

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: P333159-940

Luminaire Tested: **S125DIP-S375D1205U940-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333159-940
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-S375D1205U940-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5212.3 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

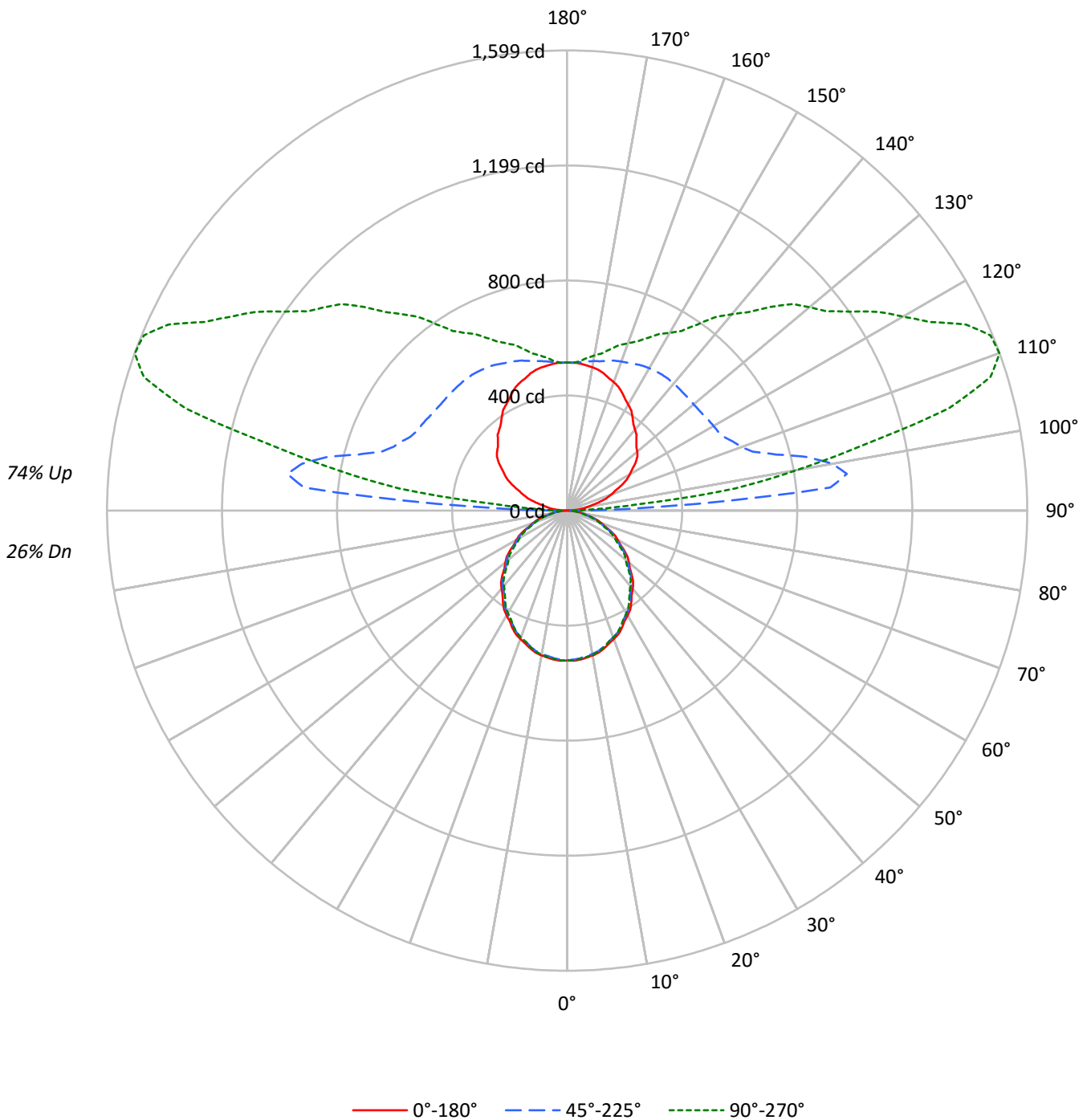
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333159-940

CATALOG NUMBER: S125DIP-S375D1205U940-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P333159-940

CATALOG NUMBER: S125DIP-S375D1205U940-4F0-1E-UDD-F4

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	92	88	84	81	82	79	76	73	61	59	57	45	44	42	30	29	29	22
2	84	77	71	66	75	69	64	60	54	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20	15
4	70	60	52	46	62	53	47	42	42	37	34	31	28	26	21	19	18	13
5	64	53	45	39	57	48	41	36	37	32	29	28	24	22	19	17	15	12
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12	9
8	50	38	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3364	3364	3364
5°	3371	3339	3361
10°	3351	3316	3335
15°	3315	3276	3290
20°	3263	3221	3226
25°	3207	3154	3151
30°	3138	3082	3067
35°	3064	3005	2964
40°	2989	2922	2880
45°	2906	2846	2789
50°	2816	2753	2671
55°	2728	2649	2575
60°	2623	2545	2454
65°	2500	2419	2337
70°	2381	2274	2194
75°	2168	2099	2024
80°	1930	1901	1852
85°	1675	1712	1615



TEST NUMBER: P333159-940

CATALOG NUMBER: S125DIP-S375D1205U940-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	0.9
10°-20°	138.7	2.7
20°-30°	204.9	3.9
30°-40°	239.0	4.6
40°-50°	240.1	4.6
50°-60°	210.7	4.0
60°-70°	157.0	3.0
70°-80°	89.8	1.7
80°-90°	29.0	0.6
90°-100°	372.5	7.1
100°-110°	800.8	15.4
110°-120°	751.5	14.4
120°-130°	609.1	11.7
130°-140°	488.8	9.4
140°-150°	368.8	7.1
150°-160°	259.6	5.0
160°-170°	153.0	2.9
170°-180°	49.8	1.0
0°-30°	392.7	7.5
0°-40°	631.7	12.1
0°-60°	1082.6	20.8
0°-90°	1358.4	26.1
90°-120°	1924.8	36.9
90°-150°	3391.5	65.1
90°-180°	3854.0	73.9
0°-180°	5212.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	520	519	515	519	518	49
15°	496	494	490	492	492	140
25°	450	448	443	443	442	207
35°	389	387	381	379	376	243
45°	318	316	312	307	305	245
55°	242	241	235	232	229	216
65°	164	163	158	155	153	162
75°	87	86	84	83	81	93
85°	23	23	23	23	22	25
90°	1	9	17	22	24	3
95°	34	101	918	416	244	36
105°	117	164	751	1479	1373	123
115°	209	252	603	1300	1529	206
125°	290	340	578	1034	1205	257
135°	340	409	574	867	1001	264
145°	396	453	576	718	790	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: P333159-940

CATALOG NUMBER: S125DIP-S375D1205U940-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	522.2	522.0	521.8	521.6	521.4	520.8	520.1	519.4	518.7	517.9	518.7
5°	520.0	519.9	519.7	519.5	519.3	518.8	517.9	517.0	516.0	515.1	515.9
7.5°	515.3	515.1	515.0	514.8	514.6	514.0	513.0	511.9	511.0	510.0	510.8
10°	511.0	510.9	510.7	510.5	510.3	509.7	508.7	507.7	506.7	505.7	506.4
12.5°	505.8	505.4	505.1	504.8	504.4	503.8	502.8	501.9	501.0	500.1	500.6
15°	495.8	495.5	495.3	495.0	494.6	494.0	493.0	492.0	491.0	490.0	490.4
17.5°	484.3	483.9	483.5	483.1	482.7	482.0	480.9	479.9	478.8	477.8	478.4
20°	474.7	474.6	474.4	474.2	474.0	473.3	472.2	470.9	469.8	468.6	469.2
22.5°	465.2	464.8	464.5	464.2	463.9	463.2	462.0	460.9	459.8	458.7	459.1
25°	450.0	449.6	449.1	448.6	448.2	447.4	446.2	445.0	443.8	442.6	442.8
27.5°	432.3	432.0	431.8	431.5	431.2	430.4	429.3	428.0	426.8	425.5	425.6
30°	420.8	420.5	420.2	419.9	419.6	418.8	417.5	416.1	414.7	413.3	413.1
32.5°	408.2	407.8	407.4	407.0	406.5	405.7	404.5	403.2	402.1	400.8	400.5
35°	388.6	388.3	387.9	387.5	387.2	386.3	385.0	383.8	382.5	381.2	380.8
37.5°	368.3	367.8	367.4	366.8	366.4	365.6	364.4	363.2	361.9	360.8	360.1
40°	354.5	353.9	353.5	353.0	352.6	351.7	350.4	349.2	347.9	346.6	345.8
42.5°	339.6	339.2	338.9	338.4	338.0	337.2	335.9	334.7	333.3	332.1	331.4
45°	318.2	317.8	317.4	317.1	316.6	315.9	314.9	313.8	312.6	311.6	310.5
47.5°	295.1	295.1	295.1	295.2	295.2	294.5	293.2	291.9	290.5	289.2	288.1
50°	280.3	280.0	279.7	279.4	279.1	278.5	277.3	276.3	275.2	274.0	272.9
52.5°	265.1	264.8	264.7	264.5	264.3	263.6	262.4	261.3	260.0	258.9	257.9
55°	242.3	242.0	241.7	241.5	241.2	240.4	239.2	237.9	236.6	235.3	234.5
57.5°	218.4	218.2	218.0	217.9	217.8	217.1	216.1	215.0	213.9	212.9	211.8
60°	203.1	202.8	202.4	202.1	201.7	201.0	200.0	199.0	198.0	197.0	196.1
62.5°	187.3	187.1	186.7	186.5	186.2	185.6	184.8	183.9	183.0	182.2	181.2
65°	163.6	163.5	163.3	163.1	162.9	162.3	161.3	160.2	159.3	158.3	157.4
67.5°	140.6	140.3	139.8	139.5	139.1	138.5	137.8	137.0	136.3	135.5	134.8
70°	126.1	125.6	125.2	124.8	124.3	123.6	122.8	122.0	121.2	120.4	119.8
72.5°	110.3	109.9	109.7	109.3	109.1	108.6	108.1	107.5	107.0	106.5	105.8
75°	86.9	86.8	86.6	86.4	86.2	85.9	85.4	85.0	84.5	84.1	83.8
77.5°	65.5	65.4	65.3	65.2	65.2	65.0	64.7	64.5	64.2	63.9	63.8
80°	51.9	51.9	51.9	51.9	51.9	51.8	51.6	51.5	51.3	51.1	51.0
82.5°	40.0	39.9	39.8	39.6	39.5	39.4	39.3	39.3	39.2	39.2	39.1
85°	22.6	22.7	22.8	22.9	23.0	23.1	23.1	23.1	23.1	23.1	23.0
87.5°	9.1	9.3	9.7	10.2	10.5	11.0	11.1	11.4	11.5	11.9	12.1
90°	1.1	2.1	4.1	6.2	8.3	10.3	11.4	13.5	14.5	16.6	17.7
92.5°	12.7	15.3	24.1	36.9	54.8	85.0	141.5	236.5	339.5	334.0	270.5
95°	34.2	35.2	43.5	54.9	77.7	124.3	235.2	463.2	749.1	918.0	898.3
97.5°	56.8	58.1	63.8	75.3	95.8	129.3	202.7	369.7	669.0	980.3	1136.7
100°	72.5	74.6	78.7	90.2	109.9	140.9	201.0	335.7	596.8	935.6	1194.6
102.5°	90.0	91.2	94.5	106.7	124.8	155.0	208.5	321.6	542.1	856.8	1159.8
105°	117.1	117.1	122.3	132.6	149.2	178.3	223.8	316.0	489.0	751.2	1048.6
107.5°	143.6	145.7	150.6	159.2	176.4	202.4	246.6	325.6	466.6	678.4	935.0
110°	162.6	164.8	168.9	178.3	193.8	220.7	263.1	334.7	460.0	644.4	870.3



TEST NUMBER: P333159-940

CATALOG NUMBER: S125DIP-S375D1205U940-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	181.7	183.8	187.1	196.4	212.0	238.1	278.9	346.3	460.0	624.6	822.2
115°	209.3	211.3	214.5	223.8	239.3	265.3	303.6	363.6	463.2	603.1	769.8
117.5°	234.2	237.3	240.6	249.9	267.5	292.6	328.9	383.6	470.0	592.5	738.5
120°	250.7	253.9	258.0	267.3	284.9	310.9	347.1	396.8	476.6	587.5	721.1
122.5°	268.1	270.5	273.8	283.0	302.4	328.2	364.5	411.8	482.4	583.4	706.2
125°	290.1	292.2	297.4	306.7	326.4	353.3	387.5	432.0	492.1	578.2	685.9
127.5°	307.3	310.4	317.1	328.9	349.8	376.7	409.7	450.8	503.1	575.7	667.3
130°	318.1	321.2	329.5	343.0	364.7	391.6	423.7	463.2	509.8	574.0	654.9
132.5°	326.4	330.3	340.3	355.4	378.0	404.9	437.0	473.9	517.2	574.0	644.9
135°	339.8	344.0	356.4	373.0	394.8	422.8	454.9	489.0	527.4	574.0	633.1
137.5°	356.9	360.0	371.6	388.2	409.5	438.3	467.5	500.2	536.7	575.2	622.5
140°	366.8	369.9	382.4	399.0	418.6	446.6	476.6	507.7	540.8	576.0	617.5
142.5°	378.4	380.7	392.3	408.8	427.8	454.1	482.4	511.8	543.3	576.9	613.4
145°	395.8	397.9	408.2	422.8	441.4	465.2	492.1	518.1	546.1	576.0	607.2
147.5°	414.0	415.3	424.2	437.7	453.8	474.7	498.4	521.8	547.1	573.4	600.7
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: P333159-940

CATALOG NUMBER: S125DIP-S375D1205U940-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	519.4	520.1	520.8	521.2	521.1	521.0	521.0	520.9
5°	516.7	517.6	518.4	518.8	518.7	518.6	518.5	518.4
7.5°	511.6	512.4	513.2	513.5	513.4	513.4	513.3	513.2
10°	507.1	507.8	508.6	508.9	508.8	508.7	508.6	508.5
12.5°	501.2	501.9	502.4	502.7	502.7	502.7	502.7	502.6
15°	490.9	491.3	491.9	492.0	492.0	492.0	492.0	492.0
17.5°	478.9	479.5	480.1	480.1	479.7	479.2	478.8	478.3
20°	469.8	470.5	471.1	471.3	470.7	470.3	469.8	469.4
22.5°	459.5	459.9	460.4	460.4	460.1	459.8	459.5	459.1
25°	443.0	443.2	443.4	443.3	443.0	442.7	442.5	442.2
27.5°	425.6	425.6	425.7	425.6	425.3	425.0	424.7	424.5
30°	413.0	412.8	412.6	412.4	412.1	411.9	411.5	411.3
32.5°	400.2	399.8	399.5	399.1	398.6	398.1	397.6	397.1
35°	380.3	379.9	379.3	378.8	378.1	377.3	376.6	375.9
37.5°	359.4	358.7	358.0	357.5	357.0	356.7	356.2	355.8
40°	344.9	344.1	343.3	342.8	342.5	342.1	341.9	341.6
42.5°	330.6	329.8	329.0	328.5	328.1	327.6	327.3	326.8
45°	309.3	308.3	307.2	306.5	306.2	305.9	305.7	305.4
47.5°	287.0	285.9	284.7	283.8	283.2	282.6	282.0	281.3
50°	271.7	270.5	269.3	268.4	267.7	267.1	266.4	265.8
52.5°	256.8	255.7	254.7	253.9	253.2	252.4	251.7	251.0
55°	233.6	232.8	232.0	231.3	230.7	230.0	229.3	228.7
57.5°	210.7	209.6	208.6	207.9	207.5	207.1	206.8	206.4
60°	195.2	194.2	193.3	192.5	191.9	191.3	190.6	190.0
62.5°	180.2	179.1	178.2	177.5	177.0	176.5	175.9	175.5
65°	156.6	155.8	155.0	154.4	154.0	153.6	153.3	152.9
67.5°	134.1	133.4	132.7	132.2	132.1	131.8	131.6	131.3
70°	119.2	118.7	118.2	117.7	117.3	117.0	116.5	116.2
72.5°	105.2	104.6	104.0	103.5	103.2	102.8	102.4	102.0
75°	83.6	83.3	82.9	82.7	82.3	81.9	81.6	81.1
77.5°	63.7	63.5	63.3	63.1	62.9	62.6	62.3	62.1
80°	50.9	50.8	50.7	50.6	50.4	50.2	50.0	49.8
82.5°	38.9	38.7	38.6	38.4	38.4	38.4	38.3	38.3
85°	22.9	22.8	22.7	22.6	22.4	22.2	22.0	21.8
87.5°	12.3	12.5	12.8	13.0	12.9	12.8	12.8	12.7
90°	18.6	19.7	20.7	22.8	22.8	22.8	23.8	23.8
92.5°	183.6	133.2	100.3	85.0	71.7	69.2	67.8	66.1
95°	744.9	587.5	460.0	373.0	299.4	268.3	260.1	243.5
97.5°	1109.5	999.1	874.9	753.9	689.8	631.9	601.8	588.5
100°	1274.4	1223.7	1117.0	1009.1	937.7	863.1	824.7	808.2
102.5°	1330.0	1361.3	1310.1	1237.2	1160.7	1107.6	1066.0	1053.6
105°	1297.3	1439.2	1484.8	1473.4	1440.2	1406.0	1385.3	1372.9
107.5°	1180.4	1369.8	1486.8	1541.0	1557.7	1557.6	1550.7	1542.4
110°	1094.1	1291.0	1437.1	1525.2	1571.8	1591.5	1598.7	1598.7



TEST NUMBER: P333159-940

CATALOG NUMBER: S125DIP-S375D1205U940-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1026.2	1213.1	1360.8	1464.6	1532.9	1566.6	1584.7	1592.1
115°	940.8	1101.4	1243.3	1356.3	1437.1	1486.8	1515.8	1529.3
117.5°	885.6	1024.1	1146.4	1250.0	1330.8	1382.2	1411.0	1419.2
120°	855.9	980.2	1094.1	1185.4	1262.0	1311.7	1339.7	1348.0
122.5°	833.5	948.7	1050.3	1135.6	1204.0	1249.6	1277.6	1285.0
125°	800.9	906.6	996.8	1071.4	1129.4	1171.9	1194.6	1205.1
127.5°	767.8	866.4	950.6	1020.4	1073.0	1110.5	1132.1	1136.7
130°	747.1	838.2	919.1	986.4	1038.2	1072.4	1093.1	1099.3
132.5°	726.3	811.7	885.0	949.9	1001.7	1035.9	1055.0	1062.0
135°	699.4	770.9	837.2	896.3	941.8	976.1	994.7	1000.9
137.5°	676.6	734.4	789.5	839.7	880.5	911.6	928.8	935.6
140°	664.1	712.8	760.5	804.1	842.4	869.3	884.8	890.0
142.5°	653.4	694.6	735.7	773.4	805.9	828.7	843.4	847.7
145°	639.3	671.4	703.6	731.5	756.3	774.0	785.4	789.5
147.5°	626.1	652.1	676.8	697.9	717.6	731.7	738.3	740.2
150°	618.6	641.4	661.0	679.7	695.3	707.7	711.9	712.8
152.5°	610.3	630.6	648.6	663.2	676.2	686.1	690.3	691.3
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)