

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: P1214170

Luminaire Tested: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214170
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-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

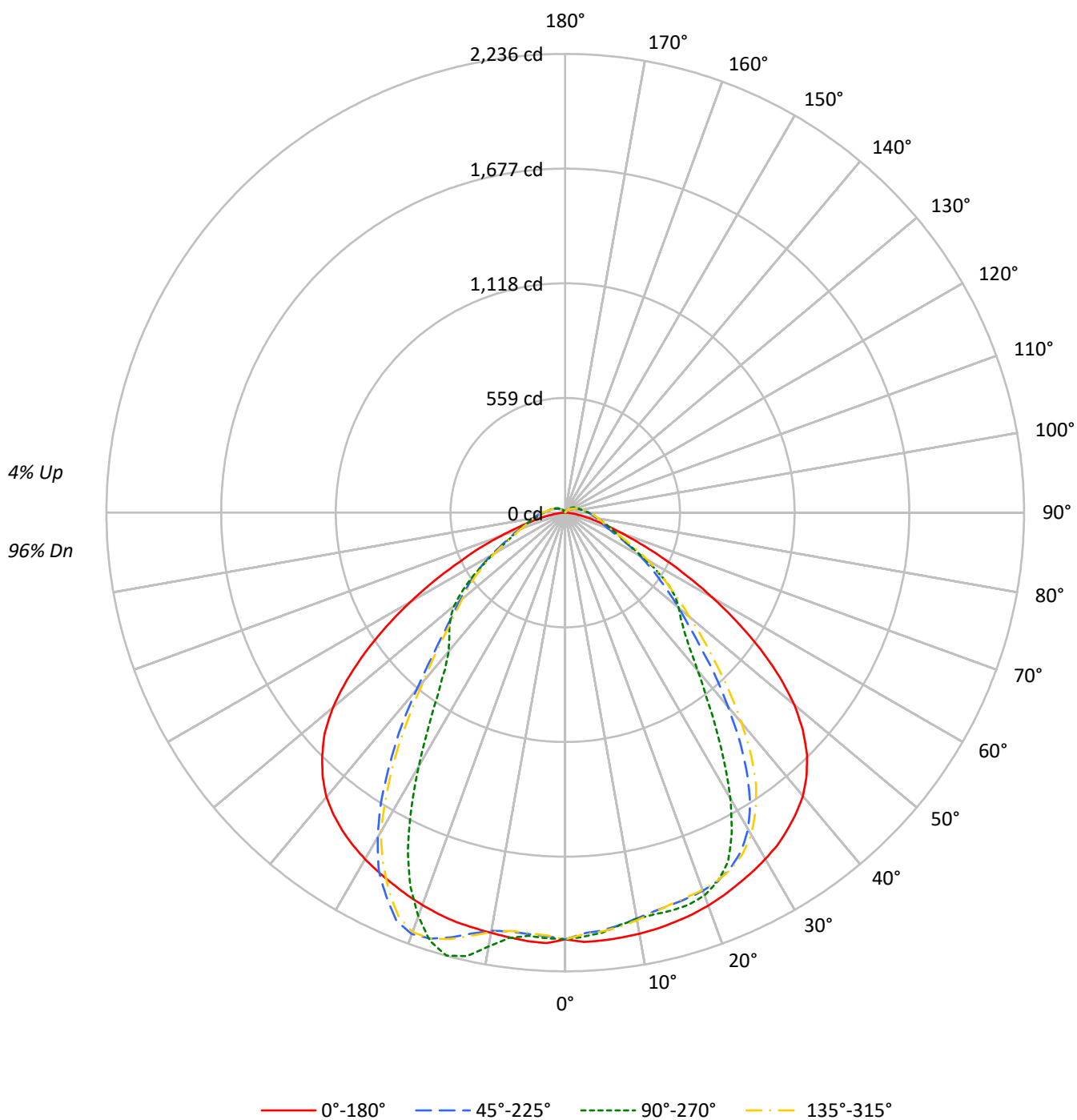
Lumens per Lamp: N/A
Luminaire Lumens: 4958.0 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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				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°	16807	16807	16807	16807
5°	16929	16140	16963	16267
10°	17008	15469	16973	16519
15°	17139	15262	17130	16993
20°	17328	15020	17309	15832
25°	17542	14249	17532	13768
30°	17871	12350	17881	10941
35°	18222	9987	18273	8451
40°	18530	8041	18607	7084
45°	18465	6811	18560	6632
50°	17669	6270	17916	6131
55°	15676	5636	16067	5123
60°	12715	4313	13391	3956
65°	9453	3300	10184	3129
70°	6428	2849	7246	2724
75°	4205	2571	4896	2431
80°	2720	2396	3186	2204
85°	1394	2390	1838	2184

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 18560 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.6	4.0
10°-20°	587.8	11.9
20°-30°	893.6	18.0
30°-40°	958.6	19.3
40°-50°	832.0	16.8
50°-60°	616.6	12.4
60°-70°	353.3	7.1
70°-80°	195.6	3.9
80°-90°	119.1	2.4
90°-100°	77.5	1.6
100°-110°	51.9	1.0
110°-120°	35.0	0.7
120°-130°	21.5	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°	1678.9	33.9
0°-40°	2637.6	53.2
0°-60°	4086.1	82.4
0°-90°	4754.2	95.9
90°-120°	164.4	3.3
90°-150°	202.3	4.1
90°-180°	204.0	4.1
0°-180°	4958.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2080	2080	2080	2080	2080	
5°	2093	2055	2097	2071	2093	199
15°	2066	2008	2065	2236	2066	585
25°	1996	1878	1995	1814	1996	923
35°	1888	1278	1893	1082	1888	1181
45°	1666	820	1675	798	1666	1276
55°	1162	614	1191	559	1162	1031
65°	528	312	568	295	528	532
75°	150	198	175	187	150	172
85°	20	136	27	125	20	27
90°	0	114	2	105	0	1
95°	1	94	0	89	1	1
105°	1	70	1	67	1	1
115°	1	57	1	52	1	1
125°	1	43	1	36	1	1
135°	1	27	1	23	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	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8
2.5°	2094.8	2089.4	2087.3	2083.0	2086.2	2099.1	2090.5	2076.5	2077.6	2052.9	2065.8
5°	2092.6	2086.2	2083.0	2078.7	2080.8	2092.6	2084.1	2070.1	2069.0	2044.3	2056.1
7.5°	2089.4	2083.0	2077.6	2074.4	2075.5	2085.1	2074.4	2058.3	2055.0	2028.2	2038.9
10°	2084.1	2079.8	2072.2	2066.9	2065.8	2076.5	2059.3	2043.2	2035.7	2007.8	2018.5
12.5°	2076.5	2070.1	2062.6	2052.9	2051.8	2058.3	2044.3	2021.7	2014.2	1991.7	2003.5
15°	2065.8	2058.3	2049.7	2038.9	2033.6	2037.9	2020.7	2000.3	1999.2	1979.8	1996.0
17.5°	2054.0	2043.2	2033.6	2018.5	2011.0	2014.2	2000.3	1982.0	1984.1	1972.3	1990.6
20°	2037.9	2026.0	2011.0	1996.0	1985.2	1990.6	1980.9	1967.0	1970.2	1961.6	1977.7
22.5°	2019.6	2003.5	1985.2	1968.0	1959.4	1967.0	1959.4	1947.6	1948.7	1943.3	1953.0
25°	1996.0	1977.7	1956.2	1934.7	1930.4	1935.8	1931.5	1921.8	1917.5	1908.9	1913.2
27.5°	1974.5	1954.1	1927.2	1904.7	1897.1	1907.9	1898.2	1882.1	1870.3	1858.5	1849.9
30°	1949.8	1925.1	1895.0	1869.2	1862.8	1867.1	1853.1	1828.4	1797.2	1782.2	1758.6
32.5°	1922.9	1890.7	1853.1	1824.1	1819.8	1816.6	1790.8	1755.3	1707.0	1676.9	1640.4
35°	1887.5	1852.0	1806.9	1771.4	1765.0	1746.7	1704.8	1657.6	1595.3	1543.7	1481.4
37.5°	1847.7	1805.8	1758.6	1711.3	1693.0	1656.5	1597.4	1548.0	1453.5	1391.2	1316.0
40°	1802.6	1752.1	1694.1	1637.2	1607.1	1548.0	1480.3	1407.3	1316.0	1232.2	1168.8
42.5°	1740.3	1686.6	1617.8	1554.4	1502.9	1424.5	1345.0	1241.8	1158.0	1087.1	1022.7
45°	1666.2	1601.7	1522.2	1445.9	1380.4	1287.0	1193.5	1090.4	1020.5	937.8	893.8
47.5°	1570.6	1500.7	1415.9	1331.0	1245.1	1141.9	1044.2	945.3	875.5	816.4	784.2
50°	1457.8	1393.3	1299.8	1198.9	1104.3	996.9	899.2	825.0	757.3	720.8	696.1
52.5°	1318.1	1258.0	1162.3	1052.8	961.5	856.2	767.0	706.9	658.5	631.7	623.1
55°	1162.3	1109.7	1015.2	913.1	819.7	723.0	655.3	602.7	571.5	555.4	556.5
57.5°	995.8	955.0	865.8	774.5	686.4	613.4	552.2	510.3	486.6	485.6	488.8
60°	829.3	799.2	721.9	643.5	566.1	507.0	461.9	432.9	417.9	419.0	417.9
62.5°	670.3	642.4	586.5	522.1	460.9	421.1	380.3	368.5	355.6	354.5	354.5
65°	527.5	506.0	460.9	414.7	368.5	342.7	322.3	308.3	298.6	296.5	297.6
67.5°	396.4	387.8	356.7	325.5	296.5	280.4	263.2	260.0	252.4	252.4	254.6
70°	295.4	289.0	271.8	253.5	241.7	231.0	222.4	222.4	221.3	220.2	225.6
72.5°	213.8	214.9	209.5	195.5	194.4	192.3	190.1	193.4	194.4	197.7	204.1
75°	150.4	153.6	153.6	151.5	155.8	161.1	164.4	169.7	176.2	180.5	188.0
77.5°	106.4	106.4	111.7	118.2	126.8	136.4	145.0	152.5	161.1	166.5	173.0
80°	68.8	72.0	80.6	92.4	104.2	117.1	128.9	138.6	147.2	155.8	160.1
82.5°	40.8	46.2	56.9	72.0	87.0	103.1	114.9	126.8	136.4	145.0	148.2
85°	20.4	27.9	40.8	56.9	73.0	90.2	105.3	116.0	126.8	134.3	138.6
87.5°	6.4	15.0	29.0	44.0	61.2	78.4	94.5	106.4	116.0	122.5	126.8
90°	0.0	7.5	20.4	36.5	52.6	69.8	84.9	97.8	107.4	112.8	116.0
92.5°	0.0	4.3	16.1	30.1	45.1	62.3	77.3	89.2	97.8	103.1	105.3
95°	1.1	3.2	11.8	24.7	39.7	55.9	69.8	80.6	89.2	94.5	95.6
97.5°	1.1	2.1	9.7	20.4	34.4	49.4	63.4	74.1	80.6	85.9	87.0
100°	1.1	2.1	7.5	18.3	30.1	44.0	56.9	66.6	74.1	78.4	79.5
102.5°	1.1	1.1	6.4	15.0	26.9	38.7	50.5	60.2	66.6	70.9	73.0
105°	1.1	1.1	5.4	12.9	23.6	34.4	45.1	54.8	60.2	64.5	66.6
107.5°	1.1	1.1	4.3	10.7	20.4	30.1	40.8	48.3	54.8	59.1	61.2
110°	1.1	1.1	3.2	9.7	17.2	26.9	35.5	43.0	49.4	53.7	55.9

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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	23.6	31.2	38.7	44.0	48.3	51.6
115°	1.1	1.1	3.2	7.5	14.0	20.4	27.9	34.4	39.7	44.0	47.3
117.5°	1.1	1.1	3.2	6.4	11.8	18.3	24.7	31.2	35.5	39.7	43.0
120°	1.1	1.1	2.1	5.4	10.7	16.1	21.5	26.9	32.2	36.5	39.7
122.5°	1.1	1.1	2.1	5.4	8.6	14.0	19.3	23.6	29.0	32.2	35.5
125°	1.1	1.1	2.1	4.3	7.5	12.9	17.2	21.5	24.7	29.0	32.2
127.5°	1.1	1.1	2.1	4.3	6.4	10.7	15.0	19.3	22.6	25.8	27.9
130°	1.1	1.1	2.1	3.2	5.4	8.6	12.9	16.1	20.4	22.6	24.7
132.5°	1.1	1.1	1.1	3.2	4.3	6.4	9.7	14.0	17.2	20.4	21.5
135°	1.1	1.1	1.1	2.1	4.3	5.4	7.5	10.7	14.0	17.2	19.3
137.5°	1.1	1.1	1.1	2.1	3.2	5.4	6.4	8.6	11.8	14.0	17.2
140°	1.1	1.1	1.1	2.1	3.2	4.3	5.4	7.5	9.7	11.8	14.0
142.5°	1.1	1.1	1.1	2.1	2.1	3.2	4.3	6.4	7.5	9.7	11.8
145°	1.1	1.1	1.1	2.1	2.1	3.2	4.3	5.4	6.4	7.5	9.7
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8
2.5°	2061.5	2063.6	2076.5	2075.5	2073.3	2071.2	2071.2	2069.0	2071.2	2076.5	2074.4
5°	2050.8	2054.0	2063.6	2062.6	2060.4	2059.3	2058.3	2055.0	2057.2	2064.7	2062.6
7.5°	2031.4	2034.6	2043.2	2038.9	2035.7	2037.9	2032.5	2029.3	2033.6	2041.1	2040.0
10°	2011.0	2013.2	2023.9	2021.7	2016.4	2017.4	2012.1	2009.9	2015.3	2019.6	2020.7
12.5°	1997.0	2004.6	2014.2	2013.2	2012.1	2013.2	2007.8	2005.6	2008.9	2013.2	2012.1
15°	1993.8	2003.5	2014.2	2014.2	2015.3	2016.4	2011.0	2007.8	2011.0	2014.2	2013.2
17.5°	1990.6	2002.4	2012.1	2011.0	2012.1	2014.2	2005.6	2003.5	2007.8	2012.1	2009.9
20°	1979.8	1990.6	1997.0	1994.9	1994.9	1996.0	1985.2	1985.2	1991.7	1994.9	1996.0
22.5°	1949.8	1962.7	1962.7	1957.3	1957.3	1953.0	1949.8	1943.3	1950.8	1956.2	1960.5
25°	1904.7	1910.0	1903.6	1891.8	1885.3	1879.9	1864.9	1877.8	1877.8	1893.9	1899.3
27.5°	1841.3	1829.5	1811.2	1786.5	1781.1	1763.9	1754.3	1757.5	1762.9	1785.4	1802.6
30°	1737.1	1701.6	1670.5	1659.7	1636.1	1618.9	1601.7	1610.3	1620.0	1632.9	1668.3
32.5°	1599.6	1565.2	1514.7	1496.4	1471.7	1450.2	1429.8	1442.7	1459.9	1468.5	1507.2
35°	1441.6	1400.8	1354.6	1323.5	1297.7	1285.9	1260.1	1278.4	1296.6	1303.1	1336.4
37.5°	1274.1	1232.2	1191.3	1164.5	1139.8	1132.3	1115.1	1128.0	1141.9	1151.6	1179.5
40°	1115.1	1076.4	1045.2	1027.0	1009.8	1003.4	996.9	1002.3	1013.0	1020.5	1042.0
42.5°	978.6	947.5	926.0	915.3	903.4	894.9	895.9	898.1	903.4	919.6	929.2
45°	859.4	841.1	827.2	825.0	817.5	816.4	815.4	819.7	822.9	832.5	840.1
47.5°	763.8	756.3	753.1	757.3	760.6	756.3	758.4	763.8	770.2	770.2	769.2
50°	688.6	690.7	695.0	704.7	711.2	713.3	715.5	721.9	723.0	725.1	721.9
52.5°	627.4	629.5	641.3	656.4	663.9	667.1	671.4	677.9	677.9	680.0	675.7
55°	565.1	568.3	580.1	595.1	601.6	605.9	610.2	614.5	617.7	622.0	618.8
57.5°	496.3	506.0	513.5	517.8	522.1	525.3	528.5	529.6	536.1	537.1	542.5
60°	423.3	425.4	432.9	431.9	428.6	437.2	432.9	440.4	448.0	457.6	458.7
62.5°	353.4	354.5	359.9	357.7	362.0	360.9	364.2	364.2	369.5	373.8	379.2
65°	298.6	299.7	304.0	304.0	302.9	306.2	309.4	311.5	311.5	314.8	319.1
67.5°	257.8	261.0	265.3	267.5	269.6	269.6	272.9	273.9	276.1	277.2	279.3
70°	229.9	234.2	238.5	240.6	241.7	243.9	244.9	244.9	247.1	248.2	250.3
72.5°	209.5	213.8	217.0	217.0	219.1	220.2	220.2	221.3	222.4	224.5	226.7
75°	192.3	195.5	197.7	196.6	196.6	196.6	197.7	197.7	199.8	202.0	204.1
77.5°	176.2	179.4	179.4	177.3	177.3	177.3	177.3	178.3	179.4	181.5	183.7
80°	164.4	164.4	163.3	163.3	161.1	160.1	160.1	161.1	161.1	163.3	166.5
82.5°	151.5	151.5	150.4	149.3	148.2	147.2	147.2	148.2	149.3	150.4	152.5
85°	139.7	139.7	137.5	137.5	136.4	136.4	136.4	136.4	137.5	138.6	140.7
87.5°	127.8	126.8	125.7	124.6	124.6	124.6	124.6	124.6	125.7	127.8	128.9
90°	116.0	114.9	113.9	113.9	112.8	112.8	113.9	113.9	114.9	116.0	117.1
92.5°	105.3	104.2	103.1	103.1	102.1	102.1	103.1	102.1	104.2	104.2	105.3
95°	95.6	94.5	93.5	93.5	93.5	93.5	93.5	93.5	94.5	94.5	95.6
97.5°	87.0	85.9	84.9	84.9	85.9	84.9	85.9	85.9	85.9	87.0	88.1
100°	79.5	78.4	78.4	79.5	78.4	78.4	79.5	79.5	79.5	79.5	80.6
102.5°	73.0	73.0	73.0	73.0	73.0	73.0	74.1	74.1	74.1	74.1	75.2
105°	66.6	67.7	67.7	67.7	68.8	68.8	68.8	69.8	69.8	69.8	69.8
107.5°	62.3	63.4	63.4	64.5	64.5	65.5	65.5	65.5	65.5	66.6	66.6
110°	58.0	59.1	60.2	61.2	61.2	62.3	62.3	62.3	62.3	62.3	62.3



TEST NUMBER: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	53.7	54.8	55.9	58.0	59.1	59.1	59.1	59.1	60.2	60.2	59.1
115°	49.4	51.6	52.6	54.8	55.9	55.9	56.9	56.9	56.9	56.9	55.9
117.5°	45.1	48.3	49.4	51.6	52.6	52.6	53.7	53.7	53.7	53.7	52.6
120°	41.9	44.0	46.2	47.3	48.3	49.4	49.4	50.5	50.5	50.5	49.4
122.5°	38.7	40.8	43.0	44.0	45.1	46.2	46.2	46.2	46.2	46.2	46.2
125°	34.4	36.5	38.7	39.7	40.8	41.9	41.9	43.0	43.0	43.0	41.9
127.5°	31.2	33.3	34.4	36.5	37.6	37.6	38.7	38.7	38.7	38.7	37.6
130°	26.9	29.0	31.2	32.2	33.3	33.3	34.4	34.4	34.4	34.4	34.4
132.5°	23.6	25.8	26.9	29.0	29.0	30.1	30.1	31.2	31.2	31.2	30.1
135°	21.5	22.6	23.6	25.8	25.8	26.9	26.9	26.9	26.9	26.9	26.9
137.5°	19.3	20.4	21.5	22.6	22.6	23.6	23.6	23.6	23.6	24.7	23.6
140°	16.1	18.3	19.3	19.3	20.4	20.4	20.4	21.5	21.5	21.5	20.4
142.5°	14.0	15.0	16.1	17.2	18.3	18.3	18.3	18.3	19.3	18.3	18.3
145°	10.7	12.9	14.0	15.0	16.1	16.1	16.1	16.1	16.1	16.1	16.1
147.5°	8.6	9.7	11.8	12.9	12.9	14.0	14.0	14.0	14.0	14.0	14.0
150°	7.5	7.5	9.7	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	9.7	9.7	9.7	9.7	9.7	9.7	9.7
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: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8
2.5°	2071.2	2070.1	2074.4	2070.1	2048.6	2057.2	2054.0	2065.8	2066.9	2070.1	2080.8
5°	2060.4	2060.4	2065.8	2061.5	2041.1	2049.7	2048.6	2060.4	2062.6	2064.7	2076.5
7.5°	2038.9	2040.0	2047.5	2044.3	2022.8	2035.7	2034.6	2048.6	2052.9	2057.2	2067.9
10°	2018.5	2017.4	2026.0	2022.8	2002.4	2017.4	2016.4	2030.3	2036.8	2044.3	2057.2
12.5°	2007.8	2004.6	2007.8	2004.6	1982.0	1993.8	1994.9	2011.0	2018.5	2028.2	2043.2
15°	2007.8	2002.4	2002.4	1996.0	1970.2	1977.7	1978.8	1989.5	1999.2	2008.9	2027.1
17.5°	2005.6	2000.3	1999.2	1993.8	1965.9	1965.9	1964.8	1972.3	1977.7	1987.4	2006.7
20°	1993.8	1991.7	1990.6	1987.4	1961.6	1957.3	1955.1	1955.1	1958.4	1961.6	1980.9
22.5°	1962.7	1964.8	1967.0	1969.1	1948.7	1941.2	1942.3	1940.1	1936.9	1936.9	1953.0
25°	1904.7	1915.4	1924.0	1933.7	1921.8	1916.5	1922.9	1919.7	1914.3	1910.0	1924.0
27.5°	1812.3	1834.8	1853.1	1876.7	1877.8	1873.5	1890.7	1888.5	1887.5	1881.0	1891.8
30°	1684.4	1719.9	1744.6	1779.0	1808.0	1812.3	1841.3	1845.6	1849.9	1846.6	1857.4
32.5°	1529.7	1578.1	1620.0	1673.7	1701.6	1726.3	1767.1	1784.3	1801.5	1806.9	1818.7
35°	1361.1	1415.9	1465.3	1524.4	1568.4	1622.1	1671.5	1697.3	1736.0	1751.0	1768.2
37.5°	1201.0	1252.6	1300.9	1360.0	1430.9	1486.8	1548.0	1606.0	1658.6	1680.1	1705.9
40°	1059.2	1101.1	1147.3	1198.9	1263.3	1336.4	1403.0	1483.5	1545.9	1588.8	1626.4
42.5°	951.8	972.2	1011.9	1058.1	1109.7	1183.8	1251.5	1341.7	1416.9	1478.2	1540.5
45°	856.2	865.8	894.9	919.6	972.2	1037.7	1109.7	1197.8	1276.2	1354.6	1429.8
47.5°	774.5	786.4	800.3	815.4	853.0	907.7	970.1	1049.5	1128.0	1219.3	1305.2
50°	719.8	723.0	725.1	731.6	754.1	791.7	842.2	909.9	985.1	1082.8	1174.2
52.5°	671.4	671.4	665.0	661.7	670.3	694.0	723.0	771.3	848.7	938.9	1035.6
55°	619.8	610.2	608.0	597.3	599.4	610.2	624.1	661.7	725.1	802.5	895.9
57.5°	547.9	543.6	543.6	539.3	530.7	536.1	539.3	566.1	611.3	677.9	759.5
60°	465.2	463.0	468.4	469.4	461.9	465.2	464.1	480.2	512.4	566.1	633.8
62.5°	382.4	392.1	393.2	397.5	393.2	392.1	397.5	411.4	427.6	468.4	521.0
65°	321.2	326.6	327.6	333.0	330.9	330.9	335.2	345.9	355.6	383.5	424.3
67.5°	281.5	279.3	280.4	283.6	280.4	279.3	282.5	289.0	296.5	313.7	342.7
70°	250.3	248.2	248.2	248.2	243.9	240.6	241.7	243.9	247.1	256.7	275.0
72.5°	226.7	226.7	223.4	220.2	217.0	214.9	212.7	210.6	209.5	212.7	222.4
75°	205.2	206.3	205.2	202.0	197.7	193.4	189.1	184.8	179.4	177.3	178.3
77.5°	185.8	186.9	188.0	186.9	182.6	177.3	170.8	164.4	156.8	149.3	145.0
80°	168.7	170.8	171.9	170.8	167.6	163.3	155.8	148.2	137.5	127.8	117.1
82.5°	153.6	156.8	157.9	157.9	155.8	151.5	142.9	134.3	122.5	109.6	95.6
85°	141.8	144.0	146.1	146.1	145.0	140.7	132.1	122.5	110.6	95.6	80.6
87.5°	130.0	131.1	133.2	135.4	133.2	128.9	121.4	110.6	98.8	83.8	66.6
90°	118.2	119.2	121.4	123.5	122.5	118.2	111.7	102.1	89.2	73.0	55.9
92.5°	106.4	108.5	109.6	110.6	111.7	108.5	103.1	93.5	80.6	64.5	48.3
95°	97.8	97.8	99.9	101.0	102.1	98.8	94.5	84.9	73.0	58.0	41.9
97.5°	89.2	89.2	91.3	91.3	92.4	90.2	85.9	77.3	65.5	51.6	35.5
100°	80.6	81.6	82.7	83.8	83.8	82.7	78.4	69.8	59.1	46.2	31.2
102.5°	75.2	75.2	76.3	76.3	77.3	75.2	70.9	63.4	52.6	40.8	26.9
105°	69.8	69.8	70.9	70.9	69.8	67.7	63.4	56.9	47.3	35.5	23.6
107.5°	65.5	65.5	65.5	65.5	64.5	62.3	58.0	50.5	41.9	32.2	21.5
110°	62.3	61.2	61.2	60.2	59.1	55.9	51.6	45.1	37.6	27.9	18.3



TEST NUMBER: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	59.1	58.0	56.9	55.9	53.7	50.5	46.2	40.8	33.3	24.7	16.1
115°	55.9	54.8	53.7	51.6	49.4	46.2	41.9	36.5	29.0	21.5	14.0
117.5°	52.6	51.6	49.4	47.3	45.1	41.9	37.6	32.2	25.8	19.3	12.9
120°	48.3	47.3	46.2	44.0	41.9	37.6	33.3	29.0	22.6	17.2	10.7
122.5°	45.1	44.0	41.9	40.8	37.6	34.4	30.1	25.8	20.4	15.0	9.7
125°	40.8	39.7	38.7	36.5	34.4	30.1	26.9	22.6	18.3	12.9	7.5
127.5°	37.6	36.5	34.4	32.2	30.1	26.9	23.6	20.4	16.1	10.7	7.5
130°	33.3	32.2	31.2	29.0	26.9	23.6	21.5	17.2	14.0	9.7	6.4
132.5°	29.0	29.0	27.9	25.8	23.6	21.5	18.3	15.0	11.8	8.6	5.4
135°	26.9	25.8	24.7	22.6	21.5	18.3	16.1	12.9	9.7	7.5	4.3
137.5°	23.6	22.6	21.5	20.4	18.3	16.1	14.0	10.7	8.6	6.4	4.3
140°	20.4	19.3	19.3	17.2	16.1	14.0	11.8	9.7	7.5	5.4	3.2
142.5°	18.3	17.2	16.1	15.0	14.0	11.8	9.7	7.5	6.4	4.3	3.2
145°	16.1	15.0	14.0	12.9	11.8	9.7	8.6	6.4	5.4	4.3	3.2
147.5°	12.9	12.9	11.8	10.7	9.7	8.6	7.5	6.4	4.3	3.2	2.1
150°	10.7	10.7	9.7	8.6	8.6	7.5	6.4	5.4	4.3	3.2	2.1
152.5°	9.7	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: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8
2.5°	2083.0	2070.1	2080.8	2100.2	2098.0	2095.9	2093.7	2098.0	2112.0	2104.5	2092.6
5°	2079.8	2066.9	2078.7	2096.9	2095.9	2092.6	2090.5	2094.8	2108.8	2101.2	2088.3
7.5°	2073.3	2061.5	2070.1	2088.3	2088.3	2086.2	2084.1	2088.3	2101.2	2094.8	2081.9
10°	2062.6	2054.0	2062.6	2079.8	2080.8	2076.5	2074.4	2079.8	2092.6	2089.4	2078.7
12.5°	2054.0	2045.4	2055.0	2072.2	2073.3	2069.0	2065.8	2072.2	2089.4	2091.6	2088.3
15°	2042.2	2034.6	2046.5	2064.7	2064.7	2061.5	2061.5	2070.1	2093.7	2103.4	2108.8
17.5°	2025.0	2019.6	2033.6	2051.8	2052.9	2050.8	2051.8	2069.0	2100.2	2123.8	2138.8
20°	2003.5	2001.3	2016.4	2035.7	2038.9	2040.0	2045.4	2071.2	2114.1	2146.4	2161.4
22.5°	1977.7	1978.8	1996.0	2016.4	2020.7	2023.9	2034.6	2071.2	2124.9	2159.3	2165.7
25°	1948.7	1951.9	1970.2	1994.9	2000.3	2006.7	2025.0	2072.2	2128.1	2150.7	2139.9
27.5°	1917.5	1924.0	1947.6	1973.4	1979.8	1990.6	2014.2	2065.8	2113.1	2114.1	2074.4
30°	1885.3	1892.8	1920.8	1950.8	1961.6	1972.3	2001.3	2050.8	2076.5	2042.2	1972.3
32.5°	1848.8	1859.5	1887.5	1924.0	1936.9	1950.8	1979.8	2021.7	2012.1	1938.0	1838.0
35°	1802.6	1817.6	1849.9	1892.8	1904.7	1922.9	1943.3	1953.0	1910.0	1804.7	1691.9
37.5°	1745.7	1768.2	1805.8	1855.2	1868.1	1879.9	1885.3	1858.5	1772.5	1658.6	1541.6
40°	1680.1	1714.5	1755.3	1810.1	1823.0	1823.0	1803.7	1746.7	1638.2	1488.9	1358.9
42.5°	1600.6	1642.5	1694.1	1748.9	1761.8	1746.7	1700.5	1600.6	1477.1	1310.6	1173.1
45°	1504.0	1559.8	1617.8	1674.8	1681.2	1647.9	1565.2	1438.4	1285.9	1131.2	1000.1
47.5°	1389.0	1462.1	1525.4	1589.9	1581.3	1525.4	1414.8	1270.8	1109.7	963.6	858.3
50°	1260.1	1346.0	1416.9	1478.2	1459.9	1382.6	1252.6	1102.2	942.1	817.5	730.5
52.5°	1122.6	1221.4	1292.3	1341.7	1317.0	1224.6	1081.8	937.8	806.8	692.9	634.9
55°	979.7	1079.6	1152.7	1191.3	1159.1	1059.2	918.5	787.4	663.9	589.8	555.4
57.5°	841.1	934.6	1003.4	1034.5	993.7	893.8	763.8	653.1	564.0	501.7	484.5
60°	707.9	784.2	849.7	873.4	829.3	736.9	625.2	537.1	471.6	428.6	420.0
62.5°	584.4	646.7	698.3	716.5	673.6	601.6	504.9	439.4	393.2	371.7	360.9
65°	482.3	518.9	571.5	568.3	542.5	475.9	405.0	358.8	328.7	314.8	308.3
67.5°	379.2	412.5	445.8	450.1	417.9	371.7	325.5	292.2	276.1	268.6	265.3
70°	293.3	318.0	338.4	333.0	315.8	286.8	257.8	239.6	233.1	229.9	229.9
72.5°	227.7	240.6	250.3	243.9	233.1	218.1	204.1	196.6	197.7	199.8	202.0
75°	176.2	179.4	181.5	175.1	173.0	163.3	162.2	163.3	169.7	176.2	179.4
77.5°	135.4	131.1	127.8	121.4	122.5	121.4	126.8	135.4	145.0	154.7	163.3
80°	104.2	94.5	87.0	80.6	83.8	89.2	99.9	112.8	125.7	136.4	147.2
82.5°	80.6	66.6	55.9	49.4	55.9	64.5	78.4	94.5	109.6	121.4	133.2
85°	62.3	46.2	33.3	26.9	33.3	46.2	61.2	79.5	95.6	108.5	120.3
87.5°	48.3	33.3	18.3	10.7	18.3	32.2	49.4	66.6	82.7	97.8	109.6
90°	38.7	22.6	8.6	2.1	9.7	22.6	38.7	55.9	72.0	88.1	99.9
92.5°	31.2	16.1	4.3	0.0	5.4	17.2	32.2	48.3	64.5	79.5	91.3
95°	25.8	12.9	3.2	0.0	4.3	12.9	25.8	41.9	56.9	72.0	81.6
97.5°	21.5	9.7	2.1	0.0	2.1	10.7	21.5	35.5	50.5	64.5	74.1
100°	18.3	8.6	2.1	0.0	2.1	8.6	18.3	31.2	44.0	56.9	66.6
102.5°	15.0	6.4	1.1	1.1	1.1	6.4	16.1	26.9	38.7	50.5	60.2
105°	14.0	5.4	1.1	1.1	1.1	5.4	14.0	23.6	34.4	45.1	53.7
107.5°	11.8	4.3	1.1	1.1	1.1	4.3	11.8	20.4	31.2	40.8	48.3
110°	9.7	4.3	1.1	1.1	1.1	4.3	9.7	18.3	26.9	35.5	43.0



TEST NUMBER: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-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	23.6	32.2	38.7
115°	7.5	3.2	1.1	1.1	1.1	3.2	7.5	14.0	20.4	27.9	34.4
117.5°	6.4	3.2	1.1	1.1	1.1	2.1	6.4	11.8	18.3	24.7	31.2
120°	5.4	2.1	1.1	1.1	1.1	2.1	5.4	10.7	16.1	21.5	26.9
122.5°	5.4	2.1	1.1	1.1	1.1	2.1	4.3	8.6	14.0	18.3	23.6
125°	4.3	2.1	1.1	1.1	1.1	1.1	4.3	7.5	11.8	16.1	20.4
127.5°	4.3	2.1	1.1	1.1	1.1	1.1	3.2	6.4	9.7	14.0	18.3
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	9.7	12.9
135°	3.2	1.1	1.1	1.1	1.1	1.1	1.1	3.2	5.4	7.5	9.7
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: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8
2.5°	2090.5	2065.8	2078.7	2074.4	2078.7	2089.4	2088.3	2085.1	2087.3	2081.9	2076.5
5°	2086.2	2061.5	2074.4	2069.0	2074.4	2085.1	2083.0	2079.8	2083.0	2076.5	2071.2
7.5°	2080.8	2058.3	2073.3	2072.2	2081.9	2095.9	2096.9	2096.9	2104.5	2094.8	2090.5
10°	2080.8	2069.0	2089.4	2096.9	2121.7	2139.9	2142.1	2146.4	2159.3	2157.1	2146.4
12.5°	2103.4	2101.2	2131.3	2149.6	2172.1	2197.9	2211.9	2216.2	2224.8	2218.3	2214.0
15°	2132.4	2143.1	2176.4	2196.8	2221.6	2240.9	2244.1	2246.3	2252.7	2243.0	2235.5
17.5°	2171.1	2177.5	2204.4	2213.0	2229.1	2232.3	2228.0	2217.3	2217.3	2195.8	2189.3
20°	2189.3	2186.1	2196.8	2182.9	2176.4	2157.1	2138.8	2118.4	2117.4	2094.8	2092.6
22.5°	2173.2	2151.7	2129.2	2094.8	2079.8	2051.8	2027.1	2015.3	2007.8	1978.8	1971.3
25°	2116.3	2063.6	2030.3	1989.5	1953.0	1920.8	1897.1	1872.4	1848.8	1825.2	1814.4
27.5°	2017.4	1968.0	1914.3	1857.4	1806.9	1757.5	1717.7	1693.0	1670.5	1639.3	1623.2
30°	1896.1	1827.3	1768.2	1713.4	1630.7	1570.6	1537.3	1487.8	1470.7	1456.7	1426.6
32.5°	1753.2	1670.5	1589.9	1515.8	1430.9	1375.0	1331.0	1294.5	1283.7	1247.2	1238.6
35°	1595.3	1486.8	1395.5	1322.4	1261.2	1193.5	1157.0	1132.3	1110.8	1086.1	1081.8
37.5°	1409.4	1311.7	1208.5	1144.1	1095.7	1037.7	1009.8	992.6	982.9	964.7	961.5
40°	1222.5	1124.7	1053.8	989.4	959.3	928.2	907.7	900.2	895.9	889.5	883.0
42.5°	1052.8	966.8	916.3	873.4	860.5	845.4	840.1	844.4	840.1	837.9	836.8
45°	908.8	843.3	807.8	794.9	791.7	787.4	791.7	799.2	800.3	798.2	798.2
47.5°	777.8	746.6	731.6	733.7	739.1	742.3	749.8	759.5	761.6	756.3	758.4
50°	691.8	673.6	670.3	678.9	690.7	695.0	703.6	711.2	710.1	707.9	705.8
52.5°	611.3	605.9	614.5	623.1	636.0	638.1	641.3	644.6	643.5	639.2	637.0
55°	543.6	547.9	555.4	558.6	568.3	567.2	568.3	568.3	564.0	561.8	558.6
57.5°	482.3	483.4	487.7	488.8	494.2	492.0	490.9	488.8	482.3	481.3	478.0
60°	420.0	417.9	427.6	420.0	424.3	420.0	419.0	413.6	407.1	406.1	403.9
62.5°	360.9	356.7	363.1	359.9	362.0	357.7	355.6	349.1	343.8	342.7	341.6
65°	308.3	306.2	312.6	311.5	313.7	308.3	306.2	301.9	297.6	296.5	295.4
67.5°	264.3	269.6	272.9	272.9	275.0	273.9	268.6	267.5	266.4	262.1	262.1
70°	232.0	235.3	241.7	242.8	241.7	243.9	239.6	238.5	237.4	235.3	234.2
72.5°	206.3	210.6	217.0	218.1	217.0	217.0	214.9	213.8	213.8	210.6	210.6
75°	185.8	191.2	196.6	196.6	196.6	194.4	192.3	192.3	190.1	189.1	186.9
77.5°	168.7	175.1	179.4	178.3	177.3	175.1	175.1	171.9	168.7	168.7	166.5
80°	155.8	160.1	163.3	162.2	161.1	157.9	156.8	153.6	151.5	148.2	148.2
82.5°	141.8	147.2	149.3	148.2	146.1	142.9	141.8	139.7	137.5	136.4	134.3
85°	130.0	135.4	136.4	134.3	132.1	130.0	128.9	127.8	126.8	124.6	124.6
87.5°	118.2	123.5	123.5	122.5	120.3	119.2	118.2	117.1	116.0	114.9	113.9
90°	108.5	112.8	112.8	111.7	110.6	109.6	108.5	107.4	106.4	105.3	105.3
92.5°	98.8	103.1	103.1	102.1	101.0	99.9	99.9	98.8	97.8	96.7	95.6
95°	90.2	94.5	94.5	94.5	93.5	92.4	92.4	91.3	90.2	90.2	89.2
97.5°	81.6	85.9	85.9	85.9	84.9	83.8	83.8	82.7	82.7	82.7	81.6
100°	74.1	77.3	78.4	78.4	77.3	77.3	77.3	76.3	76.3	76.3	75.2
102.5°	66.6	69.8	72.0	72.0	72.0	70.9	70.9	70.9	70.9	70.9	69.8
105°	60.2	63.4	65.5	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
107.5°	54.8	58.0	60.2	61.2	62.3	62.3	63.4	63.4	63.4	63.4	63.4
110°	49.4	52.6	55.9	56.9	58.0	59.1	59.1	60.2	59.1	59.1	59.1

TEST NUMBER: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	44.0	48.3	50.5	52.6	53.7	54.8	55.9	55.9	55.9	55.9	55.9
115°	39.7	44.0	46.2	48.3	50.5	51.6	51.6	52.6	52.6	52.6	51.6
117.5°	35.5	39.7	41.9	44.0	45.1	47.3	48.3	48.3	48.3	48.3	47.3
120°	32.2	35.5	37.6	39.7	41.9	43.0	44.0	44.0	44.0	44.0	44.0
122.5°	27.9	31.2	34.4	36.5	37.6	38.7	39.7	39.7	39.7	39.7	39.7
125°	24.7	27.9	30.1	32.2	33.3	35.5	35.5	35.5	35.5	35.5	35.5
127.5°	21.5	24.7	26.9	29.0	30.1	31.2	32.2	32.2	32.2	32.2	32.2
130°	18.3	21.5	23.6	25.8	26.9	27.9	27.9	29.0	29.0	29.0	29.0
132.5°	16.1	18.3	20.4	22.6	23.6	24.7	24.7	25.8	25.8	25.8	25.8
135°	12.9	16.1	17.2	19.3	20.4	21.5	21.5	22.6	22.6	22.6	22.6
137.5°	10.7	12.9	15.0	17.2	18.3	18.3	19.3	19.3	20.4	20.4	20.4
140°	8.6	9.7	12.9	14.0	15.0	16.1	17.2	17.2	17.2	17.2	17.2
142.5°	6.4	8.6	9.7	11.8	12.9	14.0	15.0	15.0	15.0	15.0	15.0
145°	5.4	6.4	7.5	9.7	10.7	11.8	12.9	12.9	12.9	12.9	12.9
147.5°	4.3	5.4	6.4	7.5	8.6	9.7	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	9.7	9.7	9.7	9.7
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: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8
2.5°	2079.8	2084.1	2081.9	2078.7	2077.6	2083.0	2077.6	2052.9	2062.6	2063.6	2071.2
5°	2076.5	2079.8	2077.6	2075.5	2072.2	2078.7	2072.2	2046.5	2056.1	2057.2	2064.7
7.5°	2098.0	2099.1	2099.1	2093.7	2085.1	2088.3	2079.8	2050.8	2056.1	2056.1	2061.5
10°	2151.7	2153.9	2157.1	2143.1	2132.4	2123.8	2112.0	2076.5	2075.5	2066.9	2066.9
12.5°	2221.6	2216.2	2210.8	2204.4	2195.8	2185.0	2167.8	2125.9	2112.0	2098.0	2084.1
15°	2242.0	2239.8	2238.7	2235.5	2230.2	2226.9	2214.0	2172.1	2151.7	2134.5	2109.8
17.5°	2188.3	2192.6	2206.5	2207.6	2214.0	2226.9	2224.8	2195.8	2177.5	2170.0	2139.9
20°	2091.6	2092.6	2109.8	2117.4	2145.3	2166.8	2182.9	2179.7	2175.4	2184.0	2161.4
22.5°	1975.6	1983.1	2001.3	2013.2	2040.0	2064.7	2090.5	2104.5	2127.0	2162.5	2158.2
25°	1817.6	1827.3	1853.1	1872.4	1910.0	1947.6	1982.0	2006.7	2033.6	2101.2	2123.8
27.5°	1628.6	1643.6	1676.9	1696.2	1748.9	1787.6	1837.0	1885.3	1922.9	2000.3	2046.5
30°	1429.8	1442.7	1478.2	1505.0	1550.1	1602.8	1665.1	1733.8	1796.2	1874.6	1932.6
32.5°	1244.0	1258.0	1287.0	1310.6	1361.1	1405.1	1473.9	1558.7	1616.8	1725.3	1802.6
35°	1081.8	1094.7	1115.1	1135.5	1177.4	1222.5	1281.6	1364.3	1438.4	1551.2	1649.0
37.5°	967.9	970.1	981.9	993.7	1024.8	1059.2	1105.4	1178.5	1247.2	1368.6	1476.0
40°	886.3	886.3	892.7	895.9	909.9	930.3	959.3	1016.2	1073.2	1165.6	1296.6
42.5°	835.8	833.6	833.6	834.7	833.6	843.3	860.5	887.3	937.8	1014.1	1116.1
45°	798.2	793.9	790.7	783.1	778.8	778.8	779.9	789.6	818.6	868.0	950.7
47.5°	756.3	755.2	749.8	741.2	733.7	728.3	719.8	716.5	725.1	753.1	808.9
50°	707.9	702.6	697.2	690.7	682.2	676.8	660.7	661.7	654.2	667.1	696.1
52.5°	637.0	632.7	630.6	625.2	622.0	619.8	607.0	594.1	590.8	593.0	603.7
55°	558.6	560.8	552.2	556.5	555.4	545.7	540.3	530.7	527.5	526.4	531.8
57.5°	477.0	479.1	473.7	478.0	478.0	472.7	469.4	469.4	461.9	455.5	463.0
60°	402.8	398.5	401.8	407.1	407.1	403.9	401.8	401.8	396.4	394.3	399.6
62.5°	342.7	338.4	341.6	347.0	348.1	345.9	343.8	343.8	337.3	337.3	341.6
65°	296.5	297.6	296.5	300.8	300.8	301.9	299.7	297.6	290.0	293.3	292.2
67.5°	263.2	262.1	262.1	266.4	265.3	267.5	265.3	262.1	256.7	252.4	251.4
70°	235.3	234.2	234.2	236.3	237.4	237.4	236.3	234.2	226.7	222.4	219.1
72.5°	210.6	209.5	210.6	211.6	212.7	213.8	212.7	210.6	204.1	198.7	193.4
75°	188.0	186.9	190.1	190.1	191.2	191.2	192.3	191.2	185.8	179.4	173.0
77.5°	165.4	166.5	169.7	170.8	173.0	174.0	175.1	175.1	169.7	164.4	155.8
80°	147.2	149.3	151.5	152.5	154.7	157.9	159.0	160.1	155.8	150.4	140.7
82.5°	134.3	135.4	137.5	138.6	141.8	142.9	144.0	146.1	144.0	138.6	127.8
85°	123.5	124.6	126.8	126.8	128.9	131.1	132.1	133.2	132.1	126.8	116.0
87.5°	113.9	114.9	116.0	117.1	118.2	119.2	120.3	121.4	120.3	114.9	105.3
90°	105.3	105.3	106.4	106.4	107.4	108.5	110.6	110.6	109.6	105.3	95.6
92.5°	95.6	96.7	96.7	97.8	98.8	99.9	101.0	101.0	99.9	95.6	87.0
95°	89.2	89.2	90.2	90.2	91.3	91.3	92.4	92.4	91.3	87.0	78.4
97.5°	81.6	81.6	81.6	81.6	82.7	82.7	83.8	83.8	82.7	78.4	70.9
100°	75.2	75.2	75.2	75.2	75.2	76.3	76.3	76.3	75.2	70.9	63.4
102.5°	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	67.7	64.5	56.9
105°	66.6	66.6	66.6	65.5	65.5	65.5	64.5	64.5	61.2	58.0	51.6
107.5°	62.3	62.3	62.3	61.2	61.2	60.2	59.1	59.1	55.9	52.6	46.2
110°	59.1	59.1	59.1	58.0	56.9	55.9	54.8	53.7	50.5	46.2	40.8

TEST NUMBER: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	55.9	55.9	54.8	54.8	53.7	52.6	50.5	49.4	46.2	41.9	36.5
115°	51.6	51.6	51.6	50.5	49.4	48.3	47.3	45.1	41.9	37.6	32.2
117.5°	47.3	47.3	47.3	46.2	45.1	44.0	43.0	40.8	37.6	33.3	29.0
120°	43.0	43.0	43.0	41.9	40.8	39.7	38.7	36.5	33.3	30.1	24.7
122.5°	39.7	39.7	38.7	37.6	36.5	35.5	34.4	32.2	30.1	25.8	21.5
125°	35.5	35.5	34.4	34.4	33.3	32.2	31.2	29.0	25.8	22.6	19.3
127.5°	32.2	31.2	31.2	31.2	30.1	29.0	26.9	25.8	22.6	19.3	16.1
130°	27.9	27.9	27.9	26.9	26.9	25.8	23.6	21.5	19.3	17.2	14.0
132.5°	24.7	24.7	24.7	24.7	23.6	22.6	20.4	19.3	17.2	14.0	11.8
135°	22.6	22.6	21.5	21.5	20.4	19.3	18.3	16.1	14.0	11.8	9.7
137.5°	19.3	19.3	19.3	18.3	18.3	17.2	15.0	14.0	12.9	10.7	8.6
140°	17.2	17.2	16.1	16.1	15.0	15.0	14.0	11.8	10.7	8.6	7.5
142.5°	15.0	15.0	14.0	14.0	12.9	12.9	11.8	10.7	8.6	7.5	5.4
145°	12.9	12.9	11.8	11.8	11.8	10.7	9.7	8.6	7.5	6.4	5.4
147.5°	10.7	10.7	10.7	9.7	9.7	8.6	8.6	7.5	6.4	5.4	4.3
150°	9.7	9.7	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: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8	2079.8
2.5°	2067.9	2066.9	2076.5	2075.5	2062.6	2081.9	2094.8
5°	2062.6	2061.5	2070.1	2072.2	2058.3	2078.7	2092.6
7.5°	2058.3	2057.2	2066.9	2070.1	2056.1	2074.4	2089.4
10°	2059.3	2054.0	2062.6	2064.7	2051.8	2071.2	2084.1
12.5°	2066.9	2054.0	2057.2	2057.2	2045.4	2062.6	2076.5
15°	2085.1	2058.3	2054.0	2050.8	2035.7	2051.8	2065.8
17.5°	2105.5	2069.0	2054.0	2043.2	2025.0	2038.9	2054.0
20°	2125.9	2080.8	2056.1	2038.9	2014.2	2027.1	2037.9
22.5°	2135.6	2091.6	2058.3	2032.5	2001.3	2007.8	2019.6
25°	2122.7	2087.3	2054.0	2022.8	1985.2	1986.3	1996.0
27.5°	2075.5	2065.8	2044.3	2013.2	1972.3	1967.0	1974.5
30°	1994.9	2021.7	2022.8	2000.3	1957.3	1946.5	1949.8
32.5°	1882.1	1942.3	1977.7	1973.4	1935.8	1920.8	1922.9
35°	1752.1	1827.3	1904.7	1930.4	1903.6	1891.8	1887.5
37.5°	1596.3	1697.3	1800.4	1863.8	1859.5	1852.0	1847.7
40°	1424.5	1545.9	1668.3	1769.3	1800.4	1800.4	1802.6
42.5°	1240.8	1382.6	1516.8	1644.7	1717.7	1733.8	1740.3
45°	1063.5	1206.4	1352.5	1499.7	1597.4	1647.9	1666.2
47.5°	902.4	1046.3	1184.9	1346.0	1476.0	1541.6	1570.6
50°	764.9	872.3	1018.4	1178.5	1320.3	1400.8	1457.8
52.5°	651.0	734.8	862.6	1011.9	1154.8	1265.5	1318.1
55°	555.4	612.3	720.8	849.7	986.2	1101.1	1162.3
57.5°	474.8	519.9	594.1	701.5	816.4	930.3	995.8
60°	403.9	435.1	485.6	570.4	668.2	765.9	829.3
62.5°	342.7	363.1	396.4	458.7	535.0	611.3	670.3
65°	295.4	304.0	322.3	360.9	419.0	477.0	527.5
67.5°	249.2	254.6	268.6	292.2	321.2	363.1	396.4
70°	214.9	214.9	215.9	229.9	244.9	271.8	295.4
72.5°	186.9	183.7	177.3	180.5	183.7	198.7	213.8
75°	164.4	156.8	146.1	141.8	139.7	141.8	150.4
77.5°	145.0	134.3	121.4	110.6	102.1	98.8	106.4
80°	128.9	116.0	101.0	87.0	73.0	65.5	68.8
82.5°	116.0	99.9	83.8	67.7	51.6	40.8	40.8
85°	102.1	87.0	69.8	52.6	36.5	22.6	20.4
87.5°	92.4	76.3	58.0	41.9	25.8	11.8	6.4
90°	82.7	66.6	49.4	33.3	18.3	5.4	0.0
92.5°	74.1	59.1	43.0	26.9	12.9	3.2	0.0
95°	66.6	52.6	36.5	22.6	10.7	2.1	1.1
97.5°	59.1	46.2	32.2	18.3	7.5	2.1	1.1
100°	53.7	40.8	27.9	15.0	6.4	1.1	1.1
102.5°	47.3	36.5	23.6	12.9	5.4	1.1	1.1
105°	41.9	32.2	20.4	10.7	4.3	1.1	1.1
107.5°	37.6	27.9	18.3	9.7	4.3	1.1	1.1
110°	33.3	24.7	16.1	8.6	3.2	1.1	1.1



TEST NUMBER: P1214170

CATALOG NUMBER: 4SNLED-LD5-55HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	30.1	21.5	14.0	7.5	2.1	1.1	1.1
115°	25.8	19.3	11.8	6.4	2.1	1.1	1.1
117.5°	22.6	16.1	10.7	5.4	2.1	1.1	1.1
120°	19.3	14.0	8.6	4.3	1.1	1.1	1.1
122.5°	17.2	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°	12.9	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)