5	5	5	5	5	5	5	5	5
77.5	4	4	4	4	4	4	4	4	4	4
80.0	4	4	4	4	4	4	4	4	4	4
82.5	3	3	3	3	3	3	3	3	3	4
85.0	3	3	3	3	3	3	3	3	3	3
87.5	3	3	3	2	2	2	2	2	2	2
90.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	Horizontal Angles									
	<u>150.0</u>	<u>152.5</u>	<u>155.0</u>	<u>157.5</u>	<u>160.0</u>	<u>162.5</u>	<u>165.0</u>	<u>167.5</u>	<u>170.0</u>	<u>172.5</u>
0.0	79	79	79	79	79	79	79	79	79	79
2.5	91	91	92	92	92	92	93	93	93	93
5.0	105	106	107	107	108	108	109	109	110	110
7.5	125	127	128	130	131	132	133	134	135	136
10.0	149	153	156	159	162	165	168	170	171	173
12.5	169	178	188	195	201	206	212	216	220	223
15.0	188	201	215	229	244	252	260	268	276	279
17.5	195	214	233	251	269	289	301	310	320	327
20.0	192	213	234	256	276	297	319	329	339	350
22.5	183	199	220	242	263	283	303	321	329	337
25.0	166	182	197	215	234	253	270	287	295	302
27.5	144	156	169	181	197	212	227	239	249	253
30.0	123	132	141	150	159	171	182	191	200	203
32.5	105	111	116	122	128	135	143	149	156	159
35.0	89	93	98	102	106	110	115	120	123	125
37.5	76	80	83	85	88	90	94	98	100	101
40.0	64	67	70	72	73	75	78	80	82	84
42.5	54	56	58	60	61	63	64	66	67	68
45.0	45	46	47	49	50	51	52	53	54	56
47.5	37	38	39	40	40	41	42	42	44	45
50.0	30	31	32	32	33	33	34	34	34	35
52.5	25	25	25	26	27	27	27	27	27	28
55.0	20	20	20	21	21	21	21	21	22	22
57.5	16	16	16	16	17	17	17	17	17	17
60.0	13	13	12	13	13	13	13	13	13	14
62.5	10	10	10	11	11	11	11	11	10	11
65.0	8	8	9	9	9	9	9	9	9	9
67.5	7	7	7	7	8	7	7	7	7	7
70.0	6	6	6	6	6	6	6	6	6	6
72.5	5	5	6	6	5	5	5	5	5	5
75.0	5	5	5	5	5	5	5	5	5	5
77.5	4	4	4	4	4	4	4	4	4	4

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

CANDELA TABULATION - (Cont.)

80.0	4	4	4	4	4	4	4	4	4	4
82.5	3	3	3	3	3	3	3	3	4	4
85.0	3	3	3	3	3	3	3	3	3	3
87.5	2	3	3	2	3	3	3	3	3	3
90.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	Horizontal Angles		
	<u>175.0</u>	<u>177.5</u>	<u>180.0</u>
0.0	79	79	79
2.5	93	93	93
5.0	110	110	110
7.5	136	136	136
10.0	174	174	174
12.5	226	227	228
15.0	284	285	287
17.5	332	335	337
20.0	352	354	355
22.5	340	341	341
25.0	304	305	305
27.5	255	255	255
30.0	204	203	203
32.5	158	158	156
35.0	125	122	120
37.5	102	100	98
40.0	83	82	80
42.5	68	67	66
45.0	55	54	53
47.5	44	43	42
50.0	35	35	34
52.5	28	27	26
55.0	22	22	21
57.5	17	17	17
60.0	14	14	13
62.5	11	11	11
65.0	9	9	9
67.5	7	7	7
70.0	6	6	6
72.5	6	6	5
75.0	5	5	5
77.5	4	4	4
80.0	4	4	4
82.5	4	4	3
85.0	3	3	3
87.5	3	3	3
90.0	2	2	2

IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	34.14	N.A.	27.50
0-30	68.93	N.A.	55.60
0-40	93.34	N.A.	75.30
0-60	116.13	N.A.	93.70
0-80	122.45	N.A.	98.80
0-90	123.99	N.A.	100.00
10-90	116.05	N.A.	93.60
20-40	59.21	N.A.	47.80
20-50	74.05	N.A.	59.70
40-70	26.77	N.A.	21.60
60-80	6.32	N.A.	5.10
70-80	2.34	N.A.	1.90
80-90	1.54	N.A.	1.20
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	123.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	7.94
10-20	26.20
20-30	34.79
30-40	24.42
40-50	14.84
50-60	7.94
60-70	3.98
70-80	2.34
80-90	1.54
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

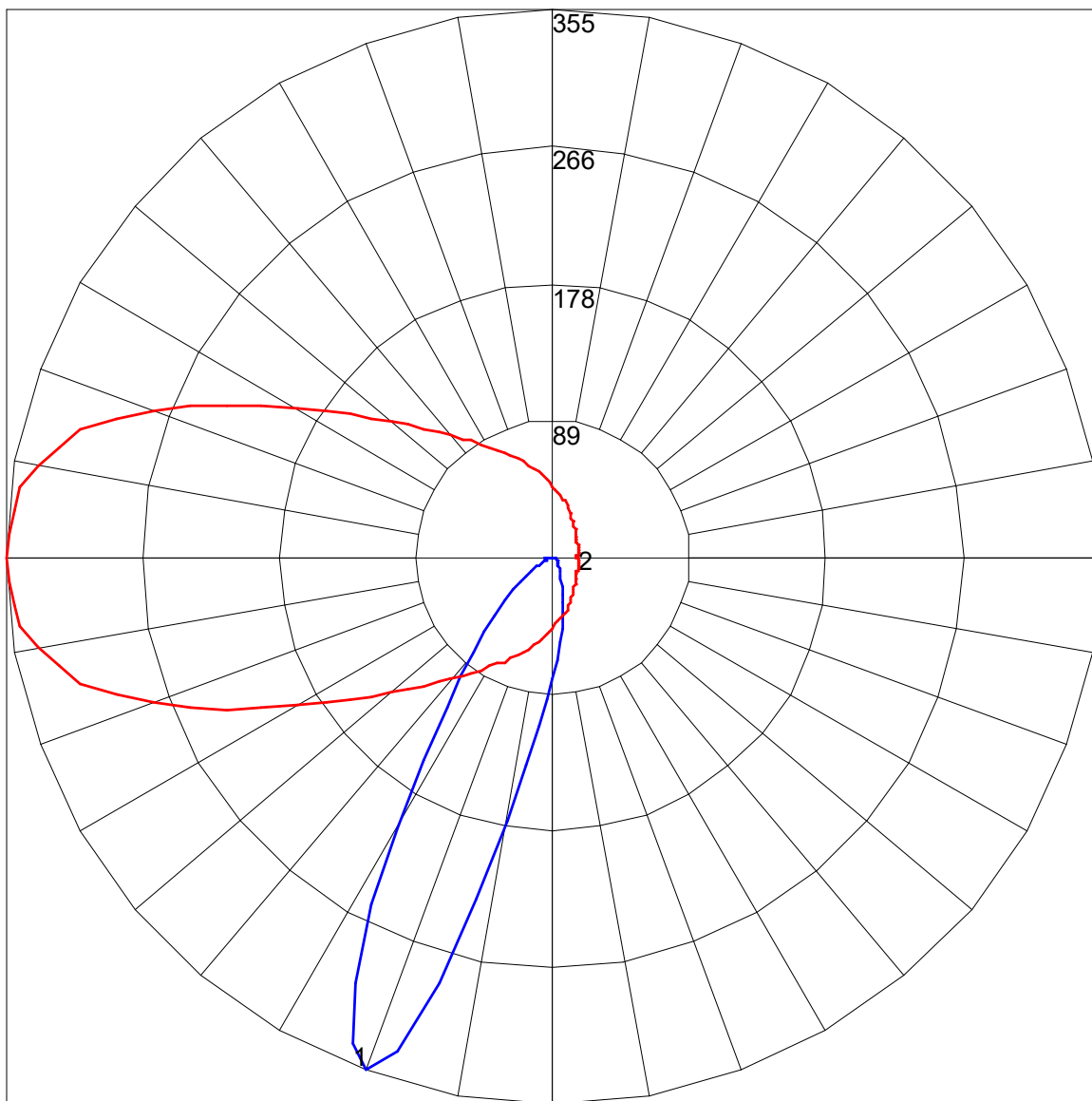
IES INDOOR REPORT
PHOTOMETRIC FILENAME : SR_6V_2W.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	85	75	69	64	74	68	63	72	67	63	70	66	62	60
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44
10	65	54	47	43	64	53	47	43	52	46	42	51	46	42	51	46	42	41

POLAR GRAPH



Maximum Candela = 355 Located At Horizontal Angle = 180, Vertical Angle = 20
1 - Vertical Plane Through Horizontal Angles (180 - 0) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (20) (Through Max. Cd.)