

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: P333246-940

Luminaire Tested: **S125DIP-S850D1205U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333246-940
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-S850D1205U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 6782.6 lumens
Efficiency: N/A
Efficacy: 119.2 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: General Diffuse

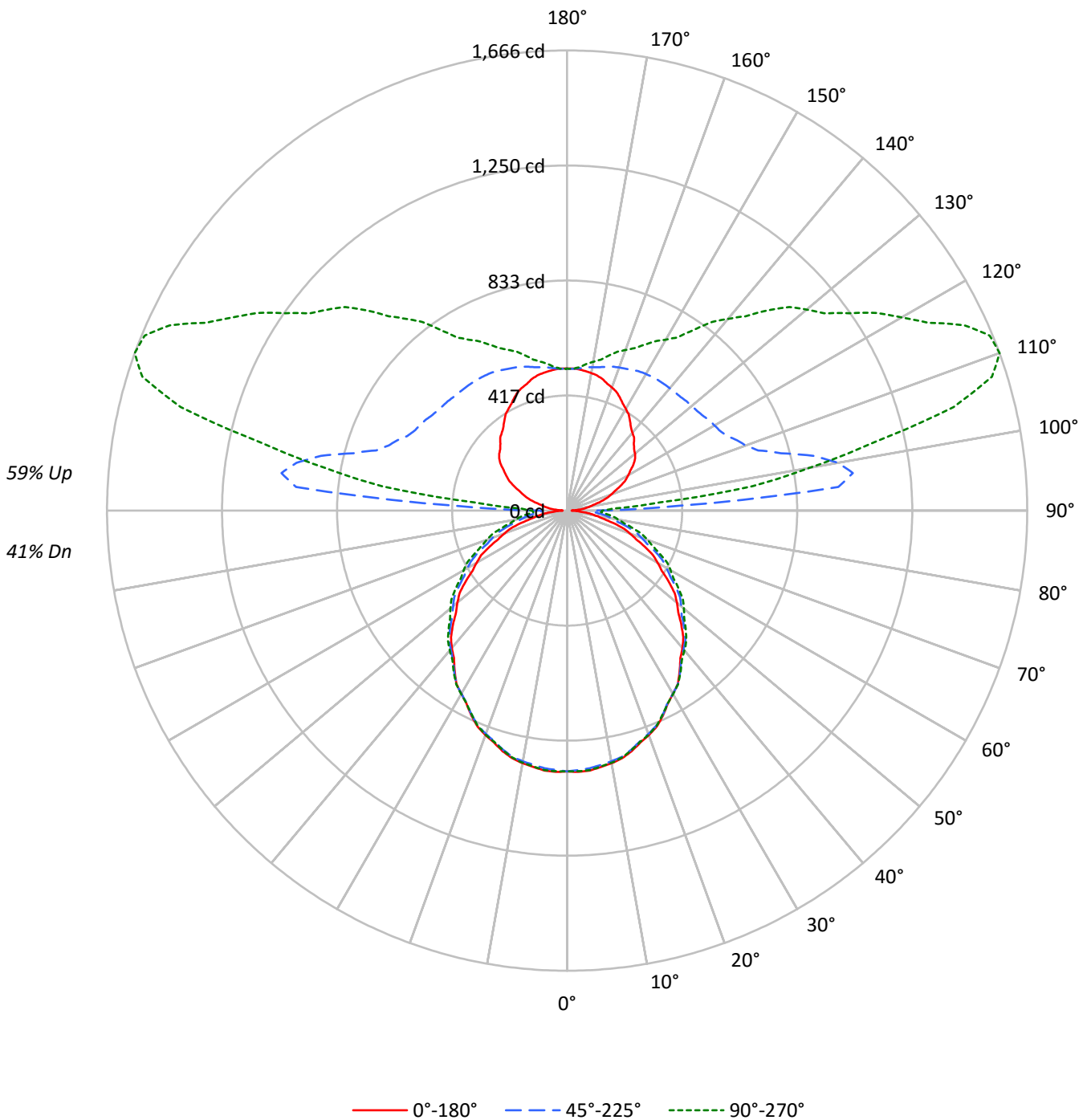
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	105	105	105	105	96	96	96	96	78	78	78		62	62	62		47	47	47	41
1	95	91	86	83	86	83	79	76	67	65	63		54	52	50		41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	51		47	44	42		36	34	32	27
3	79	69	61	56	71	63	56	51	52	47	43		41	38	35		31	29	27	23
4	72	61	53	47	65	56	49	43	46	40	36		37	33	30		28	25	23	19
5	66	54	46	40	60	49	42	37	41	35	31		33	29	26		25	22	20	17
6	60	48	40	34	55	44	37	32	37	31	27		29	25	22		23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24		27	23	20		21	18	16	13
8	52	39	32	26	47	36	29	25	30	25	21		24	20	17		19	16	14	11
9	48	36	28	23	44	33	26	22	28	22	19		22	18	16		18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17		21	17	14		16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6101	6101	6101
5°	6113	5988	6007
10°	6069	5881	5872
15°	5998	5753	5701
20°	5900	5595	5529
25°	5784	5425	5318
30°	5644	5239	5126
35°	5513	5068	4951
40°	5379	4888	4773
45°	5228	4733	4617
50°	5084	4566	4479
55°	4912	4408	4315
60°	4722	4227	4149
65°	4525	4039	3961
70°	4301	3780	3769
75°	3945	3533	3533
80°	3483	3233	3276
85°	3046	3031	3195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	1.3
10°-20°	253.6	3.7
20°-30°	377.1	5.6
30°-40°	446.7	6.6
40°-50°	461.8	6.8
50°-60°	425.4	6.3
60°-70°	343.9	5.1
70°-80°	230.3	3.4
80°-90°	122.3	1.8
90°-100°	439.5	6.5
100°-110°	850.2	12.5
110°-120°	784.6	11.6
120°-130°	627.9	9.3
130°-140°	497.0	7.3
140°-150°	370.5	5.5
150°-160°	259.6	3.8
160°-170°	153.0	2.3
170°-180°	49.8	0.7
0°-30°	720.0	10.6
0°-40°	1166.7	17.2
0°-60°	2053.9	30.3
0°-90°	2750.4	40.6
90°-120°	2074.4	30.6
90°-150°	3569.7	52.6
90°-180°	4032.0	59.4
0°-180°	6782.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	942	936	943	943	90
15°	902	903	896	902	898	254
25°	820	822	817	820	816	377
35°	709	715	713	716	716	444
45°	584	594	599	605	607	451
55°	449	464	479	489	493	401
65°	309	331	353	366	370	307
75°	170	195	224	242	247	181
85°	51	82	114	134	142	54
90°	16	54	93	118	128	12
95°	46	138	986	504	338	46
105°	125	188	802	1548	1449	132
115°	215	265	639	1352	1588	211
125°	294	344	600	1070	1246	261
135°	342	410	581	886	1025	265
145°	397	453	576	722	798	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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	946.8	946.6	946.2	945.8	945.5	944.8	943.6	942.4	941.3	940.1	941.3
5°	944.6	944.2	943.8	943.3	943.0	942.0	940.6	939.1	937.7	936.3	937.9
7.5°	936.3	936.1	935.9	935.8	935.6	934.8	933.4	931.8	930.3	928.9	930.3
10°	928.9	928.9	928.9	928.9	928.9	928.1	926.4	924.8	923.1	921.5	922.9
12.5°	918.5	918.6	918.8	919.0	919.2	918.6	917.3	916.0	914.6	913.3	914.4
15°	902.1	902.2	902.4	902.6	902.9	902.2	900.8	899.4	897.9	896.4	897.7
17.5°	880.6	880.9	881.4	881.7	882.2	881.6	880.2	878.8	877.4	875.9	876.8
20°	865.0	865.4	865.8	866.2	866.7	866.1	864.7	863.3	861.7	860.3	860.9
22.5°	847.2	847.9	848.6	849.4	850.2	849.7	848.1	846.5	844.9	843.3	844.1
25°	819.6	820.2	820.8	821.4	822.1	821.7	820.6	819.3	818.1	816.8	817.6
27.5°	788.8	789.8	790.7	791.6	792.5	792.2	790.9	789.4	788.0	786.7	787.2
30°	765.9	767.1	768.4	769.5	770.8	770.8	769.5	768.4	767.1	765.9	766.3
32.5°	745.1	746.2	747.3	748.3	749.4	749.5	748.6	747.7	746.8	745.9	746.3
35°	709.4	710.9	712.3	713.7	715.2	715.6	715.0	714.3	713.7	713.1	713.7
37.5°	673.6	674.9	676.3	677.6	678.9	679.5	679.2	679.0	678.9	678.7	679.5
40°	649.2	650.9	652.5	654.2	655.8	656.5	656.3	656.1	655.9	655.7	656.5
42.5°	622.5	624.6	626.8	628.9	631.1	632.4	632.8	633.3	633.7	634.2	635.2
45°	584.3	586.7	588.9	591.1	593.4	595.0	596.1	597.1	598.2	599.1	600.7
47.5°	545.3	547.4	549.5	551.6	553.7	555.6	557.4	559.2	560.9	562.7	564.8
50°	518.6	520.8	523.2	525.4	527.6	529.9	532.2	534.5	536.7	539.0	541.3
52.5°	490.4	493.2	496.0	498.7	501.5	504.3	507.0	509.8	512.6	515.3	517.7
55°	449.2	452.5	455.8	459.1	462.4	465.7	469.0	472.3	475.5	478.8	481.1
57.5°	406.9	410.9	414.8	418.7	422.8	426.6	430.4	434.2	437.9	441.8	444.3
60°	378.8	382.9	387.0	391.1	395.2	399.4	403.5	407.6	411.7	415.8	418.9
62.5°	351.3	355.4	359.6	363.7	367.8	372.1	376.6	381.0	385.4	389.9	393.3
65°	309.3	314.1	318.8	323.5	328.2	333.1	338.0	343.0	347.9	352.8	356.0
67.5°	269.7	274.3	278.8	283.4	287.9	292.7	297.7	302.8	307.8	312.8	316.6
70°	240.8	245.5	250.2	255.0	259.8	264.7	270.1	275.4	280.8	286.1	290.1
72.5°	212.7	217.5	222.4	227.3	232.2	237.6	243.4	249.3	255.1	261.0	265.2
75°	170.4	175.8	181.1	186.5	191.8	197.8	204.4	211.0	217.5	224.1	228.2
77.5°	129.8	136.0	142.2	148.4	154.5	160.8	167.1	173.4	179.8	186.2	190.6
80°	104.7	110.8	117.0	123.1	129.4	135.9	142.9	149.9	156.9	163.9	168.4
82.5°	81.7	88.2	94.7	101.2	107.7	114.5	121.7	128.9	136.0	143.2	147.6
85°	50.9	57.7	64.6	71.3	78.1	85.1	92.3	99.5	106.7	113.9	118.4
87.5°	29.1	35.9	42.9	49.9	56.9	64.1	71.3	78.7	86.0	93.4	98.3
90°	15.9	23.5	32.1	40.8	49.5	58.3	66.3	75.4	83.5	92.6	98.3
92.5°	25.9	34.8	49.6	68.5	92.4	129.3	193.1	295.1	405.3	407.1	347.9
95°	46.2	52.6	66.3	83.0	111.2	164.0	281.8	516.7	809.8	985.6	970.4
97.5°	67.7	73.7	84.4	100.6	125.9	165.3	245.4	419.2	725.1	1043.4	1203.9
100°	82.8	89.1	97.6	113.3	137.3	173.9	240.5	381.8	649.5	994.9	1258.3
102.5°	99.4	104.6	111.9	128.1	150.2	185.7	245.5	365.1	592.0	913.2	1220.3
105°	125.4	128.7	137.1	150.9	170.7	204.5	256.2	354.6	533.8	802.1	1103.6
107.5°	150.8	155.7	163.5	174.8	194.7	225.2	275.3	360.2	507.2	725.0	985.6
110°	169.2	173.7	180.3	192.1	210.1	241.2	289.4	366.7	497.8	688.0	917.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	188.2	192.3	197.6	208.8	226.4	256.3	302.7	375.7	495.0	665.1	866.6
115°	214.8	218.4	222.9	233.7	250.7	280.0	323.7	389.1	493.9	639.2	809.7
117.5°	238.8	242.8	247.1	257.3	276.0	304.0	345.4	405.1	496.6	624.1	773.7
120°	255.4	259.1	263.9	273.8	292.0	320.6	361.6	416.1	500.6	616.2	753.3
122.5°	272.1	274.6	278.2	287.8	307.4	335.7	376.6	428.4	503.6	609.1	735.3
125°	293.8	295.7	300.7	309.8	329.2	358.2	396.5	445.1	509.3	599.5	710.5
127.5°	310.1	313.0	319.4	331.0	351.8	380.3	416.6	461.0	516.8	592.7	687.3
130°	320.8	323.8	331.9	345.1	366.7	394.9	430.0	472.2	521.7	588.8	672.5
132.5°	328.4	332.3	342.2	357.3	379.9	407.9	442.2	481.3	526.9	585.9	659.6
135°	341.7	345.6	357.8	374.3	395.8	424.4	458.0	493.6	533.3	581.4	643.2
137.5°	358.5	361.4	372.9	389.3	410.5	439.5	469.5	502.9	540.1	579.3	629.0
140°	367.7	370.9	383.3	399.8	419.5	447.6	477.9	509.2	542.5	577.9	621.6
142.5°	379.3	381.5	392.9	409.3	428.0	454.2	482.7	512.1	543.7	577.3	615.7
145°	396.7	398.6	408.8	423.0	441.5	465.2	492.1	518.1	546.1	576.0	608.2
147.5°	414.0	415.3	424.2	437.7	453.8	474.7	498.4	521.8	547.1	573.4	601.1
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	942.4	943.6	944.8	945.3	945.1	944.9	944.8	944.6
5°	939.6	941.2	942.9	943.6	943.3	943.2	943.0	942.8
7.5°	931.7	933.2	934.6	935.2	935.0	934.9	934.6	934.4
10°	924.3	925.8	927.2	927.8	927.6	927.5	927.2	927.0
12.5°	915.5	916.7	917.7	918.0	917.5	916.9	916.4	915.9
15°	898.9	900.2	901.4	901.6	900.8	899.9	899.1	898.3
17.5°	877.8	878.8	879.7	879.9	879.4	879.0	878.4	878.0
20°	861.6	862.2	862.8	863.1	863.1	863.1	863.1	863.1
22.5°	844.9	845.6	846.4	846.6	846.1	845.6	845.1	844.6
25°	818.5	819.3	820.1	820.0	818.9	818.0	816.9	815.9
27.5°	787.7	788.4	788.9	789.1	788.6	788.3	787.9	787.6
30°	766.7	767.1	767.5	767.7	767.4	767.2	767.0	766.8
32.5°	746.7	747.1	747.5	747.6	747.4	747.3	747.0	746.8
35°	714.3	715.0	715.6	715.9	715.9	715.9	715.9	715.9
37.5°	680.3	681.1	681.9	682.3	682.2	682.2	682.1	682.0
40°	657.3	658.2	659.0	659.6	660.0	660.4	660.8	661.2
42.5°	636.1	637.1	638.1	638.6	638.7	638.8	638.9	639.0
45°	602.1	603.5	604.9	605.7	606.0	606.2	606.4	606.6
47.5°	566.9	569.0	571.1	572.4	572.8	573.3	573.7	574.2
50°	543.5	545.8	548.0	549.5	550.1	550.7	551.3	552.0
52.5°	520.1	522.5	525.0	526.5	526.9	527.4	527.8	528.2
55°	483.3	485.6	487.9	489.4	490.2	491.1	491.9	492.7
57.5°	446.9	449.5	452.1	453.7	454.3	455.0	455.6	456.2
60°	422.0	425.1	428.2	430.0	430.6	431.2	431.9	432.5
62.5°	396.7	400.1	403.6	405.6	406.4	407.2	408.0	408.8
65°	359.0	362.1	365.2	367.1	368.0	368.8	369.6	370.4
67.5°	320.3	324.0	327.8	330.2	331.3	332.3	333.4	334.5
70°	294.0	297.9	301.8	304.3	305.6	306.8	308.1	309.3
72.5°	269.5	273.7	277.9	280.5	281.4	282.3	283.2	284.1
75°	232.4	236.5	240.6	243.2	244.2	245.2	246.2	247.3
77.5°	195.2	199.7	204.3	207.0	207.8	208.6	209.4	210.3
80°	173.0	177.5	182.0	184.7	185.6	186.4	187.2	188.0
82.5°	151.9	156.2	160.6	163.5	165.1	166.5	168.0	169.5
85°	123.0	127.5	132.1	135.1	136.8	138.4	140.1	141.7
87.5°	103.2	108.2	113.1	116.6	118.1	119.5	121.1	122.5
90°	104.1	109.9	115.6	120.7	122.2	123.7	126.1	127.5
92.5°	265.7	219.9	191.5	179.2	167.4	166.4	166.3	166.1
95°	821.6	668.7	545.7	461.7	389.6	359.9	353.1	338.0
97.5°	1181.1	1075.0	955.2	837.0	774.4	717.7	689.1	677.3
100°	1342.4	1295.9	1193.5	1088.5	1018.2	944.9	907.8	892.4
102.5°	1394.6	1430.0	1383.0	1312.8	1237.5	1185.7	1145.3	1134.1
105°	1356.4	1502.4	1552.2	1543.6	1511.8	1479.1	1459.8	1448.9
107.5°	1235.0	1428.5	1549.6	1606.4	1624.4	1625.5	1620.0	1612.9
110°	1145.5	1346.3	1496.3	1587.1	1635.1	1656.3	1664.9	1666.3



TEST NUMBER: P333246-940

CATALOG NUMBER: S125DIP-S850D1205U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1074.2	1264.9	1416.4	1522.8	1592.4	1627.6	1647.1	1656.0
115°	984.4	1148.6	1294.3	1409.7	1491.7	1542.7	1573.0	1587.7
117.5°	924.3	1066.3	1192.0	1298.1	1380.3	1433.1	1463.3	1473.0
120°	891.5	1019.4	1136.8	1230.4	1308.3	1359.3	1388.5	1398.0
122.5°	865.9	984.4	1089.3	1177.0	1246.6	1293.4	1322.6	1331.3
125°	828.8	937.8	1031.3	1108.0	1167.1	1210.6	1234.4	1245.8
127.5°	790.9	892.6	979.8	1051.7	1105.5	1144.2	1167.0	1172.8
130°	767.7	861.7	945.4	1014.7	1067.6	1102.8	1124.5	1131.8
132.5°	744.0	832.2	908.5	975.2	1027.9	1062.9	1082.8	1090.7
135°	712.1	786.3	855.3	916.2	962.9	998.1	1017.7	1025.0
137.5°	685.5	745.7	803.3	855.1	896.7	928.6	946.6	954.3
140°	670.6	721.5	771.4	816.5	855.7	883.4	899.7	905.8
142.5°	657.6	700.8	743.8	782.8	816.2	839.8	855.3	860.5
145°	641.3	674.5	707.7	736.6	762.2	780.7	792.9	797.9
147.5°	626.7	653.1	678.1	699.6	719.7	734.1	741.1	743.3
150°	618.6	641.4	661.0	679.8	695.5	708.2	712.6	713.8
152.5°	610.3	630.6	648.6	663.2	676.3	686.3	690.5	691.5
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)