

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

Luminaire Tested: **S125DIP-S850D1205U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333246
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-S850D1205U835-4F0-1E-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: 7606.3 lumens
Efficiency: N/A
Efficacy: 133.7 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

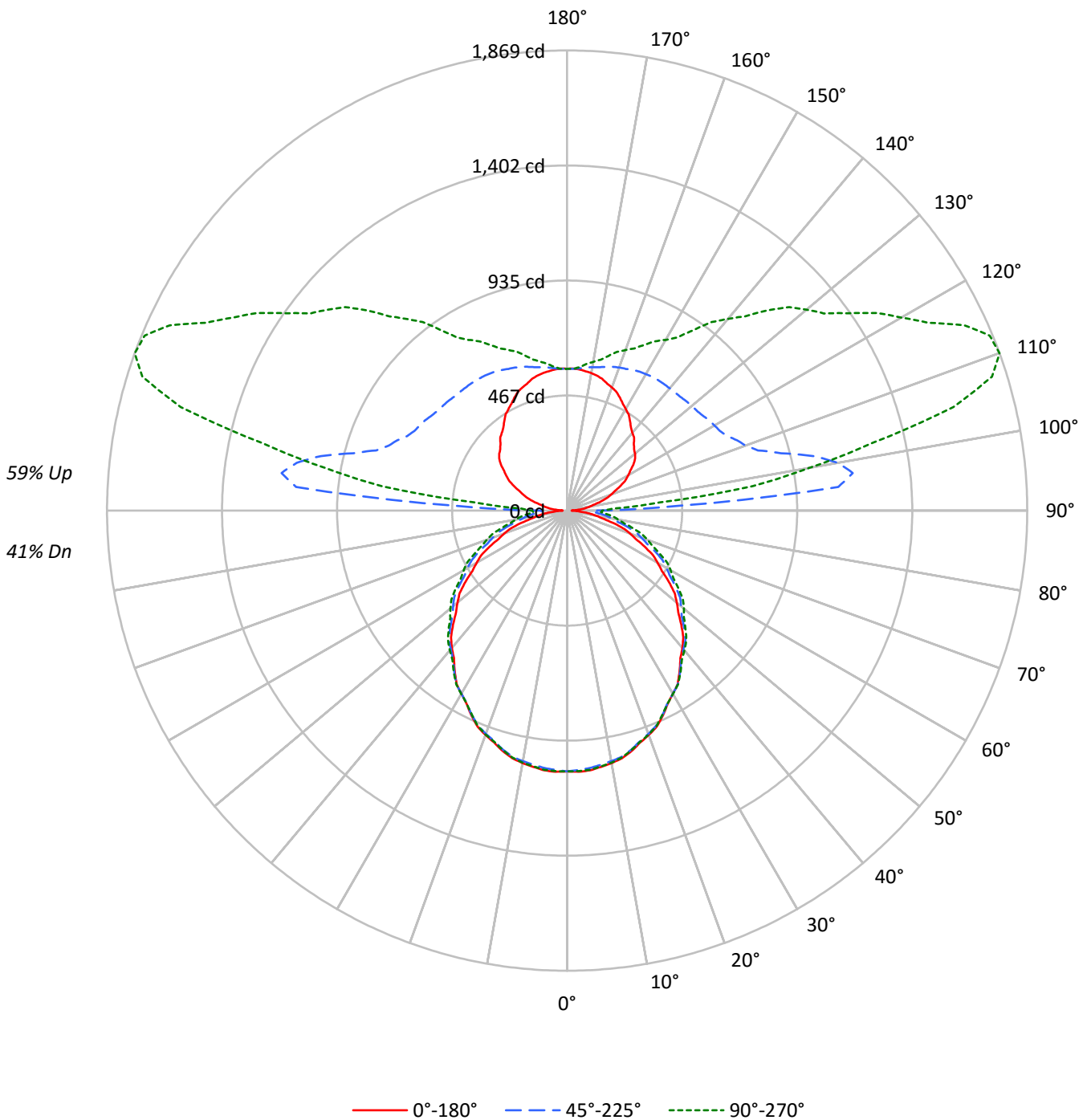
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6841	6841	6841
5°	6855	6715	6737
10°	6806	6595	6585
15°	6726	6452	6393
20°	6616	6274	6201
25°	6486	6084	5964
30°	6329	5876	5749
35°	6182	5684	5552
40°	6032	5481	5353
45°	5863	5308	5178
50°	5702	5120	5022
55°	5508	4943	4839
60°	5296	4741	4653
65°	5075	4530	4443
70°	4822	4240	4228
75°	4425	3962	3962
80°	3905	3625	3673
85°	3417	3398	3583



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	1.3
10°-20°	284.4	3.7
20°-30°	422.9	5.6
30°-40°	500.9	6.6
40°-50°	517.9	6.8
50°-60°	477.1	6.3
60°-70°	385.7	5.1
70°-80°	258.3	3.4
80°-90°	137.2	1.8
90°-100°	492.9	6.5
100°-110°	953.5	12.5
110°-120°	879.9	11.6
120°-130°	704.1	9.3
130°-140°	557.3	7.3
140°-150°	415.5	5.5
150°-160°	291.2	3.8
160°-170°	171.6	2.3
170°-180°	55.8	0.7
0°-30°	807.4	10.6
0°-40°	1308.3	17.2
0°-60°	2303.3	30.3
0°-90°	3084.4	40.6
90°-120°	2326.3	30.6
90°-150°	4003.3	52.6
90°-180°	4522.0	59.5
0°-180°	7606.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1012	1012	1005	1011	1007	285
25°	919	922	916	920	915	423
35°	796	802	800	803	803	498
45°	655	666	672	679	680	506
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	271	277	203
85°	57	92	128	150	159	61
90°	18	60	104	132	143	13
95°	52	154	1105	565	379	51
105°	141	210	900	1736	1625	148
115°	241	298	717	1516	1780	237
125°	330	385	672	1200	1397	292
135°	383	460	652	993	1150	297
145°	445	508	646	810	895	279
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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1061.8	1061.5	1061.1	1060.7	1060.3	1059.5	1058.2	1056.9	1055.6	1054.3	1055.6
5°	1059.3	1058.9	1058.4	1057.9	1057.5	1056.4	1054.8	1053.2	1051.6	1050.0	1051.8
7.5°	1050.0	1049.8	1049.6	1049.4	1049.2	1048.3	1046.7	1045.0	1043.3	1041.7	1043.3
10°	1041.7	1041.7	1041.7	1041.7	1041.7	1040.8	1038.9	1037.1	1035.2	1033.4	1035.0
12.5°	1030.0	1030.2	1030.4	1030.6	1030.8	1030.1	1028.7	1027.2	1025.7	1024.2	1025.5
15°	1011.6	1011.8	1012.0	1012.2	1012.5	1011.8	1010.2	1008.6	1006.9	1005.3	1006.7
17.5°	987.5	987.9	988.4	988.8	989.3	988.7	987.1	985.5	983.9	982.3	983.3
20°	970.0	970.5	970.9	971.4	971.9	971.3	969.7	968.1	966.4	964.8	965.5
22.5°	950.1	950.9	951.7	952.6	953.4	952.9	951.1	949.3	947.5	945.7	946.6
25°	919.1	919.8	920.5	921.2	921.9	921.5	920.2	918.8	917.4	916.0	916.9
27.5°	884.6	885.7	886.7	887.7	888.7	888.4	886.9	885.3	883.7	882.2	882.8
30°	858.9	860.3	861.7	863.0	864.4	864.4	863.0	861.7	860.3	858.9	859.4
32.5°	835.6	836.8	838.0	839.2	840.4	840.5	839.5	838.5	837.5	836.5	836.9
35°	795.5	797.2	798.8	800.4	802.0	802.5	801.8	801.1	800.4	799.7	800.4
37.5°	755.4	756.9	758.4	759.9	761.4	762.0	761.7	761.5	761.3	761.1	762.0
40°	728.0	729.9	731.7	733.6	735.4	736.2	736.0	735.8	735.5	735.3	736.2
42.5°	698.1	700.5	702.9	705.3	707.7	709.2	709.7	710.2	710.7	711.2	712.3
45°	655.3	657.9	660.4	662.9	665.5	667.3	668.5	669.6	670.8	671.9	673.6
47.5°	611.5	613.9	616.2	618.6	620.9	623.1	625.1	627.1	629.0	631.0	633.4
50°	581.6	584.1	586.7	589.2	591.7	594.3	596.8	599.4	601.9	604.4	607.0
52.5°	550.0	553.1	556.2	559.3	562.4	565.5	568.6	571.7	574.8	577.9	580.6
55°	503.7	507.4	511.1	514.8	518.5	522.2	525.9	529.6	533.2	536.9	539.5
57.5°	456.3	460.8	465.2	469.6	474.1	478.4	482.7	486.9	491.1	495.4	498.3
60°	424.8	429.4	434.0	438.6	443.2	447.9	452.5	457.1	461.7	466.3	469.8
62.5°	394.0	398.6	403.3	407.9	412.5	417.3	422.3	427.3	432.2	437.2	441.1
65°	346.9	352.2	357.5	362.8	368.1	373.5	379.1	384.6	390.2	395.7	399.2
67.5°	302.4	307.6	312.7	317.8	322.9	328.3	333.9	339.6	345.2	350.8	355.0
70°	270.0	275.3	280.6	286.0	291.3	296.9	302.9	308.9	314.9	320.9	325.3
72.5°	238.5	243.9	249.4	254.9	260.4	266.4	273.0	279.6	286.1	292.7	297.4
75°	191.1	197.1	203.1	209.1	215.1	221.8	229.2	236.6	243.9	251.3	255.9
77.5°	145.6	152.5	159.5	166.4	173.3	180.3	187.4	194.5	201.6	208.8	213.8
80°	117.4	124.3	131.2	138.1	145.1	152.4	160.3	168.1	176.0	183.8	188.9
82.5°	91.6	98.9	106.2	113.5	120.8	128.4	136.5	144.5	152.5	160.6	165.5
85°	57.1	64.7	72.4	80.0	87.6	95.4	103.5	111.6	119.7	127.7	132.8
87.5°	32.6	40.3	48.1	56.0	63.8	71.9	80.0	88.3	96.4	104.7	110.2
90°	17.8	26.3	36.0	45.7	55.5	65.4	74.4	84.6	93.6	103.8	110.2
92.5°	29.1	39.0	55.6	76.8	103.6	145.0	216.5	330.9	454.5	456.5	390.2
95°	51.8	59.0	74.3	93.1	124.7	183.9	316.0	579.5	908.1	1105.3	1088.3
97.5°	75.9	82.7	94.6	112.8	141.2	185.4	275.2	470.1	813.2	1170.1	1350.1
100°	92.8	99.9	109.4	127.1	154.0	195.0	269.7	428.2	728.4	1115.7	1411.1
102.5°	111.5	117.3	125.5	143.7	168.4	208.2	275.3	409.4	663.9	1024.1	1368.5
105°	140.6	144.3	153.8	169.2	191.4	229.3	287.3	397.7	598.6	899.5	1237.6
107.5°	169.1	174.6	183.3	196.0	218.4	252.6	308.7	403.9	568.8	813.0	1105.3
110°	189.7	194.8	202.2	215.4	235.6	270.5	324.6	411.2	558.3	771.5	1029.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	211.1	215.6	221.6	234.2	253.9	287.4	339.5	421.3	555.1	745.9	971.8
115°	240.9	244.9	250.0	262.1	281.1	314.0	363.0	436.3	553.9	716.8	908.0
117.5°	267.8	272.3	277.1	288.6	309.5	340.9	387.3	454.3	556.9	699.9	867.7
120°	286.4	290.6	295.9	307.1	327.5	359.5	405.5	466.6	561.4	691.0	844.8
122.5°	305.1	308.0	312.0	322.8	344.7	376.5	422.3	480.4	564.8	683.1	824.6
125°	329.5	331.6	337.2	347.4	369.2	401.7	444.6	499.2	571.2	672.3	796.8
127.5°	347.8	351.0	358.2	371.2	394.5	426.5	467.2	517.0	579.6	664.7	770.8
130°	359.8	363.1	372.2	387.0	411.2	442.9	482.2	529.5	585.1	660.3	754.2
132.5°	368.3	372.7	383.8	400.7	426.0	457.4	495.9	539.8	590.9	657.0	739.7
135°	383.2	387.6	401.3	419.7	443.9	475.9	513.6	553.5	598.1	652.0	721.3
137.5°	402.0	405.3	418.2	436.6	460.3	492.9	526.5	564.0	605.7	649.7	705.4
140°	412.4	415.9	429.8	448.4	470.5	502.0	535.9	571.0	608.4	648.1	697.1
142.5°	425.4	427.8	440.6	459.0	480.0	509.4	541.3	574.3	609.7	647.4	690.5
145°	444.9	447.0	458.4	474.4	495.1	521.7	551.9	581.0	612.4	646.0	682.1
147.5°	464.3	465.7	475.7	490.8	508.9	532.4	558.9	585.2	613.5	643.0	674.1
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1056.9	1058.2	1059.5	1060.1	1059.9	1059.7	1059.5	1059.3
5°	1053.7	1055.5	1057.4	1058.2	1057.9	1057.7	1057.5	1057.3
7.5°	1044.9	1046.5	1048.1	1048.8	1048.6	1048.4	1048.1	1047.9
10°	1036.6	1038.2	1039.8	1040.5	1040.3	1040.1	1039.8	1039.6
12.5°	1026.7	1028.0	1029.2	1029.5	1028.9	1028.3	1027.7	1027.1
15°	1008.1	1009.5	1010.9	1011.1	1010.2	1009.2	1008.3	1007.4
17.5°	984.4	985.5	986.5	986.8	986.2	985.7	985.1	984.6
20°	966.2	966.9	967.6	967.9	967.9	967.9	967.9	967.9
22.5°	947.5	948.3	949.2	949.4	948.8	948.3	947.7	947.2
25°	917.9	918.8	919.7	919.6	918.4	917.3	916.1	915.0
27.5°	883.4	884.1	884.7	884.9	884.4	884.0	883.6	883.2
30°	859.8	860.3	860.7	860.9	860.6	860.4	860.2	859.9
32.5°	837.4	837.8	838.3	838.4	838.2	838.0	837.7	837.5
35°	801.1	801.8	802.5	802.8	802.8	802.8	802.8	802.8
37.5°	762.9	763.8	764.7	765.2	765.1	765.0	764.9	764.8
40°	737.1	738.1	739.0	739.7	740.1	740.6	741.1	741.5
42.5°	713.4	714.5	715.6	716.2	716.3	716.4	716.5	716.6
45°	675.2	676.8	678.4	679.3	679.6	679.8	680.0	680.3
47.5°	635.7	638.1	640.4	641.9	642.4	642.9	643.4	643.9
50°	609.5	612.1	614.6	616.2	616.9	617.6	618.3	619.0
52.5°	583.3	586.0	588.7	590.4	590.9	591.4	591.9	592.4
55°	542.0	544.6	547.1	548.8	549.7	550.7	551.6	552.5
57.5°	501.2	504.1	507.0	508.8	509.5	510.2	510.9	511.6
60°	473.2	476.7	480.2	482.2	482.9	483.6	484.3	485.0
62.5°	444.9	448.7	452.6	454.9	455.8	456.7	457.5	458.4
65°	402.6	406.1	409.5	411.7	412.7	413.6	414.5	415.4
67.5°	359.2	363.4	367.6	370.3	371.5	372.7	373.9	375.1
70°	329.7	334.1	338.5	341.3	342.7	344.1	345.5	346.9
72.5°	302.2	306.9	311.7	314.6	315.6	316.6	317.6	318.6
75°	260.6	265.2	269.8	272.7	273.8	275.0	276.1	277.3
77.5°	218.9	224.0	229.1	232.1	233.0	233.9	234.8	235.8
80°	194.0	199.1	204.1	207.1	208.1	209.0	209.9	210.8
82.5°	170.3	175.2	180.1	183.4	185.1	186.7	188.4	190.1
85°	137.9	143.0	148.1	151.5	153.4	155.2	157.1	158.9
87.5°	115.7	121.3	126.8	130.8	132.4	134.0	135.8	137.4
90°	116.7	123.2	129.6	135.4	137.0	138.7	141.4	143.0
92.5°	298.0	246.6	214.8	201.0	187.7	186.6	186.5	186.3
95°	921.4	749.9	612.0	517.8	436.9	403.6	396.0	379.0
97.5°	1324.5	1205.5	1071.2	938.7	868.4	804.9	772.8	759.5
100°	1505.4	1453.3	1338.4	1220.7	1141.9	1059.6	1018.0	1000.8
102.5°	1564.0	1603.7	1551.0	1472.2	1387.8	1329.7	1284.4	1271.8
105°	1521.1	1684.9	1740.7	1731.0	1695.4	1658.7	1637.1	1624.8
107.5°	1385.0	1602.0	1737.8	1801.5	1821.7	1822.9	1816.7	1808.8
110°	1284.6	1509.8	1678.0	1779.8	1833.7	1857.4	1867.1	1868.7



TEST NUMBER: P333246

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1204.7	1418.5	1588.4	1707.7	1785.8	1825.3	1847.1	1857.1
115°	1103.9	1288.1	1451.5	1580.9	1672.9	1730.1	1764.0	1780.5
117.5°	1036.6	1195.8	1336.8	1455.7	1547.9	1607.1	1641.0	1651.9
120°	999.8	1143.2	1274.9	1379.8	1467.2	1524.4	1557.1	1567.8
122.5°	971.0	1104.0	1221.6	1319.9	1398.0	1450.5	1483.2	1493.0
125°	929.5	1051.7	1156.5	1242.5	1308.8	1357.6	1384.3	1397.1
127.5°	887.0	1001.0	1098.8	1179.4	1239.8	1283.2	1308.7	1315.2
130°	860.9	966.3	1060.2	1137.9	1197.2	1236.7	1261.1	1269.2
132.5°	834.3	933.3	1018.8	1093.6	1152.7	1192.0	1214.3	1223.2
135°	798.6	881.8	959.2	1027.5	1079.8	1119.3	1141.3	1149.5
137.5°	768.8	836.3	900.9	958.9	1005.6	1041.4	1061.6	1070.2
140°	752.0	809.1	865.1	915.6	959.6	990.7	1009.0	1015.8
142.5°	737.5	785.9	834.1	877.9	915.3	941.8	959.2	965.0
145°	719.2	756.4	793.6	826.0	854.8	875.5	889.2	894.8
147.5°	702.8	732.4	760.5	784.6	807.1	823.3	831.1	833.6
150°	693.7	719.3	741.3	762.4	780.0	794.2	799.1	800.5
152.5°	684.4	707.2	727.4	743.7	758.4	769.6	774.3	775.5
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

(END OF REPORT)