

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213825

Luminaire Tested: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

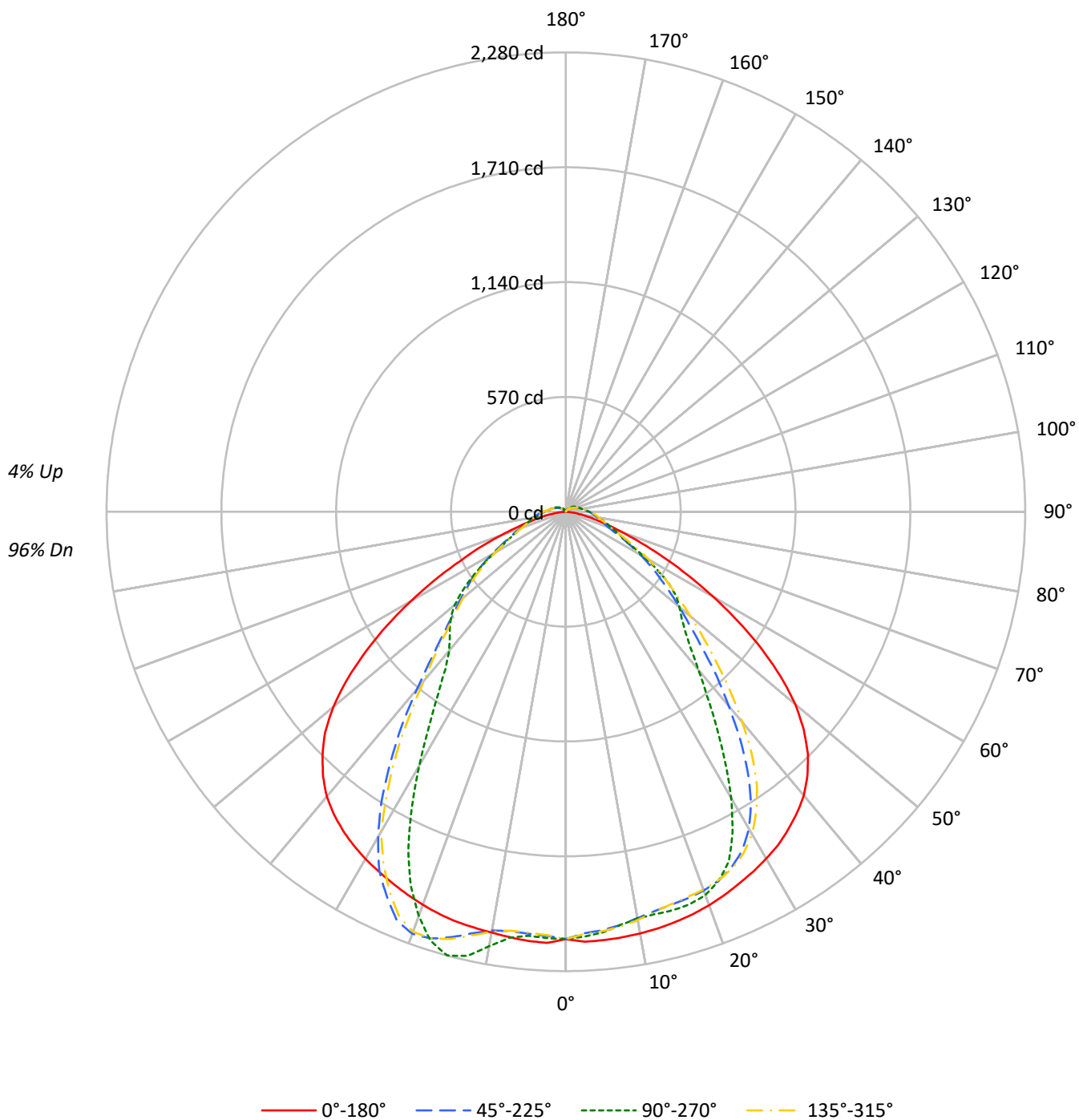
Lumens per Lamp: N/A
Luminaire Lumens: 5056.0 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 46
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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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
RCR																				
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	98	98	96
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	84	84	82
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	73	73	71
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	63	63	61
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	56	56	54
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	49	49	47
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	44	44	42
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	40	40	38
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	36	36	34
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	33	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17139	17139	17139	17139
5°	17264	16460	17299	16588
10°	17343	15775	17308	16846
15°	17478	15564	17469	17329
20°	17670	15317	17651	16146
25°	17888	14531	17878	14040
30°	18224	12593	18234	11157
35°	18582	10184	18634	8618
40°	18896	8199	18975	7224
45°	18829	6946	18927	6763
50°	18018	6395	18270	6251
55°	15986	5747	16385	5225
60°	12966	4399	13655	4034
65°	9639	3366	10385	3192
70°	6556	2906	7389	2778
75°	4289	2622	4994	2479
80°	2771	2444	3249	2249
85°	1421	2438	1872	2227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 18927 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.5	4.0
10°-20°	599.4	11.9
20°-30°	911.3	18.0
30°-40°	977.6	19.3
40°-50°	848.4	16.8
50°-60°	628.8	12.4
60°-70°	360.3	7.1
70°-80°	199.5	3.9
80°-90°	121.5	2.4
90°-100°	79.0	1.6
100°-110°	52.9	1.0
110°-120°	35.7	0.7
120°-130°	21.9	0.4
130°-140°	11.5	0.2
140°-150°	5.3	0.1
150°-160°	1.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1712.1	33.9
0°-40°	2689.7	53.2
0°-60°	4166.9	82.4
0°-90°	4848.1	95.9
90°-120°	167.6	3.3
90°-150°	206.4	4.1
90°-180°	208.0	4.1
0°-180°	5056.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2121	2121	2121	2121	2121	
5°	2134	2096	2138	2112	2134	203
15°	2107	2048	2106	2280	2107	596
25°	2035	1915	2034	1850	2035	941
35°	1925	1304	1930	1103	1925	1205
45°	1699	836	1708	814	1699	1301
55°	1185	627	1215	570	1185	1051
65°	538	318	580	301	538	542
75°	153	202	179	191	153	175
85°	21	139	27	127	21	27
90°	0	116	2	107	0	1
95°	1	95	0	91	1	1
105°	1	71	1	68	1	1
115°	1	58	1	53	1	1
125°	1	44	1	36	1	1
135°	1	27	1	23	1	1
145°	1	16	2	13	1	1
155°	2	8	2	7	2	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2136.2	2130.7	2128.5	2124.2	2127.4	2140.6	2131.8	2117.6	2118.7	2093.5	2106.6
5°	2134.0	2127.4	2124.2	2119.8	2122.0	2134.0	2125.2	2111.0	2109.9	2084.7	2096.8
7.5°	2130.7	2124.2	2118.7	2115.4	2116.5	2126.3	2115.4	2099.0	2095.7	2068.3	2079.2
10°	2125.2	2120.9	2113.2	2107.7	2106.6	2117.6	2100.0	2083.6	2075.9	2047.5	2058.4
12.5°	2117.6	2111.0	2103.3	2093.5	2092.4	2099.0	2084.7	2061.7	2054.0	2031.0	2043.1
15°	2106.6	2099.0	2090.2	2079.2	2073.8	2078.1	2060.6	2039.8	2038.7	2019.0	2035.4
17.5°	2094.6	2083.6	2073.8	2058.4	2050.8	2054.0	2039.8	2021.2	2023.4	2011.3	2029.9
20°	2078.1	2066.1	2050.8	2035.4	2024.5	2029.9	2020.1	2005.8	2009.1	2000.4	2016.8
22.5°	2059.5	2043.1	2024.5	2006.9	1998.2	2005.8	1998.2	1986.1	1987.2	1981.7	1991.6
25°	2035.4	2016.8	1994.9	1973.0	1968.6	1974.1	1969.7	1959.8	1955.4	1946.7	1951.1
27.5°	2013.5	1992.7	1965.3	1942.3	1934.6	1945.6	1935.7	1919.3	1907.2	1895.2	1886.4
30°	1988.3	1963.1	1932.4	1906.1	1899.6	1904.0	1889.7	1864.5	1832.8	1817.4	1793.3
32.5°	1960.9	1928.1	1889.7	1860.1	1855.8	1852.5	1826.2	1790.0	1740.7	1710.1	1672.8
35°	1924.8	1888.6	1842.6	1806.5	1799.9	1781.3	1738.5	1690.3	1626.8	1574.2	1510.7
37.5°	1884.2	1841.5	1793.3	1745.1	1726.5	1689.2	1629.0	1578.6	1482.2	1418.7	1342.0
40°	1838.2	1786.7	1727.6	1669.5	1638.8	1578.6	1509.6	1435.1	1342.0	1256.5	1191.9
42.5°	1774.7	1719.9	1649.8	1585.2	1532.6	1452.6	1371.6	1266.4	1180.9	1108.6	1042.9
45°	1699.1	1633.4	1552.3	1474.5	1407.7	1312.4	1217.1	1111.9	1040.7	956.4	911.4
47.5°	1601.6	1530.4	1443.9	1357.3	1269.7	1164.5	1064.8	964.0	892.8	832.6	799.7
50°	1486.6	1420.8	1325.5	1222.6	1126.2	1016.6	916.9	841.3	772.3	735.1	709.9
52.5°	1344.2	1282.8	1185.3	1073.6	980.5	873.1	782.2	720.8	671.5	644.1	635.4
55°	1185.3	1131.6	1035.2	931.2	835.9	737.3	668.2	614.6	582.8	566.4	567.5
57.5°	1015.5	973.9	883.0	789.8	700.0	625.5	563.1	520.4	496.3	495.2	498.4
60°	845.7	815.0	736.2	656.2	577.3	517.1	471.1	441.5	426.1	427.2	426.1
62.5°	683.6	655.1	598.1	532.4	470.0	429.4	387.8	375.8	362.6	361.5	361.5
65°	537.9	516.0	470.0	422.9	375.8	349.5	328.6	314.4	304.5	302.4	303.5
67.5°	404.2	395.5	363.7	331.9	302.4	285.9	268.4	265.1	257.4	257.4	259.6
70°	301.3	294.7	277.2	258.5	246.5	235.5	226.8	226.8	225.7	224.6	230.1
72.5°	218.0	219.1	213.6	199.4	198.3	196.1	193.9	197.2	198.3	201.6	208.1
75°	153.4	156.7	156.7	154.5	158.8	164.3	167.6	173.1	179.7	184.0	191.7
77.5°	108.5	108.5	113.9	120.5	129.3	139.1	147.9	155.6	164.3	169.8	176.4
80°	70.1	73.4	82.2	94.2	106.3	119.4	131.5	141.3	150.1	158.8	163.2
82.5°	41.6	47.1	58.1	73.4	88.7	105.2	117.2	129.3	139.1	147.9	151.2
85°	20.8	28.5	41.6	58.1	74.5	92.0	107.4	118.3	129.3	136.9	141.3
87.5°	6.6	15.3	29.6	44.9	62.4	80.0	96.4	108.5	118.3	124.9	129.3
90°	0.0	7.7	20.8	37.2	53.7	71.2	86.5	99.7	109.5	115.0	118.3
92.5°	0.0	4.4	16.4	30.7	46.0	63.5	78.9	90.9	99.7	105.2	107.4
95°	1.1	3.3	12.1	25.2	40.5	57.0	71.2	82.2	90.9	96.4	97.5
97.5°	1.1	2.2	9.9	20.8	35.1	50.4	64.6	75.6	82.2	87.6	88.7
100°	1.1	2.2	7.7	18.6	30.7	44.9	58.1	67.9	75.6	80.0	81.1
102.5°	1.1	1.1	6.6	15.3	27.4	39.4	51.5	61.3	67.9	72.3	74.5
105°	1.1	1.1	5.5	13.1	24.1	35.1	46.0	55.9	61.3	65.7	67.9
107.5°	1.1	1.1	4.4	11.0	20.8	30.7	41.6	49.3	55.9	60.3	62.4
110°	1.1	1.1	3.3	9.9	17.5	27.4	36.2	43.8	50.4	54.8	57.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.1	1.1	3.3	8.8	15.3	24.1	31.8	39.4	44.9	49.3	52.6
115°	1.1	1.1	3.3	7.7	14.2	20.8	28.5	35.1	40.5	44.9	48.2
117.5°	1.1	1.1	3.3	6.6	12.1	18.6	25.2	31.8	36.2	40.5	43.8
120°	1.1	1.1	2.2	5.5	11.0	16.4	21.9	27.4	32.9	37.2	40.5
122.5°	1.1	1.1	2.2	5.5	8.8	14.2	19.7	24.1	29.6	32.9	36.2
125°	1.1	1.1	2.2	4.4	7.7	13.1	17.5	21.9	25.2	29.6	32.9
127.5°	1.1	1.1	2.2	4.4	6.6	11.0	15.3	19.7	23.0	26.3	28.5
130°	1.1	1.1	2.2	3.3	5.5	8.8	13.1	16.4	20.8	23.0	25.2
132.5°	1.1	1.1	1.1	3.3	4.4	6.6	9.9	14.2	17.5	20.8	21.9
135°	1.1	1.1	1.1	2.2	4.4	5.5	7.7	11.0	14.2	17.5	19.7
137.5°	1.1	1.1	1.1	2.2	3.3	5.5	6.6	8.8	12.1	14.2	17.5
140°	1.1	1.1	1.1	2.2	3.3	4.4	5.5	7.7	9.9	12.1	14.2
142.5°	1.1	1.1	1.1	2.2	2.2	3.3	4.4	6.6	7.7	9.9	12.1
145°	1.1	1.1	1.1	2.2	2.2	3.3	4.4	5.5	6.6	7.7	9.9
147.5°	1.1	1.1	1.1	2.2	2.2	2.2	3.3	4.4	5.5	6.6	7.7
150°	2.2	2.2	2.2	2.2	2.2	2.2	3.3	3.3	4.4	5.5	6.6
152.5°	2.2	2.2	2.2	2.2	2.2	2.2	3.3	3.3	3.3	4.4	5.5
155°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.3	3.3	4.4	4.4
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2102.2	2104.4	2117.6	2116.5	2114.3	2112.1	2112.1	2109.9	2112.1	2117.6	2115.4
5°	2091.3	2094.6	2104.4	2103.3	2101.1	2100.0	2099.0	2095.7	2097.9	2105.5	2103.3
7.5°	2071.6	2074.9	2083.6	2079.2	2075.9	2078.1	2072.7	2069.4	2073.8	2081.4	2080.3
10°	2050.8	2052.9	2063.9	2061.7	2056.2	2057.3	2051.8	2049.7	2055.1	2059.5	2060.6
12.5°	2036.5	2044.2	2054.0	2052.9	2051.8	2052.9	2047.5	2045.3	2048.6	2052.9	2051.8
15°	2033.2	2043.1	2054.0	2054.0	2055.1	2056.2	2050.8	2047.5	2050.8	2054.0	2052.9
17.5°	2029.9	2042.0	2051.8	2050.8	2051.8	2054.0	2045.3	2043.1	2047.5	2051.8	2049.7
20°	2019.0	2029.9	2036.5	2034.3	2034.3	2035.4	2024.5	2024.5	2031.0	2034.3	2035.4
22.5°	1988.3	2001.5	2001.5	1996.0	1996.0	1991.6	1988.3	1981.7	1989.4	1994.9	1999.3
25°	1942.3	1947.8	1941.2	1929.2	1922.6	1917.1	1901.8	1914.9	1914.9	1931.3	1936.8
27.5°	1877.7	1865.6	1847.0	1821.8	1816.3	1798.8	1788.9	1792.2	1797.7	1820.7	1838.2
30°	1771.4	1735.3	1703.5	1692.5	1668.4	1650.9	1633.4	1642.1	1652.0	1665.1	1701.3
32.5°	1631.2	1596.1	1544.6	1526.0	1500.8	1478.9	1458.1	1471.2	1488.8	1497.5	1537.0
35°	1470.1	1428.5	1381.4	1349.6	1323.3	1311.3	1285.0	1303.6	1322.3	1328.8	1362.8
37.5°	1299.2	1256.5	1214.9	1187.5	1162.3	1154.6	1137.1	1150.3	1164.5	1174.4	1202.8
40°	1137.1	1097.7	1065.9	1047.3	1029.8	1023.2	1016.6	1022.1	1033.0	1040.7	1062.6
42.5°	998.0	966.2	944.3	933.4	921.3	912.5	913.6	915.8	921.3	937.7	947.6
45°	876.4	857.8	843.5	841.3	833.7	832.6	831.5	835.9	839.1	849.0	856.7
47.5°	778.9	771.2	767.9	772.3	775.6	771.2	773.4	778.9	785.5	785.5	784.4
50°	702.2	704.4	708.8	718.6	725.2	727.4	729.6	736.2	737.3	739.5	736.2
52.5°	639.8	642.0	654.0	669.3	677.0	680.3	684.7	691.3	691.3	693.4	689.1
55°	576.2	579.5	591.6	606.9	613.5	617.9	622.2	626.6	629.9	634.3	631.0
57.5°	506.1	516.0	523.6	528.0	532.4	535.7	539.0	540.1	546.6	547.7	553.2
60°	431.6	433.8	441.5	440.4	437.1	445.9	441.5	449.1	456.8	466.7	467.8
62.5°	360.4	361.5	367.0	364.8	369.2	368.1	371.4	371.4	376.8	381.2	386.7
65°	304.5	305.6	310.0	310.0	308.9	312.2	315.5	317.7	317.7	321.0	325.4
67.5°	262.9	266.2	270.6	272.8	275.0	275.0	278.3	279.3	281.5	282.6	284.8
70°	234.4	238.8	243.2	245.4	246.5	248.7	249.8	249.8	252.0	253.1	255.2
72.5°	213.6	218.0	221.3	221.3	223.5	224.6	224.6	225.7	226.8	229.0	231.1
75°	196.1	199.4	201.6	200.5	200.5	200.5	201.6	201.6	203.8	206.0	208.1
77.5°	179.7	182.9	182.9	180.8	180.8	180.8	180.8	181.9	182.9	185.1	187.3
80°	167.6	167.6	166.5	166.5	164.3	163.2	163.2	164.3	164.3	166.5	169.8
82.5°	154.5	154.5	153.4	152.3	151.2	150.1	150.1	151.2	152.3	153.4	155.6
85°	142.4	142.4	140.2	140.2	139.1	139.1	139.1	139.1	140.2	141.3	143.5
87.5°	130.4	129.3	128.2	127.1	127.1	127.1	127.1	127.1	128.2	130.4	131.5
90°	118.3	117.2	116.1	116.1	115.0	115.0	116.1	116.1	117.2	118.3	119.4
92.5°	107.4	106.3	105.2	105.2	104.1	104.1	105.2	104.1	106.3	106.3	107.4
95°	97.5	96.4	95.3	95.3	95.3	95.3	95.3	95.3	96.4	96.4	97.5
97.5°	88.7	87.6	86.5	86.5	87.6	86.5	87.6	87.6	87.6	88.7	89.8
100°	81.1	80.0	80.0	81.1	80.0	80.0	81.1	81.1	81.1	81.1	82.2
102.5°	74.5	74.5	74.5	74.5	74.5	74.5	75.6	75.6	75.6	75.6	76.7
105°	67.9	69.0	69.0	69.0	70.1	70.1	70.1	71.2	71.2	71.2	71.2
107.5°	63.5	64.6	64.6	65.7	65.7	66.8	66.8	66.8	66.8	67.9	67.9
110°	59.2	60.3	61.3	62.4	62.4	63.5	63.5	63.5	63.5	63.5	63.5



TEST NUMBER: P1213825

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	54.8	55.9	57.0	59.2	60.3	60.3	60.3	60.3	61.3	61.3	60.3
115°	50.4	52.6	53.7	55.9	57.0	57.0	58.1	58.1	58.1	58.1	57.0
117.5°	46.0	49.3	50.4	52.6	53.7	53.7	54.8	54.8	54.8	54.8	53.7
120°	42.7	44.9	47.1	48.2	49.3	50.4	50.4	51.5	51.5	51.5	50.4
122.5°	39.4	41.6	43.8	44.9	46.0	47.1	47.1	47.1	47.1	47.1	47.1
125°	35.1	37.2	39.4	40.5	41.6	42.7	42.7	43.8	43.8	43.8	42.7
127.5°	31.8	34.0	35.1	37.2	38.3	38.3	39.4	39.4	39.4	39.4	38.3
130°	27.4	29.6	31.8	32.9	34.0	34.0	35.1	35.1	35.1	35.1	35.1
132.5°	24.1	26.3	27.4	29.6	29.6	30.7	30.7	31.8	31.8	31.8	30.7
135°	21.9	23.0	24.1	26.3	26.3	27.4	27.4	27.4	27.4	27.4	27.4
137.5°	19.7	20.8	21.9	23.0	23.0	24.1	24.1	24.1	24.1	25.2	24.1
140°	16.4	18.6	19.7	19.7	20.8	20.8	20.8	21.9	21.9	21.9	20.8
142.5°	14.2	15.3	16.4	17.5	18.6	18.6	18.6	18.6	19.7	18.6	18.6
145°	11.0	13.1	14.2	15.3	16.4	16.4	16.4	16.4	16.4	16.4	16.4
147.5°	8.8	9.9	12.1	13.1	13.1	14.2	14.2	14.2	14.2	14.2	14.2
150°	7.7	7.7	9.9	11.0	12.1	12.1	12.1	12.1	12.1	12.1	12.1
152.5°	5.5	6.6	7.7	8.8	9.9	9.9	9.9	9.9	9.9	9.9	9.9
155°	5.5	5.5	6.6	6.6	7.7	7.7	7.7	7.7	8.8	7.7	7.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213825

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2112.1	2111.0	2115.4	2111.0	2089.1	2097.9	2094.6	2106.6	2107.7	2111.0	2122.0
5°	2101.1	2101.1	2106.6	2102.2	2081.4	2090.2	2089.1	2101.1	2103.3	2105.5	2117.6
7.5°	2079.2	2080.3	2088.0	2084.7	2062.8	2075.9	2074.9	2089.1	2093.5	2097.9	2108.8
10°	2058.4	2057.3	2066.1	2062.8	2042.0	2057.3	2056.2	2070.5	2077.0	2084.7	2097.9
12.5°	2047.5	2044.2	2047.5	2044.2	2021.2	2033.2	2034.3	2050.8	2058.4	2068.3	2083.6
15°	2047.5	2042.0	2042.0	2035.4	2009.1	2016.8	2017.9	2028.8	2038.7	2048.6	2067.2
17.5°	2045.3	2039.8	2038.7	2033.2	2004.7	2004.7	2003.6	2011.3	2016.8	2026.7	2046.4
20°	2033.2	2031.0	2029.9	2026.7	2000.4	1996.0	1993.8	1993.8	1997.1	2000.4	2020.1
22.5°	2001.5	2003.6	2005.8	2008.0	1987.2	1979.5	1980.6	1978.5	1975.2	1975.2	1991.6
25°	1942.3	1953.3	1962.0	1971.9	1959.8	1954.3	1960.9	1957.6	1952.2	1947.8	1962.0
27.5°	1848.1	1871.1	1889.7	1913.8	1914.9	1910.5	1928.1	1925.9	1924.8	1918.2	1929.2
30°	1717.7	1753.9	1779.1	1814.1	1843.7	1848.1	1877.7	1882.0	1886.4	1883.1	1894.1
32.5°	1560.0	1609.3	1652.0	1706.8	1735.3	1760.4	1802.1	1819.6	1837.1	1842.6	1854.7
35°	1388.0	1443.9	1494.2	1554.5	1599.4	1654.2	1704.6	1730.9	1770.3	1785.6	1803.2
37.5°	1224.8	1277.3	1326.6	1386.9	1459.2	1516.2	1578.6	1637.8	1691.4	1713.3	1739.6
40°	1080.2	1122.9	1170.0	1222.6	1288.3	1362.8	1430.7	1512.9	1576.4	1620.2	1658.6
42.5°	970.6	991.4	1031.9	1079.1	1131.6	1207.2	1276.2	1368.3	1444.9	1507.4	1570.9
45°	873.1	883.0	912.5	937.7	991.4	1058.2	1131.6	1221.5	1301.4	1381.4	1458.1
47.5°	789.8	801.9	816.1	831.5	869.8	925.7	989.2	1070.3	1150.3	1243.4	1331.0
50°	734.0	737.3	739.5	746.0	769.0	807.4	858.9	927.9	1004.6	1104.3	1197.4
52.5°	684.7	684.7	678.1	674.8	683.6	707.7	737.3	786.6	865.4	957.5	1056.0
55°	632.1	622.2	620.0	609.1	611.3	622.2	636.5	674.8	739.5	818.3	913.6
57.5°	558.7	554.3	554.3	549.9	541.2	546.6	549.9	577.3	623.3	691.3	774.5
60°	474.3	472.2	477.6	478.7	471.1	474.3	473.3	489.7	522.5	577.3	646.3
62.5°	390.0	399.9	400.9	405.3	400.9	399.9	405.3	419.6	436.0	477.6	531.3
65°	327.6	333.0	334.1	339.6	337.4	337.4	341.8	352.7	362.6	391.1	432.7
67.5°	287.0	284.8	285.9	289.2	285.9	284.8	288.1	294.7	302.4	319.9	349.5
70°	255.2	253.1	253.1	253.1	248.7	245.4	246.5	248.7	252.0	261.8	280.4
72.5°	231.1	231.1	227.9	224.6	221.3	219.1	216.9	214.7	213.6	216.9	226.8
75°	209.2	210.3	209.2	206.0	201.6	197.2	192.8	188.4	182.9	180.8	181.9
77.5°	189.5	190.6	191.7	190.6	186.2	180.8	174.2	167.6	159.9	152.3	147.9
80°	172.0	174.2	175.3	174.2	170.9	166.5	158.8	151.2	140.2	130.4	119.4
82.5°	156.7	159.9	161.0	161.0	158.8	154.5	145.7	136.9	124.9	111.7	97.5
85°	144.6	146.8	149.0	149.0	147.9	143.5	134.7	124.9	112.8	97.5	82.2
87.5°	132.6	133.6	135.8	138.0	135.8	131.5	123.8	112.8	100.8	85.4	67.9
90°	120.5	121.6	123.8	126.0	124.9	120.5	113.9	104.1	90.9	74.5	57.0
92.5°	108.5	110.6	111.7	112.8	113.9	110.6	105.2	95.3	82.2	65.7	49.3
95°	99.7	99.7	101.9	103.0	104.1	100.8	96.4	86.5	74.5	59.2	42.7
97.5°	90.9	90.9	93.1	93.1	94.2	92.0	87.6	78.9	66.8	52.6	36.2
100°	82.2	83.3	84.4	85.4	85.4	84.4	80.0	71.2	60.3	47.1	31.8
102.5°	76.7	76.7	77.8	77.8	78.9	76.7	72.3	64.6	53.7	41.6	27.4
105°	71.2	71.2	72.3	72.3	71.2	69.0	64.6	58.1	48.2	36.2	24.1
107.5°	66.8	66.8	66.8	66.8	65.7	63.5	59.2	51.5	42.7	32.9	21.9
110°	63.5	62.4	62.4	61.3	60.3	57.0	52.6	46.0	38.3	28.5	18.6

TEST NUMBER: P1213825

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	60.3	59.2	58.1	57.0	54.8	51.5	47.1	41.6	34.0	25.2	16.4
115°	57.0	55.9	54.8	52.6	50.4	47.1	42.7	37.2	29.6	21.9	14.2
117.5°	53.7	52.6	50.4	48.2	46.0	42.7	38.3	32.9	26.3	19.7	13.1
120°	49.3	48.2	47.1	44.9	42.7	38.3	34.0	29.6	23.0	17.5	11.0
122.5°	46.0	44.9	42.7	41.6	38.3	35.1	30.7	26.3	20.8	15.3	9.9
125°	41.6	40.5	39.4	37.2	35.1	30.7	27.4	23.0	18.6	13.1	7.7
127.5°	38.3	37.2	35.1	32.9	30.7	27.4	24.1	20.8	16.4	11.0	7.7
130°	34.0	32.9	31.8	29.6	27.4	24.1	21.9	17.5	14.2	9.9	6.6
132.5°	29.6	29.6	28.5	26.3	24.1	21.9	18.6	15.3	12.1	8.8	5.5
135°	27.4	26.3	25.2	23.0	21.9	18.6	16.4	13.1	9.9	7.7	4.4
137.5°	24.1	23.0	21.9	20.8	18.6	16.4	14.2	11.0	8.8	6.6	4.4
140°	20.8	19.7	19.7	17.5	16.4	14.2	12.1	9.9	7.7	5.5	3.3
142.5°	18.6	17.5	16.4	15.3	14.2	12.1	9.9	7.7	6.6	4.4	3.3
145°	16.4	15.3	14.2	13.1	12.1	9.9	8.8	6.6	5.5	4.4	3.3
147.5°	13.1	13.1	12.1	11.0	9.9	8.8	7.7	6.6	4.4	3.3	2.2
150°	11.0	11.0	9.9	8.8	8.8	7.7	6.6	5.5	4.4	3.3	2.2
152.5°	9.9	8.8	8.8	7.7	7.7	6.6	5.5	4.4	3.3	3.3	2.2
155°	7.7	7.7	7.7	6.6	6.6	5.5	4.4	4.4	3.3	2.2	2.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213825

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2124.2	2111.0	2122.0	2141.7	2139.5	2137.3	2135.1	2139.5	2153.7	2146.1	2134.0
5°	2120.9	2107.7	2119.8	2138.4	2137.3	2134.0	2131.8	2136.2	2150.4	2142.8	2129.6
7.5°	2114.3	2102.2	2111.0	2129.6	2129.6	2127.4	2125.2	2129.6	2142.8	2136.2	2123.1
10°	2103.3	2094.6	2103.3	2120.9	2122.0	2117.6	2115.4	2120.9	2134.0	2130.7	2119.8
12.5°	2094.6	2085.8	2095.7	2113.2	2114.3	2109.9	2106.6	2113.2	2130.7	2132.9	2129.6
15°	2082.5	2074.9	2086.9	2105.5	2105.5	2102.2	2102.2	2111.0	2135.1	2145.0	2150.4
17.5°	2065.0	2059.5	2073.8	2092.4	2093.5	2091.3	2092.4	2109.9	2141.7	2165.8	2181.1
20°	2043.1	2040.9	2056.2	2075.9	2079.2	2080.3	2085.8	2112.1	2155.9	2188.8	2204.1
22.5°	2016.8	2017.9	2035.4	2056.2	2060.6	2063.9	2074.9	2112.1	2166.9	2201.9	2208.5
25°	1987.2	1990.5	2009.1	2034.3	2039.8	2046.4	2065.0	2113.2	2170.2	2193.2	2182.2
27.5°	1955.4	1962.0	1986.1	2012.4	2019.0	2029.9	2054.0	2106.6	2154.8	2155.9	2115.4
30°	1922.6	1930.2	1958.7	1989.4	2000.4	2011.3	2040.9	2091.3	2117.6	2082.5	2011.3
32.5°	1885.3	1896.3	1924.8	1962.0	1975.2	1989.4	2019.0	2061.7	2051.8	1976.3	1874.4
35°	1838.2	1853.6	1886.4	1930.2	1942.3	1960.9	1981.7	1991.6	1947.8	1840.4	1725.4
37.5°	1780.2	1803.2	1841.5	1891.9	1905.1	1917.1	1922.6	1895.2	1807.6	1691.4	1572.0
40°	1713.3	1748.4	1790.0	1845.9	1859.0	1859.0	1839.3	1781.3	1670.6	1518.3	1385.8
42.5°	1632.3	1675.0	1727.6	1783.5	1796.6	1781.3	1734.2	1632.3	1506.3	1336.5	1196.3
45°	1533.7	1590.6	1649.8	1707.9	1714.4	1680.5	1596.1	1466.9	1311.3	1153.5	1019.9
47.5°	1416.5	1491.0	1555.6	1621.3	1612.6	1555.6	1442.8	1296.0	1131.6	982.7	875.3
50°	1285.0	1372.6	1444.9	1507.4	1488.8	1409.9	1277.3	1124.0	960.7	833.7	744.9
52.5°	1144.8	1245.6	1317.9	1368.3	1343.1	1248.9	1103.2	956.4	822.7	706.6	647.4
55°	999.1	1101.0	1175.5	1214.9	1182.0	1080.2	936.6	803.0	677.0	601.4	566.4
57.5°	857.8	953.1	1023.2	1055.0	1013.3	911.4	778.9	666.1	575.1	511.6	494.1
60°	721.9	799.7	866.5	890.6	845.7	751.5	637.6	547.7	480.9	437.1	428.3
62.5°	595.9	659.5	712.1	730.7	686.9	613.5	514.9	448.1	400.9	379.0	368.1
65°	491.9	529.1	582.8	579.5	553.2	485.3	413.0	365.9	335.2	321.0	314.4
67.5°	386.7	420.7	454.6	459.0	426.1	379.0	331.9	298.0	281.5	273.9	270.6
70°	299.1	324.3	345.1	339.6	322.1	292.5	262.9	244.3	237.7	234.4	234.4
72.5°	232.2	245.4	255.2	248.7	237.7	222.4	208.1	200.5	201.6	203.8	206.0
75°	179.7	182.9	185.1	178.6	176.4	166.5	165.4	166.5	173.1	179.7	182.9
77.5°	138.0	133.6	130.4	123.8	124.9	123.8	129.3	138.0	147.9	157.8	166.5
80°	106.3	96.4	88.7	82.2	85.4	90.9	101.9	115.0	128.2	139.1	150.1
82.5°	82.2	67.9	57.0	50.4	57.0	65.7	80.0	96.4	111.7	123.8	135.8
85°	63.5	47.1	34.0	27.4	34.0	47.1	62.4	81.1	97.5	110.6	122.7
87.5°	49.3	34.0	18.6	11.0	18.6	32.9	50.4	67.9	84.4	99.7	111.7
90°	39.4	23.0	8.8	2.2	9.9	23.0	39.4	57.0	73.4	89.8	101.9
92.5°	31.8	16.4	4.4	0.0	5.5	17.5	32.9	49.3	65.7	81.1	93.1
95°	26.3	13.1	3.3	0.0	4.4	13.1	26.3	42.7	58.1	73.4	83.3
97.5°	21.9	9.9	2.2	0.0	2.2	11.0	21.9	36.2	51.5	65.7	75.6
100°	18.6	8.8	2.2	0.0	2.2	8.8	18.6	31.8	44.9	58.1	67.9
102.5°	15.3	6.6	1.1	1.1	1.1	6.6	16.4	27.4	39.4	51.5	61.3
105°	14.2	5.5	1.1	1.1	1.1	5.5	14.2	24.1	35.1	46.0	54.8
107.5°	12.1	4.4	1.1	1.1	1.1	4.4	12.1	20.8	31.8	41.6	49.3
110°	9.9	4.4	1.1	1.1	1.1	4.4	9.9	18.6	27.4	36.2	43.8

TEST NUMBER: P1213825

CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.8	3.3	1.1	1.1	1.1	3.3	8.8	16.4	24.1	32.9	39.4
115°	7.7	3.3	1.1	1.1	1.1	3.3	7.7	14.2	20.8	28.5	35.1
117.5°	6.6	3.3	1.1	1.1	1.1	2.2	6.6	12.1	18.6	25.2	31.8
120°	5.5	2.2	1.1	1.1	1.1	2.2	5.5	11.0	16.4	21.9	27.4
122.5°	5.5	2.2	1.1	1.1	1.1	2.2	4.4	8.8	14.2	18.6	24.1
125°	4.4	2.2	1.1	1.1	1.1	1.1	4.4	7.7	12.1	16.4	20.8
127.5°	4.4	2.2	1.1	1.1	1.1	1.1	3.3	6.6	9.9	14.2	18.6
130°	3.3	2.2	1.1	1.1	1.1	1.1	2.2	5.5	8.8	12.1	15.3
132.5°	3.3	2.2	1.1	1.1	1.1	1.1	2.2	4.4	6.6	9.9	13.1
135°	3.3	1.1	1.1	1.1	1.1	1.1	1.1	3.3	5.5	7.7	9.9
137.5°	2.2	1.1	1.1	1.1	1.1	1.1	1.1	2.2	4.4	5.5	8.8
140°	2.2	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.3	4.4	6.6
142.5°	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.3	5.5
145°	2.2	1.1	1.1	2.2	2.2	1.1	1.1	2.2	2.2	3.3	4.4
147.5°	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3
150°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.3
152.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
155°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2131.8	2106.6	2119.8	2115.4	2119.8	2130.7	2129.6	2126.3	2128.5	2123.1	2117.6
5°	2127.4	2102.2	2115.4	2109.9	2115.4	2126.3	2124.2	2120.9	2124.2	2117.6	2112.1
7.5°	2122.0	2099.0	2114.3	2113.2	2123.1	2137.3	2138.4	2138.4	2146.1	2136.2	2131.8
10°	2122.0	2109.9	2130.7	2138.4	2163.6	2182.2	2184.4	2188.8	2201.9	2199.7	2188.8
12.5°	2145.0	2142.8	2173.4	2192.1	2215.1	2241.4	2255.6	2260.0	2268.8	2262.2	2257.8
15°	2174.5	2185.5	2219.5	2240.3	2265.5	2285.2	2288.5	2290.7	2297.2	2287.4	2279.7
17.5°	2214.0	2220.6	2247.9	2256.7	2273.1	2276.4	2272.0	2261.1	2261.1	2239.2	2232.6
20°	2232.6	2229.3	2240.3	2226.0	2219.5	2199.7	2181.1	2160.3	2159.2	2136.2	2134.0
22.5°	2216.2	2194.3	2171.3	2136.2	2120.9	2092.4	2067.2	2055.1	2047.5	2017.9	2010.2
25°	2158.1	2104.4	2070.5	2028.8	1991.6	1958.7	1934.6	1909.4	1885.3	1861.2	1850.3
27.5°	2057.3	2006.9	1952.2	1894.1	1842.6	1792.2	1751.7	1726.5	1703.5	1671.7	1655.3
30°	1933.5	1863.4	1803.2	1747.3	1662.9	1601.6	1567.6	1517.3	1499.7	1485.5	1454.8
32.5°	1787.8	1703.5	1621.3	1545.7	1459.2	1402.2	1357.3	1320.1	1309.1	1271.9	1263.1
35°	1626.8	1516.2	1423.0	1348.5	1286.1	1217.1	1179.8	1154.6	1132.7	1107.5	1103.2
37.5°	1437.3	1337.6	1232.4	1166.7	1117.4	1058.2	1029.8	1012.2	1002.4	983.7	980.5
40°	1246.7	1147.0	1074.7	1008.9	978.3	946.5	925.7	918.0	913.6	907.1	900.5
42.5°	1073.6	985.9	934.5	890.6	877.5	862.1	856.7	861.1	856.7	854.5	853.4
45°	926.8	860.0	823.8	810.7	807.4	803.0	807.4	815.0	816.1	813.9	813.9
47.5°	793.1	761.4	746.0	748.2	753.7	757.0	764.7	774.5	776.7	771.2	773.4
50°	705.5	686.9	683.6	692.3	704.4	708.8	717.5	725.2	724.1	721.9	719.7
52.5°	623.3	617.9	626.6	635.4	648.5	650.7	654.0	657.3	656.2	651.8	649.6
55°	554.3	558.7	566.4	569.7	579.5	578.4	579.5	579.5	575.1	572.9	569.7
57.5°	491.9	493.0	497.4	498.4	503.9	501.7	500.6	498.4	491.9	490.8	487.5
60°	428.3	426.1	436.0	428.3	432.7	428.3	427.2	421.8	415.2	414.1	411.9
62.5°	368.1	363.7	370.3	367.0	369.2	364.8	362.6	356.0	350.6	349.5	348.4
65°	314.4	312.2	318.8	317.7	319.9	314.4	312.2	307.8	303.5	302.4	301.3
67.5°	269.5	275.0	278.3	278.3	280.4	279.3	273.9	272.8	271.7	267.3	267.3
70°	236.6	239.9	246.5	247.6	246.5	248.7	244.3	243.2	242.1	239.9	238.8
72.5°	210.3	214.7	221.3	222.4	221.3	221.3	219.1	218.0	218.0	214.7	214.7
75°	189.5	195.0	200.5	200.5	200.5	198.3	196.1	196.1	193.9	192.8	190.6
77.5°	172.0	178.6	182.9	181.9	180.8	178.6	178.6	175.3	172.0	172.0	169.8
80°	158.8	163.2	166.5	165.4	164.3	161.0	159.9	156.7	154.5	151.2	151.2
82.5°	144.6	150.1	152.3	151.2	149.0	145.7	144.6	142.4	140.2	139.1	136.9
85°	132.6	138.0	139.1	136.9	134.7	132.6	131.5	130.4	129.3	127.1	127.1
87.5°	120.5	126.0	126.0	124.9	122.7	121.6	120.5	119.4	118.3	117.2	116.1
90°	110.6	115.0	115.0	113.9	112.8	111.7	110.6	109.5	108.5	107.4	107.4
92.5°	100.8	105.2	105.2	104.1	103.0	101.9	101.9	100.8	99.7	98.6	97.5
95°	92.0	96.4	96.4	96.4	95.3	94.2	94.2	93.1	92.0	92.0	90.9
97.5°	83.3	87.6	87.6	87.6	86.5	85.4	85.4	84.4	84.4	84.4	83.3
100°	75.6	78.9	80.0	80.0	78.9	78.9	78.9	77.8	77.8	77.8	76.7
102.5°	67.9	71.2	73.4	73.4	73.4	72.3	72.3	72.3	72.3	72.3	71.2
105°	61.3	64.6	66.8	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
107.5°	55.9	59.2	61.3	62.4	63.5	63.5	64.6	64.6	64.6	64.6	64.6
110°	50.4	53.7	57.0	58.1	59.2	60.3	60.3	61.3	60.3	60.3	60.3

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CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	44.9	49.3	51.5	53.7	54.8	55.9	57.0	57.0	57.0	57.0	57.0
115°	40.5	44.9	47.1	49.3	51.5	52.6	52.6	53.7	53.7	53.7	52.6
117.5°	36.2	40.5	42.7	44.9	46.0	48.2	49.3	49.3	49.3	49.3	48.2
120°	32.9	36.2	38.3	40.5	42.7	43.8	44.9	44.9	44.9	44.9	44.9
122.5°	28.5	31.8	35.1	37.2	38.3	39.4	40.5	40.5	40.5	40.5	40.5
125°	25.2	28.5	30.7	32.9	34.0	36.2	36.2	36.2	36.2	36.2	36.2
127.5°	21.9	25.2	27.4	29.6	30.7	31.8	32.9	32.9	32.9	32.9	32.9
130°	18.6	21.9	24.1	26.3	27.4	28.5	28.5	29.6	29.6	29.6	29.6
132.5°	16.4	18.6	20.8	23.0	24.1	25.2	25.2	26.3	26.3	26.3	26.3
135°	13.1	16.4	17.5	19.7	20.8	21.9	21.9	23.0	23.0	23.0	23.0
137.5°	11.0	13.1	15.3	17.5	18.6	18.6	19.7	19.7	20.8	20.8	20.8
140°	8.8	9.9	13.1	14.2	15.3	16.4	17.5	17.5	17.5	17.5	17.5
142.5°	6.6	8.8	9.9	12.1	13.1	14.2	15.3	15.3	15.3	15.3	15.3
145°	5.5	6.6	7.7	9.9	11.0	12.1	13.1	13.1	13.1	13.1	13.1
147.5°	4.4	5.5	6.6	7.7	8.8	9.9	11.0	11.0	11.0	11.0	11.0
150°	3.3	4.4	5.5	5.5	6.6	7.7	8.8	9.9	9.9	9.9	9.9
152.5°	3.3	3.3	4.4	4.4	5.5	6.6	7.7	7.7	7.7	7.7	7.7
155°	2.2	3.3	3.3	3.3	4.4	4.4	5.5	6.6	6.6	6.6	6.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2120.9	2125.2	2123.1	2119.8	2118.7	2124.2	2118.7	2093.5	2103.3	2104.4	2112.1
5°	2117.6	2120.9	2118.7	2116.5	2113.2	2119.8	2113.2	2086.9	2096.8	2097.9	2105.5
7.5°	2139.5	2140.6	2140.6	2135.1	2126.3	2129.6	2120.9	2091.3	2096.8	2096.8	2102.2
10°	2194.3	2196.5	2199.7	2185.5	2174.5	2165.8	2153.7	2117.6	2116.5	2107.7	2107.7
12.5°	2265.5	2260.0	2254.5	2247.9	2239.2	2228.2	2210.7	2168.0	2153.7	2139.5	2125.2
15°	2286.3	2284.1	2283.0	2279.7	2274.2	2270.9	2257.8	2215.1	2194.3	2176.7	2151.5
17.5°	2231.5	2235.9	2250.1	2251.2	2257.8	2270.9	2268.8	2239.2	2220.6	2212.9	2182.2
20°	2132.9	2134.0	2151.5	2159.2	2187.7	2209.6	2226.0	2222.7	2218.4	2227.1	2204.1
22.5°	2014.6	2022.3	2040.9	2052.9	2080.3	2105.5	2131.8	2146.1	2169.1	2205.2	2200.8
25°	1853.6	1863.4	1889.7	1909.4	1947.8	1986.1	2021.2	2046.4	2073.8	2142.8	2165.8
27.5°	1660.8	1676.1	1710.1	1729.8	1783.5	1822.9	1873.3	1922.6	1960.9	2039.8	2086.9
30°	1458.1	1471.2	1507.4	1534.8	1580.8	1634.5	1698.0	1768.1	1831.7	1911.6	1970.8
32.5°	1268.6	1282.8	1312.4	1336.5	1388.0	1432.9	1503.0	1589.6	1648.7	1759.4	1838.2
35°	1103.2	1116.3	1137.1	1157.9	1200.7	1246.7	1306.9	1391.3	1466.9	1581.9	1681.6
37.5°	987.0	989.2	1001.3	1013.3	1045.1	1080.2	1127.3	1201.7	1271.9	1395.7	1505.2
40°	903.8	903.8	910.4	913.6	927.9	948.7	978.3	1036.3	1094.4	1188.6	1322.3
42.5°	852.3	850.1	850.1	851.2	850.1	860.0	877.5	904.9	956.4	1034.1	1138.2
45°	813.9	809.6	806.3	798.6	794.2	794.2	795.3	805.2	834.8	885.2	969.5
47.5°	771.2	770.1	764.7	755.9	748.2	742.7	734.0	730.7	739.5	767.9	824.9
50°	721.9	716.4	711.0	704.4	695.6	690.2	673.7	674.8	667.2	680.3	709.9
52.5°	649.6	645.2	643.1	637.6	634.3	632.1	619.0	605.8	602.5	604.7	615.7
55°	569.7	571.8	563.1	567.5	566.4	556.5	551.0	541.2	537.9	536.8	542.3
57.5°	486.4	488.6	483.1	487.5	487.5	482.0	478.7	478.7	471.1	464.5	472.2
60°	410.8	406.4	409.7	415.2	415.2	411.9	409.7	409.7	404.2	402.0	407.5
62.5°	349.5	345.1	348.4	353.8	354.9	352.7	350.6	350.6	344.0	344.0	348.4
65°	302.4	303.5	302.4	306.7	306.7	307.8	305.6	303.5	295.8	299.1	298.0
67.5°	268.4	267.3	267.3	271.7	270.6	272.8	270.6	267.3	261.8	257.4	256.3
70°	239.9	238.8	238.8	241.0	242.1	242.1	241.0	238.8	231.1	226.8	223.5
72.5°	214.7	213.6	214.7	215.8	216.9	218.0	216.9	214.7	208.1	202.7	197.2
75°	191.7	190.6	193.9	193.9	195.0	195.0	196.1	195.0	189.5	182.9	176.4
77.5°	168.7	169.8	173.1	174.2	176.4	177.5	178.6	178.6	173.1	167.6	158.8
80°	150.1	152.3	154.5	155.6	157.8	161.0	162.1	163.2	158.8	153.4	143.5
82.5°	136.9	138.0	140.2	141.3	144.6	145.7	146.8	149.0	146.8	141.3	130.4
85°	126.0	127.1	129.3	129.3	131.5	133.6	134.7	135.8	134.7	129.3	118.3
87.5°	116.1	117.2	118.3	119.4	120.5	121.6	122.7	123.8	122.7	117.2	107.4
90°	107.4	107.4	108.5	108.5	109.5	110.6	112.8	112.8	111.7	107.4	97.5
92.5°	97.5	98.6	98.6	99.7	100.8	101.9	103.0	103.0	101.9	97.5	88.7
95°	90.9	90.9	92.0	92.0	93.1	93.1	94.2	94.2	93.1	88.7	80.0
97.5°	83.3	83.3	83.3	83.3	84.4	84.4	85.4	85.4	84.4	80.0	72.3
100°	76.7	76.7	76.7	76.7	76.7	77.8	77.8	77.8	76.7	72.3	64.6
102.5°	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	69.0	65.7	58.1
105°	67.9	67.9	67.9	66.8	66.8	66.8	65.7	65.7	62.4	59.2	52.6
107.5°	63.5	63.5	63.5	62.4	62.4	61.3	60.3	60.3	57.0	53.7	47.1
110°	60.3	60.3	60.3	59.2	58.1	57.0	55.9	54.8	51.5	47.1	41.6



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CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	57.0	57.0	55.9	55.9	54.8	53.7	51.5	50.4	47.1	42.7	37.2
115°	52.6	52.6	52.6	51.5	50.4	49.3	48.2	46.0	42.7	38.3	32.9
117.5°	48.2	48.2	48.2	47.1	46.0	44.9	43.8	41.6	38.3	34.0	29.6
120°	43.8	43.8	43.8	42.7	41.6	40.5	39.4	37.2	34.0	30.7	25.2
122.5°	40.5	40.5	39.4	38.3	37.2	36.2	35.1	32.9	30.7	26.3	21.9
125°	36.2	36.2	35.1	35.1	34.0	32.9	31.8	29.6	26.3	23.0	19.7
127.5°	32.9	31.8	31.8	31.8	30.7	29.6	27.4	26.3	23.0	19.7	16.4
130°	28.5	28.5	28.5	27.4	27.4	26.3	24.1	21.9	19.7	17.5	14.2
132.5°	25.2	25.2	25.2	25.2	24.1	23.0	20.8	19.7	17.5	14.2	12.1
135°	23.0	23.0	21.9	21.9	20.8	19.7	18.6	16.4	14.2	12.1	9.9
137.5°	19.7	19.7	19.7	18.6	18.6	17.5	15.3	14.2	13.1	11.0	8.8
140°	17.5	17.5	16.4	16.4	15.3	15.3	14.2	12.1	11.0	8.8	7.7
142.5°	15.3	15.3	14.2	14.2	13.1	13.1	12.1	11.0	8.8	7.7	5.5
145°	13.1	13.1	12.1	12.1	12.1	11.0	9.9	8.8	7.7	6.6	5.5
147.5°	11.0	11.0	11.0	9.9	9.9	8.8	8.8	7.7	6.6	5.5	4.4
150°	9.9	9.9	8.8	8.8	8.8	7.7	6.6	6.6	5.5	4.4	3.3
152.5°	7.7	7.7	7.7	7.7	6.6	6.6	5.5	5.5	4.4	3.3	3.3
155°	6.6	6.6	6.6	5.5	5.5	5.5	4.4	4.4	3.3	3.3	2.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2108.8	2107.7	2117.6	2116.5	2103.3	2123.1	2136.2
5°	2103.3	2102.2	2111.0	2113.2	2099.0	2119.8	2134.0
7.5°	2099.0	2097.9	2107.7	2111.0	2096.8	2115.4	2130.7
10°	2100.0	2094.6	2103.3	2105.5	2092.4	2112.1	2125.2
12.5°	2107.7	2094.6	2097.9	2097.9	2085.8	2103.3	2117.6
15°	2126.3	2099.0	2094.6	2091.3	2075.9	2092.4	2106.6
17.5°	2147.2	2109.9	2094.6	2083.6	2065.0	2079.2	2094.6
20°	2168.0	2122.0	2096.8	2079.2	2054.0	2067.2	2078.1
22.5°	2177.8	2132.9	2099.0	2072.7	2040.9	2047.5	2059.5
25°	2164.7	2128.5	2094.6	2062.8	2024.5	2025.6	2035.4
27.5°	2116.5	2106.6	2084.7	2052.9	2011.3	2005.8	2013.5
30°	2034.3	2061.7	2062.8	2039.8	1996.0	1985.0	1988.3
32.5°	1919.3	1980.6	2016.8	2012.4	1974.1	1958.7	1960.9
35°	1786.7	1863.4	1942.3	1968.6	1941.2	1929.2	1924.8
37.5°	1627.9	1730.9	1836.0	1900.7	1896.3	1888.6	1884.2
40°	1452.6	1576.4	1701.3	1804.3	1836.0	1836.0	1838.2
42.5°	1265.3	1409.9	1546.8	1677.2	1751.7	1768.1	1774.7
45°	1084.5	1230.2	1379.2	1529.3	1629.0	1680.5	1699.1
47.5°	920.2	1067.0	1208.3	1372.6	1505.2	1572.0	1601.6
50°	780.0	889.5	1038.5	1201.7	1346.4	1428.5	1486.6
52.5°	663.9	749.3	879.7	1031.9	1177.6	1290.5	1344.2
55°	566.4	624.4	735.1	866.5	1005.7	1122.9	1185.3
57.5°	484.2	530.2	605.8	715.4	832.6	948.7	1015.5
60°	411.9	443.7	495.2	581.7	681.4	781.1	845.7
62.5°	349.5	370.3	404.2	467.8	545.6	623.3	683.6
65°	301.3	310.0	328.6	368.1	427.2	486.4	537.9
67.5°	254.2	259.6	273.9	298.0	327.6	370.3	404.2
70°	219.1	219.1	220.2	234.4	249.8	277.2	301.3
72.5°	190.6	187.3	180.8	184.0	187.3	202.7	218.0
75°	167.6	159.9	149.0	144.6	142.4	144.6	153.4
77.5°	147.9	136.9	123.8	112.8	104.1	100.8	108.5
80°	131.5	118.3	103.0	88.7	74.5	66.8	70.1
82.5°	118.3	101.9	85.4	69.0	52.6	41.6	41.6
85°	104.1	88.7	71.2	53.7	37.2	23.0	20.8
87.5°	94.2	77.8	59.2	42.7	26.3	12.1	6.6
90°	84.4	67.9	50.4	34.0	18.6	5.5	0.0
92.5°	75.6	60.3	43.8	27.4	13.1	3.3	0.0
95°	67.9	53.7	37.2	23.0	11.0	2.2	1.1
97.5°	60.3	47.1	32.9	18.6	7.7	2.2	1.1
100°	54.8	41.6	28.5	15.3	6.6	1.1	1.1
102.5°	48.2	37.2	24.1	13.1	5.5	1.1	1.1
105°	42.7	32.9	20.8	11.0	4.4	1.1	1.1
107.5°	38.3	28.5	18.6	9.9	4.4	1.1	1.1
110°	34.0	25.2	16.4	8.8	3.3	1.1	1.1



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CATALOG NUMBER: 4SNLED-LD5-56SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	30.7	21.9	14.2	7.7	2.2	1.1	1.1
115°	26.3	19.7	12.1	6.6	2.2	1.1	1.1
117.5°	23.0	16.4	11.0	5.5	2.2	1.1	1.1
120°	19.7	14.2	8.8	4.4	1.1	1.1	1.1
122.5°	17.5	12.1	7.7	4.4	1.1	1.1	1.1
125°	15.3	11.0	6.6	3.3	1.1	1.1	1.1
127.5°	13.1	8.8	5.5	2.2	1.1	1.1	1.1
130°	11.0	7.7	4.4	2.2	1.1	1.1	1.1
132.5°	8.8	6.6	4.4	2.2	1.1	1.1	1.1
135°	7.7	5.5	3.3	2.2	1.1	1.1	1.1
137.5°	6.6	4.4	2.2	2.2	2.2	1.1	1.1
140°	5.5	3.3	2.2	2.2	2.2	2.2	1.1
142.5°	4.4	3.3	2.2	2.2	2.2	2.2	1.1
145°	3.3	2.2	2.2	2.2	2.2	2.2	1.1
147.5°	3.3	2.2	2.2	2.2	2.2	2.2	1.1
150°	2.2	2.2	2.2	2.2	2.2	2.2	2.2
152.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2
155°	2.2	2.2	2.2	2.2	2.2	2.2	2.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)