

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: P571642

Luminaire Tested: **4ST1L2040R**

Issue Date: 3/18/2022

Test Information

Test Method: LM-79-08
Report Number: P571642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P579285)
Test Lab: INNOVATION CENTER
Issue Date: 3/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4ST1L2040R
Description: 4 FOOT ST1 STIPLIGHT WITH 4000K, 80CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

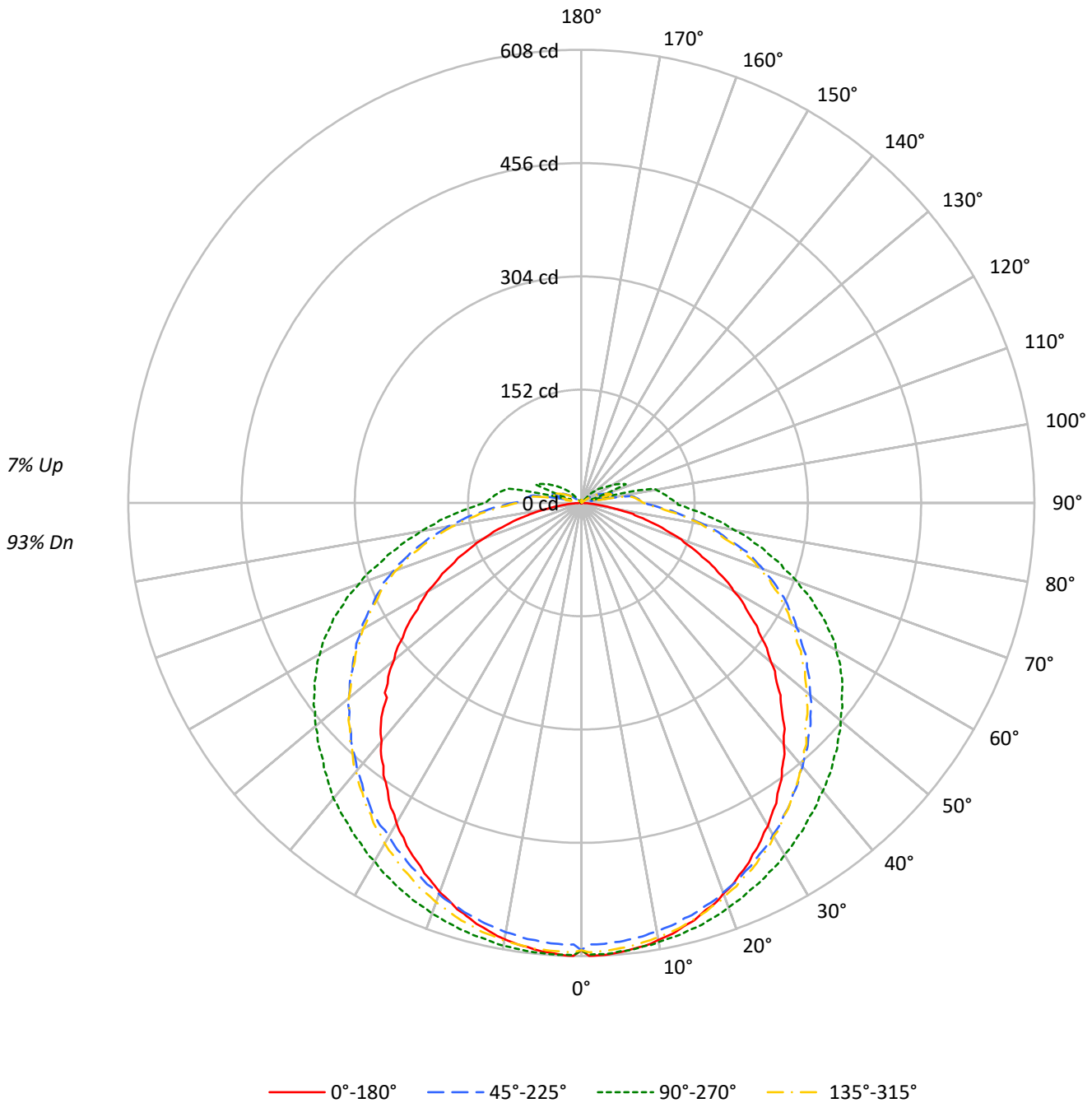
Lumens per Lamp: N/A
Luminaire Lumens: 2200.0 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.15' x L: 4' x H: 0.11')
CIE Type: Direct

Input Watts (W): 20
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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CATALOG NUMBER: 4ST1L2040R

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	117	117	117	117	114	114	114	114	107	107	107	102	102	102	96	96	96	93
1	105	99	94	90	102	96	92	88	91	87	84	86	83	80	81	79	76	74
2	95	85	78	71	91	83	76	70	78	72	67	74	69	65	70	66	62	60
3	86	74	65	58	83	72	64	57	68	61	55	64	58	53	61	56	52	49
4	78	65	56	49	75	63	55	48	60	52	46	57	50	45	54	48	44	41
5	72	58	48	41	69	56	48	41	53	46	40	51	44	39	48	42	38	35
6	66	52	43	36	64	51	42	35	48	40	35	46	39	34	44	38	33	31
7	61	47	38	31	59	46	37	31	44	36	30	42	35	30	40	34	29	27
8	57	43	34	28	55	42	33	28	40	32	27	38	31	26	36	30	26	24
9	53	39	31	25	51	38	30	25	37	29	24	35	28	24	34	28	23	21
10	50	36	28	22	48	35	28	22	34	27	22	32	26	21	31	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11075	11075	11075	11075
5°	11180	10502	11167	10545
10°	11101	9912	11083	9995
15°	11011	9400	10953	9492
20°	10843	8927	10808	9063
25°	10702	8515	10608	8662
30°	10500	8128	10408	8273
35°	10253	7789	10121	7962
40°	9958	7483	9824	7683
45°	9619	7191	9378	7331
50°	9244	6917	9124	7090
55°	8902	6675	8787	6818
60°	8316	6369	8404	6538
65°	7807	5988	7746	6181
70°	7166	5466	6990	5626
75°	5957	4874	6099	5076
80°	4468	4248	4486	4452
85°	2538	3674	2668	3819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	2.6
10°-20°	163.5	7.4
20°-30°	250.5	11.4
30°-40°	308.8	14.0
40°-50°	333.4	15.2
50°-60°	324.8	14.8
60°-70°	284.4	12.9
70°-80°	211.4	9.6
80°-90°	122.6	5.6
90°-100°	70.4	3.2
100°-110°	25.9	1.2
110°-120°	26.7	1.2
120°-130°	14.1	0.6
130°-140°	3.8	0.2
140°-150°	0.8	0.0
150°-160°	0.9	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	470.9	21.4
0°-40°	779.6	35.4
0°-60°	1437.8	65.4
0°-90°	2056.2	93.5
90°-120°	123.0	5.6
90°-150°	141.8	6.4
90°-180°	144.0	6.5
0°-180°	2200.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	600	600	600	600	600	
5°	605	604	604	606	605	57
15°	581	590	578	596	581	164
25°	532	563	528	573	532	245
35°	464	526	458	537	464	290
45°	379	480	369	490	379	293
55°	287	428	284	437	287	255
65°	189	356	188	367	189	187
75°	92	258	94	269	92	99
85°	16	165	16	171	16	19
90°	1	129	2	129	1	1
95°	0	114	1	117	0	1
105°	0	17	0	17	0	0
115°	0	61	1	60	0	0
125°	0	37	0	39	0	0
135°	0	18	1	16	0	0
145°	1	1	1	1	1	1
155°	2	2	2	2	2	1
165°	3	3	3	3	3	1
175°	4	4	4	4	4	0
180°	4	4	4	4	4	



TEST NUMBER: P571642
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	600.2	600.2	600.2	600.2	600.2	600.2	600.2	600.2	600.2	600.2	600.2
1°	607.8	579.0	592.5	609.3	606.3	596.1	603.0	602.5	607.8	579.0	592.5
2°	607.5	578.8	592.8	609.0	605.8	595.3	602.3	602.3	607.5	578.8	593.0
3°	607.3	578.6	592.3	608.8	606.1	594.5	602.0	601.8	606.3	578.3	592.5
4°	606.1	577.8	591.0	608.3	605.3	594.3	601.0	600.8	604.8	577.3	592.3
5°	605.0	576.8	591.0	607.5	603.8	593.5	599.5	599.3	604.3	576.3	591.3
6°	603.5	576.1	589.6	606.3	603.8	591.8	598.8	598.5	602.3	575.8	590.0
7°	601.6	574.3	588.5	605.3	602.5	591.3	597.3	596.8	600.0	573.8	589.6
8°	600.6	572.8	587.3	604.3	600.6	589.6	595.1	594.0	598.8	571.6	587.8
9°	598.5	571.0	585.1	602.5	600.3	587.8	594.0	592.3	596.5	570.3	585.8
10°	595.3	568.6	583.5	601.6	598.3	586.8	591.6	590.8	594.3	567.8	584.8
11°	592.8	567.0	581.6	600.0	596.5	585.1	589.8	587.5	592.0	565.1	582.5
12°	590.8	563.8	580.0	597.8	595.3	582.8	587.5	583.8	588.3	561.3	580.3
13°	586.8	560.3	577.3	596.5	594.0	581.0	585.5	582.3	584.5	559.6	578.6
14°	583.0	558.6	574.1	593.8	591.6	579.0	582.0	578.3	582.0	557.8	575.5
15°	580.6	554.8	572.5	590.8	590.0	576.5	579.0	574.1	577.5	554.1	573.3
16°	575.8	552.5	569.6	589.0	588.5	574.1	576.5	571.6	573.1	549.8	571.0
17°	571.0	549.3	565.8	586.1	585.3	572.0	573.1	567.6	570.3	547.0	567.3
18°	568.3	545.1	563.8	582.5	583.3	568.8	569.0	562.3	564.3	543.8	564.8
19°	563.8	541.1	560.8	581.8	580.8	566.5	566.5	559.3	559.6	538.8	562.3
20°	557.6	538.0	556.3	578.0	577.5	563.5	562.3	555.3	555.8	534.6	558.6
21°	553.8	533.1	552.8	575.1	574.5	560.3	557.8	548.8	549.6	531.5	554.3
22°	549.0	528.3	550.0	572.8	572.5	557.8	554.8	545.1	544.3	527.0	552.1
23°	542.1	525.1	545.6	568.6	568.6	554.1	549.8	540.3	539.6	521.1	547.3
24°	537.6	519.1	540.8	565.1	565.5	550.8	545.6	534.3	532.5	517.8	542.3
25°	532.3	513.8	537.8	562.5	563.1	547.8	542.1	530.8	527.6	512.3	539.3
26°	524.6	510.3	532.5	557.6	559.8	543.5	537.3	523.6	522.3	505.8	534.6
27°	519.6	503.8	528.0	553.5	555.8	541.8	531.5	517.6	516.6	502.1	529.6
28°	513.3	498.1	524.6	550.8	553.1	538.3	528.0	513.1	508.3	496.6	526.6
29°	505.3	494.1	520.3	545.6	550.0	535.1	523.1	505.6	503.6	489.6	521.8
30°	500.5	488.3	514.3	541.3	545.1	529.8	516.3	499.3	496.1	485.1	516.0
31°	492.8	481.3	510.3	535.8	542.1	527.0	512.8	494.3	487.6	479.3	512.1
32°	485.8	476.6	505.8	532.5	537.8	522.5	506.3	486.1	482.3	472.1	510.1
33°	480.3	472.1	499.3	528.6	533.3	517.6	499.8	479.8	474.6	469.1	505.3
34°	470.8	462.8	495.3	524.3	530.6	514.6	495.8	474.1	465.1	460.9	501.6
35°	463.8	457.8	489.8	519.8	525.6	509.8	489.6	465.3	457.8	454.3	495.1
36°	457.6	451.3	483.3	515.3	520.6	504.3	482.1	458.3	451.6	449.6	489.3
37°	447.3	442.8	479.1	511.5	517.8	501.3	478.1	450.9	441.6	441.3	485.3
38°	439.9	437.8	473.1	506.8	513.3	496.8	472.3	445.4	435.4	434.6	478.1
39°	433.4	430.6	466.1	500.8	507.6	492.3	465.8	435.8	427.6	429.6	472.6
40°	422.8	421.6	461.9	497.6	504.3	489.1	461.3	428.3	417.1	420.6	468.3
41°	414.1	416.6	455.6	491.8	500.1	483.1	453.6	422.4	410.6	413.4	461.1
42°	407.9	409.3	450.3	485.6	495.1	478.1	446.8	412.4	402.4	408.1	455.1
43°	396.9	403.6	445.6	481.8	491.8	474.3	442.6	404.8	393.4	399.1	450.6
44°	387.6	396.4	438.1	476.3	485.8	467.6	434.4	398.6	382.1	392.1	444.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	378.6	386.9	432.8	469.6	480.3	462.1	424.6	386.9	369.1	382.4	437.3
46°	371.6	381.4	427.9	465.6	476.8	455.6	419.9	381.1	366.6	376.3	430.9
47°	360.1	373.1	420.3	460.1	470.6	451.6	414.8	374.9	355.4	369.1	426.6
48°	351.1	363.9	414.4	453.3	464.8	446.1	408.3	364.6	348.6	363.4	418.9
49°	344.4	358.1	409.1	447.8	461.1	442.1	399.9	356.4	339.6	353.6	414.4
50°	332.4	349.9	401.4	443.8	454.3	435.1	394.6	350.4	328.1	345.9	407.6
51°	323.1	340.1	394.4	437.6	448.6	429.6	388.3	341.9	321.2	338.4	399.9
52°	316.1	332.4	389.6	430.6	444.6	424.8	381.1	331.6	312.4	332.2	394.6
53°	304.1	325.9	381.6	426.1	437.6	419.9	376.1	326.1	300.4	322.4	387.9
54°	294.4	316.1	374.4	419.9	432.3	412.6	367.6	317.4	293.1	316.7	379.4
55°	287.4	309.9	369.6	412.4	427.6	407.9	360.6	307.4	283.7	308.4	374.4
56°	275.1	302.2	362.9	408.1	422.1	402.4	355.6	301.2	274.1	298.6	368.1
57°	265.1	293.9	354.1	401.6	415.1	395.1	345.4	293.1	262.1	286.4	361.1
58°	257.9	283.9	347.4	393.8	410.1	388.9	340.1	282.9	255.4	284.4	356.1
59°	248.4	277.9	342.4	388.9	401.8	384.4	335.1	276.9	245.9	274.7	347.9
60°	235.9	269.4	333.4	382.4	394.6	376.1	326.7	268.9	238.4	266.9	340.6
61°	228.7	263.4	327.9	376.9	389.6	369.9	319.9	258.6	226.6	260.9	335.6
62°	218.9	253.9	321.2	367.4	381.4	364.4	314.4	252.7	216.9	251.2	327.1
63°	206.7	245.7	312.4	359.9	371.4	354.9	305.7	245.2	209.7	242.9	320.1
64°	199.2	239.7	307.1	349.4	364.9	347.4	299.6	235.2	197.4	237.2	311.2
65°	189.2	229.9	299.6	343.1	355.6	341.1	294.1	229.7	187.7	228.9	306.1
66°	177.2	221.9	290.2	334.6	344.4	332.6	284.7	221.1	180.7	219.2	299.4
67°	169.7	215.9	284.4	325.1	337.4	321.9	277.2	213.4	168.2	213.4	290.2
68°	159.9	206.2	276.1	318.1	327.9	315.1	271.7	203.4	158.7	205.7	286.7
69°	147.7	198.7	266.2	306.7	315.7	305.9	261.2	197.4	151.2	195.7	277.2
70°	142.7	192.7	259.9	296.7	308.1	294.1	252.4	189.7	139.2	189.9	268.9
71°	130.5	183.2	251.2	289.4	298.4	286.9	246.4	183.7	129.7	182.5	262.9
72°	120.7	175.7	242.9	276.9	285.7	276.9	237.4	174.2	122.4	172.9	252.4
73°	113.4	170.2	238.4	266.7	280.4	263.9	226.6	166.7	110.5	167.4	243.9
74°	101.5	162.5	224.7	259.2	267.9	256.4	219.7	161.2	101.2	159.9	237.4
75°	92.0	153.4	215.2	246.4	257.9	246.6	210.2	152.4	94.2	150.9	226.6
76°	85.2	146.0	202.7	236.6	250.7	234.2	198.4	145.0	85.5	143.4	217.2
77°	73.7	139.9	195.4	229.2	238.2	226.9	191.2	139.2	74.0	137.9	210.2
78°	71.5	129.7	188.0	216.2	230.9	216.9	181.7	129.7	67.5	130.7	198.4
79°	58.7	121.5	178.7	206.4	220.4	207.4	169.7	121.5	59.2	124.7	188.7
80°	48.5	115.0	167.2	199.4	208.4	200.2	162.9	113.2	48.7	114.7	181.7
81°	40.7	104.0	157.0	189.7	198.9	188.4	153.2	106.9	43.0	106.9	169.9
82°	35.0	95.5	144.7	177.7	192.2	179.2	141.2	96.2	35.7	100.7	160.9
83°	28.0	89.0	137.7	170.7	180.4	172.7	136.4	89.7	27.0	90.2	153.7
84°	20.0	78.2	128.7	163.9	171.2	161.7	125.0	81.2	22.2	82.0	144.4
85°	15.7	72.2	122.2	154.4	164.7	152.2	114.0	71.2	16.5	75.5	132.4
86°	9.8	64.2	111.2	143.4	153.7	145.7	107.9	63.0	10.5	65.5	125.4
87°	6.0	54.7	102.7	134.7	145.0	134.4	99.2	56.7	8.2	58.0	116.5
88°	4.0	49.5	96.5	124.4	138.7	126.7	91.2	47.7	4.3	52.2	106.0
89°	1.8	43.0	89.2	119.5	129.7	120.7	86.7	41.5	2.2	43.7	100.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	1.0	40.5	85.7	116.9	128.7	114.2	83.5	39.0	1.5	38.5	91.7
91°	0.8	38.7	83.7	115.0	125.0	112.4	81.2	37.5	1.2	37.0	83.2
92°	1.0	36.3	82.0	112.0	122.2	110.2	79.5	35.7	0.8	34.2	81.0
93°	1.0	34.5	78.5	109.5	118.9	108.7	77.0	34.5	1.0	33.0	78.5
94°	0.8	33.2	76.7	106.7	116.9	105.7	74.7	32.2	1.0	31.5	76.7
95°	0.5	22.8	74.7	105.0	114.4	104.0	73.5	21.2	0.8	25.7	75.5
96°	0.8	13.5	72.2	102.4	111.5	101.7	70.7	16.0	0.8	15.7	72.5
97°	0.8	12.0	71.0	99.5	109.5	99.0	68.5	13.2	0.8	14.0	70.0
98°	0.8	12.7	67.0	97.7	107.2	97.2	64.7	15.3	0.8	14.3	68.7
99°	0.5	18.2	46.7	94.7	104.0	95.0	45.0	18.2	0.8	17.7	63.5
100°	0.5	18.0	29.7	92.0	102.0	91.7	21.5	17.5	0.5	17.3	49.5
101°	0.5	17.0	14.7	83.2	99.5	88.7	17.3	16.5	0.5	16.3	36.0
102°	0.5	16.0	14.0	57.2	85.7	73.5	15.5	15.5	0.8	15.5	19.8
103°	0.5	14.7	12.7	32.2	70.0	46.5	14.5	14.5	0.8	14.7	18.0
104°	0.5	14.0	13.5	14.7	40.2	22.5	15.5	13.5	0.8	14.0	17.3
105°	0.5	12.7	24.5	12.2	17.3	15.3	28.5	13.0	0.5	12.7	20.2
106°	0.5	12.2	35.7	11.8	15.3	14.7	41.8	12.0	0.5	12.0	30.5
107°	0.2	11.2	43.5	11.2	14.5	13.7	41.0	11.0	0.5	10.8	39.2
108°	0.5	10.0	41.5	13.7	14.3	13.0	39.7	10.5	0.5	10.0	40.5
109°	0.2	9.2	40.2	23.2	14.0	18.0	38.0	9.5	0.5	9.0	38.7
110°	0.5	8.5	37.7	39.5	23.2	35.5	36.5	8.2	0.5	7.7	37.5
111°	0.5	6.7	35.2	58.5	38.7	48.0	33.5	7.5	0.5	5.0	35.2
112°	0.5	4.7	33.5	58.0	51.7	57.2	31.2	4.5	0.2	3.3	34.0
113°	0.5	2.2	31.0	55.7	64.7	56.0	29.7	2.0	0.5	2.0	32.8
114°	0.5	1.5	29.2	53.7	62.5	53.2	27.7	1.8	0.5	1.8	31.5
115°	0.2	1.5	28.0	52.0	61.0	51.0	26.3	1.5	0.8	1.5	29.5
116°	0.2	1.2	26.7	49.0	58.5	48.0	25.7	1.2	0.5	1.2	28.2
117°	0.2	0.8	25.0	46.2	55.2	46.0	24.5	1.0	0.5	0.8	27.0
118°	0.5	0.8	24.2	44.0	53.5	43.5	23.2	0.8	0.5	0.8	24.7
119°	0.2	0.8	22.8	41.0	50.2	41.5	22.0	0.8	0.5	0.8	24.0
120°	0.2	0.8	20.8	39.2	47.0	39.2	21.0	0.8	0.5	0.8	22.0
121°	0.5	0.8	19.5	36.7	44.7	36.5	19.2	0.8	0.5	0.8	20.5
122°	0.5	0.5	18.5	35.5	42.2	35.0	18.0	0.8	0.5	0.8	19.2
123°	0.2	0.5	16.5	33.7	39.7	33.7	16.7	0.2	0.5	0.8	17.5
124°	0.2	0.5	15.3	31.8	38.5	31.8	14.7	0.8	0.8	0.8	15.7
125°	0.2	0.5	14.3	30.5	36.7	30.2	13.5	0.5	0.5	0.5	15.0
126°	0.5	0.2	10.5	28.7	34.2	29.0	10.2	0.8	0.5	0.5	11.5
127°	0.5	0.8	6.3	27.0	33.2	27.3	5.0	0.5	0.5	0.5	7.5
128°	0.2	0.5	3.5	25.7	31.0	25.5	3.5	0.5	0.5	0.5	4.7
129°	0.5	0.5	2.0	23.5	30.0	24.5	2.2	0.5	0.5	0.8	2.5
130°	0.5	0.5	1.8	21.5	27.7	22.5	1.8	0.5	0.5	0.8	2.5
131°	0.5	0.8	1.8	20.2	25.7	20.5	1.8	0.8	0.8	0.5	2.0
132°	0.5	0.5	1.2	18.0	23.0	19.2	1.5	0.8	0.8	0.8	1.5
133°	0.5	0.5	1.0	16.3	22.5	17.5	1.2	1.0	0.8	0.8	1.2
134°	0.5	0.8	0.8	12.0	20.0	12.7	1.0	0.5	0.5	0.8	1.2



TEST NUMBER: P571642
 CATALOG NUMBER: 4ST1L2040R

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.5	0.5	0.8	9.2	17.5	9.2	0.8	0.8	0.8	0.8	1.0
136°	0.8	0.5	1.0	3.3	14.0	4.5	0.8	0.8	0.5	0.8	1.0
137°	0.5	0.5	0.8	2.2	7.0	2.7	0.8	0.8	0.8	0.8	1.0
138°	0.8	0.8	0.8	2.0	3.7	2.5	0.8	0.8	0.8	0.8	1.0
139°	0.8	0.8	0.8	2.0	2.7	2.0	1.0	0.8	0.8	1.0	0.8
140°	0.8	0.8	1.0	1.5	2.2	1.8	1.2	1.0	1.0	0.8	1.0
141°	0.8	1.0	1.0	1.2	2.0	1.5	1.0	1.0	1.0	1.2	1.2
142°	1.0	1.0	1.0	1.2	2.0	1.5	1.0	1.0	0.8	1.2	1.2
143°	1.0	1.0	1.0	1.0	1.5	1.2	1.0	1.0	1.0	1.0	1.2
144°	1.0	1.2	1.2	1.2	1.2	1.2	1.0	1.0	1.2	1.2	1.2
145°	1.2	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
146°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	1.2
147°	1.2	1.2	1.2	1.2	1.5	1.2	1.5	1.2	1.2	1.2	1.2
148°	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2	1.5	1.2	1.2
149°	1.5	1.5	1.8	1.8	1.8	1.5	1.2	1.2	1.5	1.5	1.5
150°	1.8	1.8	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.5	1.5
151°	1.8	1.8	1.5	1.8	1.8	1.5	1.8	1.8	1.8	1.5	1.5
152°	1.5	1.8	1.8	1.8	1.8	1.5	1.8	1.8	1.8	1.8	1.8
153°	2.0	2.0	1.8	1.8	2.0	1.8	1.8	1.5	1.8	1.8	1.8
154°	2.0	2.0	2.0	1.8	2.0	1.8	1.5	1.8	1.8	1.8	2.0
155°	2.0	2.2	2.2	1.8	2.0	1.8	1.8	2.0	2.0	2.0	1.8
156°	2.0	2.0	2.2	2.2	2.0	2.0	1.8	2.0	2.0	2.0	1.8
157°	2.2	2.2	2.2	2.2	2.2	1.8	2.0	2.2	2.0	2.0	2.0
158°	2.2	2.5	2.2	2.2	2.5	2.0	2.2	2.0	2.2	2.2	2.0
159°	2.5	2.5	2.2	2.5	2.5	2.2	2.2	2.2	2.2	2.2	2.2
160°	2.5	2.5	2.7	2.2	2.5	2.0	2.2	2.2	2.5	2.2	2.2
161°	2.5	2.7	2.5	2.7	2.5	2.2	2.5	2.2	2.5	2.5	2.2
162°	2.7	2.7	2.7	2.7	2.7	2.2	2.5	2.2	2.5	2.2	2.2
163°	2.7	2.7	3.0	2.7	2.7	2.5	2.5	2.7	2.5	2.5	2.5
164°	3.0	3.0	3.3	3.0	3.0	2.7	2.7	2.5	2.7	2.7	2.2
165°	3.3	3.0	3.3	3.3	2.7	2.5	2.7	2.7	2.7	2.7	2.7
166°	3.0	3.3	3.3	3.3	3.0	2.7	2.7	3.0	2.7	2.7	2.5
167°	3.3	3.3	3.5	3.3	3.3	2.7	3.3	3.0	2.7	3.0	3.0
168°	3.3	3.3	3.5	3.5	3.3	2.7	3.3	3.0	3.0	3.0	3.0
169°	3.5	3.7	3.7	3.7	3.5	3.0	3.0	3.3	3.3	3.0	3.0
170°	3.5	3.5	4.0	3.7	3.5	3.3	3.5	3.3	3.5	3.3	3.0
171°	3.7	3.7	4.0	3.7	3.7	3.5	3.3	3.3	3.3	3.5	3.3
172°	3.7	3.5	3.7	3.7	3.5	3.7	3.5	3.5	3.3	3.3	3.3
173°	4.0	4.0	4.0	4.0	3.5	3.7	3.5	3.7	3.5	3.5	3.5
174°	3.7	4.0	4.0	4.0	3.7	3.7	3.7	3.5	3.5	3.5	3.5
175°	4.0	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.5	3.7	3.7
176°	3.7	4.0	3.7	3.7	3.7	3.7	3.7	3.7	3.5	3.7	3.5
177°	4.0	4.0	4.0	4.0	4.0	3.7	3.5	3.5	3.7	3.7	3.5
178°	3.7	3.7	4.0	4.0	4.0	3.5	3.7	3.7	3.7	3.7	3.5
179°	4.0	4.0	3.7	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.7



TEST NUMBER: P571642
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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9



TEST NUMBER: P571642
 CATALOG NUMBER: 4ST1L2040R

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	600.2	600.2	600.2	600.2	600.2	600.2
1°	609.5	606.8	596.1	602.8	603.0	607.8
2°	610.0	606.3	596.1	602.8	603.0	607.5
3°	609.5	607.1	596.3	602.3	602.8	607.3
4°	609.5	606.8	595.8	602.3	602.5	606.1
5°	609.3	606.3	595.3	601.3	601.3	605.0
6°	608.3	606.1	595.3	601.3	600.0	603.5
7°	607.3	605.5	594.3	600.0	599.0	601.6
8°	606.1	604.5	593.5	598.5	597.1	600.6
9°	605.5	603.8	592.3	597.5	594.8	598.5
10°	603.8	603.3	591.8	596.3	593.8	595.3
11°	602.0	602.0	590.3	594.0	591.3	592.8
12°	601.0	600.0	588.3	592.0	588.0	590.8
13°	599.3	598.3	587.5	590.8	585.8	586.8
14°	597.1	597.8	585.3	588.0	583.3	583.0
15°	595.5	595.8	583.0	584.8	579.6	580.6
16°	593.5	594.3	581.8	583.0	576.5	575.8
17°	591.6	592.0	579.8	579.8	573.3	571.0
18°	589.3	590.3	576.8	576.1	569.3	568.3
19°	586.3	588.0	576.1	573.1	566.5	563.8
20°	583.3	586.3	572.8	570.3	561.3	557.6
21°	580.0	582.8	570.0	565.8	556.6	553.8
22°	578.3	580.8	568.3	562.5	553.1	549.0
23°	574.3	578.8	564.3	559.6	547.0	542.1
24°	570.0	575.3	560.8	554.5	542.3	537.6
25°	567.6	572.8	559.0	549.8	538.0	532.3
26°	564.1	569.8	554.8	546.6	530.8	524.6
27°	559.3	565.8	550.8	541.8	525.8	519.6
28°	556.8	563.5	548.0	536.3	521.3	513.3
29°	553.3	559.6	544.1	532.8	513.8	505.3
30°	548.8	554.8	539.8	527.6	507.8	500.5
31°	546.3	552.8	535.1	521.3	502.8	492.8
32°	541.1	548.6	531.8	517.0	496.1	485.8
33°	536.6	543.8	528.3	512.1	491.6	480.3
34°	533.3	541.1	523.6	504.8	482.6	470.8
35°	527.6	537.3	520.8	500.5	475.3	463.8
36°	522.8	532.3	515.1	495.1	466.4	457.6
37°	519.3	529.1	510.3	487.8	460.9	447.3
38°	513.6	525.6	507.6	483.1	453.1	439.9
39°	508.8	520.8	504.3	477.1	443.3	433.4
40°	504.8	517.8	497.1	470.3	437.6	422.8
41°	498.8	511.8	493.6	465.8	429.9	414.1
42°	494.1	506.8	487.3	458.1	420.1	407.9
43°	490.1	500.8	483.1	451.3	413.8	396.9
44°	483.1	497.1	478.3	446.8	406.4	387.6



TEST NUMBER: P571642
 CATALOG NUMBER: 4ST1L2040R

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	478.1	489.6	471.9	438.6	396.6	378.6
46°	474.1	485.3	466.8	432.3	390.1	371.6
47°	468.1	481.3	462.6	427.3	382.1	360.1
48°	461.1	476.3	457.1	419.1	373.1	351.1
49°	457.1	469.6	449.9	412.8	362.9	344.4
50°	450.3	465.6	445.8	407.6	356.9	332.4
51°	443.8	460.1	439.9	398.9	348.4	323.1
52°	439.6	453.1	432.6	392.1	337.9	316.1
53°	432.8	450.1	428.6	386.9	331.1	304.1
54°	425.6	443.1	422.4	379.6	323.1	294.4
55°	420.9	436.8	414.8	371.1	312.6	287.4
56°	415.1	432.3	410.6	365.9	306.1	275.1
57°	407.1	424.6	404.6	358.9	297.9	265.1
58°	402.1	418.6	396.9	350.1	287.6	257.9
59°	396.4	413.4	393.8	344.9	281.2	248.4
60°	389.4	405.1	386.1	338.1	272.9	235.9
61°	384.9	398.1	379.1	329.4	266.9	228.7
62°	375.1	391.8	374.4	322.4	256.9	218.9
63°	367.4	382.1	365.4	317.4	247.9	206.7
64°	357.6	373.6	357.6	308.4	240.2	199.2
65°	351.1	367.1	351.6	301.4	233.9	189.2
66°	342.6	356.4	341.6	295.9	223.9	177.2
67°	331.6	346.1	332.9	288.4	216.2	169.7
68°	324.6	339.6	326.4	278.6	209.9	159.9
69°	315.7	327.7	314.6	272.7	199.9	147.7
70°	303.4	317.1	305.1	264.7	192.2	142.7
71°	295.7	309.4	297.9	253.9	185.9	130.5
72°	285.9	298.9	288.4	247.4	176.4	120.7
73°	275.7	286.1	275.4	238.9	168.2	113.4
74°	268.2	276.1	267.6	227.4	162.7	101.5
75°	255.4	268.6	257.6	220.4	153.2	92.0
76°	245.7	255.9	244.9	211.2	145.4	85.2
77°	238.2	248.2	237.4	198.9	139.9	73.7
78°	225.4	238.2	227.4	191.7	132.4	71.5
79°	215.2	226.2	215.2	181.9	122.7	58.7
80°	207.7	218.4	207.9	172.2	116.2	48.5
81°	195.4	208.7	198.2	165.0	108.2	40.7
82°	185.7	196.7	185.9	152.7	97.5	35.0
83°	178.7	191.9	178.9	143.2	90.5	28.0
84°	167.0	180.2	169.9	136.2	82.2	20.0
85°	157.9	171.2	161.2	124.2	75.7	15.7
86°	151.2	162.2	150.2	117.5	65.5	9.8
87°	142.4	153.4	144.0	108.9	57.5	6.0
88°	131.7	144.4	135.4	99.2	48.5	4.0
89°	125.4	137.9	128.9	93.5	43.7	1.8



TEST NUMBER: P571642
 CATALOG NUMBER: 4ST1L2040R

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	117.5	129.2	118.5	85.7	38.7	1.0
91°	113.0	126.2	114.0	81.7	37.3	0.8
92°	111.2	124.4	111.0	79.5	34.7	1.0
93°	107.5	121.0	109.2	78.0	33.2	1.0
94°	105.5	118.7	106.5	75.2	29.5	0.8
95°	104.0	116.9	103.4	73.0	21.5	0.5
96°	102.0	114.0	101.7	71.5	13.0	0.8
97°	99.7	111.2	99.5	69.5	11.8	0.8
98°	97.9	109.2	96.2	61.5	14.3	0.8
99°	95.0	106.0	94.7	49.2	17.3	0.5
100°	90.5	103.2	92.0	28.2	16.3	0.5
101°	81.2	99.5	81.2	15.7	16.0	0.5
102°	50.7	83.7	66.7	14.7	15.3	0.5
103°	33.2	55.0	37.5	13.7	14.3	0.5
104°	20.0	36.3	16.0	20.2	13.5	0.5
105°	16.5	17.3	14.0	29.5	12.5	0.5
106°	16.5	15.7	13.0	42.2	12.5	0.5
107°	15.7	15.3	12.2	41.5	11.0	0.2
108°	15.3	14.7	14.0	41.0	9.5	0.5
109°	20.0	19.8	28.5	38.0	8.8	0.2
110°	32.8	30.2	44.7	36.3	7.5	0.5
111°	48.2	47.0	55.7	35.2	4.3	0.5
112°	57.5	65.5	56.2	33.5	2.7	0.5
113°	55.7	65.5	54.0	31.8	2.0	0.5
114°	54.0	63.0	52.2	30.5	1.2	0.5
115°	51.7	60.0	50.5	28.5	1.2	0.2
116°	50.2	58.5	48.0	27.0	1.0	0.2
117°	47.7	55.7	46.5	25.7	1.0	0.2
118°	46.0	53.7	44.7	23.5	0.8	0.5
119°	44.2	52.2	42.5	22.2	0.8	0.2
120°	42.2	49.5	40.7	21.2	0.8	0.2
121°	40.2	47.0	39.0	19.2	0.8	0.5
122°	38.5	45.0	36.5	17.7	0.8	0.5
123°	36.5	42.5	35.0	16.5	0.5	0.2
124°	34.0	40.2	33.0	15.0	0.5	0.2
125°	32.8	38.7	31.5	11.5	0.8	0.2
126°	30.2	36.3	30.0	8.8	0.5	0.5
127°	28.2	33.7	27.5	4.5	0.5	0.5
128°	26.7	32.5	25.5	2.5	0.5	0.2
129°	25.0	29.2	24.0	2.0	0.5	0.5
130°	22.8	27.5	21.8	1.8	0.5	0.5
131°	21.2	26.0	19.8	1.5	0.2	0.5
132°	19.2	23.7	18.2	1.2	0.8	0.5
133°	15.7	21.2	13.5	1.2	0.8	0.5
134°	12.7	19.8	8.8	1.0	0.5	0.5



TEST NUMBER: P571642
 CATALOG NUMBER: 4ST1L2040R

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	7.5	15.7	5.7	0.8	0.5	0.5
136°	3.7	9.2	2.7	0.8	0.8	0.8
137°	2.7	5.7	2.2	0.8	0.8	0.5
138°	2.5	3.5	2.5	0.8	1.0	0.8
139°	2.0	2.7	2.2	0.8	1.0	0.8
140°	1.8	2.2	1.5	1.0	0.8	0.8
141°	1.5	2.0	1.2	0.8	1.0	0.8
142°	1.2	1.8	1.2	1.0	1.0	1.0
143°	1.0	1.5	1.2	1.0	1.0	1.0
144°	1.2	1.2	1.2	1.2	1.2	1.0
145°	1.2	1.0	1.0	1.2	1.0	1.2
146°	1.2	1.5	1.2	1.2	1.5	1.2
147°	1.2	1.2	1.5	1.5	1.5	1.2
148°	1.2	1.5	1.8	1.5	1.2	1.5
149°	1.2	1.5	1.5	1.5	1.5	1.5
150°	1.5	1.8	1.5	1.8	1.8	1.8
151°	1.8	1.5	1.8	1.8	1.8	1.8
152°	1.8	1.8	1.8	2.0	1.8	1.5
153°	1.8	1.5	1.8	2.0	2.0	2.0
154°	1.8	2.0	2.0	1.8	1.8	2.0
155°	1.8	2.0	2.0	2.0	2.0	2.0
156°	1.8	2.2	2.0	2.2	2.2	2.0
157°	2.0	2.2	2.5	2.2	2.2	2.2
158°	2.2	2.0	2.0	2.2	2.5	2.2
159°	2.2	2.2	2.0	2.2	2.5	2.5
160°	2.0	2.2	2.5	2.5	2.5	2.5
161°	2.5	2.5	2.5	2.5	2.5	2.5
162°	2.2	2.2	2.5	2.7	2.7	2.7
163°	2.5	2.7	2.7	2.7	2.7	2.7
164°	2.5	2.5	2.7	2.7	3.0	3.0
165°	2.2	2.7	3.0	3.0	3.0	3.3
166°	2.7	2.7	3.0	3.0	3.3	3.0
167°	2.7	3.0	3.0	3.3	3.3	3.3
168°	3.0	3.0	3.3	3.3	3.5	3.3
169°	3.3	3.3	3.5	3.5	3.5	3.5
170°	3.3	3.3	3.3	3.3	3.5	3.5
171°	3.3	3.5	3.5	3.3	3.5	3.7
172°	3.3	3.7	3.5	3.5	3.5	3.7
173°	3.5	3.7	3.5	3.7	3.5	4.0
174°	3.5	3.7	3.7	3.7	3.7	3.7
175°	3.7	3.7	3.7	3.7	3.7	4.0
176°	3.7	3.7	3.5	3.7	4.0	3.7
177°	3.5	3.7	4.0	3.7	3.7	4.0
178°	3.7	4.0	4.0	4.0	3.7	3.7
179°	4.0	4.0	3.7	3.7	4.0	4.0



TEST NUMBER: P571642
CATALOG NUMBER: 4ST1L2040R

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	3.9	3.9	3.9	3.9	3.9	3.9

(END OF REPORT)