

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213123

Luminaire Tested: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213123
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

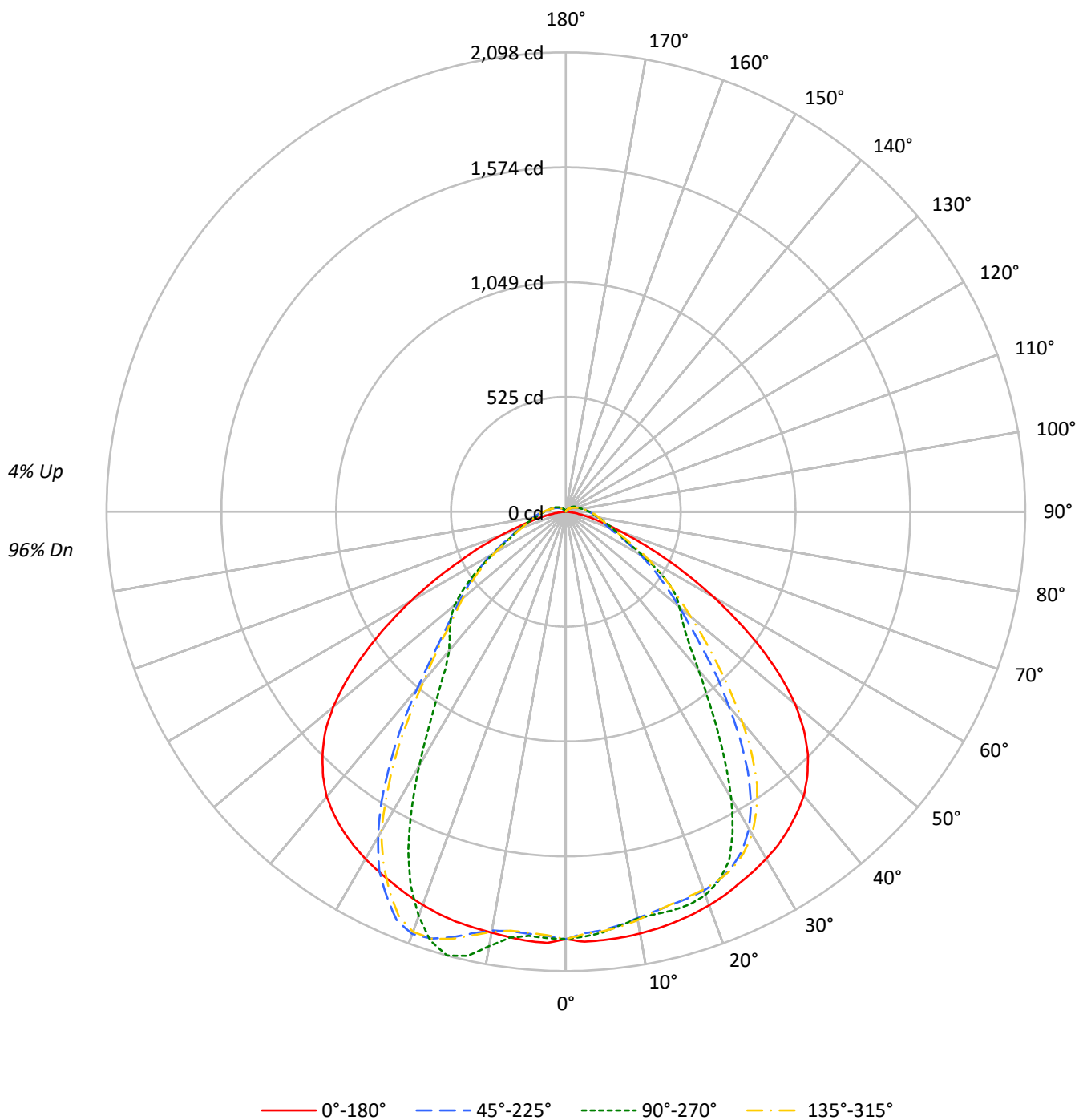
Lumens per Lamp: N/A
Luminaire Lumens: 4653.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 46
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: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	98	98	96
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	84	84	82
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	73	73	71
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	63	63	61
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	56	56	54
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	49	49	47
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	44	44	42
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	40	40	38
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	36	36	34
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	33	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15773	15773	15773	15773
5°	15887	15147	15920	15267
10°	15961	14517	15928	15503
15°	16085	14324	16076	15948
20°	16262	14096	16245	14859
25°	16462	13373	16454	12921
30°	16772	11590	16781	10267
35°	17101	9372	17149	7931
40°	17390	7546	17463	6648
45°	17329	6391	17418	6224
50°	16582	5885	16813	5754
55°	14712	5289	15080	4808
60°	11933	4048	12566	3713
65°	8871	3098	9557	2937
70°	6032	2674	6800	2557
75°	3945	2412	4594	2281
80°	2550	2249	2989	2069
85°	1312	2243	1722	2049

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 17418 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.4	4.0
10°-20°	551.6	11.9
20°-30°	838.6	18.0
30°-40°	899.6	19.3
40°-50°	780.8	16.8
50°-60°	578.6	12.4
60°-70°	331.5	7.1
70°-80°	183.6	3.9
80°-90°	111.8	2.4
90°-100°	72.7	1.6
100°-110°	48.7	1.0
110°-120°	32.9	0.7
120°-130°	20.2	0.4
130°-140°	10.6	0.2
140°-150°	4.8	0.1
150°-160°	1.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1575.7	33.9
0°-40°	2475.3	53.2
0°-60°	3834.8	82.4
0°-90°	4461.7	95.9
90°-120°	154.3	3.3
90°-150°	189.9	4.1
90°-180°	191.0	4.1
0°-180°	4653.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1952	1952	1952	1952	1952	
5°	1964	1929	1968	1944	1964	187
15°	1939	1884	1938	2098	1939	549
25°	1873	1762	1872	1703	1873	866
35°	1771	1200	1776	1015	1771	1109
45°	1564	769	1572	749	1564	1197
55°	1091	577	1118	524	1091	967
65°	495	292	533	277	495	499
75°	141	186	164	175	141	161
85°	19	128	25	117	19	25
90°	0	107	2	99	0	1
95°	1	88	0	84	1	1
105°	1	66	1	62	1	1
115°	1	53	1	48	1	1
125°	1	40	1	33	1	1
135°	1	25	1	21	1	1
145°	1	15	2	12	1	1
155°	2	7	2	6	2	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1965.9	1960.9	1958.9	1954.8	1957.9	1970.0	1961.9	1948.8	1949.8	1926.6	1938.7
5°	1963.9	1957.9	1954.8	1950.8	1952.8	1963.9	1955.8	1942.7	1941.7	1918.5	1929.6
7.5°	1960.9	1954.8	1949.8	1946.8	1947.8	1956.9	1946.8	1931.7	1928.6	1903.4	1913.5
10°	1955.8	1951.8	1944.8	1939.7	1938.7	1948.8	1932.7	1917.5	1910.5	1884.3	1894.3
12.5°	1948.8	1942.7	1935.7	1926.6	1925.6	1931.7	1918.5	1897.4	1890.3	1869.1	1880.2
15°	1938.7	1931.7	1923.6	1913.5	1908.5	1912.5	1896.4	1877.2	1876.2	1858.1	1873.2
17.5°	1927.6	1917.5	1908.5	1894.3	1887.3	1890.3	1877.2	1860.1	1862.1	1851.0	1868.1
20°	1912.5	1901.4	1887.3	1873.2	1863.1	1868.1	1859.1	1846.0	1849.0	1840.9	1856.0
22.5°	1895.4	1880.2	1863.1	1847.0	1838.9	1846.0	1838.9	1827.8	1828.8	1823.8	1832.9
25°	1873.2	1856.0	1835.9	1815.7	1811.7	1816.7	1812.7	1803.6	1799.6	1791.5	1795.5
27.5°	1853.0	1833.9	1808.7	1787.5	1780.4	1790.5	1781.4	1766.3	1755.2	1744.1	1736.1
30°	1829.8	1806.6	1778.4	1754.2	1748.2	1752.2	1739.1	1715.9	1686.7	1672.6	1650.4
32.5°	1804.6	1774.4	1739.1	1711.9	1707.8	1704.8	1680.6	1647.3	1602.0	1573.8	1539.5
35°	1771.4	1738.1	1695.7	1662.5	1656.4	1639.3	1600.0	1555.6	1497.1	1448.7	1390.3
37.5°	1734.1	1694.7	1650.4	1606.0	1588.9	1554.6	1499.1	1452.8	1364.1	1305.6	1235.0
40°	1691.7	1644.3	1589.9	1536.4	1508.2	1452.8	1389.3	1320.7	1235.0	1156.4	1096.9
42.5°	1633.2	1582.8	1518.3	1458.8	1410.4	1336.8	1262.2	1165.4	1086.8	1020.3	959.8
45°	1563.7	1503.2	1428.6	1357.0	1295.5	1207.8	1120.1	1023.3	957.8	880.1	838.8
47.5°	1473.9	1408.4	1328.8	1249.1	1168.5	1071.7	979.9	887.2	821.7	766.2	736.0
50°	1368.1	1307.6	1219.9	1125.1	1036.4	935.6	843.8	774.3	710.8	676.5	653.3
52.5°	1237.0	1180.6	1090.8	988.0	902.3	803.5	719.8	663.4	618.0	592.8	584.7
55°	1090.8	1041.4	952.7	856.9	769.2	678.5	615.0	565.6	536.3	521.2	522.2
57.5°	934.6	896.3	812.6	726.9	644.2	575.7	518.2	478.9	456.7	455.7	458.7
60°	778.3	750.1	677.5	603.9	531.3	475.9	433.5	406.3	392.2	393.2	392.2
62.5°	629.1	602.9	550.5	490.0	432.5	395.2	356.9	345.8	333.7	332.7	332.7
65°	495.0	474.8	432.5	389.2	345.8	321.6	302.5	289.3	280.3	278.3	279.3
67.5°	372.0	363.9	334.7	305.5	278.3	263.1	247.0	244.0	236.9	236.9	238.9
70°	277.2	271.2	255.1	237.9	226.8	216.8	208.7	208.7	207.7	206.7	211.7
72.5°	200.6	201.6	196.6	183.5	182.5	180.5	178.4	181.5	182.5	185.5	191.6
75°	141.1	144.2	144.2	142.2	146.2	151.2	154.2	159.3	165.3	169.4	176.4
77.5°	99.8	99.8	104.8	110.9	119.0	128.0	136.1	143.2	151.2	156.3	162.3
80°	64.5	67.5	75.6	86.7	97.8	109.9	121.0	130.1	138.1	146.2	150.2
82.5°	38.3	43.4	53.4	67.5	81.7	96.8	107.9	119.0	128.0	136.1	139.1
85°	19.2	26.2	38.3	53.4	68.6	84.7	98.8	108.9	119.0	126.0	130.1
87.5°	6.0	14.1	27.2	41.3	57.5	73.6	88.7	99.8	108.9	114.9	119.0
90°	0.0	7.1	19.2	34.3	49.4	65.5	79.6	91.7	100.8	105.9	108.9
92.5°	0.0	4.0	15.1	28.2	42.3	58.5	72.6	83.7	91.7	96.8	98.8
95°	1.0	3.0	11.1	23.2	37.3	52.4	65.5	75.6	83.7	88.7	89.7
97.5°	1.0	2.0	9.1	19.2	32.3	46.4	59.5	69.6	75.6	80.7	81.7
100°	1.0	2.0	7.1	17.1	28.2	41.3	53.4	62.5	69.6	73.6	74.6
102.5°	1.0	1.0	6.0	14.1	25.2	36.3	47.4	56.5	62.5	66.5	68.6
105°	1.0	1.0	5.0	12.1	22.2	32.3	42.3	51.4	56.5	60.5	62.5
107.5°	1.0	1.0	4.0	10.1	19.2	28.2	38.3	45.4	51.4	55.4	57.5
110°	1.0	1.0	3.0	9.1	16.1	25.2	33.3	40.3	46.4	50.4	52.4

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.0	1.0	3.0	8.1	14.1	22.2	29.2	36.3	41.3	45.4	48.4
115°	1.0	1.0	3.0	7.1	13.1	19.2	26.2	32.3	37.3	41.3	44.4
117.5°	1.0	1.0	3.0	6.0	11.1	17.1	23.2	29.2	33.3	37.3	40.3
120°	1.0	1.0	2.0	5.0	10.1	15.1	20.2	25.2	30.2	34.3	37.3
122.5°	1.0	1.0	2.0	5.0	8.1	13.1	18.1	22.2	27.2	30.2	33.3
125°	1.0	1.0	2.0	4.0	7.1	12.1	16.1	20.2	23.2	27.2	30.2
127.5°	1.0	1.0	2.0	4.0	6.0	10.1	14.1	18.1	21.2	24.2	26.2
130°	1.0	1.0	2.0	3.0	5.0	8.1	12.1	15.1	19.2	21.2	23.2
132.5°	1.0	1.0	1.0	3.0	4.0	6.0	9.1	13.1	16.1	19.2	20.2
135°	1.0	1.0	1.0	2.0	4.0	5.0	7.1	10.1	13.1	16.1	18.1
137.5°	1.0	1.0	1.0	2.0	3.0	5.0	6.0	8.1	11.1	13.1	16.1
140°	1.0	1.0	1.0	2.0	3.0	4.0	5.0	7.1	9.1	11.1	13.1
142.5°	1.0	1.0	1.0	2.0	2.0	3.0	4.0	6.0	7.1	9.1	11.1
145°	1.0	1.0	1.0	2.0	2.0	3.0	4.0	5.0	6.0	7.1	9.1
147.5°	1.0	1.0	1.0	2.0	2.0	2.0	3.0	4.0	5.0	6.0	7.1
150°	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	5.0	6.0
152.5°	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	4.0	5.0
155°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	4.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	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°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1934.7	1936.7	1948.8	1947.8	1945.8	1943.8	1943.8	1941.7	1943.8	1948.8	1946.8
5°	1924.6	1927.6	1936.7	1935.7	1933.7	1932.7	1931.7	1928.6	1930.6	1937.7	1935.7
7.5°	1906.4	1909.5	1917.5	1913.5	1910.5	1912.5	1907.5	1904.4	1908.5	1915.5	1914.5
10°	1887.3	1889.3	1899.4	1897.4	1892.3	1893.3	1888.3	1886.3	1891.3	1895.4	1896.4
12.5°	1874.2	1881.2	1890.3	1889.3	1888.3	1889.3	1884.3	1882.3	1885.3	1889.3	1888.3
15°	1871.2	1880.2	1890.3	1890.3	1891.3	1892.3	1887.3	1884.3	1887.3	1890.3	1889.3
17.5°	1868.1	1879.2	1888.3	1887.3	1888.3	1890.3	1882.3	1880.2	1884.3	1888.3	1886.3
20°	1858.1	1868.1	1874.2	1872.2	1872.2	1873.2	1863.1	1863.1	1869.1	1872.2	1873.2
22.5°	1829.8	1841.9	1841.9	1836.9	1836.9	1832.9	1829.8	1823.8	1830.8	1835.9	1839.9
25°	1787.5	1792.5	1786.5	1775.4	1769.3	1764.3	1750.2	1762.3	1762.3	1777.4	1782.4
27.5°	1728.0	1716.9	1699.8	1676.6	1671.5	1655.4	1646.3	1649.4	1654.4	1675.6	1691.7
30°	1630.2	1596.9	1567.7	1557.6	1535.4	1519.3	1503.2	1511.2	1520.3	1532.4	1565.7
32.5°	1501.2	1468.9	1421.5	1404.4	1381.2	1361.0	1341.9	1354.0	1370.1	1378.2	1414.5
35°	1353.0	1314.7	1271.3	1242.1	1217.9	1206.8	1182.6	1199.7	1216.9	1222.9	1254.2
37.5°	1195.7	1156.4	1118.1	1092.9	1069.7	1062.6	1046.5	1058.6	1071.7	1080.8	1107.0
40°	1046.5	1010.2	980.9	963.8	947.7	941.6	935.6	940.6	950.7	957.8	977.9
42.5°	918.4	889.2	869.0	859.0	847.9	839.8	840.8	842.8	847.9	863.0	872.1
45°	806.5	789.4	776.3	774.3	767.2	766.2	765.2	769.2	772.3	781.3	788.4
47.5°	716.8	709.8	706.7	710.8	713.8	709.8	711.8	716.8	722.9	722.9	721.8
50°	646.2	648.3	652.3	661.4	667.4	669.4	671.4	677.5	678.5	680.5	677.5
52.5°	588.8	590.8	601.9	616.0	623.0	626.1	630.1	636.2	636.2	638.2	634.1
55°	530.3	533.3	544.4	558.5	564.6	568.6	572.6	576.7	579.7	583.7	580.7
57.5°	465.8	474.8	481.9	485.9	490.0	493.0	496.0	497.0	503.1	504.1	509.1
60°	397.2	399.2	406.3	405.3	402.3	410.3	406.3	413.3	420.4	429.5	430.5
62.5°	331.7	332.7	337.7	335.7	339.8	338.7	341.8	341.8	346.8	350.8	355.9
65°	280.3	281.3	285.3	285.3	284.3	287.3	290.4	292.4	292.4	295.4	299.4
67.5°	242.0	245.0	249.0	251.0	253.1	253.1	256.1	257.1	259.1	260.1	262.1
70°	215.7	219.8	223.8	225.8	226.8	228.9	229.9	229.9	231.9	232.9	234.9
72.5°	196.6	200.6	203.7	203.7	205.7	206.7	206.7	207.7	208.7	210.7	212.7
75°	180.5	183.5	185.5	184.5	184.5	184.5	185.5	185.5	187.5	189.5	191.6
77.5°	165.3	168.4	168.4	166.3	166.3	166.3	166.3	167.4	168.4	170.4	172.4
80°	154.2	154.2	153.2	153.2	151.2	150.2	150.2	151.2	151.2	153.2	156.3
82.5°	142.2	142.2	141.1	140.1	139.1	138.1	138.1	139.1	140.1	141.1	143.2
85°	131.1	131.1	129.0	129.0	128.0	128.0	128.0	128.0	129.0	130.1	132.1
87.5°	120.0	119.0	118.0	116.9	116.9	116.9	116.9	116.9	118.0	120.0	121.0
90°	108.9	107.9	106.9	106.9	105.9	105.9	106.9	106.9	107.9	108.9	109.9
92.5°	98.8	97.8	96.8	96.8	95.8	95.8	96.8	95.8	97.8	97.8	98.8
95°	89.7	88.7	87.7	87.7	87.7	87.7	87.7	87.7	88.7	88.7	89.7
97.5°	81.7	80.7	79.6	79.6	80.7	79.6	80.7	80.7	80.7	81.7	82.7
100°	74.6	73.6	73.6	74.6	73.6	73.6	74.6	74.6	74.6	74.6	75.6
102.5°	68.6	68.6	68.6	68.6	68.6	68.6	69.6	69.6	69.6	69.6	70.6
105°	62.5	63.5	63.5	63.5	64.5	64.5	64.5	65.5	65.5	65.5	65.5
107.5°	58.5	59.5	59.5	60.5	60.5	61.5	61.5	61.5	61.5	62.5	62.5
110°	54.4	55.4	56.5	57.5	57.5	58.5	58.5	58.5	58.5	58.5	58.5

TEST NUMBER: P1213123

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	50.4	51.4	52.4	54.4	55.4	55.4	55.4	55.4	56.5	56.5	55.4
115°	46.4	48.4	49.4	51.4	52.4	52.4	53.4	53.4	53.4	53.4	52.4
117.5°	42.3	45.4	46.4	48.4	49.4	49.4	50.4	50.4	50.4	50.4	49.4
120°	39.3	41.3	43.4	44.4	45.4	46.4	46.4	47.4	47.4	47.4	46.4
122.5°	36.3	38.3	40.3	41.3	42.3	43.4	43.4	43.4	43.4	43.4	43.4
125°	32.3	34.3	36.3	37.3	38.3	39.3	39.3	40.3	40.3	40.3	39.3
127.5°	29.2	31.3	32.3	34.3	35.3	35.3	36.3	36.3	36.3	36.3	35.3
130°	25.2	27.2	29.2	30.2	31.3	31.3	32.3	32.3	32.3	32.3	32.3
132.5°	22.2	24.2	25.2	27.2	27.2	28.2	28.2	29.2	29.2	29.2	28.2
135°	20.2	21.2	22.2	24.2	24.2	25.2	25.2	25.2	25.2	25.2	25.2
137.5°	18.1	19.2	20.2	21.2	21.2	22.2	22.2	22.2	22.2	23.2	22.2
140°	15.1	17.1	18.1	18.1	19.2	19.2	19.2	20.2	20.2	20.2	19.2
142.5°	13.1	14.1	15.1	16.1	17.1	17.1	17.1	17.1	18.1	17.1	17.1
145°	10.1	12.1	13.1	14.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
147.5°	8.1	9.1	11.1	12.1	12.1	13.1	13.1	13.1	13.1	13.1	13.1
150°	7.1	7.1	9.1	10.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
152.5°	5.0	6.0	7.1	8.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
155°	5.0	5.0	6.0	6.0	7.1	7.1	7.1	7.1	8.1	7.1	7.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213123

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1943.8	1942.7	1946.8	1942.7	1922.6	1930.6	1927.6	1938.7	1939.7	1942.7	1952.8
5°	1933.7	1933.7	1938.7	1934.7	1915.5	1923.6	1922.6	1933.7	1935.7	1937.7	1948.8
7.5°	1913.5	1914.5	1921.6	1918.5	1898.4	1910.5	1909.5	1922.6	1926.6	1930.6	1940.7
10°	1894.3	1893.3	1901.4	1898.4	1879.2	1893.3	1892.3	1905.4	1911.5	1918.5	1930.6
12.5°	1884.3	1881.2	1884.3	1881.2	1860.1	1871.2	1872.2	1887.3	1894.3	1903.4	1917.5
15°	1884.3	1879.2	1879.2	1873.2	1849.0	1856.0	1857.0	1867.1	1876.2	1885.3	1902.4
17.5°	1882.3	1877.2	1876.2	1871.2	1844.9	1844.9	1843.9	1851.0	1856.0	1865.1	1883.3
20°	1871.2	1869.1	1868.1	1865.1	1840.9	1836.9	1834.9	1834.9	1837.9	1840.9	1859.1
22.5°	1841.9	1843.9	1846.0	1848.0	1828.8	1821.8	1822.8	1820.8	1817.7	1817.7	1832.9
25°	1787.5	1797.6	1805.6	1814.7	1803.6	1798.6	1804.6	1801.6	1796.6	1792.5	1805.6
27.5°	1700.8	1722.0	1739.1	1761.3	1762.3	1758.2	1774.4	1772.4	1771.4	1765.3	1775.4
30°	1580.8	1614.1	1637.3	1669.5	1696.7	1700.8	1728.0	1732.0	1736.1	1733.0	1743.1
32.5°	1435.6	1481.0	1520.3	1570.7	1596.9	1620.1	1658.4	1674.6	1690.7	1695.7	1706.8
35°	1277.4	1328.8	1375.1	1430.6	1471.9	1522.3	1568.7	1592.9	1629.2	1643.3	1659.4
37.5°	1127.1	1175.5	1220.9	1276.3	1342.9	1395.3	1452.8	1507.2	1556.6	1576.8	1601.0
40°	994.1	1033.4	1076.7	1125.1	1185.6	1254.2	1316.7	1392.3	1450.8	1491.1	1526.4
42.5°	893.2	912.4	949.7	993.0	1041.4	1111.0	1174.5	1259.2	1329.8	1387.2	1445.7
45°	803.5	812.6	839.8	863.0	912.4	973.9	1041.4	1124.1	1197.7	1271.3	1341.9
47.5°	726.9	738.0	751.1	765.2	800.5	851.9	910.4	985.0	1058.6	1144.3	1224.9
50°	675.5	678.5	680.5	686.6	707.7	743.0	790.4	853.9	924.5	1016.2	1101.9
52.5°	630.1	630.1	624.1	621.0	629.1	651.3	678.5	723.9	796.5	881.1	971.9
55°	581.7	572.6	570.6	560.5	562.6	572.6	585.7	621.0	680.5	753.1	840.8
57.5°	514.2	510.1	510.1	506.1	498.0	503.1	506.1	531.3	573.6	636.2	712.8
60°	436.5	434.5	439.6	440.6	433.5	436.5	435.5	450.7	480.9	531.3	594.8
62.5°	358.9	368.0	369.0	373.0	369.0	368.0	373.0	386.1	401.3	439.6	489.0
65°	301.4	306.5	307.5	312.5	310.5	310.5	314.5	324.6	333.7	359.9	398.2
67.5°	264.1	262.1	263.1	266.2	263.1	262.1	265.1	271.2	278.3	294.4	321.6
70°	234.9	232.9	232.9	232.9	228.9	225.8	226.8	228.9	231.9	241.0	258.1
72.5°	212.7	212.7	209.7	206.7	203.7	201.6	199.6	197.6	196.6	199.6	208.7
75°	192.6	193.6	192.6	189.5	185.5	181.5	177.4	173.4	168.4	166.3	167.4
77.5°	174.4	175.4	176.4	175.4	171.4	166.3	160.3	154.2	147.2	140.1	136.1
80°	158.3	160.3	161.3	160.3	157.3	153.2	146.2	139.1	129.0	120.0	109.9
82.5°	144.2	147.2	148.2	148.2	146.2	142.2	134.1	126.0	114.9	102.8	89.7
85°	133.1	135.1	137.1	137.1	136.1	132.1	124.0	114.9	103.8	89.7	75.6
87.5°	122.0	123.0	125.0	127.0	125.0	121.0	113.9	103.8	92.8	78.6	62.5
90°	110.9	111.9	113.9	115.9	114.9	110.9	104.8	95.8	83.7	68.6	52.4
92.5°	99.8	101.8	102.8	103.8	104.8	101.8	96.8	87.7	75.6	60.5	45.4
95°	91.7	91.7	93.8	94.8	95.8	92.8	88.7	79.6	68.6	54.4	39.3
97.5°	83.7	83.7	85.7	85.7	86.7	84.7	80.7	72.6	61.5	48.4	33.3
100°	75.6	76.6	77.6	78.6	78.6	77.6	73.6	65.5	55.4	43.4	29.2
102.5°	70.6	70.6	71.6	71.6	72.6	70.6	66.5	59.5	49.4	38.3	25.2
105°	65.5	65.5	66.5	66.5	65.5	63.5	59.5	53.4	44.4	33.3	22.2
107.5°	61.5	61.5	61.5	61.5	60.5	58.5	54.4	47.4	39.3	30.2	20.2
110°	58.5	57.5	57.5	56.5	55.4	52.4	48.4	42.3	35.3	26.2	17.1

TEST NUMBER: P1213123

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	55.4	54.4	53.4	52.4	50.4	47.4	43.4	38.3	31.3	23.2	15.1
115°	52.4	51.4	50.4	48.4	46.4	43.4	39.3	34.3	27.2	20.2	13.1
117.5°	49.4	48.4	46.4	44.4	42.3	39.3	35.3	30.2	24.2	18.1	12.1
120°	45.4	44.4	43.4	41.3	39.3	35.3	31.3	27.2	21.2	16.1	10.1
122.5°	42.3	41.3	39.3	38.3	35.3	32.3	28.2	24.2	19.2	14.1	9.1
125°	38.3	37.3	36.3	34.3	32.3	28.2	25.2	21.2	17.1	12.1	7.1
127.5°	35.3	34.3	32.3	30.2	28.2	25.2	22.2	19.2	15.1	10.1	7.1
130°	31.3	30.2	29.2	27.2	25.2	22.2	20.2	16.1	13.1	9.1	6.0
132.5°	27.2	27.2	26.2	24.2	22.2	20.2	17.1	14.1	11.1	8.1	5.0
135°	25.2	24.2	23.2	21.2	20.2	17.1	15.1	12.1	9.1	7.1	4.0
137.5°	22.2	21.2	20.2	19.2	17.1	15.1	13.1	10.1	8.1	6.0	4.0
140°	19.2	18.1	18.1	16.1	15.1	13.1	11.1	9.1	7.1	5.0	3.0
142.5°	17.1	16.1	15.1	14.1	13.1	11.1	9.1	7.1	6.0	4.0	3.0
145°	15.1	14.1	13.1	12.1	11.1	9.1	8.1	6.0	5.0	4.0	3.0
147.5°	12.1	12.1	11.1	10.1	9.1	8.1	7.1	6.0	4.0	3.0	2.0
150°	10.1	10.1	9.1	8.1	8.1	7.1	6.0	5.0	4.0	3.0	2.0
152.5°	9.1	8.1	8.1	7.1	7.1	6.0	5.0	4.0	3.0	3.0	2.0
155°	7.1	7.1	7.1	6.0	6.0	5.0	4.0	4.0	3.0	2.0	2.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213123

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1954.8	1942.7	1952.8	1971.0	1969.0	1966.9	1964.9	1969.0	1982.1	1975.0	1963.9
5°	1951.8	1939.7	1950.8	1967.9	1966.9	1963.9	1961.9	1965.9	1979.0	1972.0	1959.9
7.5°	1945.8	1934.7	1942.7	1959.9	1959.9	1957.9	1955.8	1959.9	1972.0	1965.9	1953.8
10°	1935.7	1927.6	1935.7	1951.8	1952.8	1948.8	1946.8	1951.8	1963.9	1960.9	1950.8
12.5°	1927.6	1919.6	1928.6	1944.8	1945.8	1941.7	1938.7	1944.8	1960.9	1962.9	1959.9
15°	1916.5	1909.5	1920.6	1937.7	1937.7	1934.7	1934.7	1942.7	1964.9	1974.0	1979.0
17.5°	1900.4	1895.4	1908.5	1925.6	1926.6	1924.6	1925.6	1941.7	1971.0	1993.2	2007.3
20°	1880.2	1878.2	1892.3	1910.5	1913.5	1914.5	1919.6	1943.8	1984.1	2014.3	2028.4
22.5°	1856.0	1857.0	1873.2	1892.3	1896.4	1899.4	1909.5	1943.8	1994.2	2026.4	2032.5
25°	1828.8	1831.8	1849.0	1872.2	1877.2	1883.3	1900.4	1944.8	1997.2	2018.4	2008.3
27.5°	1799.6	1805.6	1827.8	1852.0	1858.1	1868.1	1890.3	1938.7	1983.1	1984.1	1946.8
30°	1769.3	1776.4	1802.6	1830.8	1840.9	1851.0	1878.2	1924.6	1948.8	1916.5	1851.0
32.5°	1735.1	1745.1	1771.4	1805.6	1817.7	1830.8	1858.1	1897.4	1888.3	1818.7	1725.0
35°	1691.7	1705.8	1736.1	1776.4	1787.5	1804.6	1823.8	1832.9	1792.5	1693.7	1587.9
37.5°	1638.3	1659.4	1694.7	1741.1	1753.2	1764.3	1769.3	1744.1	1663.5	1556.6	1446.7
40°	1576.8	1609.0	1647.3	1698.8	1710.9	1710.9	1692.7	1639.3	1537.5	1397.3	1275.3
42.5°	1502.2	1541.5	1589.9	1641.3	1653.4	1639.3	1595.9	1502.2	1386.2	1230.0	1100.9
45°	1411.4	1463.9	1518.3	1571.7	1577.8	1546.5	1468.9	1349.9	1206.8	1061.6	938.6
47.5°	1303.6	1372.1	1431.6	1492.1	1484.0	1431.6	1327.8	1192.7	1041.4	904.3	805.5
50°	1182.6	1263.2	1329.8	1387.2	1370.1	1297.5	1175.5	1034.4	884.2	767.2	685.6
52.5°	1053.5	1146.3	1212.8	1259.2	1236.0	1149.3	1015.2	880.1	757.1	650.3	595.8
55°	919.5	1013.2	1081.8	1118.1	1087.8	994.1	862.0	739.0	623.0	553.5	521.2
57.5°	789.4	877.1	941.6	970.9	932.6	838.8	716.8	613.0	529.3	470.8	454.7
60°	664.4	736.0	797.5	819.6	778.3	691.6	586.8	504.1	442.6	402.3	394.2
62.5°	548.4	606.9	655.3	672.4	632.1	564.6	473.8	412.3	369.0	348.8	338.7
65°	452.7	486.9	536.3	533.3	509.1	446.6	380.1	336.7	308.5	295.4	289.3
67.5°	355.9	387.1	418.4	422.4	392.2	348.8	305.5	274.2	259.1	252.0	249.0
70°	275.2	298.4	317.6	312.5	296.4	269.2	242.0	224.8	218.8	215.7	215.7
72.5°	213.7	225.8	234.9	228.9	218.8	204.7	191.6	184.5	185.5	187.5	189.5
75°	165.3	168.4	170.4	164.3	162.3	153.2	152.2	153.2	159.3	165.3	168.4
77.5°	127.0	123.0	120.0	113.9	114.9	113.9	119.0	127.0	136.1	145.2	153.2
80°	97.8	88.7	81.7	75.6	78.6	83.7	93.8	105.9	118.0	128.0	138.1
82.5°	75.6	62.5	52.4	46.4	52.4	60.5	73.6	88.7	102.8	113.9	125.0
85°	58.5	43.4	31.3	25.2	31.3	43.4	57.5	74.6	89.7	101.8	112.9
87.5°	45.4	31.3	17.1	10.1	17.1	30.2	46.4	62.5	77.6	91.7	102.8
90°	36.3	21.2	8.1	2.0	9.1	21.2	36.3	52.4	67.5	82.7	93.8
92.5°	29.2	15.1	4.0	0.0	5.0	16.1	30.2	45.4	60.5	74.6	85.7
95°	24.2	12.1	3.0	0.0	4.0	12.1	24.2	39.3	53.4	67.5	76.6
97.5°	20.2	9.1	2.0	0.0	2.0	10.1	20.2	33.3	47.4	60.5	69.6
100°	17.1	8.1	2.0	0.0	2.0	8.1	17.1	29.2	41.3	53.4	62.5
102.5°	14.1	6.0	1.0	1.0	1.0	6.0	15.1	25.2	36.3	47.4	56.5
105°	13.1	5.0	1.0	1.0	1.0	5.0	13.1	22.2	32.3	42.3	50.4
107.5°	11.1	4.0	1.0	1.0	1.0	4.0	11.1	19.2	29.2	38.3	45.4
110°	9.1	4.0	1.0	1.0	1.0	4.0	9.1	17.1	25.2	33.3	40.3

TEST NUMBER: P1213123

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.1	3.0	1.0	1.0	1.0	3.0	8.1	15.1	22.2	30.2	36.3
115°	7.1	3.0	1.0	1.0	1.0	3.0	7.1	13.1	19.2	26.2	32.3
117.5°	6.0	3.0	1.0	1.0	1.0	2.0	6.0	11.1	17.1	23.2	29.2
120°	5.0	2.0	1.0	1.0	1.0	2.0	5.0	10.1	15.1	20.2	25.2
122.5°	5.0	2.0	1.0	1.0	1.0	2.0	4.0	8.1	13.1	17.1	22.2
125°	4.0	2.0	1.0	1.0	1.0	1.0	4.0	7.1	11.1	15.1	19.2
127.5°	4.0	2.0	1.0	1.0	1.0	1.0	3.0	6.0	9.1	13.1	17.1
130°	3.0	2.0	1.0	1.0	1.0	1.0	2.0	5.0	8.1	11.1	14.1
132.5°	3.0	2.0	1.0	1.0	1.0	1.0	2.0	4.0	6.0	9.1	12.1
135°	3.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	5.0	7.1	9.1
137.5°	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	4.0	5.0	8.1
140°	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	6.0
142.5°	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	5.0
145°	2.0	1.0	1.0	2.0	2.0	1.0	1.0	2.0	2.0	3.0	4.0
147.5°	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
150°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0
152.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
155°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1961.9	1938.7	1950.8	1946.8	1950.8	1960.9	1959.9	1956.9	1958.9	1953.8	1948.8
5°	1957.9	1934.7	1946.8	1941.7	1946.8	1956.9	1954.8	1951.8	1954.8	1948.8	1943.8
7.5°	1952.8	1931.7	1945.8	1944.8	1953.8	1966.9	1967.9	1967.9	1975.0	1965.9	1961.9
10°	1952.8	1941.7	1960.9	1967.9	1991.1	2008.3	2010.3	2014.3	2026.4	2024.4	2014.3
12.5°	1974.0	1972.0	2000.2	2017.3	2038.5	2062.7	2075.8	2079.9	2087.9	2081.9	2077.8
15°	2001.2	2011.3	2042.6	2061.7	2084.9	2103.0	2106.1	2108.1	2114.1	2105.1	2098.0
17.5°	2037.5	2043.6	2068.8	2076.8	2092.0	2095.0	2090.9	2080.9	2080.9	2060.7	2054.6
20°	2054.6	2051.6	2061.7	2048.6	2042.6	2024.4	2007.3	1988.1	1987.1	1965.9	1963.9
22.5°	2039.5	2019.4	1998.2	1965.9	1951.8	1925.6	1902.4	1891.3	1884.3	1857.0	1850.0
25°	1986.1	1936.7	1905.4	1867.1	1832.9	1802.6	1780.4	1757.2	1735.1	1712.9	1702.8
27.5°	1893.3	1847.0	1796.6	1743.1	1695.7	1649.4	1612.1	1588.9	1567.7	1538.5	1523.3
30°	1779.4	1714.9	1659.4	1608.0	1530.4	1473.9	1442.7	1396.3	1380.2	1367.1	1338.8
32.5°	1645.3	1567.7	1492.1	1422.5	1342.9	1290.5	1249.1	1214.8	1204.8	1170.5	1162.4
35°	1497.1	1395.3	1309.6	1241.1	1183.6	1120.1	1085.8	1062.6	1042.4	1019.3	1015.2
37.5°	1322.7	1231.0	1134.2	1073.7	1028.3	973.9	947.7	931.5	922.5	905.3	902.3
40°	1147.3	1055.6	989.0	928.5	900.3	871.1	851.9	844.8	840.8	834.8	828.7
42.5°	988.0	907.4	860.0	819.6	807.5	793.4	788.4	792.4	788.4	786.4	785.4
45°	852.9	791.4	758.1	746.0	743.0	739.0	743.0	750.1	751.1	749.1	749.1
47.5°	729.9	700.7	686.6	688.6	693.6	696.6	703.7	712.8	714.8	709.8	711.8
50°	649.3	632.1	629.1	637.2	648.3	652.3	660.4	667.4	666.4	664.4	662.4
52.5°	573.6	568.6	576.7	584.7	596.8	598.9	601.9	604.9	603.9	599.9	597.8
55°	510.1	514.2	521.2	524.2	533.3	532.3	533.3	533.3	529.3	527.3	524.2
57.5°	452.7	453.7	457.7	458.7	463.8	461.7	460.7	458.7	452.7	451.7	448.6
60°	394.2	392.2	401.3	394.2	398.2	394.2	393.2	388.1	382.1	381.1	379.1
62.5°	338.7	334.7	340.8	337.7	339.8	335.7	333.7	327.7	322.6	321.6	320.6
65°	289.3	287.3	293.4	292.4	294.4	289.3	287.3	283.3	279.3	278.3	277.2
67.5°	248.0	253.1	256.1	256.1	258.1	257.1	252.0	251.0	250.0	246.0	246.0
70°	217.8	220.8	226.8	227.8	226.8	228.9	224.8	223.8	222.8	220.8	219.8
72.5°	193.6	197.6	203.7	204.7	203.7	203.7	201.6	200.6	200.6	197.6	197.6
75°	174.4	179.5	184.5	184.5	184.5	182.5	180.5	180.5	178.4	177.4	175.4
77.5°	158.3	164.3	168.4	167.4	166.3	164.3	164.3	161.3	158.3	158.3	156.3
80°	146.2	150.2	153.2	152.2	151.2	148.2	147.2	144.2	142.2	139.1	139.1
82.5°	133.1	138.1	140.1	139.1	137.1	134.1	133.1	131.1	129.0	128.0	126.0
85°	122.0	127.0	128.0	126.0	124.0	122.0	121.0	120.0	119.0	116.9	116.9
87.5°	110.9	115.9	115.9	114.9	112.9	111.9	110.9	109.9	108.9	107.9	106.9
90°	101.8	105.9	105.9	104.8	103.8	102.8	101.8	100.8	99.8	98.8	98.8
92.5°	92.8	96.8	96.8	95.8	94.8	93.8	93.8	92.8	91.7	90.7	89.7
95°	84.7	88.7	88.7	88.7	87.7	86.7	86.7	85.7	84.7	84.7	83.7
97.5°	76.6	80.7	80.7	80.7	79.6	78.6	78.6	77.6	77.6	77.6	76.6
100°	69.6	72.6	73.6	73.6	72.6	72.6	72.6	71.6	71.6	71.6	70.6
102.5°	62.5	65.5	67.5	67.5	67.5	66.5	66.5	66.5	66.5	66.5	65.5
105°	56.5	59.5	61.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
107.5°	51.4	54.4	56.5	57.5	58.5	58.5	59.5	59.5	59.5	59.5	59.5
110°	46.4	49.4	52.4	53.4	54.4	55.4	55.4	56.5	55.4	55.4	55.4



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	41.3	45.4	47.4	49.4	50.4	51.4	52.4	52.4	52.4	52.4	52.4
115°	37.3	41.3	43.4	45.4	47.4	48.4	48.4	49.4	49.4	49.4	48.4
117.5°	33.3	37.3	39.3	41.3	42.3	44.4	45.4	45.4	45.4	45.4	44.4
120°	30.2	33.3	35.3	37.3	39.3	40.3	41.3	41.3	41.3	41.3	41.3
122.5°	26.2	29.2	32.3	34.3	35.3	36.3	37.3	37.3	37.3	37.3	37.3
125°	23.2	26.2	28.2	30.2	31.3	33.3	33.3	33.3	33.3	33.3	33.3
127.5°	20.2	23.2	25.2	27.2	28.2	29.2	30.2	30.2	30.2	30.2	30.2
130°	17.1	20.2	22.2	24.2	25.2	26.2	26.2	27.2	27.2	27.2	27.2
132.5°	15.1	17.1	19.2	21.2	22.2	23.2	23.2	24.2	24.2	24.2	24.2
135°	12.1	15.1	16.1	18.1	19.2	20.2	20.2	21.2	21.2	21.2	21.2
137.5°	10.1	12.1	14.1	16.1	17.1	17.1	18.1	18.1	19.2	19.2	19.2
140°	8.1	9.1	12.1	13.1	14.1	15.1	16.1	16.1	16.1	16.1	16.1
142.5°	6.0	8.1	9.1	11.1	12.1	13.1	14.1	14.1	14.1	14.1	14.1
145°	5.0	6.0	7.1	9.1	10.1	11.1	12.1	12.1	12.1	12.1	12.1
147.5°	4.0	5.0	6.0	7.1	8.1	9.1	10.1	10.1	10.1	10.1	10.1
150°	3.0	4.0	5.0	5.0	6.0	7.1	8.1	9.1	9.1	9.1	9.1
152.5°	3.0	3.0	4.0	4.0	5.0	6.0	7.1	7.1	7.1	7.1	7.1
155°	2.0	3.0	3.0	3.0	4.0	4.0	5.0	6.0	6.0	6.0	6.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1951.8	1955.8	1953.8	1950.8	1949.8	1954.8	1949.8	1926.6	1935.7	1936.7	1943.8
5°	1948.8	1951.8	1949.8	1947.8	1944.8	1950.8	1944.8	1920.6	1929.6	1930.6	1937.7
7.5°	1969.0	1970.0	1970.0	1964.9	1956.9	1959.9	1951.8	1924.6	1929.6	1929.6	1934.7
10°	2019.4	2021.4	2024.4	2011.3	2001.2	1993.2	1982.1	1948.8	1947.8	1939.7	1939.7
12.5°	2084.9	2079.9	2074.8	2068.8	2060.7	2050.6	2034.5	1995.2	1982.1	1969.0	1955.8
15°	2104.0	2102.0	2101.0	2098.0	2093.0	2089.9	2077.8	2038.5	2019.4	2003.2	1980.0
17.5°	2053.6	2057.7	2070.8	2071.8	2077.8	2089.9	2087.9	2060.7	2043.6	2036.5	2008.3
20°	1962.9	1963.9	1980.0	1987.1	2013.3	2033.5	2048.6	2045.6	2041.5	2049.6	2028.4
22.5°	1854.0	1861.1	1878.2	1889.3	1914.5	1937.7	1961.9	1975.0	1996.2	2029.4	2025.4
25°	1705.8	1714.9	1739.1	1757.2	1792.5	1827.8	1860.1	1883.3	1908.5	1972.0	1993.2
27.5°	1528.4	1542.5	1573.8	1591.9	1641.3	1677.6	1724.0	1769.3	1804.6	1877.2	1920.6
30°	1341.9	1354.0	1387.2	1412.4	1454.8	1504.2	1562.7	1627.2	1685.7	1759.3	1813.7
32.5°	1167.5	1180.6	1207.8	1230.0	1277.4	1318.7	1383.2	1462.9	1517.3	1619.1	1691.7
35°	1015.2	1027.3	1046.5	1065.6	1105.0	1147.3	1202.7	1280.4	1349.9	1455.8	1547.5
37.5°	908.4	910.4	921.5	932.6	961.8	994.1	1037.4	1106.0	1170.5	1284.4	1385.2
40°	831.7	831.7	837.8	840.8	853.9	873.1	900.3	953.7	1007.2	1093.9	1216.9
42.5°	784.4	782.3	782.3	783.3	782.3	791.4	807.5	832.7	880.1	951.7	1047.5
45°	749.1	745.0	742.0	735.0	730.9	730.9	731.9	741.0	768.2	814.6	892.2
47.5°	709.8	708.7	703.7	695.6	688.6	683.5	675.5	672.4	680.5	706.7	759.2
50°	664.4	659.3	654.3	648.3	640.2	635.1	620.0	621.0	614.0	626.1	653.3
52.5°	597.8	593.8	591.8	586.8	583.7	581.7	569.6	557.5	554.5	556.5	566.6
55°	524.2	526.3	518.2	522.2	521.2	512.1	507.1	498.0	495.0	494.0	499.0
57.5°	447.6	449.6	444.6	448.6	448.6	443.6	440.6	440.6	433.5	427.5	434.5
60°	378.1	374.0	377.1	382.1	382.1	379.1	377.1	377.1	372.0	370.0	375.0
62.5°	321.6	317.6	320.6	325.6	326.6	324.6	322.6	322.6	316.6	316.6	320.6
65°	278.3	279.3	278.3	282.3	282.3	283.3	281.3	279.3	272.2	275.2	274.2
67.5°	247.0	246.0	246.0	250.0	249.0	251.0	249.0	246.0	241.0	236.9	235.9
70°	220.8	219.8	219.8	221.8	222.8	222.8	221.8	219.8	212.7	208.7	205.7
72.5°	197.6	196.6	197.6	198.6	199.6	200.6	199.6	197.6	191.6	186.5	181.5
75°	176.4	175.4	178.4	178.4	179.5	179.5	180.5	179.5	174.4	168.4	162.3
77.5°	155.3	156.3	159.3	160.3	162.3	163.3	164.3	164.3	159.3	154.2	146.2
80°	138.1	140.1	142.2	143.2	145.2	148.2	149.2	150.2	146.2	141.1	132.1
82.5°	126.0	127.0	129.0	130.1	133.1	134.1	135.1	137.1	135.1	130.1	120.0
85°	115.9	116.9	119.0	119.0	121.0	123.0	124.0	125.0	124.0	119.0	108.9
87.5°	106.9	107.9	108.9	109.9	110.9	111.9	112.9	113.9	112.9	107.9	98.8
90°	98.8	98.8	99.8	99.8	100.8	101.8	103.8	103.8	102.8	98.8	89.7
92.5°	89.7	90.7	90.7	91.7	92.8	93.8	94.8	94.8	93.8	89.7	81.7
95°	83.7	83.7	84.7	84.7	85.7	85.7	86.7	86.7	85.7	81.7	73.6
97.5°	76.6	76.6	76.6	76.6	77.6	77.6	78.6	78.6	77.6	73.6	66.5
100°	70.6	70.6	70.6	70.6	70.6	71.6	71.6	71.6	70.6	66.5	59.5
102.5°	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	63.5	60.5	53.4
105°	62.5	62.5	62.5	61.5	61.5	61.5	60.5	60.5	57.5	54.4	48.4
107.5°	58.5	58.5	58.5	57.5	57.5	56.5	55.4	55.4	52.4	49.4	43.4
110°	55.4	55.4	55.4	54.4	53.4	52.4	51.4	50.4	47.4	43.4	38.3

TEST NUMBER: P1213123

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	52.4	52.4	51.4	51.4	50.4	49.4	47.4	46.4	43.4	39.3	34.3
115°	48.4	48.4	48.4	47.4	46.4	45.4	44.4	42.3	39.3	35.3	30.2
117.5°	44.4	44.4	44.4	43.4	42.3	41.3	40.3	38.3	35.3	31.3	27.2
120°	40.3	40.3	40.3	39.3	38.3	37.3	36.3	34.3	31.3	28.2	23.2
122.5°	37.3	37.3	36.3	35.3	34.3	33.3	32.3	30.2	28.2	24.2	20.2
125°	33.3	33.3	32.3	32.3	31.3	30.2	29.2	27.2	24.2	21.2	18.1
127.5°	30.2	29.2	29.2	29.2	28.2	27.2	25.2	24.2	21.2	18.1	15.1
130°	26.2	26.2	26.2	25.2	25.2	24.2	22.2	20.2	18.1	16.1	13.1
132.5°	23.2	23.2	23.2	23.2	22.2	21.2	19.2	18.1	16.1	13.1	11.1
135°	21.2	21.2	20.2	20.2	19.2	18.1	17.1	15.1	13.1	11.1	9.1
137.5°	18.1	18.1	18.1	17.1	17.1	16.1	14.1	13.1	12.1	10.1	8.1
140°	16.1	16.1	15.1	15.1	14.1	14.1	13.1	11.1	10.1	8.1	7.1
142.5°	14.1	14.1	13.1	13.1	12.1	12.1	11.1	10.1	8.1	7.1	5.0
145°	12.1	12.1	11.1	11.1	11.1	10.1	9.1	8.1	7.1	6.0	5.0
147.5°	10.1	10.1	10.1	9.1	9.1	8.1	8.1	7.1	6.0	5.0	4.0
150°	9.1	9.1	8.1	8.1	8.1	7.1	6.0	6.0	5.0	4.0	3.0
152.5°	7.1	7.1	7.1	7.1	6.0	6.0	5.0	5.0	4.0	3.0	3.0
155°	6.0	6.0	6.0	5.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213123

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1940.7	1939.7	1948.8	1947.8	1935.7	1953.8	1965.9
5°	1935.7	1934.7	1942.7	1944.8	1931.7	1950.8	1963.9
7.5°	1931.7	1930.6	1939.7	1942.7	1929.6	1946.8	1960.9
10°	1932.7	1927.6	1935.7	1937.7	1925.6	1943.8	1955.8
12.5°	1939.7	1927.6	1930.6	1930.6	1919.6	1935.7	1948.8
15°	1956.9	1931.7	1927.6	1924.6	1910.5	1925.6	1938.7
17.5°	1976.0	1941.7	1927.6	1917.5	1900.4	1913.5	1927.6
20°	1995.2	1952.8	1929.6	1913.5	1890.3	1902.4	1912.5
22.5°	2004.2	1962.9	1931.7	1907.5	1878.2	1884.3	1895.4
25°	1992.1	1958.9	1927.6	1898.4	1863.1	1864.1	1873.2
27.5°	1947.8	1938.7	1918.5	1889.3	1851.0	1846.0	1853.0
30°	1872.2	1897.4	1898.4	1877.2	1836.9	1826.8	1829.8
32.5°	1766.3	1822.8	1856.0	1852.0	1816.7	1802.6	1804.6
35°	1644.3	1714.9	1787.5	1811.7	1786.5	1775.4	1771.4
37.5°	1498.1	1592.9	1689.7	1749.2	1745.1	1738.1	1734.1
40°	1336.8	1450.8	1565.7	1660.5	1689.7	1689.7	1691.7
42.5°	1164.4	1297.5	1423.5	1543.5	1612.1	1627.2	1633.2
45°	998.1	1132.2	1269.3	1407.4	1499.1	1546.5	1563.7
47.5°	846.9	982.0	1112.0	1263.2	1385.2	1446.7	1473.9
50°	717.8	818.6	955.7	1106.0	1239.0	1314.7	1368.1
52.5°	611.0	689.6	809.6	949.7	1083.8	1187.6	1237.0
55°	521.2	574.7	676.5	797.5	925.5	1033.4	1090.8
57.5°	445.6	488.0	557.5	658.3	766.2	873.1	934.6
60°	379.1	408.3	455.7	535.3	627.1	718.8	778.3
62.5°	321.6	340.8	372.0	430.5	502.1	573.6	629.1
65°	277.2	285.3	302.5	338.7	393.2	447.6	495.0
67.5°	233.9	238.9	252.0	274.2	301.4	340.8	372.0
70°	201.6	201.6	202.6	215.7	229.9	255.1	277.2
72.5°	175.4	172.4	166.3	169.4	172.4	186.5	200.6
75°	154.2	147.2	137.1	133.1	131.1	133.1	141.1
77.5°	136.1	126.0	113.9	103.8	95.8	92.8	99.8
80°	121.0	108.9	94.8	81.7	68.6	61.5	64.5
82.5°	108.9	93.8	78.6	63.5	48.4	38.3	38.3
85°	95.8	81.7	65.5	49.4	34.3	21.2	19.2
87.5°	86.7	71.6	54.4	39.3	24.2	11.1	6.0
90°	77.6	62.5	46.4	31.3	17.1	5.0	0.0
92.5°	69.6	55.4	40.3	25.2	12.1	3.0	0.0
95°	62.5	49.4	34.3	21.2	10.1	2.0	1.0
97.5°	55.4	43.4	30.2	17.1	7.1	2.0	1.0
100°	50.4	38.3	26.2	14.1	6.0	1.0	1.0
102.5°	44.4	34.3	22.2	12.1	5.0	1.0	1.0
105°	39.3	30.2	19.2	10.1	4.0	1.0	1.0
107.5°	35.3	26.2	17.1	9.1	4.0	1.0	1.0
110°	31.3	23.2	15.1	8.1	3.0	1.0	1.0



TEST NUMBER: P1213123

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	28.2	20.2	13.1	7.1	2.0	1.0	1.0
115°	24.2	18.1	11.1	6.0	2.0	1.0	1.0
117.5°	21.2	15.1	10.1	5.0	2.0	1.0	1.0
120°	18.1	13.1	8.1	4.0	1.0	1.0	1.0
122.5°	16.1	11.1	7.1	4.0	1.0	1.0	1.0
125°	14.1	10.1	6.0	3.0	1.0	1.0	1.0
127.5°	12.1	8.1	5.0	2.0	1.0	1.0	1.0
130°	10.1	7.1	4.0	2.0	1.0	1.0	1.0
132.5°	8.1	6.0	4.0	2.0	1.0	1.0	1.0
135°	7.1	5.0	3.0	2.0	1.0	1.0	1.0
137.5°	6.0	4.0	2.0	2.0	2.0	1.0	1.0
140°	5.0	3.0	2.0	2.0	2.0	2.0	1.0
142.5°	4.0	3.0	2.0	2.0	2.0	2.0	1.0
145°	3.0	2.0	2.0	2.0	2.0	2.0	1.0
147.5°	3.0	2.0	2.0	2.0	2.0	2.0	1.0
150°	2.0	2.0	2.0	2.0	2.0	2.0	2.0
152.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0
155°	2.0	2.0	2.0	2.0	2.0	2.0	2.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)