

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: P333308-930

Luminaire Tested: **S125DIP-S1270D590U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333308-930
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: S125DIP-S1270D590U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5684.9 lumens
Efficiency: N/A
Efficacy: 103.2 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

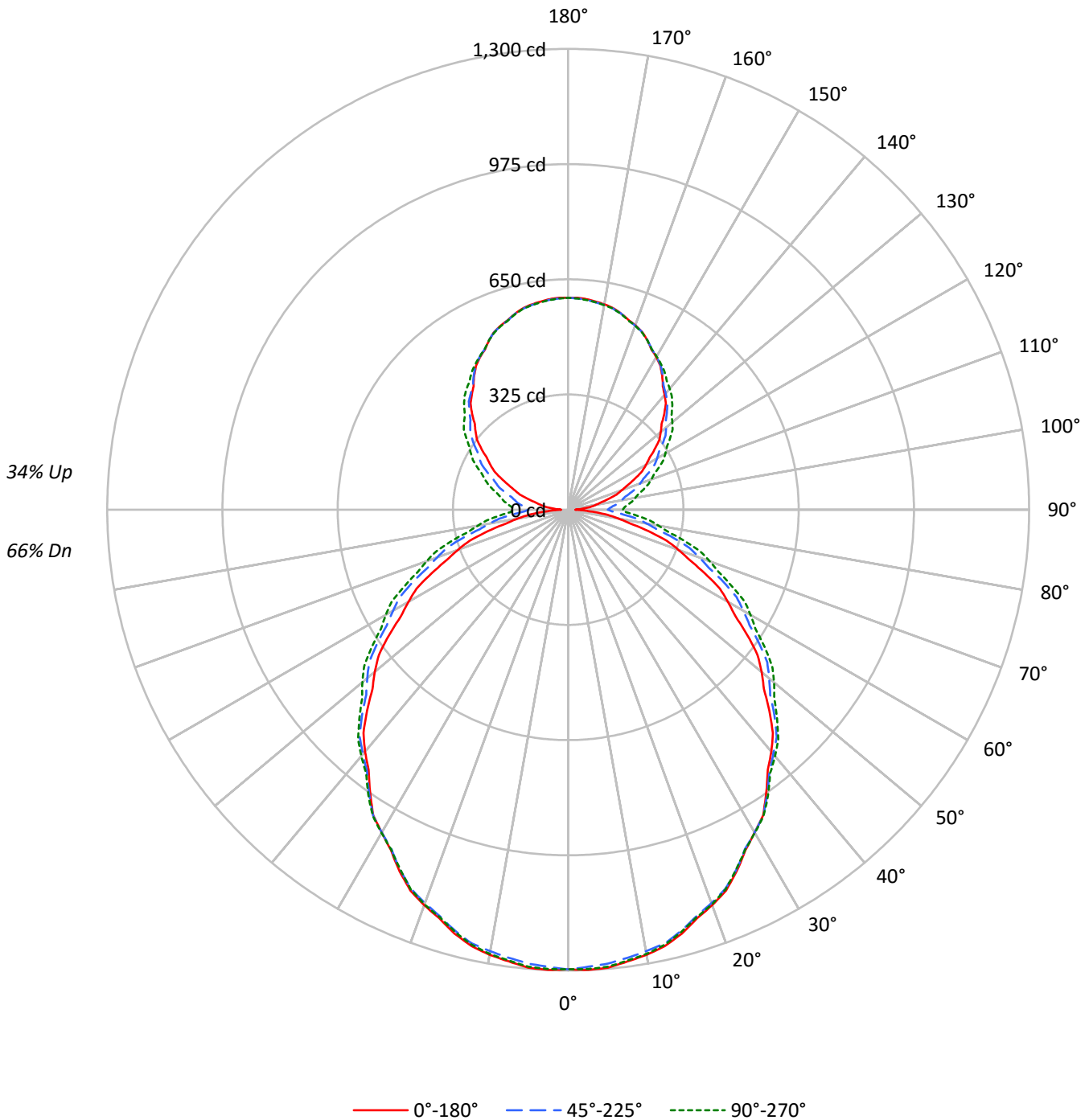
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66				
1	100	96	91	87	94	90	86	83	80	77	74	70	68	66	61	60	58	54				
2	91	83	76	71	85	78	72	67	69	65	61	61	57	54	53	51	48	44				
3	83	73	65	58	78	69	61	56	61	55	50	54	49	45	47	44	41	37				
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32				
5	70	57	48	42	65	54	46	40	48	42	37	43	38	33	38	33	30	27				
6	64	51	43	37	60	49	41	35	43	37	32	39	33	29	34	30	26	24				
7	59	46	38	32	56	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	29	24	21	19				
9	51	38	31	25	48	37	29	24	33	27	23	30	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	2.2
10°-20°	348.0	6.1
20°-30°	517.6	9.1
30°-40°	613.1	10.8
40°-50°	633.9	11.2
50°-60°	583.9	10.3
60°-70°	472.0	8.3
70°-80°	316.1	5.6
80°-90°	165.3	2.9
90°-100°	132.0	2.3
100°-110°	186.0	3.3
110°-120°	245.7	4.3
120°-130°	289.3	5.1
130°-140°	306.5	5.4
140°-150°	291.7	5.1
150°-160°	243.1	4.3
160°-170°	161.6	2.8
170°-180°	56.5	1.0
0°-30°	988.2	17.4
0°-40°	1601.3	28.2
0°-60°	2819.2	49.6
0°-90°	3772.6	66.4
90°-120°	563.7	9.9
90°-150°	1451.2	25.5
90°-180°	1912.0	33.6
0°-180°	5684.9	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	154	15
95°	47	82	129	159	170	45
105°	118	141	181	208	220	125
115°	208	220	253	274	282	206
125°	298	301	325	344	350	266
135°	383	385	394	410	415	295
145°	462	463	464	470	474	289
155°	527	527	528	530	527	243
165°	574	573	573	575	572	162
175°	596	594	594	597	594	57
180°	598	598	598	598	598	



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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	86.0	95.8	105.6	115.3	125.1	131.7
90°	20.8	30.7	40.5	50.4	60.3	70.4	80.7	91.0	101.3	111.7	118.7
92.5°	29.6	38.5	47.5	56.4	65.3	75.2	85.9	96.6	107.3	118.1	125.0
95°	46.7	54.3	61.9	69.4	77.0	86.1	96.7	107.3	118.0	128.6	135.6
97.5°	65.2	71.9	78.6	85.3	92.0	100.7	111.4	122.1	132.7	143.5	150.1
100°	79.1	85.0	91.0	96.9	102.8	111.0	121.4	131.8	142.1	152.5	159.4
102.5°	94.1	100.0	105.9	111.8	117.6	125.3	134.9	144.3	153.8	163.3	170.1
105°	117.5	122.5	127.6	132.6	137.6	144.7	153.8	162.9	171.9	181.1	187.4
107.5°	143.5	147.8	152.2	156.5	160.9	167.4	176.0	184.7	193.2	201.9	207.7
110°	161.4	165.3	169.3	173.2	177.1	183.1	191.4	199.6	207.8	216.1	221.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	180.8	183.8	186.8	189.7	192.7	198.3	206.4	214.4	222.5	230.6	235.9
115°	208.1	210.5	212.9	215.2	217.7	222.7	230.2	237.7	245.2	252.8	257.8
117.5°	235.5	236.9	238.5	239.9	241.4	245.7	252.8	260.0	267.1	274.3	279.2
120°	253.3	254.7	256.1	257.4	258.8	262.8	269.4	276.0	282.6	289.2	294.0
122.5°	271.7	272.2	272.8	273.4	274.0	277.5	284.1	290.7	297.2	303.7	308.2
125°	297.7	298.0	298.3	298.6	299.0	302.1	307.8	313.6	319.3	325.1	329.4
127.5°	324.2	324.3	324.4	324.5	324.6	326.9	331.7	336.5	341.2	346.0	350.1
130°	341.0	341.3	341.4	341.7	341.9	344.1	348.3	352.5	356.6	360.8	364.7
132.5°	356.8	357.5	358.3	359.1	359.9	361.8	364.8	367.9	370.8	373.8	377.7
135°	383.0	383.4	383.7	384.0	384.3	385.6	387.7	389.7	391.8	393.9	397.5
137.5°	407.6	408.1	408.4	408.8	409.2	409.9	411.2	412.3	413.5	414.7	418.2
140°	422.7	423.1	423.7	424.2	424.7	425.3	425.8	426.5	427.1	427.6	431.0
142.5°	438.6	438.9	439.0	439.3	439.5	439.9	440.3	440.8	441.2	441.6	444.4
145°	462.2	462.4	462.4	462.6	462.7	462.9	463.3	463.6	463.9	464.1	465.6
147.5°	482.7	482.9	483.1	483.4	483.6	483.8	484.0	484.4	484.6	484.9	485.5
150°	497.2	497.1	497.0	496.9	496.8	496.9	497.3	497.7	498.1	498.6	498.6
152.5°	509.1	509.2	509.4	509.6	509.6	509.8	510.0	510.1	510.3	510.5	510.8
155°	527.4	527.4	527.4	527.4	527.4	527.5	527.6	527.7	527.8	527.9	528.3
157.5°	543.8	543.6	543.3	543.2	542.9	542.8	542.9	543.1	543.2	543.2	543.6
160°	553.5	553.2	552.9	552.5	552.2	552.1	552.2	552.4	552.4	552.5	552.9
162.5°	562.1	561.8	561.6	561.3	561.1	561.0	561.0	561.1	561.1	561.1	561.6
165°	573.5	573.2	573.1	572.8	572.7	572.6	572.7	572.8	572.9	573.0	573.4
167.5°	583.2	582.8	582.3	581.9	581.5	581.3	581.3	581.3	581.3	581.3	581.9
170°	588.3	587.9	587.5	587.1	586.7	586.5	586.5	586.5	586.5	586.5	587.1
172.5°	592.1	591.7	591.3	590.8	590.4	590.2	590.2	590.2	590.2	590.2	590.8
175°	596.2	595.8	595.4	595.0	594.6	594.4	594.4	594.4	594.4	594.4	595.0
177.5°	598.4	598.1	597.8	597.5	597.0	596.9	596.8	596.7	596.6	596.6	597.0
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7



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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°	138.3	144.9	151.5	155.8	157.8	159.9	161.9	164.0
90°	125.7	132.7	139.7	144.4	146.7	149.0	151.2	153.5
92.5°	131.9	138.8	145.9	150.4	152.6	154.8	157.0	159.2
95°	142.5	149.4	156.4	160.9	163.1	165.3	167.5	169.7
97.5°	156.7	163.3	169.9	174.2	176.3	178.3	180.3	182.5
100°	166.2	173.1	179.9	184.3	186.2	188.2	190.0	191.9
102.5°	176.8	183.5	190.2	194.5	196.6	198.5	200.5	202.5
105°	193.6	199.9	206.2	210.4	212.7	215.0	217.3	219.6
107.5°	213.7	219.6	225.4	229.3	231.1	232.8	234.5	236.2
110°	227.4	233.0	238.7	242.5	244.3	246.2	248.1	250.0



TEST NUMBER: P333308-930

CATALOG NUMBER: S125DIP-S1270D590U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	241.2	246.4	251.7	255.3	257.1	258.9	260.7	262.4
115°	262.8	267.7	272.7	276.1	277.6	279.2	280.8	282.4
117.5°	284.1	288.9	293.8	297.0	298.5	300.0	301.5	303.0
120°	298.8	303.5	308.3	311.4	312.7	314.0	315.3	316.6
122.5°	312.7	317.2	321.7	324.6	326.0	327.3	328.7	330.0
125°	333.7	338.0	342.3	345.1	346.4	347.7	349.0	350.3
127.5°	354.2	358.2	362.3	365.0	366.5	367.9	369.3	370.8
130°	368.5	372.3	376.2	378.7	379.9	381.2	382.4	383.5
132.5°	381.6	385.4	389.2	391.6	392.5	393.4	394.3	395.2
135°	401.2	404.9	408.5	410.9	411.9	412.9	413.9	414.9
137.5°	421.6	425.1	428.5	430.6	431.2	431.8	432.4	433.0
140°	434.3	437.6	440.9	442.9	443.4	444.1	444.7	445.3
142.5°	447.2	450.0	452.7	454.4	455.0	455.7	456.2	456.9
145°	467.0	468.4	469.9	470.9	471.7	472.5	473.4	474.3
147.5°	486.2	486.9	487.6	487.9	487.7	487.5	487.3	487.1
150°	498.6	498.6	498.6	498.6	498.7	498.8	498.9	499.0
152.5°	511.0	511.3	511.5	511.4	511.1	510.9	510.5	510.2
155°	528.7	529.1	529.5	529.5	529.0	528.5	527.9	527.4
157.5°	544.0	544.5	544.9	544.8	544.0	543.4	542.7	542.0
160°	553.3	553.8	554.2	554.2	553.7	553.1	552.6	552.1
162.5°	562.1	562.6	563.1	563.0	562.5	561.8	561.3	560.6
165°	573.8	574.2	574.7	574.5	574.0	573.3	572.7	572.1
167.5°	582.5	583.2	583.8	583.8	583.1	582.4	581.8	581.2
170°	587.7	588.3	589.0	588.9	588.2	587.5	586.8	586.0
172.5°	591.5	592.1	592.7	592.7	592.1	591.4	590.8	590.1
175°	595.7	596.2	596.9	596.8	596.1	595.4	594.7	593.9
177.5°	597.5	598.0	598.5	598.5	597.9	597.4	596.7	596.1
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7

(END OF REPORT)