

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: P333613-927

Luminaire Tested: **S125RDIP-S1270D365U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333613-927
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: S125RDIP-S1270D365U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5024.1 lumens
Efficiency: N/A
Efficacy: 100.9 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-Direct

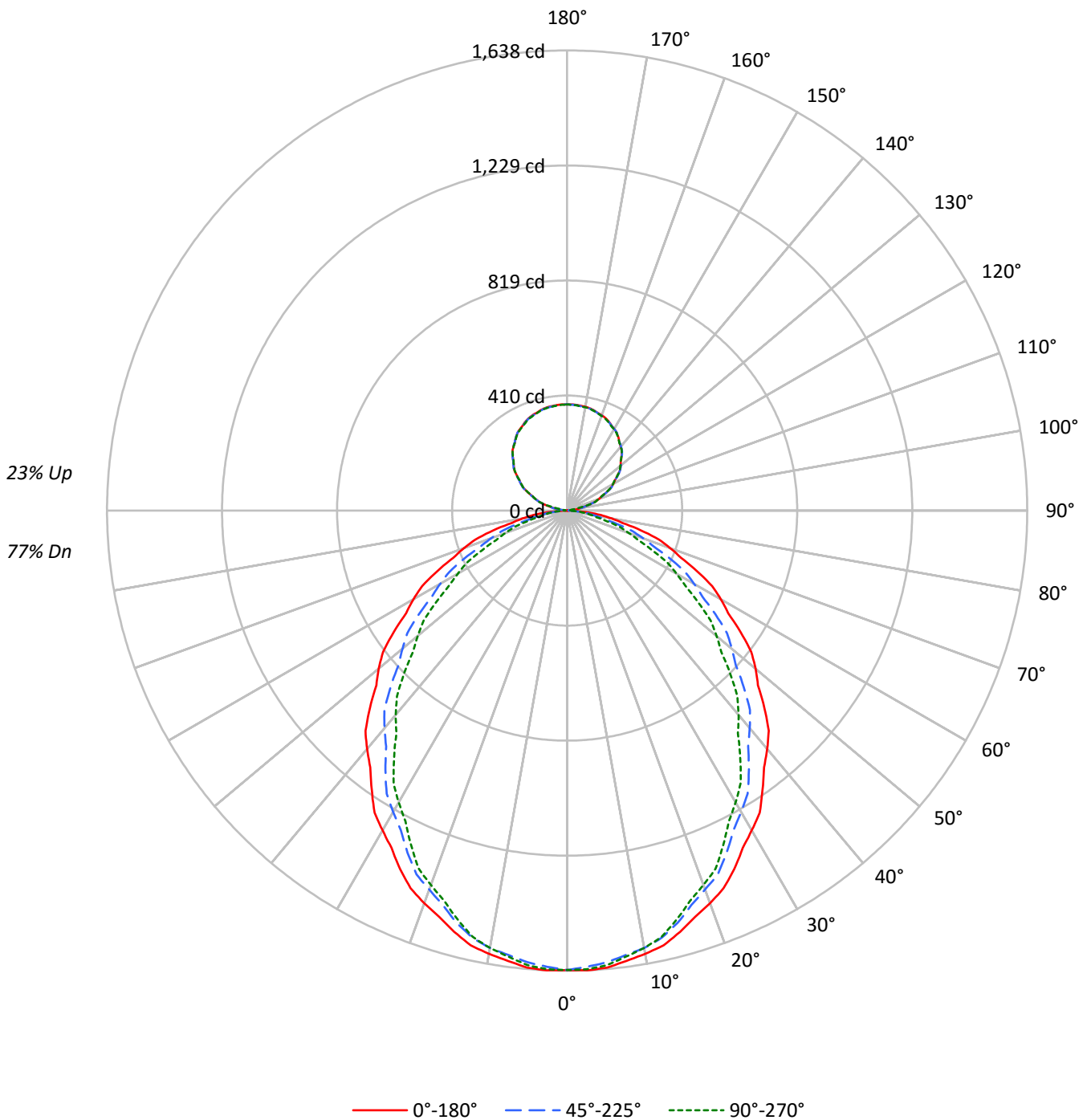
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	71	69	66
2	95	88	81	76	90	84	78	73	77	72	68	70	66	63	64	61	59	55
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50	47
4	80	69	61	54	76	66	59	53	61	54	50	56	51	47	51	47	44	41
5	74	62	53	47	70	59	51	46	54	48	43	50	45	41	46	42	38	36
6	68	56	47	41	65	53	46	40	49	43	38	45	40	36	42	37	34	31
7	63	50	42	36	60	48	41	35	45	38	34	42	36	32	38	34	30	28
8	59	46	38	32	56	44	37	32	41	35	30	38	33	29	35	31	27	25
9	55	42	34	29	52	41	33	29	38	32	27	35	30	26	33	28	25	23
10	51	39	31	26	49	38	31	26	35	29	25	33	27	24	30	26	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10561	10561	10561
5°	10585	10466	10529
10°	10506	10368	10368
15°	10380	10158	10075
20°	10221	9864	9745
25°	10033	9576	9365
30°	9801	9238	8944
35°	9563	8891	8472
40°	9340	8528	8008
45°	9070	8122	7501
50°	8799	7681	6974
55°	8483	7260	6411
60°	8169	6748	5807
65°	7795	6154	5115
70°	7370	5410	4409
75°	6780	4561	3666
80°	5973	3582	3080
85°	5039	2927	2749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	3.1
10°-20°	429.7	8.6
20°-30°	623.1	12.4
30°-40°	710.2	14.1
40°-50°	692.3	13.8
50°-60°	582.7	11.6
60°-70°	408.5	8.1
70°-80°	210.0	4.2
80°-90°	53.8	1.1
90°-100°	13.7	0.3
100°-110°	84.6	1.7
110°-120°	153.4	3.1
120°-130°	196.9	3.9
130°-140°	211.8	4.2
140°-150°	198.8	4.0
150°-160°	160.8	3.2
160°-170°	104.0	2.1
170°-180°	35.9	0.7
0°-30°	1206.6	24.0
0°-40°	1916.8	38.2
0°-60°	3191.8	63.5
0°-90°	3864.0	76.9
90°-120°	251.8	5.0
90°-150°	859.3	17.1
90°-180°	1160.0	23.1
0°-180°	5024.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1633	1627	1614	1626	1624	155
15°	1552	1544	1519	1517	1507	437
25°	1408	1388	1344	1328	1314	648
35°	1213	1182	1128	1093	1074	759
45°	993	955	889	842	821	766
55°	753	712	645	591	569	674
65°	510	467	403	355	335	505
75°	272	234	183	157	147	288
85°	68	47	40	38	37	76
90°	0	3	4	6	7	4
95°	16	15	4	6	6	20
105°	82	83	83	83	83	87
115°	155	156	156	155	153	153
125°	220	222	222	221	220	196
135°	274	276	275	275	273	211
145°	318	318	318	319	317	199
155°	350	348	349	350	348	161
165°	369	368	368	369	367	104
175°	378	376	376	378	376	36
180°	378	378	378	378	378	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1638.2	1637.6	1636.9	1636.3	1635.6	1634.2	1632.0	1629.8	1627.6	1625.4	1627.6
5°	1632.8	1631.7	1630.6	1629.5	1628.4	1626.4	1623.3	1620.3	1617.3	1614.3	1617.0
7.5°	1616.8	1615.7	1614.7	1613.6	1612.6	1610.3	1606.6	1603.0	1599.4	1595.8	1597.7
10°	1602.0	1601.1	1600.3	1599.5	1598.6	1596.3	1592.4	1588.6	1584.8	1581.0	1581.8
12.5°	1585.2	1584.1	1583.0	1582.0	1581.0	1577.9	1572.7	1567.6	1562.3	1557.2	1557.8
15°	1552.5	1550.9	1549.3	1547.6	1545.9	1542.2	1536.4	1530.7	1525.0	1519.2	1518.9
17.5°	1515.7	1513.2	1510.7	1508.2	1505.6	1500.7	1493.5	1486.2	1479.0	1471.7	1470.4
20°	1487.1	1484.3	1481.5	1478.8	1476.1	1470.3	1461.6	1452.8	1444.0	1435.2	1433.8
22.5°	1455.5	1452.7	1449.9	1447.2	1444.5	1438.5	1429.3	1420.1	1410.8	1401.6	1398.9
25°	1408.0	1403.9	1399.8	1395.7	1391.5	1384.4	1374.3	1364.1	1353.9	1343.8	1340.2
27.5°	1353.7	1348.7	1343.7	1338.7	1333.7	1325.8	1314.9	1304.0	1293.2	1282.3	1277.3
30°	1314.2	1308.9	1303.7	1298.5	1293.3	1284.9	1273.4	1261.9	1250.3	1238.8	1232.5
32.5°	1275.7	1269.6	1263.5	1257.4	1251.3	1242.3	1230.6	1218.9	1207.0	1195.3	1188.4
35°	1212.9	1206.3	1199.7	1193.1	1186.5	1177.0	1164.7	1152.4	1140.0	1127.7	1119.7
37.5°	1151.4	1143.4	1135.4	1127.4	1119.3	1108.9	1096.2	1083.5	1070.7	1058.0	1048.5
40°	1107.9	1099.6	1091.4	1083.2	1075.0	1064.2	1051.1	1037.9	1024.7	1011.5	1001.2
42.5°	1062.5	1054.0	1045.5	1037.0	1028.6	1017.6	1004.0	990.4	976.8	963.1	953.2
45°	993.0	985.1	977.1	969.2	961.2	949.7	934.5	919.5	904.4	889.3	878.3
47.5°	921.1	912.8	904.4	896.0	887.6	875.8	860.5	845.3	830.1	814.9	803.6
50°	875.7	866.6	857.5	848.5	839.5	827.1	811.4	795.8	780.1	764.5	753.0
52.5°	826.2	817.0	807.7	798.4	789.2	777.1	762.4	747.7	732.8	718.1	705.7
55°	753.4	744.7	735.9	727.1	718.3	706.2	690.9	675.5	660.1	644.8	632.4
57.5°	679.8	670.4	661.0	651.6	642.2	630.2	615.4	600.5	585.7	570.8	558.8
60°	632.4	622.7	613.1	603.6	594.0	581.7	566.9	552.1	537.3	522.4	510.4
62.5°	582.0	572.8	563.6	554.4	545.3	533.2	518.2	503.1	488.1	473.0	461.8
65°	510.1	500.7	491.5	482.1	472.8	460.8	446.3	431.7	417.2	402.7	391.7
67.5°	438.7	429.4	420.0	410.7	401.4	389.8	375.8	361.9	347.9	334.0	323.9
70°	390.3	381.0	371.6	362.3	353.0	341.4	327.7	314.0	300.2	286.5	278.1
72.5°	342.9	333.7	324.6	315.5	306.4	295.4	282.6	269.7	256.9	244.1	236.2
75°	271.7	263.5	255.2	247.0	238.8	228.9	217.4	205.9	194.3	182.8	176.7
77.5°	201.1	194.5	187.9	181.3	174.8	166.8	157.6	148.4	139.2	129.9	125.7
80°	160.6	154.0	147.4	140.8	134.2	127.1	119.4	111.7	104.0	96.3	93.9
82.5°	121.0	115.1	109.2	103.2	97.4	91.7	86.4	81.2	75.9	70.7	69.5
85°	68.0	63.0	58.1	53.1	48.2	45.0	43.6	42.3	40.9	39.5	39.2
87.5°	22.8	21.3	19.9	18.5	17.0	16.2	16.1	16.0	15.8	15.7	15.8
90°	0.3	0.8	1.3	1.7	2.3	2.8	3.2	3.6	4.0	4.5	4.8
92.5°	4.3	4.0	3.6	3.2	2.9	2.9	3.3	3.7	4.1	4.5	4.8
95°	15.9	15.8	15.6	15.4	15.2	13.9	11.6	9.2	6.8	4.5	4.8
97.5°	33.4	33.7	34.0	34.3	34.7	32.5	27.8	23.1	18.5	13.8	12.0
100°	46.7	47.0	47.1	47.3	47.5	47.7	48.0	48.2	48.5	48.7	39.5
102.5°	60.4	60.7	60.9	61.2	61.4	61.6	61.7	61.9	62.0	62.2	60.4
105°	82.3	82.5	82.9	83.1	83.3	83.4	83.4	83.4	83.4	83.4	83.4
107.5°	105.0	105.0	105.0	105.0	105.0	105.1	105.3	105.4	105.5	105.6	105.6
110°	119.9	119.9	119.9	119.9	119.9	119.9	120.0	120.2	120.3	120.4	120.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	133.7	133.9	134.0	134.2	134.4	134.4	134.5	134.6	134.7	134.8	134.5
115°	154.6	154.9	155.2	155.5	155.8	156.0	156.1	156.1	156.2	156.2	156.0
117.5°	176.1	176.1	176.1	176.1	176.1	176.2	176.4	176.7	176.9	177.1	176.8
120°	189.6	189.5	189.5	189.4	189.3	189.4	189.6	189.7	190.0	190.1	190.0
122.5°	201.5	201.7	201.9	202.2	202.4	202.6	202.6	202.7	202.8	202.9	202.8
125°	219.8	220.2	220.7	221.1	221.6	221.8	221.8	221.8	221.8	221.8	221.5
127.5°	237.3	237.7	238.0	238.3	238.6	238.8	238.7	238.7	238.6	238.6	238.4
130°	248.1	248.4	248.7	249.1	249.4	249.5	249.6	249.6	249.7	249.8	249.6
132.5°	258.9	259.2	259.6	259.9	260.3	260.4	260.3	260.2	260.0	259.8	259.8
135°	274.2	274.5	274.9	275.3	275.6	275.8	275.6	275.5	275.4	275.3	275.1
137.5°	288.2	288.5	288.8	289.1	289.5	289.6	289.5	289.4	289.2	289.1	289.1
140°	297.4	297.5	297.6	297.8	297.9	297.9	297.9	297.8	297.7	297.7	297.8
142.5°	305.7	305.8	305.9	305.9	305.9	306.0	306.2	306.3	306.3	306.4	306.4
145°	317.8	318.0	318.1	318.2	318.3	318.4	318.4	318.4	318.4	318.4	318.5
147.5°	328.4	328.4	328.4	328.4	328.4	328.4	328.4	328.5	328.6	328.7	328.8
150°	335.2	335.1	334.9	334.8	334.7	334.7	334.8	334.9	335.1	335.2	335.3
152.5°	341.7	341.4	341.1	340.9	340.6	340.5	340.6	340.8	340.9	341.0	341.1
155°	350.1	349.7	349.3	348.9	348.6	348.4	348.6	348.6	348.8	348.9	349.1
157.5°	356.5	356.2	356.0	355.8	355.6	355.5	355.5	355.5	355.5	355.5	355.7
160°	360.9	360.6	360.2	359.8	359.5	359.3	359.3	359.4	359.5	359.6	359.8
162.5°	364.6	364.2	363.8	363.4	363.1	362.9	363.0	363.0	363.1	363.1	363.5
165°	369.3	369.0	368.6	368.2	367.9	367.7	367.7	367.8	367.9	368.0	368.3
167.5°	373.0	372.6	372.2	371.8	371.4	371.2	371.3	371.4	371.5	371.5	371.9
170°	374.9	374.5	374.1	373.7	373.2	373.0	373.1	373.1	373.2	373.3	373.8
172.5°	376.3	375.9	375.4	375.0	374.5	374.4	374.5	374.6	374.7	374.9	375.3
175°	377.7	377.4	377.0	376.6	376.3	376.1	376.1	376.2	376.3	376.4	376.8
177.5°	378.4	378.1	377.8	377.6	377.2	377.1	377.2	377.2	377.2	377.3	377.6
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1629.8	1632.0	1634.2	1635.1	1635.0	1634.7	1634.5	1634.3
5°	1619.8	1622.5	1625.2	1626.4	1625.8	1625.2	1624.7	1624.1
7.5°	1599.6	1601.6	1603.5	1604.1	1603.5	1602.9	1602.3	1601.7
10°	1582.5	1583.4	1584.2	1584.2	1583.4	1582.5	1581.8	1581.0
12.5°	1558.5	1559.0	1559.6	1559.3	1558.1	1556.8	1555.5	1554.3
15°	1518.6	1518.4	1518.1	1516.7	1514.3	1511.8	1509.3	1506.8
17.5°	1469.0	1467.6	1466.3	1464.6	1462.5	1460.5	1458.5	1456.4
20°	1432.4	1431.1	1429.7	1427.8	1425.3	1422.8	1420.4	1417.9
22.5°	1396.2	1393.5	1390.8	1388.5	1386.5	1384.4	1382.4	1380.4
25°	1336.6	1333.1	1329.5	1326.2	1323.2	1320.2	1317.2	1314.2
27.5°	1272.3	1267.3	1262.3	1258.4	1255.5	1252.5	1249.6	1246.7
30°	1226.2	1219.9	1213.5	1209.2	1206.7	1204.2	1201.7	1199.3
32.5°	1181.4	1174.4	1167.4	1162.4	1159.3	1156.1	1153.0	1149.9
35°	1111.7	1103.7	1095.8	1089.9	1086.1	1082.2	1078.4	1074.5
37.5°	1038.9	1029.4	1019.8	1013.1	1009.4	1005.7	1002.0	998.2
40°	990.7	980.2	969.9	963.0	959.6	956.4	953.1	949.8
42.5°	943.2	933.2	923.2	915.8	910.9	906.1	901.3	896.4
45°	867.3	856.3	845.3	837.8	833.7	829.6	825.5	821.3
47.5°	792.3	781.0	769.7	761.8	757.2	752.7	748.1	743.5
50°	741.5	729.9	718.4	710.6	706.5	702.3	698.2	694.1
52.5°	693.2	680.9	668.4	660.2	656.1	652.0	647.8	643.7
55°	620.0	607.7	595.3	586.9	582.6	578.1	573.8	569.4
57.5°	546.7	534.6	522.5	514.6	510.6	506.8	502.9	499.0
60°	498.3	486.2	474.1	466.0	461.9	457.8	453.7	449.6
62.5°	450.7	439.4	428.3	420.6	416.5	412.3	408.2	404.1
65°	380.7	369.7	358.7	351.2	347.1	342.9	338.8	334.7
67.5°	313.9	303.8	293.8	287.1	283.8	280.5	277.3	273.9
70°	269.5	261.0	252.5	246.6	243.3	240.0	236.7	233.5
72.5°	228.4	220.5	212.6	207.6	205.4	203.3	201.1	198.8
75°	170.7	164.7	158.7	154.6	152.7	150.8	148.9	146.9
77.5°	121.4	117.2	113.0	110.2	108.8	107.3	105.9	104.5
80°	91.4	89.0	86.4	84.9	84.4	83.8	83.3	82.8
82.5°	68.4	67.2	66.1	65.3	65.0	64.6	64.3	64.0
85°	39.0	38.7	38.4	38.2	37.9	37.6	37.3	37.1
87.5°	15.8	15.9	16.0	15.9	15.7	15.5	15.4	15.2
90°	5.1	5.4	5.7	5.9	6.2	6.3	6.5	6.7
92.5°	5.1	5.4	5.7	5.9	6.0	6.1	6.2	6.3
95°	5.1	5.4	5.7	5.9	5.9	5.9	5.9	5.9
97.5°	10.3	8.5	6.7	5.9	5.9	5.9	5.9	5.9
100°	30.2	20.9	11.6	6.9	6.7	6.4	6.1	5.9
102.5°	58.6	56.9	55.1	52.1	47.9	43.7	39.5	35.3
105°	83.4	83.4	83.4	83.4	83.3	83.3	83.3	83.2
107.5°	105.7	105.7	105.7	105.6	105.4	105.2	105.0	104.8
110°	120.0	119.9	119.7	119.6	119.7	119.7	119.8	119.9



TEST NUMBER: P333613-927

CATALOG NUMBER: S125RDIP-S1270D365U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	134.3	134.0	133.8	133.6	133.6	133.5	133.4	133.3
115°	155.7	155.5	155.3	155.0	154.6	154.2	153.8	153.4
117.5°	176.5	176.2	175.9	175.6	175.5	175.3	175.2	175.0
120°	189.9	189.7	189.6	189.4	189.1	188.8	188.5	188.1
122.5°	202.6	202.6	202.4	202.2	201.8	201.5	201.1	200.7
125°	221.3	221.0	220.8	220.5	220.4	220.2	220.0	219.8
127.5°	238.3	238.1	238.1	237.7	237.3	236.8	236.4	235.9
130°	249.4	249.2	249.1	248.7	248.5	248.2	247.9	247.6
132.5°	259.8	259.8	259.7	259.5	259.2	258.9	258.6	258.3
135°	275.0	274.9	274.7	274.5	274.2	273.8	273.4	273.0
137.5°	289.2	289.2	289.2	289.1	288.8	288.4	288.1	287.8
140°	297.9	298.0	298.2	298.0	297.7	297.3	296.9	296.5
142.5°	306.4	306.5	306.5	306.3	305.9	305.5	305.2	304.8
145°	318.5	318.5	318.6	318.5	318.1	317.7	317.3	317.0
147.5°	328.8	328.9	329.0	328.8	328.4	327.9	327.5	327.0
150°	335.4	335.6	335.6	335.5	335.0	334.5	334.0	333.5
152.5°	341.3	341.4	341.5	341.4	340.9	340.5	340.0	339.5
155°	349.3	349.4	349.7	349.5	349.0	348.5	348.0	347.5
157.5°	355.9	356.1	356.3	356.2	355.7	355.1	354.7	354.2
160°	360.0	360.3	360.5	360.4	359.9	359.4	358.9	358.5
162.5°	363.8	364.2	364.6	364.4	363.8	363.3	362.8	362.3
165°	368.7	369.1	369.5	369.4	368.9	368.4	367.9	367.4
167.5°	372.4	372.8	373.3	373.2	372.6	372.1	371.5	371.0
170°	374.2	374.8	375.3	375.3	374.7	374.1	373.5	373.0
172.5°	375.7	376.2	376.6	376.6	376.0	375.4	374.9	374.3
175°	377.3	377.9	378.3	378.3	377.7	377.2	376.6	376.0
177.5°	378.0	378.3	378.7	378.7	378.3	377.9	377.5	377.1
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7

(END OF REPORT)