

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-LD5-20SL-LW-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

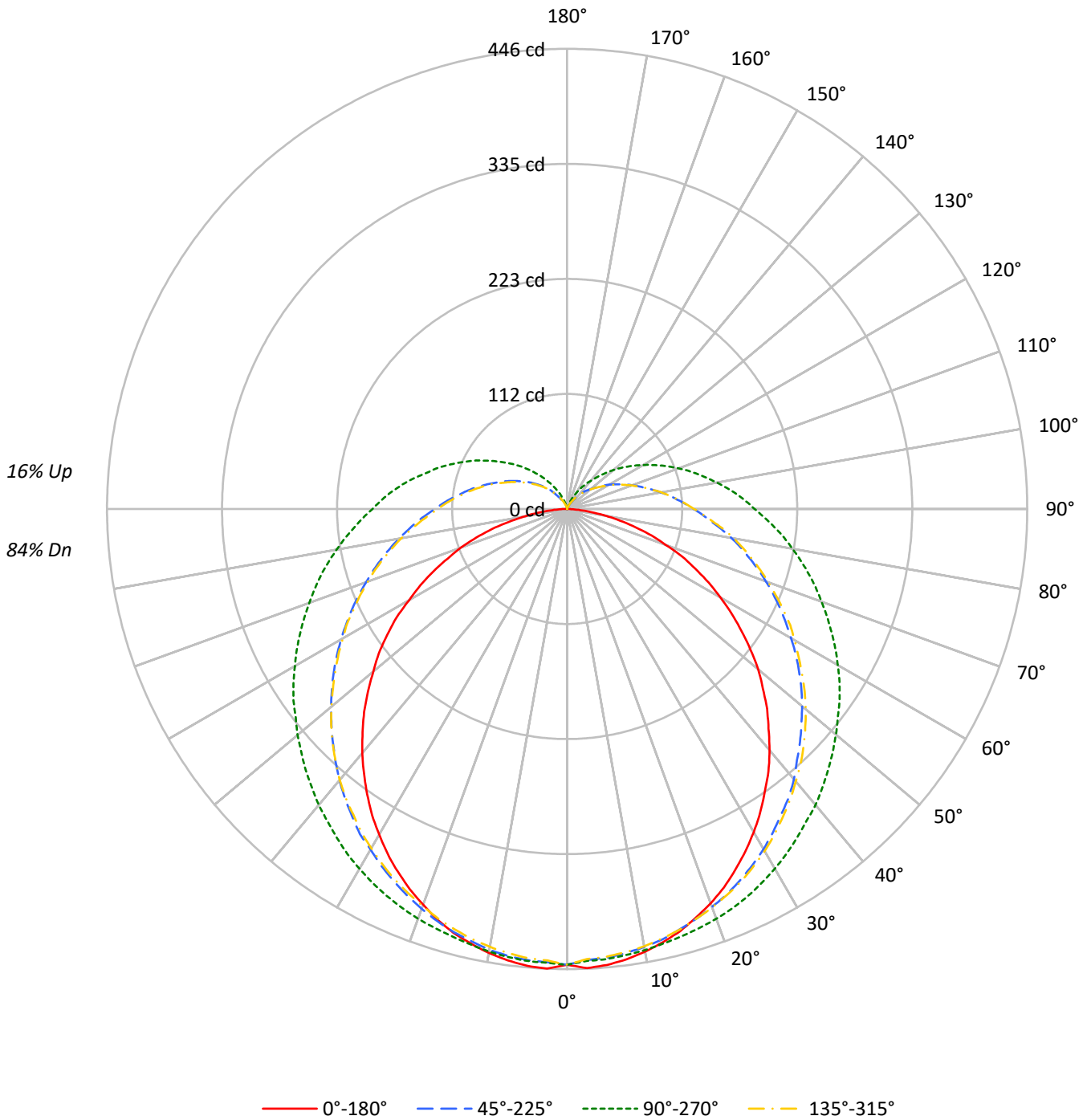
Lumens per Lamp: N/A  
Luminaire Lumens: 1919.0 lumens  
Efficiency: N/A  
Efficacy: 119.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 16  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P#  
CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





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

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16

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

	0°	90°	180°	270°
0°	3569	3569	3569	3569
5°	3589	3440	3596	3454
10°	3555	3342	3566	3352
15°	3514	3259	3529	3262
20°	3459	3197	3471	3197
25°	3391	3143	3411	3139
30°	3314	3088	3340	3088
35°	3225	3036	3261	3039
40°	3137	3005	3175	3005
45°	3036	2973	3083	2977
50°	2931	2954	2971	2963
55°	2784	2957	2871	2970
60°	2629	2967	2715	2984
65°	2455	2996	2563	3026
70°	2211	3051	2383	3094
75°	1929	3151	2111	3211
80°	1490	3299	1696	3375
85°	888	3535	1114	3633



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.8	2.2
10°-20°	120.3	6.3
20°-30°	184.4	9.6
30°-40°	227.5	11.9
40°-50°	246.8	12.9
50°-60°	243.2	12.7
60°-70°	219.9	11.5
70°-80°	183.2	9.5
80°-90°	141.9	7.4
90°-100°	107.6	5.6
100°-110°	79.6	4.2
110°-120°	55.4	2.9
120°-130°	35.3	1.8
130°-140°	19.8	1.0
140°-150°	9.1	0.5
150°-160°	2.8	0.1
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	346.5	18.1
0°-40°	573.9	29.9
0°-60°	1063.9	55.4
0°-90°	1609.0	83.8
90°-120°	242.7	12.6
90°-150°	306.9	16.0
90°-180°	310.0	16.2
0°-180°	1919.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	442	442	442	442	442	
5°	444	438	444	440	444	42
15°	424	429	425	429	424	119
25°	386	414	388	414	386	178
35°	334	389	338	389	334	209
45°	274	358	278	358	274	211
55°	206	322	213	324	206	185
65°	137	283	143	286	137	136
75°	69	242	76	247	69	73
85°	13	202	16	207	13	16
90°	0	182	1	189	0	1
95°	0	165	0	173	0	0
105°	0	131	0	139	0	1
115°	0	100	0	109	0	0
125°	0	72	0	80	0	0
135°	0	47	0	55	0	0
145°	0	27	0	33	0	0
155°	0	11	0	15	0	0
165°	0	2	0	3	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	445.4	445.4	445.0	444.0	444.5	445.9	445.0	442.6	441.2	437.5	438.4
5°	443.6	443.6	443.1	442.2	442.6	444.5	443.6	441.7	439.8	436.6	438.0
7.5°	440.3	440.3	439.8	438.9	439.8	441.7	440.8	438.9	437.5	434.2	435.6
10°	435.6	436.1	435.6	434.2	436.1	438.0	437.5	435.2	433.8	431.0	432.4
12.5°	430.0	430.5	430.0	429.6	430.5	433.3	432.4	430.5	429.6	427.3	428.7
15°	423.5	424.0	423.1	423.1	424.0	426.8	426.8	424.9	424.0	421.7	424.5
17.5°	415.1	415.6	415.1	415.1	416.1	418.9	419.3	418.4	417.5	416.5	419.3
20°	406.8	406.3	406.3	405.8	407.7	411.9	411.4	411.4	410.5	410.5	413.7
22.5°	397.0	397.0	396.5	396.5	398.8	402.6	402.6	403.5	402.6	404.4	407.2
25°	385.8	386.3	385.8	386.7	388.6	392.8	393.2	394.6	395.1	397.0	400.2
27.5°	374.1	374.6	374.1	375.1	378.3	381.6	383.9	385.8	386.3	389.0	393.2
30°	361.6	361.6	362.0	363.0	366.7	371.8	373.7	376.0	376.0	380.7	384.9
32.5°	348.5	348.5	348.5	350.4	354.6	360.6	363.0	365.8	366.7	371.3	376.0
35°	334.1	334.5	334.5	335.9	341.5	347.6	350.8	354.1	356.0	361.6	366.2
37.5°	320.6	321.5	320.1	322.0	329.9	335.0	338.7	342.0	345.3	352.7	356.4
40°	305.2	306.1	305.6	309.4	315.9	322.4	326.6	329.9	334.5	342.0	346.2
42.5°	288.9	289.8	290.7	294.9	301.9	308.4	313.6	317.8	323.4	329.9	336.9
45°	274.0	274.0	275.4	280.5	287.9	294.9	301.0	305.6	312.2	319.2	326.1
47.5°	257.2	257.7	259.5	265.6	273.5	281.9	287.5	293.5	300.5	308.0	315.9
50°	241.8	241.8	244.6	251.1	258.6	267.9	274.0	281.0	288.4	297.3	305.2
52.5°	224.1	225.0	229.2	235.3	245.1	253.5	260.5	267.9	276.8	286.1	294.9
55°	206.4	208.3	211.5	219.9	230.2	238.1	246.5	255.8	264.2	274.4	284.7
57.5°	189.2	190.6	195.7	204.1	214.8	224.6	233.4	242.3	252.5	262.8	273.5
60°	171.5	173.3	179.4	187.8	199.4	209.7	219.9	229.2	240.0	250.7	261.9
62.5°	154.7	156.1	163.1	172.9	184.5	195.7	205.9	217.1	228.8	239.0	250.2
65°	137.0	139.3	147.2	156.1	169.6	180.8	192.4	204.5	216.7	227.8	238.6
67.5°	120.7	122.1	130.5	140.7	154.2	166.8	178.9	192.0	204.5	216.2	226.9
70°	101.6	106.2	114.6	125.3	139.8	152.8	165.9	179.4	192.9	205.0	215.3
72.5°	85.7	89.5	98.8	110.4	124.4	139.8	153.3	167.7	181.2	193.8	204.5
75°	69.0	72.7	83.4	96.4	110.9	127.2	141.2	156.1	170.1	182.6	193.8
77.5°	52.6	57.3	69.0	82.5	98.3	115.1	129.5	144.4	158.9	172.4	183.6
80°	37.7	42.9	55.4	70.8	86.2	103.0	118.8	133.7	148.2	161.7	173.3
82.5°	24.2	29.8	43.3	58.7	75.0	91.8	108.1	123.0	137.4	151.0	163.1
85°	13.0	19.1	33.1	48.5	64.8	81.5	97.8	113.7	127.7	140.2	153.3
87.5°	3.7	11.2	24.7	40.1	56.8	72.2	88.1	103.9	117.9	131.4	143.0
90°	0.5	6.5	18.6	33.1	49.4	64.3	80.1	95.0	109.0	122.5	134.2
92.5°	0.5	4.2	14.4	27.5	42.4	57.8	73.6	88.1	101.1	114.6	126.3
95°	0.5	3.3	11.6	23.3	37.3	51.7	66.6	80.6	94.1	106.7	118.3
97.5°	0.5	2.3	9.3	20.0	32.6	46.1	60.6	74.5	87.6	99.7	110.4
100°	0.5	1.9	7.5	17.2	28.4	41.5	54.5	68.0	80.6	92.3	103.4
102.5°	0.5	1.4	6.5	14.4	25.2	36.8	49.4	62.0	74.1	85.3	96.4
105°	0.5	1.4	5.6	12.6	22.4	33.1	44.7	56.8	68.0	78.7	89.0
107.5°	0.5	0.9	4.7	10.7	19.6	29.8	40.5	52.2	62.4	72.7	82.5
110°	0.5	0.9	3.7	9.8	17.2	26.6	36.8	47.5	57.3	67.1	76.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.5	0.9	3.3	8.4	14.9	23.8	33.1	42.9	52.2	62.0	70.4
115°	0.5	0.9	2.8	7.5	14.0	20.5	29.8	38.7	48.0	56.8	64.8
117.5°	0.5	0.9	2.3	6.1	12.1	18.6	26.1	34.9	43.3	51.7	59.2
120°	0.5	0.9	1.9	5.6	10.7	16.8	23.3	31.2	39.1	47.1	55.0
122.5°	0.5	0.5	1.9	4.7	9.3	14.9	21.4	27.5	34.9	42.4	49.4
125°	0.5	0.5	1.9	4.2	7.9	13.5	19.1	24.7	31.2	37.7	43.8
127.5°	0.5	0.5	1.4	3.3	7.0	11.6	16.8	22.8	27.5	33.5	39.6
130°	0.5	0.5	1.4	2.8	6.1	9.8	14.9	20.0	25.6	29.8	34.9
132.5°	0.5	0.5	1.4	2.3	4.7	7.9	12.6	17.2	22.4	27.0	31.2
135°	0.5	0.5	0.9	1.9	3.7	6.5	10.3	14.4	19.6	24.2	28.4
137.5°	0.5	0.5	0.9	1.9	2.8	5.6	7.9	11.6	16.3	20.5	24.7
140°	0.5	0.5	0.9	1.4	2.3	4.2	6.5	9.3	13.0	16.8	21.4
142.5°	0.5	0.5	0.5	1.4	1.9	3.3	5.1	7.5	10.3	13.5	17.2
145°	0.5	0.5	0.5	1.4	1.9	2.3	4.2	6.1	7.9	10.3	13.5
147.5°	0.5	0.5	0.5	0.9	1.4	1.9	3.3	4.7	6.1	7.9	9.8
150°	0.5	0.5	0.5	0.9	1.4	1.9	2.3	3.3	4.7	6.5	7.9
152.5°	0.5	0.5	0.5	0.9	0.9	1.4	1.9	2.3	3.3	4.7	5.6
155°	0.5	0.5	0.5	0.5	0.9	1.4	1.9	1.9	2.3	3.3	4.2
157.5°	0.5	0.5	0.5	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.8
160°	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4	1.4	1.4	1.4
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	0.9	1.4	1.4
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	0.9
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#

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	438.4	438.9	440.3	440.3	439.4	439.4	438.9	438.4	438.9	439.8	439.8
5°	437.5	438.0	439.4	439.8	438.9	438.4	438.4	438.0	438.4	439.4	439.4
7.5°	435.6	436.1	437.5	438.0	437.0	437.0	436.6	436.1	437.0	437.5	437.5
10°	432.8	433.3	435.2	435.6	435.2	434.7	434.7	434.2	434.7	435.6	435.6
12.5°	429.1	430.0	432.4	432.4	432.4	431.9	431.9	431.4	431.9	432.8	432.4
15°	424.9	426.8	428.7	429.6	429.6	429.6	429.1	428.7	429.6	430.0	429.6
17.5°	420.3	422.6	425.4	426.3	426.3	426.8	426.3	425.9	426.8	426.8	426.3
20°	415.6	417.9	420.7	421.7	422.6	423.1	423.1	422.6	423.1	423.5	423.1
22.5°	409.5	412.3	415.6	417.0	417.9	418.9	418.9	418.9	419.3	419.8	418.9
25°	403.0	406.3	410.0	411.4	413.3	413.7	414.2	414.2	414.7	415.1	413.7
27.5°	396.0	399.8	403.5	405.8	407.2	408.2	408.2	408.6	409.1	409.5	408.2
30°	387.7	393.2	396.5	398.4	400.2	401.6	402.1	402.6	403.0	403.5	402.1
32.5°	380.2	384.9	389.0	391.4	393.7	395.6	396.0	396.0	397.0	397.0	395.6
35°	371.3	376.9	381.1	383.5	386.3	387.7	388.6	388.6	389.5	389.5	388.1
37.5°	362.5	368.1	372.7	375.5	378.8	380.7	381.1	381.1	382.1	382.1	380.2
40°	353.2	359.2	364.4	367.6	370.4	372.7	373.2	374.6	374.6	374.1	372.3
42.5°	343.9	349.4	355.0	358.8	362.5	364.8	365.8	366.2	366.2	365.8	364.4
45°	333.6	340.1	345.3	349.9	353.6	356.0	357.4	357.8	357.8	356.9	355.5
47.5°	323.8	330.3	335.5	340.6	344.3	347.1	348.5	349.0	348.5	348.0	346.6
50°	313.6	321.0	326.1	331.3	335.0	337.3	339.7	340.1	339.7	339.2	336.4
52.5°	302.9	310.8	316.4	321.5	325.7	328.5	330.3	330.8	330.8	329.9	328.0
55°	292.1	299.1	306.1	311.7	316.4	319.2	321.5	322.4	321.5	320.6	318.2
57.5°	282.4	288.9	295.9	301.9	306.6	310.3	312.2	313.1	312.2	310.8	308.4
60°	270.7	277.7	285.6	291.2	296.3	300.1	301.0	302.9	301.9	300.5	298.2
62.5°	259.5	267.9	274.9	281.9	286.1	290.3	292.1	293.1	292.1	290.7	288.4
65°	247.9	257.2	264.2	271.2	275.8	280.0	282.4	282.8	281.9	280.5	278.2
67.5°	237.2	246.0	253.5	260.9	265.1	269.3	271.6	272.6	271.6	269.8	267.4
70°	226.4	235.3	244.1	249.7	254.9	259.5	260.9	262.3	261.4	259.5	256.7
72.5°	215.7	225.0	233.9	239.5	245.1	249.3	251.1	252.5	251.6	249.7	246.5
75°	204.5	214.3	223.2	229.2	234.8	239.0	240.9	242.3	241.3	239.5	235.8
77.5°	194.3	204.1	212.5	219.0	224.6	228.3	231.6	232.0	231.1	229.2	225.5
80°	183.6	193.4	202.2	208.7	214.3	218.1	220.4	221.8	220.8	219.0	215.3
82.5°	174.3	183.1	192.0	198.5	204.1	208.7	210.6	212.0	211.5	208.7	205.9
85°	164.0	174.3	181.2	188.2	193.8	198.5	199.9	201.7	201.3	199.0	195.2
87.5°	153.8	164.0	172.4	179.4	184.5	188.2	190.6	191.5	191.0	188.7	184.5
90°	145.4	154.7	163.1	170.5	174.7	178.9	181.2	181.7	181.7	178.9	175.7
92.5°	137.4	146.3	154.7	161.7	166.8	170.5	172.4	173.3	172.9	170.5	166.8
95°	128.6	138.4	146.3	153.3	158.4	162.1	164.0	164.9	164.5	162.1	158.4
97.5°	121.1	130.0	137.9	144.4	149.6	153.3	155.2	156.1	156.1	153.8	150.0
100°	113.7	122.5	130.0	136.5	141.2	144.9	146.8	147.2	146.8	144.9	141.2
102.5°	106.2	114.6	122.1	128.1	133.3	136.5	138.4	138.8	138.8	136.5	132.8
105°	98.8	107.2	114.2	120.7	124.9	128.1	129.5	130.9	130.5	128.6	124.9
107.5°	91.8	100.2	106.7	112.8	116.9	120.2	121.6	123.0	122.5	120.7	116.9
110°	85.3	93.2	99.2	105.3	109.0	112.3	114.6	115.1	114.2	112.3	109.0





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	79.2	86.2	92.3	97.8	102.0	104.4	106.2	107.2	106.2	104.4	102.0
115°	72.7	79.7	85.7	90.9	94.6	97.4	98.8	99.7	98.8	96.9	94.6
117.5°	66.6	73.2	79.2	84.3	87.6	89.9	91.3	92.3	91.3	89.9	87.6
120°	61.5	67.1	72.7	77.3	81.1	82.9	84.3	85.3	84.8	82.9	80.6
122.5°	55.4	61.5	66.6	71.3	74.5	76.4	77.3	78.3	77.8	76.4	74.1
125°	50.3	55.4	60.6	64.8	68.0	69.9	70.8	71.8	71.3	69.9	67.1
127.5°	44.7	50.3	54.5	58.7	61.0	63.8	64.3	65.2	64.8	63.4	61.0
130°	40.5	44.7	48.9	52.6	55.4	57.3	58.2	58.7	57.8	56.8	54.5
132.5°	35.4	40.1	43.8	47.1	48.9	50.8	51.7	52.2	52.2	50.8	48.9
135°	31.7	34.9	38.2	41.5	43.3	45.2	46.1	46.6	46.1	45.2	43.3
137.5°	28.4	31.2	33.5	36.3	38.7	39.6	40.5	40.5	40.1	39.6	38.2
140°	24.7	28.0	30.3	32.1	34.0	34.5	35.4	35.4	34.9	34.5	33.5
142.5°	21.0	23.8	26.1	28.4	29.8	30.8	31.2	31.7	31.2	30.8	29.4
145°	16.8	20.0	22.4	23.8	25.6	26.1	26.6	27.0	26.6	26.1	24.7
147.5°	13.0	15.8	18.2	20.0	21.4	21.9	22.4	22.8	22.4	21.4	21.0
150°	9.3	11.6	14.4	16.3	17.2	18.2	18.2	18.2	18.6	17.7	16.8
152.5°	7.5	8.4	10.3	12.1	13.5	14.0	14.4	14.4	14.0	14.0	13.0
155°	5.1	6.1	7.5	8.9	10.3	10.7	11.2	11.2	10.7	10.7	10.3
157.5°	3.3	4.2	5.1	6.1	7.5	7.9	8.4	8.4	8.4	7.9	7.5
160°	1.9	2.3	2.8	3.7	4.7	5.1	5.6	5.6	5.6	5.6	5.1
162.5°	1.4	1.4	1.4	1.9	2.3	2.8	3.3	3.3	3.3	3.3	2.8
165°	0.9	0.9	0.9	0.9	0.9	1.4	1.9	1.9	1.9	1.9	1.9
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-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	439.4	439.4	439.8	438.9	436.1	436.6	436.6	438.4	439.4	439.8	442.2
5°	438.4	438.4	439.4	438.0	435.6	435.6	435.6	437.5	438.0	438.9	440.8
7.5°	437.0	437.0	437.5	436.1	433.3	433.3	432.8	434.7	435.6	436.1	438.0
10°	434.7	434.7	435.2	433.8	430.5	430.5	430.0	431.4	431.9	432.8	434.2
12.5°	431.4	431.4	431.4	430.0	426.8	426.3	425.9	427.3	427.3	427.7	429.1
15°	428.7	427.7	427.7	426.3	423.1	422.1	421.2	421.7	422.6	422.1	423.1
17.5°	425.4	424.5	423.5	422.1	417.9	416.5	415.6	416.1	415.6	415.1	416.1
20°	421.7	420.3	419.8	417.5	413.3	410.9	409.1	408.2	408.6	407.2	407.7
22.5°	417.5	415.6	414.7	411.9	407.7	404.9	402.6	400.7	400.2	398.4	398.8
25°	412.3	410.0	408.6	406.3	401.6	398.4	395.6	392.8	391.4	389.0	388.6
27.5°	406.3	404.0	402.1	399.8	395.1	390.9	387.7	383.9	382.1	379.3	377.9
30°	400.2	397.4	394.6	392.8	387.7	383.0	377.9	374.6	371.8	368.5	366.2
32.5°	392.8	390.0	387.2	384.4	379.7	374.1	369.9	364.8	361.6	357.8	355.0
35°	385.3	381.6	378.8	375.1	370.9	364.4	359.2	354.1	349.9	345.7	342.5
37.5°	376.9	374.1	369.9	366.7	361.6	355.0	349.4	342.9	339.2	333.6	329.4
40°	369.0	365.8	361.6	357.4	352.2	344.8	338.7	331.3	327.1	320.6	316.4
42.5°	361.1	356.4	352.2	347.6	342.0	335.0	327.5	320.1	314.5	308.4	302.4
45°	352.2	347.1	342.0	336.9	331.3	324.3	316.4	308.4	301.5	295.9	288.4
47.5°	342.9	337.8	331.7	326.1	320.1	313.1	304.7	296.3	288.9	282.4	274.4
50°	333.6	328.5	322.0	315.9	308.9	301.9	293.1	283.3	275.4	267.0	260.0
52.5°	323.8	318.7	312.6	304.7	297.3	290.3	281.0	270.7	261.9	254.9	246.0
55°	314.0	308.9	301.9	294.0	286.5	277.7	268.8	258.6	248.8	240.4	231.6
57.5°	303.8	299.1	291.2	284.7	275.4	266.0	256.7	246.9	236.2	226.4	216.2
60°	293.5	288.4	281.0	273.0	263.7	254.4	244.6	233.9	222.7	212.0	202.7
62.5°	284.2	277.7	270.7	262.3	252.5	243.7	232.5	220.8	209.7	198.5	187.3
65°	273.5	266.5	260.0	251.6	241.3	231.1	219.9	208.3	196.2	184.0	172.9
67.5°	262.8	255.8	248.8	240.4	229.7	219.0	207.3	195.7	182.2	170.5	157.5
70°	252.1	246.5	237.6	228.8	219.0	207.3	195.7	183.1	169.1	156.6	143.0
72.5°	241.3	235.8	226.9	217.6	208.3	196.2	183.6	171.0	157.9	143.5	129.1
75°	231.1	224.1	216.2	207.3	197.6	185.0	172.4	159.3	144.0	130.5	115.5
77.5°	221.3	214.8	206.9	197.1	186.4	174.3	161.2	147.7	132.3	117.9	101.6
80°	210.6	204.1	196.2	186.4	175.7	164.0	150.0	136.1	121.1	105.3	88.5
82.5°	200.3	194.3	185.4	176.6	164.9	153.3	139.3	125.3	109.5	94.1	77.8
85°	189.6	183.6	175.2	165.9	154.7	142.1	129.1	115.1	99.2	83.4	67.1
87.5°	180.3	173.3	164.9	155.6	144.4	132.3	119.7	104.8	89.5	74.1	57.3
90°	170.5	164.0	155.6	146.3	135.1	123.0	110.0	96.0	81.1	65.2	49.4
92.5°	162.1	155.2	147.2	137.9	126.7	115.1	102.0	88.1	73.6	58.2	42.9
95°	153.8	146.8	139.3	130.0	118.8	107.2	94.1	80.6	66.6	51.7	37.3
97.5°	144.4	138.4	130.9	122.1	110.9	99.7	87.1	74.1	60.6	46.1	32.6
100°	137.0	130.0	123.0	113.7	103.4	92.7	80.1	67.6	54.5	41.0	28.4
102.5°	128.6	122.1	115.1	106.2	96.0	85.3	73.6	61.5	49.4	36.8	24.7
105°	120.7	114.6	107.2	98.8	89.0	78.7	67.6	56.4	44.7	32.6	21.9
107.5°	112.8	106.7	99.7	91.8	82.5	72.2	62.0	50.8	40.1	29.4	19.6
110°	104.8	99.2	92.7	84.8	75.9	66.6	56.8	46.6	35.9	26.1	17.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	97.8	92.3	85.7	78.3	69.9	61.0	51.7	41.9	32.1	23.3	14.9
115°	90.9	85.7	79.2	72.7	64.3	55.9	47.1	37.7	28.9	21.0	13.0
117.5°	83.9	78.7	72.7	66.2	58.7	50.8	42.4	33.5	26.1	18.6	11.6
120°	76.9	72.2	66.6	60.6	54.0	46.1	37.7	30.3	23.3	16.3	10.3
122.5°	70.4	66.2	61.0	55.4	48.5	41.0	34.0	27.5	21.0	14.4	8.4
125°	64.3	60.1	55.4	49.9	43.3	36.8	30.8	24.7	18.2	12.6	7.0
127.5°	58.2	54.0	49.4	44.3	39.1	33.1	27.5	21.9	16.3	11.2	6.1
130°	52.2	48.5	44.3	40.1	34.9	29.4	24.7	19.1	14.0	8.9	5.1
132.5°	46.1	43.3	39.6	35.4	30.8	26.6	21.4	16.8	12.1	7.9	4.7
135°	41.0	38.2	34.9	31.2	27.5	23.3	18.6	14.4	10.3	6.5	3.7
137.5°	36.3	34.0	30.8	27.5	24.2	20.0	16.3	12.1	8.4	5.6	2.8
140°	32.1	29.8	27.0	23.8	21.0	17.2	13.5	9.8	7.5	4.7	2.3
142.5°	28.0	25.6	23.3	20.5	17.7	14.4	11.2	8.4	6.1	3.7	2.3
145°	23.8	21.9	19.6	17.2	14.4	11.6	9.3	7.0	4.7	2.8	1.9
147.5°	19.6	18.2	15.8	14.0	11.6	9.3	7.5	5.6	3.7	2.3	1.4
150°	15.8	14.4	12.6	10.7	9.3	7.5	6.1	4.2	2.8	2.3	1.4
152.5°	12.1	11.2	9.8	8.9	7.5	5.6	4.2	3.3	2.3	1.9	0.9
155°	9.8	8.9	7.9	6.5	5.6	4.2	3.3	2.3	1.9	1.4	0.9
157.5°	7.0	6.5	5.6	4.7	3.7	2.8	2.3	2.3	1.4	0.9	0.5
160°	4.7	4.2	3.7	2.8	2.3	2.3	1.9	1.4	0.9	0.9	0.5
162.5°	2.8	2.3	2.3	2.3	1.9	1.9	1.4	0.9	0.9	0.5	0.5
165°	1.9	1.9	1.9	1.4	1.4	1.4	0.9	0.5	0.5	0.5	0.5
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-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	442.2	440.8	442.6	445.9	446.4	445.9	445.0	446.4	448.2	447.8	444.5
5°	441.2	439.4	441.2	444.5	444.5	444.0	443.6	445.0	446.8	446.4	443.6
7.5°	438.4	436.6	438.4	441.2	441.7	440.8	440.8	442.2	444.0	443.6	441.2
10°	434.7	432.8	433.8	437.0	438.0	437.0	437.0	438.4	440.8	440.3	437.5
12.5°	429.1	427.7	428.7	431.4	432.4	431.9	431.4	433.3	435.6	435.6	432.8
15°	423.1	421.2	422.1	425.4	425.9	424.9	425.4	426.8	429.6	429.6	427.3
17.5°	416.1	413.7	415.1	417.5	417.9	417.9	417.9	419.8	423.1	422.6	420.7
20°	408.2	404.9	405.8	408.2	409.1	409.1	409.1	412.3	414.7	414.7	412.8
22.5°	398.8	396.5	396.5	398.8	400.2	399.8	399.8	402.6	405.8	405.4	405.4
25°	388.1	386.3	385.3	388.1	388.6	389.0	390.0	392.8	396.5	396.5	397.0
27.5°	376.9	375.1	374.6	376.9	377.4	377.9	378.8	382.1	385.8	386.3	387.2
30°	366.2	363.4	362.5	364.4	365.3	365.8	365.8	370.9	374.1	375.5	377.4
32.5°	353.6	350.8	348.5	351.8	352.2	353.2	353.6	358.8	362.5	364.8	367.6
35°	341.1	336.4	335.5	337.8	338.7	339.2	340.1	345.7	350.8	352.7	356.4
37.5°	327.1	323.8	321.0	323.4	324.3	324.8	327.5	332.7	337.8	340.6	344.3
40°	314.0	309.8	307.5	308.9	309.8	310.3	313.6	319.2	325.2	328.5	333.1
42.5°	299.6	294.0	292.1	293.5	294.0	295.4	298.2	305.6	311.7	316.4	320.1
45°	285.1	281.0	276.8	278.2	278.6	279.6	283.7	291.7	298.2	303.8	308.0
47.5°	270.2	265.1	260.9	261.9	263.7	264.2	268.8	278.2	284.2	290.3	295.9
50°	255.3	248.3	245.1	245.1	246.0	248.3	254.4	263.7	270.2	277.2	283.3
52.5°	240.0	233.4	229.7	230.2	231.1	233.9	239.5	248.8	256.3	263.7	271.2
55°	224.6	217.6	213.9	212.9	213.9	217.6	224.1	233.9	241.3	250.2	258.1
57.5°	209.2	200.8	197.6	196.2	197.1	201.7	208.3	218.5	227.8	236.2	245.5
60°	192.4	185.9	180.3	177.1	179.4	185.4	192.4	203.1	212.9	222.2	232.5
62.5°	178.0	169.6	163.5	160.3	162.6	167.7	177.5	187.8	198.5	209.2	219.5
65°	161.7	153.3	146.3	143.0	145.4	151.4	161.2	172.4	184.0	194.8	206.9
67.5°	145.8	137.0	128.6	125.3	128.1	134.7	145.4	157.9	170.5	181.7	194.8
70°	130.5	120.7	111.8	109.5	111.4	120.2	130.5	143.0	156.1	169.1	182.6
72.5°	116.5	104.4	95.0	92.3	94.6	104.4	116.0	129.1	143.0	157.0	171.5
75°	100.2	89.0	78.7	75.5	78.3	87.1	101.6	115.5	130.5	145.4	158.9
77.5°	87.1	74.1	63.4	58.2	62.9	74.1	88.1	103.0	118.3	133.7	149.1
80°	73.6	60.1	48.5	42.9	48.0	60.1	74.1	90.4	107.6	123.0	137.0
82.5°	61.5	47.1	34.9	28.9	34.5	48.0	63.4	79.7	96.4	111.8	128.1
85°	50.3	35.4	22.8	16.3	24.2	36.3	52.6	69.4	86.7	102.5	118.3
87.5°	41.0	26.6	14.0	7.0	14.9	28.4	43.8	60.6	77.8	93.7	108.6
90°	33.5	19.1	7.5	0.9	8.9	21.4	36.3	52.6	69.0	85.3	100.2
92.5°	27.5	14.4	4.2	0.5	5.6	17.2	31.2	46.6	62.4	78.3	92.7
95°	22.8	11.2	2.8	0.5	4.2	13.5	26.6	41.5	56.4	71.8	86.2
97.5°	19.6	9.3	2.3	0.5	3.3	11.6	22.8	36.8	51.3	65.7	79.7
100°	16.8	7.5	1.9	0.5	2.8	9.8	20.0	32.6	46.1	60.1	73.6
102.5°	14.4	6.1	1.4	0.5	2.3	8.4	17.7	29.4	41.5	55.0	68.0
105°	12.6	5.1	1.4	0.5	1.9	7.5	15.8	26.1	38.2	50.3	62.9
107.5°	10.7	4.2	0.9	0.5	1.4	6.1	14.0	23.8	34.5	46.1	57.8
110°	9.3	3.7	0.9	0.5	1.4	5.6	12.1	21.4	31.2	41.9	53.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	7.9	2.8	0.9	0.5	0.9	4.7	10.7	19.1	28.4	38.2	48.9
115°	7.0	2.3	0.5	0.5	0.9	4.2	9.8	17.2	25.6	34.9	44.7
117.5°	5.6	1.9	0.5	0.5	0.5	3.3	8.4	15.4	23.3	32.1	41.0
120°	4.7	1.9	0.5	0.5	0.5	2.8	7.5	13.5	21.0	28.9	37.3
122.5°	4.2	1.4	0.5	0.5	0.5	2.3	6.5	12.1	18.6	26.1	34.0
125°	3.7	1.4	0.5	0.5	0.5	1.9	5.6	10.7	16.8	23.3	30.8
127.5°	2.8	1.4	0.5	0.5	0.5	1.4	5.1	9.3	14.9	21.0	27.5
130°	2.3	0.9	0.5	0.5	0.5	1.4	4.2	8.4	13.0	18.6	24.7
132.5°	1.9	0.9	0.5	0.5	0.5	0.9	3.3	6.5	11.2	16.3	21.9
135°	1.9	0.9	0.5	0.5	0.5	0.9	2.3	5.6	9.3	14.0	18.6
137.5°	1.9	0.5	0.5	0.5	0.5	0.9	1.9	4.2	7.5	11.2	15.4
140°	1.4	0.5	0.5	0.5	0.5	0.5	1.4	3.3	6.1	9.3	13.0
142.5°	1.4	0.5	0.5	0.5	0.5	0.5	1.4	2.3	4.7	7.5	10.3
145°	0.9	0.5	0.5	0.5	0.5	0.5	0.9	1.9	3.7	5.6	8.4
147.5°	0.9	0.5	0.5	0.5	0.5	0.5	0.9	1.4	2.8	4.7	6.5
150°	0.9	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.9	3.3	5.1
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4	2.3	3.3
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.9	2.3
157.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4	1.9
160°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	443.1	439.8	440.8	440.3	441.2	442.6	442.6	442.2	442.2	441.2	440.3
5°	442.2	438.9	440.3	439.8	440.8	442.2	442.2	441.7	441.7	440.3	439.8
7.5°	439.4	437.0	438.0	438.0	438.9	440.3	440.3	439.8	439.8	438.4	438.0
10°	436.6	433.8	435.2	435.2	436.1	438.0	438.0	437.5	437.5	436.1	435.6
12.5°	431.9	429.1	431.4	431.9	432.8	434.7	434.2	434.2	434.2	432.8	432.4
15°	426.3	424.5	426.8	427.3	428.7	431.0	431.0	431.0	431.0	429.6	429.1
17.5°	420.3	418.9	421.2	422.1	424.0	426.3	426.3	426.8	427.3	426.3	425.9
20°	413.3	412.3	414.7	416.5	419.3	421.7	422.6	423.1	424.0	423.1	422.6
22.5°	405.4	405.4	408.6	410.5	413.7	416.1	417.5	418.9	419.8	418.9	418.4
25°	396.5	397.9	401.2	404.4	408.2	410.5	411.9	413.7	414.7	414.2	413.7
27.5°	388.1	390.0	394.2	397.4	400.7	404.4	405.8	408.2	409.1	409.1	408.6
30°	378.3	381.1	385.8	389.5	393.7	397.4	399.3	401.6	403.0	402.1	402.6
32.5°	369.0	373.7	377.4	381.6	386.3	390.0	392.3	395.1	396.5	396.0	396.5
35°	358.8	363.4	368.5	372.7	378.3	382.1	385.3	387.7	389.5	389.0	389.0
37.5°	347.6	353.6	358.8	364.4	369.5	373.7	376.9	379.7	381.6	381.6	381.6
40°	336.9	343.4	348.5	355.0	361.6	365.3	369.0	371.8	373.7	374.1	374.6
42.5°	325.2	332.2	338.3	345.3	351.8	356.4	360.6	363.9	365.8	366.7	366.2
45°	314.5	321.0	328.0	335.9	342.0	346.6	351.8	355.5	357.4	357.8	358.3
47.5°	302.4	309.8	317.8	325.7	331.7	337.8	342.5	346.2	348.0	349.4	349.4
50°	290.7	298.7	307.5	315.9	322.4	328.5	333.1	337.3	339.7	340.6	341.1
52.5°	280.0	287.5	296.8	305.2	311.7	317.8	323.8	328.5	330.8	331.7	331.7
55°	267.0	276.3	286.5	294.5	301.5	308.4	314.5	319.2	321.5	322.9	323.8
57.5°	254.9	264.6	275.4	283.7	292.1	298.7	304.2	310.3	312.2	314.0	314.5
60°	243.2	253.0	263.2	272.6	281.0	287.9	294.5	299.6	302.9	303.8	304.7
62.5°	231.1	241.3	252.1	261.4	270.2	278.6	284.7	289.3	293.1	294.5	295.4
65°	219.5	230.2	240.9	250.7	260.0	268.4	274.4	279.1	282.8	285.1	285.6
67.5°	206.9	218.5	229.7	240.0	249.3	258.1	264.2	268.8	272.6	275.4	275.8
70°	195.2	207.3	218.5	229.7	239.0	247.9	254.4	259.1	263.2	265.1	266.0
72.5°	184.0	196.6	208.3	219.5	228.8	237.6	244.6	249.3	253.5	255.8	256.3
75°	173.3	185.9	198.5	209.2	219.0	227.8	234.8	240.0	243.7	246.0	246.9
77.5°	162.6	175.7	188.2	199.0	209.2	218.1	224.1	230.2	233.9	236.7	236.7
80°	151.9	165.4	178.4	189.2	199.4	207.3	214.3	220.4	224.1	226.9	226.9
82.5°	142.6	155.6	168.2	178.9	189.2	198.0	205.0	210.6	214.8	216.7	217.1
85°	131.9	146.3	157.9	169.6	179.4	187.8	194.8	200.8	204.5	206.4	207.3
87.5°	123.0	137.0	149.6	159.8	169.6	178.0	185.9	191.0	194.8	197.1	198.0
90°	114.6	128.1	140.7	151.0	161.2	169.1	176.6	181.7	185.9	187.8	188.7
92.5°	107.2	120.7	132.8	143.0	152.8	161.7	168.7	173.8	177.5	179.4	180.8
95°	100.2	113.2	124.9	136.1	145.4	153.3	160.7	165.9	170.1	171.5	172.9
97.5°	93.2	105.8	117.4	128.1	137.9	145.4	152.4	157.5	160.7	163.1	164.5
100°	87.1	99.2	110.4	120.7	130.0	137.0	144.4	149.1	152.4	154.2	156.1
102.5°	80.6	92.7	103.4	113.2	123.0	129.5	136.5	141.2	144.0	147.2	147.2
105°	75.0	86.2	96.9	106.2	114.6	122.5	128.6	133.3	136.5	138.8	138.8
107.5°	69.0	80.1	90.4	100.2	108.1	115.5	121.1	125.3	129.1	130.5	131.9
110°	64.3	74.1	84.3	93.7	101.1	108.1	113.7	118.3	121.6	123.0	123.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	58.7	69.0	78.3	87.1	94.6	101.1	106.7	110.4	113.7	115.5	116.0
115°	54.0	63.8	72.2	80.6	88.5	94.1	99.2	103.0	106.2	107.6	108.6
117.5°	49.9	58.7	67.1	74.1	81.5	87.6	92.7	96.0	98.8	100.6	101.6
120°	45.7	54.0	61.5	68.5	75.5	81.1	85.7	89.0	92.3	93.7	93.7
122.5°	41.5	49.4	56.4	62.9	69.4	74.5	79.7	82.5	85.3	86.7	86.7
125°	37.7	45.2	51.7	57.8	63.8	68.5	72.7	75.9	78.7	79.7	79.7
127.5°	34.0	41.0	47.1	52.6	57.8	62.4	66.6	69.9	72.2	73.2	73.2
130°	30.8	36.8	42.4	48.0	53.1	56.8	61.0	63.8	65.2	66.6	67.1
132.5°	27.5	33.1	38.2	42.9	48.0	51.7	55.0	57.8	59.2	60.6	61.0
135°	24.2	29.4	34.0	38.7	42.9	46.6	49.4	51.7	53.6	54.5	55.0
137.5°	20.5	26.1	30.3	34.0	38.7	41.5	44.7	46.1	48.0	48.9	48.9
140°	17.2	21.4	26.1	29.8	33.5	36.3	39.1	41.5	42.9	43.3	43.3
142.5°	14.0	17.7	21.4	26.1	29.4	31.7	34.5	36.3	37.3	37.7	38.2
145°	11.2	14.0	17.2	21.4	25.2	28.0	29.4	31.2	32.1	32.6	33.1
147.5°	8.4	11.2	14.0	16.8	20.5	23.3	24.7	26.6	27.5	28.0	28.0
150°	6.5	8.4	10.3	13.0	15.8	19.1	21.0	22.4	22.8	23.3	23.3
152.5°	4.7	6.5	7.9	9.8	11.6	14.4	17.2	18.2	18.6	19.1	19.1
155°	3.3	4.7	5.6	7.0	8.4	10.7	13.0	14.4	14.9	15.4	15.4
157.5°	2.3	3.3	3.7	5.1	6.1	7.0	8.9	11.2	11.6	11.6	11.6
160°	1.4	1.9	2.3	3.3	3.7	4.7	5.6	7.0	8.4	8.4	8.4
162.5°	0.9	1.4	1.4	1.9	1.9	2.8	3.3	3.7	5.1	5.6	5.6
165°	0.5	0.9	0.9	0.9	0.9	0.9	1.4	1.4	2.3	2.8	2.8
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-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	440.8	441.7	441.2	441.2	441.2	442.2	441.2	437.0	438.0	438.9	439.8
5°	440.3	440.8	440.8	440.3	440.3	441.2	440.3	436.1	437.0	438.0	438.4
7.5°	438.4	438.9	438.9	438.9	438.4	439.4	438.0	434.2	434.2	435.2	435.6
10°	436.1	437.0	436.6	436.1	436.1	436.1	435.2	431.0	431.0	431.4	431.9
12.5°	433.3	433.3	433.3	432.8	432.4	432.4	431.4	427.3	426.8	427.7	427.3
15°	429.6	430.5	429.6	429.1	428.2	428.2	426.8	422.6	421.7	422.1	421.7
17.5°	426.3	426.8	425.9	424.9	424.0	423.5	422.1	417.5	416.1	416.5	415.6
20°	423.1	423.1	422.1	421.2	419.8	418.4	416.5	411.9	409.5	409.5	407.7
22.5°	418.9	418.9	417.9	416.5	415.1	413.3	411.4	406.8	403.0	402.1	400.7
25°	414.2	413.7	413.3	411.9	409.1	407.2	405.4	400.2	396.0	394.2	391.8
27.5°	408.6	408.6	407.2	405.8	403.0	400.7	398.4	393.7	388.1	385.8	382.5
30°	402.6	402.6	401.2	399.3	396.5	393.7	390.9	385.3	379.7	376.5	372.7
32.5°	396.5	396.0	394.6	392.8	390.0	385.8	383.5	377.9	371.3	367.6	362.5
35°	389.0	388.6	387.2	384.9	381.1	377.9	374.1	369.0	361.6	356.9	351.3
37.5°	381.6	381.1	380.2	376.9	373.2	369.5	364.8	359.7	352.7	346.6	341.1
40°	374.1	373.7	371.8	369.5	364.8	360.2	355.5	350.4	342.9	335.9	329.9
42.5°	366.2	365.8	363.4	360.6	355.5	350.8	345.3	339.7	332.2	323.8	317.8
45°	358.3	357.4	355.0	351.8	346.2	341.1	335.5	328.9	321.5	313.6	305.6
47.5°	349.9	348.5	346.2	341.5	336.9	331.3	324.8	317.8	310.3	301.5	293.1
50°	340.6	339.7	336.9	332.7	327.1	321.5	314.0	307.0	298.2	289.8	279.6
52.5°	331.7	329.9	327.5	322.9	317.3	311.2	303.3	294.9	286.1	278.2	267.4
55°	322.4	321.5	318.2	314.5	307.5	300.5	293.1	284.2	274.4	265.1	254.9
57.5°	313.6	311.7	308.9	303.8	297.7	290.7	282.8	273.5	262.8	253.0	241.8
60°	304.7	301.9	298.7	294.0	287.5	280.0	271.6	261.9	251.1	240.4	228.8
62.5°	294.9	292.6	288.9	284.2	277.7	269.8	260.9	250.7	240.4	229.2	216.7
65°	285.1	282.8	279.1	274.4	267.9	259.1	249.7	239.5	227.8	217.1	203.6
67.5°	275.4	273.0	268.8	263.7	257.2	248.8	239.0	228.3	216.7	205.0	191.0
70°	265.6	262.8	259.1	253.5	246.9	238.1	228.3	217.1	205.5	192.9	178.9
72.5°	255.8	253.5	248.8	243.7	236.7	227.8	218.1	206.9	194.8	181.7	167.7
75°	246.0	243.2	240.0	233.9	226.4	218.1	207.8	196.6	183.6	171.0	156.6
77.5°	236.2	233.9	229.7	223.6	216.7	207.8	197.6	186.4	173.3	160.3	144.9
80°	226.4	223.6	220.4	214.8	206.9	198.0	187.3	176.1	163.1	149.6	134.2
82.5°	216.7	213.9	210.1	204.5	197.1	188.2	178.0	165.9	152.8	138.8	124.4
85°	206.9	204.5	200.3	194.8	186.8	178.0	167.7	157.0	143.0	129.1	114.6
87.5°	197.1	194.8	190.6	185.0	177.5	168.7	158.4	147.2	133.7	120.7	104.8
90°	187.8	185.9	181.7	176.1	168.7	159.8	150.5	138.4	125.3	112.3	97.4
92.5°	179.4	177.5	173.8	168.2	161.7	151.9	142.6	130.9	117.9	104.4	89.9
95°	171.9	169.6	165.9	160.7	152.8	144.4	135.1	123.5	110.9	97.4	83.4
97.5°	163.5	161.2	157.5	151.9	145.4	136.5	127.2	116.0	103.4	90.9	76.9
100°	155.2	152.8	148.6	144.0	137.4	128.6	119.7	108.6	96.9	84.8	71.3
102.5°	146.8	144.4	140.7	136.1	129.5	121.6	112.8	102.0	90.4	78.3	65.7
105°	138.8	136.5	132.8	128.1	122.1	114.2	104.8	95.5	84.3	72.7	60.6
107.5°	130.9	128.6	125.3	120.7	114.6	107.2	98.3	88.5	78.3	67.1	55.4
110°	123.0	121.1	117.4	113.2	107.2	99.7	91.8	82.5	72.2	62.0	50.8





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	115.5	113.7	110.0	105.3	100.2	93.2	85.3	76.4	66.6	56.8	46.1
115°	108.1	105.8	102.5	98.3	93.2	86.7	79.2	71.3	61.5	52.2	42.4
117.5°	100.6	98.8	95.5	91.3	86.7	80.1	73.2	65.7	56.4	47.5	38.7
120°	93.2	91.8	88.5	84.8	80.1	74.1	67.6	60.1	51.7	43.3	34.9
122.5°	86.2	84.8	81.5	78.3	73.6	68.0	62.0	55.0	47.5	39.6	32.1
125°	79.7	77.8	75.0	71.8	67.6	62.4	56.4	49.9	42.9	35.9	28.9
127.5°	72.7	71.3	69.4	65.7	61.5	56.8	51.3	45.7	39.1	32.6	26.1
130°	67.1	65.2	62.9	60.1	56.4	51.7	46.6	41.0	35.4	29.4	22.8
132.5°	60.6	58.7	56.8	54.0	50.8	46.6	41.9	36.8	31.7	26.1	20.5
135°	54.5	53.1	51.3	48.5	45.2	41.9	37.3	32.6	28.0	22.8	18.2
137.5°	48.9	47.5	45.7	43.8	40.5	37.3	33.1	28.9	24.7	20.0	15.8
140°	43.3	42.4	40.5	38.7	35.9	32.6	28.9	25.2	21.4	17.2	13.5
142.5°	37.7	36.8	35.4	33.5	31.2	28.4	25.2	21.9	18.2	14.9	11.6
145°	32.6	32.1	30.8	28.9	27.0	24.2	21.4	18.6	15.4	12.6	9.3
147.5°	27.5	27.0	26.1	24.7	22.8	20.5	18.2	15.4	13.0	10.3	7.5
150°	22.8	22.4	21.9	20.0	19.1	16.8	14.9	12.6	10.7	7.9	6.1
152.5°	18.6	18.6	17.7	16.3	15.4	13.5	12.1	10.3	8.4	6.5	4.7
155°	14.9	14.4	14.0	13.0	12.1	10.7	9.3	7.9	6.5	4.7	3.3
157.5°	11.6	11.2	10.7	9.8	8.9	8.4	7.0	5.6	4.2	3.3	2.3
160°	8.4	7.9	7.5	7.0	6.5	5.6	4.7	3.7	2.8	1.9	1.4
162.5°	5.6	5.1	5.1	4.7	4.2	3.3	2.8	2.3	1.9	1.4	0.9
165°	2.8	2.8	2.3	2.3	1.9	1.4	1.4	1.4	0.9	0.9	0.5
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-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	439.4	439.4	441.2	440.8	439.4	442.2	445.4
5°	438.0	438.0	439.4	439.4	438.0	440.8	443.6
7.5°	435.6	435.2	436.6	436.6	434.7	437.0	440.3
10°	431.4	431.0	432.4	432.4	430.5	432.8	435.6
12.5°	426.8	425.9	427.3	426.8	424.9	427.3	430.0
15°	420.7	420.3	421.2	420.3	418.4	420.7	423.5
17.5°	414.7	413.3	413.7	413.7	410.5	412.8	415.1
20°	406.8	404.9	405.4	404.9	402.6	404.0	406.8
22.5°	398.8	396.0	396.0	395.6	392.8	394.6	397.0
25°	389.0	385.8	385.8	385.3	382.1	383.5	385.8
27.5°	379.3	376.0	374.6	374.1	370.9	370.9	374.1
30°	369.0	364.4	363.4	362.0	358.8	358.8	361.6
32.5°	359.2	352.7	350.8	349.0	345.7	345.3	348.5
35°	346.2	341.1	337.8	335.9	332.2	331.3	334.1
37.5°	335.5	328.9	324.3	322.0	318.2	316.8	320.6
40°	323.8	316.8	310.8	309.4	303.8	301.9	305.2
42.5°	310.8	303.3	297.3	294.5	290.3	288.4	288.9
45°	297.7	289.8	283.3	279.6	275.4	272.1	274.0
47.5°	284.2	277.2	269.3	263.7	258.6	256.3	257.2
50°	270.7	262.3	254.9	248.8	242.7	240.0	241.8
52.5°	257.2	248.3	240.0	233.4	226.4	223.6	224.1
55°	244.1	234.8	225.0	218.1	211.5	207.3	206.4
57.5°	231.1	220.8	210.6	202.7	194.3	190.6	189.2
60°	217.1	206.4	195.7	186.4	177.5	173.3	171.5
62.5°	204.1	192.4	180.3	170.5	161.7	156.1	154.7
65°	191.5	178.0	165.9	154.7	144.9	138.8	137.0
67.5°	178.0	164.0	151.0	138.8	129.5	121.6	120.7
70°	165.4	150.5	136.1	123.5	113.2	105.3	101.6
72.5°	152.8	137.4	122.5	109.0	96.0	88.5	85.7
75°	140.7	124.9	109.0	95.0	80.6	71.8	69.0
77.5°	129.5	113.2	96.4	81.1	67.6	56.4	52.6
80°	118.8	102.0	84.3	68.5	54.0	41.9	37.7
82.5°	107.6	91.8	73.6	56.8	41.9	29.4	24.2
85°	97.8	82.0	63.8	47.1	32.1	18.6	13.0
87.5°	89.9	72.7	56.4	39.6	24.2	10.7	3.7
90°	82.0	65.2	48.9	32.6	18.2	6.1	0.5
92.5°	75.0	59.2	42.9	28.0	14.0	4.2	0.5
95°	68.5	53.1	37.7	23.3	11.2	2.8	0.5
97.5°	62.4	48.0	33.5	20.0	9.3	2.3	0.5
100°	57.3	43.3	29.8	17.7	7.9	1.9	0.5
102.5°	52.2	39.1	26.6	15.4	7.0	1.4	0.5
105°	48.0	35.4	23.8	14.0	6.1	1.4	0.5
107.5°	43.8	32.1	21.4	12.1	5.1	0.9	0.5
110°	39.6	29.4	19.1	10.7	4.7	0.9	0.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	36.3	26.6	17.2	9.8	3.7	0.9	0.5
115°	33.1	23.8	15.4	8.4	3.3	0.5	0.5
117.5°	29.8	21.4	13.5	7.5	2.8	0.5	0.5
120°	27.0	19.1	12.1	6.5	2.3	0.5	0.5
122.5°	24.2	17.2	10.7	5.6	1.9	0.5	0.5
125°	21.9	15.4	9.3	4.7	1.4	0.5	0.5
127.5°	19.6	13.5	8.4	4.2	1.4	0.5	0.5
130°	17.2	12.1	7.0	3.3	0.9	0.5	0.5
132.5°	15.4	10.3	6.1	2.8	0.9	0.5	0.5
135°	13.5	8.9	5.1	1.9	0.9	0.5	0.5
137.5°	11.6	7.5	4.2	1.4	0.5	0.5	0.5
140°	9.8	6.5	3.3	1.4	0.5	0.5	0.5
142.5°	8.4	5.1	2.3	0.9	0.5	0.5	0.5
145°	6.5	4.2	1.9	0.9	0.5	0.5	0.5
147.5°	5.1	3.3	1.4	0.9	0.5	0.5	0.5
150°	3.7	2.3	1.4	0.5	0.5	0.5	0.5
152.5°	2.8	1.9	0.9	0.5	0.5	0.5	0.5
155°	1.9	1.4	0.9	0.5	0.5	0.5	0.5
157.5°	1.4	0.9	0.5	0.5	0.5	0.5	0.5
160°	0.9	0.5	0.5	0.5	0.5	0.5	0.5
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)