

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: P333318-930

Luminaire Tested: **S125DIP-S1270D810U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333318-930
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-S1270D810U930-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6388.8 lumens
Efficiency: N/A
Efficacy: 105.3 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: General Diffuse

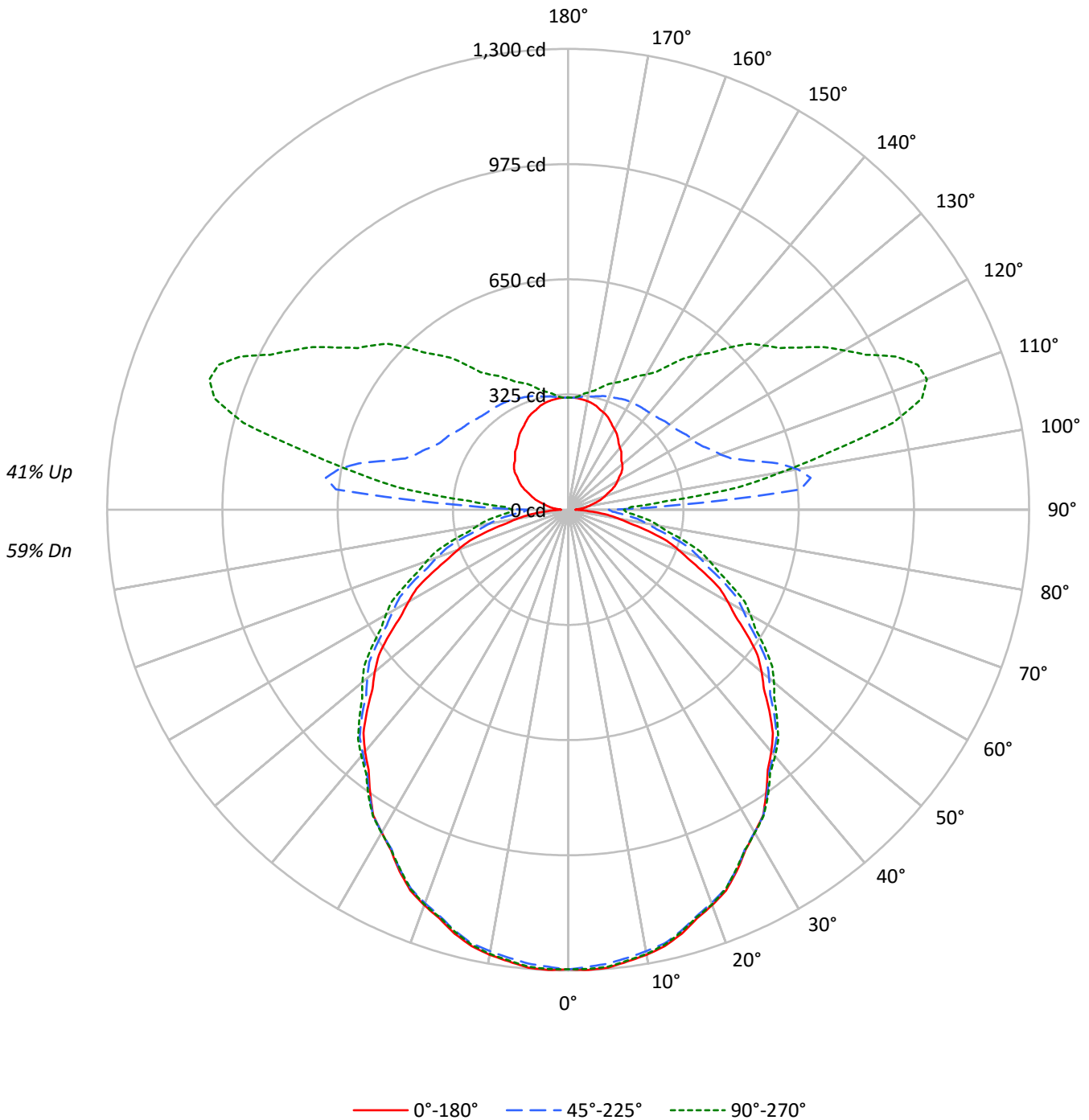
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	56	54	53	48
2	90	82	75	70	83	76	71	66	66	62	58	57	54	51	48	46	44	39
3	82	72	64	58	76	67	60	54	58	53	48	50	46	42	43	39	37	33
4	75	63	55	49	69	59	52	46	52	46	41	45	40	36	38	34	32	28
5	68	56	48	41	63	53	45	39	46	40	35	40	35	31	34	30	27	24
6	63	50	42	36	59	47	40	34	41	35	31	36	31	27	31	27	24	21
7	58	46	37	31	54	43	35	30	38	31	27	33	28	24	28	24	21	19
8	54	41	33	28	50	39	32	27	34	28	24	30	25	21	26	22	19	17
9	50	38	30	25	47	36	29	24	31	26	21	28	23	19	24	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	18	16	14

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	1.9
10°-20°	348.0	5.4
20°-30°	517.6	8.1
30°-40°	613.1	9.6
40°-50°	633.9	9.9
50°-60°	583.9	9.1
60°-70°	472.0	7.4
70°-80°	316.1	4.9
80°-90°	165.7	2.6
90°-100°	321.2	5.0
100°-110°	560.5	8.8
110°-120°	507.8	7.9
120°-130°	400.5	6.3
130°-140°	312.0	4.9
140°-150°	229.2	3.6
150°-160°	159.8	2.5
160°-170°	94.2	1.5
170°-180°	30.6	0.5
0°-30°	988.2	15.5
0°-40°	1601.3	25.1
0°-60°	2819.2	44.1
0°-90°	3773.0	59.1
90°-120°	1389.5	21.7
90°-150°	2331.3	36.5
90°-180°	2616.0	40.9
0°-180°	6388.8	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	67	114	146	157	15
95°	38	112	658	376	280	35
105°	84	134	532	1004	949	88
115°	136	173	421	871	1021	134
125°	184	214	385	685	797	163
135°	212	253	363	559	649	164
145°	245	279	354	448	497	153
155°	278	299	346	390	407	128
165°	304	312	332	352	357	85
175°	316	316	318	322	321	30
180°	316	316	316	316	316	



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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	58.2	67.5	76.8	86.4	96.1	106.0	115.8	125.6	132.2
90°	21.0	30.7	40.9	51.3	61.6	72.2	82.4	93.4	103.5	114.5	121.6
92.5°	26.1	36.1	49.8	66.1	85.4	113.1	157.8	226.0	299.1	305.7	272.8
95°	37.6	45.6	58.0	72.3	93.7	130.9	208.7	358.6	544.0	657.6	651.7
97.5°	49.9	57.3	67.5	81.1	100.4	128.9	183.4	295.4	488.7	689.6	791.7
100°	58.6	65.8	74.3	87.2	105.3	131.9	177.9	269.8	439.5	657.0	822.3
102.5°	68.3	74.5	82.1	95.1	111.6	137.4	179.1	257.6	402.0	604.5	796.5
105°	83.5	88.0	95.7	106.6	121.3	145.7	182.2	247.4	362.3	532.1	720.7
107.5°	98.2	103.4	110.3	119.4	133.8	155.8	191.1	247.9	342.8	481.3	644.7
110°	109.0	113.7	119.6	128.7	141.7	163.9	198.0	249.8	334.8	456.2	600.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	120.7	124.7	129.5	137.9	150.2	171.5	204.2	253.4	331.0	439.9	566.7
115°	136.4	139.7	143.6	151.2	162.8	183.4	214.3	258.6	327.2	420.6	528.3
117.5°	150.4	153.6	156.9	164.0	176.2	195.7	224.9	265.5	325.7	408.0	502.6
120°	160.6	163.4	166.8	173.3	185.1	204.6	233.5	270.6	326.1	400.9	487.9
122.5°	170.3	172.1	174.6	180.7	192.9	212.2	240.8	276.1	325.9	394.2	474.4
125°	183.6	184.6	187.4	192.9	204.7	224.0	250.7	283.8	326.4	385.0	455.8
127.5°	192.9	194.5	198.3	205.3	217.9	236.7	261.5	291.4	328.3	377.6	438.1
130°	199.5	201.1	205.9	213.9	227.1	245.5	269.2	297.4	330.0	373.5	427.2
132.5°	203.6	205.9	212.1	221.3	235.1	253.2	276.0	301.7	331.4	369.4	417.0
135°	211.7	213.9	221.3	231.2	244.3	262.4	284.1	307.1	332.6	363.3	403.3
137.5°	221.8	223.6	230.4	240.4	253.3	271.4	290.3	311.4	334.8	359.5	391.9
140°	226.9	228.9	236.5	246.7	258.8	276.1	294.9	314.4	335.0	357.0	385.6
142.5°	234.1	235.2	242.1	252.2	263.5	279.6	297.2	315.3	334.8	355.5	380.6
145°	244.8	245.8	251.8	260.5	271.7	286.3	302.8	318.7	336.0	354.4	375.0
147.5°	254.7	255.5	261.0	269.3	279.2	292.1	306.6	321.1	336.6	352.8	370.1
150°	261.4	262.6	267.1	275.4	284.3	295.1	309.2	322.5	336.6	351.2	366.6
152.5°	268.5	269.3	273.2	280.5	288.9	298.7	311.7	323.6	336.1	349.2	363.0
155°	277.9	277.9	281.8	288.1	294.5	303.5	314.3	324.5	334.7	345.5	357.0
157.5°	286.3	286.3	289.3	294.7	300.4	307.1	316.4	325.1	333.0	341.7	351.4
160°	292.0	291.3	293.9	298.3	303.5	309.2	317.5	325.1	331.5	339.2	346.8
162.5°	296.5	296.0	298.5	302.4	306.5	311.2	318.5	324.6	330.0	336.1	342.7
165°	303.5	302.1	304.1	307.3	309.8	313.6	318.7	323.8	327.7	331.5	336.6
167.5°	308.0	307.4	308.5	310.3	312.1	314.5	318.7	322.3	324.1	327.0	330.6
170°	311.1	310.5	311.1	312.3	313.6	315.5	318.7	321.3	322.5	324.5	327.0
172.5°	313.2	312.0	312.6	313.9	314.6	315.5	318.2	320.2	320.5	321.4	323.4
175°	315.5	314.3	315.0	315.5	315.5	315.5	317.5	318.7	318.1	318.1	318.7
177.5°	316.7	315.7	315.7	316.2	315.7	315.7	316.7	317.2	316.2	316.2	316.7
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2



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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°	138.8	145.4	152.1	156.6	158.6	160.5	162.7	164.6
90°	128.7	135.8	143.0	148.5	150.4	152.5	155.1	157.0
92.5°	225.7	201.0	186.9	181.6	175.5	175.9	177.0	178.0
95°	563.5	472.9	400.7	351.2	307.9	290.8	287.7	279.5
97.5°	780.9	718.8	648.5	577.9	540.5	506.7	490.1	483.9
100°	877.3	852.0	792.3	729.8	687.5	643.3	621.4	612.9
102.5°	906.9	931.9	906.1	865.0	819.6	788.6	764.8	758.8
105°	879.3	972.3	1006.0	1002.8	984.4	965.3	954.6	948.9
107.5°	801.2	923.3	1000.9	1037.9	1050.0	1051.7	1049.1	1045.8
110°	743.6	870.2	965.4	1023.3	1053.9	1068.0	1074.5	1076.4



TEST NUMBER: P333318-930

CATALOG NUMBER: S125DIP-S1270D810U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	697.3	817.4	913.5	981.0	1024.8	1047.7	1060.7	1067.2
115°	638.5	742.5	834.9	907.8	959.2	991.5	1011.1	1021.0
117.5°	598.0	687.9	768.0	835.1	886.7	920.3	940.0	947.0
120°	575.6	656.9	731.8	791.2	840.0	872.3	891.2	898.0
122.5°	557.3	632.8	699.8	755.5	799.2	829.0	847.9	854.2
125°	531.1	600.5	660.6	709.4	746.6	774.1	789.5	797.3
127.5°	504.1	569.0	624.9	670.8	704.8	729.5	744.4	748.9
130°	487.9	547.9	601.6	645.7	679.0	701.5	715.6	720.9
132.5°	471.1	527.5	576.7	619.1	652.2	674.4	687.3	692.8
135°	447.8	495.5	540.0	578.8	608.3	630.7	643.6	648.8
137.5°	428.5	467.4	504.7	537.8	564.0	584.2	596.0	601.3
140°	417.4	450.5	482.9	511.8	536.5	554.2	564.9	569.2
142.5°	407.8	435.9	463.7	488.9	510.0	525.1	535.3	539.2
145°	396.2	417.4	438.5	457.0	473.4	485.3	493.5	497.2
147.5°	386.0	402.6	418.2	431.7	444.3	453.5	458.1	459.7
150°	380.6	394.6	406.7	418.3	428.2	436.1	439.0	439.9
152.5°	375.4	388.0	399.1	408.0	416.1	422.2	424.9	425.6
155°	367.9	378.1	386.9	394.0	400.3	404.8	406.7	407.3
157.5°	360.2	368.6	375.4	381.0	386.0	389.6	391.4	391.3
160°	355.1	361.4	367.9	372.3	376.7	379.9	381.2	380.6
162.5°	349.4	355.3	360.7	364.6	368.1	370.7	371.0	370.9
165°	341.7	346.2	350.0	353.2	355.7	357.0	357.0	357.0
167.5°	334.3	337.2	340.1	342.4	343.7	344.9	344.4	344.2
170°	330.2	332.2	334.0	335.3	336.6	337.2	337.2	336.6
172.5°	325.6	327.5	329.0	329.7	330.0	331.1	330.1	329.5
175°	320.7	320.7	322.0	322.0	322.0	322.5	321.3	320.7
177.5°	317.2	317.7	317.7	317.7	317.2	317.7	316.2	316.2
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2

(END OF REPORT)