

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: HALO

Report Number: P407864

Luminaire Tested: **ALP7A30-DL**

Issue Date: 08/27/2020

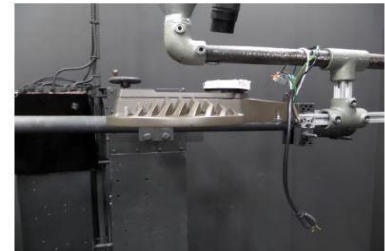
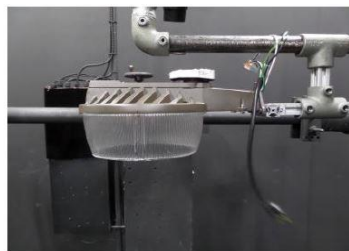
**Test Information**

Test Method: LM-79-08  
Report Number: P407864  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2006-852-18)  
Test Lab: INNOVATIONS CENTER(G1)  
Issue Date: 08/27/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ALP7A30-DL  
Description: HALO OUTDOOR BARN LIGHT PREMIUM 7000LM W/ DROP LENS  
Light Source: (78) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7265.3 lumens  
Efficiency: N/A  
Efficacy: 136.6 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.67' x H: 0.25')  
IES Classification: Type V - Short - Cutoff  
BUG Rating: B2 - U3 - G1

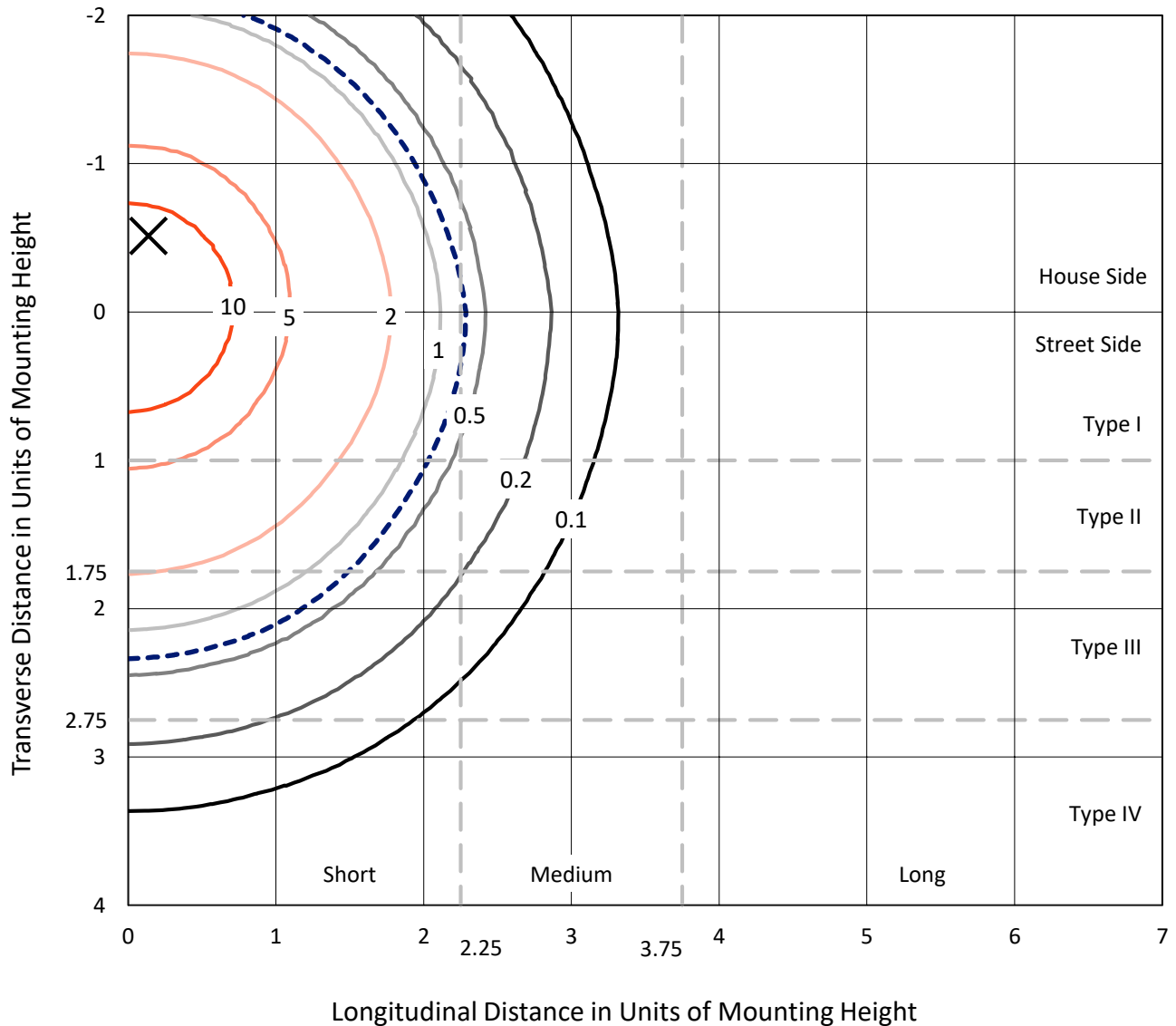
Input Watts (W): 53.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.452  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P407864  
 CATALOG NUMBER: ALP7A30-DL

### Iso-Footcandle Lines of Horizontal Illumination

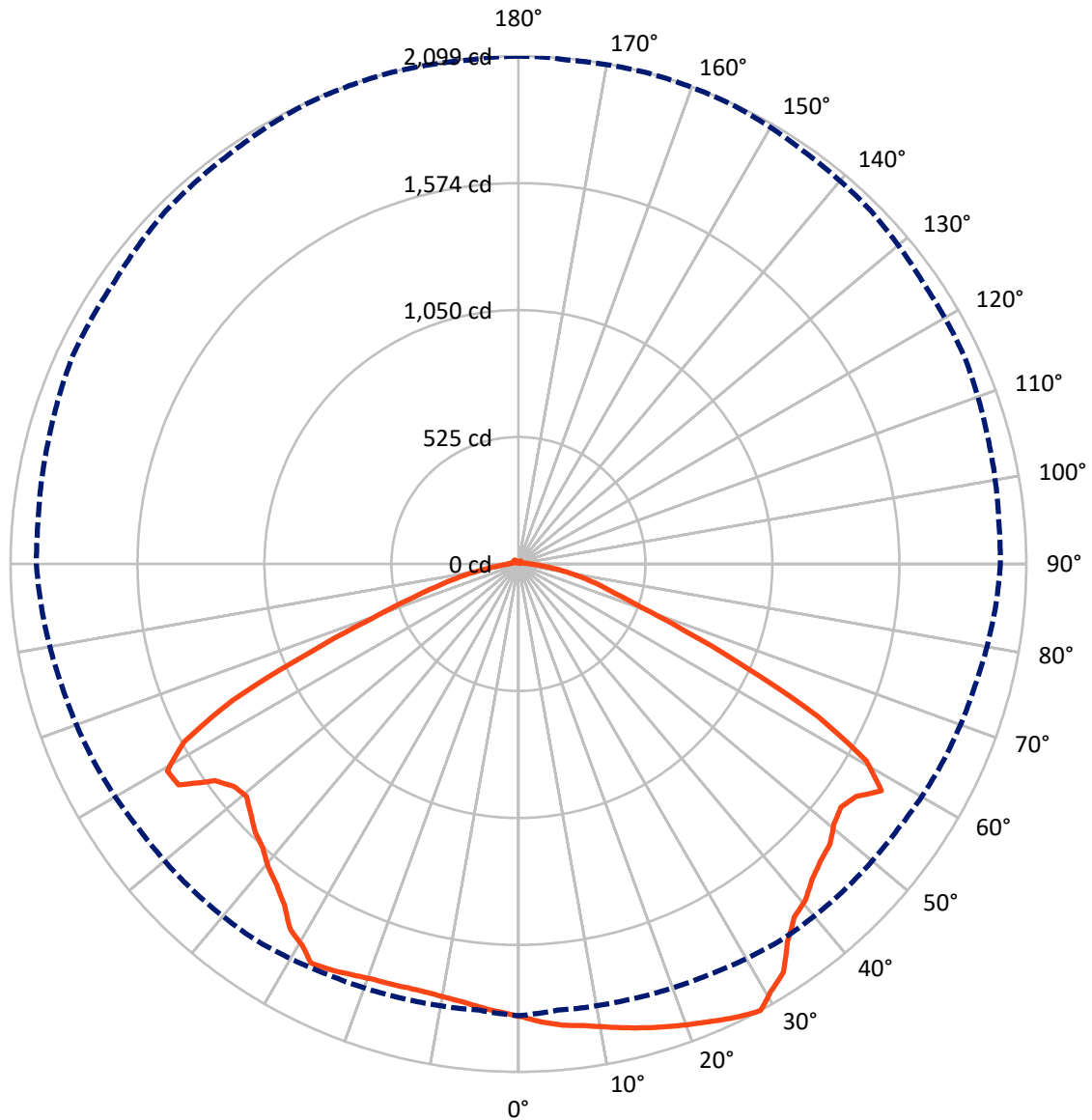
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.8 fc  
 Type V - Short - Cutoff

REPORT NUMBER: P407864  
CATALOG NUMBER: ALP7A30-DL

### Luminous Intensity Polar Plot



— Vertical Plane Through 165-Deg Lateral    - - - Horizontal Cone Through 28-Deg Vertical

REPORT NUMBER: P407864  
 CATALOG NUMBER: ALP7A30-DL

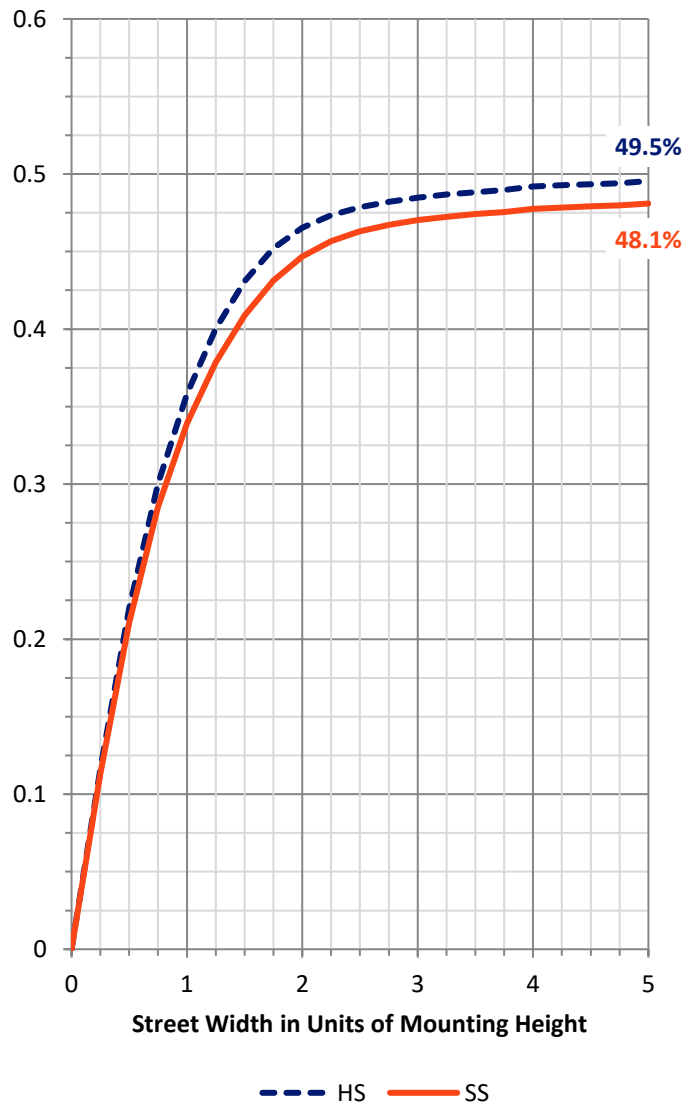
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3634.9	55.6	3690.6
	% Fixture	50.0	0.8	50.8
<b>Street Side</b>	Lumens	3511.4	63.3	3574.7
	% Fixture	48.3	0.9	49.2
<b>Total</b>	Lumens	7146.3	119.0	7265.3
	% Fixture	98.4	1.6	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.9	2.5
10°-20°	538.8	7.4
20°-30°	905.6	12.5
30°-40°	1149.7	15.8
40°-50°	1271.7	17.5
50°-60°	1474.8	20.3
60°-70°	1138.9	15.7
70°-80°	378.7	5.2
80°-90°	109.2	1.5
90°-100°	37.8	0.5
100°-110°	22.6	0.3
110°-120°	14.0	0.2
120°-130°	13.7	0.2
130°-140°	14.3	0.2
140°-150°	11.2	0.2
150°-160°	4.7	0.1
160°-170°	0.6	0.0
170°-180°	0.1	0.0
0°-90°	7146.3	98.4
0°-180°	7265.3	100.0

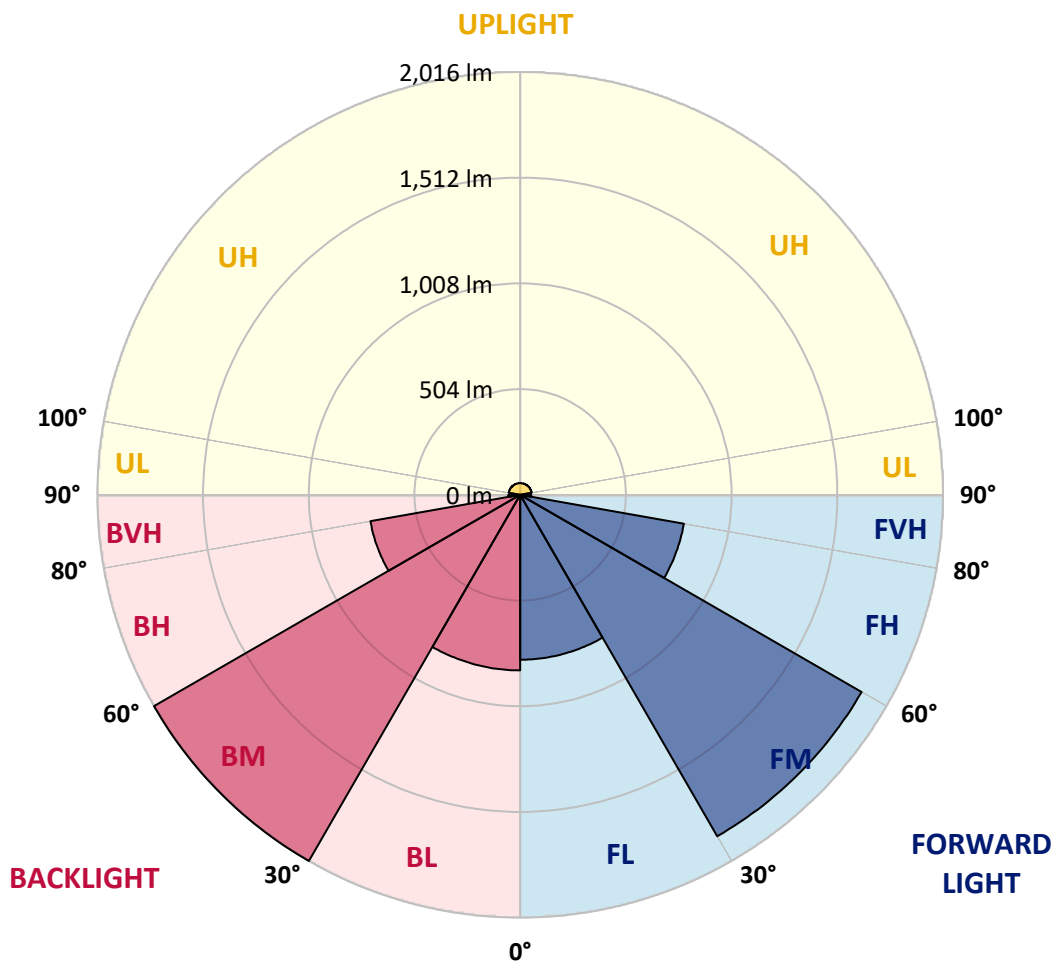


REPORT NUMBER: P407864  
 CATALOG NUMBER: ALP7A30-DL

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	786.2	10.8			
FM (30°-60°)	1879.9	25.9			
FH (60°-80°)	792.8	10.9			G1/1800
FVH (80°-90°)	52.5	0.7			G1/100
BL (0°-30°)	837.1	11.5	B2/1000		
BM (30°-60°)	2016.3	27.8	B2/2500		
BH (60°-80°)	724.9	10.0	B2/1000		G1/1800
BVH (80°-90°)	56.7	0.8			G1/100
UL (90°-100°)	37.8	0.5		U2/50	
UH (100°-180°)	55.6	0.8		U3/500	

**BUG Rating: B2-U3-G1**  
 Type V Short





REPORT NUMBER: P407864  
 CATALOG NUMBER: ALP7A30-DL

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1872	1872	1872	1872	1872	1872	1872	1872	1872	1872	1872
2.5°	1867	1846	1855	1863	1871	1861	1861	1859	1862	1871	1867
5°	1852	1830	1841	1848	1859	1851	1852	1855	1860	1870	1869
7.5°	1835	1814	1825	1831	1846	1837	1841	1845	1852	1868	1866
10°	1820	1804	1816	1825	1839	1834	1836	1846	1855	1872	1873
12.5°	1815	1798	1810	1822	1835	1835	1838	1849	1859	1877	1881
15°	1815	1797	1810	1821	1839	1840	1843	1856	1869	1888	1893
17.5°	1818	1802	1815	1826	1846	1847	1852	1867	1881	1902	1908
20°	1824	1809	1819	1834	1853	1859	1863	1881	1895	1917	1926
22.5°	1835	1821	1831	1845	1863	1873	1877	1898	1914	1934	1945
25°	1854	1839	1846	1855	1882	1888	1893	1915	1932	1958	1966
27.5°	1865	1850	1857	1870	1892	1903	1910	1932	1949	1976	1986
28°	1867	1851	1858	1871	1896	1905	1913	1935	1953	1980	1992
30°	1835	1817	1812	1831	1847	1879	1893	1924	1928	1939	1943
32.5°	1776	1762	1780	1791	1807	1829	1817	1837	1871	1916	1935
35°	1738	1712	1708	1730	1750	1741	1768	1795	1824	1862	1877
37.5°	1678	1671	1660	1666	1687	1691	1720	1745	1762	1765	1791
40°	1616	1608	1624	1628	1634	1661	1657	1685	1709	1708	1713
42.5°	1591	1581	1579	1567	1585	1614	1592	1620	1654	1673	1692
45°	1565	1557	1552	1549	1564	1591	1571	1583	1627	1643	1646
47.5°	1491	1490	1512	1517	1516	1542	1523	1547	1580	1605	1624
50°	1474	1468	1478	1493	1513	1504	1487	1523	1556	1578	1604
52.5°	1501	1491	1492	1489	1504	1493	1492	1533	1582	1619	1647
55°	1550	1542	1542	1552	1549	1538	1537	1570	1626	1669	1685
57.5°	1682	1674	1675	1679	1671	1660	1650	1677	1739	1778	1794
60°	1692	1683	1684	1678	1668	1647	1630	1658	1702	1737	1742
62.5°	1587	1572	1565	1557	1535	1509	1487	1500	1549	1552	1545
65°	1327	1317	1308	1291	1271	1232	1210	1207	1219	1237	1235
67.5°	946	942	939	950	920	899	857	863	870	887	890
70°	655	653	654	656	645	626	599	602	600	594	611
72.5°	482	479	476	478	474	464	447	440	438	444	442
75°	350	357	356	363	357	358	347	339	341	348	347
77.5°	261	260	264	262	264	267	258	259	261	270	268
80°	187	187	187	189	188	189	185	188	188	194	194
82.5°	122	120	122	123	126	127	125	125	126	126	128
85°	82	81	81	81	82	84	83	83	87	86	86
87.5°	60	60	60	61	60	61	61	62	61	63	64
90°	44	45	45	45	45	46	45	46	46	47	48
92.5°	38	38	38	38	38	39	39	39	39	39	40
95°	33	33	33	33	33	33	33	33	33	33	34
97.5°	30	30	30	30	30	30	30	30	30	30	30
100°	27	27	27	27	27	28	27	28	28	27	28
102.5°	25	25	25	25	25	25	25	25	25	25	25
105°	22	22	22	22	22	22	22	22	22	22	22
107.5°	19	19	19	20	20	20	19	20	20	19	20



REPORT NUMBER: P407864  
 CATALOG NUMBER: ALP7A30-DL

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	17	17	17	18	18	18	17	17	17	17	17
112.5°	15	15	15	16	17	17	16	16	15	14	15
115°	15	15	15	16	16	17	16	15	14	14	14
117.5°	15	15	15	15	16	16	16	15	14	13	13
120°	18	17	17	16	16	17	16	16	15	14	13
122.5°	20	19	19	18	17	17	17	17	16	14	14
125°	21	22	21	20	19	18	18	18	17	14	14
127.5°	22	22	22	21	20	19	19	18	18	16	15
130°	23	24	23	22	22	21	20	19	19	17	17
132.5°	23	24	23	22	22	22	21	19	20	18	17
135°	23	23	22	21	22	22	21	20	19	19	18
137.5°	22	23	22	22	22	22	21	20	21	20	20
140°	22	22	21	22	21	22	21	20	20	20	19
142.5°	21	20	20	20	20	21	21	20	20	20	19
145°	19	19	18	19	19	19	18	18	19	19	19
147.5°	16	17	17	17	17	17	17	17	17	17	17
150°	14	14	15	15	15	15	15	15	15	15	16
152.5°	12	12	12	12	12	12	13	13	13	13	14
155°	9	9	9	10	10	10	10	10	10	10	11
157.5°	6	6	6	7	7	7	7	7	7	7	7
160°	4	4	4	4	5	5	5	5	4	5	5
162.5°	3	3	3	3	3	3	3	3	3	3	3
165°	1	2	1	2	2	2	2	1	1	1	1
167.5°	1	1	1	1	1	1	1	1	1	1	1
170°	1	2	1	1	1	1	1	1	1	1	1
172.5°	1	1	1	1	1	1	1	1	1	1	1
175°	1	1	1	1	1	1	1	1	1	1	1
177.5°	1	1	1	1	1	1	1	1	1	1	1
180°	1	1	1	1	1	1	1	1	1	1	1





REPORT NUMBER: P407864  
 CATALOG NUMBER: ALP7A30-DL

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	176°	180°
0°	1872	1872	1872	1872	1872	1872	1872	1872	1872	1872	1872
2.5°	1870	1875	1889	1875	1883	1890	1898	1896	1887	1891	1893
5°	1871	1882	1898	1884	1895	1903	1914	1915	1904	1909	1910
7.5°	1872	1883	1900	1894	1905	1914	1925	1926	1919	1923	1924
10°	1879	1892	1912	1905	1919	1930	1944	1945	1938	1940	1943
12.5°	1886	1902	1925	1922	1938	1946	1966	1967	1960	1964	1964
15°	1897	1915	1940	1937	1956	1968	1985	1989	1982	1986	1987
17.5°	1915	1930	1954	1953	1973	1987	2005	2010	2006	2009	2012
20°	1930	1946	1970	1970	1993	2006	2025	2031	2025	2029	2030
22.5°	1950	1965	1987	1990	2012	2024	2049	2053	2047	2051	2054
25°	1971	1983	2008	2011	2034	2048	2068	2077	2073	2076	2077
27.5°	1988	2006	2028	2031	2058	2070	2090	2097	2090	2095	2093
28°	1993	2009	2033	2037	2062	2073	2094	2099	2093	2097	2099
30°	1944	1987	2023	2024	2032	2034	2050	2053	2051	2055	2060
32.5°	1937	1931	1932	1945	1978	1991	2010	2011	1982	1983	1983
35°	1880	1880	1902	1882	1883	1908	1930	1916	1939	1946	1946
37.5°	1794	1814	1842	1832	1851	1839	1852	1852	1871	1871	1868
40°	1733	1784	1773	1781	1781	1778	1808	1826	1799	1802	1794
42.5°	1685	1719	1715	1714	1748	1738	1749	1780	1762	1764	1765
45°	1659	1688	1690	1689	1729	1724	1729	1751	1748	1749	1763
47.5°	1635	1662	1651	1655	1675	1680	1704	1732	1694	1699	1707
50°	1600	1630	1631	1624	1645	1662	1680	1690	1664	1664	1672
52.5°	1636	1632	1630	1625	1660	1663	1687	1669	1675	1676	1674
55°	1691	1691	1669	1646	1670	1685	1699	1695	1689	1690	1688
57.5°	1786	1770	1756	1742	1767	1771	1782	1769	1760	1760	1759
60°	1737	1693	1660	1635	1664	1664	1671	1652	1649	1644	1648
62.5°	1526	1472	1420	1418	1400	1399	1392	1390	1377	1383	1355
65°	1212	1148	1100	1085	1071	1060	1056	1039	1035	1026	1030
67.5°	856	810	774	758	760	761	753	752	731	734	754
70°	580	555	538	538	533	537	542	540	527	525	526
72.5°	434	416	411	415	421	420	422	422	418	413	415
75°	343	329	326	337	344	343	342	343	336	336	335
77.5°	266	255	256	263	270	269	269	270	265	264	265
80°	194	188	188	194	199	201	205	203	203	202	205
82.5°	126	129	130	134	139	142	143	143	143	141	143
85°	87	88	87	90	90	93	95	95	97	96	97
87.5°	63	63	64	64	66	66	68	68	68	67	67
90°	47	47	48	48	49	49	49	49	48	48	50
92.5°	40	39	40	40	40	39	39	38	39	39	39
95°	34	34	34	34	34	33	33	33	32	32	32
97.5°	30	30	30	30	30	30	28	27	27	27	27
100°	27	27	28	28	27	26	25	23	23	23	23
102.5°	25	25	25	25	25	23	21	19	19	19	19
105°	22	22	22	22	22	21	18	16	17	17	17
107.5°	19	20	19	20	19	18	16	14	15	15	15



REPORT NUMBER: P407864  
 CATALOG NUMBER: ALP7A30-DL

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	176°	180°
110°	17	17	17	17	16	15	13	12	12	12	12
112.5°	14	14	14	15	14	14	11	10	9	9	9
115°	13	13	14	14	14	13	11	9	8	8	8
117.5°	13	13	13	13	13	12	11	9	7	7	7
120°	13	13	13	13	13	12	11	8	7	7	7
122.5°	13	13	13	14	14	13	11	8	6	6	7
125°	14	13	14	14	14	13	11	9	7	7	7
127.5°	14	14	15	14	14	13	11	9	6	6	6
130°	16	16	16	16	16	15	14	10	6	6	6
132.5°	17	17	17	18	17	17	15	10	7	6	6
135°	17	18	18	18	18	18	16	13	7	6	5
137.5°	19	19	18	19	20	20	18	14	8	7	6
140°	20	18	20	20	21	21	19	14	9	8	7
142.5°	19	20	20	21	21	20	18	14	9	8	8
145°	19	20	20	21	21	19	18	13	9	8	8
147.5°	17	18	19	20	19	19	15	11	8	7	7
150°	16	17	17	19	18	17	14	10	8	7	6
152.5°	14	14	15	16	15	14	11	9	7	6	6
155°	11	12	12	13	12	11	9	6	5	4	4
157.5°	8	8	9	9	8	8	6	4	3	2	2
160°	5	5	6	6	5	4	3	2	1	1	1
162.5°	3	3	3	3	3	2	2	1	1	1	1
165°	1	1	1	1	1	1	1	1	1	1	1
167.5°	1	1	1	1	1	1	1	1	1	1	1
170°	1	1	1	1	1	1	1	1	1	1	1
172.5°	1	1	1	1	1	1	1	1	1	1	1
175°	1	1	1	1	1	1	1	1	1	1	1
177.5°	1	1	1	1	1	1	1	1	1	1	1
180°	1	1	1	1	1	1	1	1	1	1	1

(END OF REPORT)