

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: P1213474

Luminaire Tested: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213474
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-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

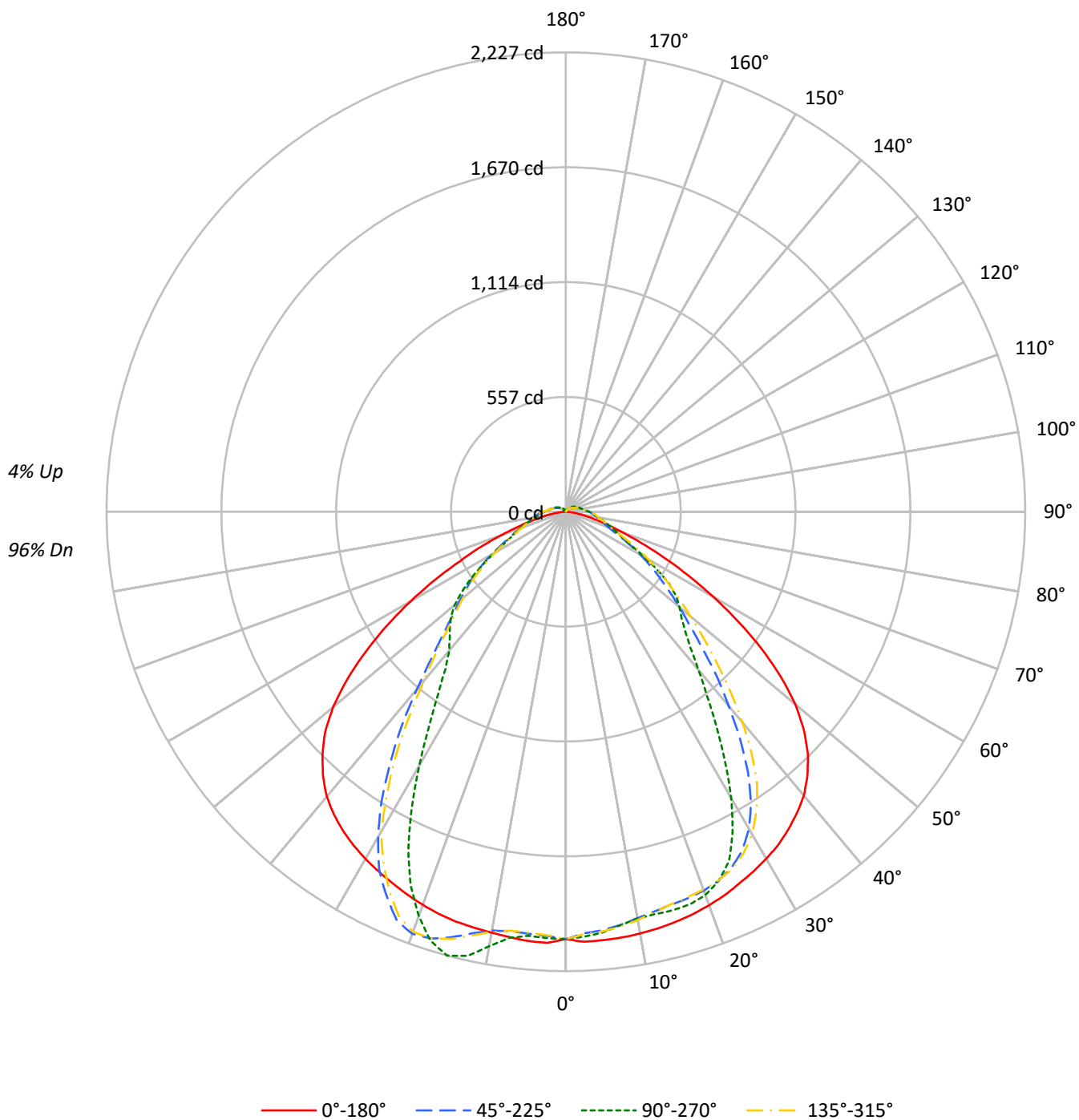
Lumens per Lamp: N/A
Luminaire Lumens: 4939.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16742	16742	16742	16742
5°	16864	16079	16899	16204
10°	16942	15409	16907	16455
15°	17074	15204	17064	16929
20°	17261	14962	17243	15772
25°	17474	14194	17464	13716
30°	17803	12302	17813	10899
35°	18151	9948	18203	8418
40°	18459	8009	18536	7057
45°	18394	6784	18488	6607
50°	17601	6246	17847	6107
55°	15616	5614	16006	5104
60°	12666	4298	13339	3941
65°	9415	3287	10145	3118
70°	6404	2838	7217	2714
75°	4189	2561	4877	2421
80°	2708	2387	3174	2197
85°	1387	2382	1831	2175

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 18488 cd/sqm

TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.8	4.0
10°-20°	585.5	11.9
20°-30°	890.2	18.0
30°-40°	954.9	19.3
40°-50°	828.8	16.8
50°-60°	614.2	12.4
60°-70°	351.9	7.1
70°-80°	194.9	3.9
80°-90°	118.7	2.4
90°-100°	77.2	1.6
100°-110°	51.7	1.0
110°-120°	34.9	0.7
120°-130°	21.4	0.4
130°-140°	11.3	0.2
140°-150°	5.1	0.1
150°-160°	1.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1672.5	33.9
0°-40°	2627.4	53.2
0°-60°	4070.5	82.4
0°-90°	4735.9	95.9
90°-120°	163.8	3.3
90°-150°	201.6	4.1
90°-180°	203.0	4.1
0°-180°	4939.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2072	2072	2072	2072	2072	
5°	2085	2047	2089	2063	2085	199
15°	2058	2000	2057	2227	2058	582
25°	1988	1871	1987	1808	1988	919
35°	1880	1274	1886	1078	1880	1177
45°	1660	816	1668	795	1660	1271
55°	1158	612	1187	556	1158	1027
65°	525	310	566	294	525	530
75°	150	197	174	186	150	171
85°	20	136	27	124	20	27
90°	0	113	2	105	0	1
95°	1	93	0	89	1	1
105°	1	70	1	66	1	1
115°	1	57	1	51	1	1
125°	1	43	1	35	1	1
135°	1	27	1	22	1	1
145°	1	16	2	13	1	1
155°	2	8	2	6	2	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2086.8	2081.4	2079.3	2075.0	2078.2	2091.0	2082.5	2068.6	2069.6	2045.0	2057.9
5°	2084.6	2078.2	2075.0	2070.7	2072.9	2084.6	2076.1	2062.2	2061.1	2036.5	2048.2
7.5°	2081.4	2075.0	2069.6	2066.4	2067.5	2077.1	2066.4	2050.4	2047.2	2020.4	2031.1
10°	2076.1	2071.8	2064.3	2058.9	2057.9	2068.6	2051.5	2035.4	2027.9	2000.1	2010.8
12.5°	2068.6	2062.2	2054.7	2045.0	2044.0	2050.4	2036.5	2014.0	2006.5	1984.0	1995.8
15°	2057.9	2050.4	2041.8	2031.1	2025.8	2030.0	2012.9	1992.6	1991.5	1972.3	1988.3
17.5°	2046.1	2035.4	2025.8	2010.8	2003.3	2006.5	1992.6	1974.4	1976.5	1964.8	1983.0
20°	2030.0	2018.3	2003.3	1988.3	1977.6	1983.0	1973.3	1959.4	1962.6	1954.1	1970.1
22.5°	2011.9	1995.8	1977.6	1960.5	1951.9	1959.4	1951.9	1940.2	1941.2	1935.9	1945.5
25°	1988.3	1970.1	1948.7	1927.3	1923.0	1928.4	1924.1	1914.5	1910.2	1901.6	1905.9
27.5°	1966.9	1946.6	1919.8	1897.4	1889.9	1900.6	1890.9	1874.9	1863.1	1851.3	1842.8
30°	1942.3	1917.7	1887.7	1862.0	1855.6	1859.9	1846.0	1821.4	1790.3	1775.4	1751.8
32.5°	1915.5	1883.4	1846.0	1817.1	1812.8	1809.6	1783.9	1748.6	1700.4	1670.5	1634.1
35°	1880.2	1844.9	1800.0	1764.7	1758.2	1740.0	1698.3	1651.2	1589.2	1537.8	1475.7
37.5°	1840.6	1798.9	1751.8	1704.7	1686.5	1650.2	1591.3	1542.1	1447.9	1385.8	1310.9
40°	1795.7	1745.4	1687.6	1630.9	1600.9	1542.1	1474.6	1401.9	1310.9	1227.4	1164.3
42.5°	1733.6	1680.1	1611.6	1548.5	1497.1	1419.0	1339.8	1237.1	1153.6	1083.0	1018.8
45°	1659.8	1595.6	1516.4	1440.4	1375.1	1282.0	1188.9	1086.2	1016.6	934.2	890.4
47.5°	1564.5	1495.0	1410.4	1325.9	1240.3	1137.6	1040.2	941.7	872.2	813.3	781.2
50°	1452.2	1388.0	1294.9	1194.3	1100.1	993.1	895.7	821.9	754.4	718.1	693.4
52.5°	1313.1	1253.1	1157.9	1048.7	957.8	852.9	764.1	704.2	656.0	629.2	620.7
55°	1157.9	1105.5	1011.3	909.6	816.5	720.2	652.8	600.3	569.3	553.3	554.3
57.5°	992.0	951.4	862.5	771.6	683.8	611.0	550.1	508.3	484.8	483.7	486.9
60°	826.1	796.2	719.1	641.0	564.0	505.1	460.2	431.3	416.3	417.4	416.3
62.5°	667.8	639.9	584.3	520.1	459.1	419.5	378.8	367.1	354.2	353.1	353.1
65°	525.4	504.0	459.1	413.1	367.1	341.4	321.0	307.1	297.5	295.4	296.4
67.5°	394.9	386.3	355.3	324.3	295.4	279.3	262.2	259.0	251.5	251.5	253.6
70°	294.3	287.9	270.7	252.6	240.8	230.1	221.5	221.5	220.4	219.4	224.7
72.5°	213.0	214.0	208.7	194.8	193.7	191.6	189.4	192.6	193.7	196.9	203.3
75°	149.8	153.0	153.0	150.9	155.2	160.5	163.7	169.1	175.5	179.8	187.3
77.5°	105.9	105.9	111.3	117.7	126.3	135.9	144.5	152.0	160.5	165.9	172.3
80°	68.5	71.7	80.3	92.0	103.8	116.6	128.4	138.0	146.6	155.2	159.5
82.5°	40.7	46.0	56.7	71.7	86.7	102.7	114.5	126.3	135.9	144.5	147.7
85°	20.3	27.8	40.7	56.7	72.8	89.9	104.9	115.6	126.3	133.8	138.0
87.5°	6.4	15.0	28.9	43.9	61.0	78.1	94.2	105.9	115.6	122.0	126.3
90°	0.0	7.5	20.3	36.4	52.4	69.6	84.5	97.4	107.0	112.4	115.6
92.5°	0.0	4.3	16.1	30.0	44.9	62.1	77.0	88.8	97.4	102.7	104.9
95°	1.1	3.2	11.8	24.6	39.6	55.6	69.6	80.3	88.8	94.2	95.2
97.5°	1.1	2.1	9.6	20.3	34.2	49.2	63.1	73.8	80.3	85.6	86.7
100°	1.1	2.1	7.5	18.2	30.0	43.9	56.7	66.3	73.8	78.1	79.2
102.5°	1.1	1.1	6.4	15.0	26.8	38.5	50.3	59.9	66.3	70.6	72.8
105°	1.1	1.1	5.4	12.8	23.5	34.2	44.9	54.6	59.9	64.2	66.3
107.5°	1.1	1.1	4.3	10.7	20.3	30.0	40.7	48.2	54.6	58.9	61.0
110°	1.1	1.1	3.2	9.6	17.1	26.8	35.3	42.8	49.2	53.5	55.6



TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.1	1.1	3.2	8.6	15.0	23.5	31.0	38.5	43.9	48.2	51.4
115°	1.1	1.1	3.2	7.5	13.9	20.3	27.8	34.2	39.6	43.9	47.1
117.5°	1.1	1.1	3.2	6.4	11.8	18.2	24.6	31.0	35.3	39.6	42.8
120°	1.1	1.1	2.1	5.4	10.7	16.1	21.4	26.8	32.1	36.4	39.6
122.5°	1.1	1.1	2.1	5.4	8.6	13.9	19.3	23.5	28.9	32.1	35.3
125°	1.1	1.1	2.1	4.3	7.5	12.8	17.1	21.4	24.6	28.9	32.1
127.5°	1.1	1.1	2.1	4.3	6.4	10.7	15.0	19.3	22.5	25.7	27.8
130°	1.1	1.1	2.1	3.2	5.4	8.6	12.8	16.1	20.3	22.5	24.6
132.5°	1.1	1.1	1.1	3.2	4.3	6.4	9.6	13.9	17.1	20.3	21.4
135°	1.1	1.1	1.1	2.1	4.3	5.4	7.5	10.7	13.9	17.1	19.3
137.5°	1.1	1.1	1.1	2.1	3.2	5.4	6.4	8.6	11.8	13.9	17.1
140°	1.1	1.1	1.1	2.1	3.2	4.3	5.4	7.5	9.6	11.8	13.9
142.5°	1.1	1.1	1.1	2.1	2.1	3.2	4.3	6.4	7.5	9.6	11.8
145°	1.1	1.1	1.1	2.1	2.1	3.2	4.3	5.4	6.4	7.5	9.6
147.5°	1.1	1.1	1.1	2.1	2.1	2.1	3.2	4.3	5.4	6.4	7.5
150°	2.1	2.1	2.1	2.1	2.1	2.1	3.2	3.2	4.3	5.4	6.4
152.5°	2.1	2.1	2.1	2.1	2.1	2.1	3.2	3.2	3.2	4.3	5.4
155°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2	3.2	4.3	4.3
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: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2053.6	2055.7	2068.6	2067.5	2065.4	2063.2	2063.2	2061.1	2063.2	2068.6	2066.4
5°	2042.9	2046.1	2055.7	2054.7	2052.5	2051.5	2050.4	2047.2	2049.3	2056.8	2054.7
7.5°	2023.6	2026.8	2035.4	2031.1	2027.9	2030.0	2024.7	2021.5	2025.8	2033.3	2032.2
10°	2003.3	2005.4	2016.1	2014.0	2008.6	2009.7	2004.4	2002.2	2007.6	2011.9	2012.9
12.5°	1989.4	1996.9	2006.5	2005.4	2004.4	2005.4	2000.1	1997.9	2001.2	2005.4	2004.4
15°	1986.2	1995.8	2006.5	2006.5	2007.6	2008.6	2003.3	2000.1	2003.3	2006.5	2005.4
17.5°	1983.0	1994.7	2004.4	2003.3	2004.4	2006.5	1997.9	1995.8	2000.1	2004.4	2002.2
20°	1972.3	1983.0	1989.4	1987.2	1987.2	1988.3	1977.6	1977.6	1984.0	1987.2	1988.3
22.5°	1942.3	1955.1	1955.1	1949.8	1949.8	1945.5	1942.3	1935.9	1943.4	1948.7	1953.0
25°	1897.4	1902.7	1896.3	1884.5	1878.1	1872.7	1857.8	1870.6	1870.6	1886.7	1892.0
27.5°	1834.2	1822.4	1804.3	1779.6	1774.3	1757.2	1747.5	1750.7	1756.1	1778.6	1795.7
30°	1730.4	1695.1	1664.1	1653.4	1629.8	1612.7	1595.6	1604.1	1613.8	1626.6	1661.9
32.5°	1593.4	1559.2	1508.9	1490.7	1466.1	1444.7	1424.4	1437.2	1454.3	1462.9	1501.4
35°	1436.1	1395.5	1349.4	1318.4	1292.7	1281.0	1255.3	1273.5	1291.7	1298.1	1331.3
37.5°	1269.2	1227.4	1186.8	1160.0	1135.4	1127.9	1110.8	1123.6	1137.6	1147.2	1175.0
40°	1110.8	1072.3	1041.2	1023.1	1005.9	999.5	993.1	998.4	1009.1	1016.6	1038.0
42.5°	974.9	943.9	922.5	911.8	900.0	891.4	892.5	894.6	900.0	916.0	925.7
45°	856.1	837.9	824.0	821.9	814.4	813.3	812.2	816.5	819.7	829.4	836.8
47.5°	760.9	753.4	750.2	754.4	757.7	753.4	755.5	760.9	767.3	767.3	766.2
50°	686.0	688.1	692.4	702.0	708.4	710.6	712.7	719.1	720.2	722.3	719.1
52.5°	625.0	627.1	638.9	653.9	661.3	664.6	668.8	675.3	675.3	677.4	673.1
55°	562.9	566.1	577.9	592.9	599.3	603.6	607.8	612.1	615.3	619.6	616.4
57.5°	494.4	504.0	511.5	515.8	520.1	523.3	526.5	527.6	534.0	535.1	540.4
60°	421.6	423.8	431.3	430.2	427.0	435.5	431.3	438.8	446.2	455.9	456.9
62.5°	352.1	353.1	358.5	356.4	360.6	359.6	362.8	362.8	368.1	372.4	377.8
65°	297.5	298.6	302.8	302.8	301.8	305.0	308.2	310.3	310.3	313.6	317.8
67.5°	256.8	260.0	264.3	266.5	268.6	268.6	271.8	272.9	275.0	276.1	278.2
70°	229.0	233.3	237.6	239.7	240.8	242.9	244.0	244.0	246.1	247.2	249.3
72.5°	208.7	213.0	216.2	216.2	218.3	219.4	219.4	220.4	221.5	223.7	225.8
75°	191.6	194.8	196.9	195.8	195.8	195.8	196.9	196.9	199.0	201.2	203.3
77.5°	175.5	178.7	178.7	176.6	176.6	176.6	176.6	177.6	178.7	180.9	183.0
80°	163.7	163.7	162.7	162.7	160.5	159.5	159.5	160.5	160.5	162.7	165.9
82.5°	150.9	150.9	149.8	148.7	147.7	146.6	146.6	147.7	148.7	149.8	152.0
85°	139.1	139.1	137.0	137.0	135.9	135.9	135.9	135.9	137.0	138.0	140.2
87.5°	127.3	126.3	125.2	124.1	124.1	124.1	124.1	124.1	125.2	127.3	128.4
90°	115.6	114.5	113.4	113.4	112.4	112.4	113.4	113.4	114.5	115.6	116.6
92.5°	104.9	103.8	102.7	102.7	101.7	101.7	102.7	101.7	103.8	103.8	104.9
95°	95.2	94.2	93.1	93.1	93.1	93.1	93.1	93.1	94.2	94.2	95.2
97.5°	86.7	85.6	84.5	84.5	85.6	84.5	85.6	85.6	85.6	86.7	87.8
100°	79.2	78.1	78.1	79.2	78.1	78.1	79.2	79.2	79.2	79.2	80.3
102.5°	72.8	72.8	72.8	72.8	72.8	72.8	73.8	73.8	73.8	73.8	74.9
105°	66.3	67.4	67.4	67.4	68.5	68.5	68.5	69.6	69.6	69.6	69.6
107.5°	62.1	63.1	63.1	64.2	64.2	65.3	65.3	65.3	65.3	66.3	66.3
110°	57.8	58.9	59.9	61.0	61.0	62.1	62.1	62.1	62.1	62.1	62.1



TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	53.5	54.6	55.6	57.8	58.9	58.9	58.9	58.9	59.9	59.9	58.9
115°	49.2	51.4	52.4	54.6	55.6	55.6	56.7	56.7	56.7	56.7	55.6
117.5°	44.9	48.2	49.2	51.4	52.4	52.4	53.5	53.5	53.5	53.5	52.4
120°	41.7	43.9	46.0	47.1	48.2	49.2	49.2	50.3	50.3	50.3	49.2
122.5°	38.5	40.7	42.8	43.9	44.9	46.0	46.0	46.0	46.0	46.0	46.0
125°	34.2	36.4	38.5	39.6	40.7	41.7	41.7	42.8	42.8	42.8	41.7
127.5°	31.0	33.2	34.2	36.4	37.5	37.5	38.5	38.5	38.5	38.5	37.5
130°	26.8	28.9	31.0	32.1	33.2	33.2	34.2	34.2	34.2	34.2	34.2
132.5°	23.5	25.7	26.8	28.9	28.9	30.0	30.0	31.0	31.0	31.0	30.0
135°	21.4	22.5	23.5	25.7	25.7	26.8	26.8	26.8	26.8	26.8	26.8
137.5°	19.3	20.3	21.4	22.5	22.5	23.5	23.5	23.5	23.5	24.6	23.5
140°	16.1	18.2	19.3	19.3	20.3	20.3	20.3	21.4	21.4	21.4	20.3
142.5°	13.9	15.0	16.1	17.1	18.2	18.2	18.2	18.2	19.3	18.2	18.2
145°	10.7	12.8	13.9	15.0	16.1	16.1	16.1	16.1	16.1	16.1	16.1
147.5°	8.6	9.6	11.8	12.8	12.8	13.9	13.9	13.9	13.9	13.9	13.9
150°	7.5	7.5	9.6	10.7	11.8	11.8	11.8	11.8	11.8	11.8	11.8
152.5°	5.4	6.4	7.5	8.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
155°	5.4	5.4	6.4	6.4	7.5	7.5	7.5	7.5	8.6	7.5	7.5
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: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2063.2	2062.2	2066.4	2062.2	2040.8	2049.3	2046.1	2057.9	2058.9	2062.2	2072.9
5°	2052.5	2052.5	2057.9	2053.6	2033.3	2041.8	2040.8	2052.5	2054.7	2056.8	2068.6
7.5°	2031.1	2032.2	2039.7	2036.5	2015.1	2027.9	2026.8	2040.8	2045.0	2049.3	2060.0
10°	2010.8	2009.7	2018.3	2015.1	1994.7	2009.7	2008.6	2022.6	2029.0	2036.5	2049.3
12.5°	2000.1	1996.9	2000.1	1996.9	1974.4	1986.2	1987.2	2003.3	2010.8	2020.4	2035.4
15°	2000.1	1994.7	1994.7	1988.3	1962.6	1970.1	1971.2	1981.9	1991.5	2001.2	2019.3
17.5°	1997.9	1992.6	1991.5	1986.2	1958.4	1958.4	1957.3	1964.8	1970.1	1979.8	1999.0
20°	1986.2	1984.0	1983.0	1979.8	1954.1	1949.8	1947.6	1947.6	1950.9	1954.1	1973.3
22.5°	1955.1	1957.3	1959.4	1961.6	1941.2	1933.7	1934.8	1932.7	1929.5	1929.5	1945.5
25°	1897.4	1908.1	1916.6	1926.2	1914.5	1909.1	1915.5	1912.3	1907.0	1902.7	1916.6
27.5°	1805.3	1827.8	1846.0	1869.5	1870.6	1866.3	1883.4	1881.3	1880.2	1873.8	1884.5
30°	1678.0	1713.3	1737.9	1772.1	1801.0	1805.3	1834.2	1838.5	1842.8	1839.6	1850.3
32.5°	1523.9	1572.0	1613.8	1667.3	1695.1	1719.7	1760.4	1777.5	1794.6	1800.0	1811.7
35°	1355.9	1410.4	1459.7	1518.5	1562.4	1615.9	1665.1	1690.8	1729.3	1744.3	1761.4
37.5°	1196.4	1247.8	1295.9	1354.8	1425.4	1481.1	1542.1	1599.9	1652.3	1673.7	1699.4
40°	1055.2	1096.9	1142.9	1194.3	1258.5	1331.3	1397.6	1477.9	1539.9	1582.7	1620.2
42.5°	948.1	968.5	1008.1	1054.1	1105.5	1179.3	1246.7	1336.6	1411.5	1472.5	1534.6
45°	852.9	862.5	891.4	916.0	968.5	1033.8	1105.5	1193.2	1271.3	1349.4	1424.4
47.5°	771.6	783.3	797.3	812.2	849.7	904.3	966.3	1045.5	1123.6	1214.6	1300.2
50°	717.0	720.2	722.3	728.8	751.2	788.7	839.0	906.4	981.3	1078.7	1169.7
52.5°	668.8	668.8	662.4	659.2	667.8	691.3	720.2	768.4	845.4	935.3	1031.6
55°	617.5	607.8	605.7	595.0	597.1	607.8	621.7	659.2	722.3	799.4	892.5
57.5°	545.8	541.5	541.5	537.2	528.6	534.0	537.2	564.0	608.9	675.3	756.6
60°	463.4	461.2	466.6	467.6	460.2	463.4	462.3	478.4	510.5	564.0	631.4
62.5°	381.0	390.6	391.7	396.0	391.7	390.6	396.0	409.9	425.9	466.6	519.0
65°	320.0	325.3	326.4	331.7	329.6	329.6	333.9	344.6	354.2	382.0	422.7
67.5°	280.4	278.2	279.3	282.5	279.3	278.2	281.4	287.9	295.4	312.5	341.4
70°	249.3	247.2	247.2	247.2	242.9	239.7	240.8	242.9	246.1	255.8	274.0
72.5°	225.8	225.8	222.6	219.4	216.2	214.0	211.9	209.7	208.7	211.9	221.5
75°	204.4	205.5	204.4	201.2	196.9	192.6	188.3	184.1	178.7	176.6	177.6
77.5°	185.1	186.2	187.3	186.2	181.9	176.6	170.2	163.7	156.2	148.7	144.5
80°	168.0	170.2	171.2	170.2	166.9	162.7	155.2	147.7	137.0	127.3	116.6
82.5°	153.0	156.2	157.3	157.3	155.2	150.9	142.3	133.8	122.0	109.2	95.2
85°	141.3	143.4	145.5	145.5	144.5	140.2	131.6	122.0	110.2	95.2	80.3
87.5°	129.5	130.6	132.7	134.8	132.7	128.4	120.9	110.2	98.5	83.5	66.3
90°	117.7	118.8	120.9	123.1	122.0	117.7	111.3	101.7	88.8	72.8	55.6
92.5°	105.9	108.1	109.2	110.2	111.3	108.1	102.7	93.1	80.3	64.2	48.2
95°	97.4	97.4	99.5	100.6	101.7	98.5	94.2	84.5	72.8	57.8	41.7
97.5°	88.8	88.8	91.0	91.0	92.0	89.9	85.6	77.0	65.3	51.4	35.3
100°	80.3	81.3	82.4	83.5	83.5	82.4	78.1	69.6	58.9	46.0	31.0
102.5°	74.9	74.9	76.0	76.0	77.0	74.9	70.6	63.1	52.4	40.7	26.8
105°	69.6	69.6	70.6	70.6	69.6	67.4	63.1	56.7	47.1	35.3	23.5
107.5°	65.3	65.3	65.3	65.3	64.2	62.1	57.8	50.3	41.7	32.1	21.4
110°	62.1	61.0	61.0	59.9	58.9	55.6	51.4	44.9	37.5	27.8	18.2



TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	58.9	57.8	56.7	55.6	53.5	50.3	46.0	40.7	33.2	24.6	16.1
115°	55.6	54.6	53.5	51.4	49.2	46.0	41.7	36.4	28.9	21.4	13.9
117.5°	52.4	51.4	49.2	47.1	44.9	41.7	37.5	32.1	25.7	19.3	12.8
120°	48.2	47.1	46.0	43.9	41.7	37.5	33.2	28.9	22.5	17.1	10.7
122.5°	44.9	43.9	41.7	40.7	37.5	34.2	30.0	25.7	20.3	15.0	9.6
125°	40.7	39.6	38.5	36.4	34.2	30.0	26.8	22.5	18.2	12.8	7.5
127.5°	37.5	36.4	34.2	32.1	30.0	26.8	23.5	20.3	16.1	10.7	7.5
130°	33.2	32.1	31.0	28.9	26.8	23.5	21.4	17.1	13.9	9.6	6.4
132.5°	28.9	28.9	27.8	25.7	23.5	21.4	18.2	15.0	11.8	8.6	5.4
135°	26.8	25.7	24.6	22.5	21.4	18.2	16.1	12.8	9.6	7.5	4.3
137.5°	23.5	22.5	21.4	20.3	18.2	16.1	13.9	10.7	8.6	6.4	4.3
140°	20.3	19.3	19.3	17.1	16.1	13.9	11.8	9.6	7.5	5.4	3.2
142.5°	18.2	17.1	16.1	15.0	13.9	11.8	9.6	7.5	6.4	4.3	3.2
145°	16.1	15.0	13.9	12.8	11.8	9.6	8.6	6.4	5.4	4.3	3.2
147.5°	12.8	12.8	11.8	10.7	9.6	8.6	7.5	6.4	4.3	3.2	2.1
150°	10.7	10.7	9.6	8.6	8.6	7.5	6.4	5.4	4.3	3.2	2.1
152.5°	9.6	8.6	8.6	7.5	7.5	6.4	5.4	4.3	3.2	3.2	2.1
155°	7.5	7.5	7.5	6.4	6.4	5.4	4.3	4.3	3.2	2.1	2.1
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: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2075.0	2062.2	2072.9	2092.1	2090.0	2087.8	2085.7	2090.0	2103.9	2096.4	2084.6
5°	2071.8	2058.9	2070.7	2088.9	2087.8	2084.6	2082.5	2086.8	2100.7	2093.2	2080.3
7.5°	2065.4	2053.6	2062.2	2080.3	2080.3	2078.2	2076.1	2080.3	2093.2	2086.8	2073.9
10°	2054.7	2046.1	2054.7	2071.8	2072.9	2068.6	2066.4	2071.8	2084.6	2081.4	2070.7
12.5°	2046.1	2037.5	2047.2	2064.3	2065.4	2061.1	2057.9	2064.3	2081.4	2083.6	2080.3
15°	2034.3	2026.8	2038.6	2056.8	2056.8	2053.6	2053.6	2062.2	2085.7	2095.3	2100.7
17.5°	2017.2	2011.9	2025.8	2044.0	2045.0	2042.9	2044.0	2061.1	2092.1	2115.7	2130.6
20°	1995.8	1993.7	2008.6	2027.9	2031.1	2032.2	2037.5	2063.2	2106.0	2138.1	2153.1
22.5°	1970.1	1971.2	1988.3	2008.6	2012.9	2016.1	2026.8	2063.2	2116.7	2151.0	2157.4
25°	1941.2	1944.4	1962.6	1987.2	1992.6	1999.0	2017.2	2064.3	2119.9	2142.4	2131.7
27.5°	1910.2	1916.6	1940.2	1965.8	1972.3	1983.0	2006.5	2057.9	2105.0	2106.0	2066.4
30°	1878.1	1885.6	1913.4	1943.4	1954.1	1964.8	1993.7	2042.9	2068.6	2034.3	1964.8
32.5°	1841.7	1852.4	1880.2	1916.6	1929.5	1943.4	1972.3	2014.0	2004.4	1930.5	1831.0
35°	1795.7	1810.7	1842.8	1885.6	1897.4	1915.5	1935.9	1945.5	1902.7	1797.8	1685.5
37.5°	1739.0	1761.4	1798.9	1848.1	1861.0	1872.7	1878.1	1851.3	1765.7	1652.3	1535.6
40°	1673.7	1707.9	1748.6	1803.2	1816.0	1816.0	1796.8	1740.0	1632.0	1483.2	1353.7
42.5°	1594.5	1636.2	1687.6	1742.2	1755.0	1740.0	1694.0	1594.5	1471.4	1305.6	1168.6
45°	1498.2	1553.8	1611.6	1668.3	1674.8	1641.6	1559.2	1432.9	1281.0	1126.9	996.3
47.5°	1383.7	1456.5	1519.6	1583.8	1575.2	1519.6	1409.4	1266.0	1105.5	959.9	855.0
50°	1255.3	1340.9	1411.5	1472.5	1454.3	1377.3	1247.8	1098.0	938.5	814.4	727.7
52.5°	1118.3	1216.7	1287.4	1336.6	1312.0	1220.0	1077.6	934.2	803.7	690.2	632.5
55°	976.0	1075.5	1148.3	1186.8	1154.7	1055.2	915.0	784.4	661.3	587.5	553.3
57.5°	837.9	931.0	999.5	1030.5	989.9	890.4	760.9	650.6	561.8	499.8	482.6
60°	705.2	781.2	846.5	870.0	826.1	734.1	622.8	535.1	469.8	427.0	418.4
62.5°	582.2	644.2	695.6	713.8	671.0	599.3	503.0	437.7	391.7	370.3	359.6
65°	480.5	516.9	569.3	566.1	540.4	474.1	403.4	357.4	327.5	313.6	307.1
67.5°	377.8	410.9	444.1	448.4	416.3	370.3	324.3	291.1	275.0	267.5	264.3
70°	292.1	316.8	337.1	331.7	314.6	285.7	256.8	238.6	232.2	229.0	229.0
72.5°	226.9	239.7	249.3	242.9	232.2	217.2	203.3	195.8	196.9	199.0	201.2
75°	175.5	178.7	180.9	174.4	172.3	162.7	161.6	162.7	169.1	175.5	178.7
77.5°	134.8	130.6	127.3	120.9	122.0	120.9	126.3	134.8	144.5	154.1	162.7
80°	103.8	94.2	86.7	80.3	83.5	88.8	99.5	112.4	125.2	135.9	146.6
82.5°	80.3	66.3	55.6	49.2	55.6	64.2	78.1	94.2	109.2	120.9	132.7
85°	62.1	46.0	33.2	26.8	33.2	46.0	61.0	79.2	95.2	108.1	119.9
87.5°	48.2	33.2	18.2	10.7	18.2	32.1	49.2	66.3	82.4	97.4	109.2
90°	38.5	22.5	8.6	2.1	9.6	22.5	38.5	55.6	71.7	87.8	99.5
92.5°	31.0	16.1	4.3	0.0	5.4	17.1	32.1	48.2	64.2	79.2	91.0
95°	25.7	12.8	3.2	0.0	4.3	12.8	25.7	41.7	56.7	71.7	81.3
97.5°	21.4	9.6	2.1	0.0	2.1	10.7	21.4	35.3	50.3	64.2	73.8
100°	18.2	8.6	2.1	0.0	2.1	8.6	18.2	31.0	43.9	56.7	66.3
102.5°	15.0	6.4	1.1	1.1	1.1	6.4	16.1	26.8	38.5	50.3	59.9
105°	13.9	5.4	1.1	1.1	1.1	5.4	13.9	23.5	34.2	44.9	53.5
107.5°	11.8	4.3	1.1	1.1	1.1	4.3	11.8	20.3	31.0	40.7	48.2
110°	9.6	4.3	1.1	1.1	1.1	4.3	9.6	18.2	26.8	35.3	42.8

TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.6	3.2	1.1	1.1	1.1	3.2	8.6	16.1	23.5	32.1	38.5
115°	7.5	3.2	1.1	1.1	1.1	3.2	7.5	13.9	20.3	27.8	34.2
117.5°	6.4	3.2	1.1	1.1	1.1	2.1	6.4	11.8	18.2	24.6	31.0
120°	5.4	2.1	1.1	1.1	1.1	2.1	5.4	10.7	16.1	21.4	26.8
122.5°	5.4	2.1	1.1	1.1	1.1	2.1	4.3	8.6	13.9	18.2	23.5
125°	4.3	2.1	1.1	1.1	1.1	1.1	4.3	7.5	11.8	16.1	20.3
127.5°	4.3	2.1	1.1	1.1	1.1	1.1	3.2	6.4	9.6	13.9	18.2
130°	3.2	2.1	1.1	1.1	1.1	1.1	2.1	5.4	8.6	11.8	15.0
132.5°	3.2	2.1	1.1	1.1	1.1	1.1	2.1	4.3	6.4	9.6	12.8
135°	3.2	1.1	1.1	1.1	1.1	1.1	1.1	3.2	5.4	7.5	9.6
137.5°	2.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	4.3	5.4	8.6
140°	2.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	3.2	4.3	6.4
142.5°	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	3.2	5.4
145°	2.1	1.1	1.1	2.1	2.1	1.1	1.1	2.1	2.1	3.2	4.3
147.5°	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1	3.2
150°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2
152.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
155°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2082.5	2057.9	2070.7	2066.4	2070.7	2081.4	2080.3	2077.1	2079.3	2073.9	2068.6
5°	2078.2	2053.6	2066.4	2061.1	2066.4	2077.1	2075.0	2071.8	2075.0	2068.6	2063.2
7.5°	2072.9	2050.4	2065.4	2064.3	2073.9	2087.8	2088.9	2088.9	2096.4	2086.8	2082.5
10°	2072.9	2061.1	2081.4	2088.9	2113.5	2131.7	2133.9	2138.1	2151.0	2148.8	2138.1
12.5°	2095.3	2093.2	2123.2	2141.3	2163.8	2189.5	2203.4	2207.7	2216.3	2209.8	2205.6
15°	2124.2	2134.9	2168.1	2188.4	2213.0	2232.3	2235.5	2237.7	2244.1	2234.4	2227.0
17.5°	2162.7	2169.2	2195.9	2204.5	2220.5	2223.7	2219.5	2208.8	2208.8	2187.4	2180.9
20°	2180.9	2177.7	2188.4	2174.5	2168.1	2148.8	2130.6	2110.3	2109.2	2086.8	2084.6
22.5°	2164.9	2143.5	2121.0	2086.8	2071.8	2044.0	2019.3	2007.6	2000.1	1971.2	1963.7
25°	2108.2	2055.7	2022.6	1981.9	1945.5	1913.4	1889.9	1865.2	1841.7	1818.2	1807.5
27.5°	2009.7	1960.5	1907.0	1850.3	1800.0	1750.7	1711.1	1686.5	1664.1	1633.0	1617.0
30°	1888.8	1820.3	1761.4	1706.9	1624.5	1564.5	1531.4	1482.1	1465.0	1451.1	1421.1
32.5°	1746.5	1664.1	1583.8	1510.0	1425.4	1369.8	1325.9	1289.5	1278.8	1242.4	1233.9
35°	1589.2	1481.1	1390.1	1317.3	1256.3	1188.9	1152.5	1127.9	1106.5	1081.9	1077.6
37.5°	1404.0	1306.6	1203.9	1139.7	1091.5	1033.8	1005.9	988.8	979.2	961.0	957.8
40°	1217.8	1120.4	1049.8	985.6	955.6	924.6	904.3	896.8	892.5	886.1	879.7
42.5°	1048.7	963.1	912.8	870.0	857.2	842.2	836.8	841.1	836.8	834.7	833.6
45°	905.3	840.1	804.7	791.9	788.7	784.4	788.7	796.2	797.3	795.1	795.1
47.5°	774.8	743.7	728.8	730.9	736.3	739.5	747.0	756.6	758.7	753.4	755.5
50°	689.2	671.0	667.8	676.3	688.1	692.4	700.9	708.4	707.4	705.2	703.1
52.5°	608.9	603.6	612.1	620.7	633.5	635.7	638.9	642.1	641.0	636.7	634.6
55°	541.5	545.8	553.3	556.5	566.1	565.0	566.1	566.1	561.8	559.7	556.5
57.5°	480.5	481.6	485.8	486.9	492.3	490.1	489.1	486.9	480.5	479.4	476.2
60°	418.4	416.3	425.9	418.4	422.7	418.4	417.4	412.0	405.6	404.5	402.4
62.5°	359.6	355.3	361.7	358.5	360.6	356.4	354.2	347.8	342.4	341.4	340.3
65°	307.1	305.0	311.4	310.3	312.5	307.1	305.0	300.7	296.4	295.4	294.3
67.5°	263.3	268.6	271.8	271.8	274.0	272.9	267.5	266.5	265.4	261.1	261.1
70°	231.1	234.4	240.8	241.9	240.8	242.9	238.6	237.6	236.5	234.4	233.3
72.5°	205.5	209.7	216.2	217.2	216.2	216.2	214.0	213.0	213.0	209.7	209.7
75°	185.1	190.5	195.8	195.8	195.8	193.7	191.6	191.6	189.4	188.3	186.2
77.5°	168.0	174.4	178.7	177.6	176.6	174.4	174.4	171.2	168.0	168.0	165.9
80°	155.2	159.5	162.7	161.6	160.5	157.3	156.2	153.0	150.9	147.7	147.7
82.5°	141.3	146.6	148.7	147.7	145.5	142.3	141.3	139.1	137.0	135.9	133.8
85°	129.5	134.8	135.9	133.8	131.6	129.5	128.4	127.3	126.3	124.1	124.1
87.5°	117.7	123.1	123.1	122.0	119.9	118.8	117.7	116.6	115.6	114.5	113.4
90°	108.1	112.4	112.4	111.3	110.2	109.2	108.1	107.0	105.9	104.9	104.9
92.5°	98.5	102.7	102.7	101.7	100.6	99.5	99.5	98.5	97.4	96.3	95.2
95°	89.9	94.2	94.2	94.2	93.1	92.0	92.0	91.0	89.9	89.9	88.8
97.5°	81.3	85.6	85.6	85.6	84.5	83.5	83.5	82.4	82.4	82.4	81.3
100°	73.8	77.0	78.1	78.1	77.0	77.0	77.0	76.0	76.0	76.0	74.9
102.5°	66.3	69.6	71.7	71.7	71.7	70.6	70.6	70.6	70.6	70.6	69.6
105°	59.9	63.1	65.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
107.5°	54.6	57.8	59.9	61.0	62.1	62.1	63.1	63.1	63.1	63.1	63.1
110°	49.2	52.4	55.6	56.7	57.8	58.9	58.9	59.9	58.9	58.9	58.9

TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	43.9	48.2	50.3	52.4	53.5	54.6	55.6	55.6	55.6	55.6	55.6
115°	39.6	43.9	46.0	48.2	50.3	51.4	51.4	52.4	52.4	52.4	51.4
117.5°	35.3	39.6	41.7	43.9	44.9	47.1	48.2	48.2	48.2	48.2	47.1
120°	32.1	35.3	37.5	39.6	41.7	42.8	43.9	43.9	43.9	43.9	43.9
122.5°	27.8	31.0	34.2	36.4	37.5	38.5	39.6	39.6	39.6	39.6	39.6
125°	24.6	27.8	30.0	32.1	33.2	35.3	35.3	35.3	35.3	35.3	35.3
127.5°	21.4	24.6	26.8	28.9	30.0	31.0	32.1	32.1	32.1	32.1	32.1
130°	18.2	21.4	23.5	25.7	26.8	27.8	27.8	28.9	28.9	28.9	28.9
132.5°	16.1	18.2	20.3	22.5	23.5	24.6	24.6	25.7	25.7	25.7	25.7
135°	12.8	16.1	17.1	19.3	20.3	21.4	21.4	22.5	22.5	22.5	22.5
137.5°	10.7	12.8	15.0	17.1	18.2	18.2	19.3	19.3	20.3	20.3	20.3
140°	8.6	9.6	12.8	13.9	15.0	16.1	17.1	17.1	17.1	17.1	17.1
142.5°	6.4	8.6	9.6	11.8	12.8	13.9	15.0	15.0	15.0	15.0	15.0
145°	5.4	6.4	7.5	9.6	10.7	11.8	12.8	12.8	12.8	12.8	12.8
147.5°	4.3	5.4	6.4	7.5	8.6	9.6	10.7	10.7	10.7	10.7	10.7
150°	3.2	4.3	5.4	5.4	6.4	7.5	8.6	9.6	9.6	9.6	9.6
152.5°	3.2	3.2	4.3	4.3	5.4	6.4	7.5	7.5	7.5	7.5	7.5
155°	2.1	3.2	3.2	3.2	4.3	4.3	5.4	6.4	6.4	6.4	6.4
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: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2071.8	2076.1	2073.9	2070.7	2069.6	2075.0	2069.6	2045.0	2054.7	2055.7	2063.2
5°	2068.6	2071.8	2069.6	2067.5	2064.3	2070.7	2064.3	2038.6	2048.2	2049.3	2056.8
7.5°	2090.0	2091.0	2091.0	2085.7	2077.1	2080.3	2071.8	2042.9	2048.2	2048.2	2053.6
10°	2143.5	2145.6	2148.8	2134.9	2124.2	2115.7	2103.9	2068.6	2067.5	2058.9	2058.9
12.5°	2213.0	2207.7	2202.3	2195.9	2187.4	2176.7	2159.5	2117.8	2103.9	2090.0	2076.1
15°	2233.4	2231.2	2230.2	2227.0	2221.6	2218.4	2205.6	2163.8	2143.5	2126.4	2101.7
17.5°	2179.9	2184.1	2198.1	2199.1	2205.6	2218.4	2216.3	2187.4	2169.2	2161.7	2131.7
20°	2083.6	2084.6	2101.7	2109.2	2137.1	2158.5	2174.5	2171.3	2167.0	2175.6	2153.1
22.5°	1968.0	1975.5	1993.7	2005.4	2032.2	2056.8	2082.5	2096.4	2118.9	2154.2	2149.9
25°	1810.7	1820.3	1846.0	1865.2	1902.7	1940.2	1974.4	1999.0	2025.8	2093.2	2115.7
27.5°	1622.3	1637.3	1670.5	1689.7	1742.2	1780.7	1829.9	1878.1	1915.5	1992.6	2038.6
30°	1424.4	1437.2	1472.5	1499.3	1544.2	1596.6	1658.7	1727.2	1789.3	1867.4	1925.2
32.5°	1239.2	1253.1	1282.0	1305.6	1355.9	1399.7	1468.2	1552.8	1610.6	1718.6	1795.7
35°	1077.6	1090.5	1110.8	1131.1	1172.9	1217.8	1276.7	1359.1	1432.9	1545.3	1642.7
37.5°	964.2	966.3	978.1	989.9	1020.9	1055.2	1101.2	1173.9	1242.4	1363.4	1470.4
40°	882.9	882.9	889.3	892.5	906.4	926.7	955.6	1012.3	1069.1	1161.1	1291.7
42.5°	832.6	830.4	830.4	831.5	830.4	840.1	857.2	883.9	934.2	1010.2	1111.9
45°	795.1	790.8	787.6	780.1	775.8	775.8	776.9	786.6	815.4	864.7	947.1
47.5°	753.4	752.3	747.0	738.4	730.9	725.6	717.0	713.8	722.3	750.2	805.8
50°	705.2	699.9	694.5	688.1	679.5	674.2	658.1	659.2	651.7	664.6	693.4
52.5°	634.6	630.3	628.2	622.8	619.6	617.5	604.6	591.8	588.6	590.7	601.4
55°	556.5	558.6	550.1	554.3	553.3	543.6	538.3	528.6	525.4	524.4	529.7
57.5°	475.1	477.3	471.9	476.2	476.2	470.9	467.6	467.6	460.2	453.7	461.2
60°	401.3	397.0	400.2	405.6	405.6	402.4	400.2	400.2	394.9	392.7	398.1
62.5°	341.4	337.1	340.3	345.7	346.7	344.6	342.4	342.4	336.0	336.0	340.3
65°	295.4	296.4	295.4	299.6	299.6	300.7	298.6	296.4	288.9	292.1	291.1
67.5°	262.2	261.1	261.1	265.4	264.3	266.5	264.3	261.1	255.8	251.5	250.4
70°	234.4	233.3	233.3	235.4	236.5	236.5	235.4	233.3	225.8	221.5	218.3
72.5°	209.7	208.7	209.7	210.8	211.9	213.0	211.9	209.7	203.3	198.0	192.6
75°	187.3	186.2	189.4	189.4	190.5	190.5	191.6	190.5	185.1	178.7	172.3
77.5°	164.8	165.9	169.1	170.2	172.3	173.4	174.4	174.4	169.1	163.7	155.2
80°	146.6	148.7	150.9	152.0	154.1	157.3	158.4	159.5	155.2	149.8	140.2
82.5°	133.8	134.8	137.0	138.0	141.3	142.3	143.4	145.5	143.4	138.0	127.3
85°	123.1	124.1	126.3	126.3	128.4	130.6	131.6	132.7	131.6	126.3	115.6
87.5°	113.4	114.5	115.6	116.6	117.7	118.8	119.9	120.9	119.9	114.5	104.9
90°	104.9	104.9	105.9	105.9	107.0	108.1	110.2	110.2	109.2	104.9	95.2
92.5°	95.2	96.3	96.3	97.4	98.5	99.5	100.6	100.6	99.5	95.2	86.7
95°	88.8	88.8	89.9	89.9	91.0	91.0	92.0	92.0	91.0	86.7	78.1
97.5°	81.3	81.3	81.3	81.3	82.4	82.4	83.5	83.5	82.4	78.1	70.6
100°	74.9	74.9	74.9	74.9	74.9	76.0	76.0	76.0	74.9	70.6	63.1
102.5°	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	67.4	64.2	56.7
105°	66.3	66.3	66.3	65.3	65.3	65.3	64.2	64.2	61.0	57.8	51.4
107.5°	62.1	62.1	62.1	61.0	61.0	59.9	58.9	58.9	55.6	52.4	46.0
110°	58.9	58.9	58.9	57.8	56.7	55.6	54.6	53.5	50.3	46.0	40.7



TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	55.6	55.6	54.6	54.6	53.5	52.4	50.3	49.2	46.0	41.7	36.4
115°	51.4	51.4	51.4	50.3	49.2	48.2	47.1	44.9	41.7	37.5	32.1
117.5°	47.1	47.1	47.1	46.0	44.9	43.9	42.8	40.7	37.5	33.2	28.9
120°	42.8	42.8	42.8	41.7	40.7	39.6	38.5	36.4	33.2	30.0	24.6
122.5°	39.6	39.6	38.5	37.5	36.4	35.3	34.2	32.1	30.0	25.7	21.4
125°	35.3	35.3	34.2	34.2	33.2	32.1	31.0	28.9	25.7	22.5	19.3
127.5°	32.1	31.0	31.0	31.0	30.0	28.9	26.8	25.7	22.5	19.3	16.1
130°	27.8	27.8	27.8	26.8	26.8	25.7	23.5	21.4	19.3	17.1	13.9
132.5°	24.6	24.6	24.6	24.6	23.5	22.5	20.3	19.3	17.1	13.9	11.8
135°	22.5	22.5	21.4	21.4	20.3	19.3	18.2	16.1	13.9	11.8	9.6
137.5°	19.3	19.3	19.3	18.2	18.2	17.1	15.0	13.9	12.8	10.7	8.6
140°	17.1	17.1	16.1	16.1	15.0	15.0	13.9	11.8	10.7	8.6	7.5
142.5°	15.0	15.0	13.9	13.9	12.8	12.8	11.8	10.7	8.6	7.5	5.4
145°	12.8	12.8	11.8	11.8	11.8	10.7	9.6	8.6	7.5	6.4	5.4
147.5°	10.7	10.7	10.7	9.6	9.6	8.6	8.6	7.5	6.4	5.4	4.3
150°	9.6	9.6	8.6	8.6	8.6	7.5	6.4	6.4	5.4	4.3	3.2
152.5°	7.5	7.5	7.5	7.5	6.4	6.4	5.4	5.4	4.3	3.2	3.2
155°	6.4	6.4	6.4	5.4	5.4	5.4	4.3	4.3	3.2	3.2	2.1
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: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2060.0	2058.9	2068.6	2067.5	2054.7	2073.9	2086.8
5°	2054.7	2053.6	2062.2	2064.3	2050.4	2070.7	2084.6
7.5°	2050.4	2049.3	2058.9	2062.2	2048.2	2066.4	2081.4
10°	2051.5	2046.1	2054.7	2056.8	2044.0	2063.2	2076.1
12.5°	2058.9	2046.1	2049.3	2049.3	2037.5	2054.7	2068.6
15°	2077.1	2050.4	2046.1	2042.9	2027.9	2044.0	2057.9
17.5°	2097.5	2061.1	2046.1	2035.4	2017.2	2031.1	2046.1
20°	2117.8	2072.9	2048.2	2031.1	2006.5	2019.3	2030.0
22.5°	2127.4	2083.6	2050.4	2024.7	1993.7	2000.1	2011.9
25°	2114.6	2079.3	2046.1	2015.1	1977.6	1978.7	1988.3
27.5°	2067.5	2057.9	2036.5	2005.4	1964.8	1959.4	1966.9
30°	1987.2	2014.0	2015.1	1992.6	1949.8	1939.1	1942.3
32.5°	1874.9	1934.8	1970.1	1965.8	1928.4	1913.4	1915.5
35°	1745.4	1820.3	1897.4	1923.0	1896.3	1884.5	1880.2
37.5°	1590.2	1690.8	1793.5	1856.7	1852.4	1844.9	1840.6
40°	1419.0	1539.9	1661.9	1762.5	1793.5	1793.5	1795.7
42.5°	1236.0	1377.3	1511.0	1638.4	1711.1	1727.2	1733.6
45°	1059.4	1201.8	1347.3	1493.9	1591.3	1641.6	1659.8
47.5°	898.9	1042.3	1180.4	1340.9	1470.4	1535.6	1564.5
50°	761.9	869.0	1014.5	1173.9	1315.2	1395.5	1452.2
52.5°	648.5	732.0	859.3	1008.1	1150.4	1260.6	1313.1
55°	553.3	610.0	718.1	846.5	982.4	1096.9	1157.9
57.5°	473.0	517.9	591.8	698.8	813.3	926.7	992.0
60°	402.4	433.4	483.7	568.2	665.6	763.0	826.1
62.5°	341.4	361.7	394.9	456.9	532.9	608.9	667.8
65°	294.3	302.8	321.0	359.6	417.4	475.1	525.4
67.5°	248.3	253.6	267.5	291.1	320.0	361.7	394.9
70°	214.0	214.0	215.1	229.0	244.0	270.7	294.3
72.5°	186.2	183.0	176.6	179.8	183.0	198.0	213.0
75°	163.7	156.2	145.5	141.3	139.1	141.3	149.8
77.5°	144.5	133.8	120.9	110.2	101.7	98.5	105.9
80°	128.4	115.6	100.6	86.7	72.8	65.3	68.5
82.5°	115.6	99.5	83.5	67.4	51.4	40.7	40.7
85°	101.7	86.7	69.6	52.4	36.4	22.5	20.3
87.5°	92.0	76.0	57.8	41.7	25.7	11.8	6.4
90°	82.4	66.3	49.2	33.2	18.2	5.4	0.0
92.5°	73.8	58.9	42.8	26.8	12.8	3.2	0.0
95°	66.3	52.4	36.4	22.5	10.7	2.1	1.1
97.5°	58.9	46.0	32.1	18.2	7.5	2.1	1.1
100°	53.5	40.7	27.8	15.0	6.4	1.1	1.1
102.5°	47.1	36.4	23.5	12.8	5.4	1.1	1.1
105°	41.7	32.1	20.3	10.7	4.3	1.1	1.1
107.5°	37.5	27.8	18.2	9.6	4.3	1.1	1.1
110°	33.2	24.6	16.1	8.6	3.2	1.1	1.1

TEST NUMBER: P1213474

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	30.0	21.4	13.9	7.5	2.1	1.1	1.1
115°	25.7	19.3	11.8	6.4	2.1	1.1	1.1
117.5°	22.5	16.1	10.7	5.4	2.1	1.1	1.1
120°	19.3	13.9	8.6	4.3	1.1	1.1	1.1
122.5°	17.1	11.8	7.5	4.3	1.1	1.1	1.1
125°	15.0	10.7	6.4	3.2	1.1	1.1	1.1
127.5°	12.8	8.6	5.4	2.1	1.1	1.1	1.1
130°	10.7	7.5	4.3	2.1	1.1	1.1	1.1
132.5°	8.6	6.4	4.3	2.1	1.1	1.1	1.1
135°	7.5	5.4	3.2	2.1	1.1	1.1	1.1
137.5°	6.4	4.3	2.1	2.1	2.1	1.1	1.1
140°	5.4	3.2	2.1	2.1	2.1	2.1	1.1
142.5°	4.3	3.2	2.1	2.1	2.1	2.1	1.1
145°	3.2	2.1	2.1	2.1	2.1	2.1	1.1
147.5°	3.2	2.1	2.1	2.1	2.1	2.1	1.1
150°	2.1	2.1	2.1	2.1	2.1	2.1	2.1
152.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1
155°	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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)