

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: NEO-RAY

Report Number: P333201-940

Luminaire Tested: **S125DIP-S610D1205U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333201-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D1205U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5997.3 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

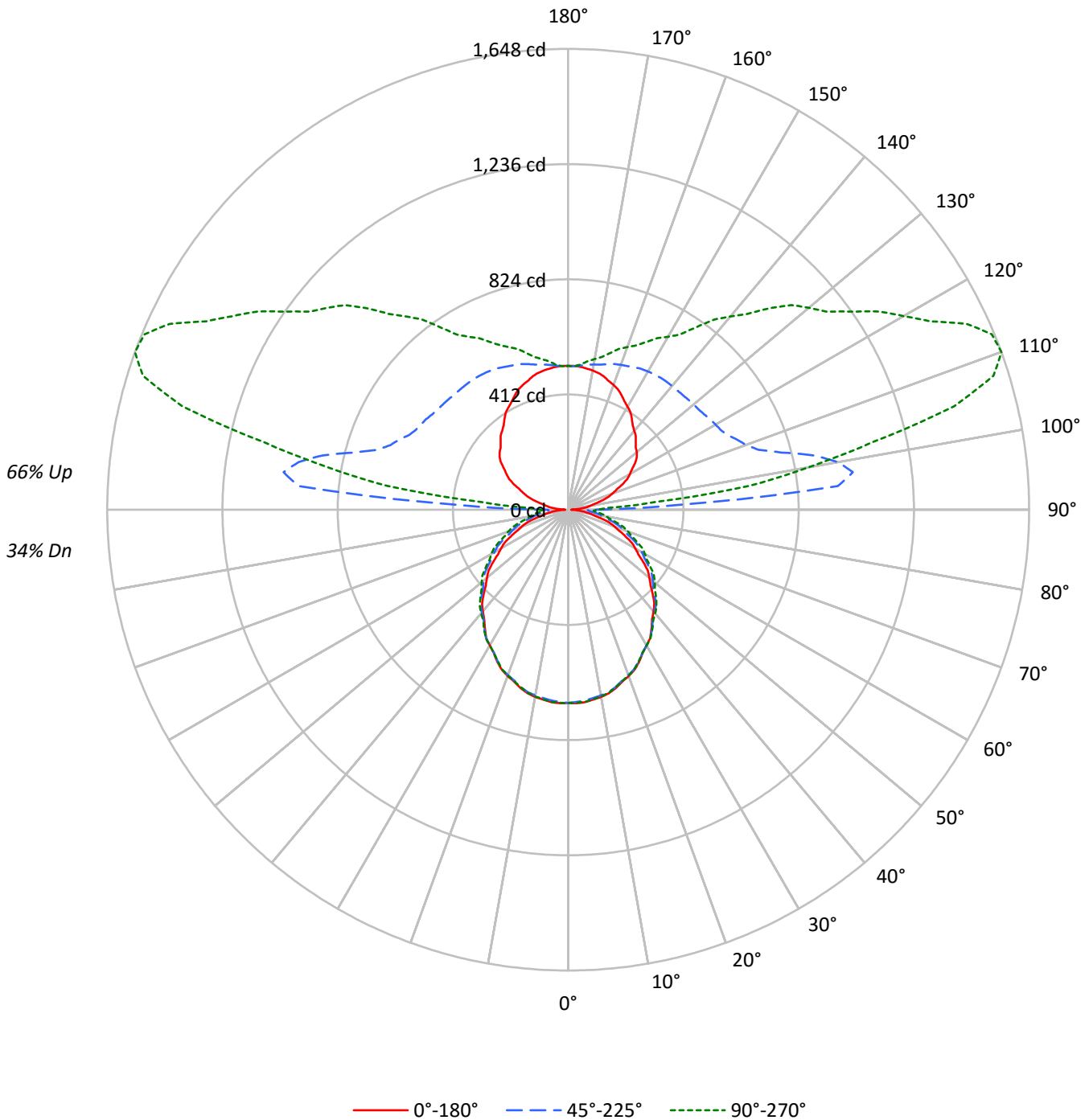
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333201-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333201-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-D4

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	89	85	82	84	80	77	74	64	62	60	49	48	46	35	34	34	27
2	85	78	71	66	76	70	65	60	56	52	49	43	40	38	31	29	28	22
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	27	25	24	19
4	71	60	52	46	63	54	47	42	43	39	35	33	30	27	24	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30	30	26	23	22	19	17	14
6	59	48	40	34	53	43	36	31	35	30	26	27	23	20	20	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13	11
8	51	39	31	26	46	35	29	24	29	23	20	22	19	16	16	14	12	9
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4463	4463	4463
5°	4472	4380	4394
10°	4440	4302	4295
15°	4388	4209	4171
20°	4316	4093	4045
25°	4232	3969	3891
30°	4129	3833	3751
35°	4033	3708	3622
40°	3935	3576	3493
45°	3825	3463	3378
50°	3720	3340	3276
55°	3593	3225	3156
60°	3455	3093	3035
65°	3310	2956	2898
70°	3145	2767	2758
75°	2887	2586	2585
80°	2548	2365	2396
85°	2232	2219	2336



TEST NUMBER: P333201-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.1
10°-20°	185.5	3.1
20°-30°	275.9	4.6
30°-40°	326.8	5.4
40°-50°	337.9	5.6
50°-60°	311.2	5.2
60°-70°	251.6	4.2
70°-80°	168.5	2.8
80°-90°	90.2	1.5
90°-100°	421.5	7.0
100°-110°	836.9	14.0
110°-120°	775.8	12.9
120°-130°	622.8	10.4
130°-140°	494.8	8.3
140°-150°	370.1	6.2
150°-160°	259.6	4.3
160°-170°	153.0	2.6
170°-180°	49.8	0.8
0°-30°	526.7	8.8
0°-40°	853.5	14.2
0°-60°	1502.6	25.1
0°-90°	2012.9	33.6
90°-120°	2034.2	33.9
90°-150°	3521.9	58.7
90°-180°	3984.0	66.4
0°-180°	5997.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	691	690	685	690	690	66
15°	660	660	656	660	657	186
25°	600	601	598	600	597	276
35°	519	523	522	524	524	325
45°	428	435	438	443	444	330
55°	329	339	350	357	360	294
65°	226	242	258	268	271	224
75°	125	143	164	177	181	132
85°	37	60	83	98	104	40
90°	12	42	72	92	100	9
95°	43	128	968	480	313	43
105°	123	181	788	1529	1428	130
115°	213	262	630	1338	1572	210
125°	293	343	594	1060	1235	260
135°	341	410	579	881	1018	265
145°	396	453	576	721	796	248
155°	452	486	562	635	662	208
165°	493	507	539	571	580	139
175°	513	513	517	523	521	49
180°	514	514	514	514	514	



TEST NUMBER: P333201-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	692.7	692.4	692.2	692.0	691.7	691.2	690.4	689.5	688.7	687.8	688.7
5°	691.1	690.7	690.5	690.2	689.8	689.2	688.1	687.1	686.0	684.9	686.2
7.5°	684.9	684.8	684.7	684.6	684.5	683.9	682.8	681.7	680.6	679.6	680.6
10°	679.6	679.6	679.6	679.6	679.6	678.9	677.7	676.5	675.3	674.1	675.2
12.5°	672.0	672.1	672.2	672.3	672.4	672.0	671.0	670.1	669.1	668.2	669.0
15°	659.9	660.0	660.2	660.3	660.5	660.0	659.0	657.9	656.9	655.9	656.7
17.5°	644.2	644.4	644.8	645.1	645.4	645.0	644.0	642.9	641.9	640.8	641.5
20°	632.8	633.1	633.4	633.7	634.0	633.6	632.6	631.5	630.4	629.4	629.8
22.5°	619.8	620.4	620.9	621.4	622.0	621.6	620.5	619.3	618.1	617.0	617.5
25°	599.6	600.0	600.5	600.9	601.4	601.2	600.3	599.4	598.4	597.5	598.2
27.5°	577.1	577.7	578.5	579.1	579.8	579.6	578.5	577.6	576.5	575.5	575.9
30°	560.3	561.2	562.1	563.0	563.9	563.9	563.0	562.1	561.2	560.3	560.6
32.5°	545.1	545.9	546.7	547.5	548.2	548.3	547.7	547.0	546.4	545.6	546.0
35°	519.0	520.0	521.1	522.1	523.2	523.5	523.1	522.5	522.1	521.7	522.1
37.5°	492.8	493.8	494.7	495.7	496.7	497.0	497.0	496.8	496.6	496.5	497.0
40°	474.9	476.2	477.3	478.6	479.7	480.3	480.1	480.0	479.8	479.7	480.3
42.5°	455.4	457.0	458.5	460.1	461.7	462.6	463.0	463.3	463.6	464.0	464.7
45°	427.5	429.2	430.8	432.5	434.2	435.3	436.1	436.8	437.6	438.4	439.4
47.5°	399.0	400.5	402.0	403.5	405.1	406.4	407.8	409.0	410.4	411.6	413.2
50°	379.4	381.0	382.7	384.4	386.0	387.7	389.3	391.0	392.6	394.3	396.0
52.5°	358.8	360.8	362.8	364.9	366.8	368.9	371.0	372.9	375.0	376.9	378.7
55°	328.6	331.0	333.4	335.8	338.2	340.6	343.0	345.4	347.9	350.3	352.0
57.5°	297.7	300.6	303.4	306.4	309.2	312.1	314.9	317.6	320.4	323.2	325.0
60°	277.1	280.1	283.1	286.1	289.2	292.1	295.2	298.2	301.2	304.2	306.5
62.5°	257.1	260.0	263.1	266.1	269.1	272.2	275.4	278.7	282.0	285.3	287.8
65°	226.3	229.8	233.2	236.7	240.1	243.7	247.3	250.9	254.5	258.2	260.4
67.5°	197.3	200.6	203.9	207.3	210.6	214.2	217.8	221.5	225.2	228.9	231.6
70°	176.1	179.6	183.1	186.5	190.0	193.7	197.6	201.5	205.5	209.4	212.2
72.5°	155.5	159.2	162.7	166.3	169.9	173.8	178.1	182.4	186.6	190.9	194.0
75°	124.7	128.6	132.5	136.4	140.4	144.7	149.5	154.4	159.2	164.0	166.9
77.5°	95.0	99.5	104.1	108.5	113.1	117.6	122.3	126.9	131.5	136.2	139.5
80°	76.6	81.1	85.6	90.2	94.6	99.4	104.6	109.7	114.8	119.9	123.2
82.5°	59.7	64.5	69.3	74.0	78.8	83.8	89.0	94.3	99.5	104.8	107.9
85°	37.3	42.3	47.2	52.2	57.2	62.2	67.5	72.8	78.0	83.4	86.7
87.5°	21.3	26.4	31.6	36.8	42.1	47.4	52.8	58.3	63.7	69.2	72.9
90°	11.9	17.7	24.6	31.5	38.4	45.5	51.6	58.8	64.9	72.1	76.6
92.5°	22.4	29.5	42.7	60.0	82.3	117.3	179.2	279.4	387.6	387.4	327.2
95°	43.0	48.0	60.2	75.4	102.2	153.3	269.3	502.4	793.4	967.5	951.1
97.5°	64.7	69.6	78.8	93.8	117.8	155.6	233.9	405.9	710.1	1026.4	1185.9
100°	80.0	85.2	92.6	107.1	129.9	165.0	229.9	369.4	635.3	979.0	1241.2
102.5°	96.8	101.0	107.3	122.4	143.4	177.5	235.6	353.4	578.6	898.0	1204.1
105°	123.1	125.6	133.2	146.0	165.0	197.4	247.5	344.3	521.8	788.5	1088.9
107.5°	148.9	153.0	160.1	170.6	189.8	219.1	267.6	350.9	496.3	712.5	972.0
110°	167.4	171.3	177.3	188.4	205.7	235.7	282.4	358.1	487.7	676.3	905.1



TEST NUMBER: P333201-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	186.5	190.0	194.7	205.5	222.5	251.4	296.3	367.7	485.6	654.2	854.7
115°	213.4	216.5	220.6	231.0	247.6	276.0	318.3	382.3	485.6	629.5	799.0
117.5°	237.6	241.4	245.4	255.4	273.7	301.0	340.9	399.3	489.5	615.6	764.3
120°	254.1	257.7	262.3	272.1	290.2	318.0	357.8	410.9	494.2	608.5	744.7
122.5°	271.0	273.5	277.1	286.5	306.0	333.7	373.4	423.9	497.9	602.2	727.5
125°	292.8	294.7	299.8	309.0	328.5	356.9	394.0	441.7	504.7	593.7	703.9
127.5°	309.3	312.3	318.8	330.5	351.2	379.3	414.7	458.3	513.2	588.2	682.0
130°	320.1	323.1	331.2	344.6	366.1	394.0	428.3	469.8	518.5	584.9	667.8
132.5°	327.9	331.8	341.7	356.8	379.3	407.1	440.9	479.4	524.3	582.6	655.7
135°	341.2	345.2	357.5	373.9	395.5	423.9	457.1	492.4	531.7	579.4	640.4
137.5°	358.0	361.1	372.6	389.0	410.2	439.3	469.0	502.2	539.2	578.3	627.2
140°	367.5	370.6	383.0	399.6	419.3	447.3	477.5	508.7	542.1	577.5	620.5
142.5°	379.1	381.2	392.7	409.2	427.9	454.1	482.6	512.0	543.6	577.2	615.1
145°	396.5	398.4	408.6	422.9	441.5	465.2	492.1	518.1	546.1	576.0	608.0
147.5°	414.0	415.3	424.2	437.7	453.8	474.7	498.4	521.8	547.1	573.4	601.0
150°	424.8	426.9	434.2	447.6	462.1	479.7	502.5	524.3	547.1	570.9	595.8
152.5°	436.4	437.7	444.1	455.9	469.6	485.5	506.7	525.9	546.3	567.6	590.0
155°	451.7	451.7	458.0	468.3	478.7	493.2	510.8	527.4	543.9	561.6	580.2
157.5°	465.5	465.2	470.2	479.1	488.2	499.2	514.3	528.4	541.3	555.4	571.1
160°	474.6	473.5	477.7	484.9	493.2	502.5	516.0	528.4	538.8	551.3	563.7
162.5°	482.0	481.0	485.1	491.5	498.2	505.9	517.6	527.6	536.3	546.3	557.1
165°	493.2	491.2	494.3	499.4	503.5	509.8	518.1	526.4	532.5	538.8	547.1
167.5°	500.7	499.6	501.5	504.4	507.3	511.2	518.1	523.9	526.7	531.5	537.3
170°	505.6	504.6	505.6	507.7	509.8	512.9	518.1	522.2	524.3	527.4	531.5
172.5°	509.0	507.1	508.1	510.1	511.4	512.9	517.2	520.6	520.9	522.5	525.8
175°	512.9	510.8	511.8	512.9	512.9	512.9	516.0	518.1	517.0	517.0	518.1
177.5°	514.8	513.1	513.1	513.9	513.1	513.1	514.8	515.6	513.9	513.9	514.8
180°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9



TEST NUMBER: P333201-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	689.5	690.4	691.2	691.5	691.4	691.3	691.2	691.1
5°	687.3	688.6	689.7	690.3	690.2	690.0	689.8	689.7
7.5°	681.6	682.7	683.8	684.2	684.0	683.9	683.8	683.6
10°	676.3	677.3	678.3	678.8	678.7	678.5	678.3	678.1
12.5°	669.8	670.6	671.5	671.6	671.2	670.8	670.5	670.0
15°	657.6	658.5	659.4	659.6	659.0	658.4	657.8	657.2
17.5°	642.2	642.8	643.5	643.7	643.4	643.0	642.7	642.3
20°	630.4	630.8	631.2	631.4	631.4	631.4	631.4	631.4
22.5°	618.0	618.7	619.2	619.3	618.9	618.6	618.2	617.9
25°	598.8	599.4	599.9	599.9	599.1	598.4	597.6	596.9
27.5°	576.3	576.8	577.2	577.2	576.9	576.7	576.4	576.1
30°	560.9	561.2	561.5	561.6	561.4	561.2	561.2	561.0
32.5°	546.3	546.5	546.9	547.0	546.8	546.6	546.5	546.4
35°	522.5	523.1	523.5	523.7	523.7	523.7	523.7	523.7
37.5°	497.7	498.3	498.9	499.2	499.1	499.0	499.0	498.9
40°	480.9	481.5	482.1	482.5	482.9	483.1	483.5	483.8
42.5°	465.4	466.1	466.8	467.3	467.3	467.3	467.4	467.5
45°	440.4	441.5	442.6	443.2	443.4	443.4	443.6	443.8
47.5°	414.7	416.3	417.8	418.7	419.1	419.4	419.7	420.1
50°	397.6	399.3	400.9	402.0	402.4	402.9	403.3	403.8
52.5°	380.5	382.3	384.1	385.1	385.5	385.8	386.1	386.5
55°	353.6	355.3	356.9	358.0	358.6	359.3	359.8	360.4
57.5°	327.0	328.9	330.7	331.9	332.4	332.9	333.3	333.8
60°	308.7	310.9	313.3	314.6	315.0	315.5	315.9	316.4
62.5°	290.3	292.7	295.2	296.8	297.3	297.9	298.5	299.1
65°	262.6	264.9	267.2	268.6	269.2	269.8	270.4	271.0
67.5°	234.3	237.1	239.8	241.6	242.4	243.2	244.0	244.7
70°	215.1	217.9	220.8	222.7	223.6	224.4	225.4	226.3
72.5°	197.2	200.2	203.3	205.2	205.9	206.5	207.2	207.9
75°	170.0	173.0	176.0	177.9	178.6	179.4	180.1	180.9
77.5°	142.8	146.2	149.5	151.4	151.9	152.6	153.2	153.8
80°	126.5	129.8	133.1	135.1	135.7	136.3	137.0	137.5
82.5°	111.1	114.3	117.5	119.7	120.7	121.8	122.9	123.9
85°	90.0	93.3	96.6	98.8	100.0	101.2	102.5	103.6
87.5°	76.5	80.2	83.8	86.5	87.6	88.6	89.9	91.0
90°	81.1	85.6	90.2	94.4	95.5	96.6	98.6	99.7
92.5°	243.7	196.6	167.0	153.9	141.7	140.3	139.9	139.3
95°	801.0	646.8	522.7	437.9	365.4	335.4	328.1	312.6
97.5°	1161.9	1054.6	933.6	814.7	751.7	694.7	665.7	653.4
100°	1324.1	1276.5	1173.0	1067.2	996.7	922.9	885.5	869.9
102.5°	1377.2	1411.6	1363.4	1292.4	1216.9	1164.8	1124.0	1112.5
105°	1340.5	1485.5	1534.1	1524.7	1492.6	1459.5	1439.8	1428.4
107.5°	1220.3	1412.7	1532.8	1588.9	1606.5	1607.3	1601.3	1594.0
110°	1131.8	1331.4	1480.4	1570.4	1618.1	1638.9	1647.2	1648.2



TEST NUMBER: P333201-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1061.3	1251.0	1401.5	1507.2	1576.5	1611.2	1630.3	1638.9
115°	972.7	1136.0	1280.6	1395.3	1477.1	1527.7	1557.6	1572.0
117.5°	914.0	1055.0	1179.8	1285.2	1367.0	1419.4	1449.3	1458.6
120°	882.0	1008.9	1125.4	1218.3	1295.9	1346.5	1375.4	1384.6
122.5°	857.2	974.8	1078.8	1165.8	1235.1	1281.7	1310.5	1318.8
125°	821.4	929.4	1022.0	1098.1	1156.9	1200.2	1223.7	1234.8
127.5°	784.7	885.6	972.0	1043.3	1096.8	1135.2	1157.6	1163.1
130°	762.1	855.4	938.3	1007.1	1059.6	1094.6	1116.1	1123.0
132.5°	739.2	826.7	902.1	968.4	1020.8	1055.7	1075.3	1083.1
135°	708.7	782.2	850.4	910.9	957.2	992.1	1011.6	1018.5
137.5°	683.1	742.7	799.6	851.0	892.4	924.1	941.9	949.3
140°	668.8	719.2	768.5	813.2	852.1	879.6	895.8	901.5
142.5°	656.5	699.1	741.5	780.3	813.4	836.9	852.1	857.1
145°	640.8	673.7	706.5	735.2	760.6	778.9	790.9	795.6
147.5°	626.5	652.8	677.8	699.2	719.1	733.4	740.4	742.5
150°	618.6	641.4	661.0	679.8	695.4	708.0	712.4	713.5
152.5°	610.3	630.6	648.6	663.2	676.2	686.2	690.4	691.4
155°	597.8	614.4	628.9	640.3	650.7	657.9	661.0	662.1
157.5°	585.4	599.1	610.3	619.2	627.2	633.3	636.1	636.0
160°	577.1	587.5	597.8	605.1	612.3	617.5	619.6	618.6
162.5°	568.0	577.6	586.2	592.6	598.2	602.6	603.1	602.8
165°	555.4	562.6	568.8	574.0	578.2	580.2	580.2	580.2
167.5°	543.3	548.1	552.9	556.6	558.7	560.5	559.7	559.5
170°	536.7	539.8	543.0	545.0	547.1	548.1	548.1	547.1
172.5°	529.2	532.4	534.7	535.9	536.3	538.1	536.5	535.5
175°	521.2	521.2	523.3	523.3	523.3	524.3	522.2	521.2
177.5°	515.6	516.4	516.4	516.4	515.6	516.4	513.9	513.9
180°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9

(END OF REPORT)