

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P14235

Luminaire Tested: **CRTK-X-A12-E-120-5 +RMARROA5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P14235
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CRTK-X-A12-E-120-5 +RMARROA5
Description: STREETWORKS CARETAKER, TYPE 5, 12 LED WITH ANSI REFRACTOR
Light Source: [12]4000K LEDS
Ballast/Driver: [1]ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5729.2 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.5' x H: 0.54')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 70
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



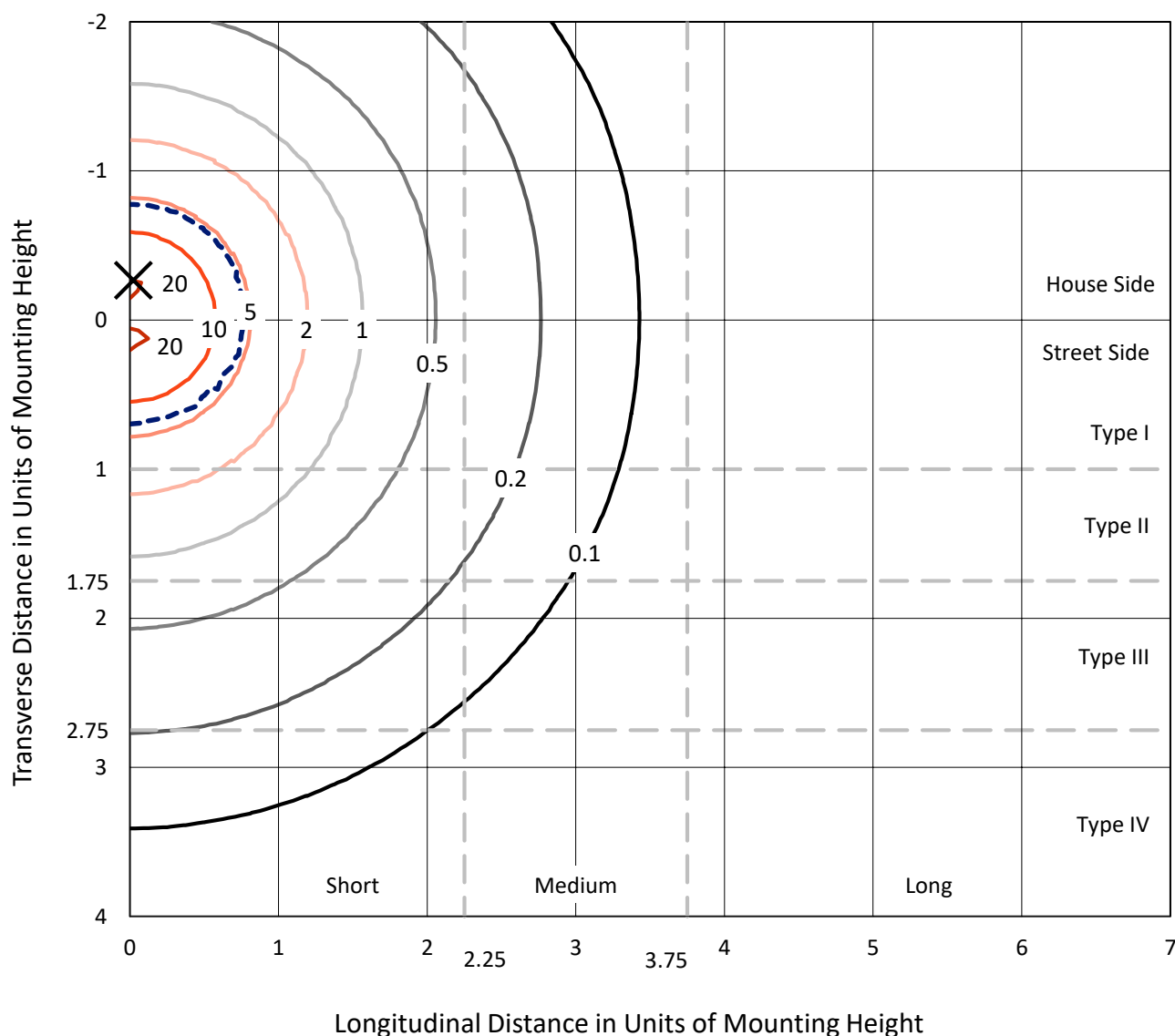
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

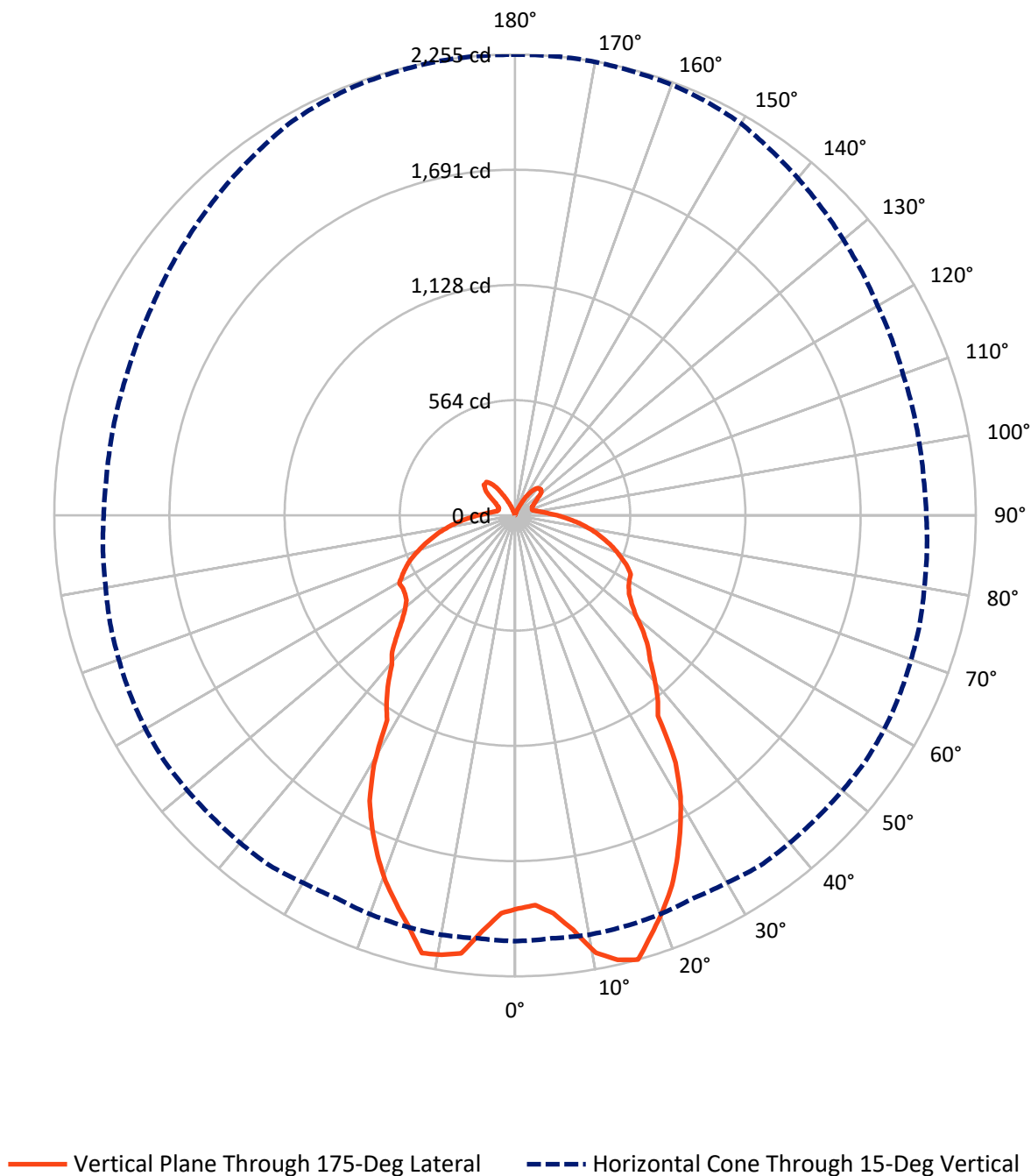


Based on 10 foot mounting height. Maximum calculated value = 21 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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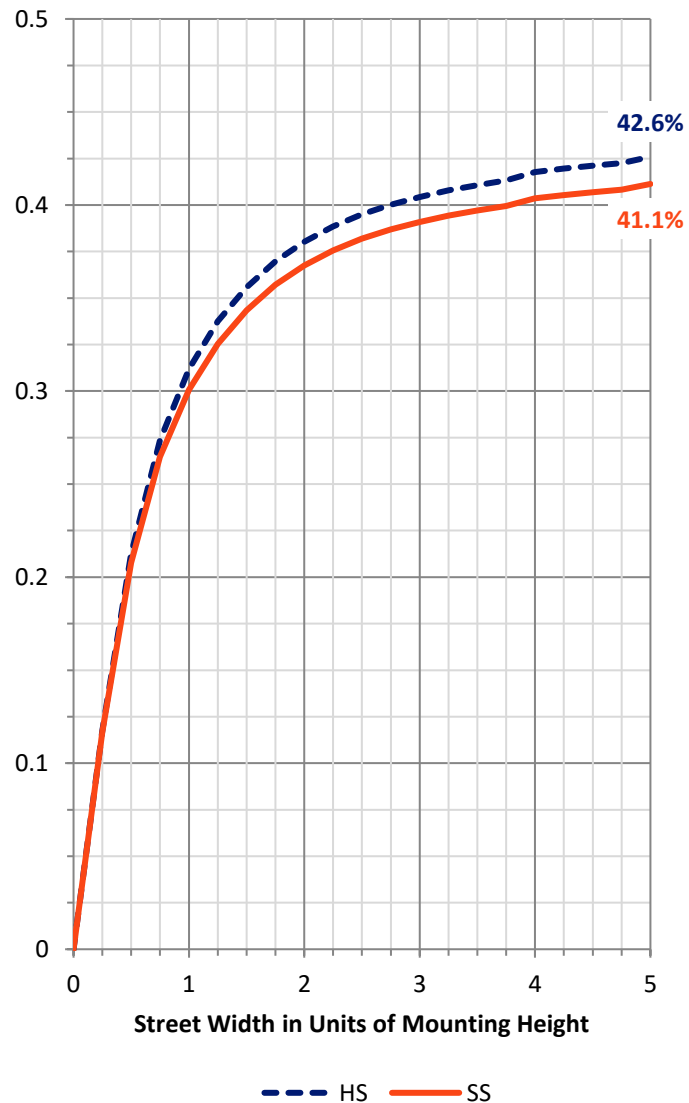
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2531.1	390.2	2921.3
	% Fixture	44.2	6.8	51.0
Street Side	Lumens	2428.1	379.8	2807.9
	% Fixture	42.4	6.6	49.0
Total	Lumens	4959.2	770.0	5729.2
	% Fixture	86.6	13.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.7	3.3
10°-20°	581.4	10.1
20°-30°	794.1	13.9
30°-40°	766.7	13.4
40°-50°	676.1	11.8
50°-60°	602.2	10.5
60°-70°	584.3	10.2
70°-80°	462.6	8.1
80°-90°	301.2	5.3
90°-100°	163.7	2.9
100°-110°	96.8	1.7
110°-120°	87.5	1.5
120°-130°	115.5	2.0
130°-140°	152.7	2.7
140°-150°	113.8	2.0
150°-160°	36.3	0.6
160°-170°	3.7	0.1
170°-180°	0.0	0.0
0°-90°	4959.2	86.6
0°-180°	5729.2	100.0

Coefficient of Utilization



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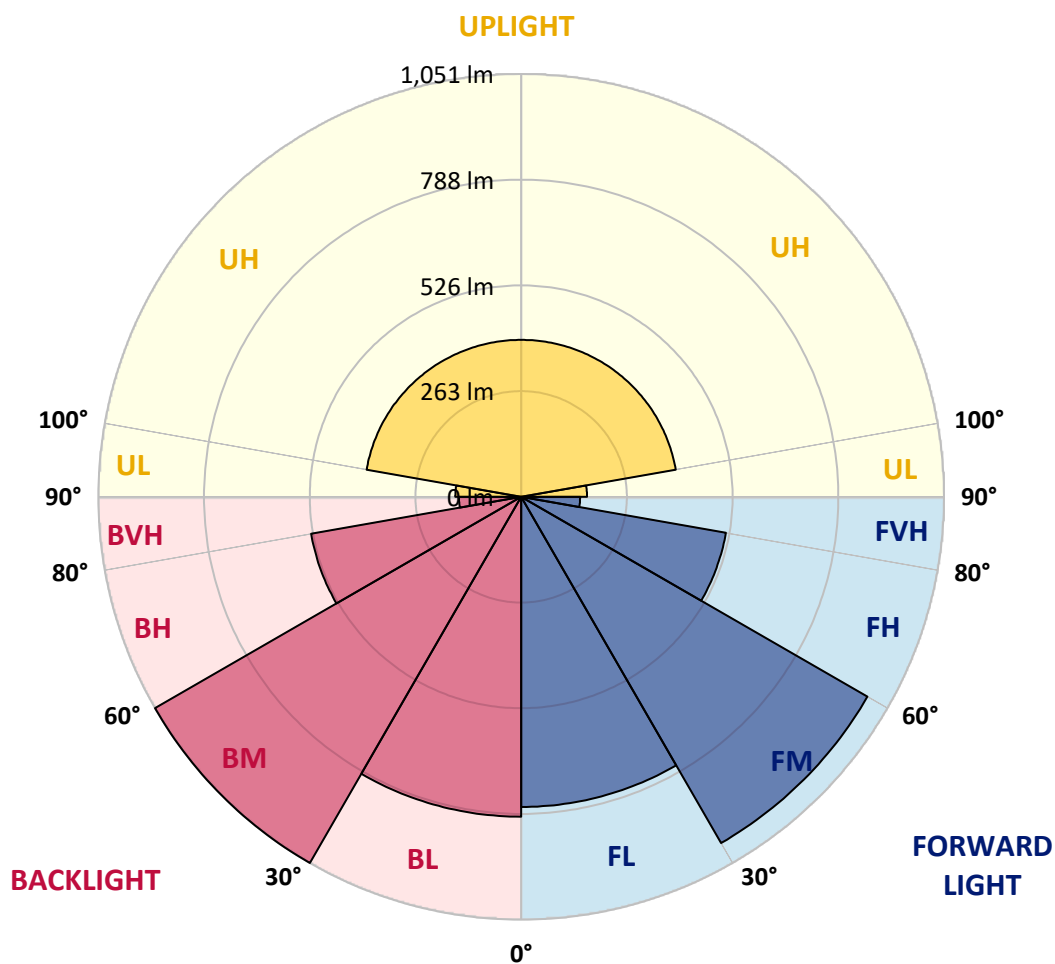
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	771.0	13.5			
FM	(30°-60°)	993.8	17.3			
FH	(60°-80°)	516.7	9.0			G0/660
FVH	(80°-90°)	146.6	2.6			G2/225
BL	(0°-30°)	795.2	13.9	B2/1000		
BM	(30°-60°)	1051.1	18.3	B2/2500		
BH	(60°-80°)	530.1	9.3	B2/1000		G0/660
BVH	(80°-90°)	154.6	2.7			G2/225
UL	(90°-100°)	163.7	2.9		U3/500	
UH	(100°-180°)	390.2	6.8		U3/500	

BUG Rating: B2-U4-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1923	1923	1923	1923	1923	1923	1923	1923	1923	1923	1923
2.5°	1949	1947	1947	1947	1946	1945	1943	1944	1942	1941	1940
5°	2042	2039	2040	2035	2032	2027	2021	2014	2007	1998	1992
7.5°	2163	2158	2155	2144	2136	2120	2108	2092	2073	2059	2039
10°	2183	2179	2179	2171	2167	2155	2141	2128	2110	2093	2075
12.5°	2194	2189	2188	2186	2181	2172	2164	2156	2146	2130	2110
15°	2083	2077	2083	2081	2076	2066	2075	2092	2092	2091	2093
17.5°	2006	1987	1981	1969	1987	1983	1986	1984	1968	1955	1970
20°	1910	1898	1897	1896	1914	1890	1872	1866	1878	1889	1883
22.5°	1809	1795	1796	1798	1801	1800	1781	1794	1790	1784	1778
25°	1697	1684	1683	1696	1706	1688	1670	1673	1690	1712	1680
27.5°	1577	1567	1567	1567	1572	1570	1585	1586	1586	1581	1586
30°	1401	1401	1414	1414	1432	1436	1434	1434	1467	1485	1471
32.5°	1179	1181	1183	1187	1195	1207	1220	1237	1277	1297	1310
35°	1111	1110	1113	1117	1119	1120	1123	1128	1133	1135	1135
37.5°	1029	1031	1030	1034	1035	1042	1050	1054	1063	1069	1073
40°	951	947	948	947	950	954	956	964	969	975	980
42.5°	900	899	897	894	895	897	904	909	915	916	919
45°	827	824	824	823	825	830	836	843	852	856	860
47.5°	757	756	754	754	755	758	763	769	770	774	783
50°	709	707	705	703	704	706	709	713	714	715	717
52.5°	678	674	675	672	674	674	675	673	673	677	681
55°	662	661	660	655	655	657	654	656	655	651	650
57.5°	657	654	654	651	650	649	646	644	644	641	643
60°	660	657	658	653	652	649	649	649	649	646	646
62.5°	632	625	623	624	621	621	616	617	618	622	624
65°	595	592	590	587	587	584	583	583	583	581	582
67.5°	559	556	554	552	553	550	549	547	547	549	551
70°	513	511	512	509	510	507	507	508	509	511	513
72.5°	469	469	468	468	467	466	467	466	467	470	472
75°	424	424	420	421	421	422	421	421	422	426	428
77.5°	385	384	384	384	383	383	383	384	385	388	391
80°	342	341	340	341	340	341	342	341	342	346	348
82.5°	300	300	300	300	301	299	301	301	302	305	307
85°	260	259	259	259	260	259	259	262	263	266	267
87.5°	223	220	222	223	222	222	222	224	225	228	229
90°	188	189	190	189	190	191	190	191	194	195	195
92.5°	160	156	160	158	159	159	159	160	162	162	164
95°	140	139	141	140	141	141	142	143	144	146	146
97.5°	120	119	121	121	122	121	121	123	125	124	125
100°	105	106	105	106	107	106	107	107	108	108	109
102.5°	95	95	95	96	95	96	95	95	95	96	95
105°	88	89	90	89	89	89	88	89	89	87	86
107.5°	85	85	84	85	85	84	83	83	82	83	81
110°	85	85	85	85	85	84	83	83	83	81	81



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	86	86	86	85	86	85	85	84	83	83	82
115°	90	86	86	88	88	87	86	84	85	84	84
117.5°	93	93	93	92	93	91	91	91	90	89	89
120°	103	101	101	101	100	100	100	99	99	98	97
122.5°	113	111	111	110	110	110	109	108	108	109	108
125°	130	129	129	128	127	127	125	124	123	123	123
127.5°	153	153	151	149	148	147	147	144	142	142	140
130°	182	181	178	176	175	174	171	168	166	165	164
132.5°	199	197	195	193	194	193	191	189	187	186	185
135°	213	213	211	209	208	209	209	207	205	203	204
137.5°	213	212	210	209	210	208	209	208	209	205	204
140°	215	215	213	212	212	212	212	212	209	208	209
142.5°	203	201	201	200	199	200	201	202	199	199	201
145°	184	182	183	183	182	183	184	186	186	184	187
147.5°	153	154	154	153	154	156	157	159	159	161	161
150°	120	119	120	121	123	123	126	128	129	130	132
152.5°	89	89	89	90	89	92	93	95	97	97	100
155°	62	62	63	64	63	66	66	68	68	71	72
157.5°	40	41	40	42	43	43	45	46	48	48	50
160°	23	22	22	24	25	25	27	28	32	32	33
162.5°	8	8	8	10	11	12	13	14	17	18	19
165°	2	2	1	1	3	3	4	3	6	6	7
167.5°	2	2	2	1	3	2	3	2	2	3	2
170°	1	1	2	2	1	2	1	1	1	1	1
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1923	1923	1923	1923	1923	1923	1923	1923	1923	1923	1923
2.5°	1938	1937	1936	1932	1931	1927	1922	1919	1919	1914	1913
5°	1985	1976	1970	1962	1952	1941	1933	1925	1919	1914	1910
7.5°	2025	2011	1995	1977	1961	1947	1937	1926	1918	1918	1917
10°	2058	2041	2026	2003	1986	1970	1959	1947	1941	1938	1943
12.5°	2090	2075	2055	2034	2015	1999	1988	1981	1975	1973	1979
15°	2095	2088	2077	2063	2051	2034	2024	2013	2008	2010	2015
17.5°	1975	1960	1965	1984	1987	2004	2023	2032	2037	2032	2031
20°	1865	1843	1880	1874	1870	1879	1904	1867	1861	1889	1908
22.5°	1794	1777	1772	1745	1786	1788	1791	1789	1800	1793	1797
25°	1668	1667	1710	1706	1695	1668	1705	1712	1714	1714	1714
27.5°	1599	1596	1591	1567	1618	1619	1621	1611	1616	1627	1629
30°	1470	1481	1534	1532	1508	1492	1532	1533	1538	1538	1535
32.5°	1347	1371	1361	1367	1429	1446	1439	1407	1419	1442	1446
35°	1141	1146	1153	1161	1189	1213	1218	1243	1260	1249	1254
37.5°	1076	1079	1086	1094	1103	1107	1109	1114	1113	1113	1115
40°	987	991	1000	1009	1015	1021	1030	1033	1040	1045	1050
42.5°	921	926	928	931	932	932	935	934	939	941	946
45°	869	874	880	883	883	886	887	887	891	894	896
47.5°	786	792	796	808	814	816	816	822	826	827	830
50°	717	724	726	729	734	735	739	743	746	751	756
52.5°	677	675	676	679	687	683	683	688	690	693	695
55°	648	650	650	649	649	652	653	654	657	663	665
57.5°	640	634	631	634	634	632	634	638	636	638	643
60°	646	641	639	633	629	628	630	626	625	631	635
62.5°	629	631	632	633	632	628	626	627	629	630	633
65°	581	580	583	581	579	576	577	577	580	585	591
67.5°	553	552	555	553	552	546	546	545	548	552	559
70°	513	514	516	516	513	513	511	509	511	518	520
72.5°	475	477	479	482	478	477	475	474	475	479	483
75°	430	434	437	436	438	436	433	434	435	437	442
77.5°	395	398	399	401	402	400	400	400	401	404	407
80°	353	355	357	360	359	360	359	358	361	363	367
82.5°	310	313	316	319	320	318	319	319	320	323	326
85°	269	272	275	277	277	277	277	278	278	282	285
87.5°	231	235	235	237	239	237	238	239	240	243	243
90°	198	198	202	204	204	203	204	203	203	208	209
92.5°	165	167	169	170	172	170	171	173	173	171	174
95°	147	148	150	151	152	152	151	152	152	154	154
97.5°	128	128	128	130	128	128	130	130	129	131	131
100°	110	109	110	111	111	111	111	111	111	112	112
102.5°	94	95	94	95	96	94	95	94	96	97	96
105°	88	86	87	87	84	85	86	86	86	86	87
107.5°	81	81	80	80	79	79	79	80	80	79	81
110°	81	79	80	80	78	79	78	79	80	80	80



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	82	81	80	81	80	78	80	79	81	81	81
115°	83	83	82	82	80	79	79	79	83	83	84
117.5°	89	88	87	87	87	86	86	85	88	89	89
120°	97	97	95	95	95	94	93	93	97	96	98
122.5°	107	105	105	104	103	103	103	102	105	106	108
125°	123	121	118	119	115	116	116	117	119	123	125
127.5°	140	137	134	134	132	130	131	132	135	138	142
130°	162	160	156	155	154	154	154	154	157	161	164
132.5°	182	182	178	177	174	174	174	177	179	182	184
135°	203	201	200	198	196	198	198	200	201	205	206
137.5°	206	206	206	205	204	204	207	209	210	212	213
140°	210	210	211	212	210	212	211	214	216	218	219
142.5°	200	201	204	205	205	207	206	208	210	211	212
145°	188	189	191	192	192	194	196	196	199	201	201
147.5°	164	165	169	170	172	172	176	177	178	181	179
150°	134	137	140	142	144	145	147	149	151	152	152
152.5°	102	104	108	111	112	114	117	116	117	119	119
155°	74	76	79	82	82	85	85	85	85	87	86
157.5°	53	54	56	58	59	61	61	60	61	62	61
160°	37	37	38	40	41	42	41	42	42	43	42
162.5°	21	21	22	25	25	25	26	26	25	26	27
165°	8	10	10	10	12	13	13	14	13	13	12
167.5°	3	4	4	4	4	4	5	6	6	6	5
170°	1	3	1	1	2	0	1	2	0	1	2
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1923	1923	1923	1923	1923	1923	1923	1923	1923	1923	1923
2.5°	1913	1913	1910	1910	1913	1910	1909	1910	1910	1909	1909
5°	1910	1910	1912	1914	1917	1921	1926	1933	1938	1944	1947
7.5°	1922	1928	1937	1945	1957	1973	1988	2002	2016	2024	2030
10°	1951	1962	1972	1985	2003	2022	2043	2067	2086	2107	2130
12.5°	1989	2002	2016	2035	2058	2080	2107	2131	2159	2179	2200
15°	2021	2035	2050	2074	2098	2125	2154	2182	2213	2230	2242
17.5°	2035	2029	2037	2053	2065	2074	2086	2114	2139	2136	2144
20°	1903	1898	1916	1930	1950	1943	1967	1999	2035	2039	2052
22.5°	1811	1825	1801	1828	1845	1873	1891	1889	1897	1914	1950
25°	1720	1728	1734	1758	1745	1741	1770	1800	1816	1811	1845
27.5°	1628	1657	1613	1646	1658	1671	1685	1683	1677	1686	1720
30°	1535	1540	1546	1563	1553	1536	1552	1588	1596	1577	1595
32.5°	1444	1451	1417	1423	1450	1463	1439	1430	1449	1451	1454
35°	1277	1271	1254	1229	1228	1240	1239	1224	1222	1219	1211
37.5°	1118	1119	1122	1121	1125	1127	1131	1136	1137	1136	1139
40°	1053	1054	1057	1059	1063	1062	1060	1061	1060	1057	1058
42.5°	948	953	957	961	963	967	967	969	968	971	971
45°	900	904	906	906	909	910	908	911	910	911	911
47.5°	836	840	843	846	848	846	845	846	847	842	842
50°	760	764	764	766	766	764	764	767	768	767	763
52.5°	697	702	705	705	707	709	711	709	709	711	711
55°	666	670	669	671	673	673	672	673	675	676	675
57.5°	642	648	647	648	652	651	652	649	652	652	650
60°	634	635	638	640	642	640	639	639	639	640	639
62.5°	637	638	641	641	641	639	637	635	632	632	634
65°	597	600	603	606	609	610	606	602	604	604	603
67.5°	560	565	566	570	571	569	567	564	564	563	563
70°	526	528	530	533	535	531	526	527	522	524	525
72.5°	487	492	494	494	495	492	490	486	485	485	483
75°	446	452	451	452	452	450	445	440	441	440	438
77.5°	412	414	418	417	416	412	409	405	403	402	402
80°	371	373	376	375	374	371	368	364	361	358	357
82.5°	328	332	334	335	332	330	326	322	321	318	317
85°	288	290	292	291	291	287	283	282	279	277	275
87.5°	247	250	250	249	249	247	244	242	238	236	236
90°	210	212	214	213	213	210	208	208	204	202	200
92.5°	177	177	177	179	177	175	173	171	171	169	168
95°	155	155	156	156	154	152	151	151	151	148	148
97.5°	132	132	133	131	134	131	130	129	129	129	128
100°	114	113	113	114	113	114	113	114	114	114	113
102.5°	98	99	97	99	99	99	99	99	101	101	100
105°	86	88	88	89	89	91	90	92	92	92	93
107.5°	80	80	82	83	83	84	84	87	86	87	86
110°	83	82	81	83	85	84	86	86	87	87	86



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REPORT N

CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
112.5°	81	83	82	83	83	85	86	87	87	89	87	0°
115°	83	84	87	85	87	88	89	89	89	92	91	2.5°
117.5°	90	93	94	93	93	95	96	95	95	96	97	5°
120°	100	101	103	104	104	105	105	105	104	106	106	7.5°
122.5°	111	113	113	117	118	117	119	119	116	114	117	10°
125°	127	128	130	133	136	137	136	137	135	131	134	12.5°
127.5°	142	145	149	152	155	156	158	160	158	153	152	15°
130°	165	167	173	176	180	181	184	187	183	177	176	17.5°
132.5°	186	189	193	197	199	203	204	203	200	192	189	20°
135°	208	211	213	218	221	222	222	220	213	203	199	22.5°
137.5°	215	217	219	222	225	226	223	216	208	200	195	25°
140°	220	222	223	224	228	228	225	215	206	199	191	27.5°
142.5°	214	216	215	217	218	216	214	205	193	183	179	30°
145°	201	202	202	202	201	198	196	187	177	166	161	32.5°
147.5°	180	181	179	176	176	171	167	161	150	143	135	35°
150°	152	151	149	147	145	139	135	128	121	114	107	37.5°
152.5°	119	117	115	114	111	106	101	96	90	81	72	40°
155°	86	87	84	82	82	78	75	70	65	57	53	42.5°
157.5°	62	60	60	59	57	56	53	52	47	43	37	45°
160°	41	42	42	40	39	36	35	33	31	27	24	47.5°
162.5°	26	25	25	23	22	20	20	18	17	15	13	50°
165°	12	11	11	10	9	8	8	6	7	4	4	52.5°
167.5°	5	4	4	3	3	4	3	3	2	4	3	55°
170°	1	1	1	1	1	1	1	1	0	2	1	57.5°
172.5°	0	0	0	0	0	0	0	0	0	0	0	60°
175°	0	0	0	0	0	0	0	0	0	0	0	62.5°
177.5°	0	0	0	0	0	0	0	0	0	0	0	65°
180°	0	0	0	0	0	0	0	0	0	0	0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°
												110°



NUMBER: P14235

NUMBER: CRTK-X-A12-E-120-5 +RMARROA5

REPORT NUMBER: P

CATALOG NUMBER:

DISTRIBUTION (continued):

165°	170°	175°	180°
1923	1923	1923	1923
1910	1910	1909	1910
1950	1952	1955	1954
2039	2044	2047	2051
2151	2167	2176	2174
2211	2222	2231	2235
2247	2253	2255	2254
2160	2165	2157	2152
2053	2056	2065	2083
1962	1957	1967	1983
1836	1844	1847	1869
1739	1720	1724	1740
1586	1590	1597	1618
1437	1442	1443	1434
1208	1209	1205	1207
1138	1138	1134	1134
1054	1052	1051	1049
970	971	970	970
910	911	911	910
839	842	841	841
762	765	764	764
709	711	715	716
674	677	678	677
649	653	656	656
636	640	643	640
634	634	636	639
602	603	605	606
561	562	565	566
522	526	526	525
483	485	487	487
439	440	443	442
401	403	404	405
358	358	360	360
317	317	317	318
274	276	274	274
235	235	235	234
202	201	202	199
167	166	168	166
148	148	147	147
128	125	126	125
112	111	113	113
100	101	102	101
93	93	94	95
87	89	88	88
88	87	89	89

CANDELA DISTRIBUTION:

	165°
112.5°	88
115°	93
117.5°	96
120°	107
122.5°	118
125°	138
127.5°	154
130°	177
132.5°	188
135°	196
137.5°	193
140°	191
142.5°	173
145°	157
147.5°	131
150°	101
152.5°	66
155°	49
157.5°	33
160°	21
162.5°	11
165°	2
167.5°	3
170°	1
172.5°	0
175°	0
177.5°	0
180°	0



'14235

CRTK-X-A12-E-120-5 +RMARROA5

TION (continued):

170°	175°	180°
89	90	88
94	92	91
97	98	97
108	107	108
119	116	118
137	130	130
153	145	143
174	168	160
187	176	167
192	179	174
187	175	167
185	173	168
168	160	155
150	142	141
125	119	115
96	93	90
62	60	61
44	40	39
30	29	26
19	16	16
11	9	7
2	2	1
2	1	3
0	1	1
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

(END OF REPORT)