

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: P333316-840

Luminaire Tested: **S125DIP-S1270D810U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333316-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1270D810U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8248.1 lumens
Efficiency: N/A
Efficacy: 135.9 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

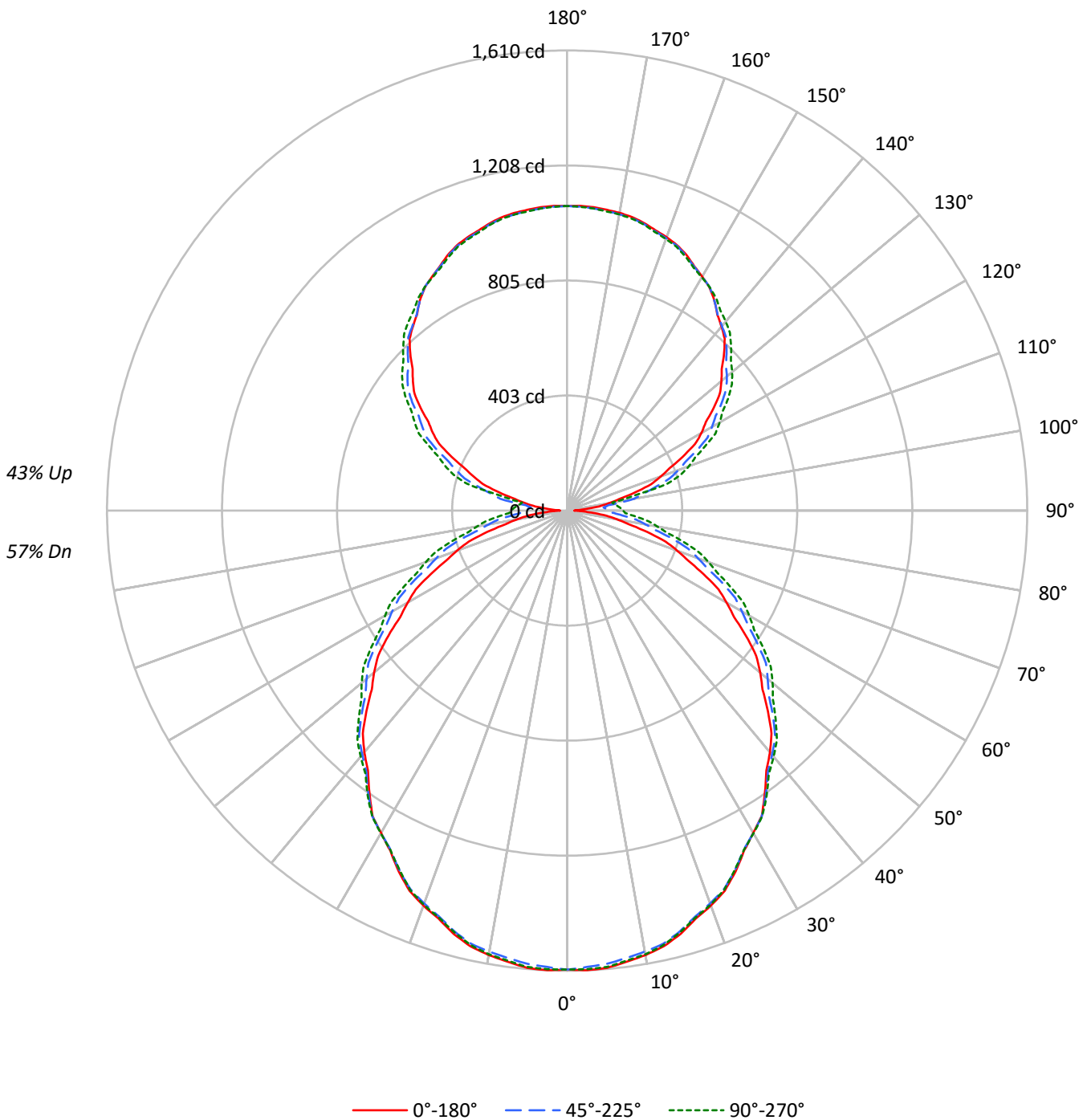
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333316-840

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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	98	94	89	86	91	87	84	80	75	72	70	64	62	60	54	52	51	46
2	89	81	75	69	83	76	70	65	65	61	57	56	52	49	47	44	42	38
3	81	71	63	57	75	66	60	54	57	52	48	49	45	42	41	38	36	32
4	74	63	55	48	69	59	51	46	51	45	40	43	39	35	37	33	30	27
5	68	56	48	41	63	52	45	39	45	39	35	39	34	31	33	29	26	23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	27	30	26	23	20
7	58	45	37	31	54	42	35	30	37	31	27	32	27	24	27	23	21	18
8	54	41	33	28	50	39	31	26	34	28	24	29	24	21	25	21	18	16
9	50	38	30	25	47	35	28	23	31	25	21	27	22	19	23	19	17	14
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10372	10372	10372
5°	10393	10181	10213
10°	10318	9998	9984
15°	10197	9781	9692
20°	10031	9512	9401
25°	9834	9224	9042
30°	9595	8907	8715
35°	9372	8616	8417
40°	9145	8310	8116
45°	8889	8048	7849
50°	8644	7763	7614
55°	8351	7495	7337
60°	8029	7187	7054
65°	7692	6868	6736
70°	7312	6430	6408
75°	6707	6007	6007
80°	5917	5497	5569
85°	5183	5154	5432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	1.8
10°-20°	431.1	5.2
20°-30°	641.1	7.8
30°-40°	759.4	9.2
40°-50°	785.2	9.5
50°-60°	723.3	8.8
60°-70°	584.7	7.1
70°-80°	391.6	4.7
80°-90°	205.3	2.5
90°-100°	152.6	1.9
100°-110°	322.6	3.9
110°-120°	489.0	5.9
120°-130°	587.4	7.1
130°-140°	611.3	7.4
140°-150°	563.5	6.8
150°-160°	453.6	5.5
160°-170°	293.3	3.6
170°-180°	101.2	1.2
0°-30°	1224.1	14.8
0°-40°	1983.5	24.0
0°-60°	3491.9	42.3
0°-90°	4673.5	56.7
90°-120°	964.3	11.7
90°-150°	2726.5	33.1
90°-180°	3575.0	43.3
0°-180°	8248.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1606	1606	1606	1606	1606	
5°	1606	1602	1592	1604	1603	152
15°	1534	1534	1524	1533	1527	432
25°	1393	1397	1389	1394	1387	641
35°	1206	1216	1212	1217	1217	755
45°	994	1010	1019	1029	1031	766
55°	764	789	814	831	838	682
65°	526	562	600	623	630	522
75°	290	331	381	411	420	307
85°	87	139	194	227	241	92
90°	26	83	142	180	195	19
95°	65	103	128	165	177	73
105°	246	276	322	352	364	261
115°	445	462	502	526	532	441
125°	626	632	662	683	689	559
135°	776	780	789	807	811	598
145°	898	898	898	906	908	561
155°	987	983	984	986	980	455
165°	1042	1037	1038	1042	1036	294
175°	1065	1061	1062	1067	1061	101
180°	1065	1065	1065	1065	1065	



TEST NUMBER: P333316-840

CATALOG NUMBER: S125DIP-S1270D810U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1609.7	1609.2	1608.6	1608.1	1607.5	1606.3	1604.3	1602.4	1600.4	1598.4	1600.4
5°	1606.0	1605.3	1604.6	1603.9	1603.2	1601.6	1599.1	1596.7	1594.3	1591.9	1594.6
7.5°	1591.9	1591.5	1591.2	1590.9	1590.7	1589.3	1586.8	1584.3	1581.8	1579.2	1581.7
10°	1579.2	1579.2	1579.2	1579.2	1579.2	1577.8	1575.0	1572.3	1569.4	1566.6	1569.0
12.5°	1561.6	1561.9	1562.2	1562.5	1562.7	1561.8	1559.5	1557.2	1555.0	1552.8	1554.7
15°	1533.6	1533.9	1534.3	1534.6	1535.0	1533.9	1531.5	1529.0	1526.6	1524.1	1526.2
17.5°	1497.0	1497.7	1498.4	1499.1	1499.9	1498.9	1496.5	1494.1	1491.6	1489.1	1490.8
20°	1470.6	1471.3	1472.0	1472.7	1473.4	1472.5	1470.1	1467.6	1465.1	1462.7	1463.8
22.5°	1440.4	1441.6	1442.9	1444.1	1445.4	1444.6	1441.9	1439.2	1436.4	1433.7	1435.0
25°	1393.4	1394.5	1395.5	1396.5	1397.7	1397.1	1395.0	1392.9	1390.8	1388.7	1390.1
27.5°	1341.2	1342.7	1344.2	1345.7	1347.4	1346.9	1344.5	1342.1	1339.8	1337.4	1338.4
30°	1302.1	1304.2	1306.3	1308.4	1310.5	1310.5	1308.4	1306.3	1304.2	1302.1	1302.8
32.5°	1266.9	1268.7	1270.5	1272.3	1274.1	1274.2	1272.7	1271.2	1269.6	1268.1	1268.8
35°	1206.1	1208.5	1210.9	1213.5	1215.9	1216.6	1215.5	1214.5	1213.5	1212.3	1213.5
37.5°	1145.3	1147.5	1149.7	1152.1	1154.3	1155.2	1154.9	1154.5	1154.2	1153.8	1155.2
40°	1103.7	1106.5	1109.3	1112.2	1114.9	1116.1	1115.8	1115.4	1115.1	1114.8	1116.1
42.5°	1058.3	1062.0	1065.6	1069.2	1073.0	1075.1	1075.9	1076.7	1077.4	1078.2	1079.8
45°	993.5	997.3	1001.2	1005.0	1008.9	1011.7	1013.5	1015.2	1016.9	1018.7	1021.2
47.5°	927.1	930.6	934.2	937.8	941.3	944.6	947.7	950.7	953.6	956.6	960.3
50°	881.7	885.6	889.4	893.2	897.2	901.0	904.8	908.7	912.5	916.4	920.2
52.5°	833.8	838.6	843.2	847.9	852.6	857.3	862.0	866.7	871.3	876.1	880.2
55°	763.7	769.2	774.9	780.4	786.0	791.6	797.2	802.8	808.4	814.1	817.9
57.5°	691.9	698.5	705.3	712.0	718.7	725.3	731.7	738.1	744.6	751.0	755.5
60°	644.0	651.0	657.9	665.0	672.0	678.9	686.0	693.0	699.9	706.9	712.2
62.5°	597.3	604.4	611.4	618.3	625.3	632.7	640.2	647.7	655.3	662.9	668.6
65°	525.8	533.9	542.0	550.1	558.1	566.3	574.7	583.1	591.5	599.9	605.1
67.5°	458.5	466.3	474.0	481.8	489.6	497.8	506.2	514.8	523.3	531.9	538.3
70°	409.4	417.4	425.5	433.5	441.5	450.1	459.2	468.4	477.5	486.6	493.2
72.5°	361.5	369.8	378.2	386.5	394.9	403.9	413.8	423.8	433.7	443.7	450.9
75°	289.7	298.8	307.9	317.0	326.1	336.3	347.4	358.6	369.8	381.0	388.0
77.5°	220.8	231.3	241.8	252.3	262.8	273.4	284.2	294.9	305.7	316.5	324.2
80°	177.9	188.4	198.9	209.4	219.9	231.1	243.0	254.9	266.8	278.7	286.4
82.5°	138.9	150.0	161.0	172.1	183.1	194.7	206.9	219.0	231.3	243.4	250.9
85°	86.6	98.2	109.7	121.3	132.8	144.7	156.9	169.2	181.4	193.7	201.4
87.5°	49.3	60.8	72.2	83.7	95.2	107.0	119.2	131.3	143.4	155.5	163.8
90°	26.0	38.6	51.2	63.8	76.3	89.3	102.4	115.5	128.7	141.8	150.7
92.5°	34.8	44.2	53.6	62.9	72.3	83.6	96.9	110.2	123.4	136.7	145.3
95°	65.4	74.0	82.6	91.2	99.8	106.6	111.9	117.1	122.4	127.5	136.1
97.5°	112.6	121.7	130.9	140.0	149.1	152.8	151.1	149.4	147.6	145.9	148.3
100°	149.3	157.0	164.9	172.8	180.7	190.6	202.5	214.4	226.3	238.2	219.3
102.5°	186.5	194.0	201.4	208.8	216.3	225.7	237.0	248.4	259.7	271.0	273.2
105°	246.4	252.7	258.9	265.3	271.6	279.9	290.4	300.9	311.4	321.9	328.9
107.5°	308.6	313.4	318.1	322.9	327.6	335.3	345.7	356.1	366.5	377.0	383.8
110°	349.0	353.3	357.4	361.6	365.9	373.0	383.1	393.3	403.4	413.6	419.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	388.2	392.0	395.8	399.5	403.3	410.1	419.8	429.5	439.3	449.0	454.7
115°	445.4	448.7	452.0	455.3	458.7	465.0	474.2	483.5	492.8	502.1	507.7
117.5°	504.6	506.2	507.8	509.4	510.9	516.3	525.6	534.9	544.2	553.4	558.5
120°	542.5	543.4	544.3	545.1	546.0	550.8	559.4	567.9	576.5	585.0	590.7
122.5°	574.8	575.9	577.0	578.2	579.4	584.0	592.0	600.0	608.0	616.0	621.4
125°	626.2	627.1	628.0	628.9	629.8	633.7	640.8	647.7	654.7	661.7	666.6
127.5°	674.1	674.7	675.2	675.7	676.2	679.3	685.0	690.5	696.2	701.9	706.6
130°	704.5	705.0	705.5	706.0	706.6	709.3	714.5	719.5	724.6	729.6	734.1
132.5°	733.6	734.5	735.4	736.4	737.3	739.5	742.9	746.3	749.6	753.1	757.8
135°	776.3	777.0	777.7	778.4	779.1	780.5	782.6	784.8	786.8	788.9	793.1
137.5°	815.7	816.3	816.9	817.6	818.2	818.9	819.8	820.7	821.5	822.4	826.7
140°	840.3	840.6	841.0	841.3	841.7	841.9	842.1	842.3	842.5	842.6	846.9
142.5°	863.6	863.6	863.5	863.4	863.4	863.5	863.8	864.1	864.4	864.7	868.2
145°	898.0	898.0	898.0	898.0	898.0	898.0	898.0	898.0	898.0	898.0	899.9
147.5°	926.3	926.3	926.2	926.1	926.1	926.1	926.3	926.6	926.9	927.1	927.8
150°	945.3	945.0	944.6	944.3	943.9	943.9	944.3	944.6	945.0	945.3	945.7
152.5°	963.7	962.9	962.1	961.4	960.6	960.4	960.7	961.1	961.4	961.8	962.1
155°	987.2	986.1	985.1	984.0	983.0	982.6	983.0	983.3	983.7	984.0	984.5
157.5°	1005.3	1004.7	1004.1	1003.5	1002.8	1002.5	1002.6	1002.6	1002.6	1002.7	1003.2
160°	1018.0	1016.9	1015.9	1014.8	1013.8	1013.4	1013.5	1013.7	1013.9	1014.0	1014.7
162.5°	1028.1	1027.0	1026.0	1024.9	1023.9	1023.5	1023.6	1023.8	1024.0	1024.2	1025.1
165°	1041.7	1040.7	1039.6	1038.5	1037.4	1037.0	1037.2	1037.4	1037.5	1037.7	1038.8
167.5°	1051.8	1050.8	1049.7	1048.5	1047.4	1047.0	1047.1	1047.3	1047.5	1047.7	1048.9
170°	1057.5	1056.2	1055.0	1053.8	1052.6	1052.1	1052.2	1052.4	1052.6	1052.8	1054.2
172.5°	1061.3	1060.1	1058.8	1057.6	1056.3	1055.9	1056.2	1056.5	1056.8	1057.1	1058.4
175°	1065.4	1064.3	1063.3	1062.3	1061.2	1060.8	1060.9	1061.1	1061.3	1061.5	1062.9
177.5°	1067.3	1066.4	1065.6	1064.8	1063.9	1063.6	1063.7	1063.8	1064.0	1064.1	1065.1
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1602.4	1604.3	1606.3	1607.1	1606.8	1606.6	1606.3	1606.0
5°	1597.4	1600.2	1603.1	1604.3	1603.9	1603.6	1603.2	1602.9
7.5°	1584.1	1586.6	1589.0	1590.0	1589.7	1589.3	1589.0	1588.6
10°	1571.6	1574.0	1576.4	1577.5	1577.1	1576.8	1576.4	1576.1
12.5°	1556.5	1558.4	1560.3	1560.8	1559.9	1559.0	1558.1	1557.2
15°	1528.3	1530.5	1532.5	1532.9	1531.5	1530.0	1528.6	1527.2
17.5°	1492.4	1494.0	1495.6	1496.0	1495.1	1494.3	1493.5	1492.6
20°	1464.8	1465.8	1466.9	1467.4	1467.4	1467.4	1467.4	1467.4
22.5°	1436.4	1437.7	1439.1	1439.3	1438.5	1437.6	1436.7	1435.9
25°	1391.5	1392.9	1394.3	1394.1	1392.4	1390.6	1388.9	1387.2
27.5°	1339.4	1340.3	1341.3	1341.5	1340.8	1340.2	1339.6	1339.0
30°	1303.5	1304.2	1304.9	1305.0	1304.7	1304.3	1304.0	1303.6
32.5°	1269.5	1270.2	1270.9	1271.1	1270.7	1270.4	1270.0	1269.7
35°	1214.5	1215.5	1216.6	1217.1	1217.1	1217.1	1217.1	1217.1
37.5°	1156.6	1158.0	1159.4	1160.0	1159.8	1159.7	1159.6	1159.4
40°	1117.5	1118.9	1120.3	1121.4	1122.1	1122.8	1123.5	1124.2
42.5°	1081.6	1083.3	1084.9	1085.8	1086.0	1086.1	1086.3	1086.4
45°	1023.6	1026.0	1028.4	1029.9	1030.3	1030.6	1031.0	1031.3
47.5°	963.8	967.3	971.0	973.1	973.9	974.6	975.4	976.2
50°	924.0	927.9	931.8	934.2	935.2	936.3	937.4	938.4
52.5°	884.3	888.5	892.5	895.0	895.8	896.6	897.4	898.1
55°	821.7	825.6	829.4	832.0	833.4	834.9	836.3	837.7
57.5°	759.8	764.3	768.7	771.4	772.4	773.5	774.6	775.6
60°	717.4	722.7	727.9	731.0	732.2	733.2	734.3	735.3
62.5°	674.5	680.2	686.1	689.6	690.9	692.4	693.7	695.0
65°	610.4	615.6	620.9	624.2	625.6	627.0	628.4	629.8
67.5°	544.6	551.0	557.3	561.4	563.2	565.0	566.9	568.8
70°	499.8	506.4	513.1	517.5	519.6	521.7	523.8	525.8
72.5°	458.1	465.3	472.5	476.9	478.5	480.0	481.5	483.0
75°	395.1	402.0	409.0	413.4	415.2	416.9	418.7	420.4
77.5°	331.8	339.5	347.3	351.8	353.3	354.6	356.0	357.4
80°	294.1	301.7	309.5	314.1	315.4	316.8	318.2	319.6
82.5°	258.2	265.7	273.1	278.0	280.5	283.1	285.6	288.1
85°	209.0	216.7	224.5	229.7	232.5	235.3	238.1	240.9
87.5°	172.0	180.3	188.4	193.9	196.4	198.9	201.5	204.1
90°	159.6	168.5	177.4	183.4	186.4	189.3	192.3	195.3
92.5°	154.0	162.7	171.3	176.9	179.7	182.4	185.0	187.7
95°	144.7	153.3	161.9	167.4	169.9	172.3	174.7	177.2
97.5°	150.7	153.1	155.5	157.9	160.3	162.7	165.0	167.4
100°	200.6	181.8	163.0	154.3	155.7	157.0	158.4	159.9
102.5°	275.3	277.4	279.5	275.7	265.8	256.0	246.2	236.3
105°	336.0	343.0	349.9	354.6	356.9	359.1	361.4	363.7
107.5°	390.8	397.8	404.8	409.1	410.7	412.3	414.0	415.7
110°	425.9	431.9	438.1	442.4	445.0	447.7	450.3	452.9



TEST NUMBER: P333316-840

CATALOG NUMBER: S125DIP-S1270D810U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	460.4	466.1	471.8	475.7	478.0	480.2	482.4	484.5
115°	513.3	518.9	524.5	527.8	528.9	529.9	530.9	532.0
117.5°	563.5	568.6	573.6	577.0	579.0	580.9	582.8	584.8
120°	596.2	601.9	607.4	610.9	612.1	613.3	614.5	615.7
122.5°	626.6	632.0	637.3	640.5	641.6	642.7	643.8	644.8
125°	671.5	676.4	681.3	684.4	685.6	686.8	688.0	689.2
127.5°	711.4	716.2	721.0	723.8	724.5	725.3	726.0	726.7
130°	738.4	742.8	747.1	749.7	750.6	751.5	752.3	753.3
132.5°	762.7	767.4	772.2	774.9	775.5	776.1	776.7	777.3
135°	797.3	801.5	805.7	808.2	808.9	809.6	810.2	810.9
137.5°	830.8	835.1	839.2	841.6	842.0	842.5	843.0	843.5
140°	851.0	855.3	859.5	861.7	862.1	862.4	862.7	863.1
142.5°	871.5	874.8	878.2	880.1	880.4	880.8	881.1	881.5
145°	901.8	903.7	905.6	906.8	907.2	907.5	907.9	908.2
147.5°	928.6	929.4	930.1	930.2	929.6	928.9	928.3	927.7
150°	946.0	946.4	946.7	946.4	945.3	944.3	943.2	942.2
152.5°	962.5	962.8	963.2	962.7	961.6	960.4	959.2	958.0
155°	985.1	985.6	986.1	985.7	984.3	982.9	981.5	980.1
157.5°	1003.8	1004.4	1004.9	1004.5	1003.1	1001.7	1000.3	998.9
160°	1015.4	1016.1	1016.8	1016.5	1015.1	1013.7	1012.3	1010.9
162.5°	1026.1	1027.1	1028.0	1027.8	1026.2	1024.7	1023.2	1021.7
165°	1039.9	1040.9	1042.0	1041.8	1040.4	1038.9	1037.5	1036.1
167.5°	1050.3	1051.5	1052.8	1052.6	1051.0	1049.5	1047.8	1046.3
170°	1055.5	1056.9	1058.3	1058.2	1056.7	1055.1	1053.5	1052.0
172.5°	1059.7	1061.0	1062.3	1062.1	1060.5	1058.9	1057.3	1055.7
175°	1064.2	1065.6	1067.0	1066.9	1065.4	1063.8	1062.3	1060.7
177.5°	1066.1	1067.0	1068.0	1068.0	1066.8	1065.7	1064.6	1063.5
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4

(END OF REPORT)