

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: P333548-830

Luminaire Tested: **S125RDIP-S610D1205U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333548-830
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: S125RDIP-S610D1205U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6170.4 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

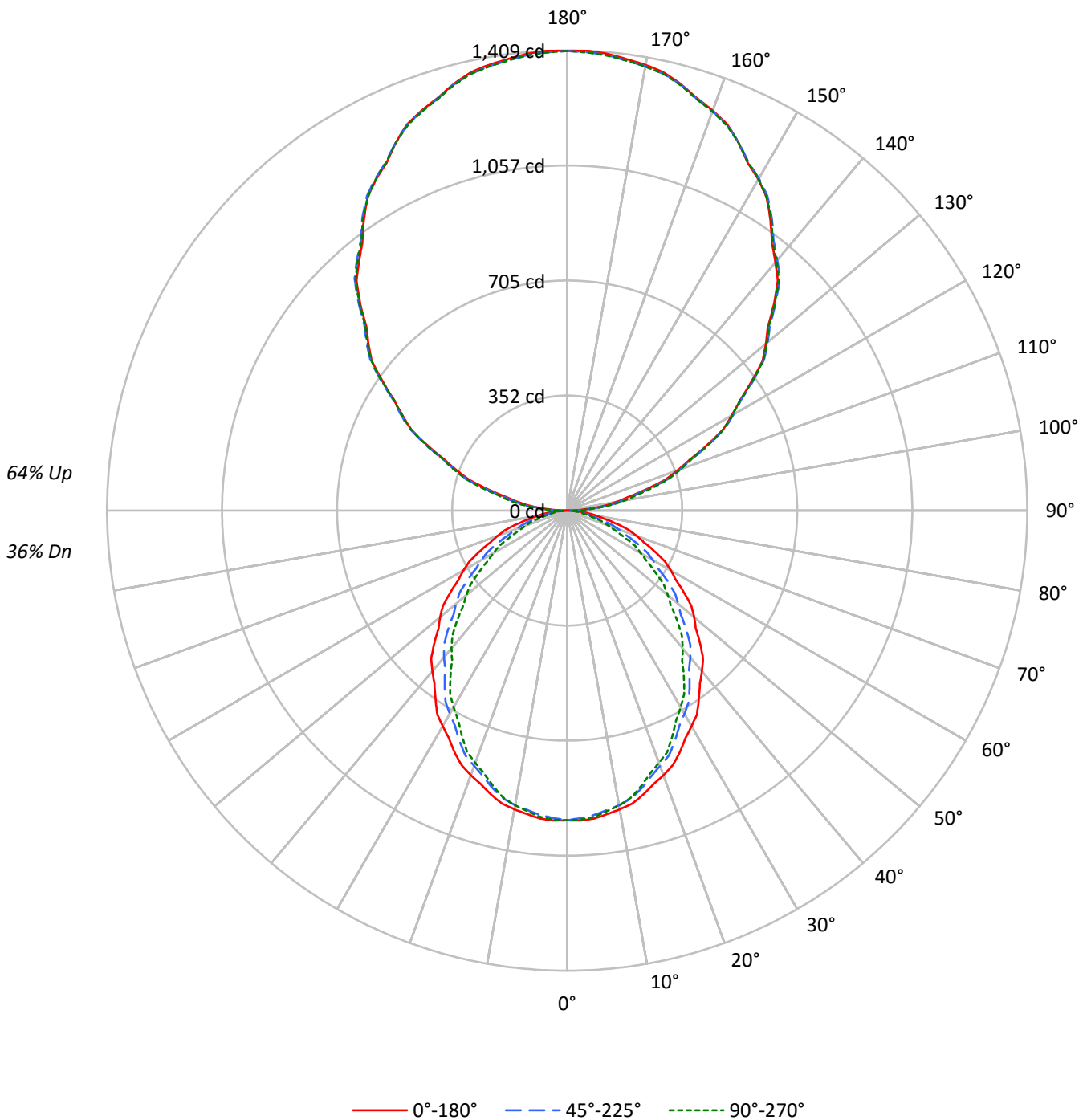
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	59	59	59	44	44	44	36
1	95	91	87	84	86	82	79	76	67	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	67	63	58	55	52	46	44	41	34	33	31	26
3	79	70	63	57	71	64	57	53	52	47	44	41	38	35	30	29	27	22
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	56	44	37	31	51	41	34	29	33	28	25	27	23	20	20	18	16	13
8	52	40	33	28	47	37	30	26	31	25	22	24	21	18	19	16	14	12
9	49	37	29	25	44	34	27	23	28	23	20	22	19	16	17	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6124	6124	6124
5°	6137	6067	6105
10°	6091	6011	6011
15°	6019	5889	5841
20°	5926	5720	5650
25°	5818	5552	5430
30°	5683	5357	5186
35°	5544	5155	4912
40°	5415	4945	4643
45°	5259	4709	4350
50°	5101	4454	4044
55°	4919	4209	3718
60°	4735	3912	3367
65°	4520	3568	2966
70°	4273	3138	2555
75°	3933	2643	2126
80°	3463	2079	1785
85°	2920	1697	1593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	1.4
10°-20°	249.2	4.0
20°-30°	361.3	5.9
30°-40°	411.8	6.7
40°-50°	401.4	6.5
50°-60°	337.9	5.5
60°-70°	236.8	3.8
70°-80°	121.7	2.0
80°-90°	33.8	0.5
90°-100°	94.3	1.5
100°-110°	278.4	4.5
110°-120°	471.5	7.6
120°-130°	620.5	10.1
130°-140°	695.3	11.3
140°-150°	681.4	11.0
150°-160°	572.4	9.3
160°-170°	380.5	6.2
170°-180°	133.1	2.2
0°-30°	699.6	11.3
0°-40°	1111.4	18.0
0°-60°	1850.7	30.0
0°-90°	2243.1	36.4
90°-120°	844.1	13.7
90°-150°	2841.4	46.0
90°-180°	3927.0	63.6
0°-180°	6170.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	947	944	936	943	942	90
15°	900	895	881	880	874	254
25°	816	805	779	770	762	375
35°	703	685	654	634	623	440
45°	576	554	516	488	476	444
55°	437	413	374	343	330	391
65°	296	271	234	206	194	293
75°	158	136	106	91	85	167
85°	39	27	23	22	22	44
90°	1	10	18	23	26	6
95°	71	74	84	92	94	76
105°	250	255	262	268	272	267
115°	472	476	479	478	476	467
125°	689	695	697	694	693	617
135°	896	902	904	903	899	690
145°	1085	1090	1093	1093	1090	678
155°	1242	1242	1243	1247	1242	572
165°	1350	1348	1349	1353	1347	381
175°	1404	1400	1400	1406	1399	133
180°	1407	1407	1407	1407	1407	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	949.9	949.5	949.1	948.8	948.4	947.5	946.2	945.0	943.7	942.4	943.7
5°	946.7	946.1	945.5	944.8	944.1	943.0	941.2	939.5	937.7	935.9	937.5
7.5°	937.5	936.8	936.2	935.6	935.0	933.7	931.5	929.4	927.4	925.2	926.3
10°	928.8	928.3	927.8	927.4	926.9	925.6	923.3	921.1	918.9	916.6	917.1
12.5°	919.1	918.5	917.8	917.3	916.6	914.8	911.9	908.9	905.9	902.9	903.2
15°	900.2	899.2	898.2	897.3	896.4	894.2	890.9	887.5	884.2	880.8	880.7
17.5°	878.8	877.4	875.9	874.5	873.0	870.2	865.9	861.8	857.5	853.4	852.5
20°	862.2	860.6	859.0	857.4	855.8	852.5	847.4	842.4	837.3	832.2	831.3
22.5°	843.9	842.3	840.7	839.1	837.5	834.1	828.7	823.4	818.0	812.7	811.2
25°	816.4	814.0	811.6	809.3	806.8	802.7	796.8	790.9	785.0	779.1	777.1
27.5°	784.9	782.0	779.1	776.2	773.3	768.7	762.4	756.1	749.8	743.5	740.6
30°	762.0	758.9	755.9	752.9	749.9	745.0	738.3	731.7	725.0	718.3	714.6
32.5°	739.6	736.1	732.5	729.1	725.5	720.3	713.5	706.7	699.8	693.1	689.0
35°	703.2	699.5	695.6	691.8	688.0	682.5	675.3	668.2	661.0	653.8	649.2
37.5°	667.6	662.9	658.3	653.7	649.0	643.0	635.6	628.2	620.9	613.4	607.9
40°	642.3	637.6	632.8	628.0	623.3	617.1	609.4	601.8	594.2	586.5	580.5
42.5°	616.0	611.1	606.2	601.3	596.4	590.0	582.1	574.2	566.4	558.5	552.6
45°	575.8	571.2	566.6	561.9	557.3	550.6	541.9	533.1	524.3	515.6	509.3
47.5°	534.1	529.2	524.3	519.5	514.6	507.7	499.0	490.1	481.4	472.5	466.0
50°	507.7	502.5	497.2	492.0	486.7	479.6	470.5	461.5	452.3	443.3	436.6
52.5°	479.1	473.7	468.3	463.0	457.6	450.6	442.1	433.5	424.9	416.3	409.2
55°	436.9	431.8	426.7	421.6	416.5	409.4	400.6	391.6	382.8	373.8	366.6
57.5°	394.2	388.7	383.2	377.9	372.4	365.3	356.8	348.2	339.6	331.0	324.0
60°	366.6	361.1	355.5	350.0	344.4	337.3	328.7	320.1	311.5	302.9	296.0
62.5°	337.4	332.2	326.8	321.5	316.2	309.2	300.5	291.7	283.0	274.3	267.8
65°	295.8	290.4	284.9	279.6	274.1	267.2	258.7	250.3	241.9	233.5	227.1
67.5°	254.4	248.9	243.6	238.2	232.7	226.0	217.9	209.8	201.7	193.6	187.8
70°	226.3	220.9	215.5	210.1	204.6	197.9	190.0	182.1	174.1	166.2	161.2
72.5°	198.8	193.5	188.2	182.9	177.7	171.3	163.8	156.4	148.9	141.5	137.0
75°	157.6	152.8	148.0	143.3	138.5	132.7	126.0	119.3	112.6	105.9	102.5
77.5°	116.6	112.7	109.0	105.1	101.3	96.7	91.3	86.1	80.7	75.3	72.9
80°	93.1	89.3	85.5	81.6	77.9	73.7	69.2	64.8	60.3	55.9	54.4
82.5°	70.2	66.7	63.3	59.9	56.5	53.2	50.1	47.0	44.0	41.0	40.3
85°	39.4	36.5	33.6	30.8	27.9	26.1	25.3	24.5	23.8	22.9	22.7
87.5°	13.4	12.9	12.3	11.9	11.4	11.2	11.5	11.7	11.9	12.1	12.3
90°	1.1	3.0	5.0	7.0	8.9	10.7	12.4	14.1	15.8	17.5	18.8
92.5°	26.5	27.9	29.2	30.6	32.0	33.6	35.8	37.9	40.0	42.0	43.6
95°	71.2	71.6	72.2	72.7	73.1	74.6	77.0	79.5	81.9	84.4	86.1
97.5°	118.3	118.5	118.7	118.9	119.0	120.8	124.2	127.5	130.9	134.3	135.9
100°	153.4	153.4	153.4	153.4	153.4	155.0	158.1	161.3	164.4	167.6	169.8
102.5°	191.1	192.0	192.9	194.0	194.9	196.2	197.8	199.4	201.0	202.6	205.0
105°	249.7	250.9	252.1	253.4	254.6	255.9	257.4	258.8	260.3	261.7	263.3
107.5°	314.5	315.8	317.0	318.2	319.4	320.6	321.7	322.8	324.0	325.1	325.8
110°	359.3	360.4	361.7	362.9	364.1	365.0	365.8	366.6	367.3	368.0	368.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	404.8	405.5	406.0	406.7	407.4	408.1	409.1	410.0	410.9	411.8	412.2
115°	472.0	473.1	474.0	474.9	476.0	476.6	477.2	477.7	478.2	478.6	478.4
117.5°	539.5	540.0	540.5	540.8	541.3	541.7	542.2	542.6	543.0	543.5	543.7
120°	581.5	582.8	584.0	585.2	586.4	587.2	587.4	587.7	588.0	588.1	588.1
122.5°	627.2	627.6	628.0	628.5	628.9	629.4	630.1	630.7	631.3	632.0	631.8
125°	688.9	690.4	691.8	693.3	694.7	695.6	695.9	696.1	696.4	696.6	696.1
127.5°	754.7	755.4	756.3	757.1	758.0	758.6	758.8	759.1	759.4	759.7	759.4
130°	794.1	795.3	796.5	797.8	798.9	799.8	800.3	800.8	801.3	801.7	801.5
132.5°	833.5	835.5	837.5	839.5	841.5	842.4	842.4	842.3	842.2	842.1	841.8
135°	896.0	897.4	898.9	900.3	901.8	902.7	902.9	903.1	903.3	903.6	903.6
137.5°	954.6	956.0	957.4	958.8	960.3	961.3	961.8	962.3	962.9	963.4	963.7
140°	992.3	993.5	994.8	996.0	997.2	998.2	998.9	999.7	1000.3	1001.1	1001.5
142.5°	1030.0	1031.0	1032.1	1033.0	1034.1	1035.1	1035.9	1036.9	1037.8	1038.8	1039.1
145°	1085.4	1086.4	1087.4	1088.4	1089.3	1090.1	1090.9	1091.7	1092.3	1093.1	1093.1
147.5°	1136.7	1137.2	1137.7	1138.3	1138.8	1139.3	1140.0	1140.6	1141.1	1141.7	1142.3
150°	1170.8	1170.6	1170.4	1170.2	1169.9	1170.3	1171.2	1172.1	1173.2	1174.1	1174.1
152.5°	1198.9	1199.2	1199.6	1200.0	1200.2	1200.6	1201.0	1201.4	1201.8	1202.2	1202.8
155°	1242.1	1242.1	1242.1	1242.1	1242.1	1242.2	1242.5	1242.6	1242.9	1243.1	1244.2
157.5°	1280.6	1280.1	1279.5	1279.0	1278.5	1278.3	1278.6	1278.8	1279.0	1279.3	1280.3
160°	1303.3	1302.7	1301.9	1301.2	1300.4	1300.2	1300.4	1300.7	1301.0	1301.2	1302.1
162.5°	1323.5	1323.0	1322.5	1321.9	1321.4	1321.2	1321.2	1321.3	1321.3	1321.4	1322.5
165°	1350.5	1350.0	1349.5	1349.1	1348.5	1348.4	1348.7	1348.9	1349.2	1349.3	1350.4
167.5°	1373.3	1372.2	1371.3	1370.4	1369.3	1368.9	1368.9	1368.9	1368.9	1368.9	1370.4
170°	1385.5	1384.6	1383.6	1382.6	1381.7	1381.1	1381.1	1381.1	1381.1	1381.1	1382.6
172.5°	1394.3	1393.4	1392.3	1391.4	1390.4	1389.9	1389.9	1389.9	1389.9	1389.9	1391.4
175°	1404.1	1403.2	1402.2	1401.2	1400.2	1399.8	1399.8	1399.8	1399.8	1399.8	1401.2
177.5°	1409.2	1408.4	1407.6	1406.8	1406.1	1405.6	1405.4	1405.2	1405.0	1404.8	1406.0
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	945.0	946.2	947.5	948.1	948.0	947.8	947.7	947.6
5°	939.1	940.8	942.4	943.0	942.6	942.4	942.1	941.7
7.5°	927.5	928.6	929.7	930.1	929.7	929.3	929.1	928.7
10°	917.6	918.0	918.6	918.6	918.0	917.6	917.1	916.6
12.5°	903.6	904.0	904.3	904.1	903.3	902.7	901.9	901.2
15°	880.5	880.3	880.2	879.4	878.0	876.6	875.2	873.6
17.5°	851.8	850.9	850.2	849.1	848.0	846.8	845.6	844.4
20°	830.6	829.7	829.0	827.8	826.4	825.0	823.6	822.1
22.5°	809.5	807.9	806.4	805.0	803.9	802.7	801.5	800.3
25°	775.1	773.0	770.9	768.9	767.2	765.4	763.7	762.0
27.5°	737.7	734.8	731.9	729.6	727.9	726.2	724.5	722.8
30°	711.0	707.3	703.6	701.1	699.6	698.2	696.8	695.4
32.5°	684.9	681.0	676.9	674.0	672.1	670.3	668.5	666.8
35°	644.6	640.0	635.4	632.0	629.7	627.5	625.3	623.0
37.5°	602.4	596.8	591.3	587.4	585.2	583.2	581.0	578.8
40°	574.4	568.4	562.3	558.4	556.5	554.5	552.6	550.7
42.5°	546.9	541.0	535.3	530.9	528.2	525.4	522.5	519.8
45°	502.8	496.5	490.1	485.8	483.4	481.0	478.6	476.3
47.5°	459.4	452.8	446.3	441.7	439.0	436.4	433.8	431.1
50°	429.9	423.2	416.5	412.0	409.6	407.3	404.8	402.5
52.5°	402.0	394.7	387.6	382.8	380.4	378.1	375.6	373.2
55°	359.5	352.3	345.2	340.4	337.8	335.3	332.7	330.2
57.5°	317.0	310.0	303.0	298.3	296.1	293.8	291.6	289.4
60°	288.9	281.9	274.9	270.2	267.9	265.4	263.1	260.7
62.5°	261.3	254.8	248.3	243.8	241.5	239.1	236.7	234.3
65°	220.7	214.3	208.0	203.6	201.2	198.9	196.4	194.1
67.5°	182.0	176.2	170.3	166.5	164.6	162.7	160.7	158.8
70°	156.3	151.4	146.4	143.0	141.1	139.2	137.2	135.3
72.5°	132.4	127.8	123.3	120.4	119.1	117.8	116.6	115.3
75°	99.0	95.5	92.0	89.6	88.6	87.5	86.3	85.2
77.5°	70.4	68.0	65.5	63.9	63.1	62.2	61.5	60.6
80°	53.0	51.6	50.1	49.3	48.9	48.6	48.3	48.0
82.5°	39.6	38.9	38.3	37.9	37.7	37.5	37.3	37.1
85°	22.6	22.4	22.2	22.1	22.0	21.8	21.7	21.5
87.5°	12.6	12.8	13.1	13.2	13.2	13.2	13.3	13.3
90°	20.0	21.2	22.4	23.4	24.1	24.8	25.5	26.3
92.5°	45.2	46.8	48.4	49.6	50.0	50.6	51.2	51.7
95°	87.8	89.4	91.1	92.3	92.7	93.2	93.7	94.2
97.5°	137.5	139.1	140.7	141.7	141.9	142.2	142.5	142.8
100°	171.9	174.2	176.3	177.7	178.1	178.6	179.2	179.6
102.5°	207.4	209.8	212.2	213.7	214.4	215.1	215.7	216.4
105°	264.7	266.2	267.6	268.7	269.5	270.1	270.9	271.6
107.5°	326.5	327.3	328.0	328.4	328.3	328.3	328.2	328.1
110°	369.5	370.2	370.9	371.2	370.9	370.7	370.4	370.2



TEST NUMBER: P333548-830

CATALOG NUMBER: S125RDIP-S610D1205U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	412.6	412.8	413.2	413.1	412.7	412.3	411.8	411.4
115°	478.2	477.9	477.7	477.4	477.2	476.9	476.6	476.5
117.5°	543.8	544.0	544.2	543.8	542.9	542.0	540.9	540.0
120°	588.1	588.1	588.1	587.7	586.7	585.7	584.8	583.8
122.5°	631.6	631.4	631.2	630.7	629.9	629.1	628.4	627.6
125°	695.6	695.1	694.7	694.3	694.1	693.8	693.5	693.3
127.5°	759.2	758.9	758.7	758.4	757.9	757.3	756.9	756.4
130°	801.3	801.0	800.8	800.4	799.9	799.5	798.9	798.4
132.5°	841.6	841.3	841.0	840.7	839.9	839.2	838.6	837.9
135°	903.6	903.6	903.6	903.1	902.1	901.2	900.2	899.2
137.5°	964.0	964.3	964.6	964.1	962.9	961.7	960.5	959.2
140°	1002.0	1002.6	1003.1	1002.7	1001.5	1000.2	999.0	997.8
142.5°	1039.3	1039.6	1039.9	1039.4	1038.2	1037.1	1035.9	1034.6
145°	1093.1	1093.1	1093.1	1092.7	1092.0	1091.3	1090.5	1089.8
147.5°	1142.9	1143.5	1144.1	1143.5	1141.9	1140.2	1138.6	1136.9
150°	1174.1	1174.1	1174.1	1173.9	1173.4	1172.9	1172.4	1172.0
152.5°	1203.3	1203.9	1204.5	1204.4	1203.5	1202.6	1201.7	1200.9
155°	1245.1	1246.0	1247.1	1246.9	1245.7	1244.4	1243.3	1242.1
157.5°	1281.2	1282.2	1283.2	1282.9	1281.3	1279.7	1278.1	1276.5
160°	1303.2	1304.1	1305.0	1305.0	1303.7	1302.5	1301.3	1300.1
162.5°	1323.7	1324.8	1326.1	1325.9	1324.5	1323.0	1321.6	1320.2
165°	1351.3	1352.3	1353.3	1353.0	1351.6	1350.1	1348.7	1347.2
167.5°	1371.8	1373.3	1374.7	1374.7	1373.2	1371.7	1370.2	1368.7
170°	1384.0	1385.5	1387.0	1386.9	1385.2	1383.5	1381.8	1380.1
172.5°	1392.8	1394.3	1395.7	1395.7	1394.2	1392.7	1391.2	1389.7
175°	1402.7	1404.1	1405.6	1405.5	1403.8	1402.1	1400.3	1398.6
177.5°	1407.1	1408.3	1409.5	1409.4	1408.1	1406.7	1405.3	1403.9
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4

(END OF REPORT)