

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: P333253

Luminaire Tested: **S125DIP-S1090D365U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333253  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIP-S1090D365U835-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5730.2 lumens  
Efficiency: N/A  
Efficacy: 131.7 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

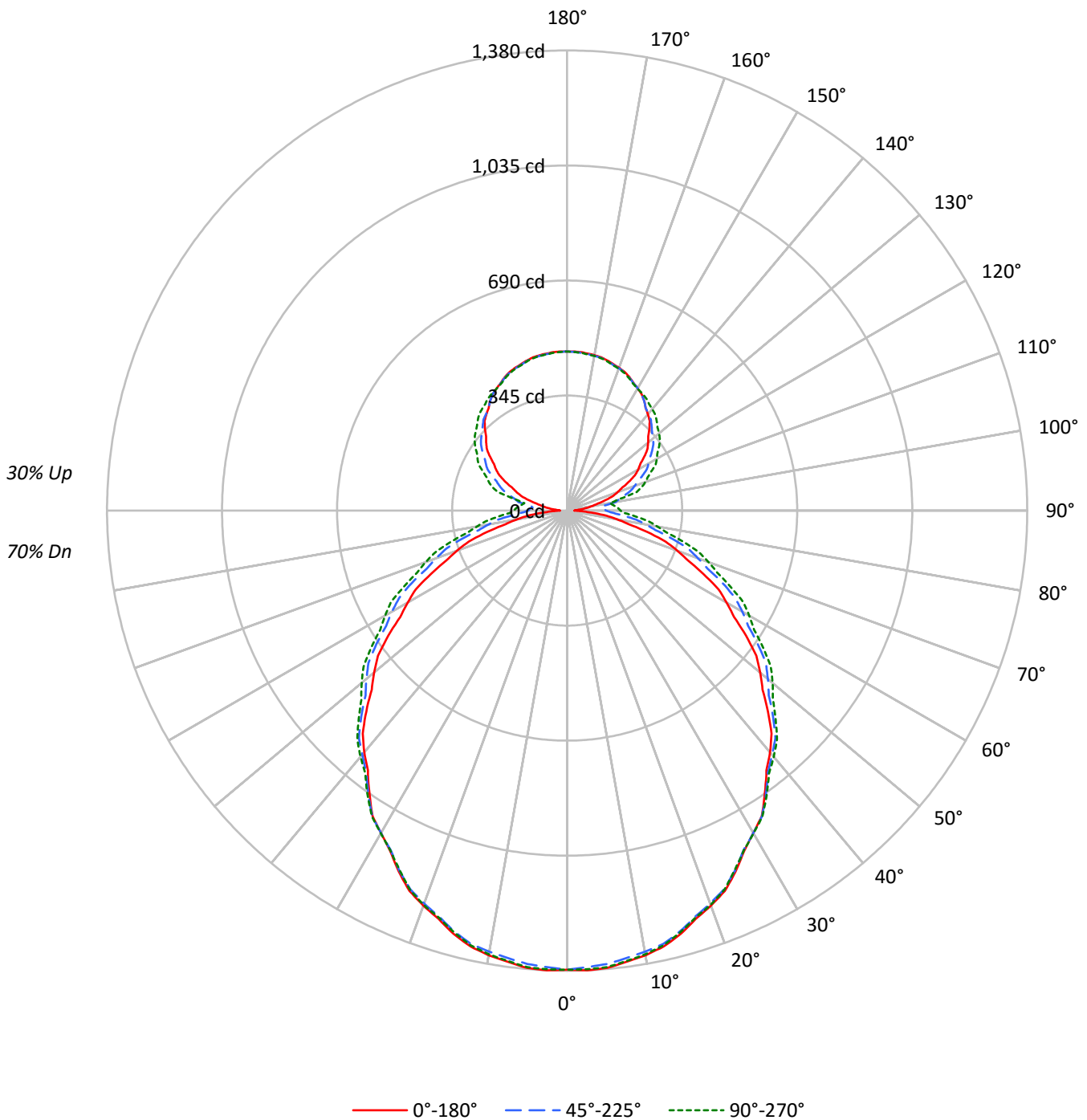
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333253

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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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	101	96	92	88	95	91	87	84	81	78	76	72	70	68	64	62	61	57
2	92	84	77	71	86	79	73	68	71	66	62	63	59	56	56	53	50	47
3	83	73	65	59	78	69	62	56	62	56	52	55	51	47	49	46	42	39
4	76	65	56	50	72	61	54	48	55	49	44	49	44	40	44	40	36	33
5	70	58	49	42	66	55	47	41	49	43	38	44	39	35	39	35	32	29
6	65	52	43	37	61	49	41	35	44	38	33	40	34	30	36	31	28	25
7	60	47	38	32	56	44	37	31	40	34	29	36	31	27	33	28	25	22
8	55	42	34	29	52	40	33	28	37	30	26	33	28	24	30	25	22	20
9	52	39	31	26	49	37	30	25	34	27	23	31	25	21	28	23	20	18
10	48	36	28	23	46	34	27	22	31	25	21	28	23	19	26	21	18	16

**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	2.3
10°-20°	369.6	6.5
20°-30°	549.7	9.6
30°-40°	651.1	11.4
40°-50°	673.2	11.7
50°-60°	620.1	10.8
60°-70°	501.3	8.7
70°-80°	335.7	5.9
80°-90°	175.1	3.1
90°-100°	115.0	2.0
100°-110°	178.8	3.1
110°-120°	242.0	4.2
120°-130°	276.0	4.8
130°-140°	279.3	4.9
140°-150°	253.4	4.4
150°-160°	203.0	3.5
160°-170°	131.3	2.3
170°-180°	45.3	0.8
0°-30°	1049.5	18.3
0°-40°	1700.6	29.7
0°-60°	2994.0	52.2
0°-90°	4006.0	69.9
90°-120°	535.8	9.4
90°-150°	1344.5	23.5
90°-180°	1724.0	30.1
0°-180°	5730.2	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	68	116	148	160	15
95°	38	72	104	134	145	39
105°	116	140	180	206	216	123
115°	203	216	250	272	279	201
125°	283	285	311	330	337	252
135°	349	350	358	374	380	269
145°	403	402	402	409	412	251
155°	442	440	440	441	439	203
165°	466	464	464	466	464	132
175°	477	475	475	478	475	45
180°	477	477	477	477	477	



TEST NUMBER: P333253

CATALOG NUMBER: S125DIP-S1090D365U835-4F0-1E-UDD-D

**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	51.9	61.6	71.4	81.1	91.1	101.4	111.7	122.0	132.3	139.3
90°	22.0	32.2	42.4	52.6	62.9	73.4	84.1	94.9	105.6	116.4	123.6
92.5°	24.9	33.3	41.8	50.2	58.6	68.3	79.3	90.2	101.1	112.0	119.1
95°	37.7	45.3	52.8	60.4	68.0	75.3	82.6	89.8	97.0	104.2	111.2
97.5°	58.0	65.4	72.9	80.3	87.8	93.5	97.4	101.3	105.3	109.2	113.3
100°	73.9	80.4	87.0	93.5	100.0	108.2	118.2	128.1	138.0	147.9	142.5
102.5°	90.1	96.2	102.3	108.4	114.5	122.4	131.9	141.5	151.0	160.6	164.4
105°	116.1	121.2	126.3	131.4	136.5	143.6	152.6	161.6	170.6	179.6	185.6
107.5°	143.2	147.2	151.3	155.4	159.5	165.9	174.7	183.5	192.3	201.1	207.1
110°	160.7	164.3	167.9	171.5	175.1	181.2	189.8	198.3	206.9	215.4	220.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	178.3	181.3	184.4	187.5	190.5	196.2	204.5	212.7	221.0	229.2	234.4
115°	203.2	205.7	208.2	210.7	213.2	218.4	226.3	234.1	242.0	249.9	255.0
117.5°	229.1	230.5	231.8	233.2	234.5	239.1	246.7	254.4	262.1	269.8	274.5
120°	246.1	246.9	247.7	248.5	249.3	253.3	260.5	267.6	274.7	281.9	286.8
122.5°	260.0	260.7	261.4	262.1	262.8	266.6	273.4	280.1	286.9	293.7	298.4
125°	282.9	283.1	283.4	283.6	283.9	287.0	293.0	299.0	305.0	311.0	315.5
127.5°	303.7	303.8	303.8	303.9	304.0	306.5	311.4	316.3	321.1	326.0	330.3
130°	317.2	317.3	317.4	317.5	317.6	319.8	324.1	328.3	332.6	336.9	340.9
132.5°	329.7	330.1	330.5	330.9	331.3	333.0	336.1	339.2	342.2	345.3	349.5
135°	348.8	348.9	349.1	349.3	349.4	350.5	352.4	354.4	356.3	358.3	362.0
137.5°	366.2	366.4	366.6	366.7	366.9	367.4	368.3	369.2	370.1	370.9	374.5
140°	376.7	376.9	377.1	377.2	377.4	377.6	377.8	378.0	378.2	378.5	381.9
142.5°	387.2	387.1	386.9	386.8	386.6	386.6	386.8	387.0	387.2	387.3	390.2
145°	402.6	402.4	402.3	402.1	402.0	401.9	401.9	401.9	401.9	401.9	403.5
147.5°	414.6	414.6	414.6	414.5	414.5	414.5	414.6	414.7	414.8	414.9	415.5
150°	423.1	423.0	422.8	422.6	422.5	422.5	422.6	422.8	423.0	423.1	423.3
152.5°	431.3	431.0	430.6	430.3	429.9	429.8	430.0	430.2	430.3	430.5	430.6
155°	441.9	441.4	440.9	440.4	440.0	439.8	440.0	440.1	440.3	440.4	440.7
157.5°	450.0	449.7	449.4	449.1	448.9	448.7	448.7	448.8	448.8	448.8	449.0
160°	455.6	455.2	454.7	454.2	453.8	453.6	453.6	453.7	453.8	453.9	454.2
162.5°	460.2	459.7	459.2	458.7	458.3	458.1	458.2	458.2	458.3	458.4	458.8
165°	466.2	465.8	465.3	464.8	464.4	464.2	464.2	464.3	464.4	464.5	464.9
167.5°	470.8	470.3	469.8	469.3	468.8	468.6	468.7	468.8	468.9	468.9	469.5
170°	473.3	472.8	472.2	471.7	471.1	470.9	471.0	471.0	471.1	471.2	471.8
172.5°	475.0	474.5	473.9	473.4	472.8	472.6	472.7	472.9	473.0	473.2	473.7
175°	476.8	476.4	475.9	475.4	475.0	474.8	474.8	474.9	475.0	475.1	475.7
177.5°	477.7	477.3	476.9	476.6	476.2	476.0	476.1	476.2	476.2	476.3	476.7
180°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8



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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°	146.3	153.3	160.3	164.8	167.0	169.1	171.3	173.4
90°	130.9	138.2	145.5	150.3	152.7	155.0	157.3	159.7
92.5°	126.1	133.2	140.2	144.9	147.1	149.3	151.5	153.7
95°	118.2	125.2	132.2	136.7	138.8	140.9	143.0	145.1
97.5°	117.4	121.4	125.5	128.6	130.6	132.7	134.7	136.7
100°	137.1	131.7	126.3	124.3	125.8	127.3	128.8	130.3
102.5°	168.2	172.1	175.9	176.1	172.5	169.0	165.5	161.9
105°	191.6	197.6	203.6	207.6	209.6	211.6	213.7	215.7
107.5°	213.0	219.0	224.9	228.7	230.3	232.0	233.6	235.2
110°	226.4	231.8	237.3	241.1	243.3	245.5	247.7	249.8





TEST NUMBER: P333253

CATALOG NUMBER: S125DIP-S1090D365U835-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	239.5	244.7	249.9	253.4	255.4	257.4	259.4	261.4
115°	260.1	265.1	270.2	273.4	274.8	276.1	277.4	278.8
117.5°	279.2	283.9	288.5	291.8	293.6	295.5	297.3	299.2
120°	291.7	296.7	301.6	304.8	306.2	307.6	309.0	310.4
122.5°	303.1	307.8	312.5	315.5	316.8	318.2	319.5	320.9
125°	320.0	324.5	329.0	331.8	333.1	334.4	335.6	336.9
127.5°	334.5	338.8	343.1	345.8	346.9	348.1	349.3	350.4
130°	344.8	348.8	352.8	355.3	356.4	357.5	358.6	359.7
132.5°	353.6	357.8	361.9	364.4	365.3	366.2	367.0	367.9
135°	365.8	369.5	373.2	375.6	376.7	377.7	378.7	379.7
137.5°	378.1	381.7	385.2	387.4	388.2	389.0	389.8	390.6
140°	385.4	388.8	392.3	394.4	395.1	395.8	396.6	397.3
142.5°	393.0	395.9	398.7	400.5	401.2	402.0	402.7	403.4
145°	405.1	406.6	408.2	409.4	410.1	410.8	411.6	412.3
147.5°	416.1	416.6	417.2	417.5	417.5	417.4	417.4	417.4
150°	423.4	423.6	423.7	423.7	423.3	423.0	422.7	422.3
152.5°	430.8	430.9	431.1	430.9	430.4	429.9	429.4	428.9
155°	440.9	441.1	441.4	441.2	440.6	439.9	439.3	438.7
157.5°	449.3	449.5	449.8	449.6	449.0	448.3	447.7	447.1
160°	454.5	454.8	455.1	455.0	454.3	453.7	453.1	452.5
162.5°	459.3	459.7	460.2	460.0	459.3	458.6	458.0	457.3
165°	465.4	465.9	466.4	466.3	465.7	465.0	464.4	463.8
167.5°	470.1	470.6	471.2	471.1	470.4	469.7	469.0	468.3
170°	472.4	473.1	473.7	473.7	473.0	472.3	471.5	470.8
172.5°	474.3	474.9	475.4	475.4	474.7	473.9	473.2	472.5
175°	476.3	477.0	477.6	477.6	476.8	476.1	475.4	474.7
177.5°	477.2	477.6	478.0	478.0	477.5	477.0	476.5	476.0
180°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8

(END OF REPORT)