

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: P333439

Luminaire Tested: **S125DIW-S1090D770U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333439
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: S125DIW-S1090D770U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6928.8 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: General Diffuse

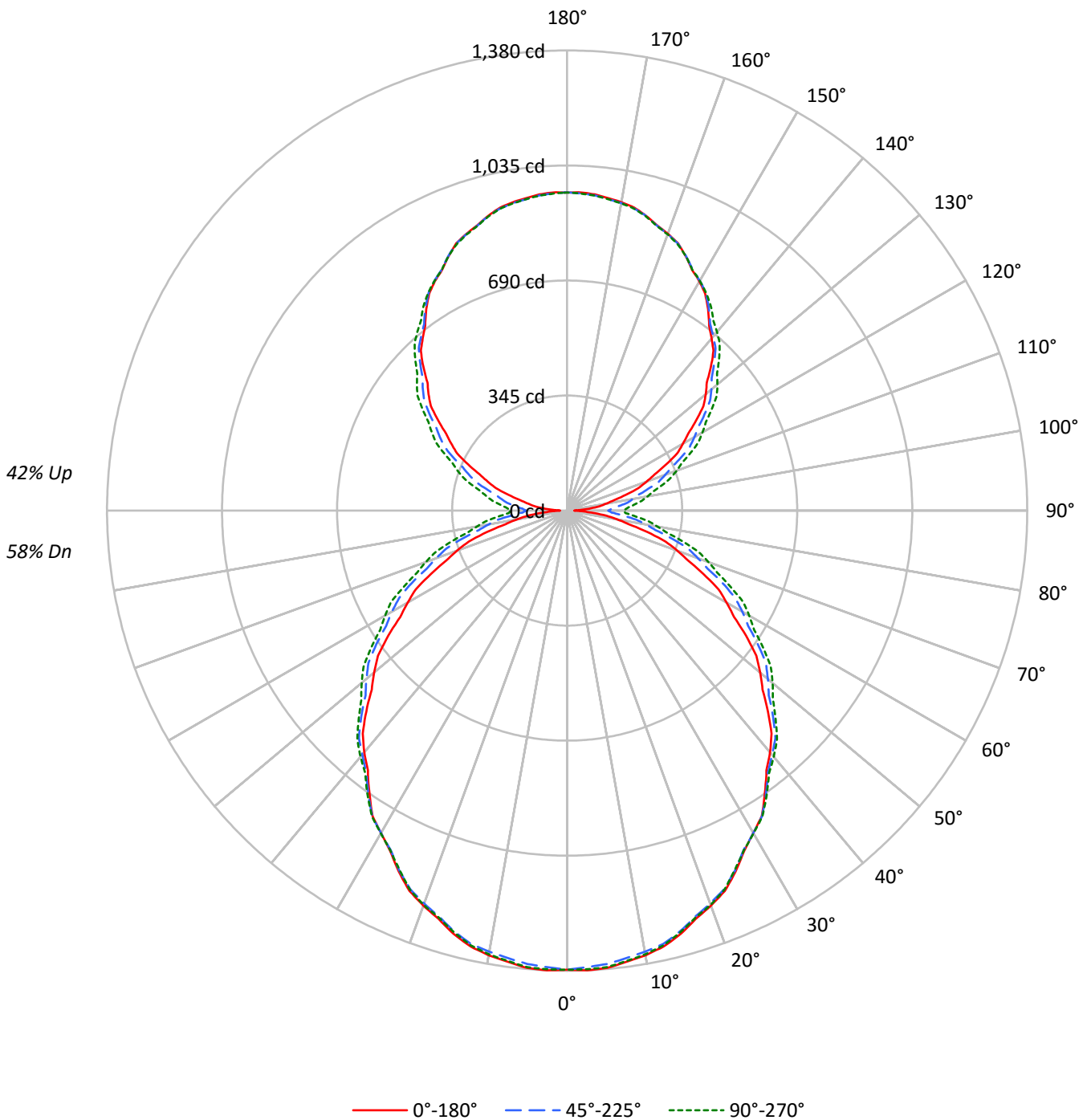
Input Watts (W): 53.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	75	75	75	63	63	63	58
1	99	94	90	86	92	88	84	80	76	73	70	65	63	61	55	53	52	47
2	90	82	75	69	83	76	70	65	66	61	58	56	53	50	48	45	43	39
3	81	71	64	57	75	67	60	54	58	52	48	50	45	42	42	39	36	32
4	74	63	55	48	69	59	52	46	51	45	41	44	39	36	37	34	31	27
5	68	56	48	41	63	53	45	39	46	40	35	39	35	31	33	30	27	24
6	63	50	42	36	58	47	40	34	41	35	30	36	31	27	30	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27	32	27	24	28	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24	30	25	21	25	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21	27	22	19	23	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	20	17	22	18	15	13

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	1.9
10°-20°	369.6	5.3
20°-30°	549.7	7.9
30°-40°	651.1	9.4
40°-50°	673.2	9.7
50°-60°	620.1	9.0
60°-70°	501.3	7.2
70°-80°	335.7	4.8
80°-90°	176.2	2.5
90°-100°	161.6	2.3
100°-110°	260.7	3.8
110°-120°	367.8	5.3
120°-130°	448.0	6.5
130°-140°	483.2	7.0
140°-150°	464.3	6.7
150°-160°	387.9	5.6
160°-170°	257.9	3.7
170°-180°	90.2	1.3
0°-30°	1049.5	15.1
0°-40°	1700.6	24.5
0°-60°	2994.0	43.2
0°-90°	4007.1	57.8
90°-120°	790.1	11.4
90°-150°	2185.6	31.5
90°-180°	2922.0	42.2
0°-180°	6928.8	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	72	123	156	169	17
95°	66	103	156	189	202	65
105°	181	208	252	282	295	194
115°	328	342	377	400	408	324
125°	472	477	503	523	529	423
135°	610	613	623	640	645	470
145°	737	739	741	747	751	460
155°	842	842	843	845	842	388
165°	915	914	915	917	913	258
175°	952	949	949	953	948	90
180°	954	954	954	954	954	



TEST NUMBER: P333439

CATALOG NUMBER: S125DIW-S1090D770U835-4F0-1E-UDD-D1

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°	42.3	52.1	62.0	71.9	81.7	91.9	102.3	112.7	123.2	133.6	140.7
90°	22.3	33.3	44.2	55.1	66.0	77.2	88.5	99.9	111.2	122.6	130.3
92.5°	37.4	47.2	57.0	66.8	76.6	87.4	99.3	111.2	123.0	134.9	142.6
95°	65.8	73.9	82.1	90.2	98.3	108.3	120.2	132.0	143.9	155.7	163.5
97.5°	96.1	103.3	110.4	117.6	124.7	134.3	146.5	158.6	170.7	182.8	190.2
100°	118.8	125.1	131.4	137.7	144.0	153.0	164.7	176.5	188.2	200.0	207.8
102.5°	143.2	149.7	156.2	162.7	169.2	177.6	188.1	198.5	209.0	219.4	227.1
105°	181.4	187.0	192.7	198.3	203.9	211.7	221.7	231.7	241.7	251.7	258.7
107.5°	223.7	228.6	233.5	238.4	243.4	250.5	259.9	269.3	278.7	288.1	294.5
110°	252.9	257.4	261.8	266.2	270.6	277.3	286.2	295.1	304.0	312.9	319.1



TEST NUMBER: P333439

CATALOG NUMBER: S125DIW-S1090D770U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	283.8	287.1	290.4	293.7	297.1	303.1	311.9	320.7	329.5	338.3	343.9
115°	328.1	330.8	333.6	336.3	339.1	344.5	352.7	360.8	368.9	377.1	382.3
117.5°	372.4	374.1	375.8	377.5	379.1	383.8	391.5	399.2	406.8	414.5	419.8
120°	400.9	402.7	404.4	406.1	407.8	412.2	419.3	426.4	433.4	440.5	445.6
122.5°	430.7	431.5	432.2	432.9	433.6	437.5	444.6	451.7	458.8	465.9	470.6
125°	472.3	473.0	473.7	474.4	475.1	478.5	484.7	490.9	497.0	503.2	507.7
127.5°	515.5	515.8	516.0	516.3	516.6	519.3	524.4	529.5	534.6	539.7	544.0
130°	542.3	542.8	543.3	543.8	544.4	546.9	551.4	555.9	560.5	565.0	569.0
132.5°	567.9	569.2	570.5	571.8	573.1	575.3	578.5	581.6	584.8	588.0	592.0
135°	609.9	610.6	611.3	612.0	612.7	614.2	616.4	618.7	621.0	623.2	627.1
137.5°	649.5	650.2	650.9	651.6	652.3	653.4	654.8	656.1	657.5	658.9	662.6
140°	673.9	674.7	675.6	676.4	677.2	678.0	678.8	679.6	680.4	681.2	684.8
142.5°	699.5	699.9	700.4	700.8	701.3	701.8	702.5	703.2	703.9	704.6	707.6
145°	737.0	737.4	737.7	738.1	738.5	738.9	739.4	739.9	740.4	740.9	742.4
147.5°	770.4	770.8	771.1	771.5	771.9	772.2	772.6	773.0	773.4	773.8	774.7
150°	793.6	793.4	793.2	793.1	792.9	793.2	793.8	794.5	795.1	795.8	795.8
152.5°	812.6	812.8	813.0	813.3	813.5	813.7	814.0	814.3	814.5	814.8	815.2
155°	841.8	841.8	841.8	841.8	841.8	841.9	842.1	842.2	842.4	842.6	843.2
157.5°	868.0	867.6	867.2	866.9	866.5	866.4	866.6	866.7	866.9	867.1	867.7
160°	883.4	882.9	882.4	881.9	881.4	881.2	881.4	881.6	881.7	881.9	882.6
162.5°	897.1	896.7	896.3	896.0	895.6	895.4	895.5	895.5	895.5	895.6	896.4
165°	915.3	915.0	914.7	914.3	914.0	913.9	914.1	914.2	914.4	914.6	915.2
167.5°	930.8	930.1	929.4	928.8	928.1	927.8	927.8	927.8	927.8	927.8	928.8
170°	939.1	938.4	937.7	937.1	936.4	936.1	936.1	936.1	936.1	936.1	937.1
172.5°	945.0	944.3	943.7	943.0	942.4	942.0	942.0	942.0	942.0	942.0	943.0
175°	951.7	951.0	950.4	949.7	949.0	948.7	948.7	948.7	948.7	948.7	949.7
177.5°	955.1	954.6	954.0	953.5	953.0	952.7	952.5	952.4	952.3	952.1	952.9
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9



TEST NUMBER: P333439

CATALOG NUMBER: S125DIW-S1090D770U835-4F0-1E-UDD-D1

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°	147.7	154.8	161.9	166.5	168.7	170.9	173.1	175.3
90°	138.0	145.7	153.5	158.6	161.2	163.8	166.4	169.0
92.5°	150.4	158.1	165.9	171.0	173.4	175.9	178.4	180.8
95°	171.2	179.0	186.7	191.8	194.2	196.7	199.1	201.5
97.5°	197.6	205.0	212.4	217.2	219.4	221.7	223.9	226.1
100°	215.5	223.3	231.1	236.1	238.2	240.3	242.5	244.6
102.5°	234.8	242.4	250.1	255.1	257.3	259.6	261.9	264.1
105°	265.6	272.6	279.6	284.4	287.0	289.6	292.2	294.8
107.5°	301.0	307.4	313.8	318.0	319.8	321.6	323.4	325.3
110°	325.3	331.5	337.7	341.7	343.7	345.6	347.5	349.5



TEST NUMBER: P333439

CATALOG NUMBER: S125DIW-S1090D770U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	349.6	355.3	361.0	364.8	366.6	368.4	370.2	372.0
115°	387.5	392.8	398.0	401.4	403.1	404.7	406.3	408.0
117.5°	425.0	430.2	435.4	438.8	440.1	441.5	442.9	444.3
120°	450.7	455.8	460.9	464.0	465.1	466.3	467.4	468.6
122.5°	475.3	480.0	484.8	487.8	489.0	490.3	491.6	492.9
125°	512.1	516.6	521.1	524.0	525.3	526.6	528.0	529.3
127.5°	548.3	552.6	556.8	559.7	561.1	562.5	563.9	565.3
130°	573.1	577.1	581.1	583.7	584.9	586.1	587.2	588.4
132.5°	596.1	600.1	604.1	606.6	607.4	608.1	608.9	609.7
135°	631.0	634.9	638.8	641.2	642.0	642.9	643.7	644.6
137.5°	666.4	670.1	673.9	675.9	676.3	676.7	677.0	677.4
140°	688.5	692.1	695.7	697.7	698.1	698.5	698.9	699.2
142.5°	710.6	713.6	716.7	718.4	718.7	719.1	719.5	719.9
145°	743.9	745.4	746.9	748.0	748.7	749.4	750.1	750.8
147.5°	775.6	776.5	777.3	777.5	776.9	776.3	775.7	775.1
150°	795.8	795.8	795.8	795.8	795.8	795.7	795.7	795.7
152.5°	815.6	816.0	816.4	816.3	815.8	815.2	814.7	814.2
155°	843.9	844.5	845.2	845.1	844.3	843.5	842.6	841.8
157.5°	868.4	869.0	869.7	869.5	868.4	867.3	866.2	865.1
160°	883.2	883.9	884.5	884.5	883.6	882.8	882.0	881.2
162.5°	897.2	897.9	898.7	898.7	897.7	896.7	895.8	894.8
165°	915.9	916.6	917.2	917.0	916.1	915.1	914.1	913.1
167.5°	929.8	930.8	931.7	931.7	930.7	929.7	928.7	927.6
170°	938.1	939.1	940.1	940.0	938.8	937.7	936.5	935.4
172.5°	944.0	945.0	946.0	946.0	945.0	943.9	942.9	941.9
175°	950.7	951.7	952.7	952.6	951.4	950.3	949.1	948.0
177.5°	953.7	954.5	955.3	955.2	954.3	953.4	952.5	951.5
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9

(END OF REPORT)