

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: P333585-930

Luminaire Tested: **S125RDIP-S1090D365U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333585-930
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-S1090D365U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 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: 4515.2 lumens
Efficiency: N/A
Efficacy: 103.8 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

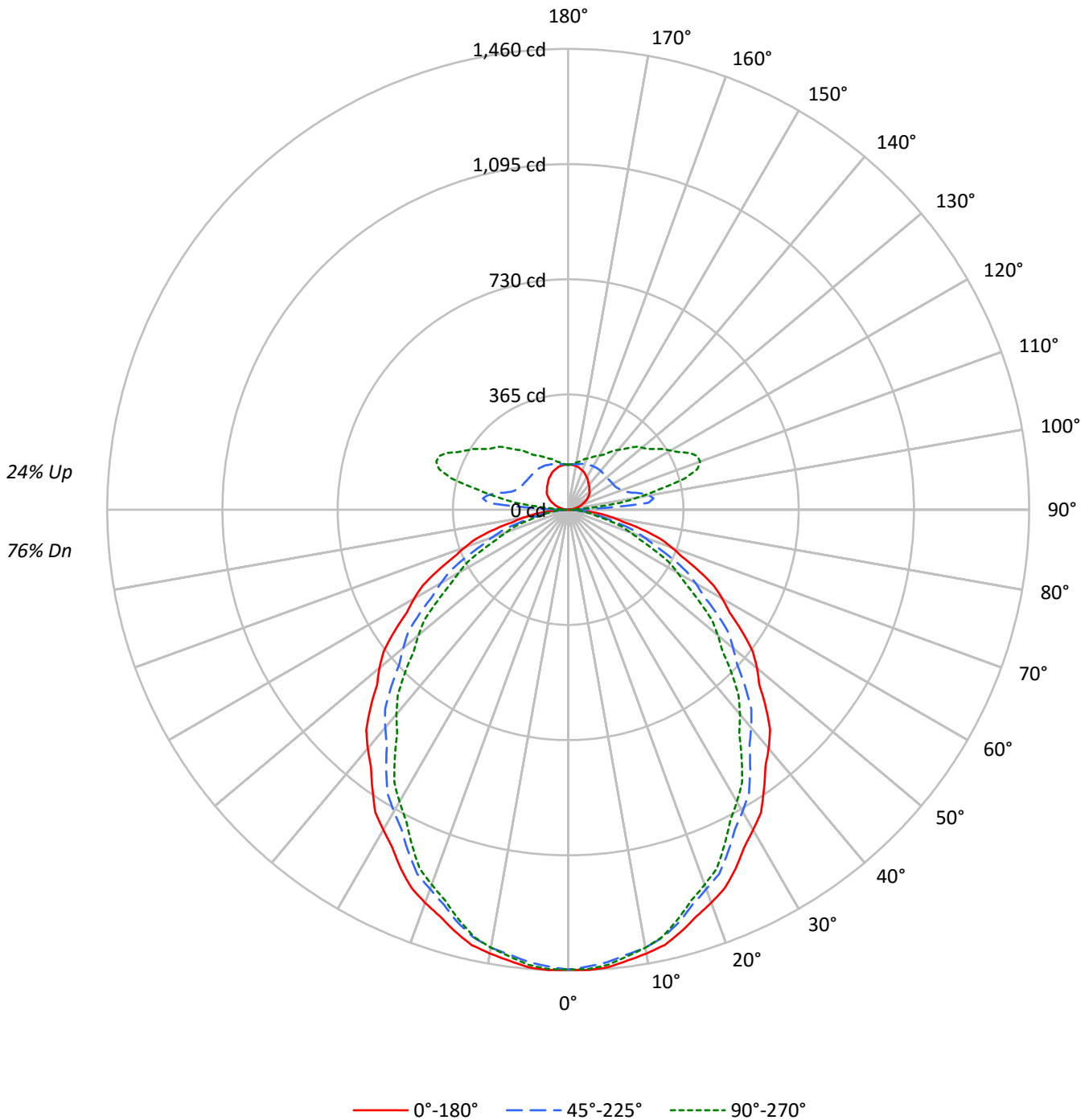
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80	76
1	104	100	96	92	99	95	92	88	87	84	81	79	77	75	72	70	69	65
2	95	87	81	76	90	84	78	73	76	72	68	70	66	63	63	61	58	55
3	87	77	70	64	83	74	67	62	68	62	58	62	57	54	56	53	50	47
4	80	69	61	54	76	66	58	53	60	54	49	55	50	46	51	47	43	40
5	73	61	53	47	70	59	51	46	54	48	43	50	45	40	46	41	38	35
6	68	55	47	41	64	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	41	36	32	38	33	30	28
8	59	46	38	32	56	44	37	32	41	35	30	38	32	28	35	30	27	25
9	55	42	34	29	52	41	33	28	38	31	27	35	30	26	32	28	24	22
10	51	39	31	26	49	37	30	26	35	29	25	32	27	23	30	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9412	9412	9412
5°	9433	9326	9383
10°	9362	9239	9239
15°	9250	9052	8978
20°	9108	8790	8685
25°	8941	8533	8345
30°	8733	8232	7970
35°	8521	7923	7550
40°	8323	7599	7136
45°	8082	7238	6685
50°	7840	6845	6215
55°	7560	6469	5713
60°	7279	6013	5174
65°	6946	5483	4557
70°	6567	4823	3928
75°	6041	4065	3266
80°	5322	3195	2741
85°	4483	2608	2445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	3.0
10°-20°	382.9	8.5
20°-30°	555.3	12.3
30°-40°	632.9	14.0
40°-50°	616.9	13.7
50°-60°	519.3	11.5
60°-70°	364.0	8.1
70°-80°	187.1	4.1
80°-90°	48.0	1.1
90°-100°	103.6	2.3
100°-110°	222.7	4.9
110°-120°	209.0	4.6
120°-130°	169.4	3.8
130°-140°	135.9	3.0
140°-150°	102.6	2.3
150°-160°	72.2	1.6
160°-170°	42.6	0.9
170°-180°	13.8	0.3
0°-30°	1075.3	23.8
0°-40°	1708.1	37.8
0°-60°	2844.3	63.0
0°-90°	3443.4	76.3
90°-120°	535.3	11.9
90°-150°	943.1	20.9
90°-180°	1072.0	23.7
0°-180°	4515.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1455	1450	1438	1449	1447	138
15°	1384	1376	1354	1352	1343	390
25°	1255	1237	1198	1183	1171	577
35°	1081	1053	1005	974	958	676
45°	885	851	792	750	732	682
55°	671	635	574	527	507	600
65°	454	416	359	316	298	450
75°	242	208	163	140	131	256
85°	60	42	35	34	33	68
90°	0	3	5	6	7	3
95°	10	28	255	116	68	10
105°	32	46	209	411	382	34
115°	58	70	168	362	425	57
125°	81	94	161	288	335	72
135°	94	114	160	241	278	73
145°	110	126	160	200	220	69
155°	126	135	156	176	184	58
165°	137	141	150	159	161	39
175°	143	143	144	146	145	14
180°	143	143	143	143	143	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3
2.5°	1459.9	1459.3	1458.7	1458.1	1457.5	1456.3	1454.3	1452.4	1450.4	1448.5	1450.4
5°	1455.1	1454.1	1453.1	1452.1	1451.2	1449.3	1446.6	1443.9	1441.2	1438.5	1441.0
7.5°	1440.7	1439.8	1438.8	1437.9	1437.0	1434.9	1431.7	1428.5	1425.2	1422.0	1423.8
10°	1427.5	1426.8	1426.0	1425.3	1424.6	1422.5	1419.1	1415.7	1412.3	1408.8	1409.6
12.5°	1412.5	1411.6	1410.7	1409.7	1408.8	1406.1	1401.5	1396.9	1392.3	1387.6	1388.2
15°	1383.5	1382.0	1380.5	1379.1	1377.6	1374.4	1369.2	1364.1	1358.9	1353.8	1353.6
17.5°	1350.7	1348.4	1346.2	1343.9	1341.7	1337.3	1330.9	1324.5	1317.9	1311.5	1310.3
20°	1325.2	1322.7	1320.3	1317.8	1315.4	1310.3	1302.4	1294.6	1286.8	1279.0	1277.7
22.5°	1297.0	1294.5	1292.1	1289.6	1287.2	1281.9	1273.7	1265.4	1257.2	1249.0	1246.6
25°	1254.7	1251.1	1247.4	1243.7	1240.1	1233.7	1224.7	1215.6	1206.6	1197.5	1194.3
27.5°	1206.3	1201.8	1197.3	1192.9	1188.5	1181.5	1171.7	1162.0	1152.3	1142.6	1138.2
30°	1171.1	1166.4	1161.8	1157.2	1152.5	1145.0	1134.7	1124.5	1114.2	1103.9	1098.3
32.5°	1136.7	1131.3	1125.8	1120.5	1115.0	1107.1	1096.6	1086.1	1075.6	1065.2	1059.0
35°	1080.8	1075.0	1069.1	1063.2	1057.4	1048.9	1037.9	1026.9	1015.9	1004.9	997.8
37.5°	1026.0	1018.9	1011.7	1004.6	997.4	988.2	976.8	965.5	954.1	942.8	934.3
40°	987.2	979.9	972.6	965.2	957.9	948.4	936.6	924.9	913.1	901.4	892.1
42.5°	946.7	939.2	931.7	924.1	916.6	906.8	894.6	882.6	870.4	858.3	849.4
45°	884.9	877.8	870.7	863.6	856.6	846.3	832.8	819.4	805.9	792.5	782.7
47.5°	820.8	813.3	805.8	798.4	790.9	780.4	766.9	753.3	739.7	726.2	716.1
50°	780.3	772.3	764.2	756.1	748.0	737.0	723.1	709.1	695.2	681.3	671.0
52.5°	736.3	728.1	719.7	711.5	703.3	692.5	679.4	666.2	653.1	639.9	628.8
55°	671.4	663.6	655.7	647.9	640.1	629.3	615.6	601.9	588.2	574.5	563.5
57.5°	605.8	597.5	589.1	580.7	572.3	561.6	548.4	535.2	522.0	508.7	498.0
60°	563.5	555.0	546.4	537.9	529.3	518.4	505.2	492.0	478.7	465.5	454.8
62.5°	518.6	510.5	502.3	494.1	485.9	475.2	461.8	448.3	435.0	421.5	411.6
65°	454.5	446.2	437.9	429.6	421.3	410.7	397.7	384.7	371.8	358.8	349.0
67.5°	390.9	382.6	374.3	366.0	357.7	347.3	334.8	322.5	310.1	297.6	288.7
70°	347.8	339.5	331.2	322.9	314.5	304.3	292.0	279.8	267.6	255.4	247.8
72.5°	305.6	297.4	289.3	281.2	273.0	263.3	251.8	240.4	228.9	217.5	210.5
75°	242.1	234.8	227.5	220.1	212.8	204.0	193.7	183.4	173.2	162.9	157.5
77.5°	179.2	173.3	167.5	161.6	155.7	148.6	140.5	132.2	124.0	115.8	112.0
80°	143.1	137.2	131.3	125.5	119.6	113.2	106.4	99.5	92.7	85.9	83.6
82.5°	107.9	102.6	97.3	92.0	86.7	81.8	77.0	72.3	67.7	62.9	62.0
85°	60.5	56.1	51.7	47.3	42.9	40.1	38.9	37.7	36.4	35.2	35.0
87.5°	20.3	19.0	17.8	16.5	15.2	14.6	14.4	14.3	14.2	14.1	14.2
90°	0.3	0.6	1.1	1.7	2.3	2.9	3.2	3.8	4.0	4.6	4.9
92.5°	3.5	4.2	6.7	10.3	15.2	23.6	39.4	65.7	94.4	92.9	75.2
95°	9.5	9.8	12.1	15.2	21.6	34.6	65.4	128.8	208.3	255.3	249.8
97.5°	15.8	16.1	17.8	21.0	26.7	36.0	56.3	102.8	186.1	272.6	316.1
100°	20.1	20.7	21.9	25.0	30.6	39.2	55.9	93.4	166.0	260.2	332.2
102.5°	25.0	25.4	26.3	29.7	34.7	43.1	58.0	89.4	150.7	238.3	322.5
105°	32.5	32.5	34.0	36.9	41.5	49.6	62.2	87.9	136.0	208.9	291.6
107.5°	39.9	40.5	41.9	44.3	49.1	56.3	68.6	90.5	129.8	188.7	260.0
110°	45.2	45.8	47.0	49.6	53.9	61.4	73.2	93.1	127.9	179.2	242.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	50.5	51.1	52.0	54.6	58.9	66.2	77.5	96.3	127.9	173.7	228.7
115°	58.2	58.8	59.7	62.2	66.5	73.8	84.5	101.1	128.8	167.7	214.1
117.5°	65.1	66.0	66.9	69.5	74.4	81.4	91.5	106.6	130.7	164.8	205.4
120°	69.7	70.6	71.7	74.4	79.2	86.4	96.5	110.4	132.6	163.4	200.6
122.5°	74.6	75.2	76.1	78.8	84.1	91.3	101.3	114.5	134.1	162.2	196.4
125°	80.7	81.3	82.7	85.3	90.7	98.2	107.8	120.2	136.9	160.8	190.8
127.5°	85.4	86.3	88.1	91.5	97.3	104.8	113.9	125.3	139.9	160.1	185.6
130°	88.5	89.4	91.6	95.4	101.4	108.9	117.8	128.8	141.8	159.6	182.1
132.5°	90.7	91.9	94.7	98.8	105.1	112.6	121.6	131.8	143.8	159.6	179.4
135°	94.5	95.6	99.1	103.7	109.8	117.6	126.5	136.0	146.7	159.6	176.0
137.5°	99.2	100.1	103.3	107.9	113.9	121.9	130.0	139.1	149.3	160.0	173.1
140°	102.0	102.9	106.3	111.0	116.4	124.2	132.6	141.2	150.4	160.2	171.7
142.5°	105.3	105.8	109.1	113.7	119.0	126.3	134.1	142.4	151.1	160.5	170.6
145°	110.1	110.6	113.5	117.6	122.8	129.4	136.9	144.1	151.8	160.2	168.8
147.5°	115.1	115.4	118.0	121.7	126.2	132.0	138.6	145.1	152.1	159.5	167.1
150°	118.1	118.7	120.7	124.5	128.5	133.4	139.7	145.8	152.1	158.7	165.7
152.5°	121.4	121.7	123.5	126.8	130.6	135.0	140.9	146.3	151.9	157.8	164.0
155°	125.6	125.6	127.3	130.2	133.1	137.1	142.0	146.7	151.2	156.2	161.3
157.5°	129.5	129.4	130.8	133.2	135.7	138.8	143.0	146.9	150.5	154.4	158.8
160°	132.0	131.7	132.8	134.9	137.1	139.7	143.5	146.9	149.9	153.3	156.8
162.5°	134.0	133.8	134.9	136.7	138.5	140.6	144.0	146.8	149.1	151.9	154.9
165°	137.1	136.6	137.5	138.8	140.1	141.8	144.1	146.3	148.1	149.9	152.1
167.5°	139.3	138.9	139.5	140.2	141.0	142.2	144.1	145.7	146.5	147.8	149.4
170°	140.6	140.3	140.6	141.2	141.8	142.6	144.1	145.2	145.8	146.7	147.8
172.5°	141.5	141.0	141.3	141.9	142.2	142.6	143.8	144.8	144.9	145.3	146.2
175°	142.6	142.0	142.4	142.6	142.6	142.6	143.5	144.1	143.8	143.8	144.1
177.5°	143.2	142.7	142.7	142.9	142.7	142.7	143.2	143.4	142.9	142.9	143.2
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3
2.5°	1452.4	1454.3	1456.3	1457.1	1456.9	1456.8	1456.5	1456.4
5°	1443.4	1445.9	1448.3	1449.3	1448.8	1448.3	1447.8	1447.3
7.5°	1425.5	1427.2	1428.9	1429.5	1428.9	1428.4	1427.8	1427.3
10°	1410.3	1411.0	1411.8	1411.8	1411.0	1410.3	1409.6	1408.8
12.5°	1388.8	1389.3	1389.8	1389.5	1388.4	1387.3	1386.2	1385.0
15°	1353.3	1353.1	1352.8	1351.6	1349.4	1347.2	1345.0	1342.8
17.5°	1309.0	1307.8	1306.6	1305.1	1303.3	1301.5	1299.7	1297.9
20°	1276.5	1275.3	1274.1	1272.4	1270.2	1268.0	1265.8	1263.6
22.5°	1244.2	1241.8	1239.4	1237.3	1235.5	1233.7	1231.8	1230.0
25°	1191.2	1188.0	1184.8	1181.9	1179.2	1176.5	1173.8	1171.1
27.5°	1133.8	1129.4	1124.9	1121.4	1118.8	1116.1	1113.5	1111.0
30°	1092.7	1087.0	1081.4	1077.5	1075.3	1073.1	1070.9	1068.7
32.5°	1052.8	1046.5	1040.3	1035.8	1033.1	1030.3	1027.4	1024.7
35°	990.7	983.6	976.5	971.3	967.8	964.4	961.0	957.6
37.5°	925.8	917.3	908.7	902.9	899.5	896.2	892.8	889.5
40°	882.8	873.5	864.2	858.1	855.2	852.2	849.3	846.4
42.5°	840.5	831.5	822.6	816.0	811.7	807.5	803.2	798.8
45°	772.9	763.1	753.3	746.6	742.9	739.2	735.6	731.9
47.5°	706.0	695.9	685.9	678.8	674.7	670.7	666.7	662.6
50°	660.7	650.4	640.2	633.2	629.6	625.9	622.2	618.6
52.5°	617.8	606.7	595.7	588.3	584.7	581.0	577.3	573.6
55°	552.5	541.5	530.5	523.0	519.1	515.2	511.3	507.4
57.5°	487.2	476.5	465.7	458.5	455.1	451.6	448.1	444.7
60°	444.0	433.3	422.5	415.3	411.6	408.0	404.3	400.6
62.5°	401.6	391.6	381.6	374.8	371.1	367.5	363.8	360.1
65°	339.2	329.5	319.7	312.9	309.2	305.6	301.9	298.2
67.5°	279.7	270.8	261.8	255.8	252.9	250.0	247.0	244.1
70°	240.2	232.6	225.0	219.7	216.8	213.9	210.9	208.0
72.5°	203.5	196.5	189.5	185.0	183.0	181.1	179.1	177.2
75°	152.1	146.8	141.4	137.8	136.1	134.4	132.6	130.9
77.5°	108.3	104.5	100.7	98.2	96.9	95.6	94.4	93.1
80°	81.4	79.2	77.0	75.7	75.2	74.7	74.2	73.7
82.5°	60.9	59.8	58.9	58.2	57.9	57.6	57.3	57.0
85°	34.7	34.5	34.2	34.0	33.8	33.5	33.3	33.0
87.5°	14.3	14.3	14.3	14.3	14.2	14.0	13.9	13.6
90°	5.2	5.5	5.8	6.4	6.4	6.4	6.6	6.6
92.5°	51.0	37.0	27.9	23.6	20.0	19.2	18.8	18.3
95°	207.2	163.4	127.9	103.7	83.2	74.6	72.3	67.8
97.5°	308.5	277.9	243.3	209.6	191.8	175.7	167.4	163.6
100°	354.4	340.3	310.6	280.6	260.7	240.0	229.3	224.8
102.5°	369.8	378.5	364.4	344.1	322.8	308.0	296.4	293.0
105°	360.8	400.2	412.9	409.8	400.5	391.0	385.2	381.8
107.5°	328.2	380.9	413.4	428.5	433.2	433.2	431.2	428.9
110°	304.3	359.1	399.7	424.1	437.1	442.5	444.6	444.6



TEST NUMBER: P333585-930

CATALOG NUMBER: S125RDIP-S1090D365U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	285.4	337.4	378.5	407.3	426.2	435.7	440.7	442.8
115°	261.6	306.3	345.8	377.2	399.7	413.4	421.5	425.3
117.5°	246.3	284.8	318.8	347.6	370.1	384.4	392.4	394.7
120°	238.0	272.6	304.3	329.6	351.0	364.8	372.6	374.9
122.5°	231.8	263.8	292.0	315.8	334.8	347.5	355.3	357.3
125°	222.7	252.1	277.2	297.9	314.1	325.9	332.2	335.1
127.5°	213.5	240.9	264.3	283.7	298.4	308.8	314.8	316.1
130°	207.7	233.1	255.6	274.3	288.7	298.2	304.0	305.7
132.5°	201.9	225.8	246.1	264.2	278.6	288.0	293.3	295.3
135°	194.5	214.3	232.8	249.2	262.0	271.4	276.6	278.3
137.5°	188.2	204.2	219.6	233.5	244.8	253.5	258.3	260.2
140°	184.7	198.2	211.5	223.6	234.2	241.7	246.1	247.5
142.5°	181.7	193.1	204.6	215.1	224.1	230.5	234.6	235.8
145°	177.8	186.7	195.7	203.4	210.3	215.2	218.4	219.6
147.5°	174.1	181.3	188.3	194.1	199.6	203.5	205.3	205.9
150°	172.0	178.4	183.8	189.0	193.3	196.8	198.0	198.2
152.5°	169.7	175.4	180.3	184.4	188.0	190.8	191.9	192.2
155°	166.2	170.9	174.9	178.1	180.9	183.0	183.8	184.1
157.5°	162.8	166.6	169.7	172.2	174.5	176.1	176.9	176.8
160°	160.5	163.4	166.2	168.3	170.3	171.7	172.3	172.0
162.5°	157.9	160.6	163.1	164.9	166.4	167.5	167.7	167.6
165°	154.4	156.5	158.2	159.6	160.8	161.3	161.3	161.3
167.5°	151.1	152.5	153.8	154.8	155.4	155.9	155.6	155.6
170°	149.3	150.1	151.0	151.6	152.1	152.5	152.5	152.1
172.5°	147.2	148.1	148.7	149.0	149.1	149.7	149.2	148.9
175°	145.0	145.0	145.5	145.5	145.5	145.8	145.2	145.0
177.5°	143.4	143.6	143.6	143.6	143.4	143.6	142.9	142.9
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9

(END OF REPORT)