

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: P333203-940

Luminaire Tested: **S125DIP-S610D1205U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333203-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
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-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5946.9 lumens
Efficiency: N/A
Efficacy: 120.4 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

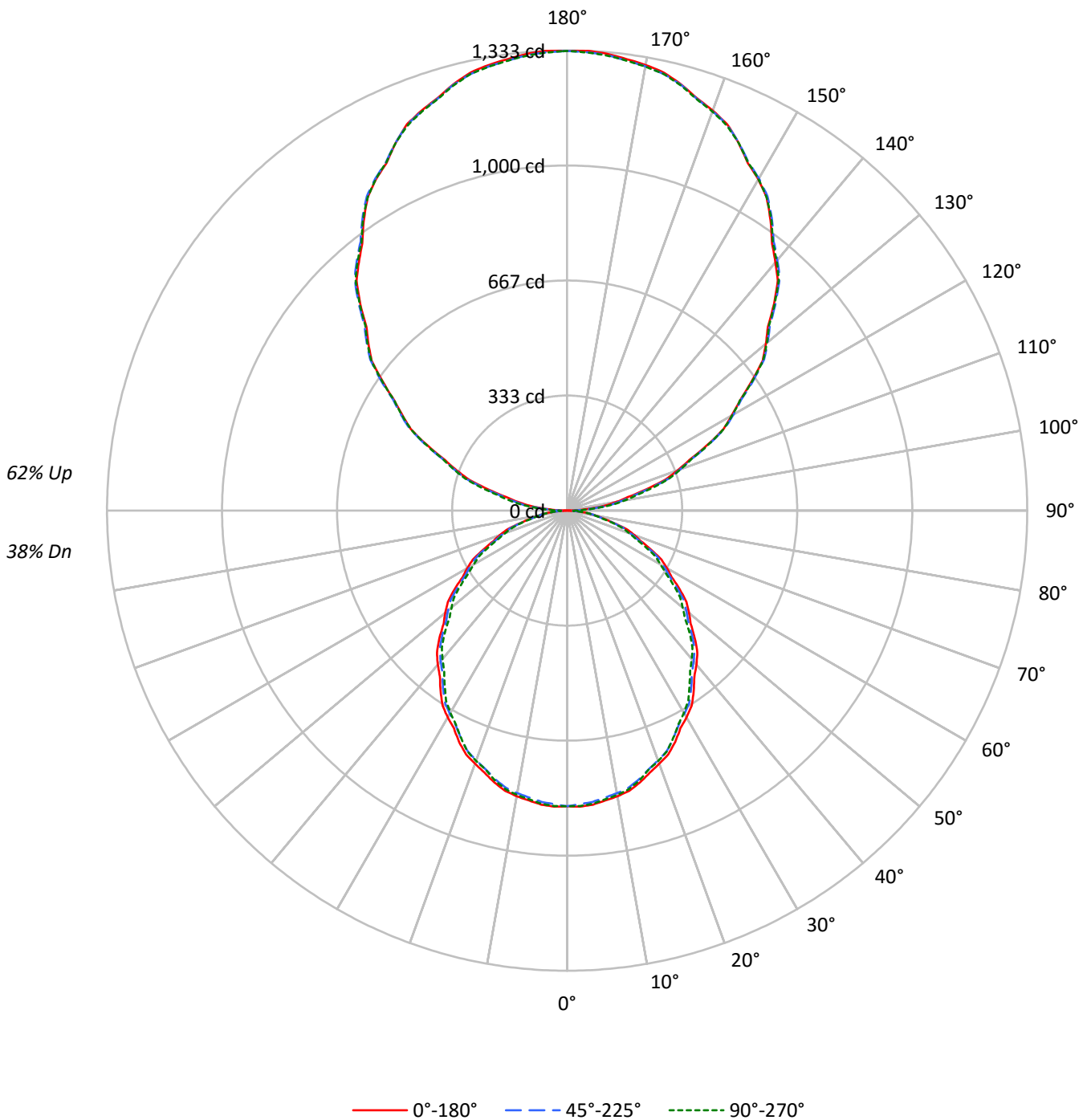
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	38
1	95	91	87	83	86	82	79	76	67	65	62	53	51	50	39	38	38	31
2	86	79	73	68	78	72	67	62	58	55	52	46	44	41	35	33	32	26
3	79	69	62	57	71	63	57	52	52	47	43	41	38	35	31	29	27	22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	25	22	20	17
6	61	49	41	35	55	45	38	33	37	31	28	29	25	23	22	20	18	15
7	56	44	36	31	51	40	33	29	33	28	24	27	23	20	20	18	16	13
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5531	5531	5531
5°	5544	5490	5525
10°	5509	5452	5483
15°	5449	5386	5409
20°	5364	5294	5304
25°	5273	5185	5181
30°	5158	5068	5043
35°	5037	4941	4872
40°	4912	4804	4736
45°	4778	4678	4585
50°	4629	4527	4391
55°	4486	4355	4234
60°	4314	4184	4035
65°	4109	3976	3842
70°	3914	3737	3609
75°	3566	3449	3331
80°	3172	3124	3046
85°	2764	2808	2660



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	1.4
10°-20°	228.1	3.8
20°-30°	336.8	5.7
30°-40°	393.0	6.6
40°-50°	394.7	6.6
50°-60°	346.5	5.8
60°-70°	258.2	4.3
70°-80°	147.6	2.5
80°-90°	45.8	0.8
90°-100°	89.2	1.5
100°-110°	263.4	4.4
110°-120°	446.1	7.5
120°-130°	587.0	9.9
130°-140°	657.8	11.1
140°-150°	644.7	10.8
150°-160°	541.5	9.1
160°-170°	359.9	6.1
170°-180°	126.0	2.1
0°-30°	645.6	10.9
0°-40°	1038.6	17.5
0°-60°	1779.7	29.9
0°-90°	2231.3	37.5
90°-120°	798.6	13.4
90°-150°	2688.1	45.2
90°-180°	3716.0	62.5
0°-180°	5946.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	855	853	847	853	852	81
15°	815	813	806	809	809	230
25°	740	736	728	729	727	340
35°	639	636	627	623	618	399
45°	523	520	512	504	502	403
55°	398	396	387	381	376	356
65°	269	267	260	254	251	267
75°	143	142	138	136	134	152
85°	37	38	38	37	36	42
90°	1	9	17	22	25	6
95°	67	70	80	87	89	72
105°	236	242	248	254	257	252
115°	447	451	453	452	451	442
125°	652	658	659	657	656	584
135°	848	854	855	855	851	653
145°	1027	1031	1034	1034	1031	642
155°	1175	1175	1176	1180	1175	541
165°	1278	1276	1277	1280	1274	360
175°	1328	1324	1324	1330	1323	126
180°	1332	1332	1332	1332	1332	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4
2.5°	858.5	858.2	857.8	857.5	857.1	856.3	855.2	853.9	852.7	851.5	852.7
5°	855.1	854.7	854.4	854.1	853.8	852.9	851.4	849.9	848.4	846.9	848.3
7.5°	847.1	846.9	846.6	846.2	846.0	845.0	843.3	841.7	840.0	838.4	839.6
10°	840.1	839.8	839.5	839.2	838.9	837.9	836.2	834.6	832.9	831.3	832.5
12.5°	831.4	830.9	830.4	829.8	829.3	828.2	826.7	825.2	823.6	822.1	823.0
15°	815.0	814.6	814.1	813.7	813.2	812.2	810.6	808.9	807.2	805.6	806.3
17.5°	796.2	795.6	794.9	794.2	793.5	792.4	790.7	788.9	787.2	785.5	786.4
20°	780.5	780.2	779.9	779.6	779.3	778.2	776.2	774.3	772.3	770.3	771.4
22.5°	764.7	764.2	763.7	763.1	762.6	761.4	759.6	757.8	755.9	754.0	754.7
25°	739.9	739.0	738.3	737.6	736.8	735.5	733.5	731.6	729.6	727.6	728.0
27.5°	710.7	710.2	709.8	709.4	708.9	707.7	705.6	703.6	701.6	699.6	699.6
30°	691.7	691.3	690.8	690.4	689.9	688.6	686.3	684.0	681.8	679.6	679.2
32.5°	671.1	670.5	669.8	669.1	668.3	667.0	665.0	663.0	660.9	659.0	658.4
35°	638.9	638.3	637.7	637.1	636.5	635.2	633.0	630.9	628.8	626.7	626.0
37.5°	605.4	604.7	604.0	603.2	602.4	601.0	599.1	597.1	595.0	593.1	592.0
40°	582.6	581.9	581.1	580.4	579.6	578.2	576.1	574.0	571.9	569.8	568.5
42.5°	558.3	557.7	557.0	556.3	555.7	554.4	552.2	550.2	548.0	545.9	544.7
45°	523.1	522.5	521.8	521.2	520.7	519.4	517.6	515.9	514.0	512.2	510.4
47.5°	485.1	485.1	485.2	485.2	485.2	484.1	482.0	479.8	477.7	475.5	473.7
50°	460.7	460.2	459.8	459.3	458.9	457.8	455.9	454.1	452.4	450.6	448.6
52.5°	435.8	435.4	435.2	434.8	434.4	433.3	431.4	429.4	427.6	425.6	423.9
55°	398.4	397.9	397.4	397.0	396.5	395.3	393.2	391.1	389.0	386.8	385.5
57.5°	358.9	358.7	358.5	358.2	358.0	357.0	355.2	353.4	351.6	349.9	348.1
60°	334.0	333.4	332.8	332.2	331.6	330.5	328.9	327.2	325.5	323.9	322.4
62.5°	308.0	307.6	307.0	306.6	306.0	305.1	303.7	302.3	300.9	299.4	297.8
65°	268.9	268.7	268.4	268.0	267.8	266.8	265.1	263.5	261.8	260.2	258.8
67.5°	231.1	230.5	229.9	229.3	228.6	227.7	226.5	225.2	224.0	222.7	221.6
70°	207.3	206.6	205.8	205.1	204.3	203.2	201.9	200.5	199.2	197.9	196.9
72.5°	181.3	180.7	180.3	179.8	179.2	178.5	177.7	176.8	175.9	175.0	174.1
75°	142.9	142.7	142.3	142.0	141.8	141.2	140.4	139.7	138.9	138.2	137.8
77.5°	107.6	107.5	107.4	107.2	107.1	106.8	106.4	106.0	105.6	105.1	104.9
80°	85.3	85.3	85.3	85.3	85.3	85.2	84.9	84.6	84.4	84.0	83.8
82.5°	65.9	65.6	65.4	65.1	64.9	64.7	64.6	64.6	64.6	64.5	64.2
85°	37.3	37.5	37.5	37.7	37.9	37.9	37.9	37.9	37.9	37.9	37.8
87.5°	14.8	15.2	15.6	16.0	16.3	16.6	16.8	17.0	17.2	17.4	17.7
90°	1.1	2.9	4.7	6.6	8.4	10.2	11.8	13.4	15.0	16.6	17.7
92.5°	25.1	26.4	27.6	29.0	30.2	31.8	33.9	35.8	37.8	39.8	41.3
95°	67.3	67.8	68.3	68.8	69.2	70.5	72.9	75.2	77.5	79.8	81.4
97.5°	111.9	112.1	112.3	112.4	112.6	114.3	117.5	120.6	123.9	127.1	128.6
100°	145.1	145.1	145.1	145.1	145.1	146.6	149.5	152.6	155.5	158.5	160.6
102.5°	180.7	181.6	182.5	183.5	184.4	185.7	187.2	188.7	190.2	191.7	193.9
105°	236.2	237.4	238.5	239.7	240.9	242.1	243.5	244.9	246.3	247.6	249.1
107.5°	297.6	298.7	299.9	301.0	302.2	303.3	304.3	305.4	306.5	307.6	308.3
110°	339.9	341.0	342.1	343.3	344.5	345.4	346.1	346.8	347.5	348.1	348.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	383.0	383.6	384.1	384.8	385.4	386.1	387.0	387.9	388.7	389.6	389.9
115°	446.6	447.5	448.4	449.3	450.3	450.9	451.5	451.9	452.4	452.8	452.6
117.5°	510.4	510.9	511.3	511.7	512.1	512.5	512.9	513.4	513.7	514.2	514.3
120°	550.2	551.3	552.5	553.7	554.8	555.5	555.7	556.0	556.2	556.4	556.4
122.5°	593.3	593.8	594.1	594.6	594.9	595.5	596.1	596.7	597.3	597.9	597.7
125°	651.8	653.2	654.5	655.9	657.3	658.1	658.4	658.5	658.8	659.1	658.5
127.5°	714.0	714.7	715.5	716.3	717.1	717.6	717.9	718.2	718.5	718.7	718.5
130°	751.3	752.4	753.6	754.7	755.8	756.7	757.2	757.6	758.0	758.5	758.3
132.5°	788.5	790.4	792.4	794.2	796.1	797.0	796.9	796.8	796.7	796.7	796.4
135°	847.7	849.0	850.4	851.8	853.2	854.0	854.2	854.4	854.6	854.9	854.9
137.5°	903.1	904.5	905.8	907.1	908.5	909.5	909.9	910.4	911.0	911.4	911.7
140°	938.8	940.0	941.1	942.3	943.4	944.3	945.0	945.7	946.4	947.1	947.5
142.5°	974.5	975.4	976.4	977.3	978.3	979.3	980.1	981.0	981.9	982.8	983.0
145°	1026.9	1027.8	1028.8	1029.7	1030.6	1031.4	1032.1	1032.8	1033.4	1034.1	1034.1
147.5°	1075.4	1075.8	1076.4	1076.9	1077.4	1077.9	1078.5	1079.1	1079.6	1080.1	1080.7
150°	1107.7	1107.5	1107.2	1107.1	1106.8	1107.1	1108.0	1108.9	1109.9	1110.8	1110.8
152.5°	1134.3	1134.5	1134.9	1135.2	1135.5	1135.9	1136.2	1136.6	1137.0	1137.4	1137.9
155°	1175.1	1175.1	1175.1	1175.1	1175.1	1175.2	1175.5	1175.6	1175.9	1176.1	1177.1
157.5°	1211.6	1211.0	1210.5	1210.1	1209.5	1209.3	1209.6	1209.9	1210.1	1210.3	1211.2
160°	1233.1	1232.4	1231.7	1231.0	1230.3	1230.1	1230.3	1230.6	1230.8	1231.0	1231.9
162.5°	1252.1	1251.7	1251.2	1250.6	1250.1	1249.9	1249.9	1250.0	1250.0	1250.1	1251.2
165°	1277.6	1277.2	1276.8	1276.3	1275.8	1275.7	1275.9	1276.1	1276.4	1276.6	1277.6
167.5°	1299.2	1298.2	1297.4	1296.5	1295.5	1295.0	1295.0	1295.0	1295.0	1295.0	1296.5
170°	1310.8	1309.9	1308.9	1308.1	1307.2	1306.6	1306.6	1306.6	1306.6	1306.6	1308.1
172.5°	1319.1	1318.2	1317.2	1316.3	1315.5	1314.9	1314.9	1314.9	1314.9	1314.9	1316.3
175°	1328.4	1327.5	1326.6	1325.6	1324.7	1324.3	1324.3	1324.3	1324.3	1324.3	1325.6
177.5°	1333.2	1332.5	1331.7	1331.0	1330.3	1329.8	1329.6	1329.5	1329.2	1329.0	1330.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4
2.5°	853.9	855.2	856.3	856.8	856.8	856.6	856.5	856.4
5°	849.6	851.0	852.3	852.9	852.7	852.7	852.5	852.3
7.5°	841.0	842.3	843.6	844.3	844.1	843.9	843.8	843.6
10°	833.7	834.9	836.2	836.7	836.5	836.3	836.2	836.1
12.5°	824.0	825.0	825.9	826.4	826.3	826.3	826.3	826.3
15°	807.1	807.8	808.6	809.0	809.0	809.0	809.0	809.0
17.5°	787.4	788.3	789.3	789.3	788.5	787.8	787.1	786.3
20°	772.4	773.5	774.5	774.7	773.9	773.2	772.4	771.7
22.5°	755.5	756.2	756.9	757.0	756.4	755.9	755.4	754.9
25°	728.3	728.5	728.9	728.8	728.3	727.9	727.5	727.0
27.5°	699.7	699.8	699.8	699.6	699.2	698.7	698.3	697.9
30°	678.9	678.7	678.3	678.0	677.5	677.1	676.6	676.2
32.5°	657.9	657.3	656.7	656.1	655.3	654.5	653.6	652.8
35°	625.2	624.5	623.7	622.7	621.5	620.3	619.1	617.9
37.5°	590.8	589.8	588.6	587.7	587.0	586.4	585.7	585.0
40°	567.0	565.7	564.4	563.5	563.0	562.6	562.1	561.7
42.5°	543.5	542.2	541.0	540.0	539.3	538.7	538.0	537.3
45°	508.5	506.8	505.0	503.8	503.4	502.9	502.5	502.0
47.5°	471.8	469.9	468.1	466.7	465.7	464.6	463.5	462.4
50°	446.7	444.7	442.7	441.2	440.1	439.1	438.0	437.0
52.5°	422.1	420.4	418.7	417.3	416.2	414.9	413.8	412.6
55°	384.1	382.8	381.5	380.2	379.2	378.1	377.1	376.0
57.5°	346.3	344.6	342.9	341.7	341.2	340.5	340.0	339.5
60°	320.8	319.3	317.8	316.6	315.5	314.4	313.3	312.4
62.5°	296.2	294.6	292.9	291.8	291.0	290.1	289.3	288.5
65°	257.4	256.1	254.8	253.8	253.2	252.5	252.0	251.4
67.5°	220.5	219.4	218.2	217.4	217.0	216.7	216.3	216.0
70°	196.0	195.1	194.2	193.5	192.9	192.3	191.6	191.1
72.5°	173.0	172.0	170.9	170.1	169.5	169.0	168.4	167.7
75°	137.3	136.9	136.4	135.9	135.3	134.6	134.1	133.5
77.5°	104.6	104.3	104.1	103.7	103.3	102.9	102.5	102.0
80°	83.7	83.6	83.4	83.2	82.8	82.6	82.3	81.9
82.5°	63.9	63.7	63.4	63.2	63.2	63.1	63.0	63.0
85°	37.6	37.5	37.4	37.1	36.8	36.5	36.2	35.9
87.5°	17.8	18.1	18.4	18.4	18.3	18.2	18.1	18.0
90°	18.9	20.1	21.2	22.1	22.8	23.5	24.2	24.9
92.5°	42.8	44.3	45.8	46.9	47.3	47.9	48.4	48.9
95°	83.0	84.6	86.2	87.3	87.7	88.2	88.6	89.1
97.5°	130.1	131.6	133.1	134.0	134.3	134.6	134.8	135.1
100°	162.6	164.8	166.8	168.1	168.5	169.0	169.5	170.0
102.5°	196.2	198.5	200.7	202.2	202.9	203.5	204.1	204.7
105°	250.4	251.8	253.2	254.2	254.9	255.6	256.3	257.0
107.5°	308.9	309.6	310.3	310.7	310.6	310.6	310.5	310.4
110°	349.6	350.3	350.9	351.2	350.9	350.7	350.4	350.3



TEST NUMBER: P333203-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	390.3	390.6	390.9	390.8	390.5	390.0	389.6	389.2
115°	452.4	452.1	451.9	451.7	451.5	451.2	450.9	450.8
117.5°	514.5	514.7	514.9	514.5	513.6	512.7	511.8	510.9
120°	556.4	556.4	556.4	556.0	555.1	554.1	553.2	552.3
122.5°	597.5	597.4	597.2	596.7	595.9	595.2	594.5	593.8
125°	658.1	657.6	657.2	656.8	656.7	656.4	656.1	655.9
127.5°	718.3	718.0	717.8	717.5	717.0	716.5	716.0	715.6
130°	758.0	757.8	757.6	757.2	756.8	756.3	755.8	755.4
132.5°	796.2	795.9	795.7	795.3	794.6	794.0	793.4	792.7
135°	854.9	854.9	854.9	854.4	853.5	852.6	851.7	850.7
137.5°	912.0	912.3	912.6	912.1	911.0	909.8	908.7	907.5
140°	948.0	948.5	949.0	948.6	947.4	946.3	945.1	944.0
142.5°	983.3	983.6	983.8	983.4	982.2	981.1	980.0	978.8
145°	1034.1	1034.1	1034.1	1033.8	1033.1	1032.4	1031.7	1031.0
147.5°	1081.3	1081.8	1082.4	1081.8	1080.3	1078.7	1077.2	1075.6
150°	1110.8	1110.8	1110.8	1110.6	1110.1	1109.6	1109.2	1108.8
152.5°	1138.4	1139.0	1139.5	1139.4	1138.6	1137.7	1136.9	1136.1
155°	1177.9	1178.8	1179.8	1179.6	1178.5	1177.3	1176.3	1175.1
157.5°	1212.1	1213.1	1214.0	1213.7	1212.2	1210.7	1209.2	1207.6
160°	1232.9	1233.8	1234.7	1234.6	1233.4	1232.3	1231.1	1230.0
162.5°	1252.3	1253.4	1254.5	1254.4	1253.0	1251.7	1250.4	1249.0
165°	1278.4	1279.3	1280.3	1280.1	1278.7	1277.3	1275.9	1274.5
167.5°	1297.8	1299.2	1300.6	1300.6	1299.1	1297.7	1296.3	1294.9
170°	1309.4	1310.8	1312.2	1312.1	1310.5	1308.9	1307.2	1305.6
172.5°	1317.7	1319.1	1320.4	1320.4	1319.0	1317.6	1316.2	1314.7
175°	1327.0	1328.4	1329.8	1329.7	1328.1	1326.5	1324.8	1323.2
177.5°	1331.2	1332.4	1333.5	1333.4	1332.1	1330.8	1329.5	1328.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5

(END OF REPORT)