

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: P333615-927

Luminaire Tested: **S125RDIP-S1270D365U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333615-927
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: S125RDIP-S1270D365U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4905.4 lumens
Efficiency: N/A
Efficacy: 98.5 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

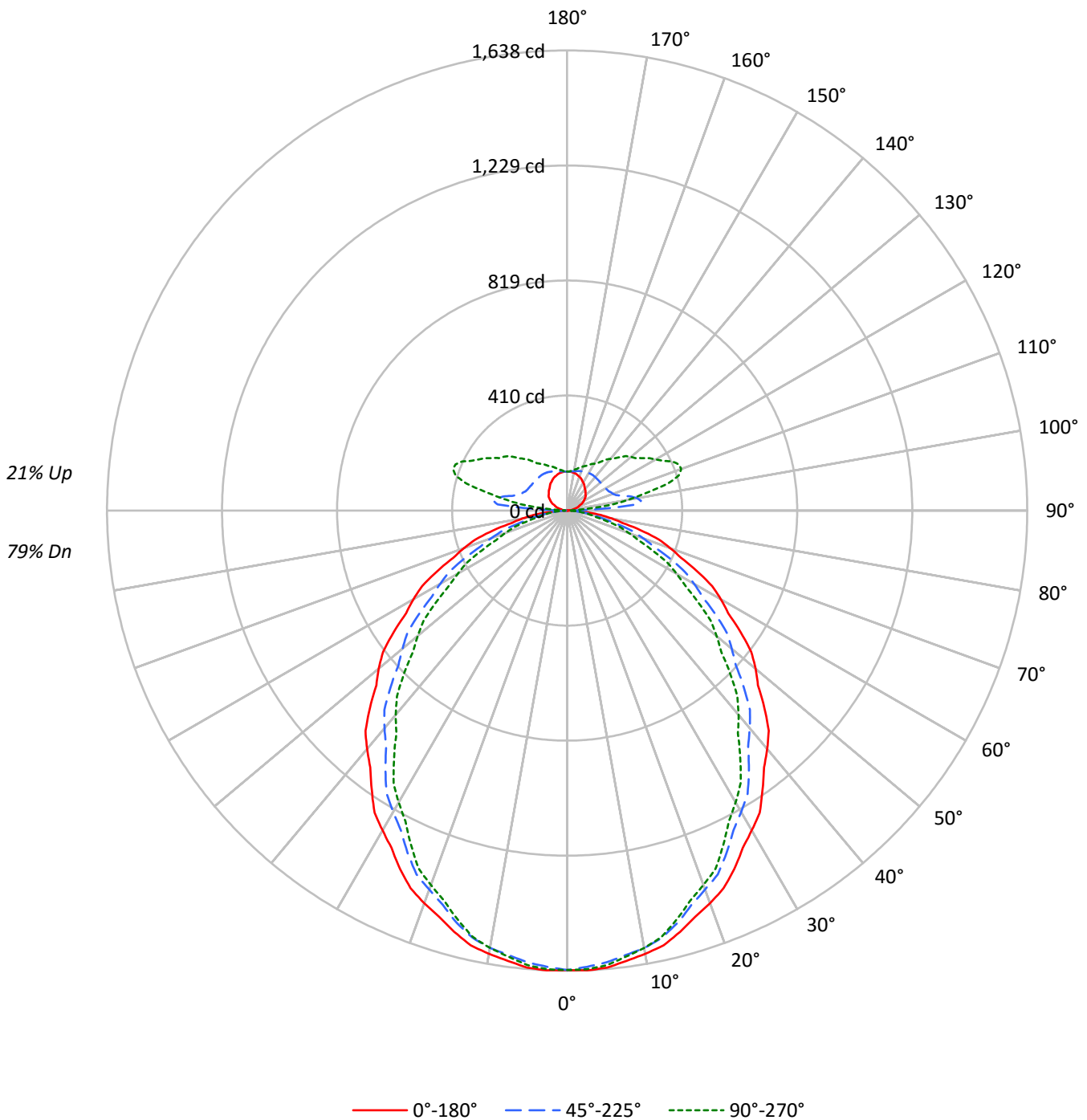
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	99	99	99	91	91	91	83	83	83	79
1	105	100	96	93	100	96	92	89	88	85	83	80	78	76	74	72	71	67
2	96	88	82	76	91	84	79	74	77	73	69	71	67	64	65	62	60	57
3	87	78	70	64	83	75	68	62	69	63	58	63	59	55	58	54	51	48
4	80	69	61	55	76	66	59	53	61	55	50	56	51	47	52	48	45	42
5	74	62	53	47	70	60	52	46	55	49	44	51	46	41	47	43	39	36
6	68	56	47	41	65	54	46	40	50	43	38	46	41	36	43	38	35	32
7	63	51	42	37	60	49	41	36	45	39	34	42	37	32	39	34	31	29
8	59	46	38	33	56	45	37	32	42	35	31	39	33	29	36	31	28	26
9	55	42	35	29	53	41	34	29	38	32	28	36	30	26	33	29	25	23
10	52	39	32	27	49	38	31	26	35	29	25	33	28	24	31	26	23	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	8.8
20°-30°	623.1	12.7
30°-40°	710.2	14.5
40°-50°	692.3	14.1
50°-60°	582.7	11.9
60°-70°	408.5	8.3
70°-80°	210.0	4.3
80°-90°	53.8	1.1
90°-100°	100.7	2.1
100°-110°	216.4	4.4
110°-120°	203.1	4.1
120°-130°	164.6	3.4
130°-140°	132.1	2.7
140°-150°	99.7	2.0
150°-160°	70.1	1.4
160°-170°	41.4	0.8
170°-180°	13.5	0.3
0°-30°	1206.6	24.6
0°-40°	1916.8	39.1
0°-60°	3191.8	65.1
0°-90°	3864.0	78.8
90°-120°	520.1	10.6
90°-150°	916.4	18.7
90°-180°	1041.0	21.2
0°-180°	4905.4	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	2	4	6	6	4
95°	9	27	248	113	66	10
105°	32	44	203	400	371	33
115°	57	68	163	351	413	56
125°	78	92	156	279	326	70
135°	92	110	155	234	270	71
145°	107	122	156	194	213	67
155°	122	131	152	171	179	56
165°	133	137	146	154	157	38
175°	139	139	140	141	141	13
180°	139	139	139	139	139	



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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	0.6	1.1	1.7	2.2	2.8	3.1	3.6	3.9	4.5	4.8
92.5°	3.4	4.1	6.5	10.0	14.8	23.0	38.3	63.8	91.7	90.2	73.0
95°	9.3	9.5	11.7	14.8	21.0	33.6	63.5	125.2	202.4	248.0	242.7
97.5°	15.4	15.7	17.3	20.4	25.9	34.9	54.7	99.9	180.8	264.9	307.1
100°	19.6	20.1	21.3	24.3	29.7	38.1	54.3	90.7	161.3	252.8	322.8
102.5°	24.3	24.6	25.5	28.8	33.7	41.9	56.3	86.9	146.5	231.6	313.4
105°	31.6	31.6	33.0	35.8	40.3	48.2	60.4	85.4	132.1	203.0	283.4
107.5°	38.8	39.4	40.7	43.0	47.7	54.7	66.6	87.9	126.1	183.3	252.6
110°	44.0	44.5	45.6	48.2	52.4	59.7	71.1	90.5	124.3	174.1	235.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	49.1	49.7	50.5	53.1	57.3	64.3	75.3	93.6	124.3	168.7	222.2
115°	56.6	57.1	58.0	60.4	64.6	71.7	82.1	98.2	125.2	163.0	208.0
117.5°	63.3	64.1	65.0	67.5	72.3	79.1	88.9	103.6	127.0	160.1	199.6
120°	67.7	68.6	69.7	72.2	77.0	84.0	93.8	107.3	128.8	158.8	194.9
122.5°	72.5	73.0	74.0	76.5	81.7	88.7	98.5	111.2	130.3	157.6	190.8
125°	78.4	79.0	80.3	82.9	88.2	95.5	104.7	116.8	133.0	156.2	185.4
127.5°	83.0	83.9	85.6	88.9	94.5	101.8	110.7	121.8	135.9	155.6	180.3
130°	86.0	86.8	89.0	92.7	98.5	105.8	114.5	125.2	137.8	155.1	177.0
132.5°	88.2	89.3	92.0	96.0	102.1	109.4	118.1	128.1	139.7	155.1	174.3
135°	91.8	92.9	96.3	100.8	106.7	114.2	122.9	132.1	142.5	155.1	171.0
137.5°	96.4	97.3	100.4	104.9	110.7	118.4	126.4	135.1	145.0	155.4	168.2
140°	99.1	100.0	103.3	107.8	113.1	120.6	128.8	137.2	146.2	155.7	166.8
142.5°	102.3	102.8	106.0	110.5	115.6	122.7	130.3	138.3	146.8	155.9	165.7
145°	106.9	107.5	110.3	114.2	119.3	125.7	133.0	140.0	147.5	155.7	164.1
147.5°	111.9	112.2	114.6	118.3	122.6	128.3	134.7	141.0	147.8	155.0	162.3
150°	114.8	115.3	117.3	121.0	124.8	129.6	135.8	141.6	147.8	154.2	161.0
152.5°	118.0	118.3	120.0	123.2	126.9	131.2	136.9	142.1	147.6	153.4	159.4
155°	122.1	122.1	123.7	126.5	129.4	133.2	138.0	142.5	146.9	151.8	156.8
157.5°	125.8	125.7	127.1	129.4	131.9	134.9	138.9	142.8	146.2	150.0	154.3
160°	128.3	127.9	129.0	131.0	133.2	135.8	139.4	142.8	145.6	148.9	152.3
162.5°	130.2	130.0	131.1	132.8	134.6	136.7	139.9	142.6	144.9	147.6	150.5
165°	133.2	132.7	133.6	134.9	136.1	137.8	140.0	142.2	143.9	145.6	147.8
167.5°	135.3	135.0	135.5	136.3	137.0	138.2	140.0	141.6	142.4	143.6	145.2
170°	136.7	136.3	136.7	137.2	137.8	138.6	140.0	141.1	141.6	142.5	143.6
172.5°	137.5	137.0	137.3	137.8	138.2	138.6	139.7	140.7	140.8	141.2	142.0
175°	138.6	138.0	138.3	138.6	138.6	138.6	139.4	140.0	139.7	139.7	140.0
177.5°	139.1	138.6	138.6	138.9	138.6	138.6	139.1	139.3	138.9	138.9	139.1
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9



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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	15.9	15.9	15.7	15.5	15.4	15.1
90°	5.1	5.3	5.6	6.2	6.2	6.2	6.4	6.4
92.5°	49.6	36.0	27.1	23.0	19.4	18.7	18.3	17.8
95°	201.3	158.8	124.3	100.8	80.9	72.5	70.3	65.8
97.5°	299.8	270.0	236.4	203.7	186.4	170.7	162.6	159.0
100°	344.4	330.7	301.8	272.7	253.3	233.2	222.8	218.4
102.5°	359.3	367.8	354.0	334.3	313.6	299.3	288.0	284.7
105°	350.5	388.9	401.2	398.2	389.1	379.9	374.3	371.0
107.5°	318.9	370.1	401.7	416.4	420.9	420.9	419.0	416.8
110°	295.6	348.9	388.3	412.1	424.7	430.0	432.0	432.0



TEST NUMBER: P333615-927

CATALOG NUMBER: S125RDIP-S1270D365U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	277.3	327.8	367.7	395.8	414.2	423.3	428.2	430.2
115°	254.2	297.6	336.0	366.5	388.3	401.7	409.6	413.2
117.5°	239.3	276.7	309.7	337.8	359.6	373.5	381.3	383.5
120°	231.2	264.8	295.6	320.3	341.0	354.4	362.0	364.2
122.5°	225.2	256.4	283.8	306.8	325.3	337.6	345.2	347.2
125°	216.4	244.9	269.3	289.5	305.1	316.6	322.8	325.6
127.5°	207.5	234.1	256.8	275.7	289.9	300.1	305.9	307.1
130°	201.8	226.5	248.3	266.6	280.5	289.8	295.4	297.1
132.5°	196.2	219.4	239.2	256.7	270.7	279.9	285.0	286.9
135°	189.0	208.3	226.2	242.2	254.5	263.7	268.8	270.5
137.5°	182.8	198.4	213.3	226.9	237.9	246.3	251.0	252.8
140°	179.4	192.6	205.5	217.2	227.6	234.9	239.1	240.5
142.5°	176.6	187.7	198.8	209.0	217.8	223.9	227.9	229.1
145°	172.8	181.4	190.1	197.6	204.4	209.1	212.2	213.3
147.5°	169.1	176.2	182.9	188.6	193.9	197.7	199.5	200.0
150°	167.2	173.3	178.6	183.6	187.8	191.2	192.3	192.6
152.5°	164.9	170.4	175.2	179.2	182.7	185.4	186.5	186.8
155°	161.5	166.0	169.9	173.0	175.8	177.8	178.6	178.9
157.5°	158.2	161.8	164.9	167.3	169.5	171.1	171.9	171.8
160°	156.0	158.8	161.5	163.5	165.5	166.8	167.4	167.2
162.5°	153.4	156.1	158.4	160.2	161.7	162.8	163.0	162.9
165°	150.0	152.0	153.7	155.1	156.2	156.8	156.8	156.8
167.5°	146.8	148.1	149.4	150.4	151.0	151.5	151.2	151.1
170°	145.0	145.8	146.7	147.3	147.8	148.1	148.1	147.8
172.5°	143.0	143.9	144.5	144.8	144.9	145.4	145.0	144.7
175°	140.9	140.9	141.4	141.4	141.4	141.6	141.1	140.9
177.5°	139.3	139.5	139.5	139.5	139.3	139.5	138.9	138.9
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9

(END OF REPORT)