

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: P333263

Luminaire Tested: **S125DIP-S1090D590U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333263
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-S1090D590U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 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: 6312.0 lumens
Efficiency: N/A
Efficacy: 129.3 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

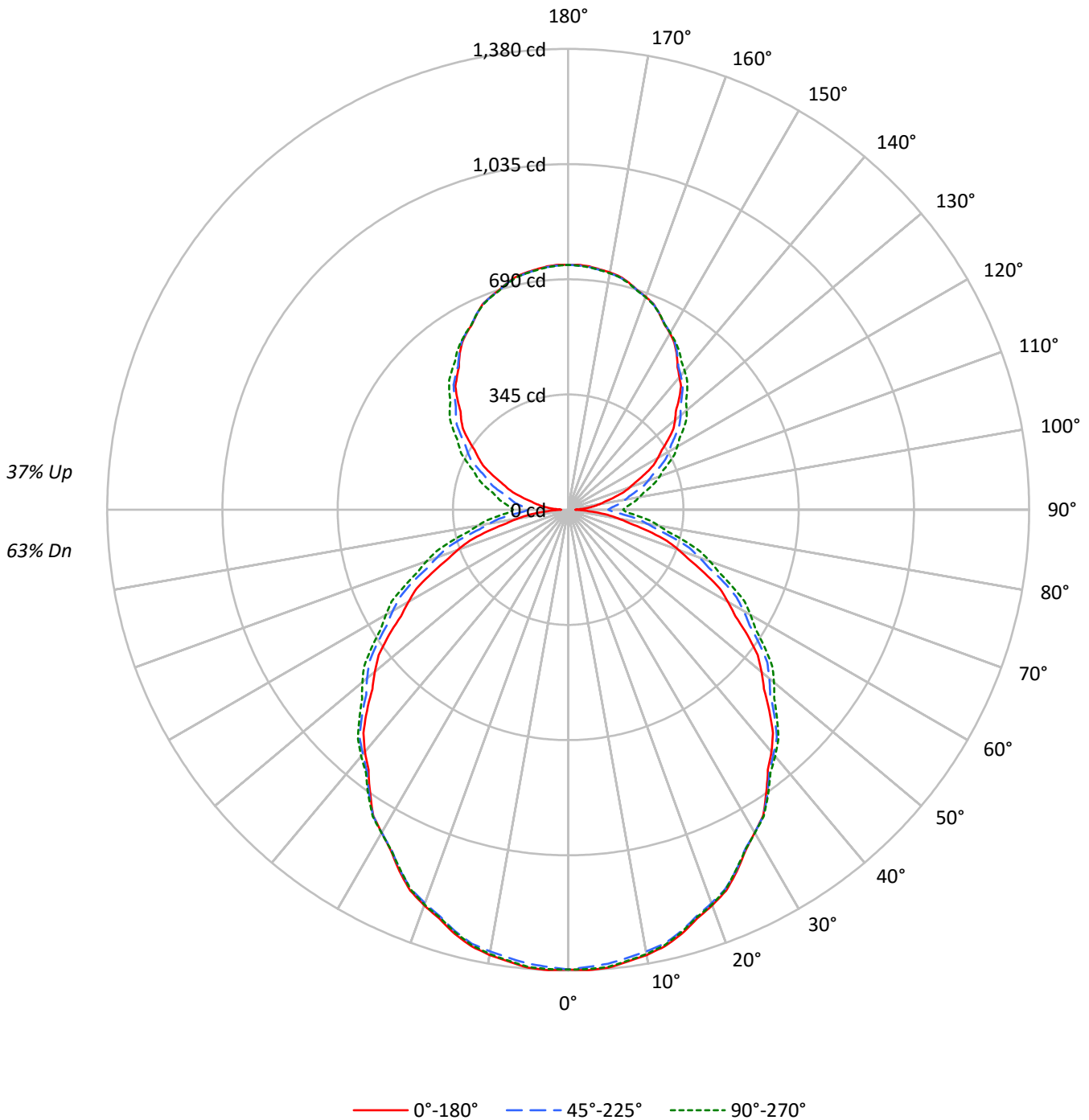
Input Watts (W): 48.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	68	68	68	63
1	100	95	91	87	93	89	85	82	78	75	73	68	66	64	59	57	56	52
2	91	82	76	70	85	77	72	67	68	63	60	59	56	53	51	49	46	42
3	82	72	64	58	77	68	61	55	60	54	50	52	48	44	45	42	39	35
4	75	64	55	49	70	60	52	47	53	47	42	46	42	38	40	37	33	30
5	69	57	48	42	64	54	46	40	47	41	36	42	37	33	36	32	29	26
6	64	51	42	36	59	48	40	35	43	36	32	38	32	28	33	29	25	23
7	59	46	38	32	55	43	36	30	39	32	28	34	29	25	30	26	23	20
8	55	42	34	28	51	40	32	27	35	29	25	31	26	22	27	23	20	18
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	25	21	18	16
10	48	35	28	23	45	33	26	22	30	24	20	27	22	18	24	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8893	8893	8893
5°	8911	8729	8756
10°	8847	8573	8560
15°	8743	8387	8310
20°	8601	8156	8061
25°	8432	7909	7752
30°	8227	7637	7473
35°	8036	7388	7217
40°	7841	7125	6959
45°	7621	6900	6730
50°	7412	6656	6528
55°	7159	6425	6290
60°	6883	6162	6048
65°	6596	5888	5775
70°	6269	5512	5495
75°	5751	5151	5149
80°	5072	4712	4775
85°	4441	4417	4657



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.1
10°-20°	369.6	5.9
20°-30°	549.7	8.7
30°-40°	651.1	10.3
40°-50°	673.2	10.7
50°-60°	620.1	9.8
60°-70°	501.3	7.9
70°-80°	335.7	5.3
80°-90°	175.7	2.8
90°-100°	146.8	2.3
100°-110°	217.0	3.4
110°-120°	293.8	4.7
120°-130°	350.6	5.6
130°-140°	374.1	5.9
140°-150°	357.4	5.7
150°-160°	298.1	4.7
160°-170°	198.2	3.1
170°-180°	69.4	1.1
0°-30°	1049.5	16.6
0°-40°	1700.6	26.9
0°-60°	2994.0	47.4
0°-90°	4006.6	63.5
90°-120°	657.6	10.4
90°-150°	1739.7	27.6
90°-180°	2305.0	36.5
0°-180°	6312.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1377	1374	1365	1375	1374	131
15°	1315	1316	1307	1314	1310	370
25°	1195	1198	1191	1195	1189	550
35°	1034	1043	1040	1043	1044	647
45°	852	866	873	882	884	657
55°	655	676	698	712	718	585
65°	451	482	514	534	540	447
75°	248	284	327	353	360	263
85°	74	119	166	195	206	79
90°	22	70	120	152	165	16
95°	55	92	142	175	187	53
105°	142	168	211	240	252	152
115°	254	267	302	325	333	251
125°	364	368	394	414	420	326
135°	469	472	481	498	504	362
145°	567	568	569	576	580	354
155°	647	647	648	650	647	298
165°	703	702	703	705	702	198
175°	731	729	729	732	728	69
180°	733	733	733	733	733	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1380.2	1379.7	1379.2	1378.8	1378.3	1377.2	1375.5	1373.8	1372.2	1370.5	1372.2
5°	1377.0	1376.4	1375.8	1375.2	1374.6	1373.2	1371.1	1369.0	1366.9	1364.8	1367.2
7.5°	1364.8	1364.6	1364.3	1364.1	1363.9	1362.7	1360.5	1358.3	1356.2	1354.0	1356.1
10°	1354.0	1354.0	1354.0	1354.0	1354.0	1352.8	1350.4	1348.0	1345.6	1343.2	1345.3
12.5°	1338.9	1339.1	1339.4	1339.6	1339.9	1339.0	1337.1	1335.2	1333.3	1331.3	1333.0
15°	1314.9	1315.2	1315.5	1315.8	1316.1	1315.2	1313.1	1311.0	1308.9	1306.8	1308.6
17.5°	1283.5	1284.1	1284.7	1285.3	1285.9	1285.2	1283.1	1281.0	1278.9	1276.8	1278.2
20°	1260.9	1261.5	1262.1	1262.7	1263.3	1262.5	1260.4	1258.3	1256.2	1254.1	1255.0
22.5°	1234.9	1236.0	1237.1	1238.2	1239.3	1238.6	1236.3	1234.0	1231.6	1229.3	1230.4
25°	1194.7	1195.6	1196.5	1197.4	1198.3	1197.9	1196.1	1194.3	1192.5	1190.7	1191.9
27.5°	1149.9	1151.2	1152.5	1153.9	1155.2	1154.8	1152.8	1150.7	1148.7	1146.7	1147.5
30°	1116.4	1118.2	1120.0	1121.8	1123.6	1123.6	1121.8	1120.0	1118.2	1116.4	1117.0
32.5°	1086.2	1087.7	1089.3	1090.9	1092.4	1092.5	1091.2	1089.9	1088.6	1087.3	1087.9
35°	1034.1	1036.2	1038.3	1040.4	1042.5	1043.1	1042.2	1041.3	1040.4	1039.5	1040.4
37.5°	982.0	983.9	985.8	987.7	989.6	990.5	990.2	989.9	989.6	989.3	990.5
40°	946.3	948.7	951.1	953.5	955.9	957.0	956.7	956.4	956.1	955.8	957.0
42.5°	907.4	910.6	913.7	916.8	919.9	921.8	922.5	923.1	923.8	924.5	925.9
45°	851.8	855.1	858.4	861.7	865.0	867.4	868.9	870.4	871.9	873.4	875.5
47.5°	794.9	797.9	801.0	804.0	807.1	809.9	812.5	815.1	817.7	820.2	823.3
50°	756.0	759.3	762.6	765.9	769.2	772.5	775.8	779.1	782.4	785.7	789.0
52.5°	714.9	719.0	723.0	727.0	731.0	735.0	739.1	743.1	747.1	751.1	754.7
55°	654.7	659.5	664.3	669.1	673.9	678.7	683.5	688.3	693.1	697.9	701.2
57.5°	593.2	598.9	604.7	610.5	616.2	621.9	627.4	632.9	638.4	643.9	647.7
60°	552.1	558.1	564.1	570.1	576.1	582.1	588.1	594.1	600.1	606.1	610.6
62.5°	512.2	518.2	524.2	530.2	536.2	542.4	548.9	555.4	561.9	568.3	573.3
65°	450.9	457.8	464.7	471.6	478.5	485.5	492.7	499.9	507.1	514.3	518.8
67.5°	393.1	399.8	406.4	413.1	419.7	426.7	434.1	441.4	448.7	456.0	461.5
70°	351.0	357.9	364.8	371.7	378.6	385.9	393.7	401.5	409.3	417.1	422.8
72.5°	310.0	317.1	324.2	331.4	338.5	346.3	354.9	363.4	371.9	380.4	386.6
75°	248.4	256.2	264.0	271.8	279.6	288.3	297.9	307.5	317.1	326.7	332.7
77.5°	189.3	198.3	207.3	216.3	225.3	234.4	243.6	252.9	262.1	271.3	277.9
80°	152.5	161.5	170.5	179.5	188.5	198.1	208.3	218.5	228.7	238.9	245.5
82.5°	119.1	128.5	138.0	147.5	157.0	166.9	177.4	187.8	198.3	208.7	215.1
85°	74.2	84.1	94.0	103.9	113.8	124.0	134.5	145.0	155.5	166.0	172.6
87.5°	42.2	52.0	61.8	71.6	81.4	91.5	101.9	112.3	122.7	133.0	140.1
90°	22.2	32.8	43.4	54.0	64.6	75.5	86.6	97.7	108.7	119.8	127.4
92.5°	33.2	42.8	52.4	62.0	71.6	82.2	93.7	105.2	116.8	128.3	135.8
95°	54.6	62.7	70.7	78.8	86.8	96.6	108.1	119.5	131.0	142.5	150.0
97.5°	77.5	84.7	91.8	98.9	106.0	115.4	127.0	138.6	150.1	161.7	168.9
100°	94.7	101.0	107.3	113.6	119.9	128.7	139.9	151.2	162.4	173.7	181.1
102.5°	113.3	119.6	125.9	132.2	138.6	146.8	157.0	167.2	177.4	187.6	194.9
105°	142.2	147.7	153.1	158.5	164.0	171.5	181.3	191.1	200.8	210.6	217.4
107.5°	174.4	179.1	183.8	188.5	193.2	200.2	209.4	218.6	227.9	237.1	243.4
110°	196.6	200.8	205.0	209.3	213.5	220.0	228.8	237.6	246.3	255.1	261.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	220.3	223.5	226.7	229.9	233.1	239.1	247.7	256.3	265.0	273.6	279.3
115°	254.0	256.6	259.2	261.8	264.4	269.7	277.8	285.8	293.9	301.9	307.2
117.5°	287.8	289.4	291.0	292.6	294.2	298.8	306.4	314.0	321.6	329.2	334.4
120°	309.7	311.2	312.7	314.3	315.8	320.1	327.1	334.1	341.2	348.2	353.3
122.5°	332.3	333.0	333.6	334.3	334.9	338.7	345.7	352.7	359.7	366.7	371.5
125°	364.2	364.7	365.1	365.6	366.1	369.4	375.5	381.6	387.7	393.9	398.4
127.5°	397.1	397.2	397.4	397.5	397.6	400.2	405.3	410.4	415.4	420.5	424.8
130°	417.6	418.0	418.3	418.6	419.0	421.4	425.8	430.3	434.7	439.2	443.3
132.5°	437.1	438.1	439.1	440.0	441.0	443.1	446.3	449.5	452.7	455.9	459.9
135°	469.3	469.8	470.3	470.7	471.2	472.5	474.8	477.0	479.2	481.4	485.3
137.5°	499.7	500.1	500.6	501.1	501.6	502.5	503.8	505.1	506.4	507.7	511.4
140°	518.2	518.8	519.5	520.1	520.7	521.4	522.1	522.8	523.4	524.1	527.7
142.5°	537.8	538.1	538.4	538.7	539.0	539.4	540.0	540.5	541.0	541.6	544.5
145°	566.7	566.9	567.1	567.3	567.5	567.8	568.2	568.6	569.0	569.3	570.8
147.5°	592.0	592.3	592.6	592.9	593.2	593.4	593.7	594.1	594.4	594.7	595.4
150°	609.8	609.7	609.6	609.5	609.3	609.5	610.0	610.5	611.0	611.5	611.5
152.5°	624.4	624.6	624.8	625.0	625.1	625.3	625.5	625.7	625.9	626.2	626.5
155°	646.9	646.9	646.9	646.9	646.9	647.0	647.1	647.2	647.4	647.5	648.0
157.5°	667.0	666.7	666.4	666.2	665.9	665.8	665.9	666.1	666.2	666.3	666.8
160°	678.9	678.5	678.1	677.7	677.3	677.2	677.3	677.5	677.6	677.7	678.2
162.5°	689.4	689.1	688.8	688.5	688.2	688.1	688.1	688.2	688.2	688.2	688.8
165°	703.4	703.1	702.9	702.6	702.4	702.3	702.4	702.6	702.7	702.8	703.3
167.5°	715.3	714.8	714.2	713.7	713.2	713.0	713.0	713.0	713.0	713.0	713.7
170°	721.6	721.1	720.6	720.1	719.6	719.4	719.4	719.4	719.4	719.4	720.1
172.5°	726.2	725.7	725.2	724.7	724.2	723.9	723.9	723.9	723.9	723.9	724.7
175°	731.3	730.8	730.3	729.8	729.3	729.1	729.1	729.1	729.1	729.1	729.8
177.5°	734.0	733.6	733.2	732.8	732.3	732.1	732.0	731.9	731.8	731.7	732.3
180°	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1373.8	1375.5	1377.2	1377.9	1377.7	1377.4	1377.2	1377.0
5°	1369.6	1372.0	1374.4	1375.5	1375.2	1374.9	1374.6	1374.3
7.5°	1358.2	1360.3	1362.4	1363.3	1363.0	1362.7	1362.4	1362.1
10°	1347.4	1349.5	1351.6	1352.5	1352.2	1351.9	1351.6	1351.3
12.5°	1334.6	1336.2	1337.8	1338.2	1337.5	1336.7	1335.9	1335.1
15°	1310.4	1312.2	1314.0	1314.3	1313.1	1311.9	1310.7	1309.5
17.5°	1279.6	1280.9	1282.3	1282.6	1281.9	1281.2	1280.5	1279.8
20°	1255.9	1256.8	1257.7	1258.2	1258.2	1258.2	1258.2	1258.2
22.5°	1231.6	1232.7	1233.8	1234.0	1233.3	1232.6	1231.9	1231.2
25°	1193.1	1194.3	1195.5	1195.3	1193.8	1192.3	1190.8	1189.3
27.5°	1148.3	1149.2	1150.0	1150.2	1149.6	1149.1	1148.5	1148.0
30°	1117.6	1118.2	1118.8	1119.0	1118.7	1118.4	1118.1	1117.8
32.5°	1088.5	1089.1	1089.7	1089.8	1089.5	1089.2	1088.9	1088.6
35°	1041.3	1042.2	1043.1	1043.5	1043.5	1043.5	1043.5	1043.5
37.5°	991.7	992.9	994.1	994.6	994.5	994.4	994.2	994.1
40°	958.2	959.4	960.6	961.5	962.1	962.7	963.3	963.9
42.5°	927.3	928.8	930.2	931.0	931.1	931.2	931.4	931.5
45°	877.6	879.7	881.8	883.0	883.3	883.6	883.9	884.2
47.5°	826.4	829.4	832.5	834.3	835.0	835.7	836.3	837.0
50°	792.3	795.6	798.9	801.0	801.9	802.8	803.7	804.6
52.5°	758.2	761.7	765.3	767.4	768.0	768.7	769.4	770.0
55°	704.5	707.8	711.1	713.4	714.6	715.8	717.0	718.2
57.5°	651.5	655.3	659.1	661.4	662.3	663.2	664.1	665.0
60°	615.1	619.6	624.1	626.8	627.7	628.6	629.5	630.4
62.5°	578.3	583.3	588.3	591.3	592.5	593.6	594.7	595.9
65°	523.3	527.8	532.3	535.2	536.4	537.6	538.8	540.0
67.5°	466.9	472.4	477.9	481.4	482.9	484.5	486.0	487.6
70°	428.5	434.2	439.9	443.7	445.5	447.3	449.1	450.9
72.5°	392.8	399.0	405.1	408.9	410.2	411.5	412.8	414.2
75°	338.7	344.7	350.7	354.4	355.9	357.4	358.9	360.4
77.5°	284.5	291.1	297.7	301.6	302.8	304.0	305.2	306.4
80°	252.1	258.7	265.3	269.2	270.4	271.6	272.8	274.0
82.5°	221.4	227.8	234.1	238.4	240.6	242.7	244.9	247.0
85°	179.2	185.8	192.4	196.9	199.3	201.7	204.1	206.5
87.5°	147.1	154.1	161.1	165.7	167.9	170.1	172.3	174.5
90°	134.9	142.4	150.0	155.0	157.4	159.9	162.4	164.9
92.5°	143.3	150.8	158.3	163.2	165.6	168.0	170.3	172.7
95°	157.4	164.9	172.4	177.3	179.7	182.1	184.4	186.8
97.5°	176.0	183.1	190.3	194.9	197.1	199.3	201.5	203.7
100°	188.6	196.0	203.4	208.2	210.2	212.3	214.4	216.4
102.5°	202.2	209.5	216.8	221.6	223.7	225.9	228.0	230.2
105°	224.1	230.9	237.6	242.3	244.7	247.2	249.7	252.2
107.5°	249.7	256.0	262.4	266.4	268.3	270.1	271.9	273.8
110°	267.3	273.4	279.4	283.5	285.4	287.4	289.4	291.4



TEST NUMBER: P333263

CATALOG NUMBER: S125DIP-S1090D590U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	284.9	290.5	296.2	299.9	301.8	303.7	305.5	307.4
115°	312.5	317.8	323.0	326.5	328.2	329.9	331.5	333.2
117.5°	339.6	344.8	350.0	353.4	354.9	356.5	358.0	359.5
120°	358.4	363.5	368.6	371.8	373.1	374.4	375.7	377.0
122.5°	376.2	381.0	385.7	388.8	390.2	391.6	393.0	394.4
125°	403.0	407.5	412.1	415.0	416.4	417.8	419.1	420.5
127.5°	429.1	433.5	437.8	440.7	442.2	443.6	445.1	446.6
130°	447.3	451.4	455.5	458.1	459.4	460.6	461.9	463.1
132.5°	464.0	468.1	472.2	474.6	475.5	476.5	477.4	478.3
135°	489.2	493.1	497.0	499.5	500.5	501.5	502.5	503.5
137.5°	515.1	518.8	522.5	524.6	525.2	525.8	526.3	526.9
140°	531.2	534.8	538.3	540.4	541.0	541.5	542.1	542.6
142.5°	547.5	550.5	553.5	555.2	555.8	556.4	556.9	557.5
145°	572.3	573.8	575.3	576.5	577.3	578.1	579.0	579.8
147.5°	596.2	597.0	597.8	598.0	597.7	597.4	597.1	596.7
150°	611.5	611.5	611.5	611.6	611.6	611.7	611.7	611.8
152.5°	626.8	627.1	627.4	627.3	626.9	626.5	626.1	625.7
155°	648.5	649.0	649.5	649.5	648.8	648.2	647.5	646.9
157.5°	667.3	667.8	668.3	668.2	667.3	666.5	665.7	664.8
160°	678.7	679.2	679.7	679.7	679.1	678.4	677.8	677.2
162.5°	689.4	690.0	690.7	690.6	689.9	689.1	688.4	687.6
165°	703.8	704.3	704.9	704.7	704.0	703.2	702.4	701.7
167.5°	714.5	715.3	716.0	716.0	715.2	714.4	713.6	712.9
170°	720.9	721.6	722.4	722.3	721.5	720.6	719.7	718.8
172.5°	725.5	726.2	727.0	727.0	726.2	725.4	724.6	723.8
175°	730.6	731.3	732.1	732.0	731.2	730.3	729.4	728.5
177.5°	732.9	733.5	734.1	734.1	733.4	732.7	731.9	731.2
180°	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1

(END OF REPORT)