

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: P1213117

Luminaire Tested: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213117
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-LD5-55HL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

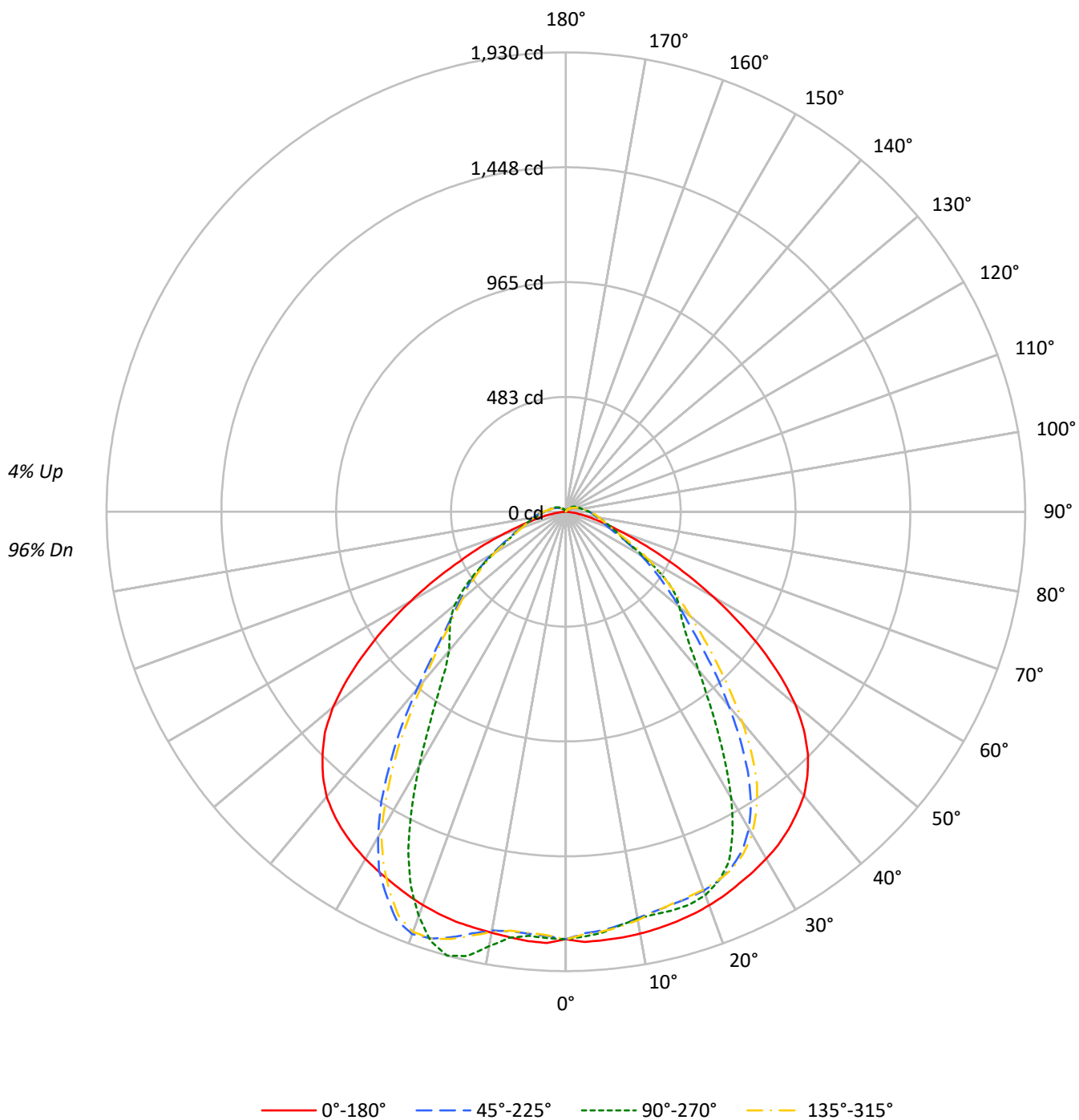
Lumens per Lamp: N/A
Luminaire Lumens: 4281.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 39
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°	14512	14512	14512	14512
5°	14617	13936	14647	14046
10°	14685	13357	14655	14264
15°	14799	13178	14791	14673
20°	14962	12969	14946	13671
25°	15146	12303	15138	11888
30°	15431	10663	15440	9447
35°	15733	8623	15778	7297
40°	16000	6942	16067	6117
45°	15944	5880	16026	5727
50°	15256	5414	15469	5293
55°	13535	4867	13874	4424
60°	10979	3725	11562	3416
65°	8161	2850	8794	2702
70°	5551	2460	6256	2352
75°	3632	2220	4228	2099
80°	2348	2069	2751	1904
85°	1202	2064	1585	1886

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 16026 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.6	4.0
10°-20°	507.5	11.9
20°-30°	771.6	18.0
30°-40°	827.7	19.3
40°-50°	718.4	16.8
50°-60°	532.4	12.4
60°-70°	305.0	7.1
70°-80°	168.9	3.9
80°-90°	102.9	2.4
90°-100°	66.9	1.6
100°-110°	44.8	1.0
110°-120°	30.3	0.7
120°-130°	18.6	0.4
130°-140°	9.8	0.2
140°-150°	4.5	0.1
150°-160°	1.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1449.7	33.9
0°-40°	2277.4	53.2
0°-60°	3528.2	82.4
0°-90°	4105.0	95.9
90°-120°	141.9	3.3
90°-150°	174.7	4.1
90°-180°	176.0	4.1
0°-180°	4281.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1796	1796	1796	1796	1796	
5°	1807	1774	1811	1788	1807	172
15°	1784	1734	1783	1930	1784	505
25°	1723	1621	1722	1567	1723	797
35°	1630	1104	1634	934	1630	1020
45°	1439	708	1446	689	1439	1101
55°	1004	531	1029	482	1004	890
65°	455	269	491	255	455	459
75°	130	171	151	161	130	148
85°	18	118	23	108	18	23
90°	0	98	2	91	0	1
95°	1	81	0	77	1	1
105°	1	60	1	58	1	1
115°	1	49	1	44	1	1
125°	1	37	1	31	1	1
135°	1	23	1	20	1	1
145°	1	14	2	11	1	1
155°	2	6	2	6	2	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8
2.5°	1808.8	1804.1	1802.3	1798.6	1801.3	1812.5	1805.0	1793.0	1793.9	1772.6	1783.7
5°	1806.9	1801.3	1798.6	1794.8	1796.7	1806.9	1799.5	1787.4	1786.5	1765.2	1775.4
7.5°	1804.1	1798.6	1793.9	1791.1	1792.1	1800.4	1791.1	1777.2	1774.4	1751.2	1760.5
10°	1799.5	1795.8	1789.3	1784.6	1783.7	1793.0	1778.1	1764.2	1757.7	1733.6	1742.9
12.5°	1793.0	1787.4	1780.9	1772.6	1771.7	1777.2	1765.2	1745.7	1739.2	1719.7	1729.9
15°	1783.7	1777.2	1769.8	1760.5	1755.9	1759.6	1744.8	1727.1	1726.2	1709.5	1723.4
17.5°	1773.5	1764.2	1755.9	1742.9	1736.4	1739.2	1727.1	1711.4	1713.2	1703.0	1718.8
20°	1759.6	1749.4	1736.4	1723.4	1714.1	1718.8	1710.4	1698.4	1701.2	1693.7	1707.7
22.5°	1743.8	1729.9	1714.1	1699.3	1691.9	1698.4	1691.9	1681.7	1682.6	1678.0	1686.3
25°	1723.4	1707.7	1689.1	1670.5	1666.8	1671.5	1667.8	1659.4	1655.7	1648.3	1652.0
27.5°	1704.9	1687.2	1664.1	1644.6	1638.1	1647.4	1639.0	1625.1	1614.9	1604.7	1597.3
30°	1683.5	1662.2	1636.2	1614.0	1608.4	1612.1	1600.1	1578.7	1551.8	1538.8	1518.4
32.5°	1660.3	1632.5	1600.1	1575.0	1571.3	1568.5	1546.3	1515.6	1473.9	1447.9	1416.4
35°	1629.7	1599.1	1560.2	1529.6	1524.0	1508.2	1472.0	1431.2	1377.4	1332.9	1279.1
37.5°	1595.4	1559.2	1518.4	1477.6	1461.8	1430.3	1379.3	1336.6	1255.0	1201.2	1136.3
40°	1556.5	1512.9	1462.8	1413.6	1387.6	1336.6	1278.2	1215.1	1136.3	1063.9	1009.2
42.5°	1502.7	1456.3	1396.9	1342.2	1297.7	1230.0	1161.3	1072.3	999.9	938.7	883.0
45°	1438.7	1383.0	1314.4	1248.5	1191.9	1111.2	1030.5	941.5	881.2	809.8	771.7
47.5°	1356.1	1295.8	1222.5	1149.3	1075.1	986.0	901.6	816.3	756.0	705.0	677.1
50°	1258.7	1203.1	1122.4	1035.2	953.5	860.8	776.4	712.4	653.9	622.4	601.1
52.5°	1138.1	1086.2	1003.6	909.0	830.2	739.3	662.3	610.3	568.6	545.4	538.0
55°	1003.6	958.2	876.6	788.4	707.7	624.3	565.8	520.4	493.5	479.6	480.5
57.5°	859.9	824.6	747.6	668.8	592.7	529.6	476.8	440.6	420.2	419.3	422.0
60°	716.1	690.1	623.3	555.6	488.8	437.8	398.9	373.8	360.8	361.8	360.8
62.5°	578.8	554.7	506.5	450.8	397.9	363.6	328.4	318.2	307.0	306.1	306.1
65°	455.4	436.9	397.9	358.0	318.2	295.9	278.3	266.2	257.9	256.0	256.9
67.5°	342.3	334.9	308.0	281.1	256.0	242.1	227.3	224.5	218.0	218.0	219.8
70°	255.1	249.5	234.7	218.9	208.7	199.4	192.0	192.0	191.1	190.2	194.8
72.5°	184.6	185.5	180.9	168.8	167.9	166.0	164.2	167.0	167.9	170.7	176.2
75°	129.9	132.6	132.6	130.8	134.5	139.1	141.9	146.6	152.1	155.8	162.3
77.5°	91.8	91.8	96.5	102.0	109.5	117.8	125.2	131.7	139.1	143.8	149.3
80°	59.4	62.1	69.6	79.8	90.0	101.1	111.3	119.7	127.1	134.5	138.2
82.5°	35.2	39.9	49.2	62.1	75.1	89.0	99.2	109.5	117.8	125.2	128.0
85°	17.6	24.1	35.2	49.2	63.1	77.9	90.9	100.2	109.5	115.9	119.7
87.5°	5.6	13.0	25.0	38.0	52.9	67.7	81.6	91.8	100.2	105.7	109.5
90°	0.0	6.5	17.6	31.5	45.5	60.3	73.3	84.4	92.8	97.4	100.2
92.5°	0.0	3.7	13.9	26.0	39.0	53.8	66.8	77.0	84.4	89.0	90.9
95°	0.9	2.8	10.2	21.3	34.3	48.2	60.3	69.6	77.0	81.6	82.6
97.5°	0.9	1.9	8.3	17.6	29.7	42.7	54.7	64.0	69.6	74.2	75.1
100°	0.9	1.9	6.5	15.8	26.0	38.0	49.2	57.5	64.0	67.7	68.6
102.5°	0.9	0.9	5.6	13.0	23.2	33.4	43.6	51.9	57.5	61.2	63.1
105°	0.9	0.9	4.6	11.1	20.4	29.7	39.0	47.3	51.9	55.7	57.5
107.5°	0.9	0.9	3.7	9.3	17.6	26.0	35.2	41.7	47.3	51.0	52.9
110°	0.9	0.9	2.8	8.3	14.8	23.2	30.6	37.1	42.7	46.4	48.2

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.9	0.9	2.8	7.4	13.0	20.4	26.9	33.4	38.0	41.7	44.5
115°	0.9	0.9	2.8	6.5	12.1	17.6	24.1	29.7	34.3	38.0	40.8
117.5°	0.9	0.9	2.8	5.6	10.2	15.8	21.3	26.9	30.6	34.3	37.1
120°	0.9	0.9	1.9	4.6	9.3	13.9	18.6	23.2	27.8	31.5	34.3
122.5°	0.9	0.9	1.9	4.6	7.4	12.1	16.7	20.4	25.0	27.8	30.6
125°	0.9	0.9	1.9	3.7	6.5	11.1	14.8	18.6	21.3	25.0	27.8
127.5°	0.9	0.9	1.9	3.7	5.6	9.3	13.0	16.7	19.5	22.3	24.1
130°	0.9	0.9	1.9	2.8	4.6	7.4	11.1	13.9	17.6	19.5	21.3
132.5°	0.9	0.9	0.9	2.8	3.7	5.6	8.3	12.1	14.8	17.6	18.6
135°	0.9	0.9	0.9	1.9	3.7	4.6	6.5	9.3	12.1	14.8	16.7
137.5°	0.9	0.9	0.9	1.9	2.8	4.6	5.6	7.4	10.2	12.1	14.8
140°	0.9	0.9	0.9	1.9	2.8	3.7	4.6	6.5	8.3	10.2	12.1
142.5°	0.9	0.9	0.9	1.9	1.9	2.8	3.7	5.6	6.5	8.3	10.2
145°	0.9	0.9	0.9	1.9	1.9	2.8	3.7	4.6	5.6	6.5	8.3
147.5°	0.9	0.9	0.9	1.9	1.9	1.9	2.8	3.7	4.6	5.6	6.5
150°	1.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	3.7	4.6	5.6
152.5°	1.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	2.8	3.7	4.6
155°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	3.7	3.7
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°	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8
2.5°	1780.0	1781.9	1793.0	1792.1	1790.2	1788.4	1788.4	1786.5	1788.4	1793.0	1791.1
5°	1770.7	1773.5	1781.9	1780.9	1779.1	1778.1	1777.2	1774.4	1776.3	1782.8	1780.9
7.5°	1754.0	1756.8	1764.2	1760.5	1757.7	1759.6	1755.0	1752.2	1755.9	1762.4	1761.5
10°	1736.4	1738.3	1747.5	1745.7	1741.0	1742.0	1737.3	1735.5	1740.1	1743.8	1744.8
12.5°	1724.3	1730.8	1739.2	1738.3	1737.3	1738.3	1733.6	1731.8	1734.6	1738.3	1737.3
15°	1721.6	1729.9	1739.2	1739.2	1740.1	1741.0	1736.4	1733.6	1736.4	1739.2	1738.3
17.5°	1718.8	1729.0	1737.3	1736.4	1737.3	1739.2	1731.8	1729.9	1733.6	1737.3	1735.5
20°	1709.5	1718.8	1724.3	1722.5	1722.5	1723.4	1714.1	1714.1	1719.7	1722.5	1723.4
22.5°	1683.5	1694.7	1694.7	1690.0	1690.0	1686.3	1683.5	1678.0	1684.5	1689.1	1692.8
25°	1644.6	1649.2	1643.6	1633.4	1627.9	1623.2	1610.3	1621.4	1621.4	1635.3	1639.9
27.5°	1589.9	1579.6	1563.9	1542.5	1537.9	1523.1	1514.7	1517.5	1522.1	1541.6	1556.5
30°	1499.9	1469.3	1442.4	1433.1	1412.7	1397.8	1383.0	1390.4	1398.8	1409.9	1440.5
32.5°	1381.1	1351.5	1307.9	1292.1	1270.8	1252.2	1234.6	1245.7	1260.6	1268.0	1301.4
35°	1244.8	1209.5	1169.7	1142.8	1120.5	1110.3	1088.0	1103.8	1119.6	1125.1	1153.9
37.5°	1100.1	1063.9	1028.7	1005.5	984.1	977.7	962.8	973.9	986.0	994.4	1018.5
40°	962.8	929.4	902.5	886.8	871.9	866.3	860.8	865.4	874.7	881.2	899.7
42.5°	845.0	818.1	799.6	790.3	780.1	772.7	773.6	775.4	780.1	794.0	802.3
45°	742.1	726.3	714.2	712.4	705.9	705.0	704.0	707.7	710.5	718.9	725.4
47.5°	659.5	653.0	650.2	653.9	656.7	653.0	654.9	659.5	665.1	665.1	664.1
50°	594.6	596.4	600.1	608.5	614.0	615.9	617.8	623.3	624.3	626.1	623.3
52.5°	541.7	543.6	553.8	566.7	573.2	576.0	579.7	585.3	585.3	587.2	583.4
55°	487.9	490.7	500.9	513.9	519.4	523.1	526.9	530.6	533.4	537.1	534.3
57.5°	428.5	436.9	443.4	447.1	450.8	453.6	456.4	457.3	462.9	463.8	468.4
60°	365.5	367.3	373.8	372.9	370.1	377.5	373.8	380.3	386.8	395.1	396.1
62.5°	305.2	306.1	310.7	308.9	312.6	311.7	314.4	314.4	319.1	322.8	327.4
65°	257.9	258.8	262.5	262.5	261.6	264.4	267.1	269.0	269.0	271.8	275.5
67.5°	222.6	225.4	229.1	231.0	232.8	232.8	235.6	236.5	238.4	239.3	241.2
70°	198.5	202.2	205.9	207.8	208.7	210.6	211.5	211.5	213.3	214.3	216.1
72.5°	180.9	184.6	187.4	187.4	189.2	190.2	190.2	191.1	192.0	193.9	195.7
75°	166.0	168.8	170.7	169.7	169.7	169.7	170.7	170.7	172.5	174.4	176.2
77.5°	152.1	154.9	154.9	153.0	153.0	153.0	153.0	154.0	154.9	156.8	158.6
80°	141.9	141.9	141.0	141.0	139.1	138.2	138.2	139.1	139.1	141.0	143.8
82.5°	130.8	130.8	129.9	128.9	128.0	127.1	127.1	128.0	128.9	129.9	131.7
85°	120.6	120.6	118.7	118.7	117.8	117.8	117.8	117.8	118.7	119.7	121.5
87.5°	110.4	109.5	108.5	107.6	107.6	107.6	107.6	107.6	108.5	110.4	111.3
90°	100.2	99.2	98.3	98.3	97.4	97.4	98.3	98.3	99.2	100.2	101.1
92.5°	90.9	90.0	89.0	89.0	88.1	88.1	89.0	88.1	90.0	90.0	90.9
95°	82.6	81.6	80.7	80.7	80.7	80.7	80.7	80.7	81.6	81.6	82.6
97.5°	75.1	74.2	73.3	73.3	74.2	73.3	74.2	74.2	74.2	75.1	76.1
100°	68.6	67.7	67.7	68.6	67.7	67.7	68.6	68.6	68.6	68.6	69.6
102.5°	63.1	63.1	63.1	63.1	63.1	63.1	64.0	64.0	64.0	64.0	64.9
105°	57.5	58.4	58.4	58.4	59.4	59.4	59.4	60.3	60.3	60.3	60.3
107.5°	53.8	54.7	54.7	55.7	55.7	56.6	56.6	56.6	56.6	57.5	57.5
110°	50.1	51.0	51.9	52.9	52.9	53.8	53.8	53.8	53.8	53.8	53.8



TEST NUMBER: P1213117

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	46.4	47.3	48.2	50.1	51.0	51.0	51.0	51.0	51.9	51.9	51.0
115°	42.7	44.5	45.5	47.3	48.2	48.2	49.2	49.2	49.2	49.2	48.2
117.5°	39.0	41.7	42.7	44.5	45.5	45.5	46.4	46.4	46.4	46.4	45.5
120°	36.2	38.0	39.9	40.8	41.7	42.7	42.7	43.6	43.6	43.6	42.7
122.5°	33.4	35.2	37.1	38.0	39.0	39.9	39.9	39.9	39.9	39.9	39.9
125°	29.7	31.5	33.4	34.3	35.2	36.2	36.2	37.1	37.1	37.1	36.2
127.5°	26.9	28.8	29.7	31.5	32.5	32.5	33.4	33.4	33.4	33.4	32.5
130°	23.2	25.0	26.9	27.8	28.8	28.8	29.7	29.7	29.7	29.7	29.7
132.5°	20.4	22.3	23.2	25.0	25.0	26.0	26.0	26.9	26.9	26.9	26.0
135°	18.6	19.5	20.4	22.3	22.3	23.2	23.2	23.2	23.2	23.2	23.2
137.5°	16.7	17.6	18.6	19.5	19.5	20.4	20.4	20.4	20.4	21.3	20.4
140°	13.9	15.8	16.7	16.7	17.6	17.6	17.6	18.6	18.6	18.6	17.6
142.5°	12.1	13.0	13.9	14.8	15.8	15.8	15.8	15.8	16.7	15.8	15.8
145°	9.3	11.1	12.1	13.0	13.9	13.9	13.9	13.9	13.9	13.9	13.9
147.5°	7.4	8.3	10.2	11.1	11.1	12.1	12.1	12.1	12.1	12.1	12.1
150°	6.5	6.5	8.3	9.3	10.2	10.2	10.2	10.2	10.2	10.2	10.2
152.5°	4.6	5.6	6.5	7.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3
155°	4.6	4.6	5.6	5.6	6.5	6.5	6.5	6.5	7.4	6.5	6.5
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: P1213117

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8
2.5°	1788.4	1787.4	1791.1	1787.4	1768.9	1776.3	1773.5	1783.7	1784.6	1787.4	1796.7
5°	1779.1	1779.1	1783.7	1780.0	1762.4	1769.8	1768.9	1779.1	1780.9	1782.8	1793.0
7.5°	1760.5	1761.5	1767.9	1765.2	1746.6	1757.7	1756.8	1768.9	1772.6	1776.3	1785.6
10°	1742.9	1742.0	1749.4	1746.6	1729.0	1742.0	1741.0	1753.1	1758.7	1765.2	1776.3
12.5°	1733.6	1730.8	1733.6	1730.8	1711.4	1721.6	1722.5	1736.4	1742.9	1751.2	1764.2
15°	1733.6	1729.0	1729.0	1723.4	1701.2	1707.7	1708.6	1717.9	1726.2	1734.6	1750.3
17.5°	1731.8	1727.1	1726.2	1721.6	1697.4	1697.4	1696.5	1703.0	1707.7	1716.0	1732.7
20°	1721.6	1719.7	1718.8	1716.0	1693.7	1690.0	1688.2	1688.2	1691.0	1693.7	1710.4
22.5°	1694.7	1696.5	1698.4	1700.2	1682.6	1676.1	1677.0	1675.2	1672.4	1672.4	1686.3
25°	1644.6	1653.9	1661.3	1669.6	1659.4	1654.8	1660.3	1657.6	1652.9	1649.2	1661.3
27.5°	1564.8	1584.3	1600.1	1620.5	1621.4	1617.7	1632.5	1630.7	1629.7	1624.2	1633.4
30°	1454.4	1485.0	1506.4	1536.1	1561.1	1564.8	1589.9	1593.6	1597.3	1594.5	1603.8
32.5°	1320.9	1362.6	1398.8	1445.2	1469.3	1490.6	1525.8	1540.7	1555.5	1560.2	1570.4
35°	1175.2	1222.5	1265.2	1316.2	1354.2	1400.6	1443.3	1465.6	1498.9	1511.9	1526.8
37.5°	1037.0	1081.5	1123.3	1174.3	1235.5	1283.8	1336.6	1386.7	1432.2	1450.7	1473.0
40°	914.6	950.8	990.6	1035.2	1090.8	1153.9	1211.4	1281.0	1334.8	1371.9	1404.3
42.5°	821.8	839.4	873.8	913.7	958.2	1022.2	1080.6	1158.5	1223.5	1276.3	1330.1
45°	739.3	747.6	772.7	794.0	839.4	896.0	958.2	1034.2	1102.0	1169.7	1234.6
47.5°	668.8	679.0	691.0	704.0	736.5	783.8	837.6	906.2	973.9	1052.8	1127.0
50°	621.5	624.3	626.1	631.7	651.2	683.6	727.2	785.6	850.6	935.0	1013.8
52.5°	579.7	579.7	574.2	571.4	578.8	599.2	624.3	666.0	732.8	810.7	894.2
55°	535.2	526.9	525.0	515.7	517.6	526.9	538.9	571.4	626.1	692.9	773.6
57.5°	473.1	469.3	469.3	465.6	458.2	462.9	465.6	488.8	527.8	585.3	655.8
60°	401.6	399.8	404.4	405.3	398.9	401.6	400.7	414.6	442.4	488.8	547.3
62.5°	330.2	338.6	339.5	343.2	339.5	338.6	343.2	355.3	369.2	404.4	449.9
65°	277.3	282.0	282.9	287.5	285.7	285.7	289.4	298.7	307.0	331.1	366.4
67.5°	243.0	241.2	242.1	244.9	242.1	241.2	244.0	249.5	256.0	270.8	295.9
70°	216.1	214.3	214.3	214.3	210.6	207.8	208.7	210.6	213.3	221.7	237.5
72.5°	195.7	195.7	192.9	190.2	187.4	185.5	183.7	181.8	180.9	183.7	192.0
75°	177.2	178.1	177.2	174.4	170.7	167.0	163.3	159.5	154.9	153.0	154.0
77.5°	160.5	161.4	162.3	161.4	157.7	153.0	147.5	141.9	135.4	128.9	125.2
80°	145.6	147.5	148.4	147.5	144.7	141.0	134.5	128.0	118.7	110.4	101.1
82.5°	132.6	135.4	136.4	136.4	134.5	130.8	123.4	115.9	105.7	94.6	82.6
85°	122.4	124.3	126.1	126.1	125.2	121.5	114.1	105.7	95.5	82.6	69.6
87.5°	112.2	113.2	115.0	116.9	115.0	111.3	104.8	95.5	85.3	72.4	57.5
90°	102.0	103.0	104.8	106.7	105.7	102.0	96.5	88.1	77.0	63.1	48.2
92.5°	91.8	93.7	94.6	95.5	96.5	93.7	89.0	80.7	69.6	55.7	41.7
95°	84.4	84.4	86.3	87.2	88.1	85.3	81.6	73.3	63.1	50.1	36.2
97.5°	77.0	77.0	78.8	78.8	79.8	77.9	74.2	66.8	56.6	44.5	30.6
100°	69.6	70.5	71.4	72.4	72.4	71.4	67.7	60.3	51.0	39.9	26.9
102.5°	64.9	64.9	65.9	65.9	66.8	64.9	61.2	54.7	45.5	35.2	23.2
105°	60.3	60.3	61.2	61.2	60.3	58.4	54.7	49.2	40.8	30.6	20.4
107.5°	56.6	56.6	56.6	56.6	55.7	53.8	50.1	43.6	36.2	27.8	18.6
110°	53.8	52.9	52.9	51.9	51.0	48.2	44.5	39.0	32.5	24.1	15.8

TEST NUMBER: P1213117

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	51.0	50.1	49.2	48.2	46.4	43.6	39.9	35.2	28.8	21.3	13.9
115°	48.2	47.3	46.4	44.5	42.7	39.9	36.2	31.5	25.0	18.6	12.1
117.5°	45.5	44.5	42.7	40.8	39.0	36.2	32.5	27.8	22.3	16.7	11.1
120°	41.7	40.8	39.9	38.0	36.2	32.5	28.8	25.0	19.5	14.8	9.3
122.5°	39.0	38.0	36.2	35.2	32.5	29.7	26.0	22.3	17.6	13.0	8.3
125°	35.2	34.3	33.4	31.5	29.7	26.0	23.2	19.5	15.8	11.1	6.5
127.5°	32.5	31.5	29.7	27.8	26.0	23.2	20.4	17.6	13.9	9.3	6.5
130°	28.8	27.8	26.9	25.0	23.2	20.4	18.6	14.8	12.1	8.3	5.6
132.5°	25.0	25.0	24.1	22.3	20.4	18.6	15.8	13.0	10.2	7.4	4.6
135°	23.2	22.3	21.3	19.5	18.6	15.8	13.9	11.1	8.3	6.5	3.7
137.5°	20.4	19.5	18.6	17.6	15.8	13.9	12.1	9.3	7.4	5.6	3.7
140°	17.6	16.7	16.7	14.8	13.9	12.1	10.2	8.3	6.5	4.6	2.8
142.5°	15.8	14.8	13.9	13.0	12.1	10.2	8.3	6.5	5.6	3.7	2.8
145°	13.9	13.0	12.1	11.1	10.2	8.3	7.4	5.6	4.6	3.7	2.8
147.5°	11.1	11.1	10.2	9.3	8.3	7.4	6.5	5.6	3.7	2.8	1.9
150°	9.3	9.3	8.3	7.4	7.4	6.5	5.6	4.6	3.7	2.8	1.9
152.5°	8.3	7.4	7.4	6.5	6.5	5.6	4.6	3.7	2.8	2.8	1.9
155°	6.5	6.5	6.5	5.6	5.6	4.6	3.7	3.7	2.8	1.9	1.9
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: P1213117

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8
2.5°	1798.6	1787.4	1796.7	1813.4	1811.5	1809.7	1807.8	1811.5	1823.6	1817.1	1806.9
5°	1795.8	1784.6	1794.8	1810.6	1809.7	1806.9	1805.0	1808.8	1820.8	1814.3	1803.2
7.5°	1790.2	1780.0	1787.4	1803.2	1803.2	1801.3	1799.5	1803.2	1814.3	1808.8	1797.6
10°	1780.9	1773.5	1780.9	1795.8	1796.7	1793.0	1791.1	1795.8	1806.9	1804.1	1794.8
12.5°	1773.5	1766.1	1774.4	1789.3	1790.2	1786.5	1783.7	1789.3	1804.1	1806.0	1803.2
15°	1763.3	1756.8	1767.0	1782.8	1782.8	1780.0	1780.0	1787.4	1807.8	1816.2	1820.8
17.5°	1748.5	1743.8	1755.9	1771.7	1772.6	1770.7	1771.7	1786.5	1813.4	1833.8	1846.8
20°	1729.9	1728.1	1741.0	1757.7	1760.5	1761.5	1766.1	1788.4	1825.5	1853.3	1866.3
22.5°	1707.7	1708.6	1723.4	1741.0	1744.8	1747.5	1756.8	1788.4	1834.7	1864.4	1870.0
25°	1682.6	1685.4	1701.2	1722.5	1727.1	1732.7	1748.5	1789.3	1837.5	1857.0	1847.7
27.5°	1655.7	1661.3	1681.7	1703.9	1709.5	1718.8	1739.2	1783.7	1824.5	1825.5	1791.1
30°	1627.9	1634.4	1658.5	1684.5	1693.7	1703.0	1728.1	1770.7	1793.0	1763.3	1703.0
32.5°	1596.3	1605.6	1629.7	1661.3	1672.4	1684.5	1709.5	1745.7	1737.3	1673.3	1587.1
35°	1556.5	1569.4	1597.3	1634.4	1644.6	1660.3	1678.0	1686.3	1649.2	1558.3	1460.9
37.5°	1507.3	1526.8	1559.2	1601.9	1613.0	1623.2	1627.9	1604.7	1530.5	1432.2	1331.1
40°	1450.7	1480.4	1515.6	1563.0	1574.1	1574.1	1557.4	1508.2	1414.5	1285.6	1173.4
42.5°	1382.1	1418.3	1462.8	1510.1	1521.2	1508.2	1468.3	1382.1	1275.4	1131.6	1012.9
45°	1298.6	1346.8	1396.9	1446.1	1451.6	1422.9	1351.5	1242.0	1110.3	976.7	863.6
47.5°	1199.3	1262.4	1317.1	1372.8	1365.4	1317.1	1221.6	1097.3	958.2	832.0	741.1
50°	1088.0	1162.2	1223.5	1276.3	1260.6	1193.8	1081.5	951.7	813.5	705.9	630.7
52.5°	969.3	1054.6	1115.9	1158.5	1137.2	1057.4	934.1	809.8	696.6	598.3	548.2
55°	845.9	932.2	995.3	1028.7	1000.8	914.6	793.1	679.9	573.2	509.2	479.6
57.5°	726.3	807.0	866.3	893.2	858.0	771.7	659.5	564.0	487.0	433.2	418.3
60°	611.3	677.1	733.7	754.1	716.1	636.3	539.8	463.8	407.2	370.1	362.7
62.5°	504.6	558.4	602.9	618.7	581.6	519.4	436.0	379.4	339.5	320.9	311.7
65°	416.5	448.0	493.5	490.7	468.4	410.9	349.7	309.8	283.8	271.8	266.2
67.5°	327.4	356.2	384.9	388.7	360.8	320.9	281.1	252.3	238.4	231.9	229.1
70°	253.2	274.6	292.2	287.5	272.7	247.7	222.6	206.8	201.3	198.5	198.5
72.5°	196.6	207.8	216.1	210.6	201.3	188.3	176.2	169.7	170.7	172.5	174.4
75°	152.1	154.9	156.8	151.2	149.3	141.0	140.1	141.0	146.6	152.1	154.9
77.5°	116.9	113.2	110.4	104.8	105.7	104.8	109.5	116.9	125.2	133.6	141.0
80°	90.0	81.6	75.1	69.6	72.4	77.0	86.3	97.4	108.5	117.8	127.1
82.5°	69.6	57.5	48.2	42.7	48.2	55.7	67.7	81.6	94.6	104.8	115.0
85°	53.8	39.9	28.8	23.2	28.8	39.9	52.9	68.6	82.6	93.7	103.9
87.5°	41.7	28.8	15.8	9.3	15.8	27.8	42.7	57.5	71.4	84.4	94.6
90°	33.4	19.5	7.4	1.9	8.3	19.5	33.4	48.2	62.1	76.1	86.3
92.5°	26.9	13.9	3.7	0.0	4.6	14.8	27.8	41.7	55.7	68.6	78.8
95°	22.3	11.1	2.8	0.0	3.7	11.1	22.3	36.2	49.2	62.1	70.5
97.5°	18.6	8.3	1.9	0.0	1.9	9.3	18.6	30.6	43.6	55.7	64.0
100°	15.8	7.4	1.9	0.0	1.9	7.4	15.8	26.9	38.0	49.2	57.5
102.5°	13.0	5.6	0.9	0.9	0.9	5.6	13.9	23.2	33.4	43.6	51.9
105°	12.1	4.6	0.9	0.9	0.9	4.6	12.1	20.4	29.7	39.0	46.4
107.5°	10.2	3.7	0.9	0.9	0.9	3.7	10.2	17.6	26.9	35.2	41.7
110°	8.3	3.7	0.9	0.9	0.9	3.7	8.3	15.8	23.2	30.6	37.1



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CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	7.4	2.8	0.9	0.9	0.9	2.8	7.4	13.9	20.4	27.8	33.4
115°	6.5	2.8	0.9	0.9	0.9	2.8	6.5	12.1	17.6	24.1	29.7
117.5°	5.6	2.8	0.9	0.9	0.9	1.9	5.6	10.2	15.8	21.3	26.9
120°	4.6	1.9	0.9	0.9	0.9	1.9	4.6	9.3	13.9	18.6	23.2
122.5°	4.6	1.9	0.9	0.9	0.9	1.9	3.7	7.4	12.1	15.8	20.4
125°	3.7	1.9	0.9	0.9	0.9	0.9	3.7	6.5	10.2	13.9	17.6
127.5°	3.7	1.9	0.9	0.9	0.9	0.9	2.8	5.6	8.3	12.1	15.8
130°	2.8	1.9	0.9	0.9	0.9	0.9	1.9	4.6	7.4	10.2	13.0
132.5°	2.8	1.9	0.9	0.9	0.9	0.9	1.9	3.7	5.6	8.3	11.1
135°	2.8	0.9	0.9	0.9	0.9	0.9	0.9	2.8	4.6	6.5	8.3
137.5°	1.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	3.7	4.6	7.4
140°	1.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	3.7	5.6
142.5°	1.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	4.6
145°	1.9	0.9	0.9	1.9	1.9	0.9	0.9	1.9	1.9	2.8	3.7
147.5°	1.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9	2.8
150°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8
152.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
155°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8
2.5°	1805.0	1783.7	1794.8	1791.1	1794.8	1804.1	1803.2	1800.4	1802.3	1797.6	1793.0
5°	1801.3	1780.0	1791.1	1786.5	1791.1	1800.4	1798.6	1795.8	1798.6	1793.0	1788.4
7.5°	1796.7	1777.2	1790.2	1789.3	1797.6	1809.7	1810.6	1810.6	1817.1	1808.8	1805.0
10°	1796.7	1786.5	1804.1	1810.6	1831.9	1847.7	1849.6	1853.3	1864.4	1862.6	1853.3
12.5°	1816.2	1814.3	1840.3	1856.1	1875.5	1897.8	1909.9	1913.6	1921.0	1915.4	1911.7
15°	1841.2	1850.5	1879.3	1896.9	1918.2	1934.9	1937.7	1939.5	1945.1	1936.8	1930.3
17.5°	1874.6	1880.2	1903.4	1910.8	1924.7	1927.5	1923.8	1914.5	1914.5	1895.9	1890.4
20°	1890.4	1887.6	1896.9	1884.8	1879.3	1862.6	1846.8	1829.2	1828.2	1808.8	1806.9
22.5°	1876.5	1857.9	1838.4	1808.8	1795.8	1771.7	1750.3	1740.1	1733.6	1708.6	1702.1
25°	1827.3	1781.9	1753.1	1717.9	1686.3	1658.5	1638.1	1616.8	1596.3	1575.9	1566.7
27.5°	1742.0	1699.3	1652.9	1603.8	1560.2	1517.5	1483.2	1461.8	1442.4	1415.5	1401.6
30°	1637.2	1577.8	1526.8	1479.5	1408.0	1356.1	1327.3	1284.7	1269.8	1257.8	1231.8
32.5°	1513.8	1442.4	1372.8	1308.8	1235.5	1187.3	1149.3	1117.7	1108.4	1076.9	1069.5
35°	1377.4	1283.8	1204.9	1141.8	1089.0	1030.5	999.0	977.7	959.1	937.8	934.1
37.5°	1217.0	1132.6	1043.5	987.9	946.1	896.0	871.9	857.1	848.7	833.0	830.2
40°	1055.6	971.2	909.9	854.3	828.3	801.4	783.8	777.3	773.6	768.0	762.5
42.5°	909.0	834.8	791.2	754.1	743.0	730.0	725.4	729.1	725.4	723.5	722.6
45°	784.7	728.1	697.5	686.4	683.6	679.9	683.6	690.1	691.0	689.2	689.2
47.5°	671.6	644.7	631.7	633.5	638.2	640.9	647.4	655.8	657.6	653.0	654.9
50°	597.4	581.6	578.8	586.2	596.4	600.1	607.6	614.0	613.1	611.3	609.4
52.5°	527.8	523.1	530.6	538.0	549.1	551.0	553.8	556.5	555.6	551.9	550.0
55°	469.3	473.1	479.6	482.3	490.7	489.8	490.7	490.7	487.0	485.1	482.3
57.5°	416.5	417.4	421.1	422.0	426.7	424.8	423.9	422.0	416.5	415.6	412.8
60°	362.7	360.8	369.2	362.7	366.4	362.7	361.8	357.1	351.5	350.6	348.8
62.5°	311.7	308.0	313.5	310.7	312.6	308.9	307.0	301.5	296.8	295.9	295.0
65°	266.2	264.4	269.9	269.0	270.8	266.2	264.4	260.6	256.9	256.0	255.1
67.5°	228.2	232.8	235.6	235.6	237.5	236.5	231.9	231.0	230.0	226.3	226.3
70°	200.4	203.1	208.7	209.6	208.7	210.6	206.8	205.9	205.0	203.1	202.2
72.5°	178.1	181.8	187.4	188.3	187.4	187.4	185.5	184.6	184.6	181.8	181.8
75°	160.5	165.1	169.7	169.7	169.7	167.9	166.0	166.0	164.2	163.3	161.4
77.5°	145.6	151.2	154.9	154.0	153.0	151.2	151.2	148.4	145.6	145.6	143.8
80°	134.5	138.2	141.0	140.1	139.1	136.4	135.4	132.6	130.8	128.0	128.0
82.5°	122.4	127.1	128.9	128.0	126.1	123.4	122.4	120.6	118.7	117.8	115.9
85°	112.2	116.9	117.8	115.9	114.1	112.2	111.3	110.4	109.5	107.6	107.6
87.5°	102.0	106.7	106.7	105.7	103.9	103.0	102.0	101.1	100.2	99.2	98.3
90°	93.7	97.4	97.4	96.5	95.5	94.6	93.7	92.8	91.8	90.9	90.9
92.5°	85.3	89.0	89.0	88.1	87.2	86.3	86.3	85.3	84.4	83.5	82.6
95°	77.9	81.6	81.6	81.6	80.7	79.8	79.8	78.8	77.9	77.9	77.0
97.5°	70.5	74.2	74.2	74.2	73.3	72.4	72.4	71.4	71.4	71.4	70.5
100°	64.0	66.8	67.7	67.7	66.8	66.8	66.8	65.9	65.9	65.9	64.9
102.5°	57.5	60.3	62.1	62.1	62.1	61.2	61.2	61.2	61.2	61.2	60.3
105°	51.9	54.7	56.6	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
107.5°	47.3	50.1	51.9	52.9	53.8	53.8	54.7	54.7	54.7	54.7	54.7
110°	42.7	45.5	48.2	49.2	50.1	51.0	51.0	51.9	51.0	51.0	51.0

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CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	38.0	41.7	43.6	45.5	46.4	47.3	48.2	48.2	48.2	48.2	48.2
115°	34.3	38.0	39.9	41.7	43.6	44.5	44.5	45.5	45.5	45.5	44.5
117.5°	30.6	34.3	36.2	38.0	39.0	40.8	41.7	41.7	41.7	41.7	40.8
120°	27.8	30.6	32.5	34.3	36.2	37.1	38.0	38.0	38.0	38.0	38.0
122.5°	24.1	26.9	29.7	31.5	32.5	33.4	34.3	34.3	34.3	34.3	34.3
125°	21.3	24.1	26.0	27.8	28.8	30.6	30.6	30.6	30.6	30.6	30.6
127.5°	18.6	21.3	23.2	25.0	26.0	26.9	27.8	27.8	27.8	27.8	27.8
130°	15.8	18.6	20.4	22.3	23.2	24.1	24.1	25.0	25.0	25.0	25.0
132.5°	13.9	15.8	17.6	19.5	20.4	21.3	21.3	22.3	22.3	22.3	22.3
135°	11.1	13.9	14.8	16.7	17.6	18.6	18.6	19.5	19.5	19.5	19.5
137.5°	9.3	11.1	13.0	14.8	15.8	15.8	16.7	16.7	17.6	17.6	17.6
140°	7.4	8.3	11.1	12.1	13.0	13.9	14.8	14.8	14.8	14.8	14.8
142.5°	5.6	7.4	8.3	10.2	11.1	12.1	13.0	13.0	13.0	13.0	13.0
145°	4.6	5.6	6.5	8.3	9.3	10.2	11.1	11.1	11.1	11.1	11.1
147.5°	3.7	4.6	5.6	6.5	7.4	8.3	9.3	9.3	9.3	9.3	9.3
150°	2.8	3.7	4.6	4.6	5.6	6.5	7.4	8.3	8.3	8.3	8.3
152.5°	2.8	2.8	3.7	3.7	4.6	5.6	6.5	6.5	6.5	6.5	6.5
155°	1.9	2.8	2.8	2.8	3.7	3.7	4.6	5.6	5.6	5.6	5.6
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-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8
2.5°	1795.8	1799.5	1797.6	1794.8	1793.9	1798.6	1793.9	1772.6	1780.9	1781.9	1788.4
5°	1793.0	1795.8	1793.9	1792.1	1789.3	1794.8	1789.3	1767.0	1775.4	1776.3	1782.8
7.5°	1811.5	1812.5	1812.5	1807.8	1800.4	1803.2	1795.8	1770.7	1775.4	1775.4	1780.0
10°	1857.9	1859.8	1862.6	1850.5	1841.2	1833.8	1823.6	1793.0	1792.1	1784.6	1784.6
12.5°	1918.2	1913.6	1908.9	1903.4	1895.9	1886.7	1871.8	1835.7	1823.6	1811.5	1799.5
15°	1935.8	1934.0	1933.1	1930.3	1925.6	1922.8	1911.7	1875.5	1857.9	1843.1	1821.7
17.5°	1889.5	1893.2	1905.2	1906.2	1911.7	1922.8	1921.0	1895.9	1880.2	1873.7	1847.7
20°	1806.0	1806.9	1821.7	1828.2	1852.4	1870.9	1884.8	1882.0	1878.3	1885.7	1866.3
22.5°	1705.8	1712.3	1728.1	1738.3	1761.5	1782.8	1805.0	1817.1	1836.6	1867.2	1863.5
25°	1569.4	1577.8	1600.1	1616.8	1649.2	1681.7	1711.4	1732.7	1755.9	1814.3	1833.8
27.5°	1406.2	1419.2	1447.9	1464.6	1510.1	1543.5	1586.1	1627.9	1660.3	1727.1	1767.0
30°	1234.6	1245.7	1276.3	1299.5	1338.5	1383.9	1437.7	1497.1	1550.9	1618.6	1668.7
32.5°	1074.1	1086.2	1111.2	1131.6	1175.2	1213.3	1272.6	1345.9	1396.0	1489.7	1556.5
35°	934.1	945.2	962.8	980.4	1016.6	1055.6	1106.6	1178.0	1242.0	1339.4	1423.8
37.5°	835.7	837.6	847.8	858.0	884.9	914.6	954.5	1017.5	1076.9	1181.7	1274.5
40°	765.2	765.2	770.8	773.6	785.6	803.3	828.3	877.5	926.6	1006.4	1119.6
42.5°	721.6	719.8	719.8	720.7	719.8	728.1	743.0	766.2	809.8	875.6	963.7
45°	689.2	685.5	682.7	676.2	672.5	672.5	673.4	681.8	706.8	749.5	820.9
47.5°	653.0	652.1	647.4	640.0	633.5	628.9	621.5	618.7	626.1	650.2	698.5
50°	611.3	606.6	602.0	596.4	589.0	584.4	570.5	571.4	564.9	576.0	601.1
52.5°	550.0	546.3	544.5	539.8	537.1	535.2	524.1	512.9	510.2	512.0	521.3
55°	482.3	484.2	476.8	480.5	479.6	471.2	466.6	458.2	455.4	454.5	459.1
57.5°	411.8	413.7	409.1	412.8	412.8	408.1	405.3	405.3	398.9	393.3	399.8
60°	347.8	344.1	346.9	351.5	351.5	348.8	346.9	346.9	342.3	340.4	345.1
62.5°	295.9	292.2	295.0	299.6	300.5	298.7	296.8	296.8	291.3	291.3	295.0
65°	256.0	256.9	256.0	259.7	259.7	260.6	258.8	256.9	250.4	253.2	252.3
67.5°	227.3	226.3	226.3	230.0	229.1	231.0	229.1	226.3	221.7	218.0	217.1
70°	203.1	202.2	202.2	204.1	205.0	205.0	204.1	202.2	195.7	192.0	189.2
72.5°	181.8	180.9	181.8	182.7	183.7	184.6	183.7	181.8	176.2	171.6	167.0
75°	162.3	161.4	164.2	164.2	165.1	165.1	166.0	165.1	160.5	154.9	149.3
77.5°	142.8	143.8	146.6	147.5	149.3	150.3	151.2	151.2	146.6	141.9	134.5
80°	127.1	128.9	130.8	131.7	133.6	136.4	137.3	138.2	134.5	129.9	121.5
82.5°	115.9	116.9	118.7	119.7	122.4	123.4	124.3	126.1	124.3	119.7	110.4
85°	106.7	107.6	109.5	109.5	111.3	113.2	114.1	115.0	114.1	109.5	100.2
87.5°	98.3	99.2	100.2	101.1	102.0	103.0	103.9	104.8	103.9	99.2	90.9
90°	90.9	90.9	91.8	91.8	92.8	93.7	95.5	95.5	94.6	90.9	82.6
92.5°	82.6	83.5	83.5	84.4	85.3	86.3	87.2	87.2	86.3	82.6	75.1
95°	77.0	77.0	77.9	77.9	78.8	78.8	79.8	79.8	78.8	75.1	67.7
97.5°	70.5	70.5	70.5	70.5	71.4	71.4	72.4	72.4	71.4	67.7	61.2
100°	64.9	64.9	64.9	64.9	64.9	65.9	65.9	65.9	64.9	61.2	54.7
102.5°	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	58.4	55.7	49.2
105°	57.5	57.5	57.5	56.6	56.6	56.6	55.7	55.7	52.9	50.1	44.5
107.5°	53.8	53.8	53.8	52.9	52.9	51.9	51.0	51.0	48.2	45.5	39.9
110°	51.0	51.0	51.0	50.1	49.2	48.2	47.3	46.4	43.6	39.9	35.2

TEST NUMBER: P1213117

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	48.2	48.2	47.3	47.3	46.4	45.5	43.6	42.7	39.9	36.2	31.5
115°	44.5	44.5	44.5	43.6	42.7	41.7	40.8	39.0	36.2	32.5	27.8
117.5°	40.8	40.8	40.8	39.9	39.0	38.0	37.1	35.2	32.5	28.8	25.0
120°	37.1	37.1	37.1	36.2	35.2	34.3	33.4	31.5	28.8	26.0	21.3
122.5°	34.3	34.3	33.4	32.5	31.5	30.6	29.7	27.8	26.0	22.3	18.6
125°	30.6	30.6	29.7	29.7	28.8	27.8	26.9	25.0	22.3	19.5	16.7
127.5°	27.8	26.9	26.9	26.9	26.0	25.0	23.2	22.3	19.5	16.7	13.9
130°	24.1	24.1	24.1	23.2	23.2	22.3	20.4	18.6	16.7	14.8	12.1
132.5°	21.3	21.3	21.3	21.3	20.4	19.5	17.6	16.7	14.8	12.1	10.2
135°	19.5	19.5	18.6	18.6	17.6	16.7	15.8	13.9	12.1	10.2	8.3
137.5°	16.7	16.7	16.7	15.8	15.8	14.8	13.0	12.1	11.1	9.3	7.4
140°	14.8	14.8	13.9	13.9	13.0	13.0	12.1	10.2	9.3	7.4	6.5
142.5°	13.0	13.0	12.1	12.1	11.1	11.1	10.2	9.3	7.4	6.5	4.6
145°	11.1	11.1	10.2	10.2	10.2	9.3	8.3	7.4	6.5	5.6	4.6
147.5°	9.3	9.3	9.3	8.3	8.3	7.4	7.4	6.5	5.6	4.6	3.7
150°	8.3	8.3	7.4	7.4	7.4	6.5	5.6	5.6	4.6	3.7	2.8
152.5°	6.5	6.5	6.5	6.5	5.6	5.6	4.6	4.6	3.7	2.8	2.8
155°	5.6	5.6	5.6	4.6	4.6	4.6	3.7	3.7	2.8	2.8	1.9
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: P1213117

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8	1795.8
2.5°	1785.6	1784.6	1793.0	1792.1	1780.9	1797.6	1808.8
5°	1780.9	1780.0	1787.4	1789.3	1777.2	1794.8	1806.9
7.5°	1777.2	1776.3	1784.6	1787.4	1775.4	1791.1	1804.1
10°	1778.1	1773.5	1780.9	1782.8	1771.7	1788.4	1799.5
12.5°	1784.6	1773.5	1776.3	1776.3	1766.1	1780.9	1793.0
15°	1800.4	1777.2	1773.5	1770.7	1757.7	1771.7	1783.7
17.5°	1818.0	1786.5	1773.5	1764.2	1748.5	1760.5	1773.5
20°	1835.7	1796.7	1775.4	1760.5	1739.2	1750.3	1759.6
22.5°	1844.0	1806.0	1777.2	1755.0	1728.1	1733.6	1743.8
25°	1832.9	1802.3	1773.5	1746.6	1714.1	1715.1	1723.4
27.5°	1792.1	1783.7	1765.2	1738.3	1703.0	1698.4	1704.9
30°	1722.5	1745.7	1746.6	1727.1	1690.0	1680.8	1683.5
32.5°	1625.1	1677.0	1707.7	1703.9	1671.5	1658.5	1660.3
35°	1512.9	1577.8	1644.6	1666.8	1643.6	1633.4	1629.7
37.5°	1378.4	1465.6	1554.6	1609.3	1605.6	1599.1	1595.4
40°	1230.0	1334.8	1440.5	1527.7	1554.6	1554.6	1556.5
42.5°	1071.3	1193.8	1309.7	1420.1	1483.2	1497.1	1502.7
45°	918.3	1041.7	1167.8	1294.9	1379.3	1422.9	1438.7
47.5°	779.2	903.5	1023.1	1162.2	1274.5	1331.1	1356.1
50°	660.4	753.2	879.3	1017.5	1140.0	1209.5	1258.7
52.5°	562.1	634.5	744.8	873.8	997.1	1092.7	1138.1
55°	479.6	528.7	622.4	733.7	851.5	950.8	1003.6
57.5°	410.0	448.9	512.9	605.7	705.0	803.3	859.9
60°	348.8	375.7	419.3	492.5	576.9	661.4	716.1
62.5°	295.9	313.5	342.3	396.1	461.9	527.8	578.8
65°	255.1	262.5	278.3	311.7	361.8	411.8	455.4
67.5°	215.2	219.8	231.9	252.3	277.3	313.5	342.3
70°	185.5	185.5	186.4	198.5	211.5	234.7	255.1
72.5°	161.4	158.6	153.0	155.8	158.6	171.6	184.6
75°	141.9	135.4	126.1	122.4	120.6	122.4	129.9
77.5°	125.2	115.9	104.8	95.5	88.1	85.3	91.8
80°	111.3	100.2	87.2	75.1	63.1	56.6	59.4
82.5°	100.2	86.3	72.4	58.4	44.5	35.2	35.2
85°	88.1	75.1	60.3	45.5	31.5	19.5	17.6
87.5°	79.8	65.9	50.1	36.2	22.3	10.2	5.6
90°	71.4	57.5	42.7	28.8	15.8	4.6	0.0
92.5°	64.0	51.0	37.1	23.2	11.1	2.8	0.0
95°	57.5	45.5	31.5	19.5	9.3	1.9	0.9
97.5°	51.0	39.9	27.8	15.8	6.5	1.9	0.9
100°	46.4	35.2	24.1	13.0	5.6	0.9	0.9
102.5°	40.8	31.5	20.4	11.1	4.6	0.9	0.9
105°	36.2	27.8	17.6	9.3	3.7	0.9	0.9
107.5°	32.5	24.1	15.8	8.3	3.7	0.9	0.9
110°	28.8	21.3	13.9	7.4	2.8	0.9	0.9



TEST NUMBER: P1213117

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	26.0	18.6	12.1	6.5	1.9	0.9	0.9
115°	22.3	16.7	10.2	5.6	1.9	0.9	0.9
117.5°	19.5	13.9	9.3	4.6	1.9	0.9	0.9
120°	16.7	12.1	7.4	3.7	0.9	0.9	0.9
122.5°	14.8	10.2	6.5	3.7	0.9	0.9	0.9
125°	13.0	9.3	5.6	2.8	0.9	0.9	0.9
127.5°	11.1	7.4	4.6	1.9	0.9	0.9	0.9
130°	9.3	6.5	3.7	1.9	0.9	0.9	0.9
132.5°	7.4	5.6	3.7	1.9	0.9	0.9	0.9
135°	6.5	4.6	2.8	1.9	0.9	0.9	0.9
137.5°	5.6	3.7	1.9	1.9	1.9	0.9	0.9
140°	4.6	2.8	1.9	1.9	1.9	1.9	0.9
142.5°	3.7	2.8	1.9	1.9	1.9	1.9	0.9
145°	2.8	1.9	1.9	1.9	1.9	1.9	0.9
147.5°	2.8	1.9	1.9	1.9	1.9	1.9	0.9
150°	1.9	1.9	1.9	1.9	1.9	1.9	1.9
152.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9
155°	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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)