

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: P333317-830

Luminaire Tested: **S125DIP-S1270D810U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333317-830
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: S125DIP-S1270D810U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7287.5 lumens
Efficiency: N/A
Efficacy: 120.1 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

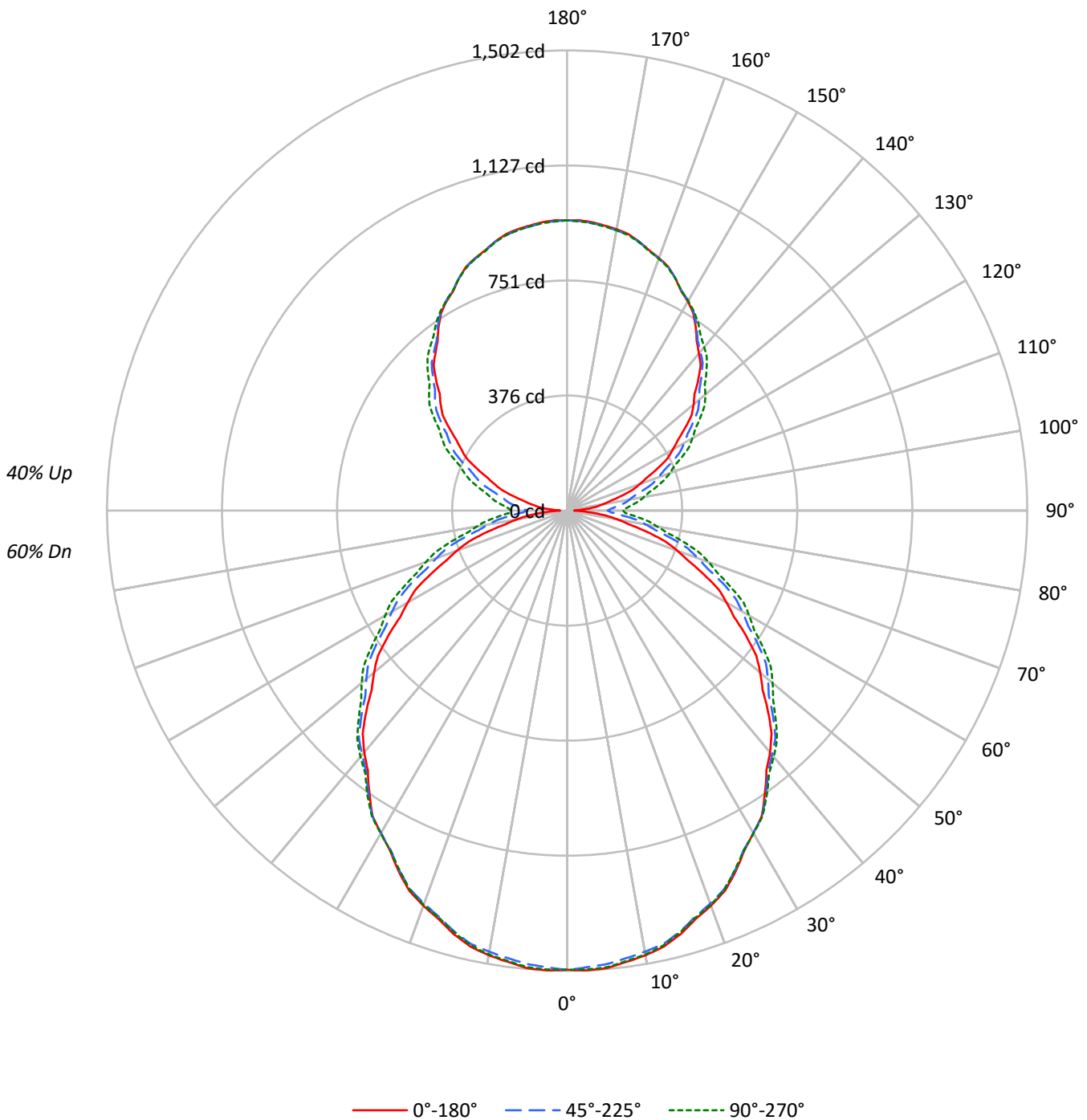
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333317-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333317-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-D1

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	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	99	94	90	86	92	88	84	81	77	74	71	66	64	62	56	55	53	49
2	90	82	75	70	84	77	71	66	67	62	58	57	54	51	49	46	44	40
3	82	72	64	58	76	67	60	55	58	53	49	51	46	43	43	40	37	33
4	75	63	55	49	69	59	52	46	52	46	41	45	40	36	38	35	32	28
5	69	56	48	42	64	53	45	39	46	40	35	40	35	31	34	31	28	25
6	63	51	42	36	59	47	40	34	42	35	31	36	31	28	31	27	24	21
7	58	46	37	32	54	43	35	30	38	32	27	33	28	24	28	25	21	19
8	54	41	33	28	50	39	32	27	34	28	24	30	25	22	26	22	19	17
9	50	38	30	25	47	36	29	24	32	26	22	28	23	19	24	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9680	9680	9680
5°	9700	9502	9532
10°	9630	9332	9318
15°	9517	9129	9046
20°	9362	8878	8774
25°	9178	8609	8439
30°	8955	8314	8134
35°	8748	8042	7856
40°	8535	7756	7574
45°	8297	7510	7326
50°	8068	7245	7106
55°	7794	6995	6847
60°	7494	6708	6584
65°	7180	6410	6286
70°	6825	6000	5981
75°	6261	5606	5607
80°	5525	5130	5198
85°	4842	4811	5069



TEST NUMBER: P333317-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	1.9
10°-20°	402.4	5.5
20°-30°	598.4	8.2
30°-40°	708.8	9.7
40°-50°	732.8	10.1
50°-60°	675.1	9.3
60°-70°	545.7	7.5
70°-80°	365.5	5.0
80°-90°	191.6	2.6
90°-100°	169.8	2.3
100°-110°	265.7	3.6
110°-120°	369.8	5.1
120°-130°	447.4	6.1
130°-140°	480.9	6.6
140°-150°	461.2	6.3
150°-160°	385.2	5.3
160°-170°	256.0	3.5
170°-180°	89.6	1.2
0°-30°	1142.5	15.7
0°-40°	1851.2	25.4
0°-60°	3259.1	44.7
0°-90°	4361.9	59.9
90°-120°	805.3	11.1
90°-150°	2194.8	30.1
90°-180°	2926.0	40.2
0°-180°	7287.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1499	1496	1486	1497	1496	142
15°	1431	1432	1422	1430	1425	403
25°	1300	1304	1296	1301	1295	598
35°	1126	1135	1132	1136	1136	704
45°	927	943	951	961	962	715
55°	713	736	760	775	782	637
65°	491	525	560	581	588	487
75°	270	309	356	384	392	287
85°	81	130	181	212	225	86
90°	24	77	132	168	182	18
95°	67	108	164	200	213	66
105°	181	210	257	290	303	193
115°	326	341	379	404	413	323
125°	470	474	503	524	531	420
135°	606	609	620	638	643	467
145°	732	733	736	743	747	457
155°	836	836	836	839	836	385
165°	909	907	908	911	906	256
175°	945	942	942	946	941	90
180°	947	947	947	947	947	



TEST NUMBER: P333317-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1502.4	1501.9	1501.4	1500.9	1500.3	1499.2	1497.3	1495.5	1493.7	1491.9	1493.7
5°	1498.9	1498.3	1497.6	1496.9	1496.3	1494.9	1492.5	1490.3	1488.0	1485.7	1488.3
7.5°	1485.7	1485.4	1485.2	1484.9	1484.7	1483.4	1481.0	1478.7	1476.3	1473.9	1476.2
10°	1473.9	1473.9	1473.9	1473.9	1473.9	1472.6	1470.0	1467.4	1464.8	1462.2	1464.4
12.5°	1457.5	1457.7	1458.0	1458.3	1458.5	1457.6	1455.6	1453.4	1451.3	1449.3	1451.0
15°	1431.3	1431.6	1432.0	1432.3	1432.7	1431.6	1429.4	1427.1	1424.8	1422.5	1424.5
17.5°	1397.2	1397.9	1398.5	1399.2	1399.9	1399.0	1396.8	1394.5	1392.1	1389.9	1391.4
20°	1372.5	1373.2	1373.9	1374.5	1375.2	1374.3	1372.1	1369.8	1367.4	1365.2	1366.2
22.5°	1344.3	1345.5	1346.7	1347.8	1349.1	1348.3	1345.8	1343.2	1340.7	1338.1	1339.4
25°	1300.5	1301.6	1302.5	1303.4	1304.5	1304.0	1302.0	1300.0	1298.1	1296.1	1297.4
27.5°	1251.8	1253.2	1254.6	1256.0	1257.5	1257.1	1254.9	1252.6	1250.5	1248.2	1249.2
30°	1215.3	1217.3	1219.2	1221.2	1223.1	1223.1	1221.2	1219.2	1217.3	1215.3	1216.0
32.5°	1182.4	1184.1	1185.8	1187.5	1189.2	1189.3	1187.9	1186.5	1185.0	1183.6	1184.2
35°	1125.7	1127.9	1130.2	1132.6	1134.8	1135.5	1134.4	1133.5	1132.6	1131.5	1132.6
37.5°	1068.9	1071.0	1073.1	1075.3	1077.3	1078.2	1077.9	1077.5	1077.2	1076.9	1078.2
40°	1030.1	1032.7	1035.4	1038.0	1040.6	1041.7	1041.4	1041.0	1040.8	1040.5	1041.7
42.5°	987.8	991.2	994.6	998.0	1001.5	1003.4	1004.2	1004.9	1005.6	1006.4	1007.9
45°	927.3	930.9	934.4	938.0	941.6	944.2	945.9	947.5	949.1	950.7	953.1
47.5°	865.3	868.6	871.9	875.2	878.5	881.7	884.5	887.3	890.0	892.9	896.3
50°	822.9	826.5	830.1	833.7	837.4	840.9	844.5	848.1	851.7	855.3	858.8
52.5°	778.3	782.7	787.0	791.4	795.8	800.1	804.6	808.9	813.2	817.7	821.5
55°	712.8	717.9	723.2	728.4	733.6	738.9	744.0	749.3	754.5	759.8	763.4
57.5°	645.7	652.0	658.3	664.5	670.8	676.9	683.0	688.9	694.9	701.0	705.1
60°	601.1	607.6	614.1	620.7	627.2	633.7	640.3	646.8	653.3	659.8	664.7
62.5°	557.5	564.1	570.6	577.1	583.6	590.5	597.5	604.5	611.6	618.7	624.1
65°	490.8	498.3	505.9	513.4	520.8	528.6	536.4	544.2	552.0	559.9	564.8
67.5°	427.9	435.2	442.4	449.7	456.9	464.6	472.5	480.5	488.4	496.4	502.4
70°	382.1	389.6	397.1	404.6	412.1	420.1	428.6	437.2	445.6	454.1	460.3
72.5°	337.4	345.2	353.0	360.7	368.5	377.0	386.3	395.6	404.8	414.2	420.8
75°	270.4	278.9	287.4	295.9	304.3	313.9	324.2	334.7	345.2	355.6	362.1
77.5°	206.0	215.8	225.6	235.4	245.2	255.1	265.2	275.2	285.3	295.4	302.6
80°	166.1	175.9	185.7	195.5	205.3	215.7	226.8	237.9	249.0	260.1	267.3
82.5°	129.6	140.0	150.2	160.6	170.9	181.7	193.1	204.4	215.8	227.2	234.1
85°	80.9	91.6	102.4	113.2	123.9	135.1	146.5	157.9	169.3	180.8	187.9
87.5°	46.0	56.7	67.4	78.1	88.9	99.9	111.2	122.5	133.8	145.2	152.9
90°	24.2	36.0	47.8	59.6	71.3	83.3	95.6	107.8	120.1	132.3	140.6
92.5°	39.0	49.6	60.1	70.8	81.3	93.0	105.8	118.6	131.3	144.1	152.4
95°	67.0	75.9	84.6	93.5	102.3	113.1	125.8	138.6	151.3	164.0	172.4
97.5°	96.9	104.7	112.4	120.3	128.0	138.4	151.4	164.4	177.3	190.3	198.2
100°	119.3	126.2	133.1	140.0	146.8	156.5	169.1	181.6	194.3	206.8	215.2
102.5°	143.5	150.5	157.5	164.5	171.4	180.6	191.9	203.1	214.4	225.7	233.9
105°	181.3	187.3	193.3	199.4	205.5	213.9	224.6	235.4	246.2	256.9	264.5
107.5°	223.1	228.4	233.7	238.9	244.2	251.8	262.0	272.2	282.4	292.6	299.4
110°	252.0	256.7	261.5	266.3	271.0	278.1	287.8	297.5	307.1	316.7	323.4



TEST NUMBER: P333317-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	282.7	286.3	289.8	293.4	296.9	303.5	313.0	322.4	332.0	341.5	347.7
115°	326.5	329.4	332.3	335.3	338.3	344.1	353.0	361.7	370.6	379.4	385.1
117.5°	370.4	372.2	374.0	375.8	377.6	382.7	391.0	399.4	407.6	415.9	421.7
120°	398.7	400.5	402.3	404.1	405.9	410.7	418.3	426.0	433.7	441.3	446.9
122.5°	428.2	429.0	429.7	430.5	431.2	435.5	443.1	450.7	458.5	466.1	471.3
125°	469.5	470.1	470.8	471.5	472.1	475.8	482.5	489.2	495.9	502.6	507.5
127.5°	512.2	512.5	512.6	512.9	513.1	516.0	521.6	527.2	532.7	538.3	542.9
130°	538.8	539.2	539.7	540.3	540.7	543.4	548.3	553.2	558.1	563.0	567.4
132.5°	564.1	565.4	566.7	568.0	569.2	571.6	575.0	578.5	582.0	585.4	589.8
135°	605.9	606.5	607.1	607.8	608.4	610.0	612.5	614.9	617.4	619.8	624.1
137.5°	645.1	645.7	646.4	647.1	647.8	648.8	650.4	651.8	653.3	654.8	658.8
140°	669.2	670.1	670.8	671.7	672.5	673.4	674.1	675.0	675.8	676.6	680.5
142.5°	694.6	695.0	695.4	695.9	696.3	696.8	697.5	698.2	698.9	699.6	702.9
145°	731.9	732.2	732.5	732.8	733.2	733.6	734.1	734.5	735.1	735.6	737.2
147.5°	764.9	765.3	765.6	766.0	766.3	766.7	767.1	767.5	767.9	768.3	769.2
150°	787.9	787.7	787.6	787.4	787.2	787.5	788.2	788.8	789.5	790.1	790.1
152.5°	806.7	807.0	807.2	807.5	807.7	807.9	808.1	808.4	808.7	809.0	809.4
155°	835.8	835.8	835.8	835.8	835.8	835.8	836.0	836.2	836.3	836.5	837.2
157.5°	861.8	861.4	861.0	860.6	860.3	860.2	860.4	860.5	860.6	860.8	861.5
160°	877.0	876.6	876.1	875.6	875.1	875.0	875.1	875.2	875.4	875.6	876.3
162.5°	890.6	890.2	889.9	889.6	889.2	889.0	889.0	889.1	889.1	889.2	889.9
165°	908.8	908.4	908.1	907.8	907.5	907.4	907.5	907.7	907.9	908.0	908.7
167.5°	924.1	923.4	922.7	922.1	921.4	921.1	921.1	921.1	921.1	921.1	922.1
170°	932.4	931.7	931.0	930.4	929.7	929.3	929.3	929.3	929.3	929.3	930.4
172.5°	938.2	937.5	936.9	936.2	935.6	935.3	935.3	935.3	935.3	935.3	936.2
175°	944.9	944.2	943.6	942.9	942.3	941.9	941.9	941.9	941.9	941.9	942.9
177.5°	948.3	947.7	947.3	946.7	946.1	945.8	945.7	945.6	945.5	945.3	946.1
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1



TEST NUMBER: P333317-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1495.5	1497.3	1499.2	1500.0	1499.7	1499.5	1499.2	1498.9
5°	1490.9	1493.6	1496.2	1497.3	1496.9	1496.7	1496.3	1496.0
7.5°	1478.5	1480.8	1483.1	1484.0	1483.8	1483.4	1483.1	1482.7
10°	1466.8	1469.0	1471.3	1472.3	1472.0	1471.7	1471.3	1471.0
12.5°	1452.7	1454.5	1456.3	1456.8	1455.9	1455.1	1454.2	1453.4
15°	1426.4	1428.4	1430.3	1430.7	1429.4	1428.0	1426.7	1425.4
17.5°	1392.9	1394.4	1395.9	1396.3	1395.4	1394.7	1393.9	1393.1
20°	1367.2	1368.1	1369.1	1369.6	1369.6	1369.6	1369.6	1369.6
22.5°	1340.7	1341.9	1343.1	1343.3	1342.6	1341.8	1341.0	1340.2
25°	1298.7	1300.0	1301.4	1301.2	1299.6	1297.9	1296.3	1294.7
27.5°	1250.1	1250.9	1251.9	1252.1	1251.4	1250.8	1250.3	1249.7
30°	1216.6	1217.3	1218.0	1218.0	1217.8	1217.4	1217.1	1216.7
32.5°	1184.9	1185.5	1186.2	1186.4	1186.0	1185.7	1185.3	1185.1
35°	1133.5	1134.4	1135.5	1136.0	1136.0	1136.0	1136.0	1136.0
37.5°	1079.5	1080.8	1082.1	1082.7	1082.5	1082.4	1082.3	1082.1
40°	1043.0	1044.3	1045.7	1046.6	1047.3	1047.9	1048.6	1049.2
42.5°	1009.5	1011.1	1012.6	1013.4	1013.6	1013.7	1013.9	1014.0
45°	955.4	957.6	959.9	961.2	961.6	961.9	962.2	962.5
47.5°	899.6	902.9	906.3	908.2	909.0	909.6	910.4	911.2
50°	862.4	866.0	869.7	871.9	872.9	873.9	874.9	875.8
52.5°	825.4	829.2	833.0	835.4	836.0	836.8	837.5	838.2
55°	766.9	770.5	774.1	776.6	777.9	779.2	780.5	781.8
57.5°	709.2	713.3	717.5	720.0	721.0	721.9	722.9	723.9
60°	669.6	674.5	679.4	682.3	683.3	684.3	685.3	686.3
62.5°	629.5	634.9	640.4	643.7	644.9	646.2	647.4	648.7
65°	569.7	574.6	579.5	582.6	583.9	585.2	586.5	587.8
67.5°	508.3	514.3	520.2	524.0	525.7	527.4	529.1	530.8
70°	466.5	472.7	478.9	483.0	484.9	486.9	488.9	490.8
72.5°	427.5	434.3	441.0	445.1	446.6	448.0	449.4	450.8
75°	368.7	375.2	381.7	385.9	387.5	389.1	390.8	392.4
77.5°	309.7	316.9	324.1	328.4	329.7	330.9	332.2	333.6
80°	274.5	281.6	288.9	293.1	294.4	295.7	297.0	298.3
82.5°	241.0	248.0	254.9	259.5	261.8	264.2	266.6	268.9
85°	195.1	202.3	209.5	214.4	217.0	219.6	222.3	224.8
87.5°	160.5	168.2	175.9	181.0	183.3	185.7	188.0	190.5
90°	148.9	157.3	165.6	171.2	173.9	176.7	179.5	182.3
92.5°	160.8	169.1	177.4	182.9	185.6	188.2	190.9	193.5
95°	180.7	189.0	197.4	202.8	205.5	208.0	210.7	213.3
97.5°	206.1	214.1	222.1	227.2	229.6	232.1	234.5	236.9
100°	223.5	231.8	240.2	245.4	247.7	250.1	252.3	254.6
102.5°	242.1	250.3	258.5	263.8	266.3	268.6	271.1	273.5
105°	272.0	279.6	287.0	292.2	294.9	297.7	300.5	303.3
107.5°	306.4	313.4	320.4	324.8	326.8	328.9	330.8	332.8
110°	330.1	336.8	343.5	347.9	350.1	352.1	354.3	356.4



TEST NUMBER: P333317-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	353.8	360.1	366.2	370.2	372.2	374.3	376.3	378.2
115°	390.8	396.5	402.3	406.0	407.8	409.6	411.4	413.2
117.5°	427.3	433.0	438.7	442.3	443.8	445.4	447.0	448.6
120°	452.4	458.0	463.5	466.9	468.3	469.6	470.9	472.2
122.5°	476.5	481.6	486.7	490.0	491.4	492.9	494.4	495.8
125°	512.4	517.3	522.2	525.3	526.8	528.3	529.7	531.2
127.5°	547.6	552.2	556.9	560.1	561.6	563.2	564.8	566.3
130°	571.8	576.3	580.6	583.5	584.8	586.1	587.4	588.7
132.5°	594.3	598.7	603.0	605.8	606.6	607.6	608.5	609.4
135°	628.3	632.5	636.8	639.4	640.4	641.3	642.3	643.3
137.5°	662.9	666.9	671.0	673.3	673.7	674.2	674.7	675.1
140°	684.4	688.3	692.3	694.5	694.9	695.4	695.9	696.4
142.5°	706.2	709.4	712.7	714.5	715.0	715.5	716.0	716.5
145°	738.9	740.5	742.1	743.3	744.1	744.9	745.7	746.6
147.5°	770.2	771.0	771.9	772.1	771.6	771.1	770.5	770.1
150°	790.1	790.1	790.1	790.1	790.1	790.1	790.1	790.1
152.5°	809.7	810.1	810.5	810.5	809.9	809.5	808.9	808.3
155°	837.8	838.5	839.1	839.1	838.2	837.4	836.6	835.8
157.5°	862.1	862.8	863.5	863.3	862.1	861.1	860.0	858.9
160°	876.9	877.5	878.2	878.2	877.3	876.5	875.6	874.9
162.5°	890.7	891.6	892.3	892.2	891.3	890.3	889.4	888.4
165°	909.4	910.0	910.6	910.5	909.5	908.5	907.5	906.5
167.5°	923.1	924.1	925.1	925.0	924.1	923.0	922.0	921.0
170°	931.3	932.4	933.3	933.2	932.1	930.9	929.8	928.7
172.5°	937.3	938.2	939.2	939.2	938.2	937.2	936.1	935.1
175°	943.9	944.9	945.8	945.7	944.6	943.5	942.4	941.2
177.5°	946.9	947.6	948.5	948.4	947.4	946.6	945.7	944.7
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1

(END OF REPORT)