

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-LD5-61SL-LN-UNV-L935-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-LD5-61SL-LN-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

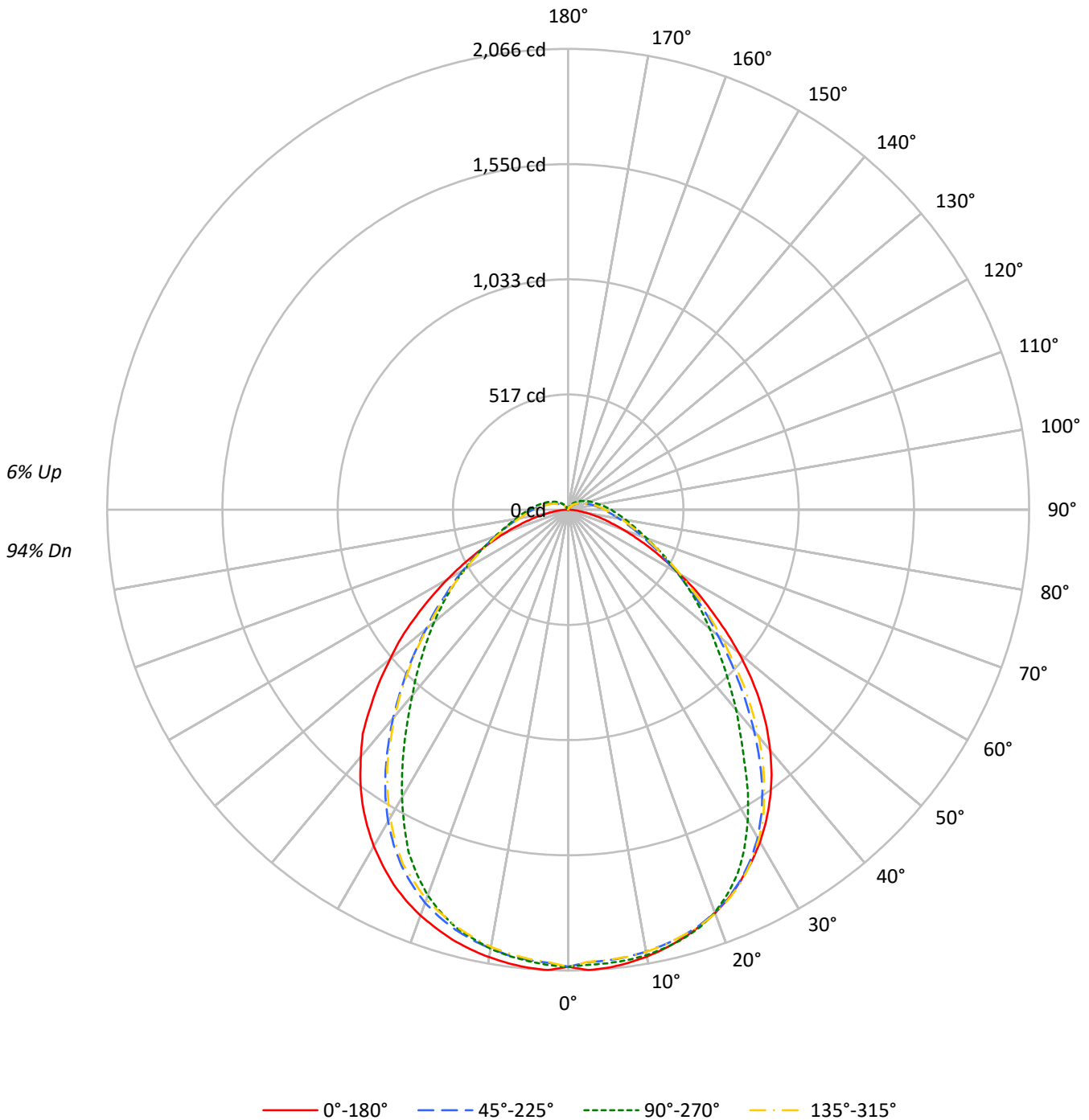
Lumens per Lamp: N/A
Luminaire Lumens: 5185.0 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 52
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



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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°	16556	16556	16556	16556
5°	16675	16029	16675	15958
10°	16601	15603	16627	15386
15°	16494	15137	16568	14743
20°	16366	14538	16463	13924
25°	16104	13648	16282	12845
30°	15762	12342	15970	11425
35°	15231	10740	15525	10001
40°	14469	9393	14852	8715
45°	13463	8165	13900	7698
50°	12089	7176	12621	6813
55°	10456	6336	11217	6016
60°	8795	5563	9590	5243
65°	7209	4919	7937	4561
70°	5738	4365	6425	4037
75°	4507	4030	5072	3708
80°	3253	3889	3831	3553
85°	2002	3910	2692	3594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.2	3.7
10°-20°	557.0	10.7
20°-30°	825.5	15.9
30°-40°	917.0	17.7
40°-50°	831.3	16.0
50°-60°	644.2	12.4
60°-70°	437.4	8.4
70°-80°	278.3	5.4
80°-90°	177.9	3.4
90°-100°	120.0	2.3
100°-110°	82.2	1.6
110°-120°	54.8	1.1
120°-130°	34.1	0.7
130°-140°	18.9	0.4
140°-150°	8.9	0.2
150°-160°	3.3	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1576.7	30.4
0°-40°	2493.7	48.1
0°-60°	3969.2	76.6
0°-90°	4862.8	93.8
90°-120°	256.9	5.0
90°-150°	318.7	6.1
90°-180°	322.0	6.2
0°-180°	5185.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2049	2049	2049	2049	2049	
5°	2061	2041	2061	2032	2061	196
15°	1988	1991	1997	1940	1988	561
25°	1832	1799	1853	1693	1832	844
35°	1578	1375	1608	1280	1578	984
45°	1215	983	1254	926	1215	933
55°	775	691	832	656	775	698
65°	402	464	443	430	402	403
75°	161	310	181	285	161	174
85°	29	223	39	205	29	35
90°	0	193	2	176	0	2
95°	1	164	0	153	1	1
105°	1	121	0	114	1	1
115°	1	91	0	84	1	1
125°	1	68	1	60	1	1
135°	1	47	1	38	1	1
145°	1	30	1	21	1	1
155°	1	17	1	8	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-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8
2.5°	2065.7	2063.5	2061.2	2057.8	2061.2	2070.2	2064.6	2052.2	2049.9	2029.7	2038.7
5°	2061.2	2057.8	2055.6	2052.2	2056.7	2068.0	2062.3	2051.1	2047.7	2028.5	2038.7
7.5°	2049.9	2047.7	2044.3	2044.3	2048.8	2060.1	2055.6	2043.2	2040.9	2021.8	2033.0
10°	2034.2	2033.0	2030.8	2030.8	2035.3	2048.8	2043.2	2031.9	2029.7	2011.6	2024.0
12.5°	2013.9	2015.0	2011.6	2011.6	2018.4	2031.9	2027.4	2015.0	2012.7	1997.0	2009.4
15°	1988.0	1989.1	1986.8	1988.0	1994.7	2010.5	2004.9	1993.6	1991.3	1978.9	1989.1
17.5°	1958.7	1959.8	1959.8	1958.7	1966.5	1982.3	1977.8	1967.7	1964.3	1954.1	1966.5
20°	1924.8	1924.8	1924.8	1924.8	1933.9	1949.6	1944.0	1936.1	1929.4	1921.5	1931.6
22.5°	1883.1	1882.0	1883.1	1886.5	1895.5	1907.9	1904.6	1895.5	1885.4	1880.9	1888.8
25°	1832.4	1835.8	1836.9	1840.3	1851.6	1861.7	1858.4	1849.3	1833.6	1830.2	1832.4
27.5°	1779.5	1781.7	1785.1	1784.0	1799.8	1809.9	1803.1	1795.2	1772.7	1769.3	1767.1
30°	1719.7	1723.1	1725.4	1724.2	1736.6	1747.9	1741.2	1731.0	1700.6	1698.3	1680.3
32.5°	1652.1	1655.5	1657.8	1657.8	1675.8	1680.3	1667.9	1653.2	1620.6	1612.7	1596.9
35°	1577.7	1581.1	1582.2	1582.2	1600.3	1599.2	1583.4	1563.1	1527.0	1516.9	1489.8
37.5°	1497.7	1500.0	1501.1	1507.9	1515.8	1509.0	1488.7	1462.8	1435.7	1407.6	1378.3
40°	1407.6	1411.0	1413.2	1417.7	1425.6	1417.7	1388.4	1356.9	1327.6	1296.0	1266.7
42.5°	1315.2	1325.3	1323.0	1321.9	1326.4	1305.0	1282.5	1246.4	1217.1	1184.4	1155.1
45°	1214.9	1213.7	1219.4	1221.6	1220.5	1202.5	1170.9	1138.2	1108.9	1075.1	1050.3
47.5°	1108.9	1107.8	1112.3	1114.6	1107.8	1088.6	1063.8	1026.7	1001.9	972.6	953.4
50°	997.4	997.4	1004.1	997.4	994.0	974.8	954.5	917.3	898.2	872.3	861.0
52.5°	885.8	895.9	889.2	886.9	883.5	864.4	848.6	818.2	802.4	791.1	777.6
55°	775.3	786.6	782.1	778.7	777.6	761.8	747.2	724.6	714.5	706.6	698.7
57.5°	681.8	680.7	678.4	675.0	676.2	663.8	649.1	636.7	632.2	628.8	631.1
60°	573.6	582.6	579.3	580.4	581.5	579.3	566.9	559.0	560.1	561.2	564.6
62.5°	484.6	492.5	498.1	493.6	495.9	499.2	492.5	490.2	494.7	499.2	503.8
65°	402.3	410.2	415.8	414.7	421.5	428.2	427.1	429.4	439.5	445.1	450.8
67.5°	327.9	335.8	343.7	344.8	355.0	365.1	369.6	377.5	388.8	396.7	403.5
70°	263.7	270.5	279.5	285.1	298.6	312.2	320.1	335.8	342.6	353.9	358.4
72.5°	206.2	211.9	224.3	237.8	249.1	266.0	281.7	295.3	305.4	317.8	323.4
75°	161.2	163.4	176.9	192.7	208.5	227.6	244.5	259.2	272.7	285.1	294.1
77.5°	118.3	121.7	134.1	155.5	173.6	193.8	213.0	228.8	243.4	255.8	268.2
80°	82.3	89.0	102.6	124.0	144.3	166.8	184.8	202.9	218.6	231.0	243.4
82.5°	53.0	58.6	77.8	99.2	120.6	143.1	162.3	180.3	197.2	210.7	222.0
85°	29.3	37.2	56.3	78.9	100.3	122.8	143.1	161.2	178.1	190.5	201.7
87.5°	11.3	22.5	40.6	62.0	83.4	104.8	126.2	143.1	160.0	173.6	183.7
90°	0.0	13.5	30.4	51.8	73.3	94.7	114.9	133.0	148.8	161.2	172.4
92.5°	1.1	9.0	23.7	41.7	62.0	82.3	101.4	119.5	135.2	147.6	157.8
95°	1.1	6.8	19.2	36.1	54.1	73.3	91.3	108.2	122.8	135.2	145.4
97.5°	1.1	4.5	15.8	31.6	47.3	66.5	83.4	99.2	112.7	125.1	133.0
100°	1.1	4.5	13.5	27.0	42.8	59.7	75.5	91.3	103.7	113.8	122.8
102.5°	1.1	3.4	11.3	23.7	38.3	53.0	68.7	83.4	94.7	104.8	113.8
105°	1.1	3.4	10.1	20.3	33.8	48.5	62.0	75.5	87.9	96.9	104.8
107.5°	1.1	2.3	9.0	16.9	29.3	44.0	57.5	68.7	80.0	89.0	96.9
110°	1.1	2.3	7.9	15.8	25.9	39.4	51.8	63.1	73.3	82.3	89.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.1	2.3	6.8	14.7	23.7	34.9	47.3	57.5	67.6	75.5	82.3
115°	1.1	2.3	6.8	13.5	21.4	30.4	41.7	53.0	60.9	69.9	75.5
117.5°	1.1	2.3	5.6	11.3	20.3	28.2	38.3	47.3	56.3	64.2	69.9
120°	1.1	2.3	5.6	10.1	18.0	25.9	33.8	42.8	51.8	57.5	63.1
122.5°	1.1	2.3	4.5	10.1	15.8	23.7	30.4	38.3	46.2	53.0	58.6
125°	1.1	2.3	4.5	9.0	14.7	21.4	28.2	33.8	41.7	47.3	53.0
127.5°	1.1	2.3	4.5	7.9	13.5	19.2	25.9	31.6	37.2	42.8	47.3
130°	1.1	2.3	3.4	6.8	12.4	16.9	22.5	29.3	33.8	38.3	42.8
132.5°	1.1	2.3	3.4	6.8	10.1	14.7	20.3	25.9	30.4	34.9	38.3
135°	1.1	2.3	3.4	5.6	9.0	13.5	16.9	22.5	27.0	31.6	34.9
137.5°	1.1	2.3	3.4	5.6	7.9	11.3	14.7	19.2	23.7	27.0	31.6
140°	1.1	2.3	3.4	4.5	6.8	10.1	13.5	15.8	20.3	23.7	27.0
142.5°	1.1	2.3	3.4	4.5	6.8	9.0	11.3	13.5	16.9	20.3	23.7
145°	1.1	2.3	3.4	4.5	5.6	7.9	10.1	12.4	13.5	16.9	19.2
147.5°	1.1	2.3	3.4	4.5	4.5	6.8	9.0	10.1	12.4	13.5	15.8
150°	1.1	2.3	3.4	3.4	4.5	5.6	7.9	9.0	10.1	12.4	13.5
152.5°	1.1	2.3	3.4	3.4	4.5	5.6	6.8	7.9	9.0	10.1	11.3
155°	1.1	2.3	3.4	3.4	3.4	4.5	5.6	6.8	7.9	9.0	10.1
157.5°	2.3	2.3	2.3	3.4	3.4	4.5	4.5	5.6	6.8	6.8	7.9
160°	2.3	2.3	2.3	3.4	3.4	3.4	4.5	4.5	5.6	5.6	6.8
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°	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8
2.5°	2036.4	2039.8	2049.9	2049.9	2047.7	2045.4	2045.4	2042.0	2044.3	2048.8	2046.6
5°	2036.4	2039.8	2049.9	2049.9	2047.7	2045.4	2044.3	2040.9	2044.3	2048.8	2046.6
7.5°	2029.7	2034.2	2044.3	2044.3	2042.0	2040.9	2038.7	2036.4	2039.8	2044.3	2042.0
10°	2020.6	2025.1	2035.3	2035.3	2033.0	2033.0	2029.7	2027.4	2031.9	2035.3	2034.2
12.5°	2007.1	2012.7	2021.8	2020.6	2018.4	2019.5	2016.1	2011.6	2016.1	2019.5	2020.6
15°	1988.0	1994.7	2003.7	2001.5	1998.1	2000.4	1994.7	1991.3	1994.7	2001.5	2000.4
17.5°	1963.2	1967.7	1974.4	1974.4	1971.1	1968.8	1966.5	1963.2	1965.4	1969.9	1971.1
20°	1928.2	1933.9	1937.2	1933.9	1932.7	1929.4	1924.8	1921.5	1926.0	1932.7	1933.9
22.5°	1882.0	1883.1	1891.0	1883.1	1877.5	1876.4	1871.9	1865.1	1871.9	1877.5	1878.6
25°	1824.5	1830.2	1826.8	1813.3	1813.3	1804.3	1802.0	1798.6	1799.8	1809.9	1814.4
27.5°	1751.3	1753.5	1744.5	1733.3	1723.1	1717.5	1709.6	1710.7	1710.7	1724.2	1728.8
30°	1671.3	1658.9	1651.0	1633.0	1625.1	1611.6	1609.3	1609.3	1607.0	1613.8	1634.1
32.5°	1575.5	1558.6	1546.2	1529.3	1515.8	1502.2	1495.5	1498.9	1497.7	1514.6	1521.4
35°	1470.7	1460.5	1434.6	1413.2	1405.3	1385.0	1385.0	1374.9	1381.7	1400.8	1408.7
37.5°	1360.2	1344.5	1323.0	1299.4	1293.7	1278.0	1272.3	1266.7	1281.4	1284.7	1292.6
40°	1247.5	1232.9	1212.6	1190.1	1190.1	1170.9	1170.9	1170.9	1172.0	1178.8	1193.4
42.5°	1140.5	1124.7	1106.7	1090.9	1088.6	1074.0	1074.0	1072.9	1075.1	1080.8	1094.3
45°	1036.8	1024.4	1005.2	997.4	998.5	982.7	986.1	982.7	987.2	992.9	997.4
47.5°	941.0	933.1	925.2	914.0	910.6	909.5	903.8	899.3	907.2	907.2	914.0
50°	852.0	847.5	843.0	836.2	837.3	832.8	826.1	826.1	831.7	832.8	837.3
52.5°	774.2	768.6	763.0	764.1	765.2	763.0	759.6	756.2	759.6	761.8	767.5
55°	696.5	692.0	697.6	695.3	697.6	695.3	693.1	690.8	696.5	693.1	698.7
57.5°	626.6	631.1	633.4	628.8	632.2	630.0	631.1	627.7	632.2	634.5	633.4
60°	562.4	569.1	565.7	566.9	571.4	569.1	564.6	568.0	572.5	573.6	572.5
62.5°	503.8	511.6	515.0	512.8	513.9	511.6	515.0	510.5	516.1	518.4	515.0
65°	450.8	459.8	462.1	462.1	462.1	459.8	463.2	464.3	466.6	466.6	464.3
67.5°	405.7	413.6	415.8	418.1	415.8	413.6	413.6	414.7	419.2	421.5	419.2
70°	365.1	373.0	374.2	374.2	375.3	377.5	373.0	375.3	378.7	379.8	378.7
72.5°	330.2	338.1	340.3	339.2	340.3	341.5	341.5	339.2	342.6	344.8	344.8
75°	302.0	306.5	308.8	308.8	309.9	311.0	311.0	309.9	312.2	313.3	314.4
77.5°	276.1	279.5	282.9	282.9	284.0	282.9	285.1	285.1	286.2	287.4	288.5
80°	250.2	254.7	256.9	258.1	260.3	261.5	261.5	261.5	262.6	263.7	263.7
82.5°	229.9	233.3	236.7	240.0	240.0	241.2	241.2	241.2	242.3	242.3	243.4
85°	209.6	214.1	217.5	219.8	220.9	222.0	222.0	223.1	223.1	223.1	224.3
87.5°	191.6	197.2	199.5	201.7	202.9	205.1	205.1	205.1	206.2	206.2	206.2
90°	179.2	184.8	187.1	189.3	190.5	191.6	191.6	192.7	192.7	193.8	193.8
92.5°	164.5	170.2	174.7	174.7	175.8	178.1	176.9	176.9	178.1	179.2	179.2
95°	153.3	157.8	161.2	162.3	163.4	163.4	163.4	164.5	163.4	164.5	164.5
97.5°	139.7	144.3	147.6	149.9	151.0	151.0	151.0	152.1	151.0	152.1	152.1
100°	128.5	133.0	136.4	137.5	139.7	139.7	139.7	139.7	139.7	139.7	140.9
102.5°	119.5	124.0	126.2	127.3	128.5	129.6	129.6	129.6	129.6	130.7	130.7
105°	110.4	114.9	117.2	118.3	119.5	120.6	120.6	120.6	121.7	121.7	120.6
107.5°	102.6	105.9	108.2	110.4	111.6	111.6	112.7	112.7	112.7	112.7	112.7
110°	94.7	98.0	101.4	103.7	103.7	104.8	104.8	105.9	105.9	104.8	105.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	86.8	91.3	93.5	95.8	96.9	98.0	98.0	98.0	98.0	98.0	98.0
115°	80.0	84.5	86.8	89.0	90.2	91.3	91.3	91.3	91.3	91.3	91.3
117.5°	74.4	78.9	81.1	82.3	83.4	84.5	85.6	85.6	85.6	85.6	84.5
120°	68.7	72.1	74.4	76.6	77.8	78.9	78.9	78.9	78.9	78.9	78.9
122.5°	63.1	66.5	68.7	71.0	72.1	73.3	73.3	73.3	73.3	73.3	73.3
125°	57.5	60.9	63.1	65.4	66.5	67.6	67.6	67.6	67.6	67.6	67.6
127.5°	51.8	55.2	58.6	59.7	60.9	62.0	62.0	62.0	63.1	62.0	62.0
130°	46.2	49.6	53.0	54.1	55.2	56.3	57.5	57.5	57.5	57.5	56.3
132.5°	41.7	45.1	47.3	48.5	50.7	50.7	51.8	51.8	51.8	51.8	50.7
135°	38.3	40.6	42.8	44.0	46.2	46.2	46.2	47.3	47.3	46.2	45.1
137.5°	33.8	36.1	38.3	39.4	40.6	41.7	41.7	42.8	41.7	41.7	41.7
140°	31.6	32.7	34.9	36.1	37.2	37.2	37.2	38.3	38.3	37.2	37.2
142.5°	27.0	29.3	31.6	32.7	33.8	33.8	33.8	33.8	33.8	33.8	33.8
145°	22.5	25.9	27.0	29.3	29.3	30.4	30.4	30.4	30.4	30.4	29.3
147.5°	19.2	21.4	24.8	25.9	25.9	27.0	27.0	27.0	27.0	27.0	25.9
150°	14.7	16.9	20.3	22.5	22.5	23.7	23.7	23.7	23.7	22.5	22.5
152.5°	12.4	14.7	15.8	18.0	19.2	19.2	19.2	20.3	19.2	19.2	19.2
155°	11.3	12.4	13.5	14.7	15.8	16.9	16.9	16.9	16.9	15.8	15.8
157.5°	9.0	10.1	11.3	12.4	13.5	14.7	14.7	14.7	14.7	14.7	13.5
160°	6.8	7.9	9.0	9.0	10.1	11.3	12.4	11.3	11.3	11.3	11.3
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-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8
2.5°	2044.3	2043.2	2046.6	2040.9	2024.0	2028.5	2026.3	2036.4	2038.7	2040.9	2051.1
5°	2044.3	2043.2	2045.4	2040.9	2022.9	2026.3	2024.0	2034.2	2036.4	2037.5	2047.7
7.5°	2039.8	2038.7	2042.0	2036.4	2017.3	2021.8	2018.4	2028.5	2029.7	2030.8	2039.8
10°	2030.8	2029.7	2031.9	2027.4	2008.2	2012.7	2008.2	2018.4	2018.4	2020.6	2027.4
12.5°	2017.3	2015.0	2019.5	2013.9	1992.5	1998.1	1995.8	2002.6	2003.7	2004.9	2011.6
15°	1998.1	1995.8	1999.2	1995.8	1976.7	1977.8	1974.4	1984.6	1985.7	1983.4	1990.2
17.5°	1969.9	1967.7	1974.4	1972.2	1953.0	1957.5	1956.4	1958.7	1962.0	1956.4	1965.4
20°	1935.0	1937.2	1939.5	1940.6	1926.0	1926.0	1924.8	1929.4	1932.7	1928.2	1935.0
22.5°	1883.1	1888.8	1895.5	1897.8	1887.7	1886.5	1893.3	1891.0	1894.4	1892.2	1896.7
25°	1817.8	1829.1	1835.8	1842.6	1836.9	1839.2	1849.3	1851.6	1851.6	1850.5	1855.0
27.5°	1736.6	1751.3	1763.7	1778.3	1772.7	1777.2	1794.1	1796.4	1800.9	1796.4	1805.4
30°	1639.7	1653.2	1676.9	1698.3	1700.6	1707.3	1731.0	1733.3	1745.7	1741.2	1744.5
32.5°	1542.8	1549.6	1576.6	1598.0	1611.6	1628.5	1654.4	1658.9	1675.8	1679.2	1679.2
35°	1421.1	1440.3	1465.0	1495.5	1512.4	1530.4	1565.3	1572.1	1596.9	1604.8	1613.8
37.5°	1318.5	1336.6	1352.4	1383.9	1414.3	1434.6	1462.8	1479.7	1505.6	1520.3	1531.5
40°	1209.2	1223.9	1240.8	1272.3	1298.3	1328.7	1356.9	1377.1	1409.8	1426.7	1441.4
42.5°	1105.5	1116.8	1134.8	1157.4	1184.4	1218.2	1245.3	1269.0	1303.9	1327.6	1344.5
45°	1013.1	1019.9	1035.7	1052.6	1076.2	1111.2	1137.1	1167.5	1195.7	1220.5	1240.8
47.5°	926.4	935.4	943.3	954.5	975.9	997.4	1027.8	1057.1	1085.3	1112.3	1132.6
50°	846.3	846.3	858.7	866.6	881.3	900.4	924.1	944.4	979.3	998.5	1024.4
52.5°	768.6	773.1	779.9	784.4	795.6	808.0	827.2	844.1	873.4	891.4	916.2
55°	699.8	704.3	707.7	710.0	716.7	731.4	738.2	751.7	772.0	786.6	808.0
57.5°	634.5	636.7	640.1	641.2	642.4	651.4	657.0	660.4	680.7	695.3	713.4
60°	574.7	574.7	578.1	577.0	575.9	580.4	579.3	582.6	595.0	604.0	611.9
62.5°	518.4	518.4	519.5	517.3	516.1	516.1	511.6	515.0	518.4	519.5	525.2
65°	466.6	472.2	467.7	468.8	462.1	459.8	457.5	450.8	449.7	445.1	447.4
67.5°	420.4	424.9	420.4	420.4	414.7	410.2	404.6	393.3	389.9	380.9	378.7
70°	383.2	379.8	382.0	378.7	371.9	366.3	358.4	349.4	338.1	326.8	318.9
72.5°	347.1	347.1	344.8	341.5	338.1	326.8	317.8	307.7	294.1	279.5	268.2
75°	312.2	313.3	313.3	309.9	304.3	294.1	284.0	269.3	254.7	237.8	223.1
77.5°	287.4	287.4	287.4	281.7	276.1	267.1	254.7	238.9	223.1	202.9	185.9
80°	263.7	262.6	262.6	255.8	250.2	240.0	227.6	211.9	195.0	173.6	154.4
82.5°	244.5	243.4	241.2	235.5	227.6	217.5	205.1	188.2	170.2	151.0	127.3
85°	224.3	223.1	220.9	215.2	207.4	198.3	184.8	167.9	149.9	128.5	105.9
87.5°	206.2	205.1	201.7	198.3	189.3	179.2	165.7	149.9	130.7	110.4	87.9
90°	193.8	191.6	189.3	184.8	176.9	165.7	152.1	135.2	116.1	95.8	73.3
92.5°	179.2	178.1	174.7	170.2	163.4	152.1	138.6	122.8	103.7	84.5	63.1
95°	164.5	163.4	161.2	156.6	149.9	139.7	127.3	111.6	93.5	74.4	55.2
97.5°	151.0	151.0	147.6	144.3	136.4	128.5	116.1	101.4	84.5	67.6	49.6
100°	139.7	139.7	136.4	131.9	126.2	118.3	105.9	92.4	76.6	60.9	42.8
102.5°	129.6	128.5	126.2	121.7	116.1	108.2	96.9	84.5	69.9	54.1	38.3
105°	120.6	119.5	117.2	112.7	108.2	99.2	90.2	77.8	63.1	48.5	33.8
107.5°	111.6	110.4	109.3	104.8	99.2	91.3	82.3	69.9	57.5	44.0	30.4
110°	103.7	102.6	100.3	95.8	90.2	83.4	74.4	64.2	51.8	39.4	27.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	96.9	95.8	93.5	89.0	84.5	76.6	68.7	57.5	47.3	36.1	23.7
115°	90.2	89.0	86.8	82.3	76.6	69.9	62.0	53.0	41.7	31.6	21.4
117.5°	83.4	82.3	80.0	76.6	71.0	64.2	56.3	47.3	37.2	29.3	19.2
120°	77.8	75.5	73.3	69.9	64.2	58.6	50.7	42.8	33.8	25.9	16.9
122.5°	72.1	69.9	67.6	64.2	58.6	53.0	45.1	38.3	31.6	23.7	15.8
125°	65.4	64.2	62.0	58.6	53.0	47.3	41.7	34.9	28.2	21.4	13.5
127.5°	59.7	58.6	56.3	51.8	47.3	42.8	37.2	31.6	24.8	18.0	12.4
130°	55.2	53.0	50.7	47.3	44.0	39.4	33.8	28.2	22.5	15.8	11.3
132.5°	49.6	47.3	45.1	42.8	39.4	34.9	30.4	24.8	20.3	14.7	10.1
135°	45.1	42.8	40.6	38.3	34.9	31.6	27.0	22.5	18.0	13.5	9.0
137.5°	39.4	38.3	37.2	34.9	31.6	28.2	24.8	19.2	15.8	12.4	7.9
140°	36.1	34.9	33.8	30.4	28.2	24.8	21.4	16.9	13.5	10.1	6.8
142.5°	32.7	31.6	29.3	27.0	24.8	22.5	18.0	15.8	12.4	9.0	6.8
145°	28.2	27.0	25.9	23.7	21.4	18.0	15.8	13.5	11.3	7.9	5.6
147.5°	25.9	24.8	22.5	20.3	18.0	15.8	14.7	12.4	9.0	6.8	4.5
150°	21.4	20.3	19.2	16.9	15.8	14.7	12.4	10.1	7.9	5.6	4.5
152.5°	18.0	16.9	15.8	15.8	13.5	12.4	10.1	9.0	6.8	5.6	3.4
155°	15.8	15.8	14.7	13.5	11.3	10.1	9.0	6.8	5.6	4.5	3.4
157.5°	13.5	12.4	11.3	11.3	10.1	9.0	6.8	5.6	4.5	4.5	3.4
160°	11.3	10.1	10.1	9.0	7.9	6.8	5.6	5.6	4.5	3.4	3.4
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8
2.5°	2052.2	2039.8	2051.1	2065.7	2065.7	2063.5	2061.2	2065.7	2077.0	2072.5	2059.0
5°	2048.8	2036.4	2046.6	2061.2	2061.2	2057.8	2055.6	2059.0	2071.3	2065.7	2053.3
7.5°	2042.0	2030.8	2037.5	2051.1	2051.1	2047.7	2045.4	2049.9	2060.1	2054.4	2040.9
10°	2029.7	2017.3	2025.1	2037.5	2036.4	2034.2	2030.8	2036.4	2045.4	2037.5	2021.8
12.5°	2013.9	2001.5	2008.2	2019.5	2018.4	2013.9	2011.6	2015.0	2022.9	2018.4	2001.5
15°	1992.5	1980.1	1985.7	1997.0	1993.6	1990.2	1985.7	1986.8	1997.0	1989.1	1971.1
17.5°	1966.5	1953.0	1957.5	1967.7	1964.3	1960.9	1955.3	1956.4	1967.7	1956.4	1937.2
20°	1935.0	1920.3	1923.7	1936.1	1930.5	1924.8	1919.2	1919.2	1930.5	1918.1	1896.7
22.5°	1901.2	1886.5	1888.8	1897.8	1893.3	1883.1	1877.5	1880.9	1886.5	1870.8	1848.2
25°	1859.5	1840.3	1843.7	1852.7	1849.3	1835.8	1830.2	1832.4	1830.2	1817.8	1794.1
27.5°	1811.0	1790.7	1793.0	1798.6	1794.1	1781.7	1775.0	1776.1	1771.6	1755.8	1728.8
30°	1750.2	1740.0	1738.9	1742.3	1735.5	1723.1	1715.2	1713.0	1711.8	1689.3	1656.6
32.5°	1688.2	1679.2	1673.5	1678.0	1670.2	1657.8	1644.2	1644.2	1633.0	1611.6	1583.4
35°	1625.1	1610.4	1604.8	1608.2	1599.2	1583.4	1572.1	1566.5	1549.6	1522.5	1492.1
37.5°	1543.9	1533.8	1527.0	1530.4	1520.3	1509.0	1487.6	1482.0	1463.9	1426.7	1388.4
40°	1456.0	1448.1	1441.4	1444.8	1433.5	1416.6	1397.4	1388.4	1368.1	1326.4	1296.0
42.5°	1361.4	1358.0	1350.1	1362.5	1340.0	1323.0	1303.9	1289.2	1269.0	1223.9	1188.9
45°	1261.1	1269.0	1250.9	1254.3	1239.7	1225.0	1204.7	1183.3	1163.0	1120.2	1080.8
47.5°	1155.1	1160.8	1148.4	1150.6	1134.8	1121.3	1103.3	1076.2	1053.7	1016.5	981.6
50°	1045.8	1043.6	1043.6	1041.3	1028.9	1012.0	994.0	969.2	946.6	912.8	883.5
52.5°	929.7	934.2	936.5	942.1	926.4	916.2	888.0	866.6	849.7	814.8	790.0
55°	818.2	833.9	829.4	831.7	813.7	805.8	783.2	766.3	741.5	721.3	705.5
57.5°	716.7	720.1	722.4	725.8	717.9	702.1	684.1	670.5	651.4	634.5	623.2
60°	618.7	618.7	619.8	625.5	617.6	604.0	590.5	580.4	566.9	556.7	550.0
62.5°	526.3	534.2	535.3	530.8	520.7	513.9	504.9	499.2	490.2	486.8	484.6
65°	440.6	440.6	440.6	442.9	437.3	432.8	427.1	426.0	429.4	424.9	427.1
67.5°	368.5	365.1	362.9	364.0	361.8	359.5	358.4	361.8	368.5	368.5	374.2
70°	306.5	299.8	295.3	295.3	295.3	296.4	299.8	306.5	317.8	322.3	330.2
72.5°	255.8	241.2	234.4	234.4	235.5	240.0	250.2	262.6	272.7	281.7	291.9
75°	207.4	192.7	182.6	181.4	183.7	190.5	205.1	216.4	233.3	245.7	258.1
77.5°	167.9	149.9	137.5	136.4	139.7	149.9	167.9	182.6	201.7	215.2	228.8
80°	134.1	113.8	103.7	96.9	102.6	114.9	135.2	153.3	171.3	189.3	206.2
82.5°	107.1	87.9	72.1	65.4	72.1	89.0	108.2	129.6	147.6	166.8	183.7
85°	84.5	64.2	46.2	39.4	47.3	65.4	86.8	108.2	128.5	147.6	164.5
87.5°	66.5	46.2	28.2	19.2	29.3	48.5	68.7	90.2	111.6	130.7	147.6
90°	51.8	32.7	15.8	2.3	16.9	34.9	55.2	75.5	96.9	116.1	133.0
92.5°	44.0	24.8	9.0	0.0	10.1	25.9	45.1	65.4	84.5	103.7	120.6
95°	37.2	20.3	6.8	0.0	6.8	20.3	37.2	55.2	74.4	93.5	110.4
97.5°	31.6	15.8	4.5	0.0	4.5	15.8	30.4	48.5	65.4	83.4	99.2
100°	27.0	13.5	3.4	0.0	3.4	12.4	25.9	41.7	58.6	75.5	90.2
102.5°	23.7	11.3	2.3	0.0	2.3	10.1	21.4	36.1	50.7	66.5	81.1
105°	20.3	9.0	2.3	0.0	1.1	7.9	18.0	31.6	45.1	59.7	73.3
107.5°	18.0	7.9	2.3	0.0	1.1	6.8	15.8	27.0	40.6	53.0	65.4
110°	15.8	6.8	2.3	0.0	1.1	4.5	13.5	23.7	34.9	47.3	59.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	13.5	5.6	1.1	0.0	0.0	3.4	11.3	20.3	30.4	42.8	53.0
115°	12.4	5.6	1.1	0.0	0.0	2.3	9.0	18.0	27.0	38.3	47.3
117.5°	11.3	4.5	1.1	0.0	1.1	2.3	7.9	15.8	23.7	32.7	42.8
120°	10.1	4.5	1.1	0.0	1.1	1.1	5.6	13.5	20.3	29.3	37.2
122.5°	9.0	4.5	1.1	0.0	1.1	1.1	4.5	11.3	18.0	25.9	32.7
125°	7.9	3.4	2.3	1.1	1.1	1.1	3.4	9.0	15.8	21.4	29.3
127.5°	7.9	3.4	2.3	1.1	1.1	1.1	2.3	7.9	12.4	19.2	25.9
130°	6.8	3.4	2.3	1.1	1.1	1.1	1.1	5.6	11.3	15.8	21.4
132.5°	5.6	3.4	2.3	1.1	1.1	1.1	1.1	3.4	7.9	13.5	18.0
135°	5.6	3.4	2.3	1.1	1.1	1.1	1.1	2.3	5.6	10.1	14.7
137.5°	4.5	2.3	2.3	1.1	1.1	1.1	1.1	1.1	4.5	7.9	11.3
140°	4.5	2.3	2.3	1.1	1.1	1.1	1.1	1.1	3.4	5.6	9.0
142.5°	3.4	2.3	2.3	1.1	1.1	1.1	1.1	1.1	2.3	4.5	6.8
145°	3.4	2.3	2.3	1.1	1.1	1.1	1.1	1.1	1.1	2.3	4.5
147.5°	3.4	3.4	2.3	1.1	1.1	1.1	1.1	1.1	1.1	2.3	3.4
150°	3.4	2.3	2.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.3
152.5°	3.4	2.3	2.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.3
155°	3.4	2.3	2.3	1.1	1.1	1.1	1.1	1.1	1.1	2.3	2.3
157.5°	3.4	2.3	2.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.3
160°	3.4	2.3	2.3	1.1	2.3	1.1	2.3	2.3	2.3	2.3	2.3
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-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8
2.5°	2054.4	2033.0	2044.3	2040.9	2045.4	2054.4	2053.3	2051.1	2051.1	2047.7	2043.2
5°	2047.7	2027.4	2037.5	2031.9	2037.5	2045.4	2044.3	2040.9	2043.2	2037.5	2031.9
7.5°	2034.2	2016.1	2025.1	2020.6	2025.1	2033.0	2029.7	2028.5	2030.8	2021.8	2018.4
10°	2018.4	1998.1	2008.2	2002.6	2008.2	2013.9	2011.6	2007.1	2011.6	2002.6	1999.2
12.5°	1993.6	1976.7	1983.4	1981.2	1984.6	1990.2	1985.7	1982.3	1984.6	1976.7	1969.9
15°	1966.5	1949.6	1955.3	1951.9	1954.1	1960.9	1953.0	1951.9	1949.6	1941.7	1939.5
17.5°	1931.6	1915.8	1921.5	1915.8	1919.2	1917.0	1915.8	1910.2	1910.2	1901.2	1894.4
20°	1888.8	1875.3	1871.9	1867.4	1871.9	1867.4	1860.6	1856.1	1855.0	1846.0	1840.3
22.5°	1839.2	1823.4	1825.7	1813.3	1814.4	1807.6	1796.4	1791.9	1787.4	1777.2	1769.3
25°	1779.5	1763.7	1752.4	1744.5	1734.4	1733.3	1718.6	1707.3	1706.2	1693.8	1692.7
27.5°	1711.8	1693.8	1684.8	1665.6	1653.2	1643.1	1630.7	1619.4	1613.8	1600.3	1591.3
30°	1634.1	1613.8	1591.3	1577.7	1558.6	1550.7	1529.3	1515.8	1511.3	1496.6	1489.8
32.5°	1546.2	1524.8	1506.7	1480.8	1459.4	1448.1	1426.7	1413.2	1407.6	1391.8	1382.8
35°	1450.4	1426.7	1405.3	1380.5	1363.6	1344.5	1318.5	1305.0	1292.6	1287.0	1280.2
37.5°	1350.1	1324.2	1299.4	1274.6	1259.9	1237.4	1214.9	1205.8	1191.2	1185.6	1178.8
40°	1246.4	1220.5	1196.8	1173.2	1156.3	1136.0	1115.7	1112.3	1096.5	1090.9	1086.4
42.5°	1143.9	1116.8	1089.8	1072.9	1060.5	1040.2	1026.7	1023.3	1009.8	1006.4	1006.4
45°	1051.5	1017.6	995.1	980.5	970.3	953.4	942.1	939.9	928.6	926.4	926.4
47.5°	952.3	920.7	903.8	894.8	885.8	873.4	866.6	866.6	855.4	853.1	852.0
50°	859.9	830.6	818.2	809.2	808.0	799.0	793.4	791.1	791.1	783.2	784.4
52.5°	772.0	757.3	747.2	741.5	734.8	729.1	724.6	724.6	721.3	715.6	717.9
55°	690.8	673.9	675.0	670.5	667.2	663.8	664.9	658.1	657.0	652.5	655.9
57.5°	609.7	609.7	607.4	604.0	598.4	600.7	600.7	600.7	595.0	591.7	595.0
60°	540.9	544.3	538.7	542.1	539.8	540.9	538.7	538.7	535.3	534.2	535.3
62.5°	480.1	485.7	483.5	488.0	485.7	486.8	489.1	484.6	482.3	480.1	482.3
65°	426.0	432.8	431.6	435.0	436.1	437.3	438.4	436.1	433.9	431.6	430.5
67.5°	378.7	385.4	389.9	391.1	392.2	395.6	394.4	392.2	389.9	386.5	385.4
70°	335.8	344.8	350.5	352.7	357.2	355.0	355.0	353.9	351.6	348.2	347.1
72.5°	299.8	309.9	315.5	317.8	322.3	322.3	321.2	320.1	317.8	314.4	313.3
75°	268.2	277.2	285.1	289.6	293.0	293.0	291.9	290.8	288.5	286.2	285.1
77.5°	243.4	251.3	258.1	263.7	266.0	267.1	266.0	263.7	263.7	262.6	261.5
80°	218.6	227.6	234.4	240.0	243.4	243.4	242.3	243.4	241.2	240.0	238.9
82.5°	197.2	207.4	215.2	220.9	223.1	224.3	223.1	224.3	222.0	222.0	222.0
85°	178.1	188.2	197.2	201.7	205.1	206.2	206.2	206.2	205.1	205.1	205.1
87.5°	162.3	172.4	181.4	185.9	189.3	190.5	190.5	191.6	189.3	189.3	189.3
90°	147.6	157.8	166.8	171.3	174.7	176.9	176.9	178.1	176.9	175.8	175.8
92.5°	134.1	145.4	154.4	158.9	162.3	165.7	165.7	166.8	164.5	164.5	164.5
95°	122.8	134.1	142.0	147.6	151.0	153.3	154.4	154.4	153.3	153.3	153.3
97.5°	112.7	122.8	130.7	136.4	139.7	140.9	142.0	143.1	142.0	142.0	142.0
100°	102.6	112.7	120.6	125.1	129.6	130.7	131.9	133.0	133.0	131.9	131.9
102.5°	93.5	103.7	110.4	116.1	119.5	121.7	122.8	122.8	122.8	122.8	122.8
105°	84.5	94.7	101.4	107.1	110.4	112.7	113.8	114.9	114.9	113.8	113.8
107.5°	76.6	85.6	93.5	98.0	102.6	104.8	105.9	105.9	107.1	105.9	105.9
110°	68.7	78.9	85.6	90.2	94.7	96.9	98.0	99.2	99.2	99.2	99.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	63.1	71.0	77.8	82.3	86.8	89.0	90.2	91.3	92.4	91.3	91.3
115°	56.3	64.2	71.0	75.5	78.9	81.1	83.4	84.5	84.5	85.6	84.5
117.5°	50.7	57.5	64.2	68.7	72.1	75.5	76.6	77.8	78.9	77.8	77.8
120°	45.1	51.8	57.5	62.0	65.4	68.7	69.9	71.0	72.1	71.0	71.0
122.5°	40.6	46.2	51.8	56.3	59.7	62.0	64.2	64.2	65.4	65.4	65.4
125°	36.1	41.7	46.2	50.7	54.1	56.3	57.5	58.6	58.6	59.7	59.7
127.5°	31.6	36.1	41.7	45.1	48.5	50.7	51.8	53.0	53.0	54.1	54.1
130°	27.0	31.6	36.1	39.4	42.8	45.1	46.2	47.3	48.5	48.5	48.5
132.5°	23.7	28.2	31.6	34.9	37.2	39.4	41.7	42.8	42.8	42.8	42.8
135°	19.2	23.7	27.0	30.4	32.7	34.9	36.1	38.3	38.3	38.3	38.3
137.5°	15.8	20.3	23.7	25.9	28.2	30.4	31.6	32.7	33.8	33.8	33.8
140°	12.4	15.8	19.2	22.5	24.8	25.9	28.2	28.2	29.3	29.3	29.3
142.5°	9.0	12.4	14.7	18.0	20.3	22.5	23.7	24.8	24.8	24.8	24.8
145°	6.8	9.0	11.3	13.5	16.9	18.0	19.2	20.3	21.4	21.4	21.4
147.5°	4.5	6.8	7.9	10.1	12.4	14.7	15.8	16.9	18.0	18.0	18.0
150°	3.4	4.5	6.8	7.9	9.0	11.3	13.5	13.5	14.7	14.7	13.5
152.5°	2.3	3.4	4.5	5.6	6.8	7.9	10.1	10.1	11.3	11.3	11.3
155°	2.3	2.3	2.3	3.4	4.5	5.6	6.8	7.9	7.9	7.9	7.9
157.5°	2.3	2.3	2.3	2.3	2.3	3.4	4.5	5.6	5.6	5.6	5.6
160°	2.3	2.3	1.1	1.1	2.3	2.3	2.3	2.3	3.4	3.4	3.4
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8
2.5°	2046.6	2048.8	2048.8	2046.6	2045.4	2049.9	2044.3	2022.9	2029.7	2031.9	2038.7
5°	2036.4	2038.7	2038.7	2038.7	2036.4	2040.9	2035.3	2013.9	2021.8	2025.1	2029.7
7.5°	2021.8	2022.9	2025.1	2024.0	2021.8	2028.5	2022.9	2001.5	2007.1	2012.7	2018.4
10°	2002.6	2002.6	2003.7	2006.0	2003.7	2009.4	2003.7	1984.6	1990.2	1993.6	2000.4
12.5°	1976.7	1978.9	1980.1	1978.9	1977.8	1982.3	1980.1	1962.0	1964.3	1971.1	1977.8
15°	1941.7	1941.7	1947.4	1945.1	1945.1	1949.6	1951.9	1931.6	1935.0	1945.1	1951.9
17.5°	1898.9	1900.1	1904.6	1906.8	1905.7	1913.6	1914.7	1898.9	1897.8	1910.2	1917.0
20°	1843.7	1846.0	1851.6	1856.1	1856.1	1865.1	1868.5	1858.4	1859.5	1873.0	1875.3
22.5°	1776.1	1776.1	1786.2	1793.0	1798.6	1804.3	1814.4	1805.4	1805.4	1823.4	1833.6
25°	1692.7	1700.6	1704.0	1717.5	1725.4	1741.2	1750.2	1751.3	1752.4	1769.3	1776.1
27.5°	1600.3	1602.5	1612.7	1628.5	1637.5	1652.1	1669.0	1672.4	1678.0	1700.6	1710.7
30°	1495.5	1502.2	1506.7	1529.3	1541.7	1560.8	1582.2	1590.1	1594.6	1625.1	1637.5
32.5°	1388.4	1390.7	1409.8	1422.2	1436.9	1457.2	1482.0	1496.6	1505.6	1537.2	1555.2
35°	1281.4	1285.9	1301.6	1317.4	1332.1	1352.4	1378.3	1398.6	1414.3	1442.5	1466.2
37.5°	1183.3	1194.6	1198.0	1213.7	1225.0	1245.3	1263.3	1292.6	1308.4	1337.7	1368.1
40°	1095.4	1098.8	1101.0	1116.8	1124.7	1143.9	1169.8	1188.9	1210.4	1231.8	1267.8
42.5°	1008.6	1010.9	1014.3	1023.3	1032.3	1045.8	1065.0	1084.1	1106.7	1138.2	1161.9
45°	928.6	930.9	933.1	938.8	946.6	959.0	971.4	985.0	1007.5	1034.5	1059.3
47.5°	854.2	858.7	858.7	859.9	865.5	875.6	884.7	901.6	914.0	928.6	956.8
50°	783.2	786.6	787.7	787.7	791.1	797.9	800.1	811.4	822.7	836.2	856.5
52.5°	716.7	716.7	715.6	720.1	720.1	724.6	725.8	732.5	740.4	755.1	764.1
55°	653.6	653.6	657.0	654.8	654.8	657.0	655.9	657.0	663.8	672.8	680.7
57.5°	592.8	591.7	595.0	592.8	591.7	593.9	596.2	591.7	592.8	601.8	601.8
60°	531.9	533.1	536.4	534.2	534.2	534.2	531.9	529.7	527.4	533.1	535.3
62.5°	483.5	480.1	483.5	480.1	482.3	481.2	479.0	474.4	475.6	473.3	471.1
65°	432.8	432.8	433.9	430.5	432.8	432.8	429.4	428.2	421.5	419.2	413.6
67.5°	388.8	388.8	389.9	387.7	387.7	388.8	385.4	382.0	375.3	371.9	364.0
70°	350.5	350.5	350.5	349.4	349.4	349.4	347.1	342.6	335.8	330.2	320.1
72.5°	315.5	316.7	315.5	315.5	318.9	315.5	312.2	307.7	302.0	290.8	281.7
75°	287.4	288.5	287.4	287.4	287.4	286.2	285.1	278.4	271.6	262.6	249.1
77.5°	262.6	262.6	263.7	262.6	262.6	261.5	258.1	252.4	244.5	236.7	220.9
80°	238.9	240.0	241.2	242.3	240.0	238.9	235.5	231.0	220.9	211.9	196.1
82.5°	222.0	220.9	222.0	223.1	220.9	219.8	216.4	210.7	202.9	190.5	174.7
85°	205.1	204.0	204.0	205.1	204.0	201.7	198.3	192.7	184.8	172.4	156.6
87.5°	188.2	189.3	190.5	189.3	188.2	185.9	182.6	176.9	167.9	157.8	140.9
90°	175.8	175.8	175.8	175.8	174.7	172.4	169.0	162.3	154.4	142.0	127.3
92.5°	164.5	164.5	164.5	164.5	163.4	160.0	156.6	151.0	142.0	129.6	116.1
95°	153.3	154.4	153.3	153.3	151.0	149.9	144.3	138.6	130.7	118.3	103.7
97.5°	140.9	142.0	140.9	140.9	139.7	137.5	134.1	127.3	119.5	108.2	94.7
100°	131.9	131.9	130.7	130.7	129.6	127.3	122.8	117.2	109.3	98.0	84.5
102.5°	121.7	122.8	121.7	121.7	119.5	117.2	113.8	108.2	100.3	89.0	76.6
105°	113.8	113.8	112.7	112.7	110.4	108.2	104.8	98.0	91.3	81.1	68.7
107.5°	105.9	105.9	104.8	104.8	102.6	100.3	95.8	90.2	83.4	73.3	62.0
110°	98.0	98.0	98.0	96.9	94.7	91.3	87.9	82.3	75.5	66.5	55.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	92.4	91.3	90.2	89.0	86.8	84.5	80.0	74.4	67.6	59.7	49.6
115°	84.5	84.5	83.4	82.3	80.0	76.6	73.3	68.7	62.0	53.0	44.0
117.5°	77.8	77.8	76.6	75.5	73.3	69.9	66.5	62.0	55.2	47.3	39.4
120°	71.0	71.0	69.9	68.7	66.5	63.1	60.9	55.2	49.6	41.7	34.9
122.5°	65.4	64.2	64.2	62.0	60.9	57.5	54.1	49.6	44.0	37.2	30.4
125°	58.6	58.6	57.5	56.3	55.2	51.8	48.5	44.0	38.3	32.7	27.0
127.5°	53.0	53.0	51.8	50.7	49.6	46.2	42.8	39.4	33.8	28.2	22.5
130°	47.3	47.3	46.2	45.1	44.0	40.6	38.3	33.8	29.3	24.8	19.2
132.5°	42.8	42.8	41.7	40.6	38.3	36.1	33.8	29.3	25.9	21.4	16.9
135°	38.3	37.2	37.2	36.1	33.8	31.6	29.3	25.9	21.4	18.0	13.5
137.5°	33.8	32.7	31.6	30.4	29.3	27.0	24.8	22.5	19.2	14.7	11.3
140°	29.3	28.2	28.2	27.0	24.8	23.7	21.4	18.0	15.8	12.4	9.0
142.5°	24.8	24.8	23.7	22.5	21.4	20.3	18.0	15.8	12.4	10.1	6.8
145°	21.4	20.3	20.3	19.2	18.0	15.8	14.7	12.4	10.1	7.9	5.6
147.5°	16.9	16.9	16.9	15.8	14.7	13.5	12.4	10.1	7.9	5.6	3.4
150°	13.5	13.5	13.5	12.4	11.3	10.1	9.0	7.9	5.6	3.4	2.3
152.5°	11.3	11.3	10.1	10.1	9.0	7.9	6.8	5.6	3.4	2.3	2.3
155°	7.9	7.9	7.9	6.8	6.8	5.6	4.5	3.4	2.3	2.3	2.3
157.5°	5.6	5.6	5.6	4.5	4.5	3.4	3.4	2.3	2.3	2.3	2.3
160°	3.4	3.4	3.4	3.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8	2048.8
2.5°	2035.3	2034.2	2043.2	2043.2	2033.0	2048.8	2065.7
5°	2028.5	2027.4	2036.4	2036.4	2027.4	2043.2	2061.2
7.5°	2015.0	2016.1	2025.1	2027.4	2016.1	2030.8	2049.9
10°	2000.4	1999.2	2009.4	2011.6	2002.6	2016.1	2034.2
12.5°	1976.7	1976.7	1986.8	1990.2	1981.2	1997.0	2013.9
15°	1951.9	1951.9	1958.7	1964.3	1956.4	1971.1	1988.0
17.5°	1920.3	1919.2	1926.0	1932.7	1924.8	1940.6	1958.7
20°	1879.8	1879.8	1887.7	1895.5	1889.9	1904.6	1924.8
22.5°	1836.9	1832.4	1846.0	1851.6	1848.2	1862.9	1883.1
25°	1782.8	1781.7	1795.2	1803.1	1798.6	1814.4	1832.4
27.5°	1724.2	1723.1	1736.6	1746.8	1744.5	1759.2	1779.5
30°	1653.2	1658.9	1671.3	1688.2	1682.5	1698.3	1719.7
32.5°	1578.9	1584.5	1599.2	1617.2	1618.3	1630.7	1652.1
35°	1489.8	1504.5	1514.6	1538.3	1542.8	1555.2	1577.7
37.5°	1396.3	1413.2	1434.6	1452.6	1461.7	1471.8	1497.7
40°	1291.5	1316.3	1340.0	1361.4	1372.6	1382.8	1407.6
42.5°	1196.8	1216.0	1238.5	1259.9	1280.2	1289.2	1315.2
45°	1089.8	1112.3	1132.6	1158.5	1178.8	1188.9	1214.9
47.5°	985.0	1007.5	1034.5	1052.6	1074.0	1084.1	1108.9
50°	884.7	904.9	927.5	948.9	966.9	975.9	997.4
52.5°	785.5	806.9	828.3	841.8	861.0	867.8	885.8
55°	697.6	712.2	731.4	739.3	758.4	763.0	775.3
57.5°	613.1	623.2	630.0	643.5	657.0	667.2	681.8
60°	536.4	540.9	545.4	553.3	564.6	568.0	573.6
62.5°	467.7	466.6	475.6	477.8	479.0	490.2	484.6
65°	406.8	408.0	400.1	396.7	401.2	404.6	402.3
67.5°	356.1	349.4	342.6	334.7	327.9	331.3	327.9
70°	306.5	300.9	289.6	278.4	273.9	267.1	263.7
72.5°	267.1	253.6	242.3	227.6	219.8	211.9	206.2
75°	236.7	217.5	201.7	185.9	174.7	163.4	161.2
77.5°	205.1	187.1	169.0	152.1	135.2	122.8	118.3
80°	180.3	163.4	142.0	121.7	103.7	87.9	82.3
82.5°	157.8	139.7	118.3	96.9	76.6	59.7	53.0
85°	138.6	119.5	98.0	76.6	56.3	38.3	29.3
87.5°	124.0	102.6	81.1	60.9	39.4	21.4	11.3
90°	110.4	90.2	69.9	48.5	28.2	11.3	0.0
92.5°	98.0	78.9	58.6	39.4	21.4	6.8	1.1
95°	86.8	69.9	49.6	31.6	15.8	4.5	1.1
97.5°	77.8	60.9	42.8	25.9	12.4	3.4	1.1
100°	69.9	53.0	37.2	21.4	10.1	2.3	1.1
102.5°	62.0	47.3	31.6	18.0	7.9	1.1	1.1
105°	55.2	41.7	27.0	15.8	6.8	1.1	1.1
107.5°	49.6	37.2	23.7	13.5	4.5	1.1	1.1
110°	44.0	31.6	20.3	11.3	3.4	1.1	1.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	39.4	28.2	18.0	9.0	2.3	1.1	1.1
115°	34.9	24.8	15.8	7.9	2.3	1.1	1.1
117.5°	30.4	21.4	13.5	5.6	1.1	1.1	1.1
120°	27.0	19.2	11.3	4.5	1.1	1.1	1.1
122.5°	23.7	15.8	9.0	3.4	1.1	1.1	1.1
125°	20.3	13.5	7.9	2.3	1.1	1.1	1.1
127.5°	16.9	11.3	5.6	2.3	1.1	1.1	1.1
130°	14.7	9.0	4.5	1.1	1.1	1.1	1.1
132.5°	12.4	6.8	3.4	1.1	1.1	1.1	1.1
135°	10.1	5.6	2.3	1.1	1.1	1.1	1.1
137.5°	7.9	4.5	2.3	1.1	1.1	1.1	1.1
140°	5.6	3.4	1.1	1.1	1.1	1.1	1.1
142.5°	4.5	2.3	1.1	1.1	1.1	1.1	1.1
145°	3.4	2.3	1.1	1.1	1.1	1.1	1.1
147.5°	2.3	2.3	2.3	2.3	1.1	1.1	1.1
150°	2.3	2.3	1.1	1.1	2.3	1.1	1.1
152.5°	2.3	1.1	1.1	1.1	2.3	1.1	1.1
155°	2.3	2.3	2.3	2.3	2.3	2.3	1.1
157.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3
160°	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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)