

# KICHLER®

KICHLER PHOTOMETRIC LAB

**Filename: RLM - AS10 Shade 200W - Photometric Report**

Manufacturer: Kichler Lighting LLC

Luminaire: AS10 - 10" Angle Shade

Luminaire Cat: CTR180916-07

Lamp: 200W A21

Lamp Output: 1 lamp, rated Lumens/lamp: 3780

Max Candela: 2,341.6 at Horizontal: 355°, Vertical: 40°

Input Wattage: 204.6

Luminous Opening: Circular (Dia: 9.96", 0")

Test: LM-79 Distribution

Test Lab: Kichler Lighting LLC

Photometry: Type C

Nema Type: 6 X 6

**Roadway Summary**

Cutoff Classification: NONCUTOFF

Distribution: TYPE III, VERY SHORT

Max Cd, 90 Deg Vert: 301.9

Max Cd, 80 to &lt;90 Deg: 862.3

Lumens % Lamp

Downward Street Side: 2,314.1 61.2%

Downward House Side: 427.9 11.3%

Downward Total: 2,741.9 72.5%

Upward Street Side: 72.6 1.9%

Upward House Side: 0 0%

Upward Total: 72.6 1.9%

Total Lumens: 2,814.5 74.5%

**Flood Summary**

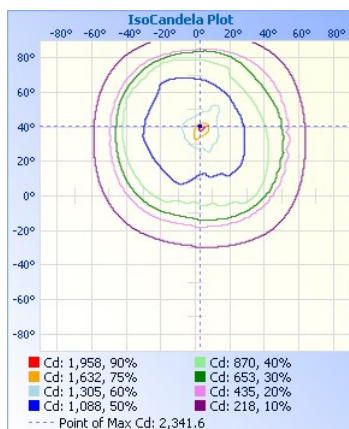
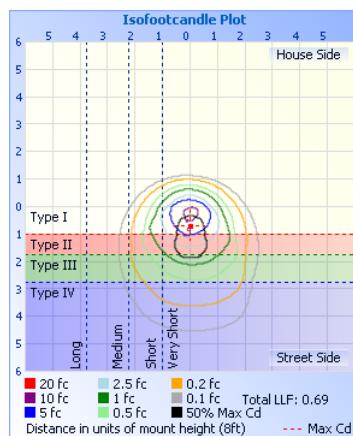
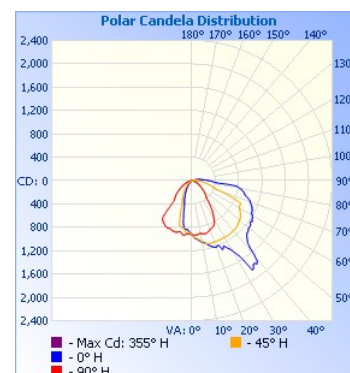
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	68.5%	2,587.9	122.5	123.4
Beam (50%):	26.2%	989.1	58.1	55
Total:	74.4%	2,813.2		

**Zonal Lumen Summary**

Zone	Lumens	% Lamp	% Luminaire
0-30	700.2	18.5%	24.9%
0-40	1,138.5	30.1%	40.5%
0-60	2,005.4	53.1%	71.3%
60-90	736.3	19.5%	26.2%
70-100	438.5	11.6%	15.6%
90-120	72.6	1.9%	2.6%
0-90	2,741.7	72.5%	97.4%
90-180	72.6	1.9%	2.6%
0-180	2,814.3	74.5%	100%

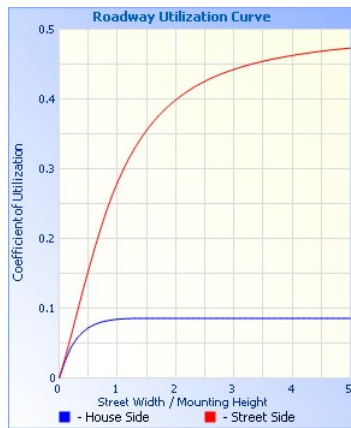
**Lumens Per Zone**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	88.8	3.2%	90-100	52.3	1.9%
10-20	250.0	8.9%	100-110	17.7	0.6%
20-30	361.3	12.8%	110-120	2.5	0.1%
30-40	438.3	15.6%	120-130	0	0%
40-50	450.2	16.0%	130-140	0	0%
50-60	416.7	14.8%	140-150	0	0%
60-70	350.2	12.4%	150-160	0	0%
70-80	256.4	9.1%	160-170	0	0%
80-90	129.8	4.6%	170-180	0	0%



Illuminance at a Distance			
	Center Beam fc	Beam Width	
1.3ft	546 fc	1.4 ft	1.4 ft
2.7ft	127 fc	2.8 ft	3.0 ft
4.0ft	57.7 fc	4.2 ft	4.4 ft
5.3ft	32.8 fc	5.5 ft	5.9 ft
6.7ft	20.5 fc	7.0 ft	7.4 ft
8.0ft	14.4 fc	8.3 ft	8.9 ft

■ Vert. Spread: 55.0°  
 ■ Horiz. Spread: 58.1°



#### Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50				30				10				0
RW %:	70	50	30	0	70	50	30	0	50	30	20		50	30	20		50	30	20		0
RCR: 0	.88	.88	.88	.88	.86	.86	.86	.73	.82	.82	.82		.78	.78	.78		.74	.74	.74		.73
1	.79	.75	.72	.68	.77	.73	.70	.59	.70	.67	.65		.67	.64	.62		.64	.62	.60		.58
2	.72	.65	.60	.55	.70	.63	.58	.49	.60	.56	.53		.58	.54	.51		.55	.52	.50		.48
3	.65	.57	.50	.45	.63	.56	.50	.41	.53	.48	.44		.51	.46	.43		.48	.45	.42		.40
4	.60	.50	.43	.38	.58	.49	.43	.35	.47	.41	.37		.45	.40	.36		.43	.39	.36		.34
5	.55	.45	.38	.33	.53	.44	.37	.31	.42	.36	.32		.40	.35	.31		.39	.34	.31		.29
6	.51	.40	.33	.29	.49	.40	.33	.27	.38	.32	.28		.36	.31	.28		.35	.31	.27		.25
7	.47	.37	.30	.25	.45	.36	.30	.24	.35	.29	.25		.33	.28	.24		.32	.28	.24		.23
8	.44	.33	.27	.22	.42	.33	.27	.21	.32	.26	.22		.31	.25	.22		.29	.25	.22		.20
9	.41	.31	.24	.20	.40	.30	.24	.19	.29	.24	.20		.28	.23	.20		.27	.23	.19		.18
10	.38	.28	.22	.18	.37	.28	.22	.18	.27	.22	.18		.26	.21	.18		.25	.21	.18		.16

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Maximum lm: 3.7  
Field lm: 2,587.9  
Total lm: 2,813.2

Alpha Table - Type C																																																			
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210								
0	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922				
1	943	943	944	947	946	945	945	947	948	945	946	944	941	940	937	934	931	928	925	922	921	918	916	914	912	910	909	907	906	903	901	902	900	901	901	901	899	905	906	909	909	907	908	908	908	908	908	908	908	908	
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3	987	986	986	984	981	980	979	977	975	974	973	972	969	964	957	951	945	939	934	930	926	923	918	916	908	899	895	892	889	885	879	874	870	867	868	866	873	874	877	878	877	881	878	881	878	881	878	881	878	881	
4	1000	1000	999	997	994	992	990	989	986	983	980	978	976	970	964	956	946	939	934	930	923	921	919	914	905	894	887	883	878	875	868	860	855	853	854	853	850	859	859	859	861	863	863	868	868	868	868	868	868		
5	1007	1005	1006	1005	1005	1007	1006	1005	1004	999	993	985	980	973	970	963	954	940	929	921	917	911	907	901	888	878	873	868	864	855	846	843	842	840	838	838	843	845	852	857	860	866	866	866	866	866	866	866	866	866	866
6	1016	1022	1028	1025	1028	1026	1023	1019	1015	1009	1002	993	985	977	968	960	952	941	932	922	911	902	895	891	882	871	866	860	852	842	837	835	831	830	833	838	839	846	855	859	865	875	878	881	885	885	885	885	885	885	
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10	1068	1074	1081	1085	1092	1092	1094	1092	1088	1081	1070	1061	1045	1025	1009	986	963	940	917	887	875	866	860	851	843	836	823	822	814	794	792	789	799	802	800	789	796	788	790	794	797	803	808	808	808	808	808	808	808	808	
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13	1109	1122	1132	1137	1136	1132	1127	1126	1118	1110	1097	1086	1069	1050	1029	1009	988	962	933	905	875	843	826	821	815	802	786	761	731	687	657	630	627	612	603	645	657	668	692	725	765	765	765	765	765	765	765	765	765	765	765
14	1127	1136	1141	1140	1139	1138	1132	1127	1123	1113	1103	1087	1072	1049	1026	1006	986	963	936	906	876	848	816	810	805	790	752	706	672	628	593	593	592	582	561	557	593	604	622	646	668	701	701	701	701	701	701	701	701	701	701
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19	1209	1186	1183	1175	1165	1155	1143	1137	1127	1119	1105	1087	1064	1038	1008	981	957	931	905	882	861	835	778	708	630	576	518	477	450	418	403	395	389	384	382	381	391	395	400	405	413	426	426	426	426	426	426	426	426	426	
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23	1229	1199	1192	1194	1174	1164	1153	1139	1128	1117	1101	1080	1052	1019	987	958	930	902	877	851	798	713	637	562	486	418	391	374	360	346	335	325	319	314	312	310	321	327	332	340	349	360	363	363	363	363	363	363	363	363	
24	1295	1249	1195	1186	1176	1164	1153	1140	1128	1117	1100	1077	1049	1014	983	953	922	895	868	841	782	673	599	518	444	396	375	358	342	329	317	308	300	295	291	289	302	306	312	320	331	343	343	343	343	343	343	343	343	343	
25	1265	1278	1214	1183	1167	1159	1165	1153	1141	1130	1118	1100	1075	1045	1009	978	947	916	887	860	820	728	645	556	476	408	380	360	341	325	312	299	289	281	275	272	271	282	286	292	301	311	324	324	324	324	324	324	324	324	324
26	1242	1243	1239	1185	1183	1165	1155	1143	1132	1118	1099	1072	1038	1005	972	940	909	879	852	787	691	608	516	433	387	365	344	325	309	295	281	270	263	258	255	254	264	267	273	281	291	305	305	305	305	305	305	305	305	305	305
27	1274	1230	1243	1191	1183	1168	1157	1144	1133	1117	1096	1068	1034	999	964	932	901	872	842	753	656	566	474	398	372	349	328	310	292	276	263	253	247	242	240	238	248	251	257	264	273	285	285	285	285	285	285	285	285	285	
28	1311	1262	1235	1200	1186	1168	1159	1146	1134	1116	1094	1064	1029	994	959	923	893	865	823	717	628																														

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**Luminaire Report Summary**

IESNA:LM-63-2002  
[LUMCAT] CTR180916-07  
[LUMINAIRE] AS10 - 10" Angle Shade  
[LAMP] 200W A21  
[TEST] LM-79 Distribution  
[TESTLAB] Kichler Lighting LLC  
[ISSUEDATE] 12/17/2019  
[MANUFAC] Kichler Lighting LLC  
FILE: CANDELA MULTIPLIER: 1  
FILE: VERTICAL ANGLES: 181, HORIZONTAL ANGLES: 73  
FILE: COORDINATE SYSTEM: TYPE C  
FILE: UNIT OF MEASURE: STANDARD  
FILE: BALLAST FACTOR: 1

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Reported data calculated from manufacturer's data file, based on IES recommended methods.