

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: P333200-940

Luminaire Tested: **S125DIP-S610D1205U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333200-940
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-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP 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: 5858.9 lumens
Efficiency: N/A
Efficacy: 118.6 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

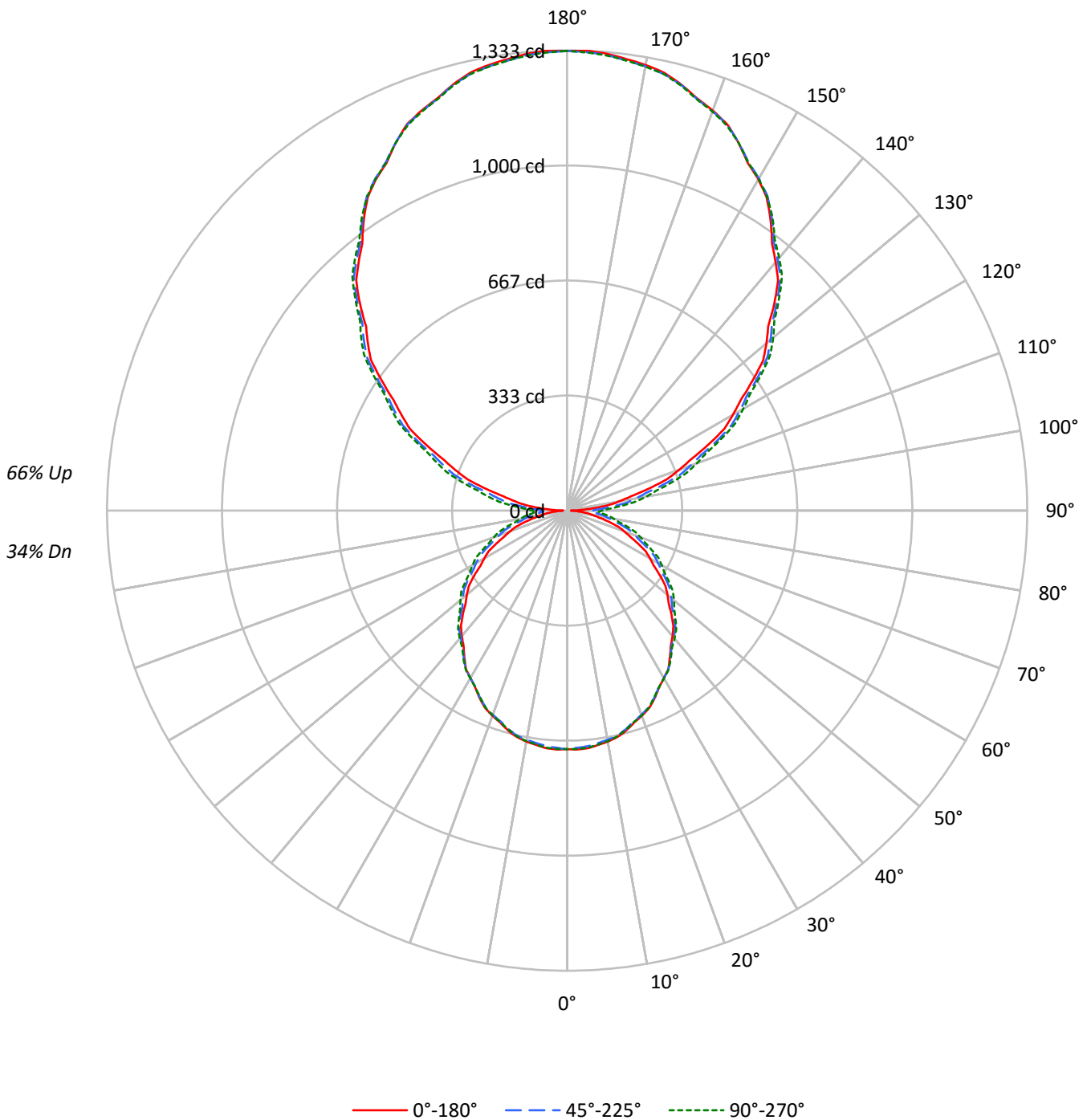
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	75	75	75		58	58	58		42	42	42	34
1	94	89	85	82	84	81	77	74	65	62	60		50	48	47		36	35	34	28
2	85	78	71	66	77	70	65	60	56	52	49		43	41	39		31	30	28	23
3	78	68	61	55	70	62	55	50	49	45	41		38	35	32		28	26	24	19
4	71	60	52	46	64	54	48	42	44	39	35		34	30	28		25	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30		30	27	24		22	20	18	14
6	60	48	40	34	54	43	36	31	35	30	26		27	23	21		20	17	16	12
7	55	43	35	30	49	39	32	27	32	26	23		25	21	18		18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20		23	19	16		17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18		21	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.1
10°-20°	185.5	3.2
20°-30°	275.9	4.7
30°-40°	326.8	5.6
40°-50°	337.9	5.8
50°-60°	311.2	5.3
60°-70°	251.6	4.3
70°-80°	168.5	2.9
80°-90°	90.3	1.5
90°-100°	138.2	2.4
100°-110°	299.5	5.1
110°-120°	470.3	8.0
120°-130°	600.8	10.3
130°-140°	663.8	11.3
140°-150°	645.9	11.0
150°-160°	541.5	9.2
160°-170°	359.9	6.1
170°-180°	126.0	2.2
0°-30°	526.7	9.0
0°-40°	853.5	14.6
0°-60°	1502.6	25.6
0°-90°	2012.9	34.4
90°-120°	908.0	15.5
90°-150°	2818.5	48.1
90°-180°	3846.0	65.6
0°-180°	5858.9	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	101	11
95°	76	97	129	150	158	79
105°	242	259	285	304	312	259
115°	451	460	479	490	494	446
125°	654	660	675	683	686	586
135°	849	855	860	869	868	654
145°	1028	1031	1034	1037	1037	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°	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	26.6	31.7	36.9	42.1	47.4	52.9	58.3	63.8	69.2	72.9
90°	11.9	18.5	25.2	31.8	38.5	45.2	52.0	58.7	65.4	72.1	76.8
92.5°	34.9	40.6	46.4	52.1	57.8	64.3	71.5	78.7	86.0	93.2	98.0
95°	76.2	80.5	84.9	89.3	93.6	99.6	107.0	114.4	121.8	129.2	134.2
97.5°	119.9	123.6	127.3	131.0	134.7	140.6	148.7	156.9	165.0	173.1	177.8
100°	152.5	155.7	158.8	162.0	165.1	170.7	178.4	186.3	194.1	201.9	207.1
102.5°	187.6	191.5	195.3	199.1	203.0	208.0	214.3	220.4	226.7	232.9	238.2
105°	242.4	245.9	249.5	253.1	256.6	261.4	267.2	273.1	279.0	284.9	289.3
107.5°	302.9	306.1	309.2	312.5	315.7	319.9	325.4	330.7	336.2	341.5	345.3
110°	344.6	347.6	350.5	353.5	356.4	360.3	365.3	370.2	375.1	380.0	383.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	387.7	389.8	391.8	393.9	395.9	399.4	404.4	409.4	414.3	419.3	422.3
115°	450.7	452.6	454.6	456.6	458.6	461.7	466.1	470.5	474.8	479.2	481.7
117.5°	513.8	515.0	516.0	517.1	518.3	520.8	525.0	529.1	533.2	537.3	540.1
120°	553.6	555.2	556.8	558.4	560.0	562.7	566.3	570.1	573.7	577.5	580.0
122.5°	596.2	596.8	597.4	598.1	598.7	600.9	604.9	608.9	612.8	616.7	619.0
125°	654.5	655.7	656.9	658.2	659.4	661.6	664.9	668.2	671.4	674.6	676.5
127.5°	716.0	716.6	717.2	717.9	718.5	720.2	722.9	725.7	728.4	731.2	733.2
130°	753.3	754.3	755.3	756.3	757.3	759.1	761.6	764.2	766.8	769.4	771.2
132.5°	790.1	791.9	793.8	795.6	797.5	799.2	800.7	802.3	803.8	805.3	807.2
135°	849.0	850.2	851.4	852.7	853.9	855.2	856.4	857.7	859.0	860.3	862.3
137.5°	904.4	905.6	906.8	908.0	909.3	910.3	911.4	912.4	913.4	914.4	916.5
140°	939.5	940.7	941.8	942.9	944.1	945.1	945.9	946.7	947.6	948.4	950.6
142.5°	975.1	976.0	976.8	977.7	978.5	979.4	980.3	981.2	982.1	983.0	984.7
145°	1027.5	1028.3	1029.1	1029.8	1030.6	1031.4	1032.1	1032.8	1033.4	1034.1	1034.9
147.5°	1075.4	1075.8	1076.4	1076.9	1077.4	1077.9	1078.5	1079.1	1079.6	1080.1	1080.9
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°	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°	76.6	80.3	83.9	86.4	87.6	88.7	90.0	91.1
90°	81.3	86.0	90.6	93.8	95.5	97.3	99.0	100.8
92.5°	102.9	107.8	112.6	115.8	117.4	119.0	120.6	122.1
95°	139.1	144.0	148.9	152.1	153.6	155.2	156.7	158.2
97.5°	182.4	187.2	191.8	194.8	196.1	197.4	198.8	200.0
100°	212.4	217.6	222.8	226.1	227.5	228.9	230.2	231.6
102.5°	243.5	248.8	254.0	257.5	259.0	260.6	262.2	263.7
105°	293.7	298.1	302.5	305.6	307.3	309.1	310.8	312.5
107.5°	348.9	352.6	356.2	358.6	359.4	360.3	361.2	362.0
110°	387.1	390.7	394.2	396.4	397.3	398.1	398.9	399.7



TEST NUMBER: P333200-940

CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	425.4	428.5	431.5	433.4	434.0	434.7	435.3	436.0
115°	484.2	486.7	489.2	490.7	491.4	492.0	492.8	493.5
117.5°	542.8	545.5	548.3	549.7	549.8	549.9	550.0	550.2
120°	582.6	585.1	587.7	589.0	589.0	588.9	588.9	588.9
122.5°	621.3	623.5	625.7	627.0	627.1	627.3	627.5	627.6
125°	678.5	680.5	682.4	683.7	684.1	684.7	685.2	685.7
127.5°	735.2	737.2	739.1	740.4	740.8	741.2	741.6	742.0
130°	773.1	775.0	776.9	777.9	778.2	778.6	778.8	779.1
132.5°	809.0	810.9	812.8	813.8	813.8	813.7	813.7	813.7
135°	864.2	866.2	868.1	869.1	868.9	868.7	868.5	868.3
137.5°	918.6	920.6	922.7	923.4	922.8	922.3	921.8	921.2
140°	952.7	954.8	956.9	957.7	957.2	956.6	956.1	955.5
142.5°	986.4	988.1	989.8	990.3	989.8	989.3	988.7	988.2
145°	1035.6	1036.4	1037.1	1037.5	1037.4	1037.3	1037.2	1037.1
147.5°	1081.7	1082.5	1083.3	1083.1	1081.7	1080.5	1079.1	1077.9
150°	1110.8	1110.8	1110.8	1110.6	1110.4	1110.0	1109.7	1109.5
152.5°	1138.4	1139.0	1139.5	1139.4	1138.6	1137.8	1137.0	1136.2
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)