

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: P333584-927

Luminaire Tested: **S125RDIP-S1090D365U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333584-927
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: S125RDIP-S1090D365U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4349.8 lumens
Efficiency: N/A
Efficacy: 100.0 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

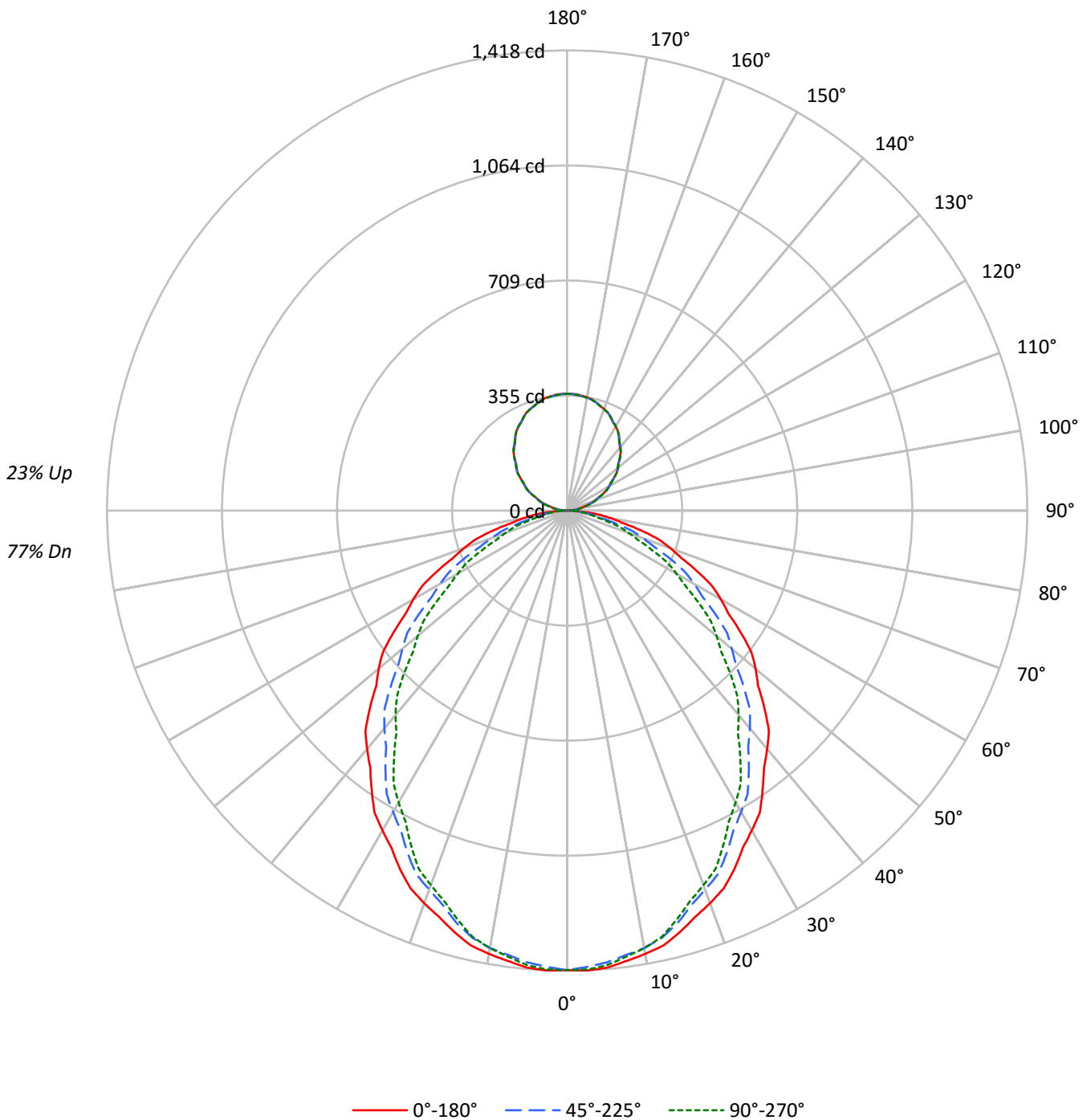
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	46	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°	9144	9144	9144
5°	9166	9061	9117
10°	9096	8977	8977
15°	8988	8795	8723
20°	8849	8541	8438
25°	8688	8292	8109
30°	8486	7999	7744
35°	8280	7698	7335
40°	8088	7384	6933
45°	7853	7033	6495
50°	7618	6650	6038
55°	7346	6286	5551
60°	7073	5842	5028
65°	6748	5327	4429
70°	6381	4685	3816
75°	5871	3950	3174
80°	5170	3102	2663
85°	4357	2534	2379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	3.1
10°-20°	372.1	8.6
20°-30°	539.6	12.4
30°-40°	614.9	14.1
40°-50°	599.4	13.8
50°-60°	504.6	11.6
60°-70°	353.7	8.1
70°-80°	181.8	4.2
80°-90°	46.7	1.1
90°-100°	24.1	0.6
100°-110°	71.2	1.6
110°-120°	120.5	2.8
120°-130°	158.6	3.6
130°-140°	177.7	4.1
140°-150°	174.2	4.0
150°-160°	146.3	3.4
160°-170°	97.3	2.2
170°-180°	34.0	0.8
0°-30°	1044.8	24.0
0°-40°	1659.7	38.2
0°-60°	2763.6	63.5
0°-90°	3345.8	76.9
90°-120°	215.8	5.0
90°-150°	726.3	16.7
90°-180°	1004.0	23.1
0°-180°	4349.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1409	1398	1408	1406	134
15°	1344	1337	1315	1314	1305	379
25°	1219	1202	1164	1150	1138	561
35°	1050	1023	976	946	930	657
45°	860	827	770	729	711	663
55°	652	617	558	512	493	583
65°	442	404	349	307	290	437
75°	235	202	158	136	127	249
85°	59	40	34	33	32	66
90°	0	3	4	6	7	4
95°	18	19	22	23	24	19
105°	64	65	67	69	70	68
115°	121	122	122	122	122	119
125°	176	178	178	178	177	158
135°	229	231	231	231	230	176
145°	278	279	279	279	279	173
155°	318	318	318	319	318	146
165°	345	345	345	346	344	97
175°	359	358	358	359	358	34
180°	360	360	360	360	360	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1418.5	1417.9	1417.4	1416.7	1416.2	1415.0	1413.1	1411.2	1409.3	1407.4	1409.3
5°	1413.8	1412.9	1411.9	1411.0	1410.0	1408.2	1405.6	1403.0	1400.3	1397.7	1400.1
7.5°	1399.9	1399.0	1398.0	1397.2	1396.2	1394.2	1391.1	1388.0	1384.8	1381.7	1383.4
10°	1387.0	1386.3	1385.6	1384.9	1384.2	1382.2	1378.9	1375.5	1372.2	1368.9	1369.6
12.5°	1372.5	1371.6	1370.7	1369.8	1368.9	1366.2	1361.8	1357.2	1352.8	1348.3	1348.8
15°	1344.3	1342.8	1341.4	1340.0	1338.6	1335.4	1330.4	1325.4	1320.4	1315.4	1315.2
17.5°	1312.4	1310.2	1308.1	1305.8	1303.6	1299.4	1293.2	1286.9	1280.6	1274.3	1273.1
20°	1287.6	1285.2	1282.9	1280.5	1278.1	1273.1	1265.5	1257.9	1250.3	1242.7	1241.5
22.5°	1260.2	1257.8	1255.5	1253.1	1250.7	1245.5	1237.5	1229.5	1221.5	1213.5	1211.2
25°	1219.2	1215.6	1212.0	1208.5	1204.9	1198.7	1189.9	1181.1	1172.4	1163.6	1160.5
27.5°	1172.1	1167.8	1163.4	1159.1	1154.8	1148.0	1138.5	1129.1	1119.7	1110.2	1106.0
30°	1137.9	1133.4	1128.9	1124.3	1119.8	1112.5	1102.6	1092.6	1082.6	1072.6	1067.1
32.5°	1104.5	1099.2	1093.9	1088.7	1083.4	1075.7	1065.5	1055.3	1045.1	1035.0	1029.0
35°	1050.2	1044.5	1038.8	1033.1	1027.4	1019.1	1008.4	997.8	987.1	976.4	969.5
37.5°	996.9	990.0	983.0	976.1	969.2	960.2	949.1	938.1	927.1	916.1	907.8
40°	959.3	952.1	945.0	937.9	930.7	921.5	910.1	898.7	887.2	875.8	866.8
42.5°	919.9	912.6	905.3	897.9	890.7	881.1	869.3	857.5	845.7	833.9	825.3
45°	859.8	852.9	846.1	839.2	832.3	822.3	809.2	796.1	783.1	770.0	760.5
47.5°	797.6	790.3	783.0	775.8	768.5	758.3	745.1	731.9	718.7	705.6	695.8
50°	758.2	750.4	742.5	734.7	726.8	716.1	702.6	689.0	675.5	661.9	652.0
52.5°	715.4	707.4	699.3	691.3	683.3	672.9	660.1	647.3	634.5	621.8	611.0
55°	652.4	644.8	637.2	629.5	621.9	611.5	598.2	584.9	571.6	558.3	547.6
57.5°	588.6	580.5	572.4	564.2	556.1	545.7	532.8	520.0	507.2	494.3	483.9
60°	547.6	539.2	530.9	522.6	514.3	503.7	490.8	478.0	465.2	452.3	441.9
62.5°	503.9	496.0	488.1	480.1	472.1	461.7	448.7	435.6	422.6	409.6	399.9
65°	441.6	433.6	425.5	417.4	409.3	399.0	386.4	373.8	361.2	348.6	339.1
67.5°	379.9	371.8	363.7	355.6	347.5	337.5	325.3	313.3	301.3	289.1	280.5
70°	337.9	329.9	321.8	313.7	305.6	295.6	283.8	271.9	260.0	248.1	240.7
72.5°	296.9	289.0	281.1	273.2	265.3	255.8	244.7	233.5	222.4	211.4	204.5
75°	235.3	228.1	221.0	213.9	206.8	198.2	188.2	178.2	168.3	158.3	153.0
77.5°	174.1	168.4	162.7	157.0	151.3	144.4	136.5	128.5	120.5	112.5	108.8
80°	139.0	133.3	127.6	121.9	116.2	110.0	103.4	96.7	90.1	83.4	81.3
82.5°	104.8	99.7	94.5	89.4	84.3	79.5	74.9	70.3	65.8	61.2	60.2
85°	58.8	54.5	50.2	45.9	41.7	39.0	37.8	36.6	35.4	34.2	34.0
87.5°	19.7	18.5	17.3	16.0	14.8	14.2	14.0	13.9	13.9	13.7	13.8
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°	6.8	7.1	7.4	7.8	8.2	8.6	9.1	9.7	10.2	10.8	11.2
95°	18.2	18.3	18.5	18.5	18.7	19.1	19.7	20.3	20.9	21.5	22.0
97.5°	30.3	30.3	30.3	30.4	30.4	30.9	31.8	32.6	33.4	34.3	34.8
100°	39.2	39.2	39.2	39.2	39.2	39.6	40.4	41.2	42.1	42.9	43.4
102.5°	48.8	49.1	49.4	49.6	49.8	50.1	50.5	50.9	51.4	51.8	52.4
105°	63.8	64.2	64.5	64.8	65.1	65.4	65.8	66.1	66.5	66.9	67.3
107.5°	80.4	80.7	81.0	81.4	81.7	82.0	82.2	82.5	82.8	83.1	83.3
110°	91.8	92.1	92.4	92.8	93.1	93.3	93.5	93.7	93.9	94.1	94.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	103.5	103.6	103.8	103.9	104.1	104.3	104.6	104.8	105.0	105.3	105.4
115°	120.6	120.9	121.2	121.4	121.7	121.8	122.0	122.1	122.2	122.4	122.3
117.5°	137.9	138.0	138.2	138.2	138.4	138.5	138.6	138.7	138.8	138.9	138.9
120°	148.7	149.0	149.3	149.6	149.9	150.1	150.2	150.2	150.3	150.4	150.4
122.5°	160.3	160.4	160.6	160.7	160.7	160.9	161.1	161.2	161.4	161.5	161.5
125°	176.1	176.5	176.9	177.2	177.6	177.8	177.9	177.9	178.0	178.1	177.9
127.5°	192.9	193.1	193.4	193.5	193.8	193.9	194.0	194.1	194.2	194.2	194.2
130°	203.0	203.3	203.6	203.9	204.2	204.5	204.5	204.7	204.9	204.9	204.9
132.5°	213.1	213.6	214.1	214.6	215.1	215.4	215.3	215.3	215.3	215.2	215.2
135°	229.0	229.4	229.8	230.1	230.5	230.8	230.8	230.8	230.9	231.0	231.0
137.5°	244.1	244.4	244.8	245.1	245.5	245.7	245.9	246.0	246.1	246.3	246.4
140°	253.7	254.0	254.3	254.6	254.9	255.2	255.3	255.6	255.7	255.9	256.0
142.5°	263.3	263.6	263.8	264.1	264.4	264.6	264.8	265.1	265.3	265.5	265.6
145°	277.5	277.7	278.0	278.2	278.5	278.7	278.8	279.1	279.2	279.4	279.4
147.5°	290.6	290.7	290.8	291.0	291.1	291.3	291.4	291.6	291.7	291.8	292.0
150°	299.3	299.3	299.2	299.1	299.0	299.1	299.4	299.7	299.9	300.2	300.2
152.5°	306.5	306.6	306.7	306.7	306.8	306.9	307.0	307.1	307.2	307.3	307.4
155°	317.5	317.5	317.5	317.5	317.5	317.5	317.6	317.7	317.7	317.8	318.1
157.5°	327.3	327.3	327.1	326.9	326.9	326.8	326.9	326.9	326.9	327.0	327.3
160°	333.2	333.0	332.8	332.6	332.5	332.4	332.5	332.5	332.6	332.6	332.9
162.5°	338.3	338.2	338.1	337.9	337.8	337.7	337.7	337.8	337.8	337.8	338.1
165°	345.2	345.1	345.0	344.8	344.8	344.7	344.8	344.8	344.9	344.9	345.2
167.5°	351.0	350.8	350.5	350.3	350.1	349.9	349.9	349.9	349.9	349.9	350.3
170°	354.2	353.9	353.7	353.5	353.2	353.1	353.1	353.1	353.1	353.1	353.5
172.5°	356.4	356.2	355.9	355.7	355.5	355.3	355.3	355.3	355.3	355.3	355.7
175°	358.9	358.7	358.5	358.2	358.0	357.8	357.8	357.8	357.8	357.8	358.2
177.5°	360.2	360.0	359.8	359.7	359.4	359.3	359.3	359.3	359.2	359.1	359.4
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1411.2	1413.1	1415.0	1415.8	1415.6	1415.5	1415.2	1415.1
5°	1402.5	1404.9	1407.2	1408.2	1407.7	1407.2	1406.8	1406.3
7.5°	1385.1	1386.7	1388.4	1388.9	1388.4	1387.9	1387.3	1386.8
10°	1370.3	1371.0	1371.7	1371.7	1371.0	1370.3	1369.6	1368.9
12.5°	1349.4	1349.9	1350.4	1350.1	1349.0	1348.0	1346.9	1345.8
15°	1314.9	1314.7	1314.5	1313.3	1311.1	1309.0	1306.9	1304.7
17.5°	1271.9	1270.7	1269.6	1268.1	1266.3	1264.6	1262.8	1261.1
20°	1240.3	1239.1	1237.9	1236.3	1234.1	1232.0	1229.9	1227.7
22.5°	1208.9	1206.6	1204.3	1202.2	1200.5	1198.7	1196.9	1195.2
25°	1157.4	1154.3	1151.2	1148.3	1145.7	1143.1	1140.5	1137.9
27.5°	1101.6	1097.3	1093.0	1089.6	1087.0	1084.5	1082.0	1079.5
30°	1061.7	1056.2	1050.8	1046.9	1044.8	1042.7	1040.5	1038.4
32.5°	1022.9	1016.8	1010.8	1006.5	1003.8	1001.1	998.3	995.6
35°	962.6	955.7	948.8	943.7	940.4	937.1	933.7	930.4
37.5°	899.5	891.3	883.0	877.3	874.0	870.8	867.5	864.3
40°	857.8	848.7	839.7	833.8	830.9	828.1	825.2	822.4
42.5°	816.7	807.9	799.3	792.9	788.7	784.6	780.4	776.2
45°	751.0	741.5	732.0	725.4	721.8	718.3	714.7	711.1
47.5°	686.0	676.2	666.5	659.6	655.6	651.6	647.8	643.8
50°	642.0	632.0	622.0	615.3	611.7	608.2	604.6	601.0
52.5°	600.3	589.5	578.8	571.6	568.1	564.5	560.9	557.4
55°	536.9	526.2	515.5	508.2	504.4	500.6	496.8	493.0
57.5°	473.4	463.0	452.5	445.5	442.2	438.8	435.4	432.1
60°	431.4	421.0	410.5	403.5	400.0	396.4	392.8	389.3
62.5°	390.2	380.5	370.8	364.2	360.6	357.0	353.5	349.9
65°	329.6	320.1	310.6	304.0	300.5	296.9	293.3	289.8
67.5°	271.8	263.1	254.4	248.6	245.7	242.9	240.0	237.2
70°	233.4	226.0	218.6	213.5	210.6	207.8	204.9	202.1
72.5°	197.7	190.9	184.1	179.7	177.8	175.9	174.0	172.1
75°	147.8	142.6	137.4	133.9	132.2	130.6	128.9	127.2
77.5°	105.2	101.6	97.8	95.4	94.2	92.9	91.7	90.5
80°	79.1	77.0	74.9	73.5	73.0	72.6	72.1	71.6
82.5°	59.2	58.1	57.2	56.6	56.2	55.9	55.7	55.4
85°	33.7	33.5	33.3	33.0	32.8	32.6	32.3	32.1
87.5°	13.9	13.9	13.9	13.9	13.8	13.6	13.5	13.3
90°	5.1	5.4	5.7	5.9	6.2	6.3	6.5	6.7
92.5°	11.6	12.0	12.4	12.7	12.8	12.9	13.1	13.2
95°	22.4	22.9	23.3	23.6	23.7	23.8	23.9	24.1
97.5°	35.2	35.6	36.0	36.2	36.3	36.4	36.4	36.5
100°	44.0	44.5	45.1	45.4	45.6	45.7	45.8	45.9
102.5°	53.0	53.6	54.3	54.7	54.8	55.0	55.1	55.3
105°	67.7	68.0	68.4	68.7	68.8	69.1	69.2	69.5
107.5°	83.5	83.7	83.8	84.0	83.9	83.9	83.9	83.9
110°	94.4	94.7	94.8	94.9	94.8	94.7	94.7	94.7



TEST NUMBER: P333584-927

CATALOG NUMBER: S125RDIP-S1090D365U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	105.4	105.5	105.6	105.6	105.5	105.4	105.3	105.2
115°	122.2	122.2	122.1	122.1	122.0	121.9	121.8	121.8
117.5°	139.0	139.1	139.1	139.0	138.8	138.6	138.3	138.0
120°	150.4	150.4	150.4	150.2	150.0	149.7	149.5	149.2
122.5°	161.4	161.4	161.4	161.2	161.1	160.8	160.7	160.4
125°	177.8	177.7	177.6	177.4	177.4	177.4	177.3	177.2
127.5°	194.1	194.0	193.9	193.8	193.8	193.6	193.5	193.4
130°	204.9	204.8	204.7	204.6	204.5	204.4	204.2	204.1
132.5°	215.2	215.1	215.0	214.9	214.7	214.5	214.4	214.2
135°	231.0	231.0	231.0	230.8	230.6	230.4	230.1	229.9
137.5°	246.4	246.5	246.6	246.4	246.1	245.8	245.5	245.2
140°	256.2	256.3	256.4	256.4	256.0	255.7	255.4	255.1
142.5°	265.7	265.8	265.9	265.7	265.4	265.1	264.8	264.5
145°	279.4	279.4	279.4	279.3	279.2	278.9	278.8	278.6
147.5°	292.2	292.3	292.5	292.3	291.9	291.4	291.0	290.7
150°	300.2	300.2	300.2	300.1	300.0	299.8	299.7	299.6
152.5°	307.6	307.8	307.9	307.8	307.7	307.4	307.2	307.0
155°	318.3	318.5	318.8	318.8	318.5	318.1	317.8	317.5
157.5°	327.5	327.8	328.0	328.0	327.6	327.1	326.7	326.3
160°	333.1	333.4	333.6	333.6	333.3	333.0	332.6	332.3
162.5°	338.3	338.7	339.0	339.0	338.6	338.2	337.9	337.5
165°	345.5	345.7	345.9	345.9	345.5	345.2	344.8	344.4
167.5°	350.7	351.0	351.4	351.4	351.0	350.6	350.2	349.9
170°	353.8	354.2	354.6	354.5	354.1	353.6	353.2	352.8
172.5°	356.1	356.4	356.8	356.8	356.4	356.0	355.6	355.2
175°	358.5	358.9	359.3	359.3	358.9	358.4	358.0	357.5
177.5°	359.7	360.0	360.3	360.3	360.0	359.6	359.3	358.9
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8

(END OF REPORT)