

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-LD5-71SL-LN-UNV-L930-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-LD5-71SL-LN-UNV-L930-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

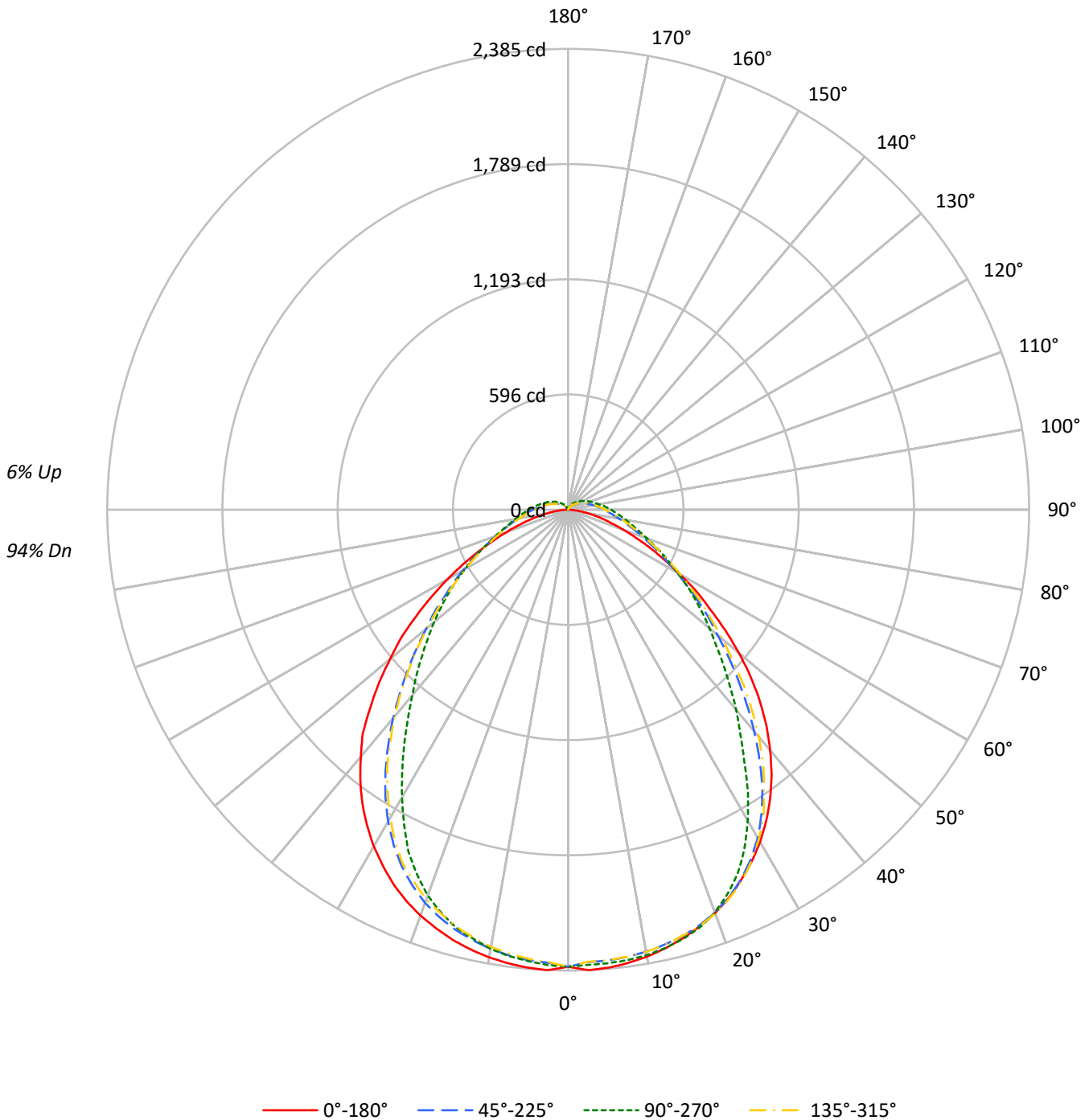
Lumens per Lamp: N/A  
Luminaire Lumens: 5986.0 lumens  
Efficiency: N/A  
Efficacy: 85.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 70  
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#  
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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94				94
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81	79				79
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69	67				67
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60	57				57
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52	50				50
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46	44				44
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41	39				39
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35				35
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31				31
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30	28				28
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27	26				26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	19114	19114	19114	19114
5°	19250	18505	19250	18424
10°	19165	18014	19196	17764
15°	19042	17476	19128	17021
20°	18895	16784	19006	16075
25°	18592	15757	18797	14829
30°	18198	14248	18436	13191
35°	17585	12400	17923	11546
40°	16704	10844	17146	10061
45°	15542	9427	16048	8887
50°	13955	8284	14571	7865
55°	12072	7315	12950	6945
60°	10153	6422	11071	6053
65°	8324	5678	9163	5265
70°	6623	5040	7418	4661
75°	5204	4653	5858	4281
80°	3755	4489	4423	4102
85°	2309	4515	3108	4150



TEST NUMBER: P#

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	224.2	3.7
10°-20°	643.0	10.7
20°-30°	953.0	15.9
30°-40°	1058.7	17.7
40°-50°	959.7	16.0
50°-60°	743.7	12.4
60°-70°	505.0	8.4
70°-80°	321.3	5.4
80°-90°	205.4	3.4
90°-100°	138.5	2.3
100°-110°	94.9	1.6
110°-120°	63.3	1.1
120°-130°	39.4	0.7
130°-140°	21.8	0.4
140°-150°	10.2	0.2
150°-160°	3.7	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1820.2	30.4
0°-40°	2878.9	48.1
0°-60°	4582.3	76.6
0°-90°	5614.0	93.8
90°-120°	296.6	5.0
90°-150°	367.9	6.1
90°-180°	372.0	6.2
0°-180°	5986.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2365	2365	2365	2365	2365	
5°	2380	2356	2380	2346	2380	226
15°	2295	2299	2306	2239	2295	648
25°	2116	2076	2139	1954	2116	974
35°	1822	1587	1857	1478	1822	1136
45°	1402	1134	1448	1070	1402	1077
55°	895	798	960	757	895	806
65°	464	536	511	497	464	466
75°	186	358	210	329	186	200
85°	34	258	46	237	34	40
90°	0	222	3	203	0	2
95°	1	190	0	177	1	1
105°	1	139	0	131	1	1
115°	1	105	0	98	1	1
125°	1	78	1	69	1	1
135°	1	55	1	44	1	1
145°	1	35	1	25	1	1
155°	1	20	1	9	1	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3
2.5°	2384.8	2382.2	2379.6	2375.7	2379.6	2390.0	2383.5	2369.2	2366.6	2343.2	2353.6
5°	2379.6	2375.7	2373.1	2369.2	2374.4	2387.4	2380.9	2367.9	2364.0	2341.9	2353.6
7.5°	2366.6	2364.0	2360.1	2360.1	2365.3	2378.3	2373.1	2358.8	2356.2	2334.1	2347.1
10°	2348.4	2347.1	2344.5	2344.5	2349.7	2365.3	2358.8	2345.8	2343.2	2322.4	2336.7
12.5°	2325.0	2326.3	2322.4	2322.4	2330.2	2345.8	2340.6	2326.3	2323.7	2305.5	2319.8
15°	2295.1	2296.4	2293.8	2295.1	2302.9	2321.1	2314.6	2301.6	2299.0	2284.7	2296.4
17.5°	2261.2	2262.5	2262.5	2261.2	2270.3	2288.6	2283.4	2271.6	2267.7	2256.0	2270.3
20°	2222.2	2222.2	2222.2	2222.2	2232.6	2250.8	2244.3	2235.2	2227.4	2218.3	2230.0
22.5°	2174.1	2172.8	2174.1	2178.0	2188.4	2202.7	2198.8	2188.4	2176.7	2171.5	2180.6
25°	2115.5	2119.4	2120.7	2124.6	2137.6	2149.3	2145.4	2135.0	2116.8	2112.9	2115.5
27.5°	2054.4	2057.0	2060.9	2059.6	2077.8	2089.5	2081.7	2072.6	2046.6	2042.7	2040.1
30°	1985.4	1989.3	1991.9	1990.6	2004.9	2017.9	2010.1	1998.4	1963.3	1960.7	1939.9
32.5°	1907.3	1911.3	1913.9	1913.9	1934.7	1939.9	1925.6	1908.6	1870.9	1861.8	1843.6
35°	1821.5	1825.4	1826.7	1826.7	1847.5	1846.2	1828.0	1804.6	1762.9	1751.2	1720.0
37.5°	1729.1	1731.7	1733.0	1740.8	1749.9	1742.1	1718.7	1688.8	1657.5	1625.0	1591.2
40°	1625.0	1628.9	1631.5	1636.7	1645.8	1636.7	1602.9	1566.5	1532.6	1496.2	1462.4
42.5°	1518.3	1530.0	1527.4	1526.1	1531.3	1506.6	1480.6	1439.0	1405.1	1367.4	1333.6
45°	1402.5	1401.2	1407.7	1410.3	1409.0	1388.2	1351.8	1314.1	1280.2	1241.2	1212.6
47.5°	1280.2	1278.9	1284.1	1286.7	1278.9	1256.8	1228.2	1185.3	1156.6	1122.8	1100.7
50°	1151.4	1151.4	1159.2	1151.4	1147.5	1125.4	1102.0	1059.1	1036.9	1007.0	994.0
52.5°	1022.6	1034.3	1026.5	1023.9	1020.0	997.9	979.7	944.6	926.4	913.3	897.7
55°	895.1	908.1	902.9	899.0	897.7	879.5	862.6	836.6	824.9	815.8	806.7
57.5°	787.1	785.8	783.2	779.3	780.6	766.3	749.4	735.1	729.9	726.0	728.6
60°	662.2	672.6	668.7	670.0	671.3	668.7	654.4	645.3	646.6	647.9	651.8
62.5°	559.5	568.6	575.1	569.9	572.5	576.4	568.6	566.0	571.2	576.4	581.6
65°	464.5	473.6	480.1	478.8	486.6	494.4	493.1	495.7	507.4	513.9	520.4
67.5°	378.6	387.7	396.8	398.1	409.8	421.5	426.7	435.9	448.9	458.0	465.8
70°	304.4	312.3	322.7	329.2	344.8	360.4	369.5	387.7	395.5	408.5	413.7
72.5°	238.1	244.6	258.9	274.5	287.5	307.0	325.3	340.9	352.6	366.9	373.4
75°	186.1	188.7	204.3	222.5	240.7	262.8	282.3	299.2	314.9	329.2	339.6
77.5°	136.6	140.5	154.8	179.5	200.4	223.8	245.9	264.1	281.0	295.3	309.7
80°	95.0	102.8	118.4	143.1	166.5	192.6	213.4	234.2	252.4	266.7	281.0
82.5°	61.1	67.7	89.8	114.5	139.2	165.2	187.4	208.2	227.7	243.3	256.3
85°	33.8	42.9	65.1	91.1	115.8	141.8	165.2	186.1	205.6	219.9	232.9
87.5°	13.0	26.0	46.8	71.6	96.3	121.0	145.7	165.2	184.7	200.4	212.1
90°	0.0	15.6	35.1	59.8	84.6	109.3	132.7	153.5	171.7	186.1	199.1
92.5°	1.3	10.4	27.3	48.1	71.6	95.0	117.1	137.9	156.1	170.4	182.1
95°	1.3	7.8	22.1	41.6	62.5	84.6	105.4	124.9	141.8	156.1	167.8
97.5°	1.3	5.2	18.2	36.4	54.6	76.8	96.3	114.5	130.1	144.4	153.5
100°	1.3	5.2	15.6	31.2	49.4	69.0	87.2	105.4	119.7	131.4	141.8
102.5°	1.3	3.9	13.0	27.3	44.2	61.1	79.4	96.3	109.3	121.0	131.4
105°	1.3	3.9	11.7	23.4	39.0	55.9	71.6	87.2	101.5	111.9	121.0
107.5°	1.3	2.6	10.4	19.5	33.8	50.7	66.4	79.4	92.4	102.8	111.9
110°	1.3	2.6	9.1	18.2	29.9	45.5	59.8	72.9	84.6	95.0	102.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.3	2.6	7.8	16.9	27.3	40.3	54.6	66.4	78.1	87.2	95.0
115°	1.3	2.6	7.8	15.6	24.7	35.1	48.1	61.1	70.3	80.7	87.2
117.5°	1.3	2.6	6.5	13.0	23.4	32.5	44.2	54.6	65.1	74.2	80.7
120°	1.3	2.6	6.5	11.7	20.8	29.9	39.0	49.4	59.8	66.4	72.9
122.5°	1.3	2.6	5.2	11.7	18.2	27.3	35.1	44.2	53.3	61.1	67.7
125°	1.3	2.6	5.2	10.4	16.9	24.7	32.5	39.0	48.1	54.6	61.1
127.5°	1.3	2.6	5.2	9.1	15.6	22.1	29.9	36.4	42.9	49.4	54.6
130°	1.3	2.6	3.9	7.8	14.3	19.5	26.0	33.8	39.0	44.2	49.4
132.5°	1.3	2.6	3.9	7.8	11.7	16.9	23.4	29.9	35.1	40.3	44.2
135°	1.3	2.6	3.9	6.5	10.4	15.6	19.5	26.0	31.2	36.4	40.3
137.5°	1.3	2.6	3.9	6.5	9.1	13.0	16.9	22.1	27.3	31.2	36.4
140°	1.3	2.6	3.9	5.2	7.8	11.7	15.6	18.2	23.4	27.3	31.2
142.5°	1.3	2.6	3.9	5.2	7.8	10.4	13.0	15.6	19.5	23.4	27.3
145°	1.3	2.6	3.9	5.2	6.5	9.1	11.7	14.3	15.6	19.5	22.1
147.5°	1.3	2.6	3.9	5.2	5.2	7.8	10.4	11.7	14.3	15.6	18.2
150°	1.3	2.6	3.9	3.9	5.2	6.5	9.1	10.4	11.7	14.3	15.6
152.5°	1.3	2.6	3.9	3.9	5.2	6.5	7.8	9.1	10.4	11.7	13.0
155°	1.3	2.6	3.9	3.9	3.9	5.2	6.5	7.8	9.1	10.4	11.7
157.5°	2.6	2.6	2.6	3.9	3.9	5.2	5.2	6.5	7.8	7.8	9.1
160°	2.6	2.6	2.6	3.9	3.9	3.9	5.2	5.2	6.5	6.5	7.8
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3
2.5°	2351.0	2354.9	2366.6	2366.6	2364.0	2361.4	2361.4	2357.5	2360.1	2365.3	2362.7
5°	2351.0	2354.9	2366.6	2366.6	2364.0	2361.4	2360.1	2356.2	2360.1	2365.3	2362.7
7.5°	2343.2	2348.4	2360.1	2360.1	2357.5	2356.2	2353.6	2351.0	2354.9	2360.1	2357.5
10°	2332.8	2338.0	2349.7	2349.7	2347.1	2347.1	2343.2	2340.6	2345.8	2349.7	2348.4
12.5°	2317.2	2323.7	2334.1	2332.8	2330.2	2331.5	2327.6	2322.4	2327.6	2331.5	2332.8
15°	2295.1	2302.9	2313.3	2310.7	2306.8	2309.4	2302.9	2299.0	2302.9	2310.7	2309.4
17.5°	2266.4	2271.6	2279.4	2279.4	2275.5	2272.9	2270.3	2266.4	2269.0	2274.2	2275.5
20°	2226.1	2232.6	2236.5	2232.6	2231.3	2227.4	2222.2	2218.3	2223.5	2231.3	2232.6
22.5°	2172.8	2174.1	2183.2	2174.1	2167.6	2166.3	2161.1	2153.2	2161.1	2167.6	2168.9
25°	2106.4	2112.9	2109.0	2093.4	2093.4	2083.0	2080.4	2076.5	2077.8	2089.5	2094.7
27.5°	2021.8	2024.4	2014.0	2001.0	1989.3	1982.8	1973.7	1975.0	1975.0	1990.6	1995.8
30°	1929.5	1915.2	1906.0	1885.2	1876.1	1860.5	1857.9	1857.9	1855.3	1863.1	1886.5
32.5°	1818.9	1799.4	1785.0	1765.5	1749.9	1734.3	1726.5	1730.4	1729.1	1748.6	1756.4
35°	1697.9	1686.2	1656.2	1631.5	1622.4	1599.0	1599.0	1587.3	1595.1	1617.2	1626.3
37.5°	1570.4	1552.2	1527.4	1500.1	1493.6	1475.4	1468.9	1462.4	1479.3	1483.2	1492.3
40°	1440.3	1423.4	1399.9	1373.9	1373.9	1351.8	1351.8	1351.8	1353.1	1360.9	1377.8
42.5°	1316.7	1298.5	1277.6	1259.4	1256.8	1239.9	1239.9	1238.6	1241.2	1247.7	1263.3
45°	1197.0	1182.7	1160.5	1151.4	1152.7	1134.5	1138.4	1134.5	1139.7	1146.2	1151.4
47.5°	1086.4	1077.3	1068.2	1055.2	1051.3	1050.0	1043.4	1038.2	1047.3	1047.3	1055.2
50°	983.6	978.4	973.2	965.4	966.7	961.5	953.7	953.7	960.2	961.5	966.7
52.5°	893.8	887.3	880.8	882.1	883.4	880.8	876.9	873.0	876.9	879.5	886.0
55°	804.1	798.8	805.4	802.8	805.4	802.8	800.1	797.5	804.1	800.1	806.7
57.5°	723.4	728.6	731.2	726.0	729.9	727.3	728.6	724.7	729.9	732.5	731.2
60°	649.2	657.0	653.1	654.4	659.6	657.0	651.8	655.7	660.9	662.2	660.9
62.5°	581.6	590.7	594.6	592.0	593.3	590.7	594.6	589.4	595.9	598.5	594.6
65°	520.4	530.8	533.4	533.4	533.4	530.8	534.7	536.0	538.6	538.6	536.0
67.5°	468.4	477.5	480.1	482.7	480.1	477.5	477.5	478.8	484.0	486.6	484.0
70°	421.5	430.6	432.0	432.0	433.3	435.9	430.6	433.3	437.2	438.5	437.2
72.5°	381.2	390.3	392.9	391.6	392.9	394.2	394.2	391.6	395.5	398.1	398.1
75°	348.7	353.9	356.5	356.5	357.8	359.1	359.1	357.8	360.4	361.7	363.0
77.5°	318.8	322.7	326.6	326.6	327.9	326.6	329.2	329.2	330.5	331.8	333.1
80°	288.8	294.0	296.6	297.9	300.5	301.8	301.8	301.8	303.1	304.4	304.4
82.5°	265.4	269.3	273.2	277.1	277.1	278.4	278.4	278.4	279.7	279.7	281.0
85°	242.0	247.2	251.1	253.7	255.0	256.3	256.3	257.6	257.6	257.6	258.9
87.5°	221.2	227.7	230.3	232.9	234.2	236.8	236.8	236.8	238.1	238.1	238.1
90°	206.9	213.4	216.0	218.6	219.9	221.2	221.2	222.5	222.5	223.8	223.8
92.5°	190.0	196.5	201.7	201.7	203.0	205.6	204.3	204.3	205.6	206.9	206.9
95°	176.9	182.1	186.1	187.4	188.7	188.7	188.7	190.0	188.7	190.0	190.0
97.5°	161.3	166.5	170.4	173.0	174.3	174.3	174.3	175.6	174.3	175.6	175.6
100°	148.3	153.5	157.4	158.7	161.3	161.3	161.3	161.3	161.3	161.3	162.6
102.5°	137.9	143.1	145.7	147.0	148.3	149.6	149.6	149.6	149.6	150.9	150.9
105°	127.5	132.7	135.3	136.6	137.9	139.2	139.2	139.2	140.5	140.5	139.2
107.5°	118.4	122.3	124.9	127.5	128.8	128.8	130.1	130.1	130.1	130.1	130.1
110°	109.3	113.2	117.1	119.7	119.7	121.0	121.0	122.3	122.3	121.0	122.3





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	100.2	105.4	108.0	110.6	111.9	113.2	113.2	113.2	113.2	113.2	113.2
115°	92.4	97.6	100.2	102.8	104.1	105.4	105.4	105.4	105.4	105.4	105.4
117.5°	85.9	91.1	93.7	95.0	96.3	97.6	98.9	98.9	98.9	98.9	97.6
120°	79.4	83.3	85.9	88.5	89.8	91.1	91.1	91.1	91.1	91.1	91.1
122.5°	72.9	76.8	79.4	82.0	83.3	84.6	84.6	84.6	84.6	84.6	84.6
125°	66.4	70.3	72.9	75.5	76.8	78.1	78.1	78.1	78.1	78.1	78.1
127.5°	59.8	63.8	67.7	69.0	70.3	71.6	71.6	71.6	72.9	71.6	71.6
130°	53.3	57.2	61.1	62.5	63.8	65.1	66.4	66.4	66.4	66.4	65.1
132.5°	48.1	52.0	54.6	55.9	58.5	58.5	59.8	59.8	59.8	59.8	58.5
135°	44.2	46.8	49.4	50.7	53.3	53.3	53.3	54.6	54.6	53.3	52.0
137.5°	39.0	41.6	44.2	45.5	46.8	48.1	48.1	49.4	48.1	48.1	48.1
140°	36.4	37.7	40.3	41.6	42.9	42.9	42.9	44.2	44.2	42.9	42.9
142.5°	31.2	33.8	36.4	37.7	39.0	39.0	39.0	39.0	39.0	39.0	39.0
145°	26.0	29.9	31.2	33.8	33.8	35.1	35.1	35.1	35.1	35.1	33.8
147.5°	22.1	24.7	28.6	29.9	29.9	31.2	31.2	31.2	31.2	31.2	29.9
150°	16.9	19.5	23.4	26.0	26.0	27.3	27.3	27.3	27.3	26.0	26.0
152.5°	14.3	16.9	18.2	20.8	22.1	22.1	22.1	23.4	22.1	22.1	22.1
155°	13.0	14.3	15.6	16.9	18.2	19.5	19.5	19.5	19.5	18.2	18.2
157.5°	10.4	11.7	13.0	14.3	15.6	16.9	16.9	16.9	16.9	16.9	15.6
160°	7.8	9.1	10.4	10.4	11.7	13.0	14.3	13.0	13.0	13.0	13.0
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: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3
2.5°	2360.1	2358.8	2362.7	2356.2	2336.7	2341.9	2339.3	2351.0	2353.6	2356.2	2367.9
5°	2360.1	2358.8	2361.4	2356.2	2335.4	2339.3	2336.7	2348.4	2351.0	2352.3	2364.0
7.5°	2354.9	2353.6	2357.5	2351.0	2328.9	2334.1	2330.2	2341.9	2343.2	2344.5	2354.9
10°	2344.5	2343.2	2345.8	2340.6	2318.5	2323.7	2318.5	2330.2	2330.2	2332.8	2340.6
12.5°	2328.9	2326.3	2331.5	2325.0	2300.3	2306.8	2304.2	2312.0	2313.3	2314.6	2322.4
15°	2306.8	2304.2	2308.1	2304.2	2282.1	2283.4	2279.4	2291.2	2292.5	2289.9	2297.7
17.5°	2274.2	2271.6	2279.4	2276.8	2254.7	2259.9	2258.6	2261.2	2265.1	2258.6	2269.0
20°	2233.9	2236.5	2239.1	2240.4	2223.5	2223.5	2222.2	2227.4	2231.3	2226.1	2233.9
22.5°	2174.1	2180.6	2188.4	2191.0	2179.3	2178.0	2185.8	2183.2	2187.1	2184.5	2189.7
25°	2098.6	2111.6	2119.4	2127.2	2120.7	2123.3	2135.0	2137.6	2137.6	2136.3	2141.5
27.5°	2004.9	2021.8	2036.2	2053.1	2046.6	2051.8	2071.3	2073.9	2079.1	2073.9	2084.3
30°	1893.0	1908.6	1936.0	1960.7	1963.3	1971.1	1998.4	2001.0	2015.3	2010.1	2014.0
32.5°	1781.1	1789.0	1820.2	1844.9	1860.5	1880.0	1909.9	1915.2	1934.7	1938.6	1938.6
35°	1640.6	1662.7	1691.4	1726.5	1746.0	1766.8	1807.2	1815.0	1843.6	1852.7	1863.1
37.5°	1522.2	1543.1	1561.3	1597.7	1632.8	1656.2	1688.8	1708.3	1738.2	1755.1	1768.1
40°	1396.0	1412.9	1432.5	1468.9	1498.8	1533.9	1566.5	1589.9	1627.6	1647.1	1664.0
42.5°	1276.3	1289.3	1310.2	1336.2	1367.4	1406.4	1437.7	1465.0	1505.3	1532.6	1552.2
45°	1169.6	1177.5	1195.7	1215.2	1242.5	1282.8	1312.8	1347.9	1380.4	1409.0	1432.5
47.5°	1069.5	1079.9	1089.0	1102.0	1126.7	1151.4	1186.6	1220.4	1252.9	1284.1	1307.6
50°	977.1	977.1	991.4	1000.5	1017.4	1039.5	1066.9	1090.3	1130.6	1152.7	1182.7
52.5°	887.3	892.5	900.3	905.5	918.5	932.9	955.0	974.5	1008.3	1029.1	1057.8
55°	808.0	813.2	817.1	819.7	827.5	844.4	852.2	867.8	891.2	908.1	932.9
57.5°	732.5	735.1	739.0	740.3	741.6	752.0	758.5	762.4	785.8	802.8	823.6
60°	663.5	663.5	667.4	666.1	664.8	670.0	668.7	672.6	687.0	697.4	706.5
62.5°	598.5	598.5	599.8	597.2	595.9	595.9	590.7	594.6	598.5	599.8	606.3
65°	538.6	545.1	539.9	541.2	533.4	530.8	528.2	520.4	519.1	513.9	516.5
67.5°	485.3	490.5	485.3	485.3	478.8	473.6	467.1	454.1	450.2	439.8	437.2
70°	442.4	438.5	441.1	437.2	429.3	422.8	413.7	403.3	390.3	377.3	368.2
72.5°	400.7	400.7	398.1	394.2	390.3	377.3	366.9	355.2	339.6	322.7	309.7
75°	360.4	361.7	361.7	357.8	351.3	339.6	327.9	311.0	294.0	274.5	257.6
77.5°	331.8	331.8	331.8	325.3	318.8	308.4	294.0	275.8	257.6	234.2	214.7
80°	304.4	303.1	303.1	295.3	288.8	277.1	262.8	244.6	225.1	200.4	178.2
82.5°	282.3	281.0	278.4	271.9	262.8	251.1	236.8	217.3	196.5	174.3	147.0
85°	258.9	257.6	255.0	248.5	239.4	229.0	213.4	193.9	173.0	148.3	122.3
87.5°	238.1	236.8	232.9	229.0	218.6	206.9	191.3	173.0	150.9	127.5	101.5
90°	223.8	221.2	218.6	213.4	204.3	191.3	175.6	156.1	134.0	110.6	84.6
92.5°	206.9	205.6	201.7	196.5	188.7	175.6	160.0	141.8	119.7	97.6	72.9
95°	190.0	188.7	186.1	180.8	173.0	161.3	147.0	128.8	108.0	85.9	63.8
97.5°	174.3	174.3	170.4	166.5	157.4	148.3	134.0	117.1	97.6	78.1	57.2
100°	161.3	161.3	157.4	152.2	145.7	136.6	122.3	106.7	88.5	70.3	49.4
102.5°	149.6	148.3	145.7	140.5	134.0	124.9	111.9	97.6	80.7	62.5	44.2
105°	139.2	137.9	135.3	130.1	124.9	114.5	104.1	89.8	72.9	55.9	39.0
107.5°	128.8	127.5	126.2	121.0	114.5	105.4	95.0	80.7	66.4	50.7	35.1
110°	119.7	118.4	115.8	110.6	104.1	96.3	85.9	74.2	59.8	45.5	31.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	111.9	110.6	108.0	102.8	97.6	88.5	79.4	66.4	54.6	41.6	27.3
115°	104.1	102.8	100.2	95.0	88.5	80.7	71.6	61.1	48.1	36.4	24.7
117.5°	96.3	95.0	92.4	88.5	82.0	74.2	65.1	54.6	42.9	33.8	22.1
120°	89.8	87.2	84.6	80.7	74.2	67.7	58.5	49.4	39.0	29.9	19.5
122.5°	83.3	80.7	78.1	74.2	67.7	61.1	52.0	44.2	36.4	27.3	18.2
125°	75.5	74.2	71.6	67.7	61.1	54.6	48.1	40.3	32.5	24.7	15.6
127.5°	69.0	67.7	65.1	59.8	54.6	49.4	42.9	36.4	28.6	20.8	14.3
130°	63.8	61.1	58.5	54.6	50.7	45.5	39.0	32.5	26.0	18.2	13.0
132.5°	57.2	54.6	52.0	49.4	45.5	40.3	35.1	28.6	23.4	16.9	11.7
135°	52.0	49.4	46.8	44.2	40.3	36.4	31.2	26.0	20.8	15.6	10.4
137.5°	45.5	44.2	42.9	40.3	36.4	32.5	28.6	22.1	18.2	14.3	9.1
140°	41.6	40.3	39.0	35.1	32.5	28.6	24.7	19.5	15.6	11.7	7.8
142.5°	37.7	36.4	33.8	31.2	28.6	26.0	20.8	18.2	14.3	10.4	7.8
145°	32.5	31.2	29.9	27.3	24.7	20.8	18.2	15.6	13.0	9.1	6.5
147.5°	29.9	28.6	26.0	23.4	20.8	18.2	16.9	14.3	10.4	7.8	5.2
150°	24.7	23.4	22.1	19.5	18.2	16.9	14.3	11.7	9.1	6.5	5.2
152.5°	20.8	19.5	18.2	18.2	15.6	14.3	11.7	10.4	7.8	6.5	3.9
155°	18.2	18.2	16.9	15.6	13.0	11.7	10.4	7.8	6.5	5.2	3.9
157.5°	15.6	14.3	13.0	13.0	11.7	10.4	7.8	6.5	5.2	5.2	3.9
160°	13.0	11.7	11.7	10.4	9.1	7.8	6.5	6.5	5.2	3.9	3.9
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3
2.5°	2369.2	2354.9	2367.9	2384.8	2384.8	2382.2	2379.6	2384.8	2397.8	2392.6	2377.0
5°	2365.3	2351.0	2362.7	2379.6	2379.6	2375.7	2373.1	2377.0	2391.3	2384.8	2370.5
7.5°	2357.5	2344.5	2352.3	2367.9	2367.9	2364.0	2361.4	2366.6	2378.3	2371.8	2356.2
10°	2343.2	2328.9	2338.0	2352.3	2351.0	2348.4	2344.5	2351.0	2361.4	2352.3	2334.1
12.5°	2325.0	2310.7	2318.5	2331.5	2330.2	2325.0	2322.4	2326.3	2335.4	2330.2	2310.7
15°	2300.3	2286.0	2292.5	2305.5	2301.6	2297.7	2292.5	2293.8	2305.5	2296.4	2275.5
17.5°	2270.3	2254.7	2259.9	2271.6	2267.7	2263.8	2257.3	2258.6	2271.6	2258.6	2236.5
20°	2233.9	2217.0	2220.9	2235.2	2228.7	2222.2	2215.7	2215.7	2228.7	2214.4	2189.7
22.5°	2194.9	2178.0	2180.6	2191.0	2185.8	2174.1	2167.6	2171.5	2178.0	2159.8	2133.7
25°	2146.7	2124.6	2128.5	2138.9	2135.0	2119.4	2112.9	2115.5	2112.9	2098.6	2071.3
27.5°	2090.8	2067.4	2070.0	2076.5	2071.3	2057.0	2049.2	2050.5	2045.3	2027.0	1995.8
30°	2020.5	2008.8	2007.5	2011.4	2003.6	1989.3	1980.2	1977.6	1976.3	1950.3	1912.6
32.5°	1949.0	1938.6	1932.1	1937.3	1928.2	1913.9	1898.2	1898.2	1885.2	1860.5	1828.0
35°	1876.1	1859.2	1852.7	1856.6	1846.2	1828.0	1815.0	1808.5	1789.0	1757.7	1722.6
37.5°	1782.4	1770.7	1762.9	1766.8	1755.1	1742.1	1717.4	1710.9	1690.1	1647.1	1602.9
40°	1681.0	1671.9	1664.0	1668.0	1654.9	1635.4	1613.3	1602.9	1579.5	1531.3	1496.2
42.5°	1571.7	1567.8	1558.7	1573.0	1547.0	1527.4	1505.3	1488.4	1465.0	1412.9	1372.6
45°	1455.9	1465.0	1444.2	1448.1	1431.2	1414.2	1390.8	1366.1	1342.7	1293.2	1247.7
47.5°	1333.6	1340.1	1325.8	1328.4	1310.2	1294.6	1273.7	1242.5	1216.5	1173.6	1133.2
50°	1207.4	1204.8	1204.8	1202.2	1187.9	1168.3	1147.5	1118.9	1092.9	1053.9	1020.0
52.5°	1073.4	1078.6	1081.2	1087.7	1069.5	1057.8	1025.2	1000.5	981.0	940.7	912.0
55°	944.6	962.8	957.6	960.2	939.4	930.3	904.2	884.7	856.1	832.7	814.5
57.5°	827.5	831.4	834.0	837.9	828.8	810.6	789.7	774.1	752.0	732.5	719.5
60°	714.3	714.3	715.6	722.1	713.0	697.4	681.8	670.0	654.4	642.7	634.9
62.5°	607.6	616.7	618.0	612.8	601.1	593.3	582.9	576.4	566.0	562.1	559.5
65°	508.7	508.7	508.7	511.3	504.8	499.6	493.1	491.8	495.7	490.5	493.1
67.5°	425.4	421.5	418.9	420.2	417.6	415.0	413.7	417.6	425.4	425.4	432.0
70°	353.9	346.1	340.9	340.9	340.9	342.2	346.1	353.9	366.9	372.1	381.2
72.5°	295.3	278.4	270.6	270.6	271.9	277.1	288.8	303.1	314.9	325.3	337.0
75°	239.4	222.5	210.8	209.5	212.1	219.9	236.8	249.8	269.3	283.6	297.9
77.5°	193.9	173.0	158.7	157.4	161.3	173.0	193.9	210.8	232.9	248.5	264.1
80°	154.8	131.4	119.7	111.9	118.4	132.7	156.1	176.9	197.8	218.6	238.1
82.5°	123.6	101.5	83.3	75.5	83.3	102.8	124.9	149.6	170.4	192.6	212.1
85°	97.6	74.2	53.3	45.5	54.6	75.5	100.2	124.9	148.3	170.4	190.0
87.5°	76.8	53.3	32.5	22.1	33.8	55.9	79.4	104.1	128.8	150.9	170.4
90°	59.8	37.7	18.2	2.6	19.5	40.3	63.8	87.2	111.9	134.0	153.5
92.5°	50.7	28.6	10.4	0.0	11.7	29.9	52.0	75.5	97.6	119.7	139.2
95°	42.9	23.4	7.8	0.0	7.8	23.4	42.9	63.8	85.9	108.0	127.5
97.5°	36.4	18.2	5.2	0.0	5.2	18.2	35.1	55.9	75.5	96.3	114.5
100°	31.2	15.6	3.9	0.0	3.9	14.3	29.9	48.1	67.7	87.2	104.1
102.5°	27.3	13.0	2.6	0.0	2.6	11.7	24.7	41.6	58.5	76.8	93.7
105°	23.4	10.4	2.6	0.0	1.3	9.1	20.8	36.4	52.0	69.0	84.6
107.5°	20.8	9.1	2.6	0.0	1.3	7.8	18.2	31.2	46.8	61.1	75.5
110°	18.2	7.8	2.6	0.0	1.3	5.2	15.6	27.3	40.3	54.6	69.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	15.6	6.5	1.3	0.0	0.0	3.9	13.0	23.4	35.1	49.4	61.1
115°	14.3	6.5	1.3	0.0	0.0	2.6	10.4	20.8	31.2	44.2	54.6
117.5°	13.0	5.2	1.3	0.0	1.3	2.6	9.1	18.2	27.3	37.7	49.4
120°	11.7	5.2	1.3	0.0	1.3	1.3	6.5	15.6	23.4	33.8	42.9
122.5°	10.4	5.2	1.3	0.0	1.3	1.3	5.2	13.0	20.8	29.9	37.7
125°	9.1	3.9	2.6	1.3	1.3	1.3	3.9	10.4	18.2	24.7	33.8
127.5°	9.1	3.9	2.6	1.3	1.3	1.3	2.6	9.1	14.3	22.1	29.9
130°	7.8	3.9	2.6	1.3	1.3	1.3	1.3	6.5	13.0	18.2	24.7
132.5°	6.5	3.9	2.6	1.3	1.3	1.3	1.3	3.9	9.1	15.6	20.8
135°	6.5	3.9	2.6	1.3	1.3	1.3	1.3	2.6	6.5	11.7	16.9
137.5°	5.2	2.6	2.6	1.3	1.3	1.3	1.3	1.3	5.2	9.1	13.0
140°	5.2	2.6	2.6	1.3	1.3	1.3	1.3	1.3	3.9	6.5	10.4
142.5°	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3	2.6	5.2	7.8
145°	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	2.6	5.2
147.5°	3.9	3.9	2.6	1.3	1.3	1.3	1.3	1.3	1.3	2.6	3.9
150°	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.6
152.5°	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.6
155°	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	2.6	2.6
157.5°	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.6
160°	3.9	2.6	2.6	1.3	2.6	1.3	2.6	2.6	2.6	2.6	2.6
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-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3
2.5°	2371.8	2347.1	2360.1	2356.2	2361.4	2371.8	2370.5	2367.9	2367.9	2364.0	2358.8
5°	2364.0	2340.6	2352.3	2345.8	2352.3	2361.4	2360.1	2356.2	2358.8	2352.3	2345.8
7.5°	2348.4	2327.6	2338.0	2332.8	2338.0	2347.1	2343.2	2341.9	2344.5	2334.1	2330.2
10°	2330.2	2306.8	2318.5	2312.0	2318.5	2325.0	2322.4	2317.2	2322.4	2312.0	2308.1
12.5°	2301.6	2282.1	2289.9	2287.3	2291.2	2297.7	2292.5	2288.6	2291.2	2282.1	2274.2
15°	2270.3	2250.8	2257.3	2253.4	2256.0	2263.8	2254.7	2253.4	2250.8	2241.7	2239.1
17.5°	2230.0	2211.8	2218.3	2211.8	2215.7	2213.1	2211.8	2205.3	2205.3	2194.9	2187.1
20°	2180.6	2165.0	2161.1	2155.8	2161.1	2155.8	2148.0	2142.8	2141.5	2131.1	2124.6
22.5°	2123.3	2105.1	2107.7	2093.4	2094.7	2086.9	2073.9	2068.7	2063.5	2051.8	2042.7
25°	2054.4	2036.2	2023.1	2014.0	2002.3	2001.0	1984.1	1971.1	1969.8	1955.5	1954.2
27.5°	1976.3	1955.5	1945.1	1923.0	1908.6	1896.9	1882.6	1869.6	1863.1	1847.5	1837.1
30°	1886.5	1863.1	1837.1	1821.5	1799.4	1790.3	1765.5	1749.9	1744.7	1727.8	1720.0
32.5°	1785.0	1760.3	1739.5	1709.6	1684.9	1671.9	1647.1	1631.5	1625.0	1606.8	1596.4
35°	1674.5	1647.1	1622.4	1593.8	1574.3	1552.2	1522.2	1506.6	1492.3	1485.8	1478.0
37.5°	1558.7	1528.7	1500.1	1471.5	1454.6	1428.6	1402.5	1392.1	1375.2	1368.7	1360.9
40°	1439.0	1409.0	1381.7	1354.4	1334.9	1311.5	1288.0	1284.1	1265.9	1259.4	1254.2
42.5°	1320.6	1289.3	1258.1	1238.6	1224.3	1200.9	1185.3	1181.4	1165.7	1161.8	1161.8
45°	1213.9	1174.9	1148.8	1131.9	1120.2	1100.7	1087.7	1085.1	1072.1	1069.5	1069.5
47.5°	1099.4	1063.0	1043.4	1033.0	1022.6	1008.3	1000.5	1000.5	987.5	984.9	983.6
50°	992.7	958.9	944.6	934.2	932.9	922.4	915.9	913.3	913.3	904.2	905.5
52.5°	891.2	874.3	862.6	856.1	848.3	841.8	836.6	836.6	832.7	826.2	828.8
55°	797.5	778.0	779.3	774.1	770.2	766.3	767.6	759.8	758.5	753.3	757.2
57.5°	703.9	703.9	701.3	697.4	690.9	693.5	693.5	693.5	687.0	683.1	687.0
60°	624.5	628.4	621.9	625.8	623.2	624.5	621.9	621.9	618.0	616.7	618.0
62.5°	554.2	560.8	558.2	563.4	560.8	562.1	564.7	559.5	556.9	554.2	556.9
65°	491.8	499.6	498.3	502.2	503.5	504.8	506.1	503.5	500.9	498.3	497.0
67.5°	437.2	445.0	450.2	451.5	452.8	456.7	455.4	452.8	450.2	446.3	445.0
70°	387.7	398.1	404.6	407.2	412.4	409.8	409.8	408.5	405.9	402.0	400.7
72.5°	346.1	357.8	364.3	366.9	372.1	372.1	370.8	369.5	366.9	363.0	361.7
75°	309.7	320.1	329.2	334.4	338.3	338.3	337.0	335.7	333.1	330.5	329.2
77.5°	281.0	290.1	297.9	304.4	307.0	308.4	307.0	304.4	304.4	303.1	301.8
80°	252.4	262.8	270.6	277.1	281.0	281.0	279.7	281.0	278.4	277.1	275.8
82.5°	227.7	239.4	248.5	255.0	257.6	258.9	257.6	258.9	256.3	256.3	256.3
85°	205.6	217.3	227.7	232.9	236.8	238.1	238.1	238.1	236.8	236.8	236.8
87.5°	187.4	199.1	209.5	214.7	218.6	219.9	219.9	221.2	218.6	218.6	218.6
90°	170.4	182.1	192.6	197.8	201.7	204.3	204.3	205.6	204.3	203.0	203.0
92.5°	154.8	167.8	178.2	183.4	187.4	191.3	191.3	192.6	190.0	190.0	190.0
95°	141.8	154.8	163.9	170.4	174.3	176.9	178.2	178.2	176.9	176.9	176.9
97.5°	130.1	141.8	150.9	157.4	161.3	162.6	163.9	165.2	163.9	163.9	163.9
100°	118.4	130.1	139.2	144.4	149.6	150.9	152.2	153.5	153.5	152.2	152.2
102.5°	108.0	119.7	127.5	134.0	137.9	140.5	141.8	141.8	141.8	141.8	141.8
105°	97.6	109.3	117.1	123.6	127.5	130.1	131.4	132.7	132.7	131.4	131.4
107.5°	88.5	98.9	108.0	113.2	118.4	121.0	122.3	122.3	123.6	122.3	122.3
110°	79.4	91.1	98.9	104.1	109.3	111.9	113.2	114.5	114.5	114.5	114.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	72.9	82.0	89.8	95.0	100.2	102.8	104.1	105.4	106.7	105.4	105.4
115°	65.1	74.2	82.0	87.2	91.1	93.7	96.3	97.6	97.6	98.9	97.6
117.5°	58.5	66.4	74.2	79.4	83.3	87.2	88.5	89.8	91.1	89.8	89.8
120°	52.0	59.8	66.4	71.6	75.5	79.4	80.7	82.0	83.3	82.0	82.0
122.5°	46.8	53.3	59.8	65.1	69.0	71.6	74.2	74.2	75.5	75.5	75.5
125°	41.6	48.1	53.3	58.5	62.5	65.1	66.4	67.7	67.7	69.0	69.0
127.5°	36.4	41.6	48.1	52.0	55.9	58.5	59.8	61.1	61.1	62.5	62.5
130°	31.2	36.4	41.6	45.5	49.4	52.0	53.3	54.6	55.9	55.9	55.9
132.5°	27.3	32.5	36.4	40.3	42.9	45.5	48.1	49.4	49.4	49.4	49.4
135°	22.1	27.3	31.2	35.1	37.7	40.3	41.6	44.2	44.2	44.2	44.2
137.5°	18.2	23.4	27.3	29.9	32.5	35.1	36.4	37.7	39.0	39.0	39.0
140°	14.3	18.2	22.1	26.0	28.6	29.9	32.5	32.5	33.8	33.8	33.8
142.5°	10.4	14.3	16.9	20.8	23.4	26.0	27.3	28.6	28.6	28.6	28.6
145°	7.8	10.4	13.0	15.6	19.5	20.8	22.1	23.4	24.7	24.7	24.7
147.5°	5.2	7.8	9.1	11.7	14.3	16.9	18.2	19.5	20.8	20.8	20.8
150°	3.9	5.2	7.8	9.1	10.4	13.0	15.6	15.6	16.9	16.9	15.6
152.5°	2.6	3.9	5.2	6.5	7.8	9.1	11.7	11.7	13.0	13.0	13.0
155°	2.6	2.6	2.6	3.9	5.2	6.5	7.8	9.1	9.1	9.1	9.1
157.5°	2.6	2.6	2.6	2.6	2.6	3.9	5.2	6.5	6.5	6.5	6.5
160°	2.6	2.6	1.3	1.3	2.6	2.6	2.6	2.6	3.9	3.9	3.9
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3
2.5°	2362.7	2365.3	2365.3	2362.7	2361.4	2366.6	2360.1	2335.4	2343.2	2345.8	2353.6
5°	2351.0	2353.6	2353.6	2353.6	2351.0	2356.2	2349.7	2325.0	2334.1	2338.0	2343.2
7.5°	2334.1	2335.4	2338.0	2336.7	2334.1	2341.9	2335.4	2310.7	2317.2	2323.7	2330.2
10°	2312.0	2312.0	2313.3	2315.9	2313.3	2319.8	2313.3	2291.2	2297.7	2301.6	2309.4
12.5°	2282.1	2284.7	2286.0	2284.7	2283.4	2288.6	2286.0	2265.1	2267.7	2275.5	2283.4
15°	2241.7	2241.7	2248.2	2245.6	2245.6	2250.8	2253.4	2230.0	2233.9	2245.6	2253.4
17.5°	2192.3	2193.6	2198.8	2201.4	2200.1	2209.2	2210.5	2192.3	2191.0	2205.3	2213.1
20°	2128.5	2131.1	2137.6	2142.8	2142.8	2153.2	2157.2	2145.4	2146.7	2162.4	2165.0
22.5°	2050.5	2050.5	2062.2	2070.0	2076.5	2083.0	2094.7	2084.3	2084.3	2105.1	2116.8
25°	1954.2	1963.3	1967.2	1982.8	1991.9	2010.1	2020.5	2021.8	2023.1	2042.7	2050.5
27.5°	1847.5	1850.1	1861.8	1880.0	1890.4	1907.3	1926.9	1930.8	1937.3	1963.3	1975.0
30°	1726.5	1734.3	1739.5	1765.5	1779.8	1802.0	1826.7	1835.8	1841.0	1876.1	1890.4
32.5°	1602.9	1605.5	1627.6	1641.9	1658.8	1682.3	1710.9	1727.8	1738.2	1774.6	1795.5
35°	1479.3	1484.5	1502.7	1520.9	1537.8	1561.3	1591.2	1614.6	1632.8	1665.4	1692.7
37.5°	1366.1	1379.1	1383.0	1401.2	1414.2	1437.7	1458.5	1492.3	1510.5	1544.4	1579.5
40°	1264.6	1268.5	1271.1	1289.3	1298.5	1320.6	1350.5	1372.6	1397.3	1422.1	1463.7
42.5°	1164.4	1167.0	1170.9	1181.4	1191.8	1207.4	1229.5	1251.6	1277.6	1314.1	1341.4
45°	1072.1	1074.7	1077.3	1083.8	1092.9	1107.2	1121.5	1137.1	1163.1	1194.4	1223.0
47.5°	986.2	991.4	991.4	992.7	999.2	1010.9	1021.3	1040.8	1055.2	1072.1	1104.6
50°	904.2	908.1	909.4	909.4	913.3	921.1	923.7	936.8	949.8	965.4	988.8
52.5°	827.5	827.5	826.2	831.4	831.4	836.6	837.9	845.7	854.8	871.7	882.1
55°	754.6	754.6	758.5	755.9	755.9	758.5	757.2	758.5	766.3	776.7	785.8
57.5°	684.4	683.1	687.0	684.4	683.1	685.7	688.3	683.1	684.4	694.8	694.8
60°	614.1	615.4	619.3	616.7	616.7	616.7	614.1	611.5	608.9	615.4	618.0
62.5°	558.2	554.2	558.2	554.2	556.9	555.6	552.9	547.7	549.0	546.4	543.8
65°	499.6	499.6	500.9	497.0	499.6	499.6	495.7	494.4	486.6	484.0	477.5
67.5°	448.9	448.9	450.2	447.6	447.6	448.9	445.0	441.1	433.3	429.3	420.2
70°	404.6	404.6	404.6	403.3	403.3	403.3	400.7	395.5	387.7	381.2	369.5
72.5°	364.3	365.6	364.3	364.3	368.2	364.3	360.4	355.2	348.7	335.7	325.3
75°	331.8	333.1	331.8	331.8	331.8	330.5	329.2	321.4	313.6	303.1	287.5
77.5°	303.1	303.1	304.4	303.1	303.1	301.8	297.9	291.4	282.3	273.2	255.0
80°	275.8	277.1	278.4	279.7	277.1	275.8	271.9	266.7	255.0	244.6	226.4
82.5°	256.3	255.0	256.3	257.6	255.0	253.7	249.8	243.3	234.2	219.9	201.7
85°	236.8	235.5	235.5	236.8	235.5	232.9	229.0	222.5	213.4	199.1	180.8
87.5°	217.3	218.6	219.9	218.6	217.3	214.7	210.8	204.3	193.9	182.1	162.6
90°	203.0	203.0	203.0	203.0	201.7	199.1	195.2	187.4	178.2	163.9	147.0
92.5°	190.0	190.0	190.0	190.0	188.7	184.7	180.8	174.3	163.9	149.6	134.0
95°	176.9	178.2	176.9	176.9	174.3	173.0	166.5	160.0	150.9	136.6	119.7
97.5°	162.6	163.9	162.6	162.6	161.3	158.7	154.8	147.0	137.9	124.9	109.3
100°	152.2	152.2	150.9	150.9	149.6	147.0	141.8	135.3	126.2	113.2	97.6
102.5°	140.5	141.8	140.5	140.5	137.9	135.3	131.4	124.9	115.8	102.8	88.5
105°	131.4	131.4	130.1	130.1	127.5	124.9	121.0	113.2	105.4	93.7	79.4
107.5°	122.3	122.3	121.0	121.0	118.4	115.8	110.6	104.1	96.3	84.6	71.6
110°	113.2	113.2	113.2	111.9	109.3	105.4	101.5	95.0	87.2	76.8	63.8





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	106.7	105.4	104.1	102.8	100.2	97.6	92.4	85.9	78.1	69.0	57.2
115°	97.6	97.6	96.3	95.0	92.4	88.5	84.6	79.4	71.6	61.1	50.7
117.5°	89.8	89.8	88.5	87.2	84.6	80.7	76.8	71.6	63.8	54.6	45.5
120°	82.0	82.0	80.7	79.4	76.8	72.9	70.3	63.8	57.2	48.1	40.3
122.5°	75.5	74.2	74.2	71.6	70.3	66.4	62.5	57.2	50.7	42.9	35.1
125°	67.7	67.7	66.4	65.1	63.8	59.8	55.9	50.7	44.2	37.7	31.2
127.5°	61.1	61.1	59.8	58.5	57.2	53.3	49.4	45.5	39.0	32.5	26.0
130°	54.6	54.6	53.3	52.0	50.7	46.8	44.2	39.0	33.8	28.6	22.1
132.5°	49.4	49.4	48.1	46.8	44.2	41.6	39.0	33.8	29.9	24.7	19.5
135°	44.2	42.9	42.9	41.6	39.0	36.4	33.8	29.9	24.7	20.8	15.6
137.5°	39.0	37.7	36.4	35.1	33.8	31.2	28.6	26.0	22.1	16.9	13.0
140°	33.8	32.5	32.5	31.2	28.6	27.3	24.7	20.8	18.2	14.3	10.4
142.5°	28.6	28.6	27.3	26.0	24.7	23.4	20.8	18.2	14.3	11.7	7.8
145°	24.7	23.4	23.4	22.1	20.8	18.2	16.9	14.3	11.7	9.1	6.5
147.5°	19.5	19.5	19.5	18.2	16.9	15.6	14.3	11.7	9.1	6.5	3.9
150°	15.6	15.6	15.6	14.3	13.0	11.7	10.4	9.1	6.5	3.9	2.6
152.5°	13.0	13.0	11.7	11.7	10.4	9.1	7.8	6.5	3.9	2.6	2.6
155°	9.1	9.1	9.1	7.8	7.8	6.5	5.2	3.9	2.6	2.6	2.6
157.5°	6.5	6.5	6.5	5.2	5.2	3.9	3.9	2.6	2.6	2.6	2.6
160°	3.9	3.9	3.9	3.9	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3	2365.3
2.5°	2349.7	2348.4	2358.8	2358.8	2347.1	2365.3	2384.8
5°	2341.9	2340.6	2351.0	2351.0	2340.6	2358.8	2379.6
7.5°	2326.3	2327.6	2338.0	2340.6	2327.6	2344.5	2366.6
10°	2309.4	2308.1	2319.8	2322.4	2312.0	2327.6	2348.4
12.5°	2282.1	2282.1	2293.8	2297.7	2287.3	2305.5	2325.0
15°	2253.4	2253.4	2261.2	2267.7	2258.6	2275.5	2295.1
17.5°	2217.0	2215.7	2223.5	2231.3	2222.2	2240.4	2261.2
20°	2170.2	2170.2	2179.3	2188.4	2181.9	2198.8	2222.2
22.5°	2120.7	2115.5	2131.1	2137.6	2133.7	2150.6	2174.1
25°	2058.3	2057.0	2072.6	2081.7	2076.5	2094.7	2115.5
27.5°	1990.6	1989.3	2004.9	2016.6	2014.0	2030.9	2054.4
30°	1908.6	1915.2	1929.5	1949.0	1942.5	1960.7	1985.4
32.5°	1822.8	1829.3	1846.2	1867.0	1868.3	1882.6	1907.3
35°	1720.0	1736.9	1748.6	1775.9	1781.1	1795.5	1821.5
37.5°	1612.0	1631.5	1656.2	1677.1	1687.5	1699.2	1729.1
40°	1491.0	1519.6	1547.0	1571.7	1584.7	1596.4	1625.0
42.5°	1381.7	1403.8	1429.9	1454.6	1478.0	1488.4	1518.3
45°	1258.1	1284.1	1307.6	1337.5	1360.9	1372.6	1402.5
47.5°	1137.1	1163.1	1194.4	1215.2	1239.9	1251.6	1280.2
50°	1021.3	1044.7	1070.8	1095.5	1116.3	1126.7	1151.4
52.5°	906.8	931.6	956.3	971.9	994.0	1001.8	1022.6
55°	805.4	822.3	844.4	853.5	875.6	880.8	895.1
57.5°	707.8	719.5	727.3	742.9	758.5	770.2	787.1
60°	619.3	624.5	629.7	638.8	651.8	655.7	662.2
62.5°	539.9	538.6	549.0	551.6	552.9	566.0	559.5
65°	469.7	471.0	461.9	458.0	463.2	467.1	464.5
67.5°	411.1	403.3	395.5	386.4	378.6	382.5	378.6
70°	353.9	347.4	334.4	321.4	316.2	308.4	304.4
72.5°	308.4	292.7	279.7	262.8	253.7	244.6	238.1
75°	273.2	251.1	232.9	214.7	201.7	188.7	186.1
77.5°	236.8	216.0	195.2	175.6	156.1	141.8	136.6
80°	208.2	188.7	163.9	140.5	119.7	101.5	95.0
82.5°	182.1	161.3	136.6	111.9	88.5	69.0	61.1
85°	160.0	137.9	113.2	88.5	65.1	44.2	33.8
87.5°	143.1	118.4	93.7	70.3	45.5	24.7	13.0
90°	127.5	104.1	80.7	55.9	32.5	13.0	0.0
92.5°	113.2	91.1	67.7	45.5	24.7	7.8	1.3
95°	100.2	80.7	57.2	36.4	18.2	5.2	1.3
97.5°	89.8	70.3	49.4	29.9	14.3	3.9	1.3
100°	80.7	61.1	42.9	24.7	11.7	2.6	1.3
102.5°	71.6	54.6	36.4	20.8	9.1	1.3	1.3
105°	63.8	48.1	31.2	18.2	7.8	1.3	1.3
107.5°	57.2	42.9	27.3	15.6	5.2	1.3	1.3
110°	50.7	36.4	23.4	13.0	3.9	1.3	1.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	45.5	32.5	20.8	10.4	2.6	1.3	1.3
115°	40.3	28.6	18.2	9.1	2.6	1.3	1.3
117.5°	35.1	24.7	15.6	6.5	1.3	1.3	1.3
120°	31.2	22.1	13.0	5.2	1.3	1.3	1.3
122.5°	27.3	18.2	10.4	3.9	1.3	1.3	1.3
125°	23.4	15.6	9.1	2.6	1.3	1.3	1.3
127.5°	19.5	13.0	6.5	2.6	1.3	1.3	1.3
130°	16.9	10.4	5.2	1.3	1.3	1.3	1.3
132.5°	14.3	7.8	3.9	1.3	1.3	1.3	1.3
135°	11.7	6.5	2.6	1.3	1.3	1.3	1.3
137.5°	9.1	5.2	2.6	1.3	1.3	1.3	1.3
140°	6.5	3.9	1.3	1.3	1.3	1.3	1.3
142.5°	5.2	2.6	1.3	1.3	1.3	1.3	1.3
145°	3.9	2.6	1.3	1.3	1.3	1.3	1.3
147.5°	2.6	2.6	2.6	2.6	1.3	1.3	1.3
150°	2.6	2.6	1.3	1.3	2.6	1.3	1.3
152.5°	2.6	1.3	1.3	1.3	2.6	1.3	1.3
155°	2.6	2.6	2.6	2.6	2.6	2.6	1.3
157.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6
160°	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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)