

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-L940-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-L940-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

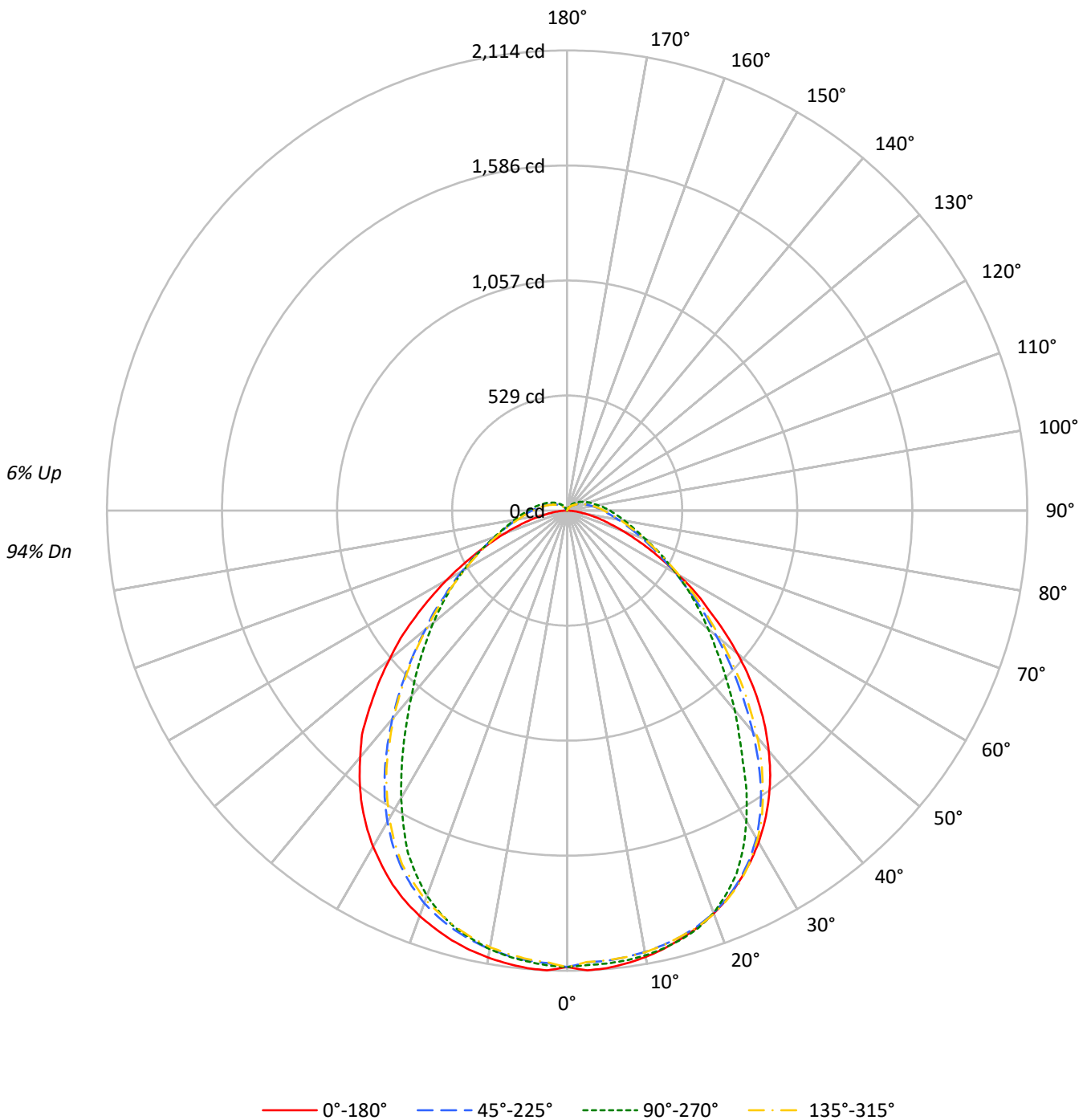
Lumens per Lamp: N/A  
Luminaire Lumens: 5307.0 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

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	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°	16946	16946	16946	16946
5°	17067	16406	17067	16334
10°	16991	15971	17019	15749
15°	16881	15493	16958	15090
20°	16752	14880	16850	14251
25°	16483	13969	16665	13147
30°	16134	12633	16345	11695
35°	15590	10993	15890	10236
40°	14810	9615	15201	8920
45°	13779	8357	14227	7879
50°	12373	7344	12918	6973
55°	10703	6485	11481	6157
60°	9002	5694	9816	5366
65°	7380	5034	8123	4668
70°	5873	4468	6576	4133
75°	4611	4125	5192	3795
80°	3328	3980	3921	3637
85°	2050	4003	2760	3679



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.8	3.7
10°-20°	570.1	10.7
20°-30°	844.9	15.9
30°-40°	938.6	17.7
40°-50°	850.9	16.0
50°-60°	659.3	12.4
60°-70°	447.7	8.4
70°-80°	284.8	5.4
80°-90°	182.1	3.4
90°-100°	122.8	2.3
100°-110°	84.1	1.6
110°-120°	56.1	1.1
120°-130°	34.9	0.7
130°-140°	19.3	0.4
140°-150°	9.1	0.2
150°-160°	3.3	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1613.8	30.4
0°-40°	2552.4	48.1
0°-60°	4062.6	76.6
0°-90°	4977.2	93.8
90°-120°	263.0	5.0
90°-150°	326.2	6.1
90°-180°	330.0	6.2
0°-180°	5307.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2097	2097	2097	2097	2097	
5°	2110	2089	2110	2080	2110	200
15°	2035	2038	2044	1985	2035	574
25°	1876	1841	1896	1732	1876	864
35°	1615	1407	1646	1310	1615	1007
45°	1243	1006	1284	948	1243	955
55°	794	707	851	671	794	715
65°	412	475	453	441	412	413
75°	165	317	186	292	165	178
85°	30	228	40	210	30	36
90°	0	197	2	180	0	2
95°	1	168	0	157	1	1
105°	1	123	0	116	1	1
115°	1	93	0	86	1	1
125°	1	69	1	61	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	



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CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	2114.3	2112.0	2109.7	2106.2	2109.7	2118.9	2113.2	2100.5	2098.2	2077.4	2086.6
5°	2109.7	2106.2	2103.9	2100.5	2105.1	2116.6	2110.9	2099.3	2095.9	2076.3	2086.6
7.5°	2098.2	2095.9	2092.4	2092.4	2097.0	2108.6	2103.9	2091.3	2088.9	2069.3	2080.9
10°	2082.0	2080.9	2078.6	2078.6	2083.2	2097.0	2091.3	2079.7	2077.4	2059.0	2071.6
12.5°	2061.3	2062.4	2059.0	2059.0	2065.9	2079.7	2075.1	2062.4	2060.1	2044.0	2056.6
15°	2034.7	2035.9	2033.6	2034.7	2041.7	2057.8	2052.0	2040.5	2038.2	2025.5	2035.9
17.5°	2004.7	2005.9	2005.9	2004.7	2012.8	2029.0	2024.3	2014.0	2010.5	2000.1	2012.8
20°	1970.1	1970.1	1970.1	1970.1	1979.4	1995.5	1989.7	1981.7	1974.7	1966.7	1977.1
22.5°	1927.5	1926.3	1927.5	1930.9	1940.1	1952.8	1949.4	1940.1	1929.8	1925.1	1933.2
25°	1875.6	1879.0	1880.2	1883.6	1895.2	1905.5	1902.1	1892.9	1876.7	1873.2	1875.6
27.5°	1821.3	1823.6	1827.1	1826.0	1842.1	1852.5	1845.6	1837.5	1814.4	1811.0	1808.6
30°	1760.2	1763.7	1766.0	1764.8	1777.5	1789.0	1782.1	1771.7	1740.6	1738.3	1719.8
32.5°	1691.0	1694.5	1696.8	1696.8	1715.2	1719.8	1707.1	1692.1	1658.7	1650.6	1634.5
35°	1614.9	1618.3	1619.5	1619.5	1637.9	1636.8	1620.6	1599.9	1563.0	1552.6	1524.9
37.5°	1533.0	1535.3	1536.4	1543.3	1551.4	1544.5	1523.7	1497.2	1469.5	1440.7	1410.7
40°	1440.7	1444.2	1446.5	1451.1	1459.1	1451.1	1421.1	1388.8	1358.8	1326.5	1296.5
42.5°	1346.1	1356.5	1354.2	1353.0	1357.6	1335.7	1312.7	1275.7	1245.8	1212.3	1182.3
45°	1243.4	1242.3	1248.1	1250.4	1249.2	1230.8	1198.5	1165.0	1135.0	1100.4	1075.0
47.5°	1135.0	1133.9	1138.5	1140.8	1133.9	1114.3	1088.9	1050.8	1025.4	995.4	975.8
50°	1020.8	1020.8	1027.7	1020.8	1017.4	997.8	977.0	938.9	919.3	892.8	881.3
52.5°	906.6	917.0	910.1	907.8	904.3	884.7	868.6	837.4	821.3	809.7	795.9
55°	793.6	805.1	800.5	797.1	795.9	779.7	764.8	741.7	731.3	723.2	715.2
57.5°	697.9	696.7	694.4	690.9	692.1	679.4	664.4	651.7	647.1	643.6	645.9
60°	587.1	596.3	592.9	594.0	595.2	592.9	580.2	572.1	573.3	574.4	577.9
62.5°	496.0	504.1	509.8	505.2	507.5	511.0	504.1	501.8	506.4	511.0	515.6
65°	411.8	419.9	425.6	424.5	431.4	438.3	437.2	439.5	449.9	455.6	461.4
67.5°	335.7	343.7	351.8	353.0	363.3	373.7	378.3	386.4	397.9	406.0	412.9
70°	269.9	276.8	286.1	291.8	305.7	319.5	327.6	343.7	350.7	362.2	366.8
72.5°	211.1	216.9	229.5	243.4	254.9	272.2	288.4	302.2	312.6	325.3	331.0
75°	164.9	167.3	181.1	197.2	213.4	233.0	250.3	265.3	279.1	291.8	301.1
77.5°	121.1	124.6	137.3	159.2	177.6	198.4	218.0	234.2	249.2	261.8	274.5
80°	84.2	91.1	105.0	126.9	147.6	170.7	189.2	207.6	223.8	236.5	249.2
82.5°	54.2	60.0	79.6	101.5	123.4	146.5	166.1	184.6	201.9	215.7	227.2
85°	30.0	38.1	57.7	80.7	102.7	125.7	146.5	164.9	182.2	194.9	206.5
87.5°	11.5	23.1	41.5	63.4	85.4	107.3	129.2	146.5	163.8	177.6	188.0
90°	0.0	13.8	31.1	53.1	75.0	96.9	117.7	136.1	152.3	164.9	176.5
92.5°	1.2	9.2	24.2	42.7	63.4	84.2	103.8	122.3	138.4	151.1	161.5
95°	1.2	6.9	19.6	36.9	55.4	75.0	93.4	110.7	125.7	138.4	148.8
97.5°	1.2	4.6	16.1	32.3	48.4	68.1	85.4	101.5	115.3	128.0	136.1
100°	1.2	4.6	13.8	27.7	43.8	61.1	77.3	93.4	106.1	116.5	125.7
102.5°	1.2	3.5	11.5	24.2	39.2	54.2	70.4	85.4	96.9	107.3	116.5
105°	1.2	3.5	10.4	20.8	34.6	49.6	63.4	77.3	90.0	99.2	107.3
107.5°	1.2	2.3	9.2	17.3	30.0	45.0	58.8	70.4	81.9	91.1	99.2
110°	1.2	2.3	8.1	16.1	26.5	40.4	53.1	64.6	75.0	84.2	91.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.2	2.3	6.9	15.0	24.2	35.8	48.4	58.8	69.2	77.3	84.2
115°	1.2	2.3	6.9	13.8	21.9	31.1	42.7	54.2	62.3	71.5	77.3
117.5°	1.2	2.3	5.8	11.5	20.8	28.8	39.2	48.4	57.7	65.7	71.5
120°	1.2	2.3	5.8	10.4	18.5	26.5	34.6	43.8	53.1	58.8	64.6
122.5°	1.2	2.3	4.6	10.4	16.1	24.2	31.1	39.2	47.3	54.2	60.0
125°	1.2	2.3	4.6	9.2	15.0	21.9	28.8	34.6	42.7	48.4	54.2
127.5°	1.2	2.3	4.6	8.1	13.8	19.6	26.5	32.3	38.1	43.8	48.4
130°	1.2	2.3	3.5	6.9	12.7	17.3	23.1	30.0	34.6	39.2	43.8
132.5°	1.2	2.3	3.5	6.9	10.4	15.0	20.8	26.5	31.1	35.8	39.2
135°	1.2	2.3	3.5	5.8	9.2	13.8	17.3	23.1	27.7	32.3	35.8
137.5°	1.2	2.3	3.5	5.8	8.1	11.5	15.0	19.6	24.2	27.7	32.3
140°	1.2	2.3	3.5	4.6	6.9	10.4	13.8	16.1	20.8	24.2	27.7
142.5°	1.2	2.3	3.5	4.6	6.9	9.2	11.5	13.8	17.3	20.8	24.2
145°	1.2	2.3	3.5	4.6	5.8	8.1	10.4	12.7	13.8	17.3	19.6
147.5°	1.2	2.3	3.5	4.6	4.6	6.9	9.2	10.4	12.7	13.8	16.1
150°	1.2	2.3	3.5	3.5	4.6	5.8	8.1	9.2	10.4	12.7	13.8
152.5°	1.2	2.3	3.5	3.5	4.6	5.8	6.9	8.1	9.2	10.4	11.5
155°	1.2	2.3	3.5	3.5	3.5	4.6	5.8	6.9	8.1	9.2	10.4
157.5°	2.3	2.3	2.3	3.5	3.5	4.6	4.6	5.8	6.9	6.9	8.1
160°	2.3	2.3	2.3	3.5	3.5	3.5	4.6	4.6	5.8	5.8	6.9
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°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	2084.3	2087.8	2098.2	2098.2	2095.9	2093.6	2093.6	2090.1	2092.4	2097.0	2094.7
5°	2084.3	2087.8	2098.2	2098.2	2095.9	2093.6	2092.4	2088.9	2092.4	2097.0	2094.7
7.5°	2077.4	2082.0	2092.4	2092.4	2090.1	2088.9	2086.6	2084.3	2087.8	2092.4	2090.1
10°	2068.2	2072.8	2083.2	2083.2	2080.9	2080.9	2077.4	2075.1	2079.7	2083.2	2082.0
12.5°	2054.3	2060.1	2069.3	2068.2	2065.9	2067.0	2063.6	2059.0	2063.6	2067.0	2068.2
15°	2034.7	2041.7	2050.9	2048.6	2045.1	2047.4	2041.7	2038.2	2041.7	2048.6	2047.4
17.5°	2009.4	2014.0	2020.9	2020.9	2017.4	2015.1	2012.8	2009.4	2011.7	2016.3	2017.4
20°	1973.6	1979.4	1982.8	1979.4	1978.2	1974.7	1970.1	1966.7	1971.3	1978.2	1979.4
22.5°	1926.3	1927.5	1935.5	1927.5	1921.7	1920.5	1915.9	1909.0	1915.9	1921.7	1922.8
25°	1867.5	1873.2	1869.8	1855.9	1855.9	1846.7	1844.4	1840.9	1842.1	1852.5	1857.1
27.5°	1792.5	1794.8	1785.6	1774.0	1763.7	1757.9	1749.8	1751.0	1751.0	1764.8	1769.4
30°	1710.6	1697.9	1689.8	1671.4	1663.3	1649.5	1647.2	1647.2	1644.9	1651.8	1672.5
32.5°	1612.6	1595.3	1582.6	1565.3	1551.4	1537.6	1530.7	1534.1	1533.0	1550.3	1557.2
35°	1505.3	1494.9	1468.4	1446.5	1438.4	1417.6	1417.6	1407.2	1414.2	1433.8	1441.8
37.5°	1392.2	1376.1	1354.2	1330.0	1324.2	1308.0	1302.3	1296.5	1311.5	1315.0	1323.0
40°	1276.9	1261.9	1241.1	1218.1	1218.1	1198.5	1198.5	1198.5	1199.6	1206.5	1221.5
42.5°	1167.3	1151.2	1132.7	1116.6	1114.3	1099.3	1099.3	1098.1	1100.4	1106.2	1120.0
45°	1061.2	1048.5	1028.9	1020.8	1022.0	1005.8	1009.3	1005.8	1010.4	1016.2	1020.8
47.5°	963.2	955.1	947.0	935.5	932.0	930.9	925.1	920.5	928.5	928.5	935.5
50°	872.0	867.4	862.8	855.9	857.0	852.4	845.5	845.5	851.3	852.4	857.0
52.5°	792.4	786.7	780.9	782.1	783.2	780.9	777.4	774.0	777.4	779.7	785.5
55°	712.8	708.2	714.0	711.7	714.0	711.7	709.4	707.1	712.8	709.4	715.2
57.5°	641.3	645.9	648.3	643.6	647.1	644.8	645.9	642.5	647.1	649.4	648.3
60°	575.6	582.5	579.0	580.2	584.8	582.5	577.9	581.4	586.0	587.1	586.0
62.5°	515.6	523.7	527.1	524.8	526.0	523.7	527.1	522.5	528.3	530.6	527.1
65°	461.4	470.6	472.9	472.9	472.9	470.6	474.1	475.2	477.5	477.5	475.2
67.5°	415.3	423.3	425.6	427.9	425.6	423.3	423.3	424.5	429.1	431.4	429.1
70°	373.7	381.8	383.0	383.0	384.1	386.4	381.8	384.1	387.6	388.7	387.6
72.5°	338.0	346.0	348.3	347.2	348.3	349.5	349.5	347.2	350.7	353.0	353.0
75°	309.1	313.7	316.1	316.1	317.2	318.4	318.4	317.2	319.5	320.7	321.8
77.5°	282.6	286.1	289.5	289.5	290.7	289.5	291.8	291.8	293.0	294.1	295.3
80°	256.1	260.7	263.0	264.1	266.5	267.6	267.6	267.6	268.8	269.9	269.9
82.5°	235.3	238.8	242.2	245.7	245.7	246.8	246.8	246.8	248.0	248.0	249.2
85°	214.5	219.2	222.6	224.9	226.1	227.2	227.2	228.4	228.4	228.4	229.5
87.5°	196.1	201.9	204.2	206.5	207.6	209.9	209.9	209.9	211.1	211.1	211.1
90°	183.4	189.2	191.5	193.8	194.9	196.1	196.1	197.2	197.2	198.4	198.4
92.5°	168.4	174.2	178.8	178.8	179.9	182.2	181.1	181.1	182.2	183.4	183.4
95°	156.9	161.5	164.9	166.1	167.3	167.3	167.3	168.4	167.3	168.4	168.4
97.5°	143.0	147.6	151.1	153.4	154.6	154.6	154.6	155.7	154.6	155.7	155.7
100°	131.5	136.1	139.6	140.7	143.0	143.0	143.0	143.0	143.0	143.0	144.2
102.5°	122.3	126.9	129.2	130.3	131.5	132.6	132.6	132.6	132.6	133.8	133.8
105°	113.0	117.7	120.0	121.1	122.3	123.4	123.4	123.4	124.6	124.6	123.4
107.5°	105.0	108.4	110.7	113.0	114.2	114.2	115.3	115.3	115.3	115.3	115.3
110°	96.9	100.4	103.8	106.1	106.1	107.3	107.3	108.4	108.4	107.3	108.4





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	88.8	93.4	95.7	98.0	99.2	100.4	100.4	100.4	100.4	100.4	100.4
115°	81.9	86.5	88.8	91.1	92.3	93.4	93.4	93.4	93.4	93.4	93.4
117.5°	76.1	80.7	83.1	84.2	85.4	86.5	87.7	87.7	87.7	87.7	86.5
120°	70.4	73.8	76.1	78.4	79.6	80.7	80.7	80.7	80.7	80.7	80.7
122.5°	64.6	68.1	70.4	72.7	73.8	75.0	75.0	75.0	75.0	75.0	75.0
125°	58.8	62.3	64.6	66.9	68.1	69.2	69.2	69.2	69.2	69.2	69.2
127.5°	53.1	56.5	60.0	61.1	62.3	63.4	63.4	63.4	64.6	63.4	63.4
130°	47.3	50.8	54.2	55.4	56.5	57.7	58.8	58.8	58.8	58.8	57.7
132.5°	42.7	46.1	48.4	49.6	51.9	51.9	53.1	53.1	53.1	53.1	51.9
135°	39.2	41.5	43.8	45.0	47.3	47.3	47.3	48.4	48.4	47.3	46.1
137.5°	34.6	36.9	39.2	40.4	41.5	42.7	42.7	43.8	42.7	42.7	42.7
140°	32.3	33.5	35.8	36.9	38.1	38.1	38.1	39.2	39.2	38.1	38.1
142.5°	27.7	30.0	32.3	33.5	34.6	34.6	34.6	34.6	34.6	34.6	34.6
145°	23.1	26.5	27.7	30.0	30.0	31.1	31.1	31.1	31.1	31.1	30.0
147.5°	19.6	21.9	25.4	26.5	26.5	27.7	27.7	27.7	27.7	27.7	26.5
150°	15.0	17.3	20.8	23.1	23.1	24.2	24.2	24.2	24.2	23.1	23.1
152.5°	12.7	15.0	16.1	18.5	19.6	19.6	19.6	20.8	19.6	19.6	19.6
155°	11.5	12.7	13.8	15.0	16.1	17.3	17.3	17.3	17.3	16.1	16.1
157.5°	9.2	10.4	11.5	12.7	13.8	15.0	15.0	15.0	15.0	15.0	13.8
160°	6.9	8.1	9.2	9.2	10.4	11.5	12.7	11.5	11.5	11.5	11.5
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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	2092.4	2091.3	2094.7	2088.9	2071.6	2076.3	2073.9	2084.3	2086.6	2088.9	2099.3
5°	2092.4	2091.3	2093.6	2088.9	2070.5	2073.9	2071.6	2082.0	2084.3	2085.5	2095.9
7.5°	2087.8	2086.6	2090.1	2084.3	2064.7	2069.3	2065.9	2076.3	2077.4	2078.6	2087.8
10°	2078.6	2077.4	2079.7	2075.1	2055.5	2060.1	2055.5	2065.9	2065.9	2068.2	2075.1
12.5°	2064.7	2062.4	2067.0	2061.3	2039.3	2045.1	2042.8	2049.7	2050.9	2052.0	2059.0
15°	2045.1	2042.8	2046.3	2042.8	2023.2	2024.3	2020.9	2031.3	2032.4	2030.1	2037.0
17.5°	2016.3	2014.0	2020.9	2018.6	1999.0	2003.6	2002.4	2004.7	2008.2	2002.4	2011.7
20°	1980.5	1982.8	1985.1	1986.3	1971.3	1971.3	1970.1	1974.7	1978.2	1973.6	1980.5
22.5°	1927.5	1933.2	1940.1	1942.5	1932.1	1930.9	1937.8	1935.5	1939.0	1936.7	1941.3
25°	1860.6	1872.1	1879.0	1885.9	1880.2	1882.5	1892.9	1895.2	1895.2	1894.0	1898.6
27.5°	1777.5	1792.5	1805.2	1820.2	1814.4	1819.0	1836.3	1838.6	1843.3	1838.6	1847.9
30°	1678.3	1692.1	1716.4	1738.3	1740.6	1747.5	1771.7	1774.0	1786.7	1782.1	1785.6
32.5°	1579.1	1586.0	1613.7	1635.6	1649.5	1666.8	1693.3	1697.9	1715.2	1718.7	1718.7
35°	1454.5	1474.1	1499.5	1530.7	1548.0	1566.4	1602.2	1609.1	1634.5	1642.5	1651.8
37.5°	1349.6	1368.0	1384.2	1416.5	1447.6	1468.4	1497.2	1514.5	1541.0	1556.0	1567.6
40°	1237.7	1252.7	1270.0	1302.3	1328.8	1359.9	1388.8	1409.5	1443.0	1460.3	1475.3
42.5°	1131.6	1143.1	1161.5	1184.6	1212.3	1246.9	1274.6	1298.8	1334.6	1358.8	1376.1
45°	1037.0	1043.9	1060.0	1077.3	1101.6	1137.3	1163.9	1195.0	1223.8	1249.2	1270.0
47.5°	948.2	957.4	965.5	977.0	998.9	1020.8	1052.0	1082.0	1110.8	1138.5	1159.2
50°	866.3	866.3	878.9	887.0	902.0	921.6	945.8	966.6	1002.4	1022.0	1048.5
52.5°	786.7	791.3	798.2	802.8	814.4	827.0	846.7	864.0	893.9	912.4	937.8
55°	716.3	720.9	724.4	726.7	733.6	748.6	755.5	769.4	790.1	805.1	827.0
57.5°	649.4	651.7	655.2	656.3	657.5	666.7	672.5	675.9	696.7	711.7	730.1
60°	588.3	588.3	591.7	590.6	589.4	594.0	592.9	596.3	609.0	618.3	626.3
62.5°	530.6	530.6	531.8	529.4	528.3	528.3	523.7	527.1	530.6	531.8	537.5
65°	477.5	483.3	478.7	479.8	472.9	470.6	468.3	461.4	460.2	455.6	457.9
67.5°	430.2	434.9	430.2	430.2	424.5	419.9	414.1	402.6	399.1	389.9	387.6
70°	392.2	388.7	391.0	387.6	380.6	374.9	366.8	357.6	346.0	334.5	326.4
72.5°	355.3	355.3	353.0	349.5	346.0	334.5	325.3	314.9	301.1	286.1	274.5
75°	319.5	320.7	320.7	317.2	311.4	301.1	290.7	275.7	260.7	243.4	228.4
77.5°	294.1	294.1	294.1	288.4	282.6	273.4	260.7	244.5	228.4	207.6	190.3
80°	269.9	268.8	268.8	261.8	256.1	245.7	233.0	216.9	199.6	177.6	158.0
82.5°	250.3	249.2	246.8	241.1	233.0	222.6	209.9	192.6	174.2	154.6	130.3
85°	229.5	228.4	226.1	220.3	212.2	203.0	189.2	171.9	153.4	131.5	108.4
87.5°	211.1	209.9	206.5	203.0	193.8	183.4	169.6	153.4	133.8	113.0	90.0
90°	198.4	196.1	193.8	189.2	181.1	169.6	155.7	138.4	118.8	98.0	75.0
92.5°	183.4	182.2	178.8	174.2	167.3	155.7	141.9	125.7	106.1	86.5	64.6
95°	168.4	167.3	164.9	160.3	153.4	143.0	130.3	114.2	95.7	76.1	56.5
97.5°	154.6	154.6	151.1	147.6	139.6	131.5	118.8	103.8	86.5	69.2	50.8
100°	143.0	143.0	139.6	135.0	129.2	121.1	108.4	94.6	78.4	62.3	43.8
102.5°	132.6	131.5	129.2	124.6	118.8	110.7	99.2	86.5	71.5	55.4	39.2
105°	123.4	122.3	120.0	115.3	110.7	101.5	92.3	79.6	64.6	49.6	34.6
107.5°	114.2	113.0	111.9	107.3	101.5	93.4	84.2	71.5	58.8	45.0	31.1
110°	106.1	105.0	102.7	98.0	92.3	85.4	76.1	65.7	53.1	40.4	27.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	99.2	98.0	95.7	91.1	86.5	78.4	70.4	58.8	48.4	36.9	24.2
115°	92.3	91.1	88.8	84.2	78.4	71.5	63.4	54.2	42.7	32.3	21.9
117.5°	85.4	84.2	81.9	78.4	72.7	65.7	57.7	48.4	38.1	30.0	19.6
120°	79.6	77.3	75.0	71.5	65.7	60.0	51.9	43.8	34.6	26.5	17.3
122.5°	73.8	71.5	69.2	65.7	60.0	54.2	46.1	39.2	32.3	24.2	16.1
125°	66.9	65.7	63.4	60.0	54.2	48.4	42.7	35.8	28.8	21.9	13.8
127.5°	61.1	60.0	57.7	53.1	48.4	43.8	38.1	32.3	25.4	18.5	12.7
130°	56.5	54.2	51.9	48.4	45.0	40.4	34.6	28.8	23.1	16.1	11.5
132.5°	50.8	48.4	46.1	43.8	40.4	35.8	31.1	25.4	20.8	15.0	10.4
135°	46.1	43.8	41.5	39.2	35.8	32.3	27.7	23.1	18.5	13.8	9.2
137.5°	40.4	39.2	38.1	35.8	32.3	28.8	25.4	19.6	16.1	12.7	8.1
140°	36.9	35.8	34.6	31.1	28.8	25.4	21.9	17.3	13.8	10.4	6.9
142.5°	33.5	32.3	30.0	27.7	25.4	23.1	18.5	16.1	12.7	9.2	6.9
145°	28.8	27.7	26.5	24.2	21.9	18.5	16.1	13.8	11.5	8.1	5.8
147.5°	26.5	25.4	23.1	20.8	18.5	16.1	15.0	12.7	9.2	6.9	4.6
150°	21.9	20.8	19.6	17.3	16.1	15.0	12.7	10.4	8.1	5.8	4.6
152.5°	18.5	17.3	16.1	16.1	13.8	12.7	10.4	9.2	6.9	5.8	3.5
155°	16.1	16.1	15.0	13.8	11.5	10.4	9.2	6.9	5.8	4.6	3.5
157.5°	13.8	12.7	11.5	11.5	10.4	9.2	6.9	5.8	4.6	4.6	3.5
160°	11.5	10.4	10.4	9.2	8.1	6.9	5.8	5.8	4.6	3.5	3.5
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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	2100.5	2087.8	2099.3	2114.3	2114.3	2112.0	2109.7	2114.3	2125.9	2121.2	2107.4
5°	2097.0	2084.3	2094.7	2109.7	2109.7	2106.2	2103.9	2107.4	2120.1	2114.3	2101.6
7.5°	2090.1	2078.6	2085.5	2099.3	2099.3	2095.9	2093.6	2098.2	2108.6	2102.8	2088.9
10°	2077.4	2064.7	2072.8	2085.5	2084.3	2082.0	2078.6	2084.3	2093.6	2085.5	2069.3
12.5°	2061.3	2048.6	2055.5	2067.0	2065.9	2061.3	2059.0	2062.4	2070.5	2065.9	2048.6
15°	2039.3	2026.7	2032.4	2044.0	2040.5	2037.0	2032.4	2033.6	2044.0	2035.9	2017.4
17.5°	2012.8	1999.0	2003.6	2014.0	2010.5	2007.0	2001.3	2002.4	2014.0	2002.4	1982.8
20°	1980.5	1965.5	1969.0	1981.7	1975.9	1970.1	1964.4	1964.4	1975.9	1963.2	1941.3
22.5°	1945.9	1930.9	1933.2	1942.5	1937.8	1927.5	1921.7	1925.1	1930.9	1914.8	1891.7
25°	1903.2	1883.6	1887.1	1896.3	1892.9	1879.0	1873.2	1875.6	1873.2	1860.6	1836.3
27.5°	1853.6	1832.9	1835.2	1840.9	1836.3	1823.6	1816.7	1817.9	1813.3	1797.1	1769.4
30°	1791.3	1781.0	1779.8	1783.3	1776.4	1763.7	1755.6	1753.3	1752.1	1729.1	1695.6
32.5°	1727.9	1718.7	1712.9	1717.5	1709.4	1696.8	1682.9	1682.9	1671.4	1649.5	1620.6
35°	1663.3	1648.3	1642.5	1646.0	1636.8	1620.6	1609.1	1603.3	1586.0	1558.3	1527.2
37.5°	1580.3	1569.9	1563.0	1566.4	1556.0	1544.5	1522.6	1516.8	1498.4	1460.3	1421.1
40°	1490.3	1482.2	1475.3	1478.8	1467.2	1449.9	1430.3	1421.1	1400.3	1357.6	1326.5
42.5°	1393.4	1389.9	1381.9	1394.6	1371.5	1354.2	1334.6	1319.6	1298.8	1252.7	1216.9
45°	1290.7	1298.8	1280.4	1283.8	1268.8	1253.8	1233.1	1211.1	1190.4	1146.6	1106.2
47.5°	1182.3	1188.1	1175.4	1177.7	1161.5	1147.7	1129.3	1101.6	1078.5	1040.4	1004.7
50°	1070.4	1068.1	1068.1	1065.8	1053.1	1035.8	1017.4	992.0	968.9	934.3	904.3
52.5°	951.6	956.2	958.5	964.3	948.2	937.8	908.9	887.0	869.7	834.0	808.6
55°	837.4	853.6	849.0	851.3	832.8	824.7	801.7	784.4	759.0	738.2	722.1
57.5°	733.6	737.1	739.4	742.8	734.8	718.6	700.2	686.3	666.7	649.4	637.9
60°	633.3	633.3	634.4	640.2	632.1	618.3	604.4	594.0	580.2	569.8	562.9
62.5°	538.7	546.7	547.9	543.3	532.9	526.0	516.8	511.0	501.8	498.3	496.0
65°	451.0	451.0	451.0	453.3	447.5	442.9	437.2	436.0	439.5	434.9	437.2
67.5°	377.2	373.7	371.4	372.6	370.3	368.0	366.8	370.3	377.2	377.2	383.0
70°	313.7	306.8	302.2	302.2	302.2	303.4	306.8	313.7	325.3	329.9	338.0
72.5°	261.8	246.8	239.9	239.9	241.1	245.7	256.1	268.8	279.1	288.4	298.8
75°	212.2	197.2	186.9	185.7	188.0	194.9	209.9	221.5	238.8	251.5	264.1
77.5°	171.9	153.4	140.7	139.6	143.0	153.4	171.9	186.9	206.5	220.3	234.2
80°	137.3	116.5	106.1	99.2	105.0	117.7	138.4	156.9	175.3	193.8	211.1
82.5°	109.6	90.0	73.8	66.9	73.8	91.1	110.7	132.6	151.1	170.7	188.0
85°	86.5	65.7	47.3	40.4	48.4	66.9	88.8	110.7	131.5	151.1	168.4
87.5°	68.1	47.3	28.8	19.6	30.0	49.6	70.4	92.3	114.2	133.8	151.1
90°	53.1	33.5	16.1	2.3	17.3	35.8	56.5	77.3	99.2	118.8	136.1
92.5°	45.0	25.4	9.2	0.0	10.4	26.5	46.1	66.9	86.5	106.1	123.4
95°	38.1	20.8	6.9	0.0	6.9	20.8	38.1	56.5	76.1	95.7	113.0
97.5°	32.3	16.1	4.6	0.0	4.6	16.1	31.1	49.6	66.9	85.4	101.5
100°	27.7	13.8	3.5	0.0	3.5	12.7	26.5	42.7	60.0	77.3	92.3
102.5°	24.2	11.5	2.3	0.0	2.3	10.4	21.9	36.9	51.9	68.1	83.1
105°	20.8	9.2	2.3	0.0	1.2	8.1	18.5	32.3	46.1	61.1	75.0
107.5°	18.5	8.1	2.3	0.0	1.2	6.9	16.1	27.7	41.5	54.2	66.9
110°	16.1	6.9	2.3	0.0	1.2	4.6	13.8	24.2	35.8	48.4	61.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	13.8	5.8	1.2	0.0	0.0	3.5	11.5	20.8	31.1	43.8	54.2
115°	12.7	5.8	1.2	0.0	0.0	2.3	9.2	18.5	27.7	39.2	48.4
117.5°	11.5	4.6	1.2	0.0	1.2	2.3	8.1	16.1	24.2	33.5	43.8
120°	10.4	4.6	1.2	0.0	1.2	1.2	5.8	13.8	20.8	30.0	38.1
122.5°	9.2	4.6	1.2	0.0	1.2	1.2	4.6	11.5	18.5	26.5	33.5
125°	8.1	3.5	2.3	1.2	1.2	1.2	3.5	9.2	16.1	21.9	30.0
127.5°	8.1	3.5	2.3	1.2	1.2	1.2	2.3	8.1	12.7	19.6	26.5
130°	6.9	3.5	2.3	1.2	1.2	1.2	1.2	5.8	11.5	16.1	21.9
132.5°	5.8	3.5	2.3	1.2	1.2	1.2	1.2	3.5	8.1	13.8	18.5
135°	5.8	3.5	2.3	1.2	1.2	1.2	1.2	2.3	5.8	10.4	15.0
137.5°	4.6	2.3	2.3	1.2	1.2	1.2	1.2	1.2	4.6	8.1	11.5
140°	4.6	2.3	2.3	1.2	1.2	1.2	1.2	1.2	3.5	5.8	9.2
142.5°	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2	2.3	4.6	6.9
145°	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	2.3	4.6
147.5°	3.5	3.5	2.3	1.2	1.2	1.2	1.2	1.2	1.2	2.3	3.5
150°	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3
152.5°	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3
155°	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3
157.5°	3.5	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3
160°	3.5	2.3	2.3	1.2	2.3	1.2	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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	2102.8	2080.9	2092.4	2088.9	2093.6	2102.8	2101.6	2099.3	2099.3	2095.9	2091.3
5°	2095.9	2075.1	2085.5	2079.7	2085.5	2093.6	2092.4	2088.9	2091.3	2085.5	2079.7
7.5°	2082.0	2063.6	2072.8	2068.2	2072.8	2080.9	2077.4	2076.3	2078.6	2069.3	2065.9
10°	2065.9	2045.1	2055.5	2049.7	2055.5	2061.3	2059.0	2054.3	2059.0	2049.7	2046.3
12.5°	2040.5	2023.2	2030.1	2027.8	2031.3	2037.0	2032.4	2029.0	2031.3	2023.2	2016.3
15°	2012.8	1995.5	2001.3	1997.8	2000.1	2007.0	1999.0	1997.8	1995.5	1987.4	1985.1
17.5°	1977.1	1960.9	1966.7	1960.9	1964.4	1962.1	1960.9	1955.1	1955.1	1945.9	1939.0
20°	1933.2	1919.4	1915.9	1911.3	1915.9	1911.3	1904.4	1899.8	1898.6	1889.4	1883.6
22.5°	1882.5	1866.3	1868.6	1855.9	1857.1	1850.2	1838.6	1834.0	1829.4	1819.0	1811.0
25°	1821.3	1805.2	1793.7	1785.6	1775.2	1774.0	1759.0	1747.5	1746.4	1733.7	1732.5
27.5°	1752.1	1733.7	1724.4	1704.8	1692.1	1681.8	1669.1	1657.5	1651.8	1637.9	1628.7
30°	1672.5	1651.8	1628.7	1614.9	1595.3	1587.2	1565.3	1551.4	1546.8	1531.8	1524.9
32.5°	1582.6	1560.7	1542.2	1515.7	1493.8	1482.2	1460.3	1446.5	1440.7	1424.5	1415.3
35°	1484.5	1460.3	1438.4	1413.0	1395.7	1376.1	1349.6	1335.7	1323.0	1317.3	1310.3
37.5°	1381.9	1355.3	1330.0	1304.6	1289.6	1266.5	1243.4	1234.2	1219.2	1213.5	1206.5
40°	1275.7	1249.2	1225.0	1200.8	1183.5	1162.7	1141.9	1138.5	1122.3	1116.6	1111.9
42.5°	1170.8	1143.1	1115.4	1098.1	1085.4	1064.7	1050.8	1047.4	1033.5	1030.1	1030.1
45°	1076.2	1041.6	1018.5	1003.5	993.1	975.8	964.3	962.0	950.5	948.2	948.2
47.5°	974.7	942.4	925.1	915.9	906.6	893.9	887.0	887.0	875.5	873.2	872.0
50°	880.1	850.1	837.4	828.2	827.0	817.8	812.0	809.7	809.7	801.7	802.8
52.5°	790.1	775.1	764.8	759.0	752.1	746.3	741.7	741.7	738.2	732.5	734.8
55°	707.1	689.8	690.9	686.3	682.9	679.4	680.6	673.6	672.5	667.9	671.3
57.5°	624.0	624.0	621.7	618.3	612.5	614.8	614.8	614.8	609.0	605.6	609.0
60°	553.7	557.1	551.4	554.8	552.5	553.7	551.4	551.4	547.9	546.7	547.9
62.5°	491.4	497.1	494.8	499.5	497.1	498.3	500.6	496.0	493.7	491.4	493.7
65°	436.0	442.9	441.8	445.2	446.4	447.5	448.7	446.4	444.1	441.8	440.6
67.5°	387.6	394.5	399.1	400.3	401.4	404.9	403.7	401.4	399.1	395.6	394.5
70°	343.7	353.0	358.7	361.0	365.7	363.3	363.3	362.2	359.9	356.4	355.3
72.5°	306.8	317.2	323.0	325.3	329.9	329.9	328.7	327.6	325.3	321.8	320.7
75°	274.5	283.8	291.8	296.4	299.9	299.9	298.8	297.6	295.3	293.0	291.8
77.5°	249.2	257.2	264.1	269.9	272.2	273.4	272.2	269.9	269.9	268.8	267.6
80°	223.8	233.0	239.9	245.7	249.2	249.2	248.0	249.2	246.8	245.7	244.5
82.5°	201.9	212.2	220.3	226.1	228.4	229.5	228.4	229.5	227.2	227.2	227.2
85°	182.2	192.6	201.9	206.5	209.9	211.1	211.1	211.1	209.9	209.9	209.9
87.5°	166.1	176.5	185.7	190.3	193.8	194.9	194.9	196.1	193.8	193.8	193.8
90°	151.1	161.5	170.7	175.3	178.8	181.1	181.1	182.2	181.1	179.9	179.9
92.5°	137.3	148.8	158.0	162.6	166.1	169.6	169.6	170.7	168.4	168.4	168.4
95°	125.7	137.3	145.3	151.1	154.6	156.9	158.0	158.0	156.9	156.9	156.9
97.5°	115.3	125.7	133.8	139.6	143.0	144.2	145.3	146.5	145.3	145.3	145.3
100°	105.0	115.3	123.4	128.0	132.6	133.8	135.0	136.1	136.1	135.0	135.0
102.5°	95.7	106.1	113.0	118.8	122.3	124.6	125.7	125.7	125.7	125.7	125.7
105°	86.5	96.9	103.8	109.6	113.0	115.3	116.5	117.7	117.7	116.5	116.5
107.5°	78.4	87.7	95.7	100.4	105.0	107.3	108.4	108.4	109.6	108.4	108.4
110°	70.4	80.7	87.7	92.3	96.9	99.2	100.4	101.5	101.5	101.5	101.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	64.6	72.7	79.6	84.2	88.8	91.1	92.3	93.4	94.6	93.4	93.4
115°	57.7	65.7	72.7	77.3	80.7	83.1	85.4	86.5	86.5	87.7	86.5
117.5°	51.9	58.8	65.7	70.4	73.8	77.3	78.4	79.6	80.7	79.6	79.6
120°	46.1	53.1	58.8	63.4	66.9	70.4	71.5	72.7	73.8	72.7	72.7
122.5°	41.5	47.3	53.1	57.7	61.1	63.4	65.7	65.7	66.9	66.9	66.9
125°	36.9	42.7	47.3	51.9	55.4	57.7	58.8	60.0	60.0	61.1	61.1
127.5°	32.3	36.9	42.7	46.1	49.6	51.9	53.1	54.2	54.2	55.4	55.4
130°	27.7	32.3	36.9	40.4	43.8	46.1	47.3	48.4	49.6	49.6	49.6
132.5°	24.2	28.8	32.3	35.8	38.1	40.4	42.7	43.8	43.8	43.8	43.8
135°	19.6	24.2	27.7	31.1	33.5	35.8	36.9	39.2	39.2	39.2	39.2
137.5°	16.1	20.8	24.2	26.5	28.8	31.1	32.3	33.5	34.6	34.6	34.6
140°	12.7	16.1	19.6	23.1	25.4	26.5	28.8	28.8	30.0	30.0	30.0
142.5°	9.2	12.7	15.0	18.5	20.8	23.1	24.2	25.4	25.4	25.4	25.4
145°	6.9	9.2	11.5	13.8	17.3	18.5	19.6	20.8	21.9	21.9	21.9
147.5°	4.6	6.9	8.1	10.4	12.7	15.0	16.1	17.3	18.5	18.5	18.5
150°	3.5	4.6	6.9	8.1	9.2	11.5	13.8	13.8	15.0	15.0	13.8
152.5°	2.3	3.5	4.6	5.8	6.9	8.1	10.4	10.4	11.5	11.5	11.5
155°	2.3	2.3	2.3	3.5	4.6	5.8	6.9	8.1	8.1	8.1	8.1
157.5°	2.3	2.3	2.3	2.3	2.3	3.5	4.6	5.8	5.8	5.8	5.8
160°	2.3	2.3	1.2	1.2	2.3	2.3	2.3	2.3	3.5	3.5	3.5
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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	2094.7	2097.0	2097.0	2094.7	2093.6	2098.2	2092.4	2070.5	2077.4	2079.7	2086.6
5°	2084.3	2086.6	2086.6	2086.6	2084.3	2088.9	2083.2	2061.3	2069.3	2072.8	2077.4
7.5°	2069.3	2070.5	2072.8	2071.6	2069.3	2076.3	2070.5	2048.6	2054.3	2060.1	2065.9
10°	2049.7	2049.7	2050.9	2053.2	2050.9	2056.6	2050.9	2031.3	2037.0	2040.5	2047.4
12.5°	2023.2	2025.5	2026.7	2025.5	2024.3	2029.0	2026.7	2008.2	2010.5	2017.4	2024.3
15°	1987.4	1987.4	1993.2	1990.9	1990.9	1995.5	1997.8	1977.1	1980.5	1990.9	1997.8
17.5°	1943.6	1944.8	1949.4	1951.7	1950.5	1958.6	1959.8	1943.6	1942.5	1955.1	1962.1
20°	1887.1	1889.4	1895.2	1899.8	1899.8	1909.0	1912.5	1902.1	1903.2	1917.1	1919.4
22.5°	1817.9	1817.9	1828.3	1835.2	1840.9	1846.7	1857.1	1847.9	1847.9	1866.3	1876.7
25°	1732.5	1740.6	1744.1	1757.9	1766.0	1782.1	1791.3	1792.5	1793.7	1811.0	1817.9
27.5°	1637.9	1640.2	1650.6	1666.8	1676.0	1691.0	1708.3	1711.8	1717.5	1740.6	1751.0
30°	1530.7	1537.6	1542.2	1565.3	1578.0	1597.6	1619.5	1627.6	1632.2	1663.3	1676.0
32.5°	1421.1	1423.4	1443.0	1455.7	1470.7	1491.4	1516.8	1531.8	1541.0	1573.3	1591.8
35°	1311.5	1316.1	1332.3	1348.4	1363.4	1384.2	1410.7	1431.5	1447.6	1476.4	1500.7
37.5°	1211.1	1222.7	1226.1	1242.3	1253.8	1274.6	1293.0	1323.0	1339.2	1369.2	1400.3
40°	1121.2	1124.6	1126.9	1143.1	1151.2	1170.8	1197.3	1216.9	1238.8	1260.7	1297.7
42.5°	1032.4	1034.7	1038.1	1047.4	1056.6	1070.4	1090.0	1109.6	1132.7	1165.0	1189.2
45°	950.5	952.8	955.1	960.8	968.9	981.6	994.3	1008.1	1031.2	1058.9	1084.3
47.5°	874.3	878.9	878.9	880.1	885.9	896.3	905.5	922.8	935.5	950.5	979.3
50°	801.7	805.1	806.3	806.3	809.7	816.7	819.0	830.5	842.0	855.9	876.6
52.5°	733.6	733.6	732.5	737.1	737.1	741.7	742.8	749.8	757.8	772.8	782.1
55°	669.0	669.0	672.5	670.2	670.2	672.5	671.3	672.5	679.4	688.6	696.7
57.5°	606.7	605.6	609.0	606.7	605.6	607.9	610.2	605.6	606.7	616.0	616.0
60°	544.4	545.6	549.1	546.7	546.7	546.7	544.4	542.1	539.8	545.6	547.9
62.5°	494.8	491.4	494.8	491.4	493.7	492.5	490.2	485.6	486.8	484.5	482.2
65°	442.9	442.9	444.1	440.6	442.9	442.9	439.5	438.3	431.4	429.1	423.3
67.5°	397.9	397.9	399.1	396.8	396.8	397.9	394.5	391.0	384.1	380.6	372.6
70°	358.7	358.7	358.7	357.6	357.6	357.6	355.3	350.7	343.7	338.0	327.6
72.5°	323.0	324.1	323.0	323.0	326.4	323.0	319.5	314.9	309.1	297.6	288.4
75°	294.1	295.3	294.1	294.1	294.1	293.0	291.8	284.9	278.0	268.8	254.9
77.5°	268.8	268.8	269.9	268.8	268.8	267.6	264.1	258.4	250.3	242.2	226.1
80°	244.5	245.7	246.8	248.0	245.7	244.5	241.1	236.5	226.1	216.9	200.7
82.5°	227.2	226.1	227.2	228.4	226.1	224.9	221.5	215.7	207.6	194.9	178.8
85°	209.9	208.8	208.8	209.9	208.8	206.5	203.0	197.2	189.2	176.5	160.3
87.5°	192.6	193.8	194.9	193.8	192.6	190.3	186.9	181.1	171.9	161.5	144.2
90°	179.9	179.9	179.9	179.9	178.8	176.5	173.0	166.1	158.0	145.3	130.3
92.5°	168.4	168.4	168.4	168.4	167.3	163.8	160.3	154.6	145.3	132.6	118.8
95°	156.9	158.0	156.9	156.9	154.6	153.4	147.6	141.9	133.8	121.1	106.1
97.5°	144.2	145.3	144.2	144.2	143.0	140.7	137.3	130.3	122.3	110.7	96.9
100°	135.0	135.0	133.8	133.8	132.6	130.3	125.7	120.0	111.9	100.4	86.5
102.5°	124.6	125.7	124.6	124.6	122.3	120.0	116.5	110.7	102.7	91.1	78.4
105°	116.5	116.5	115.3	115.3	113.0	110.7	107.3	100.4	93.4	83.1	70.4
107.5°	108.4	108.4	107.3	107.3	105.0	102.7	98.0	92.3	85.4	75.0	63.4
110°	100.4	100.4	100.4	99.2	96.9	93.4	90.0	84.2	77.3	68.1	56.5





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	94.6	93.4	92.3	91.1	88.8	86.5	81.9	76.1	69.2	61.1	50.8
115°	86.5	86.5	85.4	84.2	81.9	78.4	75.0	70.4	63.4	54.2	45.0
117.5°	79.6	79.6	78.4	77.3	75.0	71.5	68.1	63.4	56.5	48.4	40.4
120°	72.7	72.7	71.5	70.4	68.1	64.6	62.3	56.5	50.8	42.7	35.8
122.5°	66.9	65.7	65.7	63.4	62.3	58.8	55.4	50.8	45.0	38.1	31.1
125°	60.0	60.0	58.8	57.7	56.5	53.1	49.6	45.0	39.2	33.5	27.7
127.5°	54.2	54.2	53.1	51.9	50.8	47.3	43.8	40.4	34.6	28.8	23.1
130°	48.4	48.4	47.3	46.1	45.0	41.5	39.2	34.6	30.0	25.4	19.6
132.5°	43.8	43.8	42.7	41.5	39.2	36.9	34.6	30.0	26.5	21.9	17.3
135°	39.2	38.1	38.1	36.9	34.6	32.3	30.0	26.5	21.9	18.5	13.8
137.5°	34.6	33.5	32.3	31.1	30.0	27.7	25.4	23.1	19.6	15.0	11.5
140°	30.0	28.8	28.8	27.7	25.4	24.2	21.9	18.5	16.1	12.7	9.2
142.5°	25.4	25.4	24.2	23.1	21.9	20.8	18.5	16.1	12.7	10.4	6.9
145°	21.9	20.8	20.8	19.6	18.5	16.1	15.0	12.7	10.4	8.1	5.8
147.5°	17.3	17.3	17.3	16.1	15.0	13.8	12.7	10.4	8.1	5.8	3.5
150°	13.8	13.8	13.8	12.7	11.5	10.4	9.2	8.1	5.8	3.5	2.3
152.5°	11.5	11.5	10.4	10.4	9.2	8.1	6.9	5.8	3.5	2.3	2.3
155°	8.1	8.1	8.1	6.9	6.9	5.8	4.6	3.5	2.3	2.3	2.3
157.5°	5.8	5.8	5.8	4.6	4.6	3.5	3.5	2.3	2.3	2.3	2.3
160°	3.5	3.5	3.5	3.5	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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	2083.2	2082.0	2091.3	2091.3	2080.9	2097.0	2114.3
5°	2076.3	2075.1	2084.3	2084.3	2075.1	2091.3	2109.7
7.5°	2062.4	2063.6	2072.8	2075.1	2063.6	2078.6	2098.2
10°	2047.4	2046.3	2056.6	2059.0	2049.7	2063.6	2082.0
12.5°	2023.2	2023.2	2033.6	2037.0	2027.8	2044.0	2061.3
15°	1997.8	1997.8	2004.7	2010.5	2002.4	2017.4	2034.7
17.5°	1965.5	1964.4	1971.3	1978.2	1970.1	1986.3	2004.7
20°	1924.0	1924.0	1932.1	1940.1	1934.4	1949.4	1970.1
22.5°	1880.2	1875.6	1889.4	1895.2	1891.7	1906.7	1927.5
25°	1824.8	1823.6	1837.5	1845.6	1840.9	1857.1	1875.6
27.5°	1764.8	1763.7	1777.5	1787.9	1785.6	1800.6	1821.3
30°	1692.1	1697.9	1710.6	1727.9	1722.1	1738.3	1760.2
32.5°	1616.0	1621.8	1636.8	1655.2	1656.4	1669.1	1691.0
35°	1524.9	1539.9	1550.3	1574.5	1579.1	1591.8	1614.9
37.5°	1429.2	1446.5	1468.4	1486.8	1496.1	1506.4	1533.0
40°	1321.9	1347.3	1371.5	1393.4	1404.9	1415.3	1440.7
42.5°	1225.0	1244.6	1267.7	1289.6	1310.3	1319.6	1346.1
45°	1115.4	1138.5	1159.2	1185.8	1206.5	1216.9	1243.4
47.5°	1008.1	1031.2	1058.9	1077.3	1099.3	1109.6	1135.0
50°	905.5	926.2	949.3	971.2	989.7	998.9	1020.8
52.5°	804.0	825.9	847.8	861.6	881.3	888.2	906.6
55°	714.0	729.0	748.6	756.7	776.3	780.9	793.6
57.5°	627.5	637.9	644.8	658.6	672.5	682.9	697.9
60°	549.1	553.7	558.3	566.4	577.9	581.4	587.1
62.5°	478.7	477.5	486.8	489.1	490.2	501.8	496.0
65°	416.4	417.6	409.5	406.0	410.6	414.1	411.8
67.5°	364.5	357.6	350.7	342.6	335.7	339.1	335.7
70°	313.7	308.0	296.4	284.9	280.3	273.4	269.9
72.5°	273.4	259.5	248.0	233.0	224.9	216.9	211.1
75°	242.2	222.6	206.5	190.3	178.8	167.3	164.9
77.5°	209.9	191.5	173.0	155.7	138.4	125.7	121.1
80°	184.6	167.3	145.3	124.6	106.1	90.0	84.2
82.5°	161.5	143.0	121.1	99.2	78.4	61.1	54.2
85°	141.9	122.3	100.4	78.4	57.7	39.2	30.0
87.5°	126.9	105.0	83.1	62.3	40.4	21.9	11.5
90°	113.0	92.3	71.5	49.6	28.8	11.5	0.0
92.5°	100.4	80.7	60.0	40.4	21.9	6.9	1.2
95°	88.8	71.5	50.8	32.3	16.1	4.6	1.2
97.5°	79.6	62.3	43.8	26.5	12.7	3.5	1.2
100°	71.5	54.2	38.1	21.9	10.4	2.3	1.2
102.5°	63.4	48.4	32.3	18.5	8.1	1.2	1.2
105°	56.5	42.7	27.7	16.1	6.9	1.2	1.2
107.5°	50.8	38.1	24.2	13.8	4.6	1.2	1.2
110°	45.0	32.3	20.8	11.5	3.5	1.2	1.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-61SL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	40.4	28.8	18.5	9.2	2.3	1.2	1.2
115°	35.8	25.4	16.1	8.1	2.3	1.2	1.2
117.5°	31.1	21.9	13.8	5.8	1.2	1.2	1.2
120°	27.7	19.6	11.5	4.6	1.2	1.2	1.2
122.5°	24.2	16.1	9.2	3.5	1.2	1.2	1.2
125°	20.8	13.8	8.1	2.3	1.2	1.2	1.2
127.5°	17.3	11.5	5.8	2.3	1.2	1.2	1.2
130°	15.0	9.2	4.6	1.2	1.2	1.2	1.2
132.5°	12.7	6.9	3.5	1.2	1.2	1.2	1.2
135°	10.4	5.8	2.3	1.2	1.2	1.2	1.2
137.5°	8.1	4.6	2.3	1.2	1.2	1.2	1.2
140°	5.8	3.5	1.2	1.2	1.2	1.2	1.2
142.5°	4.6	2.3	1.2	1.2	1.2	1.2	1.2
145°	3.5	2.3	1.2	1.2	1.2	1.2	1.2
147.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2
150°	2.3	2.3	1.2	1.2	2.3	1.2	1.2
152.5°	2.3	1.2	1.2	1.2	2.3	1.2	1.2
155°	2.3	2.3	2.3	2.3	2.3	2.3	1.2
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)