

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: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-53SL-LN-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

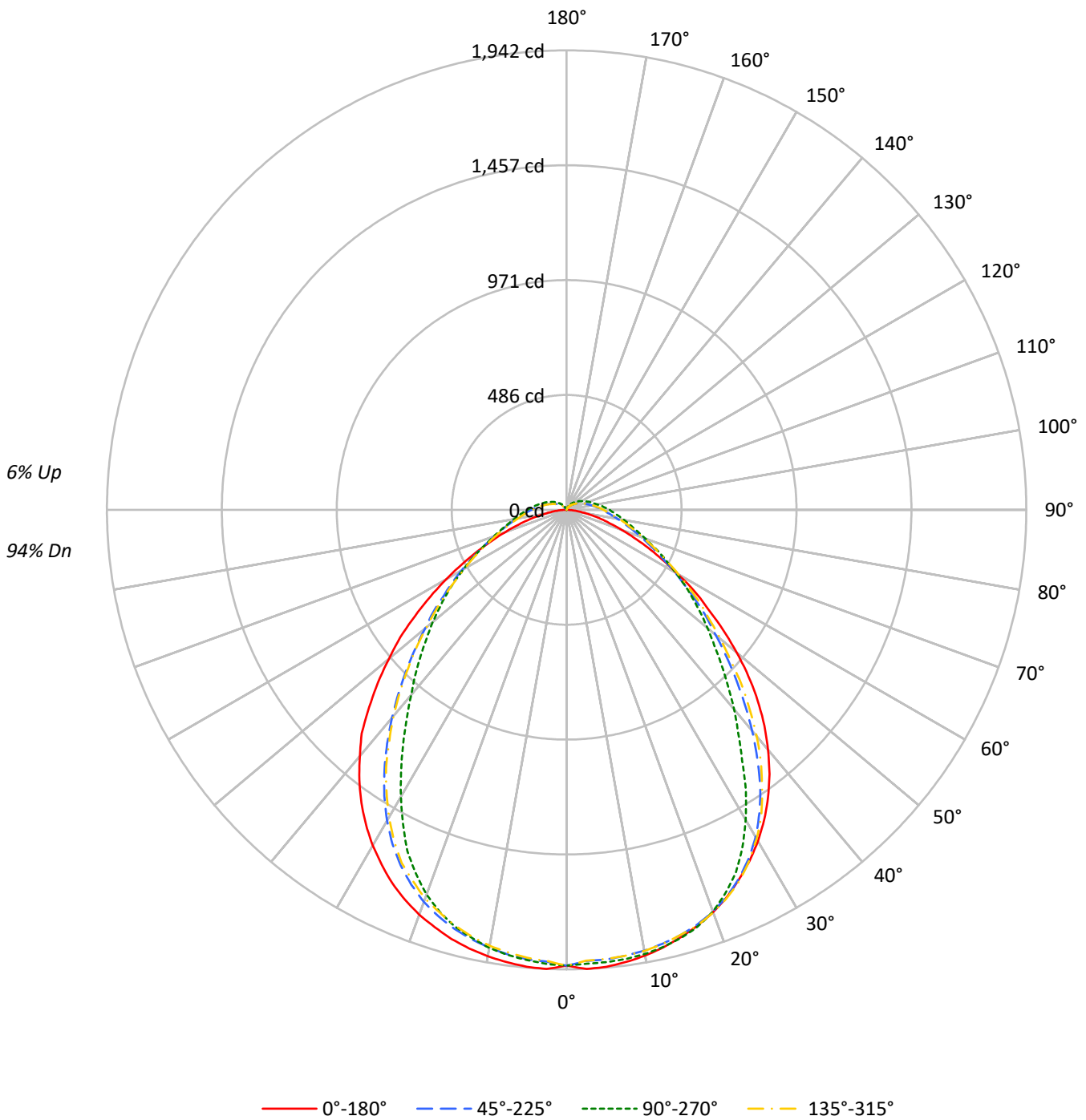
Lumens per Lamp: N/A
Luminaire Lumens: 4875.0 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 41
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: 25 FT



TEST NUMBER: P#
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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					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94				
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81	79				
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69	67				
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60	57				
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52	50				
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46	44				
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41	39				
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35				
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31				
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30	28				
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27	26				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15566	15566	15566	15566
5°	15678	15071	15678	15004
10°	15607	14671	15633	14467
15°	15507	14232	15578	13861
20°	15389	13669	15479	13091
25°	15141	12832	15308	12077
30°	14820	11604	15014	10743
35°	14321	10098	14597	9403
40°	13604	8832	13964	8194
45°	12658	7678	13069	7237
50°	11365	6746	11867	6406
55°	9832	5957	10547	5656
60°	8269	5230	9017	4929
65°	6779	4624	7462	4288
70°	5394	4104	6040	3796
75°	4236	3789	4770	3486
80°	3056	3656	3601	3341
85°	1879	3677	2535	3379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	3.7
10°-20°	523.7	10.7
20°-30°	776.1	15.9
30°-40°	862.2	17.7
40°-50°	781.6	16.0
50°-60°	605.7	12.4
60°-70°	411.3	8.4
70°-80°	261.7	5.4
80°-90°	167.3	3.4
90°-100°	112.8	2.3
100°-110°	77.3	1.6
110°-120°	51.5	1.1
120°-130°	32.1	0.7
130°-140°	17.7	0.4
140°-150°	8.3	0.2
150°-160°	3.1	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1482.4	30.4
0°-40°	2344.6	48.1
0°-60°	3731.9	76.6
0°-90°	4572.1	93.8
90°-120°	241.6	5.0
90°-150°	299.7	6.1
90°-180°	303.0	6.2
0°-180°	4875.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1926	1926	1926	1926	1926	
5°	1938	1919	1938	1910	1938	184
15°	1869	1872	1878	1824	1869	528
25°	1723	1691	1742	1592	1723	793
35°	1483	1293	1512	1204	1483	925
45°	1142	924	1179	871	1142	877
55°	729	650	782	617	729	656
65°	378	436	416	405	378	379
75°	152	291	171	268	152	163
85°	28	210	37	193	28	33
90°	0	181	2	165	0	2
95°	1	155	0	144	1	1
105°	1	113	0	107	1	1
115°	1	86	0	80	1	1
125°	1	64	1	56	1	1
135°	1	44	1	36	1	1
145°	1	29	1	20	1	1
155°	1	16	1	7	1	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3
2.5°	1942.2	1940.1	1938.0	1934.8	1938.0	1946.4	1941.2	1929.5	1927.4	1908.3	1916.8
5°	1938.0	1934.8	1932.7	1929.5	1933.7	1944.3	1939.0	1928.4	1925.3	1907.2	1916.8
7.5°	1927.4	1925.3	1922.1	1922.1	1926.3	1936.9	1932.7	1921.0	1918.9	1900.9	1911.5
10°	1912.5	1911.5	1909.4	1909.4	1913.6	1926.3	1921.0	1910.4	1908.3	1891.4	1903.0
12.5°	1893.5	1894.5	1891.4	1891.4	1897.7	1910.4	1906.2	1894.5	1892.4	1877.6	1889.2
15°	1869.1	1870.2	1868.0	1869.1	1875.5	1890.3	1885.0	1874.4	1872.3	1860.6	1870.2
17.5°	1841.5	1842.6	1842.6	1841.5	1849.0	1863.8	1859.6	1850.0	1846.8	1837.3	1849.0
20°	1809.8	1809.8	1809.8	1809.8	1818.2	1833.1	1827.8	1820.4	1814.0	1806.6	1816.1
22.5°	1770.6	1769.5	1770.6	1773.7	1782.2	1793.9	1790.7	1782.2	1772.7	1768.4	1775.9
25°	1722.9	1726.1	1727.1	1730.3	1740.9	1750.4	1747.2	1738.8	1723.9	1720.8	1722.9
27.5°	1673.1	1675.2	1678.4	1677.3	1692.1	1701.7	1695.3	1687.9	1666.7	1663.5	1661.4
30°	1616.9	1620.1	1622.2	1621.2	1632.8	1643.4	1637.1	1627.5	1598.9	1596.8	1579.8
32.5°	1553.3	1556.5	1558.6	1558.6	1575.6	1579.8	1568.2	1554.4	1523.7	1516.3	1501.4
35°	1483.4	1486.6	1487.7	1487.7	1504.6	1503.5	1488.7	1469.6	1435.7	1426.2	1400.8
37.5°	1408.2	1410.3	1411.4	1417.7	1425.1	1418.8	1399.7	1375.3	1349.9	1323.4	1295.9
40°	1323.4	1326.6	1328.7	1333.0	1340.4	1333.0	1305.4	1275.7	1248.2	1218.5	1191.0
42.5°	1236.5	1246.1	1243.9	1242.9	1247.1	1227.0	1205.8	1171.9	1144.3	1113.6	1086.1
45°	1142.2	1141.2	1146.5	1148.6	1147.5	1130.6	1100.9	1070.2	1042.6	1010.8	987.5
47.5°	1042.6	1041.6	1045.8	1047.9	1041.6	1023.6	1000.2	965.3	942.0	914.4	896.4
50°	937.7	937.7	944.1	937.7	934.5	916.5	897.5	862.5	844.5	820.1	809.5
52.5°	832.8	842.4	836.0	833.9	830.7	812.7	797.9	769.3	754.4	743.8	731.1
55°	729.0	739.6	735.3	732.2	731.1	716.3	702.5	681.3	671.8	664.4	656.9
57.5°	641.0	640.0	637.9	634.7	635.7	624.1	610.3	598.7	594.4	591.2	593.4
60°	539.3	547.8	544.6	545.7	546.7	544.6	533.0	525.6	526.6	527.7	530.8
62.5°	455.6	463.0	468.3	464.1	466.2	469.4	463.0	460.9	465.2	469.4	473.6
65°	378.3	385.7	391.0	389.9	396.3	402.6	401.6	403.7	413.2	418.5	423.8
67.5°	308.3	315.8	323.2	324.2	333.8	343.3	347.5	355.0	365.6	373.0	379.3
70°	247.9	254.3	262.8	268.1	280.8	293.5	300.9	315.8	322.1	332.7	336.9
72.5°	193.9	199.2	210.9	223.6	234.2	250.1	264.9	277.6	287.1	298.8	304.1
75°	151.5	153.6	166.4	181.2	196.0	214.0	229.9	243.7	256.4	268.1	276.6
77.5°	111.3	114.4	126.1	146.2	163.2	182.2	200.3	215.1	228.9	240.5	252.2
80°	77.3	83.7	96.4	116.6	135.6	156.8	173.8	190.7	205.6	217.2	228.9
82.5°	49.8	55.1	73.1	93.2	113.4	134.6	152.6	169.5	185.4	198.1	208.7
85°	27.5	35.0	53.0	74.2	94.3	115.5	134.6	151.5	167.4	179.1	189.7
87.5°	10.6	21.2	38.1	58.3	78.4	98.5	118.7	134.6	150.5	163.2	172.7
90°	0.0	12.7	28.6	48.7	68.9	89.0	108.1	125.0	139.9	151.5	162.1
92.5°	1.1	8.5	22.3	39.2	58.3	77.3	95.4	112.3	127.1	138.8	148.3
95°	1.1	6.4	18.0	33.9	50.9	68.9	85.8	101.7	115.5	127.1	136.7
97.5°	1.1	4.2	14.8	29.7	44.5	62.5	78.4	93.2	106.0	117.6	125.0
100°	1.1	4.2	12.7	25.4	40.3	56.2	71.0	85.8	97.5	107.0	115.5
102.5°	1.1	3.2	10.6	22.3	36.0	49.8	64.6	78.4	89.0	98.5	107.0
105°	1.1	3.2	9.5	19.1	31.8	45.6	58.3	71.0	82.6	91.1	98.5
107.5°	1.1	2.1	8.5	15.9	27.5	41.3	54.0	64.6	75.2	83.7	91.1
110°	1.1	2.1	7.4	14.8	24.4	37.1	48.7	59.3	68.9	77.3	83.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.1	2.1	6.4	13.8	22.3	32.8	44.5	54.0	63.6	71.0	77.3
115°	1.1	2.1	6.4	12.7	20.1	28.6	39.2	49.8	57.2	65.7	71.0
117.5°	1.1	2.1	5.3	10.6	19.1	26.5	36.0	44.5	53.0	60.4	65.7
120°	1.1	2.1	5.3	9.5	17.0	24.4	31.8	40.3	48.7	54.0	59.3
122.5°	1.1	2.1	4.2	9.5	14.8	22.3	28.6	36.0	43.4	49.8	55.1
125°	1.1	2.1	4.2	8.5	13.8	20.1	26.5	31.8	39.2	44.5	49.8
127.5°	1.1	2.1	4.2	7.4	12.7	18.0	24.4	29.7	35.0	40.3	44.5
130°	1.1	2.1	3.2	6.4	11.7	15.9	21.2	27.5	31.8	36.0	40.3
132.5°	1.1	2.1	3.2	6.4	9.5	13.8	19.1	24.4	28.6	32.8	36.0
135°	1.1	2.1	3.2	5.3	8.5	12.7	15.9	21.2	25.4	29.7	32.8
137.5°	1.1	2.1	3.2	5.3	7.4	10.6	13.8	18.0	22.3	25.4	29.7
140°	1.1	2.1	3.2	4.2	6.4	9.5	12.7	14.8	19.1	22.3	25.4
142.5°	1.1	2.1	3.2	4.2	6.4	8.5	10.6	12.7	15.9	19.1	22.3
145°	1.1	2.1	3.2	4.2	5.3	7.4	9.5	11.7	12.7	15.9	18.0
147.5°	1.1	2.1	3.2	4.2	4.2	6.4	8.5	9.5	11.7	12.7	14.8
150°	1.1	2.1	3.2	3.2	4.2	5.3	7.4	8.5	9.5	11.7	12.7
152.5°	1.1	2.1	3.2	3.2	4.2	5.3	6.4	7.4	8.5	9.5	10.6
155°	1.1	2.1	3.2	3.2	3.2	4.2	5.3	6.4	7.4	8.5	9.5
157.5°	2.1	2.1	2.1	3.2	3.2	4.2	4.2	5.3	6.4	6.4	7.4
160°	2.1	2.1	2.1	3.2	3.2	3.2	4.2	4.2	5.3	5.3	6.4
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°	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3
2.5°	1914.7	1917.8	1927.4	1927.4	1925.3	1923.1	1923.1	1920.0	1922.1	1926.3	1924.2
5°	1914.7	1917.8	1927.4	1927.4	1925.3	1923.1	1922.1	1918.9	1922.1	1926.3	1924.2
7.5°	1908.3	1912.5	1922.1	1922.1	1920.0	1918.9	1916.8	1914.7	1917.8	1922.1	1920.0
10°	1899.8	1904.1	1913.6	1913.6	1911.5	1911.5	1908.3	1906.2	1910.4	1913.6	1912.5
12.5°	1887.1	1892.4	1900.9	1899.8	1897.7	1898.8	1895.6	1891.4	1895.6	1898.8	1899.8
15°	1869.1	1875.5	1883.9	1881.8	1878.6	1880.8	1875.5	1872.3	1875.5	1881.8	1880.8
17.5°	1845.8	1850.0	1856.4	1856.4	1853.2	1851.1	1849.0	1845.8	1847.9	1852.1	1853.2
20°	1812.9	1818.2	1821.4	1818.2	1817.2	1814.0	1809.8	1806.6	1810.8	1817.2	1818.2
22.5°	1769.5	1770.6	1778.0	1770.6	1765.3	1764.2	1760.0	1753.6	1760.0	1765.3	1766.3
25°	1715.5	1720.8	1717.6	1704.9	1704.9	1696.4	1694.3	1691.1	1692.1	1701.7	1705.9
27.5°	1646.6	1648.7	1640.2	1629.6	1620.1	1614.8	1607.4	1608.4	1608.4	1621.2	1625.4
30°	1571.4	1559.7	1552.3	1535.3	1527.9	1515.2	1513.1	1513.1	1511.0	1517.3	1536.4
32.5°	1481.3	1465.4	1453.7	1437.8	1425.1	1412.4	1406.1	1409.2	1408.2	1424.1	1430.4
35°	1382.8	1373.2	1348.8	1328.7	1321.3	1302.2	1302.2	1292.7	1299.0	1317.1	1324.5
37.5°	1278.9	1264.1	1243.9	1221.7	1216.4	1201.6	1196.3	1191.0	1204.7	1207.9	1215.3
40°	1173.0	1159.2	1140.1	1118.9	1118.9	1100.9	1100.9	1100.9	1102.0	1108.3	1122.1
42.5°	1072.3	1057.5	1040.5	1025.7	1023.6	1009.8	1009.8	1008.7	1010.8	1016.1	1028.9
45°	974.8	963.2	945.1	937.7	938.8	924.0	927.1	924.0	928.2	933.5	937.7
47.5°	884.7	877.3	869.9	859.3	856.1	855.1	849.8	845.5	853.0	853.0	859.3
50°	801.0	796.8	792.6	786.2	787.3	783.0	776.7	776.7	782.0	783.0	787.3
52.5°	727.9	722.6	717.3	718.4	719.5	717.3	714.2	711.0	714.2	716.3	721.6
55°	654.8	650.6	655.9	653.8	655.9	653.8	651.6	649.5	654.8	651.6	656.9
57.5°	589.1	593.4	595.5	591.2	594.4	592.3	593.4	590.2	594.4	596.5	595.5
60°	528.7	535.1	531.9	533.0	537.2	535.1	530.8	534.0	538.3	539.3	538.3
62.5°	473.6	481.0	484.2	482.1	483.2	481.0	484.2	480.0	485.3	487.4	484.2
65°	423.8	432.3	434.4	434.4	434.4	432.3	435.5	436.5	438.7	438.7	436.5
67.5°	381.4	388.9	391.0	393.1	391.0	388.9	388.9	389.9	394.2	396.3	394.2
70°	343.3	350.7	351.8	351.8	352.8	355.0	350.7	352.8	356.0	357.1	356.0
72.5°	310.5	317.9	320.0	318.9	320.0	321.1	321.1	318.9	322.1	324.2	324.2
75°	284.0	288.2	290.3	290.3	291.4	292.4	292.4	291.4	293.5	294.6	295.6
77.5°	259.6	262.8	266.0	266.0	267.0	266.0	268.1	268.1	269.1	270.2	271.3
80°	235.2	239.5	241.6	242.6	244.8	245.8	245.8	245.8	246.9	247.9	247.9
82.5°	216.2	219.3	222.5	225.7	225.7	226.8	226.8	226.8	227.8	227.8	228.9
85°	197.1	201.3	204.5	206.6	207.7	208.7	208.7	209.8	209.8	209.8	210.9
87.5°	180.1	185.4	187.5	189.7	190.7	192.8	192.8	192.8	193.9	193.9	193.9
90°	168.5	173.8	175.9	178.0	179.1	180.1	180.1	181.2	181.2	182.2	182.2
92.5°	154.7	160.0	164.2	164.2	165.3	167.4	166.4	166.4	167.4	168.5	168.5
95°	144.1	148.3	151.5	152.6	153.6	153.6	153.6	154.7	153.6	154.7	154.7
97.5°	131.4	135.6	138.8	140.9	142.0	142.0	142.0	143.0	142.0	143.0	143.0
100°	120.8	125.0	128.2	129.3	131.4	131.4	131.4	131.4	131.4	131.4	132.4
102.5°	112.3	116.6	118.7	119.7	120.8	121.9	121.9	121.9	121.9	122.9	122.9
105°	103.8	108.1	110.2	111.3	112.3	113.4	113.4	113.4	114.4	114.4	113.4
107.5°	96.4	99.6	101.7	103.8	104.9	104.9	106.0	106.0	106.0	106.0	106.0
110°	89.0	92.2	95.4	97.5	97.5	98.5	98.5	99.6	99.6	98.5	99.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	81.6	85.8	87.9	90.1	91.1	92.2	92.2	92.2	92.2	92.2	92.2
115°	75.2	79.5	81.6	83.7	84.8	85.8	85.8	85.8	85.8	85.8	85.8
117.5°	69.9	74.2	76.3	77.3	78.4	79.5	80.5	80.5	80.5	80.5	79.5
120°	64.6	67.8	69.9	72.1	73.1	74.2	74.2	74.2	74.2	74.2	74.2
122.5°	59.3	62.5	64.6	66.8	67.8	68.9	68.9	68.9	68.9	68.9	68.9
125°	54.0	57.2	59.3	61.5	62.5	63.6	63.6	63.6	63.6	63.6	63.6
127.5°	48.7	51.9	55.1	56.2	57.2	58.3	58.3	58.3	59.3	58.3	58.3
130°	43.4	46.6	49.8	50.9	51.9	53.0	54.0	54.0	54.0	54.0	53.0
132.5°	39.2	42.4	44.5	45.6	47.7	47.7	48.7	48.7	48.7	48.7	47.7
135°	36.0	38.1	40.3	41.3	43.4	43.4	43.4	44.5	44.5	43.4	42.4
137.5°	31.8	33.9	36.0	37.1	38.1	39.2	39.2	40.3	39.2	39.2	39.2
140°	29.7	30.7	32.8	33.9	35.0	35.0	35.0	36.0	36.0	35.0	35.0
142.5°	25.4	27.5	29.7	30.7	31.8	31.8	31.8	31.8	31.8	31.8	31.8
145°	21.2	24.4	25.4	27.5	27.5	28.6	28.6	28.6	28.6	28.6	27.5
147.5°	18.0	20.1	23.3	24.4	24.4	25.4	25.4	25.4	25.4	25.4	24.4
150°	13.8	15.9	19.1	21.2	21.2	22.3	22.3	22.3	22.3	21.2	21.2
152.5°	11.7	13.8	14.8	17.0	18.0	18.0	18.0	19.1	18.0	18.0	18.0
155°	10.6	11.7	12.7	13.8	14.8	15.9	15.9	15.9	15.9	14.8	14.8
157.5°	8.5	9.5	10.6	11.7	12.7	13.8	13.8	13.8	13.8	13.8	12.7
160°	6.4	7.4	8.5	8.5	9.5	10.6	11.7	10.6	10.6	10.6	10.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3
2.5°	1922.1	1921.0	1924.2	1918.9	1903.0	1907.2	1905.1	1914.7	1916.8	1918.9	1928.4
5°	1922.1	1921.0	1923.1	1918.9	1901.9	1905.1	1903.0	1912.5	1914.7	1915.7	1925.3
7.5°	1917.8	1916.8	1920.0	1914.7	1896.6	1900.9	1897.7	1907.2	1908.3	1909.4	1917.8
10°	1909.4	1908.3	1910.4	1906.2	1888.2	1892.4	1888.2	1897.7	1897.7	1899.8	1906.2
12.5°	1896.6	1894.5	1898.8	1893.5	1873.3	1878.6	1876.5	1882.9	1883.9	1885.0	1891.4
15°	1878.6	1876.5	1879.7	1876.5	1858.5	1859.6	1856.4	1865.9	1867.0	1864.9	1871.2
17.5°	1852.1	1850.0	1856.4	1854.3	1836.3	1840.5	1839.4	1841.5	1844.7	1839.4	1847.9
20°	1819.3	1821.4	1823.5	1824.6	1810.8	1810.8	1809.8	1814.0	1817.2	1812.9	1819.3
22.5°	1770.6	1775.9	1782.2	1784.3	1774.8	1773.7	1780.1	1778.0	1781.2	1779.0	1783.3
25°	1709.1	1719.7	1726.1	1732.4	1727.1	1729.2	1738.8	1740.9	1740.9	1739.8	1744.1
27.5°	1632.8	1646.6	1658.2	1672.0	1666.7	1671.0	1686.9	1689.0	1693.2	1689.0	1697.4
30°	1541.7	1554.4	1576.7	1596.8	1598.9	1605.3	1627.5	1629.6	1641.3	1637.1	1640.2
32.5°	1450.6	1456.9	1482.4	1502.5	1515.2	1531.1	1555.5	1559.7	1575.6	1578.8	1578.8
35°	1336.1	1354.1	1377.5	1406.1	1422.0	1438.9	1471.8	1478.1	1501.4	1508.8	1517.3
37.5°	1239.7	1256.7	1271.5	1301.2	1329.8	1348.8	1375.3	1391.2	1415.6	1429.4	1440.0
40°	1136.9	1150.7	1166.6	1196.3	1220.6	1249.2	1275.7	1294.8	1325.5	1341.4	1355.2
42.5°	1039.4	1050.0	1067.0	1088.2	1113.6	1145.4	1170.8	1193.1	1225.9	1248.2	1264.1
45°	952.6	958.9	973.8	989.6	1011.9	1044.7	1069.1	1097.7	1124.2	1147.5	1166.6
47.5°	871.0	879.5	886.9	897.5	917.6	937.7	966.3	993.9	1020.4	1045.8	1064.9
50°	795.7	795.7	807.4	814.8	828.6	846.6	868.9	887.9	920.8	938.8	963.2
52.5°	722.6	726.9	733.2	737.5	748.1	759.7	777.7	793.6	821.2	838.1	861.4
55°	658.0	662.2	665.4	667.5	673.9	687.7	694.0	706.7	725.8	739.6	759.7
57.5°	596.5	598.7	601.8	602.9	604.0	612.4	617.7	620.9	640.0	653.8	670.7
60°	540.4	540.4	543.6	542.5	541.4	545.7	544.6	547.8	559.5	567.9	575.4
62.5°	487.4	487.4	488.5	486.3	485.3	485.3	481.0	484.2	487.4	488.5	493.8
65°	438.7	444.0	439.7	440.8	434.4	432.3	430.2	423.8	422.8	418.5	420.7
67.5°	395.2	399.5	395.2	395.2	389.9	385.7	380.4	369.8	366.6	358.1	356.0
70°	360.3	357.1	359.2	356.0	349.7	344.4	336.9	328.5	317.9	307.3	299.9
72.5°	326.4	326.4	324.2	321.1	317.9	307.3	298.8	289.3	276.6	262.8	252.2
75°	293.5	294.6	294.6	291.4	286.1	276.6	267.0	253.2	239.5	223.6	209.8
77.5°	270.2	270.2	270.2	264.9	259.6	251.1	239.5	224.6	209.8	190.7	174.8
80°	247.9	246.9	246.9	240.5	235.2	225.7	214.0	199.2	183.3	163.2	145.2
82.5°	229.9	228.9	226.8	221.5	214.0	204.5	192.8	176.9	160.0	142.0	119.7
85°	210.9	209.8	207.7	202.4	195.0	186.5	173.8	157.9	140.9	120.8	99.6
87.5°	193.9	192.8	189.7	186.5	178.0	168.5	155.8	140.9	122.9	103.8	82.6
90°	182.2	180.1	178.0	173.8	166.4	155.8	143.0	127.1	109.1	90.1	68.9
92.5°	168.5	167.4	164.2	160.0	153.6	143.0	130.3	115.5	97.5	79.5	59.3
95°	154.7	153.6	151.5	147.3	140.9	131.4	119.7	104.9	87.9	69.9	51.9
97.5°	142.0	142.0	138.8	135.6	128.2	120.8	109.1	95.4	79.5	63.6	46.6
100°	131.4	131.4	128.2	124.0	118.7	111.3	99.6	86.9	72.1	57.2	40.3
102.5°	121.9	120.8	118.7	114.4	109.1	101.7	91.1	79.5	65.7	50.9	36.0
105°	113.4	112.3	110.2	106.0	101.7	93.2	84.8	73.1	59.3	45.6	31.8
107.5°	104.9	103.8	102.8	98.5	93.2	85.8	77.3	65.7	54.0	41.3	28.6
110°	97.5	96.4	94.3	90.1	84.8	78.4	69.9	60.4	48.7	37.1	25.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	91.1	90.1	87.9	83.7	79.5	72.1	64.6	54.0	44.5	33.9	22.3
115°	84.8	83.7	81.6	77.3	72.1	65.7	58.3	49.8	39.2	29.7	20.1
117.5°	78.4	77.3	75.2	72.1	66.8	60.4	53.0	44.5	35.0	27.5	18.0
120°	73.1	71.0	68.9	65.7	60.4	55.1	47.7	40.3	31.8	24.4	15.9
122.5°	67.8	65.7	63.6	60.4	55.1	49.8	42.4	36.0	29.7	22.3	14.8
125°	61.5	60.4	58.3	55.1	49.8	44.5	39.2	32.8	26.5	20.1	12.7
127.5°	56.2	55.1	53.0	48.7	44.5	40.3	35.0	29.7	23.3	17.0	11.7
130°	51.9	49.8	47.7	44.5	41.3	37.1	31.8	26.5	21.2	14.8	10.6
132.5°	46.6	44.5	42.4	40.3	37.1	32.8	28.6	23.3	19.1	13.8	9.5
135°	42.4	40.3	38.1	36.0	32.8	29.7	25.4	21.2	17.0	12.7	8.5
137.5°	37.1	36.0	35.0	32.8	29.7	26.5	23.3	18.0	14.8	11.7	7.4
140°	33.9	32.8	31.8	28.6	26.5	23.3	20.1	15.9	12.7	9.5	6.4
142.5°	30.7	29.7	27.5	25.4	23.3	21.2	17.0	14.8	11.7	8.5	6.4
145°	26.5	25.4	24.4	22.3	20.1	17.0	14.8	12.7	10.6	7.4	5.3
147.5°	24.4	23.3	21.2	19.1	17.0	14.8	13.8	11.7	8.5	6.4	4.2
150°	20.1	19.1	18.0	15.9	14.8	13.8	11.7	9.5	7.4	5.3	4.2
152.5°	17.0	15.9	14.8	14.8	12.7	11.7	9.5	8.5	6.4	5.3	3.2
155°	14.8	14.8	13.8	12.7	10.6	9.5	8.5	6.4	5.3	4.2	3.2
157.5°	12.7	11.7	10.6	10.6	9.5	8.5	6.4	5.3	4.2	4.2	3.2
160°	10.6	9.5	9.5	8.5	7.4	6.4	5.3	5.3	4.2	3.2	3.2
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: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3
2.5°	1929.5	1917.8	1928.4	1942.2	1942.2	1940.1	1938.0	1942.2	1952.8	1948.6	1935.9
5°	1926.3	1914.7	1924.2	1938.0	1938.0	1934.8	1932.7	1935.9	1947.5	1942.2	1930.6
7.5°	1920.0	1909.4	1915.7	1928.4	1928.4	1925.3	1923.1	1927.4	1936.9	1931.6	1918.9
10°	1908.3	1896.6	1904.1	1915.7	1914.7	1912.5	1909.4	1914.7	1923.1	1915.7	1900.9
12.5°	1893.5	1881.8	1888.2	1898.8	1897.7	1893.5	1891.4	1894.5	1901.9	1897.7	1881.8
15°	1873.3	1861.7	1867.0	1877.6	1874.4	1871.2	1867.0	1868.0	1877.6	1870.2	1853.2
17.5°	1849.0	1836.3	1840.5	1850.0	1846.8	1843.7	1838.4	1839.4	1850.0	1839.4	1821.4
20°	1819.3	1805.5	1808.7	1820.4	1815.1	1809.8	1804.5	1804.5	1815.1	1803.4	1783.3
22.5°	1787.5	1773.7	1775.9	1784.3	1780.1	1770.6	1765.3	1768.4	1773.7	1758.9	1737.7
25°	1748.3	1730.3	1733.5	1741.9	1738.8	1726.1	1720.8	1722.9	1720.8	1709.1	1686.9
27.5°	1702.7	1683.7	1685.8	1691.1	1686.9	1675.2	1668.8	1669.9	1665.7	1650.8	1625.4
30°	1645.5	1636.0	1634.9	1638.1	1631.8	1620.1	1612.7	1610.6	1609.5	1588.3	1557.6
32.5°	1587.3	1578.8	1573.5	1577.7	1570.3	1558.6	1545.9	1545.9	1535.3	1515.2	1488.7
35°	1527.9	1514.1	1508.8	1512.0	1503.5	1488.7	1478.1	1472.8	1456.9	1431.5	1402.9
37.5°	1451.6	1442.1	1435.7	1438.9	1429.4	1418.8	1398.6	1393.3	1376.4	1341.4	1305.4
40°	1369.0	1361.6	1355.2	1358.4	1347.8	1331.9	1313.9	1305.4	1286.3	1247.1	1218.5
42.5°	1280.0	1276.8	1269.4	1281.0	1259.8	1243.9	1225.9	1212.2	1193.1	1150.7	1117.9
45°	1185.7	1193.1	1176.1	1179.3	1165.5	1151.8	1132.7	1112.6	1093.5	1053.2	1016.1
47.5°	1086.1	1091.4	1079.7	1081.8	1067.0	1054.3	1037.3	1011.9	990.7	955.7	922.9
50°	983.3	981.2	981.2	979.1	967.4	951.5	934.5	911.2	890.0	858.3	830.7
52.5°	874.2	878.4	880.5	885.8	871.0	861.4	834.9	814.8	798.9	766.1	742.8
55°	769.3	784.1	779.9	782.0	765.0	757.6	736.4	720.5	697.2	678.1	663.3
57.5°	673.9	677.1	679.2	682.4	675.0	660.1	643.2	630.5	612.4	596.5	585.9
60°	581.7	581.7	582.8	588.1	580.6	567.9	555.2	545.7	533.0	523.4	517.1
62.5°	494.8	502.2	503.3	499.1	489.5	483.2	474.7	469.4	460.9	457.7	455.6
65°	414.3	414.3	414.3	416.4	411.1	406.9	401.6	400.5	403.7	399.5	401.6
67.5°	346.5	343.3	341.2	342.2	340.1	338.0	336.9	340.1	346.5	346.5	351.8
70°	288.2	281.8	277.6	277.6	277.6	278.7	281.8	288.2	298.8	303.0	310.5
72.5°	240.5	226.8	220.4	220.4	221.5	225.7	235.2	246.9	256.4	264.9	274.4
75°	195.0	181.2	171.7	170.6	172.7	179.1	192.8	203.4	219.3	231.0	242.6
77.5°	157.9	140.9	129.3	128.2	131.4	140.9	157.9	171.7	189.7	202.4	215.1
80°	126.1	107.0	97.5	91.1	96.4	108.1	127.1	144.1	161.1	178.0	193.9
82.5°	100.7	82.6	67.8	61.5	67.8	83.7	101.7	121.9	138.8	156.8	172.7
85°	79.5	60.4	43.4	37.1	44.5	61.5	81.6	101.7	120.8	138.8	154.7
87.5°	62.5	43.4	26.5	18.0	27.5	45.6	64.6	84.8	104.9	122.9	138.8
90°	48.7	30.7	14.8	2.1	15.9	32.8	51.9	71.0	91.1	109.1	125.0
92.5°	41.3	23.3	8.5	0.0	9.5	24.4	42.4	61.5	79.5	97.5	113.4
95°	35.0	19.1	6.4	0.0	6.4	19.1	35.0	51.9	69.9	87.9	103.8
97.5°	29.7	14.8	4.2	0.0	4.2	14.8	28.6	45.6	61.5	78.4	93.2
100°	25.4	12.7	3.2	0.0	3.2	11.7	24.4	39.2	55.1	71.0	84.8
102.5°	22.3	10.6	2.1	0.0	2.1	9.5	20.1	33.9	47.7	62.5	76.3
105°	19.1	8.5	2.1	0.0	1.1	7.4	17.0	29.7	42.4	56.2	68.9
107.5°	17.0	7.4	2.1	0.0	1.1	6.4	14.8	25.4	38.1	49.8	61.5
110°	14.8	6.4	2.1	0.0	1.1	4.2	12.7	22.3	32.8	44.5	56.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	12.7	5.3	1.1	0.0	0.0	3.2	10.6	19.1	28.6	40.3	49.8
115°	11.7	5.3	1.1	0.0	0.0	2.1	8.5	17.0	25.4	36.0	44.5
117.5°	10.6	4.2	1.1	0.0	1.1	2.1	7.4	14.8	22.3	30.7	40.3
120°	9.5	4.2	1.1	0.0	1.1	1.1	5.3	12.7	19.1	27.5	35.0
122.5°	8.5	4.2	1.1	0.0	1.1	1.1	4.2	10.6	17.0	24.4	30.7
125°	7.4	3.2	2.1	1.1	1.1	1.1	3.2	8.5	14.8	20.1	27.5
127.5°	7.4	3.2	2.1	1.1	1.1	1.1	2.1	7.4	11.7	18.0	24.4
130°	6.4	3.2	2.1	1.1	1.1	1.1	1.1	5.3	10.6	14.8	20.1
132.5°	5.3	3.2	2.1	1.1	1.1	1.1	1.1	3.2	7.4	12.7	17.0
135°	5.3	3.2	2.1	1.1	1.1	1.1	1.1	2.1	5.3	9.5	13.8
137.5°	4.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	4.2	7.4	10.6
140°	4.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	3.2	5.3	8.5
142.5°	3.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	2.1	4.2	6.4
145°	3.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	4.2
147.5°	3.2	3.2	2.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	3.2
150°	3.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1
152.5°	3.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1
155°	3.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1
157.5°	3.2	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1
160°	3.2	2.1	2.1	1.1	2.1	1.1	2.1	2.1	2.1	2.1	2.1
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: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3
2.5°	1931.6	1911.5	1922.1	1918.9	1923.1	1931.6	1930.6	1928.4	1928.4	1925.3	1921.0
5°	1925.3	1906.2	1915.7	1910.4	1915.7	1923.1	1922.1	1918.9	1921.0	1915.7	1910.4
7.5°	1912.5	1895.6	1904.1	1899.8	1904.1	1911.5	1908.3	1907.2	1909.4	1900.9	1897.7
10°	1897.7	1878.6	1888.2	1882.9	1888.2	1893.5	1891.4	1887.1	1891.4	1882.9	1879.7
12.5°	1874.4	1858.5	1864.9	1862.7	1865.9	1871.2	1867.0	1863.8	1865.9	1858.5	1852.1
15°	1849.0	1833.1	1838.4	1835.2	1837.3	1843.7	1836.3	1835.2	1833.1	1825.7	1823.5
17.5°	1816.1	1801.3	1806.6	1801.3	1804.5	1802.3	1801.3	1796.0	1796.0	1787.5	1781.2
20°	1775.9	1763.1	1760.0	1755.7	1760.0	1755.7	1749.4	1745.1	1744.1	1735.6	1730.3
22.5°	1729.2	1714.4	1716.5	1704.9	1705.9	1699.6	1689.0	1684.7	1680.5	1671.0	1663.5
25°	1673.1	1658.2	1647.6	1640.2	1630.7	1629.6	1615.9	1605.3	1604.2	1592.5	1591.5
27.5°	1609.5	1592.5	1584.1	1566.1	1554.4	1544.9	1533.2	1522.6	1517.3	1504.6	1496.1
30°	1536.4	1517.3	1496.1	1483.4	1465.4	1458.0	1437.8	1425.1	1420.9	1407.1	1400.8
32.5°	1453.7	1433.6	1416.7	1392.3	1372.2	1361.6	1341.4	1328.7	1323.4	1308.6	1300.1
35°	1363.7	1341.4	1321.3	1298.0	1282.1	1264.1	1239.7	1227.0	1215.3	1210.0	1203.7
37.5°	1269.4	1245.0	1221.7	1198.4	1184.6	1163.4	1142.2	1133.8	1120.0	1114.7	1108.3
40°	1171.9	1147.5	1125.3	1103.0	1087.1	1068.1	1049.0	1045.8	1031.0	1025.7	1021.4
42.5°	1075.5	1050.0	1024.6	1008.7	997.1	978.0	965.3	962.1	949.4	946.2	946.2
45°	988.6	956.8	935.6	921.8	912.3	896.4	885.8	883.7	873.1	871.0	871.0
47.5°	895.3	865.7	849.8	841.3	832.8	821.2	814.8	814.8	804.2	802.1	801.0
50°	808.5	780.9	769.3	760.8	759.7	751.2	745.9	743.8	743.8	736.4	737.5
52.5°	725.8	712.0	702.5	697.2	690.8	685.5	681.3	681.3	678.1	672.8	675.0
55°	649.5	633.6	634.7	630.5	627.3	624.1	625.2	618.8	617.7	613.5	616.7
57.5°	573.2	573.2	571.1	567.9	562.6	564.8	564.8	564.8	559.5	556.3	559.5
60°	508.6	511.8	506.5	509.7	507.5	508.6	506.5	506.5	503.3	502.2	503.3
62.5°	451.4	456.7	454.6	458.8	456.7	457.7	459.9	455.6	453.5	451.4	453.5
65°	400.5	406.9	405.8	409.0	410.1	411.1	412.2	410.1	407.9	405.8	404.8
67.5°	356.0	362.4	366.6	367.7	368.7	371.9	370.9	368.7	366.6	363.4	362.4
70°	315.8	324.2	329.5	331.6	335.9	333.8	333.8	332.7	330.6	327.4	326.4
72.5°	281.8	291.4	296.7	298.8	303.0	303.0	302.0	300.9	298.8	295.6	294.6
75°	252.2	260.7	268.1	272.3	275.5	275.5	274.4	273.4	271.3	269.1	268.1
77.5°	228.9	236.3	242.6	247.9	250.1	251.1	250.1	247.9	247.9	246.9	245.8
80°	205.6	214.0	220.4	225.7	228.9	228.9	227.8	228.9	226.8	225.7	224.6
82.5°	185.4	195.0	202.4	207.7	209.8	210.9	209.8	210.9	208.7	208.7	208.7
85°	167.4	176.9	185.4	189.7	192.8	193.9	193.9	193.9	192.8	192.8	192.8
87.5°	152.6	162.1	170.6	174.8	178.0	179.1	179.1	180.1	178.0	178.0	178.0
90°	138.8	148.3	156.8	161.1	164.2	166.4	166.4	167.4	166.4	165.3	165.3
92.5°	126.1	136.7	145.2	149.4	152.6	155.8	155.8	156.8	154.7	154.7	154.7
95°	115.5	126.1	133.5	138.8	142.0	144.1	145.2	145.2	144.1	144.1	144.1
97.5°	106.0	115.5	122.9	128.2	131.4	132.4	133.5	134.6	133.5	133.5	133.5
100°	96.4	106.0	113.4	117.6	121.9	122.9	124.0	125.0	125.0	124.0	124.0
102.5°	87.9	97.5	103.8	109.1	112.3	114.4	115.5	115.5	115.5	115.5	115.5
105°	79.5	89.0	95.4	100.7	103.8	106.0	107.0	108.1	108.1	107.0	107.0
107.5°	72.1	80.5	87.9	92.2	96.4	98.5	99.6	99.6	100.7	99.6	99.6
110°	64.6	74.2	80.5	84.8	89.0	91.1	92.2	93.2	93.2	93.2	93.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	59.3	66.8	73.1	77.3	81.6	83.7	84.8	85.8	86.9	85.8	85.8
115°	53.0	60.4	66.8	71.0	74.2	76.3	78.4	79.5	79.5	80.5	79.5
117.5°	47.7	54.0	60.4	64.6	67.8	71.0	72.1	73.1	74.2	73.1	73.1
120°	42.4	48.7	54.0	58.3	61.5	64.6	65.7	66.8	67.8	66.8	66.8
122.5°	38.1	43.4	48.7	53.0	56.2	58.3	60.4	60.4	61.5	61.5	61.5
125°	33.9	39.2	43.4	47.7	50.9	53.0	54.0	55.1	55.1	56.2	56.2
127.5°	29.7	33.9	39.2	42.4	45.6	47.7	48.7	49.8	49.8	50.9	50.9
130°	25.4	29.7	33.9	37.1	40.3	42.4	43.4	44.5	45.6	45.6	45.6
132.5°	22.3	26.5	29.7	32.8	35.0	37.1	39.2	40.3	40.3	40.3	40.3
135°	18.0	22.3	25.4	28.6	30.7	32.8	33.9	36.0	36.0	36.0	36.0
137.5°	14.8	19.1	22.3	24.4	26.5	28.6	29.7	30.7	31.8	31.8	31.8
140°	11.7	14.8	18.0	21.2	23.3	24.4	26.5	26.5	27.5	27.5	27.5
142.5°	8.5	11.7	13.8	17.0	19.1	21.2	22.3	23.3	23.3	23.3	23.3
145°	6.4	8.5	10.6	12.7	15.9	17.0	18.0	19.1	20.1	20.1	20.1
147.5°	4.2	6.4	7.4	9.5	11.7	13.8	14.8	15.9	17.0	17.0	17.0
150°	3.2	4.2	6.4	7.4	8.5	10.6	12.7	12.7	13.8	13.8	12.7
152.5°	2.1	3.2	4.2	5.3	6.4	7.4	9.5	9.5	10.6	10.6	10.6
155°	2.1	2.1	2.1	3.2	4.2	5.3	6.4	7.4	7.4	7.4	7.4
157.5°	2.1	2.1	2.1	2.1	2.1	3.2	4.2	5.3	5.3	5.3	5.3
160°	2.1	2.1	1.1	1.1	2.1	2.1	2.1	2.1	3.2	3.2	3.2
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: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3
2.5°	1924.2	1926.3	1926.3	1924.2	1923.1	1927.4	1922.1	1901.9	1908.3	1910.4	1916.8
5°	1914.7	1916.8	1916.8	1916.8	1914.7	1918.9	1913.6	1893.5	1900.9	1904.1	1908.3
7.5°	1900.9	1901.9	1904.1	1903.0	1900.9	1907.2	1901.9	1881.8	1887.1	1892.4	1897.7
10°	1882.9	1882.9	1883.9	1886.1	1883.9	1889.2	1883.9	1865.9	1871.2	1874.4	1880.8
12.5°	1858.5	1860.6	1861.7	1860.6	1859.6	1863.8	1861.7	1844.7	1846.8	1853.2	1859.6
15°	1825.7	1825.7	1831.0	1828.8	1828.8	1833.1	1835.2	1816.1	1819.3	1828.8	1835.2
17.5°	1785.4	1786.5	1790.7	1792.8	1791.7	1799.2	1800.2	1785.4	1784.3	1796.0	1802.3
20°	1733.5	1735.6	1740.9	1745.1	1745.1	1753.6	1756.8	1747.2	1748.3	1761.0	1763.1
22.5°	1669.9	1669.9	1679.4	1685.8	1691.1	1696.4	1705.9	1697.4	1697.4	1714.4	1723.9
25°	1591.5	1598.9	1602.1	1614.8	1622.2	1637.1	1645.5	1646.6	1647.6	1663.5	1669.9
27.5°	1504.6	1506.7	1516.3	1531.1	1539.6	1553.3	1569.2	1572.4	1577.7	1598.9	1608.4
30°	1406.1	1412.4	1416.7	1437.8	1449.5	1467.5	1487.7	1495.1	1499.3	1527.9	1539.6
32.5°	1305.4	1307.5	1325.5	1337.2	1351.0	1370.0	1393.3	1407.1	1415.6	1445.3	1462.2
35°	1204.7	1209.0	1223.8	1238.6	1252.4	1271.5	1295.9	1314.9	1329.8	1356.3	1378.5
37.5°	1112.6	1123.2	1126.3	1141.2	1151.8	1170.8	1187.8	1215.3	1230.2	1257.7	1286.3
40°	1029.9	1033.1	1035.2	1050.0	1057.5	1075.5	1099.8	1117.9	1138.0	1158.1	1192.0
42.5°	948.3	950.4	953.6	962.1	970.6	983.3	1001.3	1019.3	1040.5	1070.2	1092.4
45°	873.1	875.2	877.3	882.6	890.0	901.7	913.4	926.1	947.3	972.7	996.0
47.5°	803.2	807.4	807.4	808.5	813.8	823.3	831.8	847.7	859.3	873.1	899.6
50°	736.4	739.6	740.6	740.6	743.8	750.2	752.3	762.9	773.5	786.2	805.3
52.5°	673.9	673.9	672.8	677.1	677.1	681.3	682.4	688.7	696.1	709.9	718.4
55°	614.6	614.6	617.7	615.6	615.6	617.7	616.7	617.7	624.1	632.6	640.0
57.5°	557.3	556.3	559.5	557.3	556.3	558.4	560.5	556.3	557.3	565.8	565.8
60°	500.1	501.2	504.4	502.2	502.2	502.2	500.1	498.0	495.9	501.2	503.3
62.5°	454.6	451.4	454.6	451.4	453.5	452.4	450.3	446.1	447.1	445.0	442.9
65°	406.9	406.9	407.9	404.8	406.9	406.9	403.7	402.6	396.3	394.2	388.9
67.5°	365.6	365.6	366.6	364.5	364.5	365.6	362.4	359.2	352.8	349.7	342.2
70°	329.5	329.5	329.5	328.5	328.5	328.5	326.4	322.1	315.8	310.5	300.9
72.5°	296.7	297.7	296.7	296.7	299.9	296.7	293.5	289.3	284.0	273.4	264.9
75°	270.2	271.3	270.2	270.2	270.2	269.1	268.1	261.7	255.4	246.9	234.2
77.5°	246.9	246.9	247.9	246.9	246.9	245.8	242.6	237.3	229.9	222.5	207.7
80°	224.6	225.7	226.8	227.8	225.7	224.6	221.5	217.2	207.7	199.2	184.4
82.5°	208.7	207.7	208.7	209.8	207.7	206.6	203.4	198.1	190.7	179.1	164.2
85°	192.8	191.8	191.8	192.8	191.8	189.7	186.5	181.2	173.8	162.1	147.3
87.5°	176.9	178.0	179.1	178.0	176.9	174.8	171.7	166.4	157.9	148.3	132.4
90°	165.3	165.3	165.3	165.3	164.2	162.1	158.9	152.6	145.2	133.5	119.7
92.5°	154.7	154.7	154.7	154.7	153.6	150.5	147.3	142.0	133.5	121.9	109.1
95°	144.1	145.2	144.1	144.1	142.0	140.9	135.6	130.3	122.9	111.3	97.5
97.5°	132.4	133.5	132.4	132.4	131.4	129.3	126.1	119.7	112.3	101.7	89.0
100°	124.0	124.0	122.9	122.9	121.9	119.7	115.5	110.2	102.8	92.2	79.5
102.5°	114.4	115.5	114.4	114.4	112.3	110.2	107.0	101.7	94.3	83.7	72.1
105°	107.0	107.0	106.0	106.0	103.8	101.7	98.5	92.2	85.8	76.3	64.6
107.5°	99.6	99.6	98.5	98.5	96.4	94.3	90.1	84.8	78.4	68.9	58.3
110°	92.2	92.2	92.2	91.1	89.0	85.8	82.6	77.3	71.0	62.5	51.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	86.9	85.8	84.8	83.7	81.6	79.5	75.2	69.9	63.6	56.2	46.6
115°	79.5	79.5	78.4	77.3	75.2	72.1	68.9	64.6	58.3	49.8	41.3
117.5°	73.1	73.1	72.1	71.0	68.9	65.7	62.5	58.3	51.9	44.5	37.1
120°	66.8	66.8	65.7	64.6	62.5	59.3	57.2	51.9	46.6	39.2	32.8
122.5°	61.5	60.4	60.4	58.3	57.2	54.0	50.9	46.6	41.3	35.0	28.6
125°	55.1	55.1	54.0	53.0	51.9	48.7	45.6	41.3	36.0	30.7	25.4
127.5°	49.8	49.8	48.7	47.7	46.6	43.4	40.3	37.1	31.8	26.5	21.2
130°	44.5	44.5	43.4	42.4	41.3	38.1	36.0	31.8	27.5	23.3	18.0
132.5°	40.3	40.3	39.2	38.1	36.0	33.9	31.8	27.5	24.4	20.1	15.9
135°	36.0	35.0	35.0	33.9	31.8	29.7	27.5	24.4	20.1	17.0	12.7
137.5°	31.8	30.7	29.7	28.6	27.5	25.4	23.3	21.2	18.0	13.8	10.6
140°	27.5	26.5	26.5	25.4	23.3	22.3	20.1	17.0	14.8	11.7	8.5
142.5°	23.3	23.3	22.3	21.2	20.1	19.1	17.0	14.8	11.7	9.5	6.4
145°	20.1	19.1	19.1	18.0	17.0	14.8	13.8	11.7	9.5	7.4	5.3
147.5°	15.9	15.9	15.9	14.8	13.8	12.7	11.7	9.5	7.4	5.3	3.2
150°	12.7	12.7	12.7	11.7	10.6	9.5	8.5	7.4	5.3	3.2	2.1
152.5°	10.6	10.6	9.5	9.5	8.5	7.4	6.4	5.3	3.2	2.1	2.1
155°	7.4	7.4	7.4	6.4	6.4	5.3	4.2	3.2	2.1	2.1	2.1
157.5°	5.3	5.3	5.3	4.2	4.2	3.2	3.2	2.1	2.1	2.1	2.1
160°	3.2	3.2	3.2	3.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3	1926.3
2.5°	1913.6	1912.5	1921.0	1921.0	1911.5	1926.3	1942.2
5°	1907.2	1906.2	1914.7	1914.7	1906.2	1921.0	1938.0
7.5°	1894.5	1895.6	1904.1	1906.2	1895.6	1909.4	1927.4
10°	1880.8	1879.7	1889.2	1891.4	1882.9	1895.6	1912.5
12.5°	1858.5	1858.5	1868.0	1871.2	1862.7	1877.6	1893.5
15°	1835.2	1835.2	1841.5	1846.8	1839.4	1853.2	1869.1
17.5°	1805.5	1804.5	1810.8	1817.2	1809.8	1824.6	1841.5
20°	1767.4	1767.4	1774.8	1782.2	1776.9	1790.7	1809.8
22.5°	1727.1	1722.9	1735.6	1740.9	1737.7	1751.5	1770.6
25°	1676.3	1675.2	1687.9	1695.3	1691.1	1705.9	1722.9
27.5°	1621.2	1620.1	1632.8	1642.3	1640.2	1654.0	1673.1
30°	1554.4	1559.7	1571.4	1587.3	1582.0	1596.8	1616.9
32.5°	1484.5	1489.8	1503.5	1520.5	1521.6	1533.2	1553.3
35°	1400.8	1414.5	1424.1	1446.3	1450.6	1462.2	1483.4
37.5°	1312.8	1328.7	1348.8	1365.8	1374.3	1383.8	1408.2
40°	1214.3	1237.6	1259.8	1280.0	1290.6	1300.1	1323.4
42.5°	1125.3	1143.3	1164.5	1184.6	1203.7	1212.2	1236.5
45°	1024.6	1045.8	1064.9	1089.2	1108.3	1117.9	1142.2
47.5°	926.1	947.3	972.7	989.6	1009.8	1019.3	1042.6
50°	831.8	850.8	872.0	892.2	909.1	917.6	937.7
52.5°	738.5	758.7	778.8	791.5	809.5	815.9	832.8
55°	655.9	669.7	687.7	695.1	713.1	717.3	729.0
57.5°	576.4	585.9	592.3	605.0	617.7	627.3	641.0
60°	504.4	508.6	512.8	520.3	530.8	534.0	539.3
62.5°	439.7	438.7	447.1	449.3	450.3	460.9	455.6
65°	382.5	383.6	376.2	373.0	377.2	380.4	378.3
67.5°	334.8	328.5	322.1	314.7	308.3	311.5	308.3
70°	288.2	282.9	272.3	261.7	257.5	251.1	247.9
72.5°	251.1	238.4	227.8	214.0	206.6	199.2	193.9
75°	222.5	204.5	189.7	174.8	164.2	153.6	151.5
77.5°	192.8	175.9	158.9	143.0	127.1	115.5	111.3
80°	169.5	153.6	133.5	114.4	97.5	82.6	77.3
82.5°	148.3	131.4	111.3	91.1	72.1	56.2	49.8
85°	130.3	112.3	92.2	72.1	53.0	36.0	27.5
87.5°	116.6	96.4	76.3	57.2	37.1	20.1	10.6
90°	103.8	84.8	65.7	45.6	26.5	10.6	0.0
92.5°	92.2	74.2	55.1	37.1	20.1	6.4	1.1
95°	81.6	65.7	46.6	29.7	14.8	4.2	1.1
97.5°	73.1	57.2	40.3	24.4	11.7	3.2	1.1
100°	65.7	49.8	35.0	20.1	9.5	2.1	1.1
102.5°	58.3	44.5	29.7	17.0	7.4	1.1	1.1
105°	51.9	39.2	25.4	14.8	6.4	1.1	1.1
107.5°	46.6	35.0	22.3	12.7	4.2	1.1	1.1
110°	41.3	29.7	19.1	10.6	3.2	1.1	1.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	37.1	26.5	17.0	8.5	2.1	1.1	1.1
115°	32.8	23.3	14.8	7.4	2.1	1.1	1.1
117.5°	28.6	20.1	12.7	5.3	1.1	1.1	1.1
120°	25.4	18.0	10.6	4.2	1.1	1.1	1.1
122.5°	22.3	14.8	8.5	3.2	1.1	1.1	1.1
125°	19.1	12.7	7.4	2.1	1.1	1.1	1.1
127.5°	15.9	10.6	5.3	2.1	1.1	1.1	1.1
130°	13.8	8.5	4.2	1.1	1.1	1.1	1.1
132.5°	11.7	6.4	3.2	1.1	1.1	1.1	1.1
135°	9.5	5.3	2.1	1.1	1.1	1.1	1.1
137.5°	7.4	4.2	2.1	1.1	1.1	1.1	1.1
140°	5.3	3.2	1.1	1.1	1.1	1.1	1.1
142.5°	4.2	2.1	1.1	1.1	1.1	1.1	1.1
145°	3.2	2.1	1.1	1.1	1.1	1.1	1.1
147.5°	2.1	2.1	2.1	2.1	1.1	1.1	1.1
150°	2.1	2.1	1.1	1.1	2.1	1.1	1.1
152.5°	2.1	1.1	1.1	1.1	2.1	1.1	1.1
155°	2.1	2.1	2.1	2.1	2.1	2.1	1.1
157.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1
160°	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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)