

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: P333311-930

Luminaire Tested: **S125DIP-S1270D590U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333311-930
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-S1270D590U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5850.0 lumens
Efficiency: N/A
Efficacy: 106.2 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-Direct

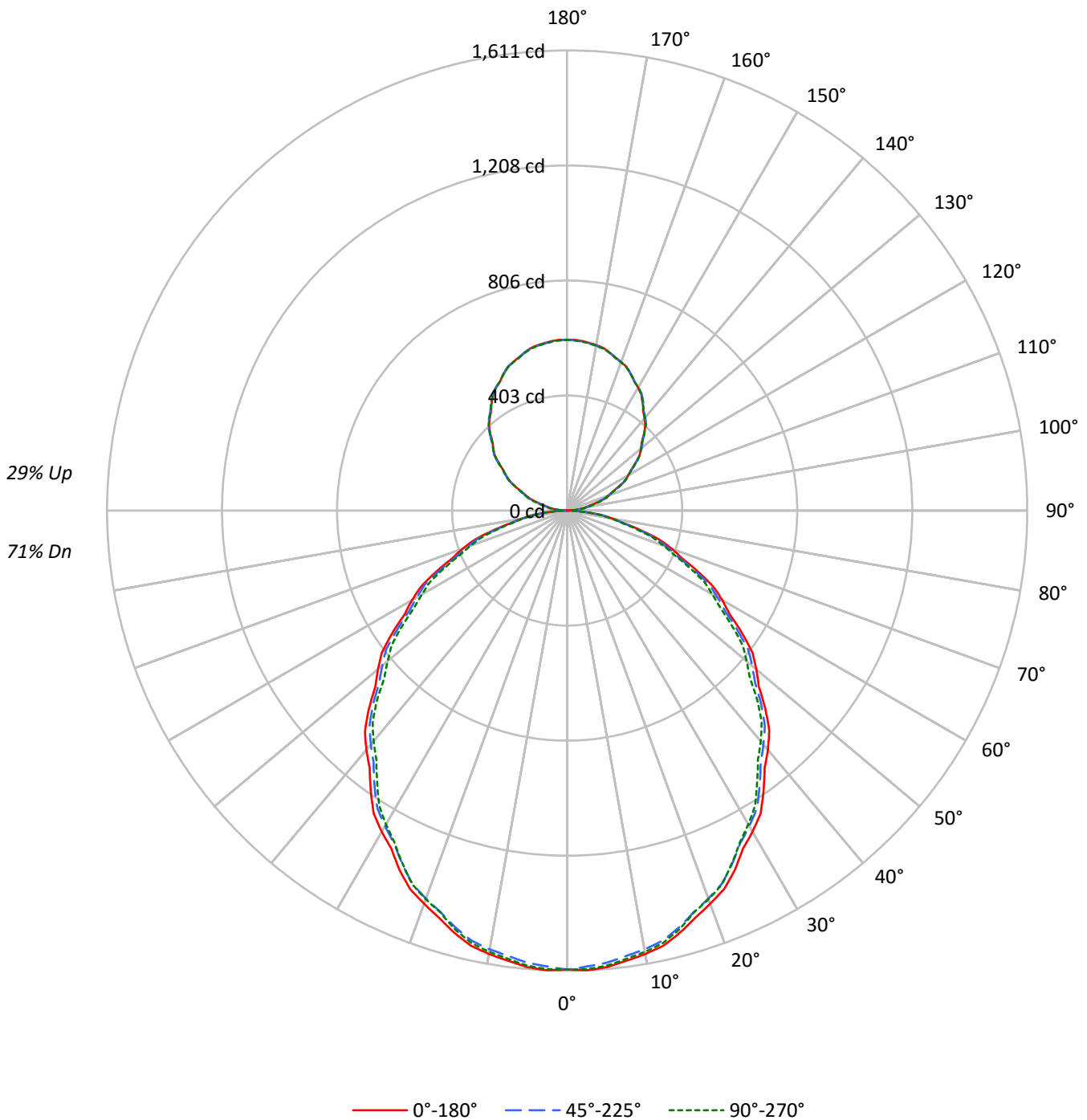
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	103	98	94	90	97	93	89	86	84	81	78	75	73	71	67	65	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	74	63	56	50	57	51	47	52	47	43	47	43	39	36
5	72	60	51	45	68	57	49	43	51	45	40	47	41	37	42	38	34	32
6	66	54	45	39	62	51	43	38	46	40	35	42	37	33	38	34	30	28
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	35	30	27	25
8	57	44	36	31	54	42	35	30	39	32	28	35	30	26	32	28	24	22
9	53	40	33	27	50	39	31	27	35	29	25	32	27	23	30	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10377	10377	10377
5°	10400	10301	10367
10°	10337	10228	10287
15°	10224	10105	10148
20°	10065	9933	9950
25°	9892	9728	9719
30°	9679	9508	9461
35°	9451	9270	9140
40°	9217	9012	8884
45°	8963	8777	8603
50°	8685	8493	8238
55°	8417	8173	7944
60°	8094	7848	7569
65°	7713	7459	7207
70°	7345	7009	6770
75°	6692	6470	6248
80°	5954	5861	5720
85°	5187	5276	4987



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	2.6
10°-20°	427.9	7.3
20°-30°	631.9	10.8
30°-40°	737.3	12.6
40°-50°	740.5	12.7
50°-60°	650.0	11.1
60°-70°	484.3	8.3
70°-80°	276.9	4.7
80°-90°	81.9	1.4
90°-100°	40.0	0.7
100°-110°	118.2	2.0
110°-120°	200.2	3.4
120°-130°	263.5	4.5
130°-140°	295.3	5.0
140°-150°	289.4	4.9
150°-160°	243.0	4.2
160°-170°	161.6	2.8
170°-180°	56.5	1.0
0°-30°	1211.3	20.7
0°-40°	1948.6	33.3
0°-60°	3339.1	57.1
0°-90°	4182.3	71.5
90°-120°	358.5	6.1
90°-150°	1206.6	20.6
90°-180°	1668.0	28.5
0°-180°	5850.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1607	1607	1607	1607	1607	
5°	1604	1601	1589	1600	1599	152
15°	1529	1525	1511	1517	1518	431
25°	1388	1381	1365	1367	1364	638
35°	1199	1193	1176	1169	1159	749
45°	981	976	961	946	942	756
55°	748	743	726	715	706	667
65°	505	501	488	477	472	501
75°	268	266	259	255	250	286
85°	70	71	71	70	67	78
90°	0	4	7	10	11	5
95°	30	31	36	39	40	32
105°	106	108	111	114	115	113
115°	200	202	203	203	202	198
125°	292	295	296	295	294	262
135°	380	383	384	384	382	293
145°	461	463	464	464	463	288
155°	527	527	528	530	527	243
165°	574	573	573	575	572	162
175°	596	594	594	597	594	57
180°	598	598	598	598	598	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7
2.5°	1610.8	1610.1	1609.5	1608.7	1608.1	1606.6	1604.3	1602.1	1599.9	1597.6	1599.9
5°	1604.2	1603.6	1603.0	1602.5	1601.9	1600.3	1597.4	1594.6	1591.8	1588.9	1591.5
7.5°	1589.4	1588.9	1588.3	1587.7	1587.1	1585.3	1582.3	1579.2	1576.1	1573.0	1575.4
10°	1576.2	1575.6	1575.1	1574.5	1573.9	1572.1	1569.0	1565.9	1562.8	1559.7	1562.0
12.5°	1559.9	1558.9	1558.0	1556.9	1555.9	1554.0	1551.0	1548.2	1545.3	1542.4	1544.3
15°	1529.2	1528.4	1527.5	1526.6	1525.8	1523.8	1520.7	1517.6	1514.5	1511.4	1512.8
17.5°	1493.9	1492.6	1491.3	1490.1	1488.9	1486.6	1483.4	1480.2	1477.0	1473.7	1475.5
20°	1464.4	1463.8	1463.2	1462.6	1462.1	1460.0	1456.3	1452.6	1448.9	1445.3	1447.2
22.5°	1434.8	1433.9	1432.8	1431.8	1430.8	1428.6	1425.1	1421.7	1418.2	1414.8	1416.1
25°	1388.1	1386.7	1385.3	1383.9	1382.4	1379.9	1376.2	1372.6	1368.9	1365.2	1365.8
27.5°	1333.4	1332.6	1331.7	1330.9	1330.1	1327.7	1324.0	1320.1	1316.4	1312.6	1312.7
30°	1297.9	1297.0	1296.2	1295.3	1294.5	1291.9	1287.7	1283.4	1279.2	1275.0	1274.4
32.5°	1259.2	1257.9	1256.6	1255.3	1254.0	1251.5	1247.7	1243.9	1240.1	1236.3	1235.3
35°	1198.7	1197.6	1196.5	1195.3	1194.2	1191.6	1187.6	1183.7	1179.7	1175.8	1174.4
37.5°	1135.9	1134.5	1133.1	1131.6	1130.2	1127.6	1124.0	1120.2	1116.5	1112.8	1110.7
40°	1093.2	1091.8	1090.4	1088.9	1087.5	1084.8	1080.9	1076.9	1073.0	1069.0	1066.5
42.5°	1047.4	1046.3	1045.1	1043.8	1042.7	1040.1	1036.2	1032.2	1028.3	1024.3	1022.0
45°	981.3	980.2	979.1	978.0	976.8	974.5	971.2	967.8	964.4	961.0	957.6
47.5°	910.1	910.2	910.3	910.3	910.4	908.3	904.3	900.3	896.2	892.1	888.7
50°	864.4	863.6	862.7	861.9	861.0	858.8	855.5	852.1	848.7	845.3	841.6
52.5°	817.6	817.0	816.4	815.7	815.1	813.0	809.3	805.8	802.2	798.5	795.3
55°	747.5	746.6	745.8	744.9	744.0	741.7	737.7	733.8	729.8	725.9	723.3
57.5°	673.4	673.0	672.5	672.1	671.6	669.8	666.4	663.1	659.7	656.4	653.1
60°	626.6	625.6	624.4	623.3	622.2	620.0	616.9	613.8	610.7	607.6	604.8
62.5°	577.9	577.0	576.1	575.1	574.2	572.5	569.8	567.1	564.5	561.8	558.8
65°	504.7	504.1	503.5	503.0	502.4	500.5	497.4	494.3	491.2	488.1	485.6
67.5°	433.7	432.5	431.4	430.2	429.0	427.2	424.9	422.6	420.3	417.9	415.8
70°	389.0	387.6	386.1	384.7	383.4	381.3	378.8	376.3	373.7	371.2	369.5
72.5°	340.1	339.2	338.3	337.3	336.3	335.0	333.4	331.7	330.1	328.5	326.5
75°	268.2	267.7	267.1	266.5	266.0	265.0	263.6	262.1	260.7	259.3	258.4
77.5°	201.9	201.6	201.4	201.2	201.0	200.5	199.7	198.9	198.0	197.3	196.8
80°	160.1	160.1	160.1	160.1	160.1	159.9	159.3	158.7	158.2	157.6	157.4
82.5°	123.5	123.1	122.6	122.2	121.7	121.5	121.3	121.2	121.2	121.0	120.5
85°	70.0	70.2	70.4	70.8	71.0	71.2	71.2	71.2	71.2	71.2	70.9
87.5°	27.6	27.7	27.9	28.0	28.2	28.3	28.2	28.1	28.0	28.0	28.0
90°	0.5	1.3	2.1	2.9	3.8	4.6	5.3	6.0	6.7	7.4	8.0
92.5°	11.3	11.8	12.4	13.0	13.5	14.3	15.2	16.1	17.0	17.9	18.5
95°	30.2	30.4	30.7	30.8	31.1	31.7	32.7	33.8	34.8	35.8	36.5
97.5°	50.2	50.3	50.4	50.5	50.5	51.3	52.7	54.1	55.6	57.0	57.7
100°	65.1	65.1	65.1	65.1	65.1	65.8	67.1	68.5	69.8	71.2	72.1
102.5°	81.1	81.5	81.9	82.3	82.8	83.3	84.0	84.7	85.4	86.0	87.1
105°	106.1	106.6	107.0	107.6	108.1	108.7	109.3	109.9	110.6	111.1	111.8
107.5°	133.5	134.1	134.6	135.1	135.7	136.2	136.6	137.1	137.5	138.0	138.4
110°	152.5	153.0	153.6	154.1	154.7	155.1	155.3	155.6	156.0	156.3	156.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	171.9	172.2	172.4	172.7	173.0	173.3	173.7	174.1	174.5	174.9	175.0
115°	200.5	200.9	201.3	201.7	202.1	202.4	202.6	202.8	203.0	203.3	203.2
117.5°	229.1	229.3	229.5	229.7	229.8	230.1	230.2	230.4	230.6	230.8	230.9
120°	247.0	247.5	248.0	248.5	249.1	249.3	249.5	249.6	249.6	249.7	249.7
122.5°	266.4	266.5	266.7	266.8	267.1	267.3	267.6	267.8	268.1	268.4	268.3
125°	292.5	293.2	293.8	294.4	295.1	295.4	295.5	295.6	295.7	295.8	295.6
127.5°	320.5	320.8	321.1	321.5	321.9	322.1	322.2	322.4	322.5	322.6	322.5
130°	337.2	337.7	338.3	338.8	339.2	339.7	339.8	340.1	340.2	340.5	340.4
132.5°	353.9	354.8	355.6	356.4	357.3	357.8	357.7	357.7	357.6	357.6	357.5
135°	380.4	381.1	381.7	382.3	382.9	383.3	383.4	383.5	383.6	383.7	383.7
137.5°	405.4	406.0	406.6	407.2	407.8	408.2	408.5	408.6	408.9	409.1	409.2
140°	421.3	421.9	422.4	422.9	423.5	423.9	424.2	424.5	424.8	425.1	425.3
142.5°	437.4	437.8	438.2	438.7	439.1	439.5	439.9	440.3	440.8	441.1	441.2
145°	460.9	461.3	461.8	462.2	462.6	462.9	463.3	463.6	463.9	464.1	464.1
147.5°	482.7	482.9	483.1	483.4	483.6	483.8	484.0	484.4	484.6	484.9	485.1
150°	497.2	497.1	497.0	496.9	496.8	496.9	497.3	497.7	498.1	498.6	498.6
152.5°	509.1	509.2	509.4	509.6	509.6	509.8	510.0	510.1	510.3	510.5	510.8
155°	527.4	527.4	527.4	527.4	527.4	527.5	527.6	527.7	527.8	527.9	528.3
157.5°	543.8	543.6	543.3	543.2	542.9	542.8	542.9	543.1	543.2	543.2	543.6
160°	553.5	553.2	552.9	552.5	552.2	552.1	552.2	552.4	552.4	552.5	552.9
162.5°	562.1	561.8	561.6	561.3	561.1	561.0	561.0	561.1	561.1	561.1	561.6
165°	573.5	573.2	573.1	572.8	572.7	572.6	572.7	572.8	572.9	573.0	573.4
167.5°	583.2	582.8	582.3	581.9	581.5	581.3	581.3	581.3	581.3	581.3	581.9
170°	588.3	587.9	587.5	587.1	586.7	586.5	586.5	586.5	586.5	586.5	587.1
172.5°	592.1	591.7	591.3	590.8	590.4	590.2	590.2	590.2	590.2	590.2	590.8
175°	596.2	595.8	595.4	595.0	594.6	594.4	594.4	594.4	594.4	594.4	595.0
177.5°	598.4	598.1	597.8	597.5	597.0	596.9	596.8	596.7	596.6	596.6	597.0
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7
2.5°	1602.1	1604.3	1606.6	1607.6	1607.4	1607.2	1607.0	1606.7
5°	1594.0	1596.6	1599.1	1600.3	1599.9	1599.7	1599.4	1599.1
7.5°	1577.8	1580.4	1582.8	1584.0	1583.7	1583.4	1583.1	1582.8
10°	1564.2	1566.5	1568.7	1569.7	1569.5	1569.1	1568.9	1568.6
12.5°	1546.1	1547.8	1549.6	1550.5	1550.5	1550.4	1550.4	1550.3
15°	1514.3	1515.6	1517.0	1517.8	1517.8	1517.8	1517.8	1517.8
17.5°	1477.2	1479.0	1480.7	1480.9	1479.5	1478.1	1476.7	1475.3
20°	1449.3	1451.2	1453.2	1453.5	1452.0	1450.7	1449.3	1447.8
22.5°	1417.4	1418.7	1420.0	1420.2	1419.2	1418.2	1417.2	1416.3
25°	1366.4	1366.9	1367.5	1367.3	1366.5	1365.6	1364.8	1363.9
27.5°	1312.8	1313.0	1313.0	1312.6	1311.8	1311.0	1310.1	1309.3
30°	1273.8	1273.3	1272.7	1272.0	1271.1	1270.3	1269.4	1268.6
32.5°	1234.3	1233.3	1232.2	1230.9	1229.5	1227.9	1226.4	1224.9
35°	1173.0	1171.6	1170.2	1168.3	1166.0	1163.8	1161.6	1159.3
37.5°	1108.6	1106.5	1104.4	1102.7	1101.4	1100.1	1098.8	1097.5
40°	1064.0	1061.4	1058.8	1057.2	1056.3	1055.5	1054.6	1053.8
42.5°	1019.7	1017.3	1015.0	1013.3	1011.9	1010.6	1009.3	1008.0
45°	954.2	950.8	947.5	945.3	944.4	943.6	942.7	941.9
47.5°	885.2	881.7	878.3	875.6	873.6	871.6	869.7	867.7
50°	838.0	834.3	830.6	827.8	825.8	823.9	821.9	819.9
52.5°	792.1	788.9	785.6	782.9	780.7	778.5	776.3	774.1
55°	720.7	718.2	715.7	713.4	711.4	709.5	707.4	705.5
57.5°	649.9	646.6	643.4	641.2	640.1	639.0	637.9	636.8
60°	601.9	599.2	596.3	593.9	591.9	590.0	588.0	586.0
62.5°	555.7	552.7	549.7	547.4	545.8	544.3	542.7	541.3
65°	483.1	480.5	477.9	476.1	475.0	473.9	472.7	471.6
67.5°	413.7	411.5	409.4	408.0	407.2	406.6	405.9	405.2
70°	367.8	366.1	364.4	363.0	361.8	360.7	359.6	358.5
72.5°	324.7	322.7	320.8	319.3	318.1	317.0	315.8	314.7
75°	257.6	256.7	255.9	254.9	253.8	252.7	251.5	250.4
77.5°	196.2	195.8	195.3	194.6	193.8	193.0	192.2	191.4
80°	157.0	156.8	156.5	156.0	155.5	154.9	154.3	153.8
82.5°	120.0	119.5	119.0	118.7	118.5	118.5	118.3	118.2
85°	70.6	70.4	70.0	69.6	69.1	68.5	67.9	67.3
87.5°	28.1	28.2	28.4	28.2	27.8	27.4	27.1	26.7
90°	8.5	9.0	9.5	9.9	10.3	10.5	10.8	11.2
92.5°	19.2	19.9	20.6	21.0	21.3	21.5	21.7	21.9
95°	37.3	38.0	38.7	39.1	39.4	39.6	39.8	40.0
97.5°	58.4	59.1	59.8	60.2	60.3	60.4	60.5	60.7
100°	73.1	73.9	74.8	75.4	75.7	75.9	76.1	76.3
102.5°	88.1	89.1	90.1	90.7	91.1	91.3	91.6	91.9
105°	112.4	113.0	113.7	114.1	114.4	114.7	115.0	115.4
107.5°	138.7	139.0	139.3	139.4	139.4	139.4	139.3	139.3
110°	156.9	157.2	157.5	157.6	157.5	157.4	157.3	157.2



TEST NUMBER: P333311-930

CATALOG NUMBER: S125DIP-S1270D590U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	175.2	175.3	175.5	175.5	175.3	175.0	174.9	174.7
115°	203.0	202.9	202.8	202.8	202.6	202.5	202.4	202.4
117.5°	231.0	231.1	231.1	231.0	230.6	230.2	229.8	229.3
120°	249.7	249.7	249.7	249.6	249.2	248.7	248.3	247.9
122.5°	268.2	268.2	268.1	267.8	267.5	267.2	266.8	266.5
125°	295.4	295.2	295.0	294.8	294.7	294.6	294.5	294.4
127.5°	322.4	322.3	322.2	322.0	321.8	321.6	321.4	321.2
130°	340.2	340.1	340.1	339.9	339.7	339.5	339.2	339.1
132.5°	357.3	357.3	357.2	356.9	356.7	356.4	356.1	355.8
135°	383.7	383.7	383.7	383.5	383.1	382.7	382.3	381.9
137.5°	409.4	409.4	409.6	409.4	408.9	408.4	407.9	407.3
140°	425.5	425.7	425.9	425.7	425.3	424.8	424.2	423.7
142.5°	441.3	441.5	441.6	441.4	440.9	440.3	439.9	439.4
145°	464.1	464.1	464.1	464.0	463.7	463.4	463.1	462.8
147.5°	485.3	485.6	485.8	485.6	484.9	484.2	483.5	482.8
150°	498.6	498.6	498.6	498.5	498.3	498.1	497.9	497.7
152.5°	511.0	511.3	511.5	511.4	511.0	510.7	510.3	510.0
155°	528.7	529.1	529.5	529.5	529.0	528.5	527.9	527.4
157.5°	544.0	544.5	544.9	544.8	544.0	543.4	542.7	542.0
160°	553.3	553.8	554.2	554.2	553.7	553.1	552.6	552.1
162.5°	562.1	562.6	563.1	563.0	562.5	561.8	561.3	560.6
165°	573.8	574.2	574.7	574.5	574.0	573.3	572.7	572.1
167.5°	582.5	583.2	583.8	583.8	583.1	582.4	581.8	581.2
170°	587.7	588.3	589.0	588.9	588.2	587.5	586.8	586.0
172.5°	591.5	592.1	592.7	592.7	592.1	591.4	590.8	590.1
175°	595.7	596.2	596.9	596.8	596.1	595.4	594.7	593.9
177.5°	597.5	598.0	598.5	598.5	597.9	597.4	596.7	596.1
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7

(END OF REPORT)