

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SGE9LEDOS-20L35KEX-AR9223OSSGSO.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] 102560753CRT-007_M-20L
[TESTLAB] Intertek
[ISSUE DATE] 09/19/2016
[UPDATE] 10/28/2016
[LAB-REF LUMCAT] CRT1609071034-004_M-20L
[MANUFAC] Spectrum Lighting
[LUMCAT] SGE9LEDOS-20L-35K-EX-AR9223OS-SG-SO
[LUMINAIRE] 9" DIAM. LED DOWNLIGHT SEMI-DIFFUSE CLEAR ANODIZED CONE
[OTHER] REGRESSED, INTEGRAL SOLITE GLASS LENS
[OTHER] 81.3 DEGREE BEAM ANGLE
[LAMP] N/A
[LAMPCAT] N/A
[OTHER] TOTAL LUMINAIRE WATTS IS APPROXIMATE
[OTHER] PHOTOMETRIC MEASUREMENTS TAKEN AT 120VAC
[OTHER] CCT OUTPUT MULTIPLIERS: 40K x 1.0, 30K x 1.0, 27K x 0.945
[OTHER] THIS REPORT UPDATED BY SPECTRUM LIGHTING, SCALED FROM 30L

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1826
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	20.24
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.16
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.71 ft (Diameter)
Luminous Width (90-270)	0.71 ft (Diameter)
Luminous Height	0.00 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	16250	16183	16203
55	3390	3424	3500
65	809	842	893
75	0	0	0
85	0	0	0

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	1211.142	1211.142	1211.142	1211.142	1211.142	1211.142	1211.142	1211.142	1211.142	1211.142
2.5	1205.031	1207.214	1208.087	1208.159	1209.032	1208.159	1208.087	1207.214	1205.031	1207.214
5.0	1201.539	1201.394	1202.121	1202.558	1204.595	1202.558	1202.121	1201.394	1201.539	1201.394
7.5	1190.336	1191.791	1192.300	1194.846	1194.628	1194.846	1192.300	1191.791	1190.336	1191.791
10.0	1178.914	1181.533	1178.332	1183.061	1181.387	1183.061	1178.332	1181.533	1178.914	1181.533
12.5	1166.765	1165.091	1166.983	1168.147	1167.638	1168.147	1166.983	1165.091	1166.765	1165.091
15.0	1151.414	1149.596	1147.195	1148.141	1149.159	1148.141	1147.195	1149.596	1151.414	1149.596
17.5	1125.006	1123.842	1123.988	1125.588	1126.534	1125.588	1123.988	1123.842	1125.006	1123.842
20.0	1097.288	1096.124	1096.488	1094.742	1098.016	1094.742	1096.488	1096.124	1097.288	1096.124
22.5	1067.897	1066.370	1066.952	1068.043	1066.370	1068.043	1066.952	1066.370	1067.897	1066.370
25.0	1035.669	1036.906	1037.124	1033.487	1031.668	1033.487	1037.124	1036.906	1035.669	1036.906
27.5	996.239	999.876	998.494	997.766	998.567	997.766	998.494	999.876	996.239	999.876
30.0	947.423	946.550	944.295	941.385	942.695	941.385	944.295	946.550	947.423	946.550
32.5	890.096	887.914	882.821	879.766	883.913	879.766	882.821	887.914	890.096	887.914
35.0	823.821	815.309	806.361	808.398	813.127	808.398	806.361	815.309	823.821	815.309
37.5	736.885	730.483	722.480	721.244	725.318	721.244	722.480	730.483	736.885	730.483
40.0	637.508	632.198	625.286	624.413	630.961	624.413	625.286	632.198	637.508	632.198
42.5	529.838	529.402	525.401	522.345	526.856	522.345	525.401	529.402	529.838	529.402
45.0	423.041	422.605	421.295	420.059	421.805	420.059	421.295	422.605	423.041	422.605
47.5	320.391	324.101	326.648	323.956	320.318	323.956	326.648	324.101	320.391	324.101
50.0	197.662	196.643	198.680	200.063	202.027	200.063	198.680	196.643	197.662	196.643
52.5	114.872	115.091	116.036	117.273	119.310	117.273	116.036	115.091	114.872	115.091
55.0	71.586	72.095	72.314	72.386	73.914	72.386	72.314	72.095	71.586	72.095
57.5	46.633	47.069	47.215	47.360	47.870	47.360	47.215	47.069	46.633	47.069
60.0	32.156	32.301	32.447	32.519	32.810	32.519	32.447	32.301	32.156	32.301
62.5	22.116	22.553	22.698	22.625	22.916	22.625	22.698	22.553	22.116	22.553
65.0	12.586	12.804	13.095	13.241	13.895	13.241	13.095	12.804	12.586	12.804
67.5	3.128	4.292	4.947	5.238	5.093	5.238	4.947	4.292	3.128	4.292
70.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	1211.142	1211.142	1211.142	1211.142	1211.142	1211.142	1211.142
2.5	1208.087	1208.159	1209.032	1208.159	1208.087	1207.214	1205.031
5.0	1202.121	1202.558	1204.595	1202.558	1202.121	1201.394	1201.539
7.5	1192.300	1194.846	1194.628	1194.846	1192.300	1191.791	1190.336
10.0	1178.332	1183.061	1181.387	1183.061	1178.332	1181.533	1178.914
12.5	1166.983	1168.147	1167.638	1168.147	1166.983	1165.091	1166.765
15.0	1147.195	1148.141	1149.159	1148.141	1147.195	1149.596	1151.414
17.5	1123.988	1125.588	1126.534	1125.588	1123.988	1123.842	1125.006
20.0	1096.488	1094.742	1098.016	1094.742	1096.488	1096.124	1097.288
22.5	1066.952	1068.043	1066.370	1068.043	1066.952	1066.370	1067.897
25.0	1037.124	1033.487	1031.668	1033.487	1037.124	1036.906	1035.669
27.5	998.494	997.766	998.567	997.766	998.494	999.876	996.239
30.0	944.295	941.385	942.695	941.385	944.295	946.550	947.423

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CANDELA TABULATION - (Cont.)

32.5	882.821	879.766	883.913	879.766	882.821	887.914	890.096
35.0	806.361	808.398	813.127	808.398	806.361	815.309	823.821
37.5	722.480	721.244	725.318	721.244	722.480	730.483	736.885
40.0	625.286	624.413	630.961	624.413	625.286	632.198	637.508
42.5	525.401	522.345	526.856	522.345	525.401	529.402	529.838
45.0	421.295	420.059	421.805	420.059	421.295	422.605	423.041
47.5	326.648	323.956	320.318	323.956	326.648	324.101	320.391
50.0	198.680	200.063	202.027	200.063	198.680	196.643	197.662
52.5	116.036	117.273	119.310	117.273	116.036	115.091	114.872
55.0	72.314	72.386	73.914	72.386	72.314	72.095	71.586
57.5	47.215	47.360	47.870	47.360	47.215	47.069	46.633
60.0	32.447	32.519	32.810	32.519	32.447	32.301	32.156
62.5	22.698	22.625	22.916	22.625	22.698	22.553	22.116
65.0	13.095	13.241	13.895	13.241	13.095	12.804	12.586
67.5	4.947	5.238	5.093	5.238	4.947	4.292	3.128
70.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	437.35	N.A.	24.00
0-30	912.25	N.A.	50.00
0-40	1412.44	N.A.	77.40
0-60	1811.89	N.A.	99.20
0-80	1825.71	N.A.	100.00
0-90	1825.71	N.A.	100.00
10-90	1711.64	N.A.	93.80
20-40	975.09	N.A.	53.40
20-50	1297.02	N.A.	71.00
40-70	413.27	N.A.	22.60
60-80	13.82	N.A.	0.80
70-80	0.00	N.A.	0.00
80-90	0.00	N.A.	0.00
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	1825.71	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	114.07
10-20	323.28
20-30	474.90
30-40	500.19
40-50	321.92
50-60	77.52
60-70	13.82
70-80	0.00
80-90	0.00
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

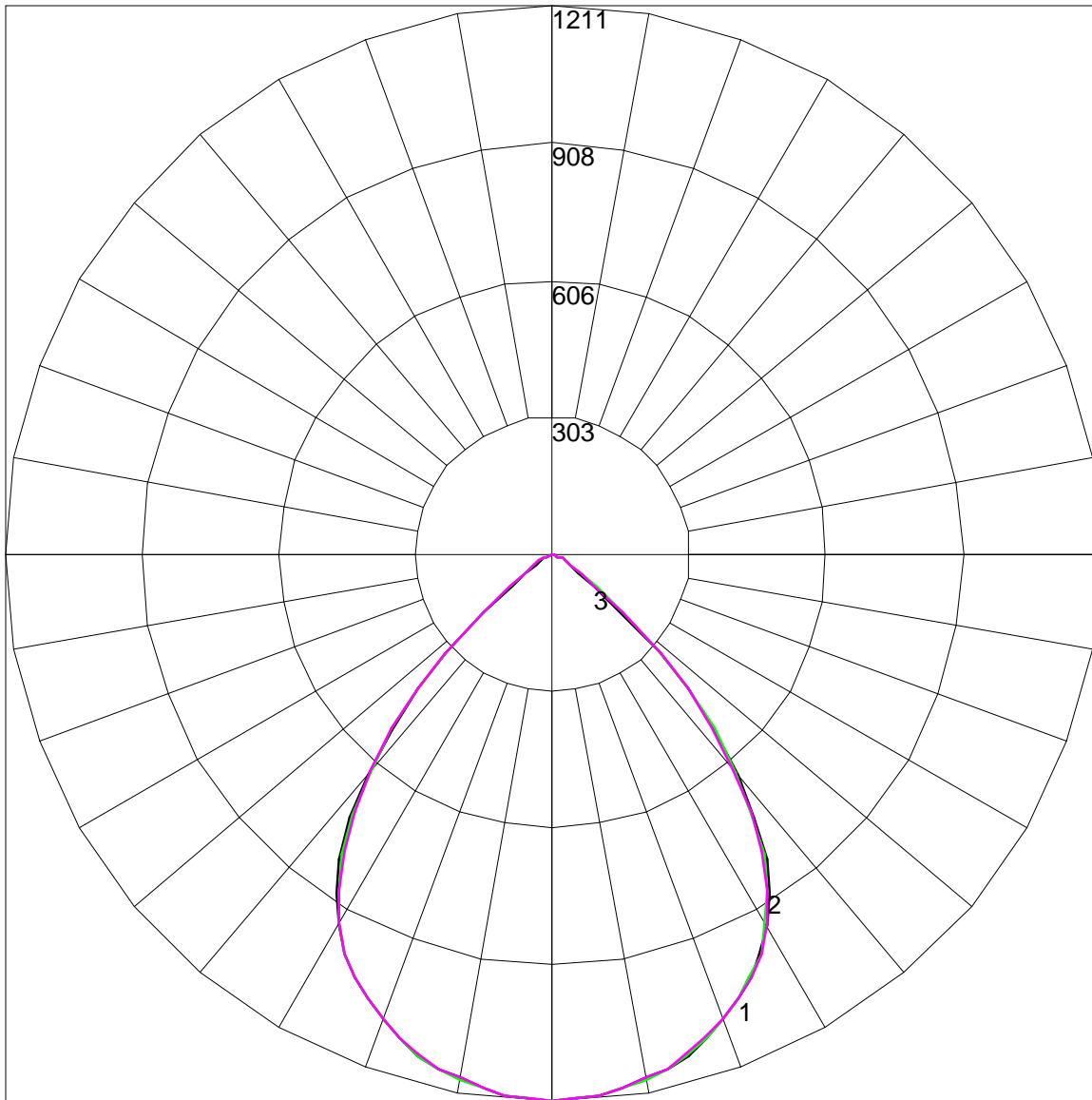
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	113	110	107	104	110	107	105	103	103	101	99	99	98	96	96	95	94	92
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83
3	99	92	86	82	97	90	85	81	88	83	80	85	81	78	83	80	77	75
4	93	84	78	73	91	83	77	73	81	76	72	79	74	71	77	73	70	68
5	87	78	71	66	85	77	70	65	75	69	65	73	68	64	71	67	64	62
6	82	71	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	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	56	50	45	55	49	45	54	49	45	53	49	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

POLAR GRAPH



Maximum Candela = 1211.142 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180)
2 - Vertical Plane Through Horizontal Angles (90 - 270)
3 - Vertical Plane Through Horizontal Angles (45 - 225)