

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: P333204

Luminaire Tested: **S125DIP-S610D1205U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333204
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-S610D1205U835-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 6824.2 lumens
Efficiency: N/A
Efficacy: 138.1 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

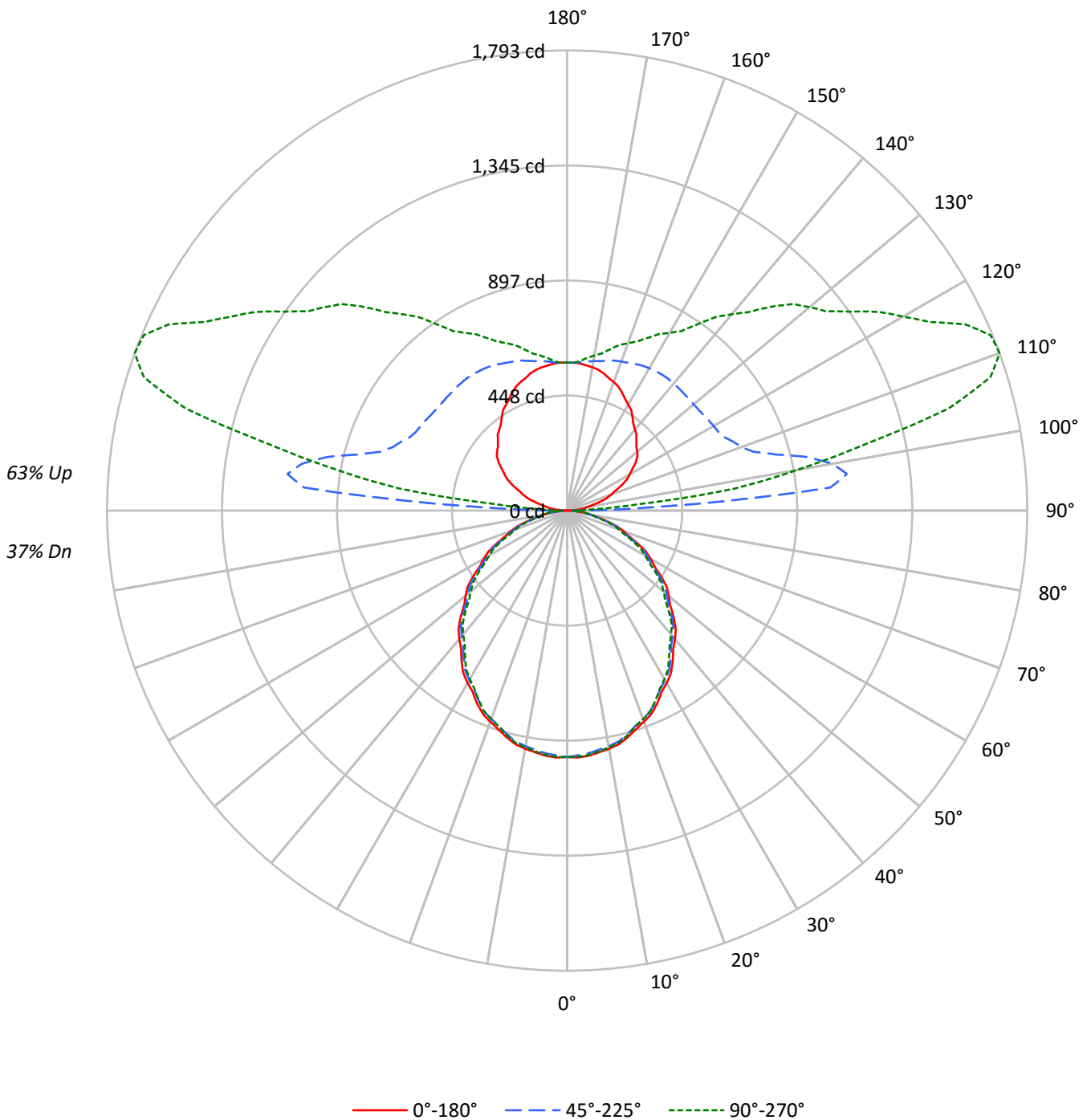
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333204

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-F4

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	59	59	59	44	44	44	37
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	39	38	37	31
2	86	79	73	68	78	72	67	62	58	54	51	46	43	41	34	32	31	26
3	79	69	62	56	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	25	23	19
5	66	54	47	41	59	50	43	38	41	35	31	32	28	26	24	22	20	16
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	28	33	28	24	26	23	20	20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6203	6203	6203
5°	6217	6157	6196
10°	6178	6114	6149
15°	6111	6040	6066
20°	6016	5937	5948
25°	5912	5815	5810
30°	5785	5683	5655
35°	5649	5541	5463
40°	5509	5387	5311
45°	5358	5246	5142
50°	5191	5077	4924
55°	5031	4884	4748
60°	4839	4691	4525
65°	4609	4459	4308
70°	4390	4190	4047
75°	4000	3868	3735
80°	3559	3503	3418
85°	3097	3149	2986



TEST NUMBER: P333204

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.3
10°-20°	255.8	3.7
20°-30°	377.7	5.5
30°-40°	440.7	6.5
40°-50°	442.6	6.5
50°-60°	388.5	5.7
60°-70°	289.5	4.2
70°-80°	165.5	2.4
80°-90°	51.4	0.8
90°-100°	417.8	6.1
100°-110°	898.0	13.2
110°-120°	842.8	12.3
120°-130°	683.0	10.0
130°-140°	548.1	8.0
140°-150°	413.6	6.1
150°-160°	291.2	4.3
160°-170°	171.6	2.5
170°-180°	55.8	0.8
0°-30°	724.0	10.6
0°-40°	1164.7	17.1
0°-60°	1995.9	29.2
0°-90°	2502.3	36.7
90°-120°	2158.6	31.6
90°-150°	3803.4	55.7
90°-180°	4322.0	63.3
0°-180°	6824.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	957	950	956	956	91
15°	914	911	903	907	907	257
25°	830	826	816	817	815	382
35°	716	713	703	699	693	448
45°	587	583	574	566	563	452
55°	447	444	434	427	422	399
65°	302	300	292	285	282	299
75°	160	159	155	153	150	171
85°	42	42	42	42	40	47
90°	1	10	19	24	27	5
95°	38	113	1030	467	273	41
105°	131	184	842	1659	1540	138
115°	235	283	676	1458	1715	231
125°	325	381	648	1160	1351	289
135°	381	458	644	972	1122	296
145°	444	508	646	805	885	278
155°	507	545	630	712	742	233
165°	553	568	604	641	651	156
175°	575	575	580	587	584	55
180°	576	576	576	576	576	



TEST NUMBER: P333204

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	962.8	962.4	962.0	961.6	961.2	960.3	959.0	957.6	956.3	954.9	956.3
5°	958.9	958.5	958.2	957.8	957.5	956.5	954.8	953.1	951.4	949.7	951.3
7.5°	950.0	949.7	949.4	949.0	948.7	947.6	945.7	943.9	942.0	940.2	941.6
10°	942.1	941.8	941.5	941.1	940.8	939.7	937.8	936.0	934.1	932.3	933.6
12.5°	932.4	931.8	931.2	930.6	930.0	928.8	927.1	925.4	923.6	921.9	923.0
15°	914.0	913.5	913.0	912.5	912.0	910.8	909.0	907.1	905.2	903.4	904.2
17.5°	892.9	892.2	891.4	890.7	889.9	888.6	886.7	884.7	882.8	880.9	881.9
20°	875.3	874.9	874.6	874.3	873.9	872.7	870.5	868.3	866.1	863.9	865.1
22.5°	857.6	857.0	856.4	855.8	855.2	853.9	851.8	849.8	847.7	845.6	846.4
25°	829.7	828.8	828.0	827.2	826.3	824.8	822.6	820.4	818.2	816.0	816.4
27.5°	797.0	796.5	796.0	795.5	795.0	793.6	791.3	789.1	786.8	784.6	784.6
30°	775.7	775.2	774.7	774.2	773.7	772.2	769.7	767.1	764.6	762.1	761.7
32.5°	752.6	751.9	751.1	750.3	749.5	748.0	745.8	743.5	741.2	739.0	738.4
35°	716.5	715.8	715.1	714.5	713.8	712.3	709.9	707.5	705.2	702.8	702.0
37.5°	678.9	678.1	677.3	676.4	675.6	674.0	671.8	669.6	667.3	665.1	663.9
40°	653.4	652.6	651.7	650.9	650.0	648.4	646.1	643.7	641.3	639.0	637.5
42.5°	626.1	625.4	624.6	623.9	623.2	621.7	619.3	617.0	614.6	612.2	610.9
45°	586.6	585.9	585.2	584.5	583.9	582.5	580.5	578.5	576.4	574.4	572.4
47.5°	544.0	544.0	544.1	544.1	544.1	542.9	540.5	538.1	535.7	533.2	531.2
50°	516.7	516.1	515.6	515.1	514.6	513.4	511.3	509.3	507.3	505.3	503.1
52.5°	488.7	488.3	488.0	487.6	487.2	485.9	483.8	481.6	479.5	477.3	475.4
55°	446.8	446.2	445.7	445.2	444.7	443.3	440.9	438.6	436.2	433.8	432.3
57.5°	402.5	402.3	402.0	401.7	401.5	400.3	398.3	396.3	394.3	392.4	390.4
60°	374.6	373.9	373.2	372.5	371.9	370.6	368.8	366.9	365.0	363.2	361.5
62.5°	345.4	344.9	344.3	343.8	343.2	342.2	340.6	339.0	337.4	335.8	334.0
65°	301.6	301.3	301.0	300.6	300.3	299.2	297.3	295.5	293.6	291.8	290.2
67.5°	259.2	258.5	257.8	257.1	256.4	255.4	254.0	252.6	251.2	249.8	248.5
70°	232.5	231.7	230.8	230.0	229.1	227.9	226.4	224.9	223.4	221.9	220.8
72.5°	203.3	202.7	202.2	201.6	201.0	200.2	199.3	198.3	197.3	196.3	195.2
75°	160.3	160.0	159.6	159.3	159.0	158.4	157.5	156.7	155.8	155.0	154.5
77.5°	120.7	120.5	120.4	120.2	120.1	119.8	119.3	118.9	118.4	117.9	117.6
80°	95.7	95.7	95.7	95.7	95.7	95.6	95.2	94.9	94.6	94.2	94.0
82.5°	73.9	73.6	73.3	73.0	72.8	72.6	72.5	72.5	72.4	72.3	72.0
85°	41.8	42.0	42.1	42.3	42.5	42.5	42.5	42.5	42.5	42.5	42.4
87.5°	16.6	16.9	17.3	17.8	18.3	18.7	18.8	19.1	19.2	19.5	19.8
90°	1.2	2.3	4.6	7.0	9.3	11.6	12.8	15.1	16.3	18.6	19.8
92.5°	14.2	17.2	27.0	41.4	61.4	95.3	158.7	265.2	380.7	374.6	303.3
95°	38.3	39.5	48.8	61.6	87.1	139.4	263.8	519.4	840.1	1029.5	1007.4
97.5°	63.7	65.1	71.6	84.4	107.4	145.0	227.3	414.6	750.2	1099.4	1274.7
100°	81.3	83.7	88.3	101.1	123.2	158.0	225.4	376.5	669.3	1049.2	1339.7
102.5°	100.9	102.3	106.0	119.7	139.9	173.8	233.8	360.7	607.9	960.9	1300.7
105°	131.3	131.3	137.1	148.7	167.3	199.9	251.0	354.4	548.4	842.4	1175.9
107.5°	161.0	163.4	168.9	178.5	197.8	227.0	276.5	365.1	523.3	760.8	1048.6
110°	182.4	184.8	189.4	199.9	217.3	247.5	295.1	375.3	515.9	722.7	976.0



TEST NUMBER: P333204

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	203.8	206.1	209.8	220.3	237.7	267.0	312.8	388.3	515.9	700.4	922.1
115°	234.7	237.0	240.5	251.0	268.4	297.5	340.5	407.8	519.4	676.3	863.3
117.5°	262.6	266.1	269.8	280.3	300.0	328.1	368.8	430.2	527.1	664.4	828.2
120°	281.2	284.7	289.3	299.8	319.5	348.6	389.3	445.0	534.5	658.8	808.7
122.5°	300.7	303.3	307.0	317.4	339.1	368.1	408.8	461.8	541.0	654.2	792.0
125°	325.3	327.7	333.5	343.9	366.0	396.2	434.6	484.5	551.9	648.4	769.2
127.5°	344.6	348.1	355.6	368.8	392.3	422.5	459.4	505.5	564.2	645.6	748.3
130°	356.7	360.2	369.5	384.6	409.0	439.2	475.2	519.4	571.7	643.7	734.4
132.5°	366.0	370.4	381.6	398.6	423.9	454.1	490.1	531.5	580.0	643.7	723.2
135°	381.1	385.8	399.7	418.3	442.7	474.1	510.1	548.4	591.4	643.7	710.0
137.5°	400.2	403.7	416.7	435.3	459.2	491.5	524.3	561.0	601.9	645.1	698.1
140°	411.3	414.8	428.8	447.4	469.4	500.8	534.5	569.4	606.5	646.0	692.5
142.5°	424.3	426.9	439.9	458.5	479.7	509.2	541.0	574.0	609.3	647.0	687.9
145°	443.9	446.2	457.8	474.1	495.0	521.7	551.9	581.0	612.4	646.0	680.9
147.5°	464.3	465.7	475.7	490.8	508.9	532.4	558.9	585.2	613.5	643.0	673.7
150°	476.4	478.7	486.9	502.0	518.2	538.0	563.5	588.0	613.5	640.2	668.1
152.5°	489.4	490.8	498.0	511.3	526.6	544.5	568.2	589.8	612.6	636.5	661.6
155°	506.6	506.6	513.6	525.2	536.8	553.1	572.8	591.4	610.0	629.8	650.7
157.5°	522.0	521.7	527.3	537.3	547.5	559.8	576.8	592.6	607.0	622.8	640.5
160°	532.2	531.0	535.7	543.8	553.1	563.5	578.7	592.6	604.2	618.2	632.1
162.5°	540.5	539.4	544.0	551.2	558.7	567.3	580.5	591.7	601.4	612.6	624.7
165°	553.1	550.8	554.3	560.1	564.7	571.7	581.0	590.3	597.2	604.2	613.5
167.5°	561.5	560.3	562.4	565.6	568.9	573.3	581.0	587.5	590.7	596.1	602.6
170°	567.0	565.9	567.0	569.4	571.7	575.2	581.0	585.6	588.0	591.4	596.1
172.5°	570.8	568.7	569.8	572.1	573.5	575.2	580.0	583.8	584.2	585.9	589.6
175°	575.2	572.8	574.0	575.2	575.2	575.2	578.7	581.0	579.8	579.8	581.0
177.5°	577.3	575.4	575.4	576.3	575.4	575.4	577.3	578.2	576.3	576.3	577.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3



TEST NUMBER: P333204

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	957.6	959.0	960.3	960.9	960.8	960.6	960.5	960.4
5°	952.8	954.3	955.8	956.5	956.3	956.2	956.0	955.8
7.5°	943.1	944.6	946.1	946.8	946.6	946.4	946.3	946.1
10°	935.0	936.3	937.7	938.3	938.1	937.9	937.7	937.6
12.5°	924.1	925.2	926.2	926.8	926.7	926.7	926.7	926.6
15°	905.1	905.9	906.8	907.2	907.2	907.2	907.2	907.2
17.5°	883.0	884.0	885.1	885.2	884.3	883.5	882.7	881.8
20°	866.2	867.4	868.6	868.8	867.9	867.1	866.2	865.4
22.5°	847.2	848.0	848.8	848.9	848.3	847.7	847.1	846.6
25°	816.7	817.0	817.4	817.3	816.8	816.3	815.8	815.3
27.5°	784.7	784.8	784.8	784.6	784.1	783.6	783.1	782.6
30°	761.4	761.1	760.7	760.3	759.8	759.3	758.8	758.3
32.5°	737.8	737.1	736.5	735.8	734.9	734.0	733.0	732.1
35°	701.1	700.3	699.4	698.3	697.0	695.6	694.3	692.9
37.5°	662.6	661.4	660.1	659.1	658.3	657.6	656.8	656.0
40°	635.9	634.4	632.9	631.9	631.4	630.9	630.4	629.9
42.5°	609.5	608.1	606.7	605.6	604.8	604.1	603.3	602.5
45°	570.3	568.3	566.3	565.0	564.5	564.0	563.5	563.0
47.5°	529.1	527.0	525.0	523.4	522.2	521.0	519.8	518.6
50°	500.9	498.7	496.5	494.8	493.6	492.4	491.2	490.1
52.5°	473.4	471.5	469.6	468.0	466.7	465.3	464.0	462.7
55°	430.8	429.3	427.8	426.4	425.2	424.0	422.9	421.7
57.5°	388.4	386.5	384.5	383.2	382.6	381.9	381.3	380.7
60°	359.8	358.1	356.4	355.0	353.8	352.6	351.4	350.3
62.5°	332.2	330.4	328.5	327.2	326.3	325.3	324.4	323.5
65°	288.7	287.2	285.7	284.6	283.9	283.2	282.6	281.9
67.5°	247.3	246.0	244.7	243.8	243.4	243.0	242.6	242.2
70°	219.8	218.8	217.8	217.0	216.3	215.6	214.9	214.3
72.5°	194.0	192.9	191.7	190.8	190.1	189.5	188.8	188.1
75°	154.0	153.5	153.0	152.4	151.7	151.0	150.4	149.7
77.5°	117.3	117.0	116.7	116.3	115.8	115.4	114.9	114.4
80°	93.9	93.7	93.5	93.3	92.9	92.6	92.3	91.9
82.5°	71.7	71.4	71.1	70.9	70.9	70.8	70.7	70.7
85°	42.2	42.0	41.9	41.6	41.3	40.9	40.6	40.3
87.5°	20.0	20.2	20.5	20.8	20.5	20.2	20.2	19.9
90°	20.9	22.1	23.2	25.6	25.6	25.6	26.7	26.7
92.5°	205.9	149.4	112.5	95.3	80.4	77.6	76.0	74.1
95°	835.4	658.8	515.9	418.3	335.8	300.9	291.7	273.1
97.5°	1244.2	1120.4	981.2	845.4	773.6	708.6	674.9	660.0
100°	1429.2	1372.3	1252.6	1131.7	1051.6	967.9	924.9	906.3
102.5°	1491.5	1526.6	1469.2	1387.4	1301.6	1242.1	1195.4	1181.5
105°	1454.8	1614.0	1665.1	1652.3	1615.1	1576.8	1553.5	1539.6
107.5°	1323.7	1536.1	1667.4	1728.1	1746.9	1746.7	1739.0	1729.7
110°	1227.0	1447.8	1611.6	1710.4	1762.7	1784.8	1792.9	1792.9



TEST NUMBER: P333204

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1150.8	1360.4	1526.1	1642.5	1719.0	1756.9	1777.1	1785.5
115°	1055.1	1235.2	1394.3	1521.0	1611.6	1667.4	1699.9	1715.0
117.5°	993.2	1148.5	1285.6	1401.8	1492.4	1550.1	1582.4	1591.6
120°	959.8	1099.2	1227.0	1329.3	1415.3	1471.0	1502.4	1511.7
122.5°	934.7	1063.9	1177.8	1273.5	1350.2	1401.3	1432.7	1441.1
125°	898.2	1016.7	1117.8	1201.5	1266.5	1314.2	1339.7	1351.4
127.5°	861.0	971.6	1066.0	1144.3	1203.3	1245.4	1269.6	1274.7
130°	837.8	940.0	1030.7	1106.2	1164.3	1202.6	1225.9	1232.8
132.5°	814.5	910.3	992.5	1065.3	1123.4	1161.7	1183.1	1191.0
135°	784.3	864.5	938.9	1005.1	1056.2	1094.6	1115.5	1122.5
137.5°	758.8	823.6	885.4	941.7	987.4	1022.3	1041.6	1049.2
140°	744.8	799.4	852.9	901.7	944.7	974.9	992.3	998.1
142.5°	732.7	779.0	825.0	867.3	903.8	929.3	945.8	950.7
145°	716.9	752.9	789.0	820.3	848.2	868.0	880.8	885.4
147.5°	702.1	731.3	759.0	782.7	804.8	820.6	828.0	830.1
150°	693.7	719.3	741.3	762.2	779.7	793.6	798.3	799.4
152.5°	684.4	707.2	727.4	743.7	758.3	769.4	774.1	775.3
155°	670.4	689.0	705.3	718.1	729.7	737.8	741.3	742.5
157.5°	656.5	671.8	684.4	694.4	703.4	710.2	713.4	713.2
160°	647.2	658.8	670.4	678.6	686.7	692.5	694.9	693.7
162.5°	637.0	647.7	657.4	664.6	670.9	675.8	676.3	676.0
165°	622.8	630.9	637.9	643.7	648.4	650.7	650.7	650.7
167.5°	609.3	614.7	620.0	624.2	626.5	628.6	627.7	627.5
170°	601.9	605.4	608.9	611.2	613.5	614.7	614.7	613.5
172.5°	593.5	597.0	599.6	601.0	601.4	603.5	601.7	600.5
175°	584.5	584.5	586.8	586.8	586.8	588.0	585.6	584.5
177.5°	578.2	579.1	579.1	579.1	578.2	579.1	576.3	576.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3

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