

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-LD5-56SL-LN-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-56SL-LN-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

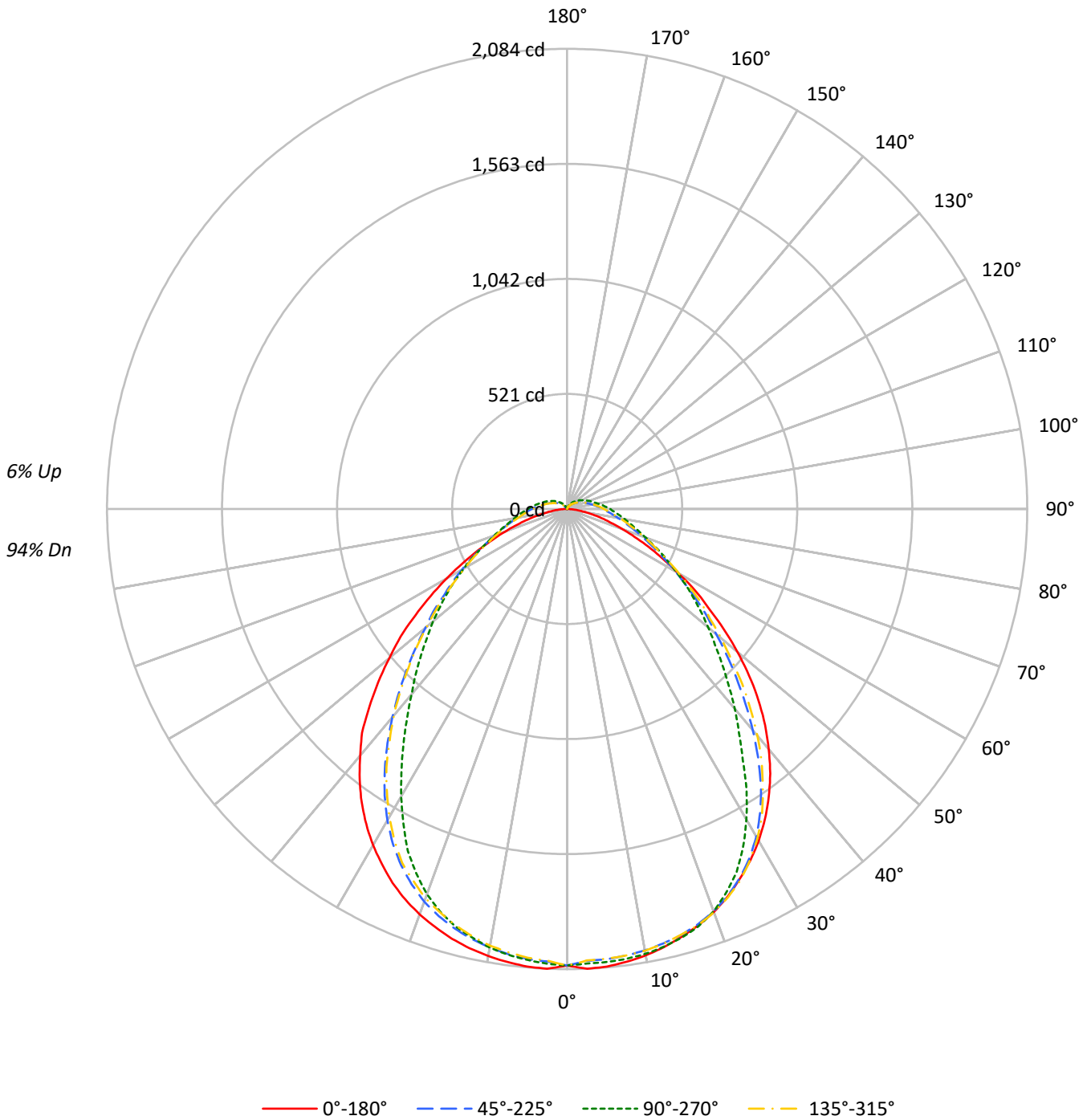
Lumens per Lamp: N/A
Luminaire Lumens: 5232.0 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 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: 25 FT



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L950-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	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°	16707	16707	16707	16707
5°	16826	16174	16826	16103
10°	16751	15745	16778	15526
15°	16643	15274	16719	14877
20°	16515	14670	16612	14050
25°	16250	13772	16430	12961
30°	15905	12454	16114	11529
35°	15369	10838	15665	10091
40°	14600	9478	14986	8794
45°	13585	8239	14026	7767
50°	12198	7240	12735	6875
55°	10552	6394	11318	6070
60°	8874	5613	9676	5291
65°	7276	4963	8009	4602
70°	5790	4405	6482	4073
75°	4547	4066	5120	3741
80°	3281	3924	3866	3586
85°	2022	3947	2719	3628



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	3.7
10°-20°	562.0	10.7
20°-30°	832.9	15.9
30°-40°	925.4	17.7
40°-50°	838.8	16.0
50°-60°	650.0	12.4
60°-70°	441.4	8.4
70°-80°	280.8	5.4
80°-90°	179.5	3.4
90°-100°	121.0	2.3
100°-110°	82.9	1.6
110°-120°	55.3	1.1
120°-130°	34.4	0.7
130°-140°	19.0	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°	1590.9	30.4
0°-40°	2516.3	48.1
0°-60°	4005.1	76.6
0°-90°	4906.9	93.8
90°-120°	259.3	5.0
90°-150°	321.6	6.1
90°-180°	325.0	6.2
0°-180°	5232.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2067	2067	2067	2067	2067	
5°	2080	2059	2080	2050	2080	198
15°	2006	2009	2015	1957	2006	566
25°	1849	1815	1870	1708	1849	852
35°	1592	1387	1623	1292	1592	993
45°	1226	992	1266	935	1226	941
55°	782	697	839	662	782	704
65°	406	468	447	434	406	407
75°	163	313	183	288	163	175
85°	30	225	40	207	30	35
90°	0	194	2	177	0	2
95°	1	166	0	155	1	1
105°	1	122	0	115	1	1
115°	1	92	0	85	1	1
125°	1	68	1	60	1	1
135°	1	48	1	39	1	1
145°	1	31	1	22	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-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4
2.5°	2084.4	2082.2	2079.9	2076.5	2079.9	2089.0	2083.3	2070.8	2068.5	2048.1	2057.1
5°	2079.9	2076.5	2074.2	2070.8	2075.3	2086.7	2081.0	2069.7	2066.2	2046.9	2057.1
7.5°	2068.5	2066.2	2062.8	2062.8	2067.4	2078.8	2074.2	2061.7	2059.4	2040.1	2051.5
10°	2052.6	2051.5	2049.2	2049.2	2053.7	2067.4	2061.7	2050.3	2048.1	2029.9	2042.4
12.5°	2032.1	2033.3	2029.9	2029.9	2036.7	2050.3	2045.8	2033.3	2031.0	2015.1	2027.6
15°	2006.0	2007.1	2004.8	2006.0	2012.8	2028.7	2023.0	2011.7	2009.4	1996.9	2007.1
17.5°	1976.4	1977.5	1977.5	1976.4	1984.4	2000.3	1995.7	1985.5	1982.1	1971.9	1984.4
20°	1942.3	1942.3	1942.3	1942.3	1951.4	1967.3	1961.6	1953.7	1946.8	1938.9	1949.1
22.5°	1900.2	1899.1	1900.2	1903.6	1912.7	1925.2	1921.8	1912.7	1902.5	1897.9	1905.9
25°	1849.0	1852.5	1853.6	1857.0	1868.4	1878.6	1875.2	1866.1	1850.2	1846.8	1849.0
27.5°	1795.6	1797.9	1801.3	1800.1	1816.1	1826.3	1819.5	1811.5	1788.8	1785.4	1783.1
30°	1735.3	1738.7	1741.0	1739.9	1752.4	1763.8	1756.9	1746.7	1716.0	1713.7	1695.5
32.5°	1667.1	1670.5	1672.8	1672.8	1691.0	1695.5	1683.0	1668.2	1635.3	1627.3	1611.4
35°	1592.0	1595.5	1596.6	1596.6	1614.8	1613.6	1597.7	1577.3	1540.9	1530.6	1503.3
37.5°	1511.3	1513.6	1514.7	1521.5	1529.5	1522.7	1502.2	1476.1	1448.8	1420.3	1390.8
40°	1420.3	1423.7	1426.0	1430.6	1438.5	1430.6	1401.0	1369.2	1339.6	1307.7	1278.2
42.5°	1327.1	1337.3	1335.0	1333.9	1338.5	1316.8	1294.1	1257.7	1228.1	1195.2	1165.6
45°	1225.9	1224.7	1230.4	1232.7	1231.6	1213.4	1181.5	1148.5	1119.0	1084.9	1059.8
47.5°	1119.0	1117.8	1122.4	1124.7	1117.8	1098.5	1073.5	1036.0	1010.9	981.4	962.0
50°	1006.4	1006.4	1013.2	1006.4	1003.0	983.7	963.2	925.7	906.3	880.2	868.8
52.5°	893.8	904.1	897.2	895.0	891.5	872.2	856.3	825.6	809.7	798.3	784.6
55°	782.4	793.7	789.2	785.8	784.6	768.7	753.9	731.2	721.0	713.0	705.0
57.5°	688.0	686.9	684.6	681.2	682.3	669.8	655.0	642.5	638.0	634.5	636.8
60°	578.8	587.9	584.5	585.6	586.8	584.5	572.0	564.0	565.2	566.3	569.7
62.5°	489.0	496.9	502.6	498.1	500.4	503.8	496.9	494.7	499.2	503.8	508.3
65°	406.0	413.9	419.6	418.5	425.3	432.1	431.0	433.3	443.5	449.2	454.9
67.5°	330.9	338.9	346.8	348.0	358.2	368.4	373.0	381.0	392.3	400.3	407.1
70°	266.1	272.9	282.0	287.7	301.4	315.0	323.0	338.9	345.7	357.1	361.6
72.5°	208.1	213.8	226.3	239.9	251.3	268.4	284.3	297.9	308.2	320.7	326.4
75°	162.6	164.9	178.5	194.5	210.4	229.7	246.8	261.5	275.2	287.7	296.8
77.5°	119.4	122.8	135.3	156.9	175.1	195.6	214.9	230.8	245.6	258.1	270.6
80°	83.0	89.8	103.5	125.1	145.6	168.3	186.5	204.7	220.6	233.1	245.6
82.5°	53.4	59.1	78.5	100.1	121.7	144.4	163.8	181.9	199.0	212.7	224.0
85°	29.6	37.5	56.9	79.6	101.2	124.0	144.4	162.6	179.7	192.2	203.6
87.5°	11.4	22.7	40.9	62.5	84.2	105.8	127.4	144.4	161.5	175.1	185.4
90°	0.0	13.6	30.7	52.3	73.9	95.5	116.0	134.2	150.1	162.6	174.0
92.5°	1.1	9.1	23.9	42.1	62.5	83.0	102.3	120.5	136.5	149.0	159.2
95°	1.1	6.8	19.3	36.4	54.6	73.9	92.1	109.2	124.0	136.5	146.7
97.5°	1.1	4.5	15.9	31.8	47.8	67.1	84.2	100.1	113.7	126.2	134.2
100°	1.1	4.5	13.6	27.3	43.2	60.3	76.2	92.1	104.6	114.9	124.0
102.5°	1.1	3.4	11.4	23.9	38.7	53.4	69.4	84.2	95.5	105.8	114.9
105°	1.1	3.4	10.2	20.5	34.1	48.9	62.5	76.2	88.7	97.8	105.8
107.5°	1.1	2.3	9.1	17.1	29.6	44.3	58.0	69.4	80.7	89.8	97.8
110°	1.1	2.3	8.0	15.9	26.2	39.8	52.3	63.7	73.9	83.0	89.8



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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	14.8	23.9	35.3	47.8	58.0	68.2	76.2	83.0
115°	1.1	2.3	6.8	13.6	21.6	30.7	42.1	53.4	61.4	70.5	76.2
117.5°	1.1	2.3	5.7	11.4	20.5	28.4	38.7	47.8	56.9	64.8	70.5
120°	1.1	2.3	5.7	10.2	18.2	26.2	34.1	43.2	52.3	58.0	63.7
122.5°	1.1	2.3	4.5	10.2	15.9	23.9	30.7	38.7	46.6	53.4	59.1
125°	1.1	2.3	4.5	9.1	14.8	21.6	28.4	34.1	42.1	47.8	53.4
127.5°	1.1	2.3	4.5	8.0	13.6	19.3	26.2	31.8	37.5	43.2	47.8
130°	1.1	2.3	3.4	6.8	12.5	17.1	22.7	29.6	34.1	38.7	43.2
132.5°	1.1	2.3	3.4	6.8	10.2	14.8	20.5	26.2	30.7	35.3	38.7
135°	1.1	2.3	3.4	5.7	9.1	13.6	17.1	22.7	27.3	31.8	35.3
137.5°	1.1	2.3	3.4	5.7	8.0	11.4	14.8	19.3	23.9	27.3	31.8
140°	1.1	2.3	3.4	4.5	6.8	10.2	13.6	15.9	20.5	23.9	27.3
142.5°	1.1	2.3	3.4	4.5	6.8	9.1	11.4	13.6	17.1	20.5	23.9
145°	1.1	2.3	3.4	4.5	5.7	8.0	10.2	12.5	13.6	17.1	19.3
147.5°	1.1	2.3	3.4	4.5	4.5	6.8	9.1	10.2	12.5	13.6	15.9
150°	1.1	2.3	3.4	3.4	4.5	5.7	8.0	9.1	10.2	12.5	13.6
152.5°	1.1	2.3	3.4	3.4	4.5	5.7	6.8	8.0	9.1	10.2	11.4
155°	1.1	2.3	3.4	3.4	3.4	4.5	5.7	6.8	8.0	9.1	10.2
157.5°	2.3	2.3	2.3	3.4	3.4	4.5	4.5	5.7	6.8	6.8	8.0
160°	2.3	2.3	2.3	3.4	3.4	3.4	4.5	4.5	5.7	5.7	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°	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4
2.5°	2054.9	2058.3	2068.5	2068.5	2066.2	2064.0	2064.0	2060.6	2062.8	2067.4	2065.1
5°	2054.9	2058.3	2068.5	2068.5	2066.2	2064.0	2062.8	2059.4	2062.8	2067.4	2065.1
7.5°	2048.1	2052.6	2062.8	2062.8	2060.6	2059.4	2057.1	2054.9	2058.3	2062.8	2060.6
10°	2039.0	2043.5	2053.7	2053.7	2051.5	2051.5	2048.1	2045.8	2050.3	2053.7	2052.6
12.5°	2025.3	2031.0	2040.1	2039.0	2036.7	2037.8	2034.4	2029.9	2034.4	2037.8	2039.0
15°	2006.0	2012.8	2021.9	2019.6	2016.2	2018.5	2012.8	2009.4	2012.8	2019.6	2018.5
17.5°	1981.0	1985.5	1992.3	1992.3	1988.9	1986.6	1984.4	1981.0	1983.2	1987.8	1988.9
20°	1945.7	1951.4	1954.8	1951.4	1950.3	1946.8	1942.3	1938.9	1943.4	1950.3	1951.4
22.5°	1899.1	1900.2	1908.2	1900.2	1894.5	1893.4	1888.8	1882.0	1888.8	1894.5	1895.7
25°	1841.1	1846.8	1843.4	1829.7	1829.7	1820.6	1818.3	1814.9	1816.1	1826.3	1830.8
27.5°	1767.2	1769.4	1760.3	1749.0	1738.7	1733.1	1725.1	1726.2	1726.2	1739.9	1744.4
30°	1686.4	1673.9	1666.0	1647.8	1639.8	1626.2	1623.9	1623.9	1621.6	1628.4	1648.9
32.5°	1589.8	1572.7	1560.2	1543.1	1529.5	1515.9	1509.0	1512.4	1511.3	1528.4	1535.2
35°	1484.0	1473.8	1447.6	1426.0	1418.1	1397.6	1397.6	1387.4	1394.2	1413.5	1421.5
37.5°	1372.6	1356.6	1335.0	1311.2	1305.5	1289.6	1283.9	1278.2	1293.0	1296.4	1304.3
40°	1258.9	1244.1	1223.6	1200.9	1200.9	1181.5	1181.5	1181.5	1182.7	1189.5	1204.3
42.5°	1150.8	1134.9	1116.7	1100.8	1098.5	1083.7	1083.7	1082.6	1084.9	1090.5	1104.2
45°	1046.2	1033.7	1014.4	1006.4	1007.5	991.6	995.0	991.6	996.2	1001.9	1006.4
47.5°	949.5	941.6	933.6	922.2	918.8	917.7	912.0	907.5	915.4	915.4	922.2
50°	859.7	855.2	850.6	843.8	844.9	840.4	833.5	833.5	839.2	840.4	844.9
52.5°	781.2	775.6	769.9	771.0	772.1	769.9	766.5	763.0	766.5	768.7	774.4
55°	702.8	698.2	703.9	701.6	703.9	701.6	699.4	697.1	702.8	699.4	705.0
57.5°	632.3	636.8	639.1	634.5	638.0	635.7	636.8	633.4	638.0	640.2	639.1
60°	567.4	574.3	570.9	572.0	576.5	574.3	569.7	573.1	577.7	578.8	577.7
62.5°	508.3	516.3	519.7	517.4	518.6	516.3	519.7	515.1	520.8	523.1	519.7
65°	454.9	464.0	466.2	466.2	466.2	464.0	467.4	468.5	470.8	470.8	468.5
67.5°	409.4	417.3	419.6	421.9	419.6	417.3	417.3	418.5	423.0	425.3	423.0
70°	368.4	376.4	377.5	377.5	378.7	381.0	376.4	378.7	382.1	383.2	382.1
72.5°	333.2	341.2	343.4	342.3	343.4	344.6	344.6	342.3	345.7	348.0	348.0
75°	304.8	309.3	311.6	311.6	312.7	313.9	313.9	312.7	315.0	316.1	317.3
77.5°	278.6	282.0	285.4	285.4	286.6	285.4	287.7	287.7	288.8	290.0	291.1
80°	252.5	257.0	259.3	260.4	262.7	263.8	263.8	263.8	265.0	266.1	266.1
82.5°	232.0	235.4	238.8	242.2	242.2	243.4	243.4	243.4	244.5	244.5	245.6
85°	211.5	216.1	219.5	221.7	222.9	224.0	224.0	225.2	225.2	225.2	226.3
87.5°	193.3	199.0	201.3	203.6	204.7	207.0	207.0	207.0	208.1	208.1	208.1
90°	180.8	186.5	188.8	191.0	192.2	193.3	193.3	194.5	194.5	195.6	195.6
92.5°	166.0	171.7	176.3	176.3	177.4	179.7	178.5	178.5	179.7	180.8	180.8
95°	154.7	159.2	162.6	163.8	164.9	164.9	164.9	166.0	164.9	166.0	166.0
97.5°	141.0	145.6	149.0	151.2	152.4	152.4	152.4	153.5	152.4	153.5	153.5
100°	129.6	134.2	137.6	138.7	141.0	141.0	141.0	141.0	141.0	141.0	142.1
102.5°	120.5	125.1	127.4	128.5	129.6	130.8	130.8	130.8	130.8	131.9	131.9
105°	111.4	116.0	118.3	119.4	120.5	121.7	121.7	121.7	122.8	122.8	121.7
107.5°	103.5	106.9	109.2	111.4	112.6	112.6	113.7	113.7	113.7	113.7	113.7
110°	95.5	98.9	102.3	104.6	104.6	105.8	105.8	106.9	106.9	105.8	106.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	87.6	92.1	94.4	96.7	97.8	98.9	98.9	98.9	98.9	98.9	98.9
115°	80.7	85.3	87.6	89.8	91.0	92.1	92.1	92.1	92.1	92.1	92.1
117.5°	75.1	79.6	81.9	83.0	84.2	85.3	86.4	86.4	86.4	86.4	85.3
120°	69.4	72.8	75.1	77.3	78.5	79.6	79.6	79.6	79.6	79.6	79.6
122.5°	63.7	67.1	69.4	71.6	72.8	73.9	73.9	73.9	73.9	73.9	73.9
125°	58.0	61.4	63.7	66.0	67.1	68.2	68.2	68.2	68.2	68.2	68.2
127.5°	52.3	55.7	59.1	60.3	61.4	62.5	62.5	62.5	63.7	62.5	62.5
130°	46.6	50.0	53.4	54.6	55.7	56.9	58.0	58.0	58.0	58.0	56.9
132.5°	42.1	45.5	47.8	48.9	51.2	51.2	52.3	52.3	52.3	52.3	51.2
135°	38.7	40.9	43.2	44.3	46.6	46.6	46.6	47.8	47.8	46.6	45.5
137.5°	34.1	36.4	38.7	39.8	40.9	42.1	42.1	43.2	42.1	42.1	42.1
140°	31.8	33.0	35.3	36.4	37.5	37.5	37.5	38.7	38.7	37.5	37.5
142.5°	27.3	29.6	31.8	33.0	34.1	34.1	34.1	34.1	34.1	34.1	34.1
145°	22.7	26.2	27.3	29.6	29.6	30.7	30.7	30.7	30.7	30.7	29.6
147.5°	19.3	21.6	25.0	26.2	26.2	27.3	27.3	27.3	27.3	27.3	26.2
150°	14.8	17.1	20.5	22.7	22.7	23.9	23.9	23.9	23.9	22.7	22.7
152.5°	12.5	14.8	15.9	18.2	19.3	19.3	19.3	20.5	19.3	19.3	19.3
155°	11.4	12.5	13.6	14.8	15.9	17.1	17.1	17.1	17.1	15.9	15.9
157.5°	9.1	10.2	11.4	12.5	13.6	14.8	14.8	14.8	14.8	14.8	13.6
160°	6.8	8.0	9.1	9.1	10.2	11.4	12.5	11.4	11.4	11.4	11.4
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-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4
2.5°	2062.8	2061.7	2065.1	2059.4	2042.4	2046.9	2044.6	2054.9	2057.1	2059.4	2069.7
5°	2062.8	2061.7	2064.0	2059.4	2041.2	2044.6	2042.4	2052.6	2054.9	2056.0	2066.2
7.5°	2058.3	2057.1	2060.6	2054.9	2035.5	2040.1	2036.7	2046.9	2048.1	2049.2	2058.3
10°	2049.2	2048.1	2050.3	2045.8	2026.4	2031.0	2026.4	2036.7	2036.7	2039.0	2045.8
12.5°	2035.5	2033.3	2037.8	2032.1	2010.5	2016.2	2013.9	2020.8	2021.9	2023.0	2029.9
15°	2016.2	2013.9	2017.3	2013.9	1994.6	1995.7	1992.3	2002.6	2003.7	2001.4	2008.2
17.5°	1987.8	1985.5	1992.3	1990.1	1970.7	1975.3	1974.1	1976.4	1979.8	1974.1	1983.2
20°	1952.5	1954.8	1957.1	1958.2	1943.4	1943.4	1942.3	1946.8	1950.3	1945.7	1952.5
22.5°	1900.2	1905.9	1912.7	1915.0	1904.8	1903.6	1910.5	1908.2	1911.6	1909.3	1913.9
25°	1834.3	1845.6	1852.5	1859.3	1853.6	1855.9	1866.1	1868.4	1868.4	1867.2	1871.8
27.5°	1752.4	1767.2	1779.7	1794.5	1788.8	1793.3	1810.4	1812.7	1817.2	1812.7	1821.8
30°	1654.6	1668.2	1692.1	1713.7	1716.0	1722.8	1746.7	1749.0	1761.5	1756.9	1760.3
32.5°	1556.8	1563.6	1590.9	1612.5	1626.2	1643.2	1669.4	1673.9	1691.0	1694.4	1694.4
35°	1434.0	1453.3	1478.3	1509.0	1526.1	1544.3	1579.5	1586.4	1611.4	1619.3	1628.4
37.5°	1330.5	1348.7	1364.6	1396.4	1427.2	1447.6	1476.1	1493.1	1519.3	1534.0	1545.4
40°	1220.2	1235.0	1252.0	1283.9	1310.0	1340.7	1369.2	1389.6	1422.6	1439.7	1454.4
42.5°	1115.6	1126.9	1145.1	1167.9	1195.2	1229.3	1256.6	1280.5	1315.7	1339.6	1356.6
45°	1022.3	1029.1	1045.1	1062.1	1086.0	1121.3	1147.4	1178.1	1206.5	1231.6	1252.0
47.5°	934.8	943.9	951.8	963.2	984.8	1006.4	1037.1	1066.7	1095.1	1122.4	1142.9
50°	854.0	854.0	866.5	874.5	889.3	908.6	932.5	953.0	988.2	1007.5	1033.7
52.5°	775.6	780.1	786.9	791.5	802.8	815.4	834.7	851.7	881.3	899.5	924.5
55°	706.2	710.7	714.1	716.4	723.2	738.0	744.8	758.5	779.0	793.7	815.4
57.5°	640.2	642.5	645.9	647.1	648.2	657.3	663.0	666.4	686.9	701.6	719.8
60°	580.0	580.0	583.4	582.2	581.1	585.6	584.5	587.9	600.4	609.5	617.5
62.5°	523.1	523.1	524.2	522.0	520.8	520.8	516.3	519.7	523.1	524.2	529.9
65°	470.8	476.5	471.9	473.1	466.2	464.0	461.7	454.9	453.7	449.2	451.5
67.5°	424.2	428.7	424.2	424.2	418.5	413.9	408.2	396.9	393.5	384.4	382.1
70°	386.6	383.2	385.5	382.1	375.3	369.6	361.6	352.5	341.2	329.8	321.8
72.5°	350.2	350.2	348.0	344.6	341.2	329.8	320.7	310.4	296.8	282.0	270.6
75°	315.0	316.1	316.1	312.7	307.0	296.8	286.6	271.8	257.0	239.9	225.2
77.5°	290.0	290.0	290.0	284.3	278.6	269.5	257.0	241.1	225.2	204.7	187.6
80°	266.1	265.0	265.0	258.1	252.5	242.2	229.7	213.8	196.7	175.1	155.8
82.5°	246.8	245.6	243.4	237.7	229.7	219.5	207.0	189.9	171.7	152.4	128.5
85°	226.3	225.2	222.9	217.2	209.2	200.1	186.5	169.4	151.2	129.6	106.9
87.5°	208.1	207.0	203.6	200.1	191.0	180.8	167.2	151.2	131.9	111.4	88.7
90°	195.6	193.3	191.0	186.5	178.5	167.2	153.5	136.5	117.1	96.7	73.9
92.5°	180.8	179.7	176.3	171.7	164.9	153.5	139.9	124.0	104.6	85.3	63.7
95°	166.0	164.9	162.6	158.1	151.2	141.0	128.5	112.6	94.4	75.1	55.7
97.5°	152.4	152.4	149.0	145.6	137.6	129.6	117.1	102.3	85.3	68.2	50.0
100°	141.0	141.0	137.6	133.0	127.4	119.4	106.9	93.2	77.3	61.4	43.2
102.5°	130.8	129.6	127.4	122.8	117.1	109.2	97.8	85.3	70.5	54.6	38.7
105°	121.7	120.5	118.3	113.7	109.2	100.1	91.0	78.5	63.7	48.9	34.1
107.5°	112.6	111.4	110.3	105.8	100.1	92.1	83.0	70.5	58.0	44.3	30.7
110°	104.6	103.5	101.2	96.7	91.0	84.2	75.1	64.8	52.3	39.8	27.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	97.8	96.7	94.4	89.8	85.3	77.3	69.4	58.0	47.8	36.4	23.9
115°	91.0	89.8	87.6	83.0	77.3	70.5	62.5	53.4	42.1	31.8	21.6
117.5°	84.2	83.0	80.7	77.3	71.6	64.8	56.9	47.8	37.5	29.6	19.3
120°	78.5	76.2	73.9	70.5	64.8	59.1	51.2	43.2	34.1	26.2	17.1
122.5°	72.8	70.5	68.2	64.8	59.1	53.4	45.5	38.7	31.8	23.9	15.9
125°	66.0	64.8	62.5	59.1	53.4	47.8	42.1	35.3	28.4	21.6	13.6
127.5°	60.3	59.1	56.9	52.3	47.8	43.2	37.5	31.8	25.0	18.2	12.5
130°	55.7	53.4	51.2	47.8	44.3	39.8	34.1	28.4	22.7	15.9	11.4
132.5°	50.0	47.8	45.5	43.2	39.8	35.3	30.7	25.0	20.5	14.8	10.2
135°	45.5	43.2	40.9	38.7	35.3	31.8	27.3	22.7	18.2	13.6	9.1
137.5°	39.8	38.7	37.5	35.3	31.8	28.4	25.0	19.3	15.9	12.5	8.0
140°	36.4	35.3	34.1	30.7	28.4	25.0	21.6	17.1	13.6	10.2	6.8
142.5°	33.0	31.8	29.6	27.3	25.0	22.7	18.2	15.9	12.5	9.1	6.8
145°	28.4	27.3	26.2	23.9	21.6	18.2	15.9	13.6	11.4	8.0	5.7
147.5°	26.2	25.0	22.7	20.5	18.2	15.9	14.8	12.5	9.1	6.8	4.5
150°	21.6	20.5	19.3	17.1	15.9	14.8	12.5	10.2	8.0	5.7	4.5
152.5°	18.2	17.1	15.9	15.9	13.6	12.5	10.2	9.1	6.8	5.7	3.4
155°	15.9	15.9	14.8	13.6	11.4	10.2	9.1	6.8	5.7	4.5	3.4
157.5°	13.6	12.5	11.4	11.4	10.2	9.1	6.8	5.7	4.5	4.5	3.4
160°	11.4	10.2	10.2	9.1	8.0	6.8	5.7	5.7	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-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4
2.5°	2070.8	2058.3	2069.7	2084.4	2084.4	2082.2	2079.9	2084.4	2095.8	2091.3	2077.6
5°	2067.4	2054.9	2065.1	2079.9	2079.9	2076.5	2074.2	2077.6	2090.1	2084.4	2071.9
7.5°	2060.6	2049.2	2056.0	2069.7	2069.7	2066.2	2064.0	2068.5	2078.8	2073.1	2059.4
10°	2048.1	2035.5	2043.5	2056.0	2054.9	2052.6	2049.2	2054.9	2064.0	2056.0	2040.1
12.5°	2032.1	2019.6	2026.4	2037.8	2036.7	2032.1	2029.9	2033.3	2041.2	2036.7	2019.6
15°	2010.5	1998.0	2003.7	2015.1	2011.7	2008.2	2003.7	2004.8	2015.1	2007.1	1988.9
17.5°	1984.4	1970.7	1975.3	1985.5	1982.1	1978.7	1973.0	1974.1	1985.5	1974.1	1954.8
20°	1952.5	1937.7	1941.2	1953.7	1948.0	1942.3	1936.6	1936.6	1948.0	1935.5	1913.9
22.5°	1918.4	1903.6	1905.9	1915.0	1910.5	1900.2	1894.5	1897.9	1903.6	1887.7	1865.0
25°	1876.3	1857.0	1860.4	1869.5	1866.1	1852.5	1846.8	1849.0	1846.8	1834.3	1810.4
27.5°	1827.4	1807.0	1809.2	1814.9	1810.4	1797.9	1791.0	1792.2	1787.6	1771.7	1744.4
30°	1766.0	1755.8	1754.7	1758.1	1751.2	1738.7	1730.8	1728.5	1727.4	1704.6	1671.6
32.5°	1703.5	1694.4	1688.7	1693.3	1685.3	1672.8	1659.1	1659.1	1647.8	1626.2	1597.7
35°	1639.8	1625.0	1619.3	1622.7	1613.6	1597.7	1586.4	1580.7	1563.6	1536.3	1505.6
37.5°	1557.9	1547.7	1540.9	1544.3	1534.0	1522.7	1501.1	1495.4	1477.2	1439.7	1401.0
40°	1469.2	1461.3	1454.4	1457.9	1446.5	1429.4	1410.1	1401.0	1380.5	1338.5	1307.7
42.5°	1373.7	1370.3	1362.3	1374.8	1352.1	1335.0	1315.7	1300.9	1280.5	1235.0	1199.7
45°	1272.5	1280.5	1262.3	1265.7	1250.9	1236.1	1215.6	1194.0	1173.6	1130.4	1090.5
47.5°	1165.6	1171.3	1158.8	1161.1	1145.1	1131.5	1113.3	1086.0	1063.3	1025.7	990.5
50°	1055.3	1053.0	1053.0	1050.7	1038.2	1021.2	1003.0	978.0	955.2	921.1	891.5
52.5°	938.2	942.7	945.0	950.7	934.8	924.5	896.1	874.5	857.4	822.2	797.2
55°	825.6	841.5	837.0	839.2	821.0	813.1	790.3	773.3	748.3	727.8	711.9
57.5°	723.2	726.7	728.9	732.3	724.4	708.5	690.3	676.6	657.3	640.2	628.9
60°	624.3	624.3	625.4	631.1	623.2	609.5	595.9	585.6	572.0	561.8	554.9
62.5°	531.1	539.0	540.2	535.6	525.4	518.6	509.5	503.8	494.7	491.3	489.0
65°	444.6	444.6	444.6	446.9	441.2	436.7	431.0	429.9	433.3	428.7	431.0
67.5°	371.9	368.4	366.2	367.3	365.0	362.8	361.6	365.0	371.9	371.9	377.5
70°	309.3	302.5	297.9	297.9	297.9	299.1	302.5	309.3	320.7	325.2	333.2
72.5°	258.1	243.4	236.5	236.5	237.7	242.2	252.5	265.0	275.2	284.3	294.5
75°	209.2	194.5	184.2	183.1	185.4	192.2	207.0	218.3	235.4	247.9	260.4
77.5°	169.4	151.2	138.7	137.6	141.0	151.2	169.4	184.2	203.6	217.2	230.8
80°	135.3	114.9	104.6	97.8	103.5	116.0	136.5	154.7	172.9	191.0	208.1
82.5°	108.0	88.7	72.8	66.0	72.8	89.8	109.2	130.8	149.0	168.3	185.4
85°	85.3	64.8	46.6	39.8	47.8	66.0	87.6	109.2	129.6	149.0	166.0
87.5°	67.1	46.6	28.4	19.3	29.6	48.9	69.4	91.0	112.6	131.9	149.0
90°	52.3	33.0	15.9	2.3	17.1	35.3	55.7	76.2	97.8	117.1	134.2
92.5°	44.3	25.0	9.1	0.0	10.2	26.2	45.5	66.0	85.3	104.6	121.7
95°	37.5	20.5	6.8	0.0	6.8	20.5	37.5	55.7	75.1	94.4	111.4
97.5°	31.8	15.9	4.5	0.0	4.5	15.9	30.7	48.9	66.0	84.2	100.1
100°	27.3	13.6	3.4	0.0	3.4	12.5	26.2	42.1	59.1	76.2	91.0
102.5°	23.9	11.4	2.3	0.0	2.3	10.2	21.6	36.4	51.2	67.1	81.9
105°	20.5	9.1	2.3	0.0	1.1	8.0	18.2	31.8	45.5	60.3	73.9
107.5°	18.2	8.0	2.3	0.0	1.1	6.8	15.9	27.3	40.9	53.4	66.0
110°	15.9	6.8	2.3	0.0	1.1	4.5	13.6	23.9	35.3	47.8	60.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	13.6	5.7	1.1	0.0	0.0	3.4	11.4	20.5	30.7	43.2	53.4
115°	12.5	5.7	1.1	0.0	0.0	2.3	9.1	18.2	27.3	38.7	47.8
117.5°	11.4	4.5	1.1	0.0	1.1	2.3	8.0	15.9	23.9	33.0	43.2
120°	10.2	4.5	1.1	0.0	1.1	1.1	5.7	13.6	20.5	29.6	37.5
122.5°	9.1	4.5	1.1	0.0	1.1	1.1	4.5	11.4	18.2	26.2	33.0
125°	8.0	3.4	2.3	1.1	1.1	1.1	3.4	9.1	15.9	21.6	29.6
127.5°	8.0	3.4	2.3	1.1	1.1	1.1	2.3	8.0	12.5	19.3	26.2
130°	6.8	3.4	2.3	1.1	1.1	1.1	1.1	5.7	11.4	15.9	21.6
132.5°	5.7	3.4	2.3	1.1	1.1	1.1	1.1	3.4	8.0	13.6	18.2
135°	5.7	3.4	2.3	1.1	1.1	1.1	1.1	2.3	5.7	10.2	14.8
137.5°	4.5	2.3	2.3	1.1	1.1	1.1	1.1	1.1	4.5	8.0	11.4
140°	4.5	2.3	2.3	1.1	1.1	1.1	1.1	1.1	3.4	5.7	9.1
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-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4
2.5°	2073.1	2051.5	2062.8	2059.4	2064.0	2073.1	2071.9	2069.7	2069.7	2066.2	2061.7
5°	2066.2	2045.8	2056.0	2050.3	2056.0	2064.0	2062.8	2059.4	2061.7	2056.0	2050.3
7.5°	2052.6	2034.4	2043.5	2039.0	2043.5	2051.5	2048.1	2046.9	2049.2	2040.1	2036.7
10°	2036.7	2016.2	2026.4	2020.8	2026.4	2032.1	2029.9	2025.3	2029.9	2020.8	2017.3
12.5°	2011.7	1994.6	2001.4	1999.2	2002.6	2008.2	2003.7	2000.3	2002.6	1994.6	1987.8
15°	1984.4	1967.3	1973.0	1969.6	1971.9	1978.7	1970.7	1969.6	1967.3	1959.4	1957.1
17.5°	1949.1	1933.2	1938.9	1933.2	1936.6	1934.3	1933.2	1927.5	1927.5	1918.4	1911.6
20°	1905.9	1892.3	1888.8	1884.3	1888.8	1884.3	1877.5	1872.9	1871.8	1862.7	1857.0
22.5°	1855.9	1839.9	1842.2	1829.7	1830.8	1824.0	1812.7	1808.1	1803.6	1793.3	1785.4
25°	1795.6	1779.7	1768.3	1760.3	1750.1	1749.0	1734.2	1722.8	1721.7	1709.2	1708.0
27.5°	1727.4	1709.2	1700.1	1680.7	1668.2	1658.0	1645.5	1634.1	1628.4	1614.8	1605.7
30°	1648.9	1628.4	1605.7	1592.0	1572.7	1564.8	1543.1	1529.5	1525.0	1510.2	1503.3
32.5°	1560.2	1538.6	1520.4	1494.2	1472.6	1461.3	1439.7	1426.0	1420.3	1404.4	1395.3
35°	1463.5	1439.7	1418.1	1393.0	1376.0	1356.6	1330.5	1316.8	1304.3	1298.7	1291.8
37.5°	1362.3	1336.2	1311.2	1286.1	1271.4	1248.6	1225.9	1216.8	1202.0	1196.3	1189.5
40°	1257.7	1231.6	1207.7	1183.8	1166.7	1146.3	1125.8	1122.4	1106.5	1100.8	1096.2
42.5°	1154.2	1126.9	1099.6	1082.6	1070.1	1049.6	1036.0	1032.6	1018.9	1015.5	1015.5
45°	1061.0	1026.9	1004.1	989.3	979.1	962.0	950.7	948.4	937.0	934.8	934.8
47.5°	960.9	929.1	912.0	902.9	893.8	881.3	874.5	874.5	863.1	860.8	859.7
50°	867.7	838.1	825.6	816.5	815.4	806.3	800.6	798.3	798.3	790.3	791.5
52.5°	779.0	764.2	753.9	748.3	741.4	735.8	731.2	731.2	727.8	722.1	724.4
55°	697.1	680.0	681.2	676.6	673.2	669.8	670.9	664.1	663.0	658.4	661.8
57.5°	615.2	615.2	612.9	609.5	603.8	606.1	606.1	606.1	600.4	597.0	600.4
60°	545.8	549.3	543.6	547.0	544.7	545.8	543.6	543.6	540.2	539.0	540.2
62.5°	484.4	490.1	487.8	492.4	490.1	491.3	493.5	489.0	486.7	484.4	486.7
65°	429.9	436.7	435.5	438.9	440.1	441.2	442.4	440.1	437.8	435.5	434.4
67.5°	382.1	388.9	393.5	394.6	395.7	399.1	398.0	395.7	393.5	390.1	388.9
70°	338.9	348.0	353.7	355.9	360.5	358.2	358.2	357.1	354.8	351.4	350.2
72.5°	302.5	312.7	318.4	320.7	325.2	325.2	324.1	323.0	320.7	317.3	316.1
75°	270.6	279.7	287.7	292.3	295.7	295.7	294.5	293.4	291.1	288.8	287.7
77.5°	245.6	253.6	260.4	266.1	268.4	269.5	268.4	266.1	266.1	265.0	263.8
80°	220.6	229.7	236.5	242.2	245.6	245.6	244.5	245.6	243.4	242.2	241.1
82.5°	199.0	209.2	217.2	222.9	225.2	226.3	225.2	226.3	224.0	224.0	224.0
85°	179.7	189.9	199.0	203.6	207.0	208.1	208.1	208.1	207.0	207.0	207.0
87.5°	163.8	174.0	183.1	187.6	191.0	192.2	192.2	193.3	191.0	191.0	191.0
90°	149.0	159.2	168.3	172.9	176.3	178.5	178.5	179.7	178.5	177.4	177.4
92.5°	135.3	146.7	155.8	160.3	163.8	167.2	167.2	168.3	166.0	166.0	166.0
95°	124.0	135.3	143.3	149.0	152.4	154.7	155.8	155.8	154.7	154.7	154.7
97.5°	113.7	124.0	131.9	137.6	141.0	142.1	143.3	144.4	143.3	143.3	143.3
100°	103.5	113.7	121.7	126.2	130.8	131.9	133.0	134.2	134.2	133.0	133.0
102.5°	94.4	104.6	111.4	117.1	120.5	122.8	124.0	124.0	124.0	124.0	124.0
105°	85.3	95.5	102.3	108.0	111.4	113.7	114.9	116.0	116.0	114.9	114.9
107.5°	77.3	86.4	94.4	98.9	103.5	105.8	106.9	106.9	108.0	106.9	106.9
110°	69.4	79.6	86.4	91.0	95.5	97.8	98.9	100.1	100.1	100.1	100.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	63.7	71.6	78.5	83.0	87.6	89.8	91.0	92.1	93.2	92.1	92.1
115°	56.9	64.8	71.6	76.2	79.6	81.9	84.2	85.3	85.3	86.4	85.3
117.5°	51.2	58.0	64.8	69.4	72.8	76.2	77.3	78.5	79.6	78.5	78.5
120°	45.5	52.3	58.0	62.5	66.0	69.4	70.5	71.6	72.8	71.6	71.6
122.5°	40.9	46.6	52.3	56.9	60.3	62.5	64.8	64.8	66.0	66.0	66.0
125°	36.4	42.1	46.6	51.2	54.6	56.9	58.0	59.1	59.1	60.3	60.3
127.5°	31.8	36.4	42.1	45.5	48.9	51.2	52.3	53.4	53.4	54.6	54.6
130°	27.3	31.8	36.4	39.8	43.2	45.5	46.6	47.8	48.9	48.9	48.9
132.5°	23.9	28.4	31.8	35.3	37.5	39.8	42.1	43.2	43.2	43.2	43.2
135°	19.3	23.9	27.3	30.7	33.0	35.3	36.4	38.7	38.7	38.7	38.7
137.5°	15.9	20.5	23.9	26.2	28.4	30.7	31.8	33.0	34.1	34.1	34.1
140°	12.5	15.9	19.3	22.7	25.0	26.2	28.4	28.4	29.6	29.6	29.6
142.5°	9.1	12.5	14.8	18.2	20.5	22.7	23.9	25.0	25.0	25.0	25.0
145°	6.8	9.1	11.4	13.6	17.1	18.2	19.3	20.5	21.6	21.6	21.6
147.5°	4.5	6.8	8.0	10.2	12.5	14.8	15.9	17.1	18.2	18.2	18.2
150°	3.4	4.5	6.8	8.0	9.1	11.4	13.6	13.6	14.8	14.8	13.6
152.5°	2.3	3.4	4.5	5.7	6.8	8.0	10.2	10.2	11.4	11.4	11.4
155°	2.3	2.3	2.3	3.4	4.5	5.7	6.8	8.0	8.0	8.0	8.0
157.5°	2.3	2.3	2.3	2.3	2.3	3.4	4.5	5.7	5.7	5.7	5.7
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-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4
2.5°	2065.1	2067.4	2067.4	2065.1	2064.0	2068.5	2062.8	2041.2	2048.1	2050.3	2057.1
5°	2054.9	2057.1	2057.1	2057.1	2054.9	2059.4	2053.7	2032.1	2040.1	2043.5	2048.1
7.5°	2040.1	2041.2	2043.5	2042.4	2040.1	2046.9	2041.2	2019.6	2025.3	2031.0	2036.7
10°	2020.8	2020.8	2021.9	2024.2	2021.9	2027.6	2021.9	2002.6	2008.2	2011.7	2018.5
12.5°	1994.6	1996.9	1998.0	1996.9	1995.7	2000.3	1998.0	1979.8	1982.1	1988.9	1995.7
15°	1959.4	1959.4	1965.0	1962.8	1962.8	1967.3	1969.6	1949.1	1952.5	1962.8	1969.6
17.5°	1916.1	1917.3	1921.8	1924.1	1923.0	1930.9	1932.1	1916.1	1915.0	1927.5	1934.3
20°	1860.4	1862.7	1868.4	1872.9	1872.9	1882.0	1885.4	1875.2	1876.3	1890.0	1892.3
22.5°	1792.2	1792.2	1802.4	1809.2	1814.9	1820.6	1830.8	1821.8	1821.8	1839.9	1850.2
25°	1708.0	1716.0	1719.4	1733.1	1741.0	1756.9	1766.0	1767.2	1768.3	1785.4	1792.2
27.5°	1614.8	1617.1	1627.3	1643.2	1652.3	1667.1	1684.2	1687.6	1693.3	1716.0	1726.2
30°	1509.0	1515.9	1520.4	1543.1	1555.7	1575.0	1596.6	1604.6	1609.1	1639.8	1652.3
32.5°	1401.0	1403.3	1422.6	1435.1	1449.9	1470.4	1495.4	1510.2	1519.3	1551.1	1569.3
35°	1293.0	1297.5	1313.4	1329.4	1344.1	1364.6	1390.8	1411.2	1427.2	1455.6	1479.5
37.5°	1194.0	1205.4	1208.8	1224.7	1236.1	1256.6	1274.8	1304.3	1320.3	1349.8	1380.5
40°	1105.3	1108.7	1111.0	1126.9	1134.9	1154.2	1180.4	1199.7	1221.3	1242.9	1279.3
42.5°	1017.8	1020.0	1023.5	1032.6	1041.7	1055.3	1074.6	1094.0	1116.7	1148.5	1172.4
45°	937.0	939.3	941.6	947.3	955.2	967.7	980.2	993.9	1016.6	1043.9	1068.9
47.5°	862.0	866.5	866.5	867.7	873.3	883.6	892.7	909.7	922.2	937.0	965.5
50°	790.3	793.7	794.9	794.9	798.3	805.1	807.4	818.8	830.1	843.8	864.3
52.5°	723.2	723.2	722.1	726.7	726.7	731.2	732.3	739.2	747.1	761.9	771.0
55°	659.6	659.6	663.0	660.7	660.7	663.0	661.8	663.0	669.8	678.9	686.9
57.5°	598.2	597.0	600.4	598.2	597.0	599.3	601.6	597.0	598.2	607.3	607.3
60°	536.7	537.9	541.3	539.0	539.0	539.0	536.7	534.5	532.2	537.9	540.2
62.5°	487.8	484.4	487.8	484.4	486.7	485.6	483.3	478.8	479.9	477.6	475.3
65°	436.7	436.7	437.8	434.4	436.7	436.7	433.3	432.1	425.3	423.0	417.3
67.5°	392.3	392.3	393.5	391.2	391.2	392.3	388.9	385.5	378.7	375.3	367.3
70°	353.7	353.7	353.7	352.5	352.5	352.5	350.2	345.7	338.9	333.2	323.0
72.5°	318.4	319.5	318.4	318.4	321.8	318.4	315.0	310.4	304.8	293.4	284.3
75°	290.0	291.1	290.0	290.0	290.0	288.8	287.7	280.9	274.1	265.0	251.3
77.5°	265.0	265.0	266.1	265.0	265.0	263.8	260.4	254.7	246.8	238.8	222.9
80°	241.1	242.2	243.4	244.5	242.2	241.1	237.7	233.1	222.9	213.8	197.9
82.5°	224.0	222.9	224.0	225.2	222.9	221.7	218.3	212.7	204.7	192.2	176.3
85°	207.0	205.8	205.8	207.0	205.8	203.6	200.1	194.5	186.5	174.0	158.1
87.5°	189.9	191.0	192.2	191.0	189.9	187.6	184.2	178.5	169.4	159.2	142.1
90°	177.4	177.4	177.4	177.4	176.3	174.0	170.6	163.8	155.8	143.3	128.5
92.5°	166.0	166.0	166.0	166.0	164.9	161.5	158.1	152.4	143.3	130.8	117.1
95°	154.7	155.8	154.7	154.7	152.4	151.2	145.6	139.9	131.9	119.4	104.6
97.5°	142.1	143.3	142.1	142.1	141.0	138.7	135.3	128.5	120.5	109.2	95.5
100°	133.0	133.0	131.9	131.9	130.8	128.5	124.0	118.3	110.3	98.9	85.3
102.5°	122.8	124.0	122.8	122.8	120.5	118.3	114.9	109.2	101.2	89.8	77.3
105°	114.9	114.9	113.7	113.7	111.4	109.2	105.8	98.9	92.1	81.9	69.4
107.5°	106.9	106.9	105.8	105.8	103.5	101.2	96.7	91.0	84.2	73.9	62.5
110°	98.9	98.9	98.9	97.8	95.5	92.1	88.7	83.0	76.2	67.1	55.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	93.2	92.1	91.0	89.8	87.6	85.3	80.7	75.1	68.2	60.3	50.0
115°	85.3	85.3	84.2	83.0	80.7	77.3	73.9	69.4	62.5	53.4	44.3
117.5°	78.5	78.5	77.3	76.2	73.9	70.5	67.1	62.5	55.7	47.8	39.8
120°	71.6	71.6	70.5	69.4	67.1	63.7	61.4	55.7	50.0	42.1	35.3
122.5°	66.0	64.8	64.8	62.5	61.4	58.0	54.6	50.0	44.3	37.5	30.7
125°	59.1	59.1	58.0	56.9	55.7	52.3	48.9	44.3	38.7	33.0	27.3
127.5°	53.4	53.4	52.3	51.2	50.0	46.6	43.2	39.8	34.1	28.4	22.7
130°	47.8	47.8	46.6	45.5	44.3	40.9	38.7	34.1	29.6	25.0	19.3
132.5°	43.2	43.2	42.1	40.9	38.7	36.4	34.1	29.6	26.2	21.6	17.1
135°	38.7	37.5	37.5	36.4	34.1	31.8	29.6	26.2	21.6	18.2	13.6
137.5°	34.1	33.0	31.8	30.7	29.6	27.3	25.0	22.7	19.3	14.8	11.4
140°	29.6	28.4	28.4	27.3	25.0	23.9	21.6	18.2	15.9	12.5	9.1
142.5°	25.0	25.0	23.9	22.7	21.6	20.5	18.2	15.9	12.5	10.2	6.8
145°	21.6	20.5	20.5	19.3	18.2	15.9	14.8	12.5	10.2	8.0	5.7
147.5°	17.1	17.1	17.1	15.9	14.8	13.6	12.5	10.2	8.0	5.7	3.4
150°	13.6	13.6	13.6	12.5	11.4	10.2	9.1	8.0	5.7	3.4	2.3
152.5°	11.4	11.4	10.2	10.2	9.1	8.0	6.8	5.7	3.4	2.3	2.3
155°	8.0	8.0	8.0	6.8	6.8	5.7	4.5	3.4	2.3	2.3	2.3
157.5°	5.7	5.7	5.7	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-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4
2.5°	2053.7	2052.6	2061.7	2061.7	2051.5	2067.4	2084.4
5°	2046.9	2045.8	2054.9	2054.9	2045.8	2061.7	2079.9
7.5°	2033.3	2034.4	2043.5	2045.8	2034.4	2049.2	2068.5
10°	2018.5	2017.3	2027.6	2029.9	2020.8	2034.4	2052.6
12.5°	1994.6	1994.6	2004.8	2008.2	1999.2	2015.1	2032.1
15°	1969.6	1969.6	1976.4	1982.1	1974.1	1988.9	2006.0
17.5°	1937.7	1936.6	1943.4	1950.3	1942.3	1958.2	1976.4
20°	1896.8	1896.8	1904.8	1912.7	1907.0	1921.8	1942.3
22.5°	1853.6	1849.0	1862.7	1868.4	1865.0	1879.7	1900.2
25°	1799.0	1797.9	1811.5	1819.5	1814.9	1830.8	1849.0
27.5°	1739.9	1738.7	1752.4	1762.6	1760.3	1775.1	1795.6
30°	1668.2	1673.9	1686.4	1703.5	1697.8	1713.7	1735.3
32.5°	1593.2	1598.9	1613.6	1631.8	1633.0	1645.5	1667.1
35°	1503.3	1518.1	1528.4	1552.2	1556.8	1569.3	1592.0
37.5°	1409.0	1426.0	1447.6	1465.8	1474.9	1485.1	1511.3
40°	1303.2	1328.2	1352.1	1373.7	1385.1	1395.3	1420.3
42.5°	1207.7	1227.0	1249.8	1271.4	1291.8	1300.9	1327.1
45°	1099.6	1122.4	1142.9	1169.0	1189.5	1199.7	1225.9
47.5°	993.9	1016.6	1043.9	1062.1	1083.7	1094.0	1119.0
50°	892.7	913.2	935.9	957.5	975.7	984.8	1006.4
52.5°	792.6	814.2	835.8	849.5	868.8	875.6	893.8
55°	703.9	718.7	738.0	746.0	765.3	769.9	782.4
57.5°	618.6	628.9	635.7	649.3	663.0	673.2	688.0
60°	541.3	545.8	550.4	558.4	569.7	573.1	578.8
62.5°	471.9	470.8	479.9	482.2	483.3	494.7	489.0
65°	410.5	411.7	403.7	400.3	404.8	408.2	406.0
67.5°	359.3	352.5	345.7	337.7	330.9	334.3	330.9
70°	309.3	303.6	292.3	280.9	276.3	269.5	266.1
72.5°	269.5	255.9	244.5	229.7	221.7	213.8	208.1
75°	238.8	219.5	203.6	187.6	176.3	164.9	162.6
77.5°	207.0	188.8	170.6	153.5	136.5	124.0	119.4
80°	181.9	164.9	143.3	122.8	104.6	88.7	83.0
82.5°	159.2	141.0	119.4	97.8	77.3	60.3	53.4
85°	139.9	120.5	98.9	77.3	56.9	38.7	29.6
87.5°	125.1	103.5	81.9	61.4	39.8	21.6	11.4
90°	111.4	91.0	70.5	48.9	28.4	11.4	0.0
92.5°	98.9	79.6	59.1	39.8	21.6	6.8	1.1
95°	87.6	70.5	50.0	31.8	15.9	4.5	1.1
97.5°	78.5	61.4	43.2	26.2	12.5	3.4	1.1
100°	70.5	53.4	37.5	21.6	10.2	2.3	1.1
102.5°	62.5	47.8	31.8	18.2	8.0	1.1	1.1
105°	55.7	42.1	27.3	15.9	6.8	1.1	1.1
107.5°	50.0	37.5	23.9	13.6	4.5	1.1	1.1
110°	44.3	31.8	20.5	11.4	3.4	1.1	1.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	39.8	28.4	18.2	9.1	2.3	1.1	1.1
115°	35.3	25.0	15.9	8.0	2.3	1.1	1.1
117.5°	30.7	21.6	13.6	5.7	1.1	1.1	1.1
120°	27.3	19.3	11.4	4.5	1.1	1.1	1.1
122.5°	23.9	15.9	9.1	3.4	1.1	1.1	1.1
125°	20.5	13.6	8.0	2.3	1.1	1.1	1.1
127.5°	17.1	11.4	5.7	2.3	1.1	1.1	1.1
130°	14.8	9.1	4.5	1.1	1.1	1.1	1.1
132.5°	12.5	6.8	3.4	1.1	1.1	1.1	1.1
135°	10.2	5.7	2.3	1.1	1.1	1.1	1.1
137.5°	8.0	4.5	2.3	1.1	1.1	1.1	1.1
140°	5.7	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)