

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-LD5-74HL-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-LD5-74HL-LN-UNV-L940-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

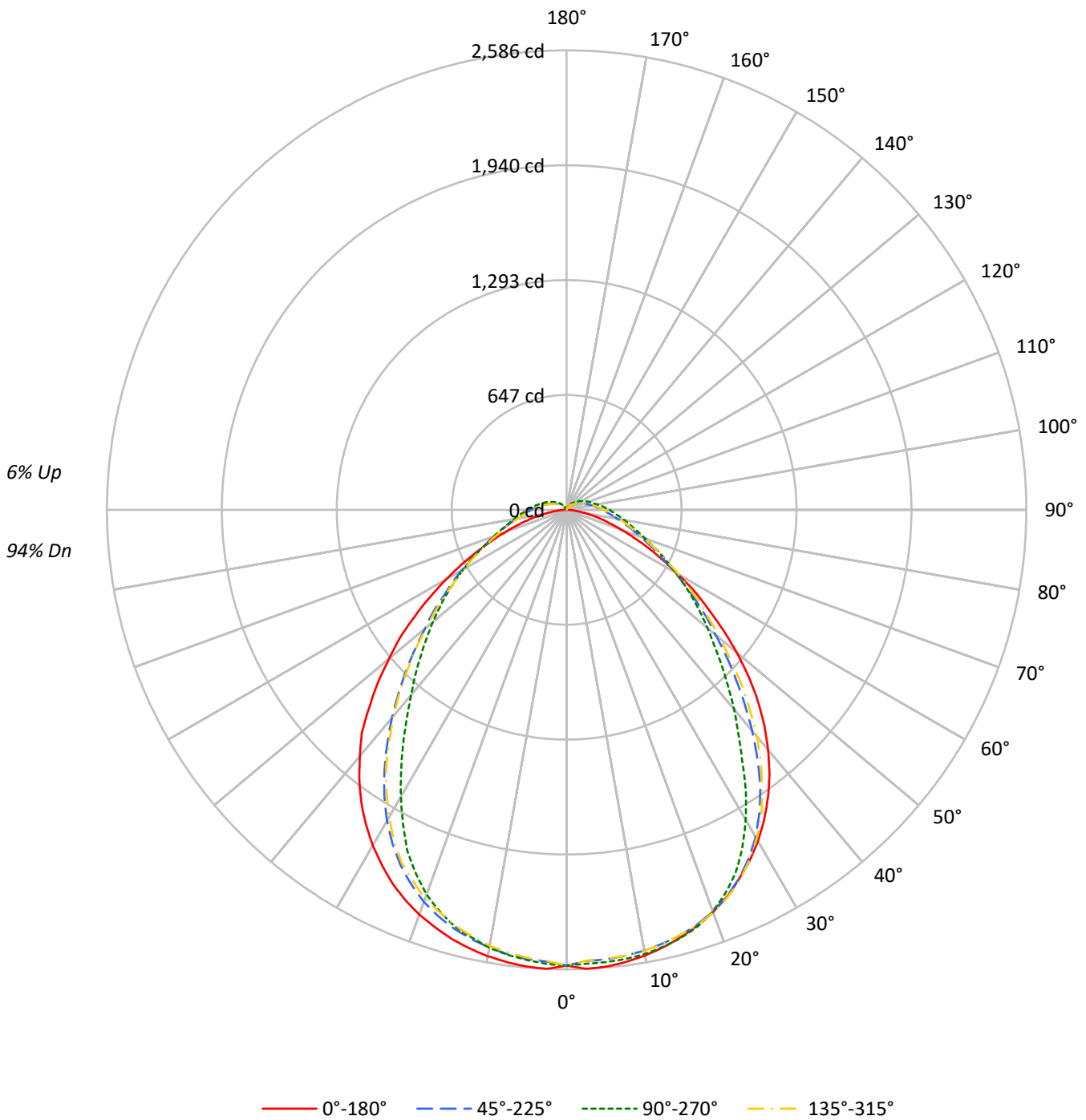
Lumens per Lamp: N/A  
Luminaire Lumens: 6490.0 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 62  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

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

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

	0°	90°	180°	270°
0°	20724	20724	20724	20724
5°	20872	20064	20872	19975
10°	20778	19531	20813	19259
15°	20644	18947	20738	18453
20°	20486	18197	20606	17428
25°	20157	17083	20380	16077
30°	19730	15448	19989	14301
35°	19064	13443	19432	12518
40°	18110	11757	18589	10909
45°	16851	10220	17399	9635
50°	15131	8981	15798	8528
55°	13089	7931	14040	7530
60°	11008	6963	12004	6562
65°	9025	6157	9935	5708
70°	7183	5463	8042	5054
75°	5640	5044	6350	4641
80°	4072	4868	4795	4447
85°	2507	4895	3375	4499



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.1	3.7
10°-20°	697.1	10.7
20°-30°	1033.2	15.9
30°-40°	1147.9	17.7
40°-50°	1040.5	16.0
50°-60°	806.3	12.4
60°-70°	547.5	8.4
70°-80°	348.3	5.4
80°-90°	222.7	3.4
90°-100°	150.1	2.3
100°-110°	102.8	1.6
110°-120°	68.6	1.1
120°-130°	42.7	0.7
130°-140°	23.6	0.4
140°-150°	11.1	0.2
150°-160°	4.1	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1973.5	30.4
0°-40°	3121.3	48.1
0°-60°	4968.2	76.6
0°-90°	6086.7	93.8
90°-120°	321.6	5.0
90°-150°	398.9	6.1
90°-180°	403.0	6.2
0°-180°	6490.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2564	2564	2564	2564	2564	
5°	2580	2555	2580	2543	2580	245
15°	2488	2492	2500	2428	2488	702
25°	2294	2251	2319	2119	2294	1056
35°	1975	1721	2013	1602	1975	1232
45°	1521	1230	1570	1160	1521	1168
55°	970	865	1041	821	970	874
65°	504	581	554	539	504	505
75°	202	388	227	357	202	217
85°	37	279	49	257	37	44
90°	0	241	3	220	0	2
95°	1	206	0	192	1	1
105°	1	151	0	142	1	1
115°	1	114	0	106	1	1
125°	1	85	1	75	1	1
135°	1	59	1	48	1	1
145°	1	38	1	27	1	1
155°	1	21	1	10	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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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5
2.5°	2585.6	2582.8	2580.0	2575.8	2580.0	2591.3	2584.2	2568.7	2565.9	2540.5	2551.8
5°	2580.0	2575.8	2572.9	2568.7	2574.3	2588.5	2581.4	2567.3	2563.1	2539.1	2551.8
7.5°	2565.9	2563.1	2558.8	2558.8	2564.5	2578.6	2572.9	2557.4	2554.6	2530.6	2544.7
10°	2546.1	2544.7	2541.9	2541.9	2547.5	2564.5	2557.4	2543.3	2540.5	2517.9	2533.4
12.5°	2520.7	2522.2	2517.9	2517.9	2526.4	2543.3	2537.7	2522.2	2519.3	2499.6	2515.1
15°	2488.3	2489.7	2486.9	2488.3	2496.8	2516.5	2509.5	2495.4	2492.5	2477.0	2489.7
17.5°	2451.6	2453.0	2453.0	2451.6	2461.5	2481.2	2475.6	2462.9	2458.7	2446.0	2461.5
20°	2409.3	2409.3	2409.3	2409.3	2420.6	2440.3	2433.3	2423.4	2414.9	2405.1	2417.8
22.5°	2357.1	2355.7	2357.1	2361.3	2372.6	2388.1	2383.9	2372.6	2359.9	2354.3	2364.2
25°	2293.6	2297.9	2299.3	2303.5	2317.6	2330.3	2326.1	2314.8	2295.0	2290.8	2293.6
27.5°	2227.3	2230.2	2234.4	2233.0	2252.7	2265.4	2257.0	2247.1	2218.9	2214.6	2211.8
30°	2152.6	2156.8	2159.6	2158.2	2173.7	2187.8	2179.4	2166.7	2128.6	2125.8	2103.2
32.5°	2067.9	2072.2	2075.0	2075.0	2097.6	2103.2	2087.7	2069.3	2028.4	2018.6	1998.8
35°	1974.8	1979.1	1980.5	1980.5	2003.1	2001.6	1981.9	1956.5	1911.4	1898.7	1864.8
37.5°	1874.7	1877.5	1878.9	1887.4	1897.3	1888.8	1863.4	1831.0	1797.1	1761.8	1725.2
40°	1761.8	1766.1	1768.9	1774.5	1784.4	1774.5	1737.9	1698.4	1661.7	1622.2	1585.5
42.5°	1646.2	1658.9	1656.0	1654.6	1660.3	1633.5	1605.3	1560.1	1523.4	1482.5	1445.9
45°	1520.6	1519.2	1526.3	1529.1	1527.7	1505.1	1465.6	1424.7	1388.0	1345.7	1314.7
47.5°	1388.0	1386.6	1392.3	1395.1	1386.6	1362.6	1331.6	1285.1	1254.0	1217.3	1193.4
50°	1248.4	1248.4	1256.8	1248.4	1244.1	1220.2	1194.8	1148.2	1124.2	1091.8	1077.7
52.5°	1108.7	1121.4	1113.0	1110.1	1105.9	1081.9	1062.2	1024.1	1004.3	990.2	973.3
55°	970.5	984.6	979.0	974.7	973.3	953.6	935.2	907.0	894.3	884.4	874.6
57.5°	853.4	852.0	849.2	844.9	846.4	830.8	812.5	797.0	791.3	787.1	789.9
60°	718.0	729.3	725.0	726.5	727.9	725.0	709.5	699.7	701.1	702.5	706.7
62.5°	606.6	616.4	623.5	617.8	620.7	624.9	616.4	613.6	619.3	624.9	630.5
65°	503.6	513.5	520.5	519.1	527.6	536.0	534.6	537.4	550.1	557.2	564.2
67.5°	410.5	420.4	430.2	431.6	444.3	457.0	462.7	472.6	486.7	496.5	505.0
70°	330.1	338.5	349.8	356.9	373.8	390.7	400.6	420.4	428.8	442.9	448.6
72.5°	258.1	265.2	280.7	297.6	311.7	332.9	352.6	369.6	382.3	397.8	404.8
75°	201.7	204.5	221.5	241.2	261.0	284.9	306.1	324.4	341.4	356.9	368.2
77.5°	148.1	152.3	167.9	194.7	217.2	242.6	266.6	286.4	304.7	320.2	335.7
80°	103.0	111.4	128.4	155.2	180.6	208.8	231.3	253.9	273.7	289.2	304.7
82.5°	66.3	73.4	97.3	124.1	150.9	179.1	203.1	225.7	246.9	263.8	277.9
85°	36.7	46.5	70.5	98.7	125.5	153.8	179.1	201.7	222.9	238.4	252.5
87.5°	14.1	28.2	50.8	77.6	104.4	131.2	158.0	179.1	200.3	217.2	229.9
90°	0.0	16.9	38.1	64.9	91.7	118.5	143.9	166.5	186.2	201.7	215.8
92.5°	1.4	11.3	29.6	52.2	77.6	103.0	127.0	149.5	169.3	184.8	197.5
95°	1.4	8.5	24.0	45.1	67.7	91.7	114.3	135.4	153.8	169.3	182.0
97.5°	1.4	5.6	19.7	39.5	59.2	83.2	104.4	124.1	141.1	156.6	166.5
100°	1.4	5.6	16.9	33.9	53.6	74.8	94.5	114.3	129.8	142.5	153.8
102.5°	1.4	4.2	14.1	29.6	48.0	66.3	86.0	104.4	118.5	131.2	142.5
105°	1.4	4.2	12.7	25.4	42.3	60.7	77.6	94.5	110.0	121.3	131.2
107.5°	1.4	2.8	11.3	21.2	36.7	55.0	71.9	86.0	100.2	111.4	121.3
110°	1.4	2.8	9.9	19.7	32.4	49.4	64.9	79.0	91.7	103.0	111.4



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CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.4	2.8	8.5	18.3	29.6	43.7	59.2	71.9	84.6	94.5	103.0
115°	1.4	2.8	8.5	16.9	26.8	38.1	52.2	66.3	76.2	87.5	94.5
117.5°	1.4	2.8	7.1	14.1	25.4	35.3	48.0	59.2	70.5	80.4	87.5
120°	1.4	2.8	7.1	12.7	22.6	32.4	42.3	53.6	64.9	71.9	79.0
122.5°	1.4	2.8	5.6	12.7	19.7	29.6	38.1	48.0	57.8	66.3	73.4
125°	1.4	2.8	5.6	11.3	18.3	26.8	35.3	42.3	52.2	59.2	66.3
127.5°	1.4	2.8	5.6	9.9	16.9	24.0	32.4	39.5	46.5	53.6	59.2
130°	1.4	2.8	4.2	8.5	15.5	21.2	28.2	36.7	42.3	48.0	53.6
132.5°	1.4	2.8	4.2	8.5	12.7	18.3	25.4	32.4	38.1	43.7	48.0
135°	1.4	2.8	4.2	7.1	11.3	16.9	21.2	28.2	33.9	39.5	43.7
137.5°	1.4	2.8	4.2	7.1	9.9	14.1	18.3	24.0	29.6	33.9	39.5
140°	1.4	2.8	4.2	5.6	8.5	12.7	16.9	19.7	25.4	29.6	33.9
142.5°	1.4	2.8	4.2	5.6	8.5	11.3	14.1	16.9	21.2	25.4	29.6
145°	1.4	2.8	4.2	5.6	7.1	9.9	12.7	15.5	16.9	21.2	24.0
147.5°	1.4	2.8	4.2	5.6	5.6	8.5	11.3	12.7	15.5	16.9	19.7
150°	1.4	2.8	4.2	4.2	5.6	7.1	9.9	11.3	12.7	15.5	16.9
152.5°	1.4	2.8	4.2	4.2	5.6	7.1	8.5	9.9	11.3	12.7	14.1
155°	1.4	2.8	4.2	4.2	4.2	5.6	7.1	8.5	9.9	11.3	12.7
157.5°	2.8	2.8	2.8	4.2	4.2	5.6	5.6	7.1	8.5	8.5	9.9
160°	2.8	2.8	2.8	4.2	4.2	4.2	5.6	5.6	7.1	7.1	8.5
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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5
2.5°	2549.0	2553.2	2565.9	2565.9	2563.1	2560.2	2560.2	2556.0	2558.8	2564.5	2561.6
5°	2549.0	2553.2	2565.9	2565.9	2563.1	2560.2	2558.8	2554.6	2558.8	2564.5	2561.6
7.5°	2540.5	2546.1	2558.8	2558.8	2556.0	2554.6	2551.8	2549.0	2553.2	2558.8	2556.0
10°	2529.2	2534.8	2547.5	2547.5	2544.7	2544.7	2540.5	2537.7	2543.3	2547.5	2546.1
12.5°	2512.3	2519.3	2530.6	2529.2	2526.4	2527.8	2523.6	2517.9	2523.6	2527.8	2529.2
15°	2488.3	2496.8	2508.0	2505.2	2501.0	2503.8	2496.8	2492.5	2496.8	2505.2	2503.8
17.5°	2457.3	2462.9	2471.4	2471.4	2467.1	2464.3	2461.5	2457.3	2460.1	2465.7	2467.1
20°	2413.5	2420.6	2424.8	2420.6	2419.2	2414.9	2409.3	2405.1	2410.7	2419.2	2420.6
22.5°	2355.7	2357.1	2367.0	2357.1	2350.1	2348.6	2343.0	2334.5	2343.0	2350.1	2351.5
25°	2283.8	2290.8	2286.6	2269.7	2269.7	2258.4	2255.5	2251.3	2252.7	2265.4	2271.1
27.5°	2192.1	2194.9	2183.6	2169.5	2156.8	2149.8	2139.9	2141.3	2141.3	2158.2	2163.9
30°	2091.9	2076.4	2066.5	2044.0	2034.1	2017.2	2014.3	2014.3	2011.5	2020.0	2045.4
32.5°	1972.0	1950.9	1935.3	1914.2	1897.3	1880.3	1871.9	1876.1	1874.7	1895.8	1904.3
35°	1840.8	1828.1	1795.7	1768.9	1759.0	1733.6	1733.6	1720.9	1729.4	1753.4	1763.2
37.5°	1702.6	1682.8	1656.0	1626.4	1619.4	1599.6	1592.6	1585.5	1603.9	1608.1	1618.0
40°	1561.5	1543.2	1517.8	1489.6	1489.6	1465.6	1465.6	1465.6	1467.0	1475.5	1493.8
42.5°	1427.5	1407.8	1385.2	1365.5	1362.6	1344.3	1344.3	1342.9	1345.7	1352.8	1369.7
45°	1297.8	1282.2	1258.3	1248.4	1249.8	1230.0	1234.3	1230.0	1235.7	1242.7	1248.4
47.5°	1177.9	1168.0	1158.1	1144.0	1139.8	1138.4	1131.3	1125.7	1135.5	1135.5	1144.0
50°	1066.4	1060.8	1055.1	1046.7	1048.1	1042.4	1034.0	1034.0	1041.0	1042.4	1048.1
52.5°	969.1	962.0	955.0	956.4	957.8	955.0	950.7	946.5	950.7	953.6	960.6
55°	871.8	866.1	873.2	870.3	873.2	870.3	867.5	864.7	871.8	867.5	874.6
57.5°	784.3	789.9	792.8	787.1	791.3	788.5	789.9	785.7	791.3	794.2	792.8
60°	703.9	712.4	708.1	709.5	715.2	712.4	706.7	710.9	716.6	718.0	716.6
62.5°	630.5	640.4	644.6	641.8	643.2	640.4	644.6	639.0	646.1	648.9	644.6
65°	564.2	575.5	578.3	578.3	578.3	575.5	579.8	581.2	584.0	584.0	581.2
67.5°	507.8	517.7	520.5	523.3	520.5	517.7	517.7	519.1	524.7	527.6	524.7
70°	457.0	466.9	468.3	468.3	469.7	472.6	466.9	469.7	474.0	475.4	474.0
72.5°	413.3	423.2	426.0	424.6	426.0	427.4	427.4	424.6	428.8	431.6	431.6
75°	378.0	383.7	386.5	386.5	387.9	389.3	389.3	387.9	390.7	392.1	393.6
77.5°	345.6	349.8	354.1	354.1	355.5	354.1	356.9	356.9	358.3	359.7	361.1
80°	313.2	318.8	321.6	323.0	325.8	327.3	327.3	327.3	328.7	330.1	330.1
82.5°	287.8	292.0	296.2	300.5	300.5	301.9	301.9	301.9	303.3	303.3	304.7
85°	262.4	268.0	272.2	275.1	276.5	277.9	277.9	279.3	279.3	279.3	280.7
87.5°	239.8	246.9	249.7	252.5	253.9	256.7	256.7	256.7	258.1	258.1	258.1
90°	224.3	231.3	234.2	237.0	238.4	239.8	239.8	241.2	241.2	242.6	242.6
92.5°	205.9	213.0	218.6	218.6	220.1	222.9	221.5	221.5	222.9	224.3	224.3
95°	191.8	197.5	201.7	203.1	204.5	204.5	204.5	205.9	204.5	205.9	205.9
97.5°	174.9	180.6	184.8	187.6	189.0	189.0	189.0	190.4	189.0	190.4	190.4
100°	160.8	166.5	170.7	172.1	174.9	174.9	174.9	174.9	174.9	174.9	176.3
102.5°	149.5	155.2	158.0	159.4	160.8	162.2	162.2	162.2	162.2	163.6	163.6
105°	138.2	143.9	146.7	148.1	149.5	150.9	150.9	150.9	152.3	152.3	150.9
107.5°	128.4	132.6	135.4	138.2	139.6	139.6	141.1	141.1	141.1	141.1	141.1
110°	118.5	122.7	127.0	129.8	129.8	131.2	131.2	132.6	132.6	131.2	132.6





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	108.6	114.3	117.1	119.9	121.3	122.7	122.7	122.7	122.7	122.7	122.7
115°	100.2	105.8	108.6	111.4	112.8	114.3	114.3	114.3	114.3	114.3	114.3
117.5°	93.1	98.7	101.6	103.0	104.4	105.8	107.2	107.2	107.2	107.2	105.8
120°	86.0	90.3	93.1	95.9	97.3	98.7	98.7	98.7	98.7	98.7	98.7
122.5°	79.0	83.2	86.0	88.9	90.3	91.7	91.7	91.7	91.7	91.7	91.7
125°	71.9	76.2	79.0	81.8	83.2	84.6	84.6	84.6	84.6	84.6	84.6
127.5°	64.9	69.1	73.4	74.8	76.2	77.6	77.6	77.6	79.0	77.6	77.6
130°	57.8	62.1	66.3	67.7	69.1	70.5	71.9	71.9	71.9	71.9	70.5
132.5°	52.2	56.4	59.2	60.7	63.5	63.5	64.9	64.9	64.9	64.9	63.5
135°	48.0	50.8	53.6	55.0	57.8	57.8	57.8	59.2	59.2	57.8	56.4
137.5°	42.3	45.1	48.0	49.4	50.8	52.2	52.2	53.6	52.2	52.2	52.2
140°	39.5	40.9	43.7	45.1	46.5	46.5	46.5	48.0	48.0	46.5	46.5
142.5°	33.9	36.7	39.5	40.9	42.3	42.3	42.3	42.3	42.3	42.3	42.3
145°	28.2	32.4	33.9	36.7	36.7	38.1	38.1	38.1	38.1	38.1	36.7
147.5°	24.0	26.8	31.0	32.4	32.4	33.9	33.9	33.9	33.9	33.9	32.4
150°	18.3	21.2	25.4	28.2	28.2	29.6	29.6	29.6	29.6	28.2	28.2
152.5°	15.5	18.3	19.7	22.6	24.0	24.0	24.0	25.4	24.0	24.0	24.0
155°	14.1	15.5	16.9	18.3	19.7	21.2	21.2	21.2	21.2	19.7	19.7
157.5°	11.3	12.7	14.1	15.5	16.9	18.3	18.3	18.3	18.3	18.3	16.9
160°	8.5	9.9	11.3	11.3	12.7	14.1	15.5	14.1	14.1	14.1	14.1
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-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5
2.5°	2558.8	2557.4	2561.6	2554.6	2533.4	2539.1	2536.3	2549.0	2551.8	2554.6	2567.3
5°	2558.8	2557.4	2560.2	2554.6	2532.0	2536.3	2533.4	2546.1	2549.0	2550.4	2563.1
7.5°	2553.2	2551.8	2556.0	2549.0	2525.0	2530.6	2526.4	2539.1	2540.5	2541.9	2553.2
10°	2541.9	2540.5	2543.3	2537.7	2513.7	2519.3	2513.7	2526.4	2526.4	2529.2	2537.7
12.5°	2525.0	2522.2	2527.8	2520.7	2493.9	2501.0	2498.2	2506.6	2508.0	2509.5	2517.9
15°	2501.0	2498.2	2502.4	2498.2	2474.2	2475.6	2471.4	2484.1	2485.5	2482.7	2491.1
17.5°	2465.7	2462.9	2471.4	2468.5	2444.6	2450.2	2448.8	2451.6	2455.9	2448.8	2460.1
20°	2422.0	2424.8	2427.6	2429.1	2410.7	2410.7	2409.3	2414.9	2419.2	2413.5	2422.0
22.5°	2357.1	2364.2	2372.6	2375.5	2362.8	2361.3	2369.8	2367.0	2371.2	2368.4	2374.0
25°	2275.3	2289.4	2297.9	2306.3	2299.3	2302.1	2314.8	2317.6	2317.6	2316.2	2321.8
27.5°	2173.7	2192.1	2207.6	2225.9	2218.9	2224.5	2245.7	2248.5	2254.1	2248.5	2259.8
30°	2052.4	2069.3	2099.0	2125.8	2128.6	2137.1	2166.7	2169.5	2185.0	2179.4	2183.6
32.5°	1931.1	1939.6	1973.4	2000.2	2017.2	2038.3	2070.8	2076.4	2097.6	2101.8	2101.8
35°	1778.8	1802.7	1833.8	1871.9	1893.0	1915.6	1959.3	1967.8	1998.8	2008.7	2020.0
37.5°	1650.4	1673.0	1692.7	1732.2	1770.3	1795.7	1831.0	1852.1	1884.6	1902.9	1917.0
40°	1513.6	1531.9	1553.1	1592.6	1625.0	1663.1	1698.4	1723.8	1764.7	1785.8	1804.2
42.5°	1383.8	1397.9	1420.5	1448.7	1482.5	1524.9	1558.7	1588.3	1632.1	1661.7	1682.8
45°	1268.1	1276.6	1296.3	1317.5	1347.1	1390.9	1423.3	1461.4	1496.6	1527.7	1553.1
47.5°	1159.5	1170.8	1180.7	1194.8	1221.6	1248.4	1286.5	1323.1	1358.4	1392.3	1417.7
50°	1059.4	1059.4	1074.9	1084.8	1103.1	1127.1	1156.7	1182.1	1225.8	1249.8	1282.2
52.5°	962.0	967.7	976.1	981.8	995.9	1011.4	1035.4	1056.5	1093.2	1115.8	1146.8
55°	876.0	881.6	885.9	888.7	897.1	915.5	923.9	940.9	966.3	984.6	1011.4
57.5°	794.2	797.0	801.2	802.6	804.0	815.3	822.4	826.6	852.0	870.3	892.9
60°	719.4	719.4	723.6	722.2	720.8	726.5	725.0	729.3	744.8	756.1	766.0
62.5°	648.9	648.9	650.3	647.5	646.1	646.1	640.4	644.6	648.9	650.3	657.3
65°	584.0	591.0	585.4	586.8	578.3	575.5	572.7	564.2	562.8	557.2	560.0
67.5°	526.2	531.8	526.2	526.2	519.1	513.5	506.4	492.3	488.1	476.8	474.0
70°	479.6	475.4	478.2	474.0	465.5	458.4	448.6	437.3	423.2	409.1	399.2
72.5°	434.5	434.5	431.6	427.4	423.2	409.1	397.8	385.1	368.2	349.8	335.7
75°	390.7	392.1	392.1	387.9	380.9	368.2	355.5	337.1	318.8	297.6	279.3
77.5°	359.7	359.7	359.7	352.6	345.6	334.3	318.8	299.0	279.3	253.9	232.7
80°	330.1	328.7	328.7	320.2	313.2	300.5	284.9	265.2	244.0	217.2	193.3
82.5°	306.1	304.7	301.9	294.8	284.9	272.2	256.7	235.6	213.0	189.0	159.4
85°	280.7	279.3	276.5	269.4	259.6	248.3	231.3	210.2	187.6	160.8	132.6
87.5°	258.1	256.7	252.5	248.3	237.0	224.3	207.4	187.6	163.6	138.2	110.0
90°	242.6	239.8	237.0	231.3	221.5	207.4	190.4	169.3	145.3	119.9	91.7
92.5°	224.3	222.9	218.6	213.0	204.5	190.4	173.5	153.8	129.8	105.8	79.0
95°	205.9	204.5	201.7	196.1	187.6	174.9	159.4	139.6	117.1	93.1	69.1
97.5°	189.0	189.0	184.8	180.6	170.7	160.8	145.3	127.0	105.8	84.6	62.1
100°	174.9	174.9	170.7	165.0	158.0	148.1	132.6	115.7	95.9	76.2	53.6
102.5°	162.2	160.8	158.0	152.3	145.3	135.4	121.3	105.8	87.5	67.7	48.0
105°	150.9	149.5	146.7	141.1	135.4	124.1	112.8	97.3	79.0	60.7	42.3
107.5°	139.6	138.2	136.8	131.2	124.1	114.3	103.0	87.5	71.9	55.0	38.1
110°	129.8	128.4	125.5	119.9	112.8	104.4	93.1	80.4	64.9	49.4	33.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	121.3	119.9	117.1	111.4	105.8	95.9	86.0	71.9	59.2	45.1	29.6
115°	112.8	111.4	108.6	103.0	95.9	87.5	77.6	66.3	52.2	39.5	26.8
117.5°	104.4	103.0	100.2	95.9	88.9	80.4	70.5	59.2	46.5	36.7	24.0
120°	97.3	94.5	91.7	87.5	80.4	73.4	63.5	53.6	42.3	32.4	21.2
122.5°	90.3	87.5	84.6	80.4	73.4	66.3	56.4	48.0	39.5	29.6	19.7
125°	81.8	80.4	77.6	73.4	66.3	59.2	52.2	43.7	35.3	26.8	16.9
127.5°	74.8	73.4	70.5	64.9	59.2	53.6	46.5	39.5	31.0	22.6	15.5
130°	69.1	66.3	63.5	59.2	55.0	49.4	42.3	35.3	28.2	19.7	14.1
132.5°	62.1	59.2	56.4	53.6	49.4	43.7	38.1	31.0	25.4	18.3	12.7
135°	56.4	53.6	50.8	48.0	43.7	39.5	33.9	28.2	22.6	16.9	11.3
137.5°	49.4	48.0	46.5	43.7	39.5	35.3	31.0	24.0	19.7	15.5	9.9
140°	45.1	43.7	42.3	38.1	35.3	31.0	26.8	21.2	16.9	12.7	8.5
142.5°	40.9	39.5	36.7	33.9	31.0	28.2	22.6	19.7	15.5	11.3	8.5
145°	35.3	33.9	32.4	29.6	26.8	22.6	19.7	16.9	14.1	9.9	7.1
147.5°	32.4	31.0	28.2	25.4	22.6	19.7	18.3	15.5	11.3	8.5	5.6
150°	26.8	25.4	24.0	21.2	19.7	18.3	15.5	12.7	9.9	7.1	5.6
152.5°	22.6	21.2	19.7	19.7	16.9	15.5	12.7	11.3	8.5	7.1	4.2
155°	19.7	19.7	18.3	16.9	14.1	12.7	11.3	8.5	7.1	5.6	4.2
157.5°	16.9	15.5	14.1	14.1	12.7	11.3	8.5	7.1	5.6	5.6	4.2
160°	14.1	12.7	12.7	11.3	9.9	8.5	7.1	7.1	5.6	4.2	4.2
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-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5
2.5°	2568.7	2553.2	2567.3	2585.6	2585.6	2582.8	2580.0	2585.6	2599.7	2594.1	2577.2
5°	2564.5	2549.0	2561.6	2580.0	2580.0	2575.8	2572.9	2577.2	2592.7	2585.6	2570.1
7.5°	2556.0	2541.9	2550.4	2567.3	2567.3	2563.1	2560.2	2565.9	2578.6	2571.5	2554.6
10°	2540.5	2525.0	2534.8	2550.4	2549.0	2546.1	2541.9	2549.0	2560.2	2550.4	2530.6
12.5°	2520.7	2505.2	2513.7	2527.8	2526.4	2520.7	2517.9	2522.2	2532.0	2526.4	2505.2
15°	2493.9	2478.4	2485.5	2499.6	2495.4	2491.1	2485.5	2486.9	2499.6	2489.7	2467.1
17.5°	2461.5	2444.6	2450.2	2462.9	2458.7	2454.4	2447.4	2448.8	2462.9	2448.8	2424.8
20°	2422.0	2403.7	2407.9	2423.4	2416.4	2409.3	2402.3	2402.3	2416.4	2400.8	2374.0
22.5°	2379.7	2361.3	2364.2	2375.5	2369.8	2357.1	2350.1	2354.3	2361.3	2341.6	2313.4
25°	2327.5	2303.5	2307.7	2319.0	2314.8	2297.9	2290.8	2293.6	2290.8	2275.3	2245.7
27.5°	2266.8	2241.4	2244.3	2251.3	2245.7	2230.2	2221.7	2223.1	2217.5	2197.7	2163.9
30°	2190.7	2178.0	2176.6	2180.8	2172.3	2156.8	2146.9	2144.1	2142.7	2114.5	2073.6
32.5°	2113.1	2101.8	2094.7	2100.4	2090.5	2075.0	2058.1	2058.1	2044.0	2017.2	1981.9
35°	2034.1	2015.7	2008.7	2012.9	2001.6	1981.9	1967.8	1960.7	1939.6	1905.7	1867.6
37.5°	1932.5	1919.8	1911.4	1915.6	1902.9	1888.8	1862.0	1854.9	1832.4	1785.8	1737.9
40°	1822.5	1812.6	1804.2	1808.4	1794.3	1773.1	1749.1	1737.9	1712.5	1660.3	1622.2
42.5°	1704.0	1699.8	1689.9	1705.4	1677.2	1656.0	1632.1	1613.7	1588.3	1531.9	1488.2
45°	1578.5	1588.3	1565.8	1570.0	1551.7	1533.3	1507.9	1481.1	1455.7	1402.1	1352.8
47.5°	1445.9	1452.9	1437.4	1440.2	1420.5	1403.5	1381.0	1347.1	1318.9	1272.4	1228.6
50°	1309.0	1306.2	1306.2	1303.4	1287.9	1266.7	1244.1	1213.1	1184.9	1142.6	1105.9
52.5°	1163.7	1169.4	1172.2	1179.3	1159.5	1146.8	1111.6	1084.8	1063.6	1019.9	988.8
55°	1024.1	1043.8	1038.2	1041.0	1018.5	1008.6	980.4	959.2	928.2	902.8	883.0
57.5°	897.1	901.4	904.2	908.4	898.6	878.8	856.2	839.3	815.3	794.2	780.1
60°	774.4	774.4	775.8	782.9	773.0	756.1	739.2	726.5	709.5	696.8	688.4
62.5°	658.8	668.6	670.0	664.4	651.7	643.2	631.9	624.9	613.6	609.4	606.6
65°	551.5	551.5	551.5	554.4	547.3	541.7	534.6	533.2	537.4	531.8	534.6
67.5°	461.3	457.0	454.2	455.6	452.8	450.0	448.6	452.8	461.3	461.3	468.3
70°	383.7	375.2	369.6	369.6	369.6	371.0	375.2	383.7	397.8	403.4	413.3
72.5°	320.2	301.9	293.4	293.4	294.8	300.5	313.2	328.7	341.4	352.6	365.3
75°	259.6	241.2	228.5	227.1	229.9	238.4	256.7	270.8	292.0	307.5	323.0
77.5°	210.2	187.6	172.1	170.7	174.9	187.6	210.2	228.5	252.5	269.4	286.4
80°	167.9	142.5	129.8	121.3	128.4	143.9	169.3	191.8	214.4	237.0	258.1
82.5°	134.0	110.0	90.3	81.8	90.3	111.4	135.4	162.2	184.8	208.8	229.9
85°	105.8	80.4	57.8	49.4	59.2	81.8	108.6	135.4	160.8	184.8	205.9
87.5°	83.2	57.8	35.3	24.0	36.7	60.7	86.0	112.8	139.6	163.6	184.8
90°	64.9	40.9	19.7	2.8	21.2	43.7	69.1	94.5	121.3	145.3	166.5
92.5°	55.0	31.0	11.3	0.0	12.7	32.4	56.4	81.8	105.8	129.8	150.9
95°	46.5	25.4	8.5	0.0	8.5	25.4	46.5	69.1	93.1	117.1	138.2
97.5°	39.5	19.7	5.6	0.0	5.6	19.7	38.1	60.7	81.8	104.4	124.1
100°	33.9	16.9	4.2	0.0	4.2	15.5	32.4	52.2	73.4	94.5	112.8
102.5°	29.6	14.1	2.8	0.0	2.8	12.7	26.8	45.1	63.5	83.2	101.6
105°	25.4	11.3	2.8	0.0	1.4	9.9	22.6	39.5	56.4	74.8	91.7
107.5°	22.6	9.9	2.8	0.0	1.4	8.5	19.7	33.9	50.8	66.3	81.8
110°	19.7	8.5	2.8	0.0	1.4	5.6	16.9	29.6	43.7	59.2	74.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	16.9	7.1	1.4	0.0	0.0	4.2	14.1	25.4	38.1	53.6	66.3
115°	15.5	7.1	1.4	0.0	0.0	2.8	11.3	22.6	33.9	48.0	59.2
117.5°	14.1	5.6	1.4	0.0	1.4	2.8	9.9	19.7	29.6	40.9	53.6
120°	12.7	5.6	1.4	0.0	1.4	1.4	7.1	16.9	25.4	36.7	46.5
122.5°	11.3	5.6	1.4	0.0	1.4	1.4	5.6	14.1	22.6	32.4	40.9
125°	9.9	4.2	2.8	1.4	1.4	1.4	4.2	11.3	19.7	26.8	36.7
127.5°	9.9	4.2	2.8	1.4	1.4	1.4	2.8	9.9	15.5	24.0	32.4
130°	8.5	4.2	2.8	1.4	1.4	1.4	1.4	7.1	14.1	19.7	26.8
132.5°	7.1	4.2	2.8	1.4	1.4	1.4	1.4	4.2	9.9	16.9	22.6
135°	7.1	4.2	2.8	1.4	1.4	1.4	1.4	2.8	7.1	12.7	18.3
137.5°	5.6	2.8	2.8	1.4	1.4	1.4	1.4	1.4	5.6	9.9	14.1
140°	5.6	2.8	2.8	1.4	1.4	1.4	1.4	1.4	4.2	7.1	11.3
142.5°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	2.8	5.6	8.5
145°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	2.8	5.6
147.5°	4.2	4.2	2.8	1.4	1.4	1.4	1.4	1.4	1.4	2.8	4.2
150°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
152.5°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
155°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8
157.5°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
160°	4.2	2.8	2.8	1.4	2.8	1.4	2.8	2.8	2.8	2.8	2.8
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-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5
2.5°	2571.5	2544.7	2558.8	2554.6	2560.2	2571.5	2570.1	2567.3	2567.3	2563.1	2557.4
5°	2563.1	2537.7	2550.4	2543.3	2550.4	2560.2	2558.8	2554.6	2557.4	2550.4	2543.3
7.5°	2546.1	2523.6	2534.8	2529.2	2534.8	2544.7	2540.5	2539.1	2541.9	2530.6	2526.4
10°	2526.4	2501.0	2513.7	2506.6	2513.7	2520.7	2517.9	2512.3	2517.9	2506.6	2502.4
12.5°	2495.4	2474.2	2482.7	2479.8	2484.1	2491.1	2485.5	2481.2	2484.1	2474.2	2465.7
15°	2461.5	2440.3	2447.4	2443.2	2446.0	2454.4	2444.6	2443.2	2440.3	2430.5	2427.6
17.5°	2417.8	2398.0	2405.1	2398.0	2402.3	2399.4	2398.0	2391.0	2391.0	2379.7	2371.2
20°	2364.2	2347.2	2343.0	2337.4	2343.0	2337.4	2328.9	2323.3	2321.8	2310.6	2303.5
22.5°	2302.1	2282.4	2285.2	2269.7	2271.1	2262.6	2248.5	2242.9	2237.2	2224.5	2214.6
25°	2227.3	2207.6	2193.5	2183.6	2170.9	2169.5	2151.2	2137.1	2135.6	2120.1	2118.7
27.5°	2142.7	2120.1	2108.8	2084.9	2069.3	2056.7	2041.1	2027.0	2020.0	2003.1	1991.8
30°	2045.4	2020.0	1991.8	1974.8	1950.9	1941.0	1914.2	1897.3	1891.6	1873.3	1864.8
32.5°	1935.3	1908.5	1886.0	1853.5	1826.7	1812.6	1785.8	1768.9	1761.8	1742.1	1730.8
35°	1815.4	1785.8	1759.0	1728.0	1706.8	1682.8	1650.4	1633.5	1618.0	1610.9	1602.4
37.5°	1689.9	1657.5	1626.4	1595.4	1577.1	1548.8	1520.6	1509.3	1491.0	1484.0	1475.5
40°	1560.1	1527.7	1498.1	1468.4	1447.3	1421.9	1396.5	1392.3	1372.5	1365.5	1359.8
42.5°	1431.8	1397.9	1364.0	1342.9	1327.4	1302.0	1285.1	1280.8	1263.9	1259.7	1259.7
45°	1316.1	1273.8	1245.6	1227.2	1214.5	1193.4	1179.3	1176.4	1162.3	1159.5	1159.5
47.5°	1192.0	1152.5	1131.3	1120.0	1108.7	1093.2	1084.8	1084.8	1070.6	1067.8	1066.4
50°	1076.3	1039.6	1024.1	1012.8	1011.4	1000.1	993.1	990.2	990.2	980.4	981.8
52.5°	966.3	947.9	935.2	928.2	919.7	912.7	907.0	907.0	902.8	895.7	898.6
55°	864.7	843.5	844.9	839.3	835.1	830.8	832.3	823.8	822.4	816.7	821.0
57.5°	763.1	763.1	760.3	756.1	749.0	751.8	751.8	751.8	744.8	740.6	744.8
60°	677.1	681.3	674.3	678.5	675.7	677.1	674.3	674.3	670.0	668.6	670.0
62.5°	600.9	608.0	605.1	610.8	608.0	609.4	612.2	606.6	603.7	600.9	603.7
65°	533.2	541.7	540.3	544.5	545.9	547.3	548.7	545.9	543.1	540.3	538.8
67.5°	474.0	482.4	488.1	489.5	490.9	495.1	493.7	490.9	488.1	483.8	482.4
70°	420.4	431.6	438.7	441.5	447.2	444.3	444.3	442.9	440.1	435.9	434.5
72.5°	375.2	387.9	395.0	397.8	403.4	403.4	402.0	400.6	397.8	393.6	392.1
75°	335.7	347.0	356.9	362.5	366.8	366.8	365.3	363.9	361.1	358.3	356.9
77.5°	304.7	314.6	323.0	330.1	332.9	334.3	332.9	330.1	330.1	328.7	327.3
80°	273.7	284.9	293.4	300.5	304.7	304.7	303.3	304.7	301.9	300.5	299.0
82.5°	246.9	259.6	269.4	276.5	279.3	280.7	279.3	280.7	277.9	277.9	277.9
85°	222.9	235.6	246.9	252.5	256.7	258.1	258.1	258.1	256.7	256.7	256.7
87.5°	203.1	215.8	227.1	232.7	237.0	238.4	238.4	239.8	237.0	237.0	237.0
90°	184.8	197.5	208.8	214.4	218.6	221.5	221.5	222.9	221.5	220.1	220.1
92.5°	167.9	182.0	193.3	198.9	203.1	207.4	207.4	208.8	205.9	205.9	205.9
95°	153.8	167.9	177.7	184.8	189.0	191.8	193.3	193.3	191.8	191.8	191.8
97.5°	141.1	153.8	163.6	170.7	174.9	176.3	177.7	179.1	177.7	177.7	177.7
100°	128.4	141.1	150.9	156.6	162.2	163.6	165.0	166.5	166.5	165.0	165.0
102.5°	117.1	129.8	138.2	145.3	149.5	152.3	153.8	153.8	153.8	153.8	153.8
105°	105.8	118.5	127.0	134.0	138.2	141.1	142.5	143.9	143.9	142.5	142.5
107.5°	95.9	107.2	117.1	122.7	128.4	131.2	132.6	132.6	134.0	132.6	132.6
110°	86.0	98.7	107.2	112.8	118.5	121.3	122.7	124.1	124.1	124.1	124.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	79.0	88.9	97.3	103.0	108.6	111.4	112.8	114.3	115.7	114.3	114.3
115°	70.5	80.4	88.9	94.5	98.7	101.6	104.4	105.8	105.8	107.2	105.8
117.5°	63.5	71.9	80.4	86.0	90.3	94.5	95.9	97.3	98.7	97.3	97.3
120°	56.4	64.9	71.9	77.6	81.8	86.0	87.5	88.9	90.3	88.9	88.9
122.5°	50.8	57.8	64.9	70.5	74.8	77.6	80.4	80.4	81.8	81.8	81.8
125°	45.1	52.2	57.8	63.5	67.7	70.5	71.9	73.4	73.4	74.8	74.8
127.5°	39.5	45.1	52.2	56.4	60.7	63.5	64.9	66.3	66.3	67.7	67.7
130°	33.9	39.5	45.1	49.4	53.6	56.4	57.8	59.2	60.7	60.7	60.7
132.5°	29.6	35.3	39.5	43.7	46.5	49.4	52.2	53.6	53.6	53.6	53.6
135°	24.0	29.6	33.9	38.1	40.9	43.7	45.1	48.0	48.0	48.0	48.0
137.5°	19.7	25.4	29.6	32.4	35.3	38.1	39.5	40.9	42.3	42.3	42.3
140°	15.5	19.7	24.0	28.2	31.0	32.4	35.3	35.3	36.7	36.7	36.7
142.5°	11.3	15.5	18.3	22.6	25.4	28.2	29.6	31.0	31.0	31.0	31.0
145°	8.5	11.3	14.1	16.9	21.2	22.6	24.0	25.4	26.8	26.8	26.8
147.5°	5.6	8.5	9.9	12.7	15.5	18.3	19.7	21.2	22.6	22.6	22.6
150°	4.2	5.6	8.5	9.9	11.3	14.1	16.9	16.9	18.3	18.3	16.9
152.5°	2.8	4.2	5.6	7.1	8.5	9.9	12.7	12.7	14.1	14.1	14.1
155°	2.8	2.8	2.8	4.2	5.6	7.1	8.5	9.9	9.9	9.9	9.9
157.5°	2.8	2.8	2.8	2.8	2.8	4.2	5.6	7.1	7.1	7.1	7.1
160°	2.8	2.8	1.4	1.4	2.8	2.8	2.8	2.8	4.2	4.2	4.2
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-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5
2.5°	2561.6	2564.5	2564.5	2561.6	2560.2	2565.9	2558.8	2532.0	2540.5	2543.3	2551.8
5°	2549.0	2551.8	2551.8	2551.8	2549.0	2554.6	2547.5	2520.7	2530.6	2534.8	2540.5
7.5°	2530.6	2532.0	2534.8	2533.4	2530.6	2539.1	2532.0	2505.2	2512.3	2519.3	2526.4
10°	2506.6	2506.6	2508.0	2510.9	2508.0	2515.1	2508.0	2484.1	2491.1	2495.4	2503.8
12.5°	2474.2	2477.0	2478.4	2477.0	2475.6	2481.2	2478.4	2455.9	2458.7	2467.1	2475.6
15°	2430.5	2430.5	2437.5	2434.7	2434.7	2440.3	2443.2	2417.8	2422.0	2434.7	2443.2
17.5°	2376.9	2378.3	2383.9	2386.7	2385.3	2395.2	2396.6	2376.9	2375.5	2391.0	2399.4
20°	2307.7	2310.6	2317.6	2323.3	2323.3	2334.5	2338.8	2326.1	2327.5	2344.4	2347.2
22.5°	2223.1	2223.1	2235.8	2244.3	2251.3	2258.4	2271.1	2259.8	2259.8	2282.4	2295.0
25°	2118.7	2128.6	2132.8	2149.8	2159.6	2179.4	2190.7	2192.1	2193.5	2214.6	2223.1
27.5°	2003.1	2005.9	2018.6	2038.3	2049.6	2067.9	2089.1	2093.3	2100.4	2128.6	2141.3
30°	1871.9	1880.3	1886.0	1914.2	1929.7	1953.7	1980.5	1990.4	1996.0	2034.1	2049.6
32.5°	1737.9	1740.7	1764.7	1780.2	1798.5	1823.9	1854.9	1873.3	1884.6	1924.1	1946.6
35°	1603.9	1609.5	1629.2	1649.0	1667.3	1692.7	1725.2	1750.6	1770.3	1805.6	1835.2
37.5°	1481.1	1495.2	1499.5	1519.2	1533.3	1558.7	1581.3	1618.0	1637.7	1674.4	1712.5
40°	1371.1	1375.3	1378.2	1397.9	1407.8	1431.8	1464.2	1488.2	1515.0	1541.8	1586.9
42.5°	1262.5	1265.3	1269.5	1280.8	1292.1	1309.0	1333.0	1357.0	1385.2	1424.7	1454.3
45°	1162.3	1165.2	1168.0	1175.0	1184.9	1200.4	1215.9	1232.9	1261.1	1294.9	1326.0
47.5°	1069.2	1074.9	1074.9	1076.3	1083.3	1096.0	1107.3	1128.5	1144.0	1162.3	1197.6
50°	980.4	984.6	986.0	986.0	990.2	998.7	1001.5	1015.6	1029.7	1046.7	1072.1
52.5°	897.1	897.1	895.7	901.4	901.4	907.0	908.4	916.9	926.8	945.1	956.4
55°	818.1	818.1	822.4	819.6	819.6	822.4	821.0	822.4	830.8	842.1	852.0
57.5°	742.0	740.6	744.8	742.0	740.6	743.4	746.2	740.6	742.0	753.3	753.3
60°	665.8	667.2	671.4	668.6	668.6	668.6	665.8	663.0	660.2	667.2	670.0
62.5°	605.1	600.9	605.1	600.9	603.7	602.3	599.5	593.9	595.3	592.5	589.6
65°	541.7	541.7	543.1	538.8	541.7	541.7	537.4	536.0	527.6	524.7	517.7
67.5°	486.7	486.7	488.1	485.2	485.2	486.7	482.4	478.2	469.7	465.5	455.6
70°	438.7	438.7	438.7	437.3	437.3	437.3	434.5	428.8	420.4	413.3	400.6
72.5°	395.0	396.4	395.0	395.0	399.2	395.0	390.7	385.1	378.0	363.9	352.6
75°	359.7	361.1	359.7	359.7	359.7	358.3	356.9	348.4	340.0	328.7	311.7
77.5°	328.7	328.7	330.1	328.7	328.7	327.3	323.0	316.0	306.1	296.2	276.5
80°	299.0	300.5	301.9	303.3	300.5	299.0	294.8	289.2	276.5	265.2	245.4
82.5°	277.9	276.5	277.9	279.3	276.5	275.1	270.8	263.8	253.9	238.4	218.6
85°	256.7	255.3	255.3	256.7	255.3	252.5	248.3	241.2	231.3	215.8	196.1
87.5°	235.6	237.0	238.4	237.0	235.6	232.7	228.5	221.5	210.2	197.5	176.3
90°	220.1	220.1	220.1	220.1	218.6	215.8	211.6	203.1	193.3	177.7	159.4
92.5°	205.9	205.9	205.9	205.9	204.5	200.3	196.1	189.0	177.7	162.2	145.3
95°	191.8	193.3	191.8	191.8	189.0	187.6	180.6	173.5	163.6	148.1	129.8
97.5°	176.3	177.7	176.3	176.3	174.9	172.1	167.9	159.4	149.5	135.4	118.5
100°	165.0	165.0	163.6	163.6	162.2	159.4	153.8	146.7	136.8	122.7	105.8
102.5°	152.3	153.8	152.3	152.3	149.5	146.7	142.5	135.4	125.5	111.4	95.9
105°	142.5	142.5	141.1	141.1	138.2	135.4	131.2	122.7	114.3	101.6	86.0
107.5°	132.6	132.6	131.2	131.2	128.4	125.5	119.9	112.8	104.4	91.7	77.6
110°	122.7	122.7	122.7	121.3	118.5	114.3	110.0	103.0	94.5	83.2	69.1





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	115.7	114.3	112.8	111.4	108.6	105.8	100.2	93.1	84.6	74.8	62.1
115°	105.8	105.8	104.4	103.0	100.2	95.9	91.7	86.0	77.6	66.3	55.0
117.5°	97.3	97.3	95.9	94.5	91.7	87.5	83.2	77.6	69.1	59.2	49.4
120°	88.9	88.9	87.5	86.0	83.2	79.0	76.2	69.1	62.1	52.2	43.7
122.5°	81.8	80.4	80.4	77.6	76.2	71.9	67.7	62.1	55.0	46.5	38.1
125°	73.4	73.4	71.9	70.5	69.1	64.9	60.7	55.0	48.0	40.9	33.9
127.5°	66.3	66.3	64.9	63.5	62.1	57.8	53.6	49.4	42.3	35.3	28.2
130°	59.2	59.2	57.8	56.4	55.0	50.8	48.0	42.3	36.7	31.0	24.0
132.5°	53.6	53.6	52.2	50.8	48.0	45.1	42.3	36.7	32.4	26.8	21.2
135°	48.0	46.5	46.5	45.1	42.3	39.5	36.7	32.4	26.8	22.6	16.9
137.5°	42.3	40.9	39.5	38.1	36.7	33.9	31.0	28.2	24.0	18.3	14.1
140°	36.7	35.3	35.3	33.9	31.0	29.6	26.8	22.6	19.7	15.5	11.3
142.5°	31.0	31.0	29.6	28.2	26.8	25.4	22.6	19.7	15.5	12.7	8.5
145°	26.8	25.4	25.4	24.0	22.6	19.7	18.3	15.5	12.7	9.9	7.1
147.5°	21.2	21.2	21.2	19.7	18.3	16.9	15.5	12.7	9.9	7.1	4.2
150°	16.9	16.9	16.9	15.5	14.1	12.7	11.3	9.9	7.1	4.2	2.8
152.5°	14.1	14.1	12.7	12.7	11.3	9.9	8.5	7.1	4.2	2.8	2.8
155°	9.9	9.9	9.9	8.5	8.5	7.1	5.6	4.2	2.8	2.8	2.8
157.5°	7.1	7.1	7.1	5.6	5.6	4.2	4.2	2.8	2.8	2.8	2.8
160°	4.2	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5	2564.5
2.5°	2547.5	2546.1	2557.4	2557.4	2544.7	2564.5	2585.6
5°	2539.1	2537.7	2549.0	2549.0	2537.7	2557.4	2580.0
7.5°	2522.2	2523.6	2534.8	2537.7	2523.6	2541.9	2565.9
10°	2503.8	2502.4	2515.1	2517.9	2506.6	2523.6	2546.1
12.5°	2474.2	2474.2	2486.9	2491.1	2479.8	2499.6	2520.7
15°	2443.2	2443.2	2451.6	2458.7	2448.8	2467.1	2488.3
17.5°	2403.7	2402.3	2410.7	2419.2	2409.3	2429.1	2451.6
20°	2352.9	2352.9	2362.8	2372.6	2365.6	2383.9	2409.3
22.5°	2299.3	2293.6	2310.6	2317.6	2313.4	2331.7	2357.1
25°	2231.6	2230.2	2247.1	2257.0	2251.3	2271.1	2293.6
27.5°	2158.2	2156.8	2173.7	2186.4	2183.6	2201.9	2227.3
30°	2069.3	2076.4	2091.9	2113.1	2106.0	2125.8	2152.6
32.5°	1976.3	1983.3	2001.6	2024.2	2025.6	2041.1	2067.9
35°	1864.8	1883.2	1895.8	1925.5	1931.1	1946.6	1974.8
37.5°	1747.7	1768.9	1795.7	1818.3	1829.5	1842.2	1874.7
40°	1616.5	1647.6	1677.2	1704.0	1718.1	1730.8	1761.8
42.5°	1498.1	1522.0	1550.2	1577.1	1602.4	1613.7	1646.2
45°	1364.0	1392.3	1417.7	1450.1	1475.5	1488.2	1520.6
47.5°	1232.9	1261.1	1294.9	1317.5	1344.3	1357.0	1388.0
50°	1107.3	1132.7	1160.9	1187.7	1210.3	1221.6	1248.4
52.5°	983.2	1010.0	1036.8	1053.7	1077.7	1086.2	1108.7
55°	873.2	891.5	915.5	925.4	949.3	955.0	970.5
57.5°	767.4	780.1	788.5	805.5	822.4	835.1	853.4
60°	671.4	677.1	682.7	692.6	706.7	710.9	718.0
62.5°	585.4	584.0	595.3	598.1	599.5	613.6	606.6
65°	509.2	510.6	500.8	496.5	502.2	506.4	503.6
67.5°	445.7	437.3	428.8	418.9	410.5	414.7	410.5
70°	383.7	376.6	362.5	348.4	342.8	334.3	330.1
72.5°	334.3	317.4	303.3	284.9	275.1	265.2	258.1
75°	296.2	272.2	252.5	232.7	218.6	204.5	201.7
77.5°	256.7	234.2	211.6	190.4	169.3	153.8	148.1
80°	225.7	204.5	177.7	152.3	129.8	110.0	103.0
82.5°	197.5	174.9	148.1	121.3	95.9	74.8	66.3
85°	173.5	149.5	122.7	95.9	70.5	48.0	36.7
87.5°	155.2	128.4	101.6	76.2	49.4	26.8	14.1
90°	138.2	112.8	87.5	60.7	35.3	14.1	0.0
92.5°	122.7	98.7	73.4	49.4	26.8	8.5	1.4
95°	108.6	87.5	62.1	39.5	19.7	5.6	1.4
97.5°	97.3	76.2	53.6	32.4	15.5	4.2	1.4
100°	87.5	66.3	46.5	26.8	12.7	2.8	1.4
102.5°	77.6	59.2	39.5	22.6	9.9	1.4	1.4
105°	69.1	52.2	33.9	19.7	8.5	1.4	1.4
107.5°	62.1	46.5	29.6	16.9	5.6	1.4	1.4
110°	55.0	39.5	25.4	14.1	4.2	1.4	1.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	49.4	35.3	22.6	11.3	2.8	1.4	1.4
115°	43.7	31.0	19.7	9.9	2.8	1.4	1.4
117.5°	38.1	26.8	16.9	7.1	1.4	1.4	1.4
120°	33.9	24.0	14.1	5.6	1.4	1.4	1.4
122.5°	29.6	19.7	11.3	4.2	1.4	1.4	1.4
125°	25.4	16.9	9.9	2.8	1.4	1.4	1.4
127.5°	21.2	14.1	7.1	2.8	1.4	1.4	1.4
130°	18.3	11.3	5.6	1.4	1.4	1.4	1.4
132.5°	15.5	8.5	4.2	1.4	1.4	1.4	1.4
135°	12.7	7.1	2.8	1.4	1.4	1.4	1.4
137.5°	9.9	5.6	2.8	1.4	1.4	1.4	1.4
140°	7.1	4.2	1.4	1.4	1.4	1.4	1.4
142.5°	5.6	2.8	1.4	1.4	1.4	1.4	1.4
145°	4.2	2.8	1.4	1.4	1.4	1.4	1.4
147.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4
150°	2.8	2.8	1.4	1.4	2.8	1.4	1.4
152.5°	2.8	1.4	1.4	1.4	2.8	1.4	1.4
155°	2.8	2.8	2.8	2.8	2.8	2.8	1.4
157.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8
160°	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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)