

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: P333309-930

Luminaire Tested: **S125DIP-S1270D590U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333309-930
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: S125DIP-S1270D590U930-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5747.1 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

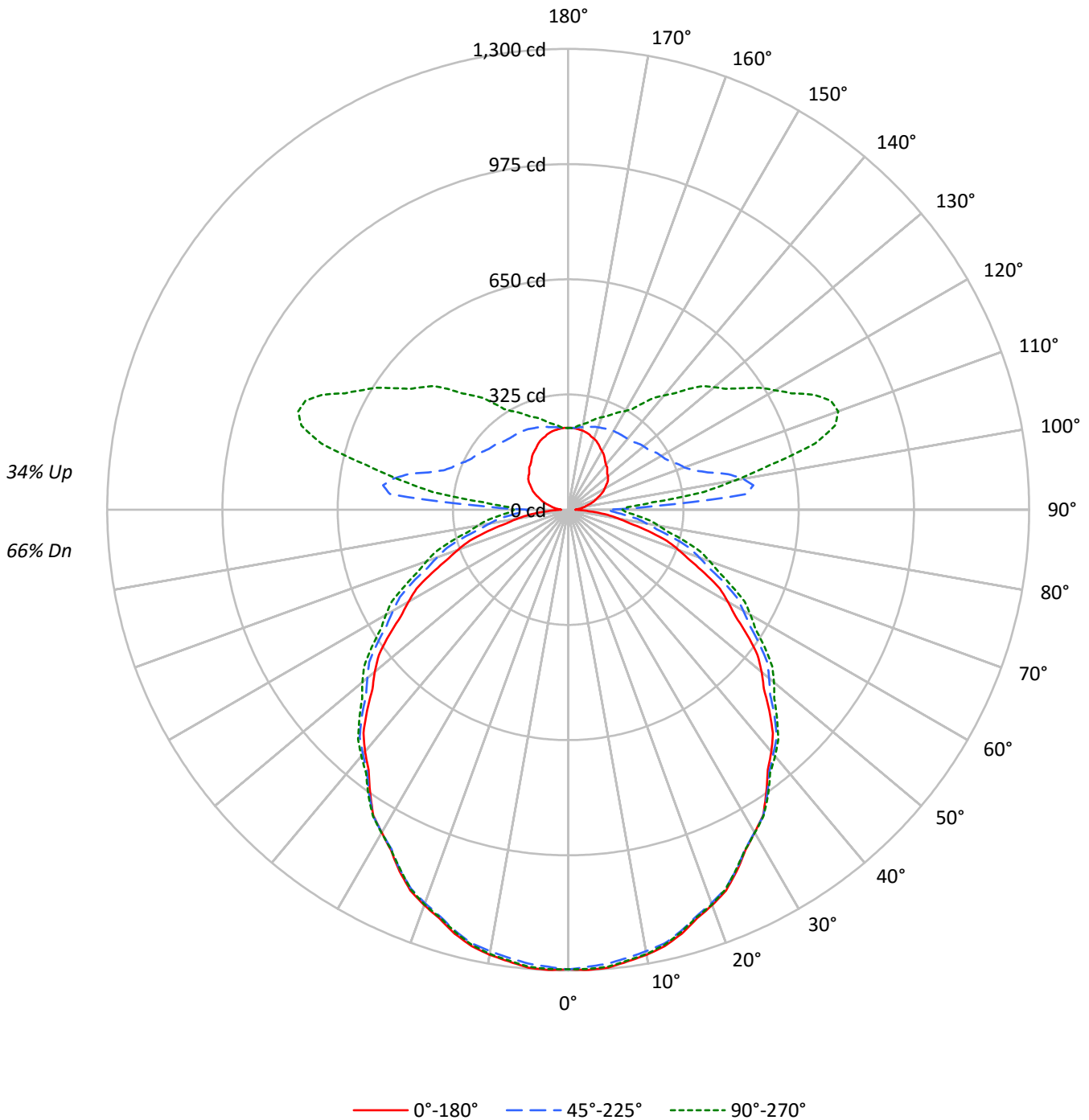
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	100	95	91	87	94	90	86	83	79	76	74	70	67	65	61	59	58	53
2	91	83	76	70	85	78	72	67	69	64	60	61	57	54	53	50	48	44
3	83	73	65	58	77	68	61	56	61	55	50	53	49	45	47	43	40	37
4	76	64	56	49	71	60	53	47	54	48	43	47	42	38	41	38	34	31
5	69	57	48	42	65	54	46	40	48	42	37	42	37	33	37	33	30	27
6	64	51	43	36	60	48	41	35	43	37	32	38	33	29	34	30	26	24
7	59	46	38	32	55	44	36	31	39	33	28	35	30	26	31	27	23	21
8	55	42	34	28	52	40	32	27	36	30	25	32	27	23	28	24	21	19
9	51	38	31	25	48	36	29	24	33	27	22	29	24	21	26	22	19	17
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8374	8374	8374
5°	8391	8220	8245
10°	8331	8072	8060
15°	8232	7896	7825
20°	8098	7680	7590
25°	7939	7447	7300
30°	7746	7191	7036
35°	7566	6956	6795
40°	7383	6709	6552
45°	7176	6497	6337
50°	6978	6267	6147
55°	6741	6051	5923
60°	6482	5802	5695
65°	6210	5544	5437
70°	5903	5190	5173
75°	5415	4849	4849
80°	4780	4438	4496
85°	4189	4162	4384



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	2.1
10°-20°	348.0	6.1
20°-30°	517.6	9.0
30°-40°	613.1	10.7
40°-50°	633.9	11.0
50°-60°	583.9	10.2
60°-70°	472.0	8.2
70°-80°	316.1	5.5
80°-90°	165.2	2.9
90°-100°	259.2	4.5
100°-110°	427.3	7.4
110°-120°	382.8	6.7
120°-130°	299.2	5.2
130°-140°	230.7	4.0
140°-150°	167.8	2.9
150°-160°	116.5	2.0
160°-170°	68.7	1.2
170°-180°	22.3	0.4
0°-30°	988.2	17.2
0°-40°	1601.3	27.9
0°-60°	2819.2	49.1
0°-90°	3772.5	65.6
90°-120°	1069.2	18.6
90°-150°	1766.9	30.7
90°-180°	1975.0	34.4
0°-180°	5747.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1297	1294	1285	1295	1294	123
15°	1238	1239	1230	1237	1233	349
25°	1125	1128	1121	1126	1120	518
35°	974	982	979	982	983	609
45°	802	816	822	831	833	619
55°	616	637	657	671	676	551
65°	424	454	484	503	508	421
75°	234	267	308	332	339	248
85°	70	112	156	183	194	74
90°	21	65	112	142	153	14
95°	32	95	505	307	239	29
105°	64	106	407	758	720	68
115°	102	131	320	655	766	100
125°	135	158	289	513	597	120
135°	155	185	268	415	482	120
145°	179	204	259	328	366	112
155°	203	218	252	285	297	93
165°	221	227	242	256	260	62
175°	230	230	232	235	234	22
180°	231	231	231	231	231	



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CATALOG NUMBER: S125DIP-S1270D590U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6
2.5°	1299.6	1299.2	1298.7	1298.3	1297.8	1296.8	1295.2	1293.6	1292.1	1290.5	1292.1
5°	1296.6	1296.0	1295.4	1294.9	1294.3	1293.1	1291.0	1289.1	1287.1	1285.2	1287.4
7.5°	1285.2	1284.9	1284.7	1284.4	1284.3	1283.1	1281.1	1279.0	1277.0	1275.0	1276.9
10°	1275.0	1275.0	1275.0	1275.0	1275.0	1273.8	1271.5	1269.3	1267.1	1264.8	1266.7
12.5°	1260.7	1260.9	1261.2	1261.4	1261.6	1260.9	1259.1	1257.2	1255.4	1253.6	1255.2
15°	1238.1	1238.4	1238.7	1238.9	1239.3	1238.4	1236.4	1234.4	1232.5	1230.4	1232.2
17.5°	1208.6	1209.2	1209.7	1210.3	1210.9	1210.1	1208.2	1206.2	1204.2	1202.2	1203.5
20°	1187.2	1187.8	1188.4	1189.0	1189.5	1188.8	1186.8	1184.9	1182.8	1180.9	1181.8
22.5°	1162.9	1163.8	1164.9	1165.9	1166.9	1166.3	1164.1	1161.9	1159.7	1157.5	1158.5
25°	1124.9	1125.8	1126.7	1127.5	1128.4	1128.0	1126.3	1124.5	1122.8	1121.1	1122.3
27.5°	1082.8	1084.0	1085.2	1086.5	1087.8	1087.4	1085.5	1083.5	1081.7	1079.7	1080.5
30°	1051.2	1053.0	1054.6	1056.3	1058.0	1058.0	1056.3	1054.6	1053.0	1051.2	1051.8
32.5°	1022.8	1024.3	1025.7	1027.2	1028.7	1028.7	1027.5	1026.3	1025.0	1023.8	1024.3
35°	973.7	975.7	977.6	979.7	981.6	982.2	981.3	980.5	979.7	978.8	979.7
37.5°	924.6	926.4	928.2	930.1	931.9	932.6	932.4	932.1	931.8	931.5	932.6
40°	891.0	893.3	895.6	897.9	900.1	901.1	900.8	900.5	900.3	900.0	901.1
42.5°	854.4	857.4	860.3	863.2	866.3	868.0	868.6	869.3	869.8	870.5	871.8
45°	802.1	805.2	808.3	811.4	814.5	816.8	818.2	819.6	821.0	822.4	824.4
47.5°	748.4	751.3	754.2	757.1	759.9	762.6	765.1	767.5	769.9	772.3	775.3
50°	711.8	714.9	718.0	721.1	724.3	727.4	730.5	733.6	736.7	739.8	742.9
52.5°	673.2	677.0	680.8	684.5	688.4	692.1	695.9	699.7	703.4	707.3	710.6
55°	616.5	621.0	625.6	630.1	634.5	639.1	643.6	648.2	652.6	657.2	660.3
57.5°	558.6	563.9	569.4	574.8	580.2	585.5	590.8	595.9	601.1	606.3	609.9
60°	519.9	525.5	531.2	536.9	542.5	548.1	553.8	559.5	565.1	570.7	574.9
62.5°	482.2	488.0	493.6	499.2	504.8	510.8	516.8	522.9	529.0	535.2	539.8
65°	424.5	431.0	437.6	444.1	450.5	457.2	464.0	470.8	477.5	484.3	488.5
67.5°	370.1	376.4	382.7	389.0	395.3	401.9	408.7	415.6	422.5	429.4	434.6
70°	330.5	337.0	343.5	350.0	356.4	363.4	370.7	378.1	385.5	392.8	398.2
72.5°	291.9	298.6	305.3	312.0	318.8	326.1	334.1	342.2	350.2	358.2	364.0
75°	233.9	241.2	248.6	255.9	263.3	271.5	280.5	289.5	298.6	307.6	313.2
77.5°	178.2	186.7	195.2	203.7	212.1	220.7	229.4	238.1	246.8	255.5	261.7
80°	143.7	152.1	160.6	169.1	177.6	186.5	196.2	205.8	215.4	225.0	231.2
82.5°	112.1	121.1	130.0	138.9	147.8	157.2	167.1	176.8	186.7	196.5	202.5
85°	70.0	79.2	88.5	97.9	107.2	116.8	126.7	136.6	146.4	156.4	162.6
87.5°	39.8	48.9	58.1	67.3	76.6	86.1	95.8	105.6	115.3	125.1	131.7
90°	20.8	30.3	40.3	50.2	60.3	70.4	80.6	91.1	101.2	111.7	118.6
92.5°	24.0	33.5	45.8	59.9	76.3	99.0	134.2	186.6	242.7	250.1	227.8
95°	31.9	39.7	50.7	63.2	80.8	110.1	169.6	281.4	419.5	504.8	502.2
97.5°	40.5	47.6	56.9	68.6	84.4	107.5	149.6	233.8	377.4	526.5	602.6
100°	46.6	53.4	61.2	72.2	87.0	108.4	144.5	213.9	340.2	501.3	623.5
102.5°	53.3	59.4	66.4	77.3	90.9	111.6	144.4	204.0	311.8	461.9	603.6
105°	64.0	68.5	75.3	84.5	96.4	116.0	145.0	194.8	281.0	407.1	546.3
107.5°	74.4	79.2	85.2	92.9	104.4	122.1	150.1	193.6	265.1	368.4	489.1
110°	81.9	86.3	91.5	99.1	109.4	127.2	154.2	194.1	258.3	349.0	455.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	90.5	94.1	98.3	105.2	114.9	131.8	157.8	195.8	254.5	336.0	429.9
115°	101.6	104.4	107.9	114.0	122.9	139.3	163.8	198.1	250.1	320.2	400.2
117.5°	111.5	114.1	116.9	122.5	131.7	147.0	170.2	201.7	247.4	309.4	379.8
120°	118.9	121.2	123.8	128.9	137.6	153.0	175.7	204.6	246.9	303.1	367.9
122.5°	125.7	127.1	129.0	133.5	142.6	157.6	180.1	207.6	245.6	297.2	356.9
125°	135.3	136.0	138.0	141.9	150.4	165.3	186.2	211.9	244.5	288.8	341.6
127.5°	141.8	142.8	145.5	150.6	159.7	174.0	193.4	216.5	244.6	281.8	327.1
130°	146.6	147.7	151.2	156.9	166.4	180.3	198.7	220.3	245.2	278.0	318.2
132.5°	149.3	151.0	155.4	162.2	172.2	185.8	203.3	222.9	245.4	273.9	309.7
135°	155.1	156.7	162.0	169.1	178.6	192.0	208.4	225.8	244.9	267.8	298.0
137.5°	162.5	163.6	168.6	175.9	185.2	198.4	212.5	228.2	245.6	263.8	288.4
140°	165.9	167.3	172.8	180.3	189.1	201.9	215.6	229.8	245.0	261.1	282.8
142.5°	171.1	171.9	176.9	184.1	192.3	204.1	216.9	230.2	244.3	259.4	278.5
145°	179.0	179.6	183.9	190.2	198.3	208.8	220.9	232.5	245.1	258.6	273.9
147.5°	185.8	186.4	190.4	196.4	203.7	213.1	223.7	234.2	245.6	257.4	270.1
150°	190.7	191.6	194.9	200.9	207.4	215.3	225.6	235.3	245.6	256.2	267.4
152.5°	195.9	196.4	199.3	204.6	210.8	217.9	227.4	236.0	245.2	254.8	264.8
155°	202.8	202.8	205.5	210.2	214.8	221.4	229.3	236.7	244.2	252.1	260.4
157.5°	208.9	208.8	211.1	215.1	219.2	224.0	230.9	237.2	243.0	249.2	256.3
160°	213.0	212.5	214.4	217.7	221.4	225.6	231.6	237.2	241.8	247.4	253.0
162.5°	216.4	215.9	217.8	220.6	223.6	227.1	232.4	236.8	240.8	245.2	250.1
165°	221.4	220.5	221.8	224.1	226.0	228.9	232.5	236.3	239.0	241.8	245.6
167.5°	224.7	224.3	225.1	226.4	227.7	229.4	232.5	235.1	236.4	238.6	241.2
170°	227.0	226.5	227.0	227.9	228.9	230.2	232.5	234.4	235.3	236.7	238.6
172.5°	228.4	227.6	228.0	229.0	229.6	230.2	232.2	233.7	233.8	234.5	235.9
175°	230.2	229.3	229.8	230.2	230.2	230.2	231.6	232.5	232.0	232.0	232.5
177.5°	231.1	230.3	230.3	230.6	230.3	230.3	231.1	231.4	230.6	230.6	231.1
180°	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6
2.5°	1293.6	1295.2	1296.8	1297.5	1297.2	1297.1	1296.8	1296.6
5°	1289.6	1291.9	1294.2	1295.2	1294.9	1294.6	1294.3	1294.0
7.5°	1278.9	1280.9	1282.9	1283.7	1283.4	1283.1	1282.9	1282.5
10°	1268.8	1270.7	1272.7	1273.6	1273.3	1273.0	1272.7	1272.4
12.5°	1256.6	1258.2	1259.7	1260.1	1259.4	1258.7	1257.9	1257.2
15°	1233.9	1235.6	1237.2	1237.5	1236.4	1235.3	1234.1	1233.0
17.5°	1204.8	1206.2	1207.5	1207.8	1207.1	1206.4	1205.7	1205.0
20°	1182.6	1183.4	1184.3	1184.7	1184.7	1184.7	1184.7	1184.7
22.5°	1159.7	1160.7	1161.8	1162.0	1161.3	1160.7	1159.9	1159.3
25°	1123.4	1124.5	1125.7	1125.5	1124.1	1122.7	1121.3	1119.9
27.5°	1081.3	1082.1	1082.9	1083.0	1082.5	1082.0	1081.5	1081.0
30°	1052.4	1053.0	1053.5	1053.6	1053.4	1053.0	1052.8	1052.5
32.5°	1024.9	1025.5	1026.1	1026.2	1025.9	1025.6	1025.3	1025.1
35°	980.5	981.3	982.2	982.6	982.6	982.6	982.6	982.6
37.5°	933.8	934.9	936.0	936.5	936.4	936.3	936.2	936.0
40°	902.2	903.4	904.5	905.3	905.9	906.4	907.0	907.6
42.5°	873.2	874.6	875.9	876.6	876.8	876.9	877.0	877.1
45°	826.4	828.3	830.3	831.4	831.8	832.0	832.3	832.6
47.5°	778.1	781.0	783.9	785.6	786.3	786.8	787.5	788.1
50°	746.0	749.1	752.3	754.2	755.0	755.9	756.8	757.6
52.5°	714.0	717.3	720.6	722.6	723.2	723.8	724.5	725.0
55°	663.4	666.5	669.6	671.7	672.9	674.0	675.1	676.3
57.5°	613.4	617.0	620.6	622.8	623.6	624.4	625.3	626.1
60°	579.2	583.4	587.7	590.2	591.1	591.9	592.8	593.6
62.5°	544.5	549.2	553.9	556.8	557.8	559.0	560.0	561.1
65°	492.8	497.0	501.2	503.9	505.1	506.2	507.4	508.4
67.5°	439.7	444.8	450.0	453.2	454.7	456.2	457.7	459.2
70°	403.5	408.9	414.3	417.8	419.5	421.2	422.9	424.5
72.5°	369.8	375.7	381.5	385.0	386.3	387.5	388.7	390.0
75°	318.9	324.6	330.2	333.8	335.2	336.6	338.0	339.4
77.5°	267.9	274.1	280.4	284.1	285.2	286.3	287.4	288.5
80°	237.4	243.6	249.9	253.6	254.6	255.8	256.9	258.0
82.5°	208.5	214.5	220.5	224.5	226.5	228.5	230.6	232.6
85°	168.8	175.0	181.2	185.5	187.7	190.0	192.2	194.4
87.5°	138.2	144.8	151.4	155.8	157.8	159.8	161.8	163.8
90°	125.6	132.6	139.5	144.7	146.7	148.6	151.1	153.0
92.5°	195.1	178.8	170.2	167.5	163.5	164.4	165.8	167.0
95°	439.6	375.1	324.2	289.2	258.1	246.1	244.4	239.0
97.5°	596.3	552.7	502.9	452.5	425.7	401.5	390.0	386.0
100°	665.3	648.4	606.4	561.9	531.5	499.7	484.2	478.4
102.5°	685.7	705.4	688.1	659.1	626.5	604.4	587.3	583.5
105°	663.5	732.9	759.0	757.7	744.8	731.4	724.1	720.5
107.5°	604.8	695.5	753.6	781.5	790.8	792.5	791.2	789.1
110°	561.6	655.3	726.3	769.5	792.4	803.2	808.5	810.4



TEST NUMBER: P333309-930

CATALOG NUMBER: S125DIP-S1270D590U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	526.6	615.6	687.1	737.2	769.8	786.9	797.0	802.3
115°	482.0	559.2	628.0	682.1	720.1	744.0	758.8	766.5
117.5°	450.6	517.6	577.2	627.1	665.3	690.3	705.2	710.8
120°	433.2	493.7	549.8	593.9	630.0	654.0	668.3	673.7
122.5°	418.6	474.9	525.1	566.5	598.9	621.0	635.3	640.3
125°	397.8	449.7	494.7	531.2	558.6	579.1	590.8	596.8
127.5°	376.3	424.9	466.8	501.0	526.3	544.8	556.0	559.8
130°	363.5	408.5	448.7	481.6	506.2	523.0	533.7	537.9
132.5°	350.2	392.5	429.3	461.1	485.5	502.0	511.8	516.1
135°	331.4	367.2	400.6	429.7	451.6	468.3	478.1	482.3
137.5°	315.9	345.2	373.3	398.0	417.5	432.6	441.4	445.6
140°	306.9	331.8	356.4	378.0	396.3	409.5	417.7	421.1
142.5°	299.1	320.2	341.4	360.1	375.9	387.3	395.0	398.0
145°	289.8	305.6	321.5	335.3	347.6	356.6	362.8	365.8
147.5°	281.9	294.1	305.6	315.5	324.9	331.7	335.3	336.6
150°	277.6	287.9	296.7	305.2	312.5	318.4	320.5	321.2
152.5°	273.9	283.1	291.1	297.7	303.6	308.1	310.1	310.5
155°	268.3	275.8	282.3	287.4	292.0	295.3	296.7	297.2
157.5°	262.8	268.9	273.9	277.9	281.5	284.2	285.5	285.4
160°	259.0	263.7	268.3	271.6	274.8	277.2	278.1	277.6
162.5°	254.9	259.3	263.1	266.0	268.6	270.5	270.7	270.6
165°	249.2	252.5	255.4	257.6	259.5	260.4	260.4	260.4
167.5°	243.9	246.1	248.2	249.8	250.8	251.6	251.2	251.1
170°	240.9	242.3	243.7	244.6	245.6	246.1	246.1	245.6
172.5°	237.6	239.0	239.9	240.5	240.8	241.6	240.8	240.4
175°	233.9	233.9	234.9	234.9	234.9	235.3	234.4	233.9
177.5°	231.4	231.8	231.8	231.8	231.4	231.8	230.6	230.6
180°	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6

(END OF REPORT)