

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge
or Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: P13096

Luminaire Tested: **TRU10S2F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: P13096
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: TRU10S2F
Description: TRIBUTE AREA/SITE HID FIXTURE WITH TYPE 2F SEMI SPECULAR
Light Source: (1) MOGUL BASE ED23.5 HIGH PRESSURE SODIUM LAMP
THE LAMP UNDER TEST IN GONIOPHOTOMETER WITH TEST DISTANCE OF
25.0 FEET
LU100/ED23.5 100 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 9500 (1 lamp)
Luminaire Lumens: 7336.7 lumens
Efficiency: 77.2%
Efficacy: 73.4 lumens/watt
Luminous Opening: Rectangular (W 1.1' x L: 1.1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

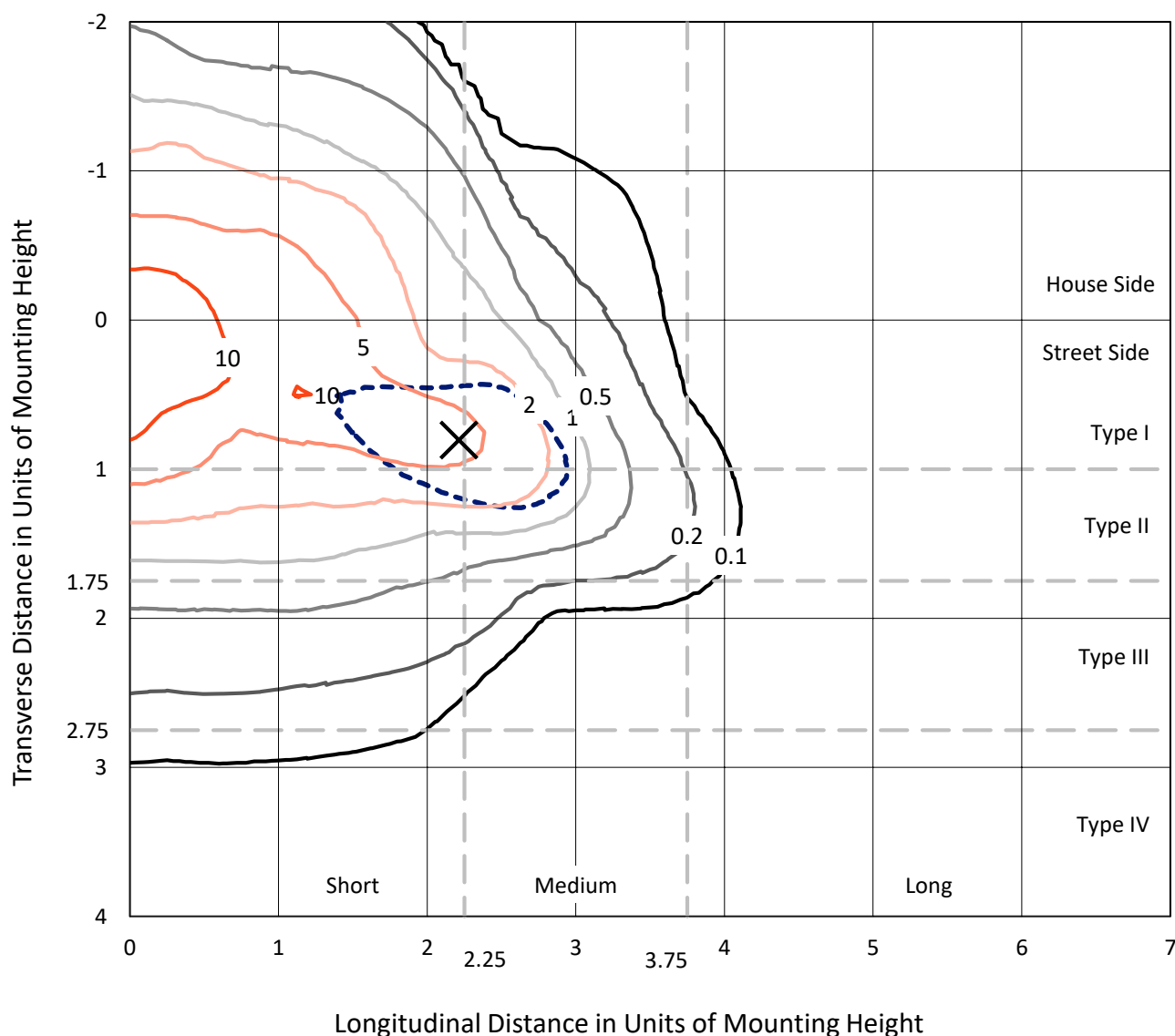
Input Watts (W): 100
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P13096
 CATALOG NUMBER: TRU10S2F

Iso-Footcandle Lines of Horizontal Illumination

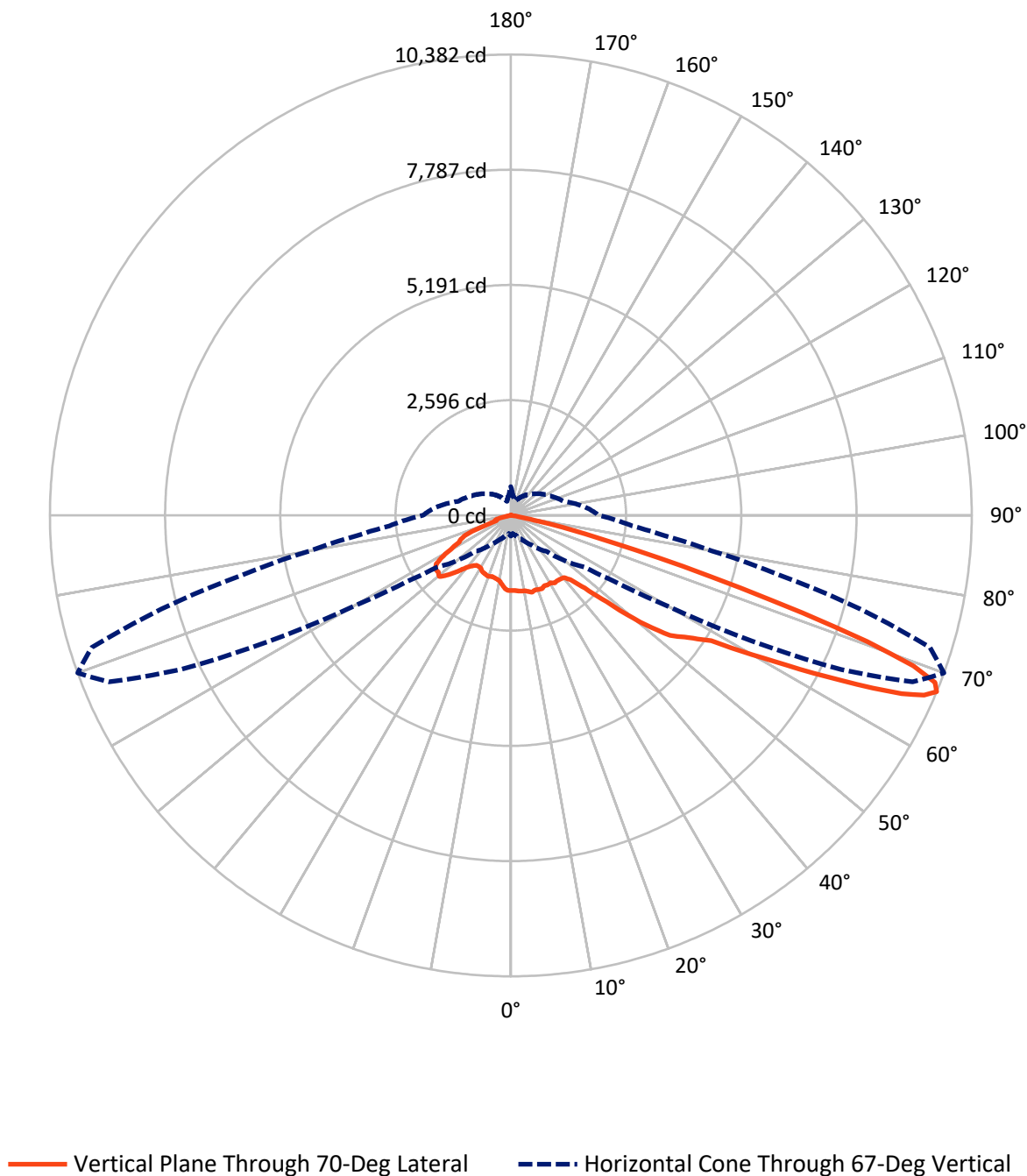
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.9 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P13096
CATALOG NUMBER: TRU10S2F

Luminous Intensity Polar Plot



REPORT NUMBER: P13096

CATALOG NUMBER: TRU10S2F

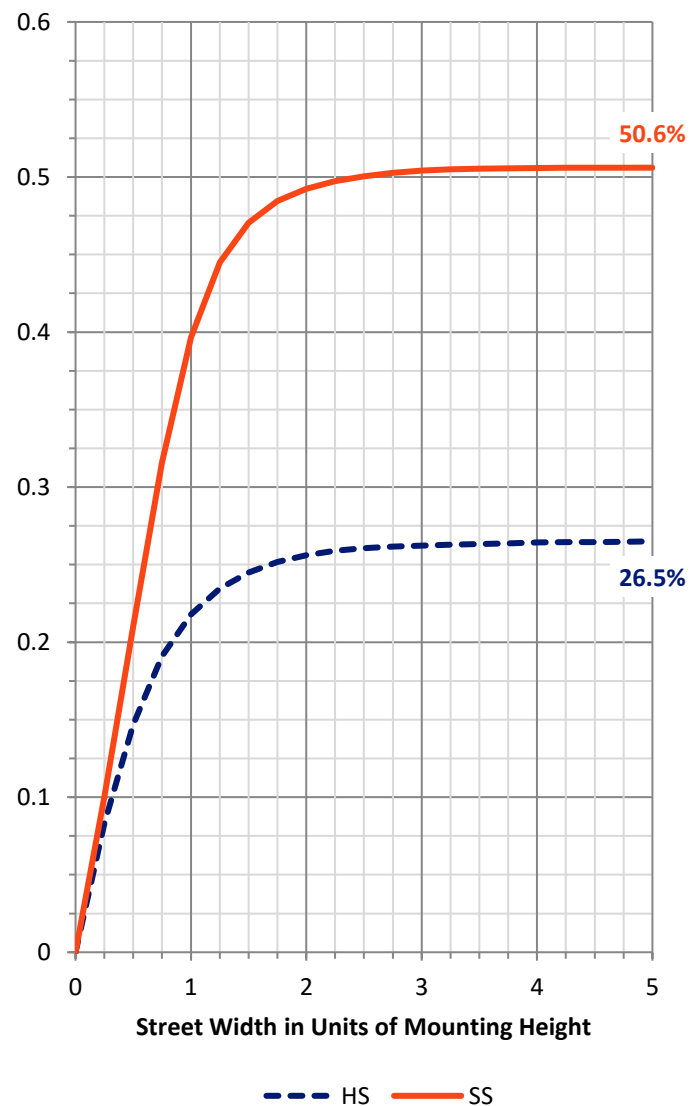
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2528.9	0.0	2528.9
	% Lamp	26.6	0.0	26.6
Street Side	Lumens	4807.8	0.0	4807.8
	% Lamp	50.6	0.0	50.6
Total	Lumens	7336.7	0.0	7336.7
	% Lamp	77.2	0.0	77.2

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	158.9	2.2	1.7
10°-20°	462.3	6.3	4.9
20°-30°	730.7	10.0	7.7
30°-40°	941.9	12.8	9.9
40°-50°	1262.6	17.2	13.3
50°-60°	1595.3	21.7	16.8
60°-70°	1674.2	22.8	17.6
70°-80°	496.2	6.8	5.2
80°-90°	14.6	0.2	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	7336.7	100.0	77.2
0°-180°	7336.7	100.0	77.2

Coefficient of Utilization



REPORT NUMBER: P13096

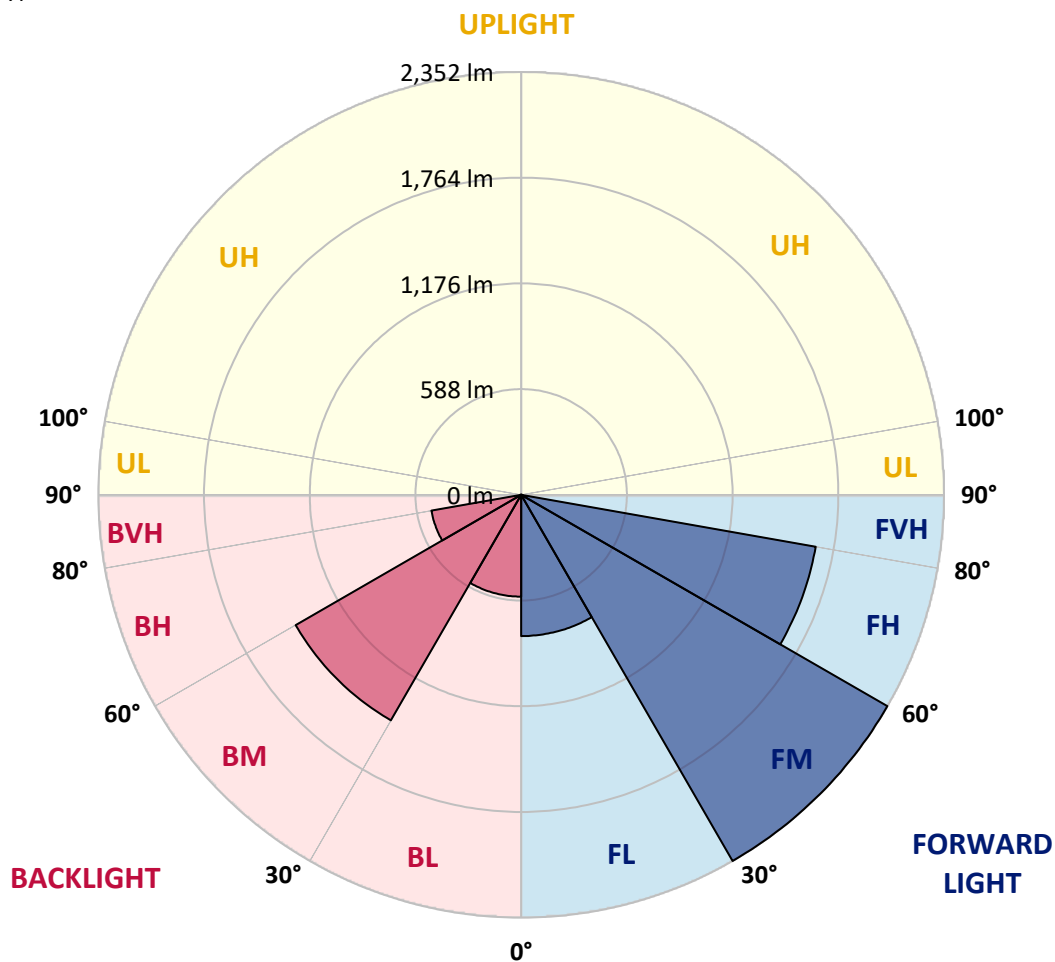
CATALOG NUMBER: TRU10S2F

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	785.6	8.3			
FM	(30°-60°)	2351.5	24.8			
FH	(60°-80°)	1663.3	17.5			G1/1800
FVH	(80°-90°)	7.3	0.1			G0/10
BL	(0°-30°)	566.3	6.0	B2/1000		
BM	(30°-60°)	1448.4	15.2	B2/2500		
BH	(60°-80°)	507.1	5.3	B2/1000		G2/1000
BVH	(80°-90°)	7.2	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		2163.3	22.8			

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P13096
CATALOG NUMBER: TRU10S2F

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	1693	1693	1693	1693	1693	1693	1693	1693	1693	1693	1693
2.5°	1735	1709	1707	1711	1714	1714	1698	1701	1703	1699	1710
5°	1782	1759	1764	1745	1747	1744	1734	1737	1741	1730	1732
7.5°	1838	1831	1819	1820	1833	1821	1788	1785	1767	1758	1760
10°	1873	1863	1876	1900	1884	1876	1806	1802	1782	1772	1764
12.5°	1906	1890	1938	1975	1925	1894	1858	1846	1817	1815	1811
15°	1963	1944	1986	1996	1986	1952	1902	1897	1867	1861	1846
17.5°	2045	2037	2049	2012	1999	1980	1912	1896	1879	1862	1829
20°	2176	2157	2121	2067	2024	1989	1920	1908	1873	1854	1833
22.5°	2163	2130	2107	2065	2012	1947	1888	1867	1835	1828	1826
25°	2026	2015	1974	1953	1929	1908	1867	1864	1840	1832	1817
27.5°	1966	1934	1881	1867	1886	1910	1919	1923	1895	1878	1841
30°	1905	1872	1754	1743	1772	1892	1945	1932	1905	1870	1833
32.5°	2002	1931	1728	1683	1750	1903	2003	1988	1945	1901	1878
35°	2126	2002	1761	1654	1695	1881	2023	2031	1971	1930	1905
37.5°	2112	2027	1798	1678	1649	1830	1999	2023	2003	1971	1921
40°	2115	2024	1823	1699	1653	1764	1978	2023	2051	2039	1959
42.5°	2087	2005	1805	1712	1608	1677	1989	2077	2116	2141	2120
45°	1988	1918	1740	1720	1540	1562	2057	2203	2314	2409	2424
47.5°	1683	1659	1601	1621	1400	1465	2170	2430	2647	2854	2970
50°	1359	1396	1372	1492	1301	1468	2415	2806	3205	3559	3785
52.5°	1039	1050	1116	1179	1212	1494	2538	3084	3634	4119	4452
55°	825	846	919	1051	1169	1540	2557	3193	3822	4334	4732
57.5°	709	717	799	996	1227	1550	2494	3112	3807	4469	4948
60°	603	609	696	888	1244	1600	2477	3118	3990	4998	5829
61°	579	567	662	832	1217	1634	2502	3154	4157	5352	6325
62°	537	538	619	779	1156	1639	2564	3243	4345	5725	6854
63°	478	497	556	699	1070	1583	2560	3254	4470	6002	7319
64°	492	489	557	695	1020	1523	2502	3238	4517	6271	7773
65°	457	459	523	644	940	1400	2387	3140	4473	6371	8088
66°	466	435	491	625	859	1259	2212	2969	4324	6324	8303
67°	465	413	474	602	813	1151	2033	2754	4086	6138	8212
68°	398	381	454	540	750	1057	1828	2543	3796	5757	7904
69°	373	381	425	516	684	933	1659	2290	3416	5303	7358
70°	323	323	384	460	603	821	1470	1994	2981	4645	6550
71°	332	323	371	452	581	776	1303	1742	2524	3916	5461
72°	274	274	339	421	539	719	1030	1332	1922	2929	4202
73°	177	194	251	370	487	546	637	848	1308	2123	3114
74°	108	97	148	268	419	311	387	582	949	1555	2273
75°	68	32	57	138	243	136	289	435	707	1130	1604
77.5°	38	20	21	45	21	48	123	183	297	412	538
80°	0	0	0	0	0	17	32	62	78	129	155
82.5°	1	1	1	2	0	6	15	20	25	42	43
85°	46	14	11	23	0	7	0	4	7	4	23
87.5°	25	3	8	6	2	7	5	8	9	6	9



REPORT NUMBER: P13096
CATALOG NUMBER: TRU10S2F

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P13096
CATALOG NUMBER: TRU10S2F

CANDELA DISTRIBUTION (continued):

	67.5°	70°	72.5°	75°	77.5°	80°	82.5°	85°	90°	95°	105°
0°	1693	1693	1693	1693	1693	1693	1693	1693	1693	1693	1693
2.5°	1697	1691	1696	1699	1701	1694	1693	1704	1693	1683	1701
5°	1718	1710	1712	1707	1699	1691	1688	1694	1681	1664	1656
7.5°	1741	1722	1719	1710	1691	1693	1675	1671	1644	1617	1591
10°	1736	1726	1710	1710	1686	1670	1667	1657	1620	1585	1529
12.5°	1773	1758	1754	1723	1732	1710	1677	1662	1616	1576	1504
15°	1846	1796	1786	1758	1734	1700	1688	1661	1612	1576	1480
17.5°	1801	1765	1754	1734	1698	1663	1649	1658	1578	1529	1460
20°	1808	1779	1769	1747	1723	1706	1687	1664	1616	1563	1500
22.5°	1799	1796	1769	1751	1760	1704	1701	1670	1621	1592	1499
25°	1802	1755	1740	1722	1700	1676	1661	1633	1592	1552	1475
27.5°	1807	1772	1767	1735	1710	1679	1654	1635	1583	1541	1457
30°	1802	1761	1750	1714	1677	1636	1612	1593	1547	1477	1397
32.5°	1838	1813	1764	1723	1707	1660	1632	1610	1543	1481	1395
35°	1846	1802	1788	1736	1711	1679	1651	1631	1578	1508	1407
37.5°	1868	1820	1793	1758	1733	1705	1688	1666	1612	1560	1472
40°	1898	1838	1846	1806	1781	1749	1740	1729	1672	1636	1563
42.5°	2041	1984	1970	1938	1934	1917	1903	1884	1836	1778	1696
45°	2379	2335	2292	2271	2264	2239	2216	2187	2113	2044	1883
47.5°	2989	2907	2865	2801	2743	2678	2614	2542	2375	2242	2060
50°	3856	3781	3631	3477	3270	3158	3069	2963	2739	2555	2265
52.5°	4584	4493	4281	3951	3692	3503	3374	3221	2906	2607	2251
55°	4933	4854	4554	4131	3775	3545	3418	3286	3055	2685	2305
57.5°	5296	5326	4960	4324	3792	3488	3350	3283	3091	2691	2207
60°	6401	6514	5960	4910	4005	3423	3095	2892	2620	2274	1859
61°	6980	7061	6427	5220	4116	3355	2954	2666	2343	2053	1679
62°	7579	7692	6958	5518	4217	3290	2783	2430	2086	1856	1514
63°	8161	8329	7542	5900	4356	3251	2578	2165	1793	1623	1415
64°	8798	9032	8199	6407	4669	3391	2586	2107	1672	1537	1417
65°	9328	9677	8884	7008	5090	3630	2688	2147	1643	1541	1390
66°	9701	10152	9485	7638	5658	4088	3021	2400	1826	1673	1315
67°	9796	10382	9897	8148	6196	4597	3484	2749	1982	1754	1227
68°	9558	10269	9866	8283	6450	4908	3771	2951	2027	1615	1031
69°	8999	9680	9353	7910	6186	4710	3644	2792	1700	1141	626
70°	7996	8514	8133	6834	5175	3892	2953	2202	1264	775	419
71°	6608	6930	6515	5429	4058	3005	2301	1739	1047	678	439
72°	5118	5427	5058	4160	3088	2334	1744	1358	918	625	470
73°	3852	4047	3764	3072	2240	1696	1273	1017	721	574	463
74°	2797	2900	2689	2143	1584	1177	897	728	581	526	449
75°	1920	1997	1867	1442	1150	798	603	531	446	432	434
77.5°	641	640	593	473	366	266	213	182	185	235	276
80°	164	176	162	140	103	108	65	57	58	68	126
82.5°	39	48	69	42	25	24	22	34	23	45	33
85°	34	5	11	7	4	0	0	5	1	18	0
87.5°	5	9	7	10	8	1	1	3	1	3	1



REPORT NUMBER: P13096
CATALOG NUMBER: TRU10S2F

CANDELA DISTRIBUTION (continued):

	67.5°	70°	72.5°	75°	77.5°	80°	82.5°	85°	90°	95°	105°
90°	0	0	0	0	0	0	0	0	0	0	0

REPORT NUMBER: P13096

CATALOG NUMBER: TRU10S2F

CANDELA DISTRIBUTION (continued):

	115°	125°	135°	145°	155°	165°	175°	180°
0°	1693	1693	1693	1693	1693	1693	1693	1693
2.5°	1687	1694	1675	1678	1682	1695	1678	1696
5°	1658	1633	1608	1606	1634	1632	1630	1654
7.5°	1564	1548	1534	1521	1498	1466	1439	1447
10°	1475	1469	1436	1414	1410	1365	1333	1342
12.5°	1433	1405	1375	1360	1344	1321	1286	1292
15°	1428	1394	1359	1324	1305	1281	1240	1241
17.5°	1417	1360	1346	1280	1250	1225	1168	1202
20°	1423	1375	1327	1284	1241	1200	1154	1151
22.5°	1410	1358	1302	1257	1195	1160	1141	1115
25°	1394	1314	1256	1208	1148	1105	1061	1063
27.5°	1380	1300	1265	1203	1136	1091	1038	1039
30°	1336	1246	1196	1177	1062	1003	966	970
32.5°	1317	1256	1176	1138	1054	973	952	943
35°	1324	1234	1157	1093	1032	948	907	900
37.5°	1366	1253	1145	1053	1001	895	852	886
40°	1440	1278	1136	1044	930	843	810	807
42.5°	1565	1378	1153	975	880	862	800	814
45°	1730	1496	1143	911	880	897	789	793
47.5°	1888	1582	1020	834	776	875	712	710
50°	1979	1548	974	835	750	851	678	659
52.5°	1895	1430	931	793	716	744	628	597
55°	1869	1270	899	695	659	630	547	560
57.5°	1795	1194	907	666	592	554	563	624
60°	1567	1042	800	639	531	476	539	583
61°	1435	983	769	672	500	440	520	571
62°	1392	932	746	628	475	412	528	549
63°	1212	899	712	571	429	366	468	519
64°	1158	891	740	579	480	387	497	555
65°	1099	875	719	571	430	353	486	569
66°	1054	855	706	555	417	335	483	566
67°	1013	841	685	550	421	331	468	648
68°	857	771	646	525	392	344	410	486
69°	518	567	552	480	370	265	297	417
70°	273	245	288	315	235	202	201	311
71°	261	167	143	148	138	231	195	284
72°	283	156	115	88	83	278	190	240
73°	267	152	95	113	88	304	163	177
74°	240	155	87	63	64	313	164	144
75°	233	126	98	57	56	308	134	128
77.5°	157	103	55	30	34	226	75	74
80°	49	25	5	2	8	99	41	7
82.5°	19	32	3	2	0	16	0	7
85°	17	6	0	17	9	0	10	0
87.5°	8	11	4	9	2	11	3	23



REPORT NUMBER: P13096
CATALOG NUMBER: TRU10S2F

CANDELA DISTRIBUTION (continued):

	115°	125°	135°	145°	155°	165°	175°	180°
90°	0	0	0	0	0	0	0	0

(END OF REPORT)