

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: P333254

Luminaire Tested: **S125DIP-S1090D365U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333254
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-S1090D365U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5533.2 lumens
Efficiency: N/A
Efficacy: 127.2 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

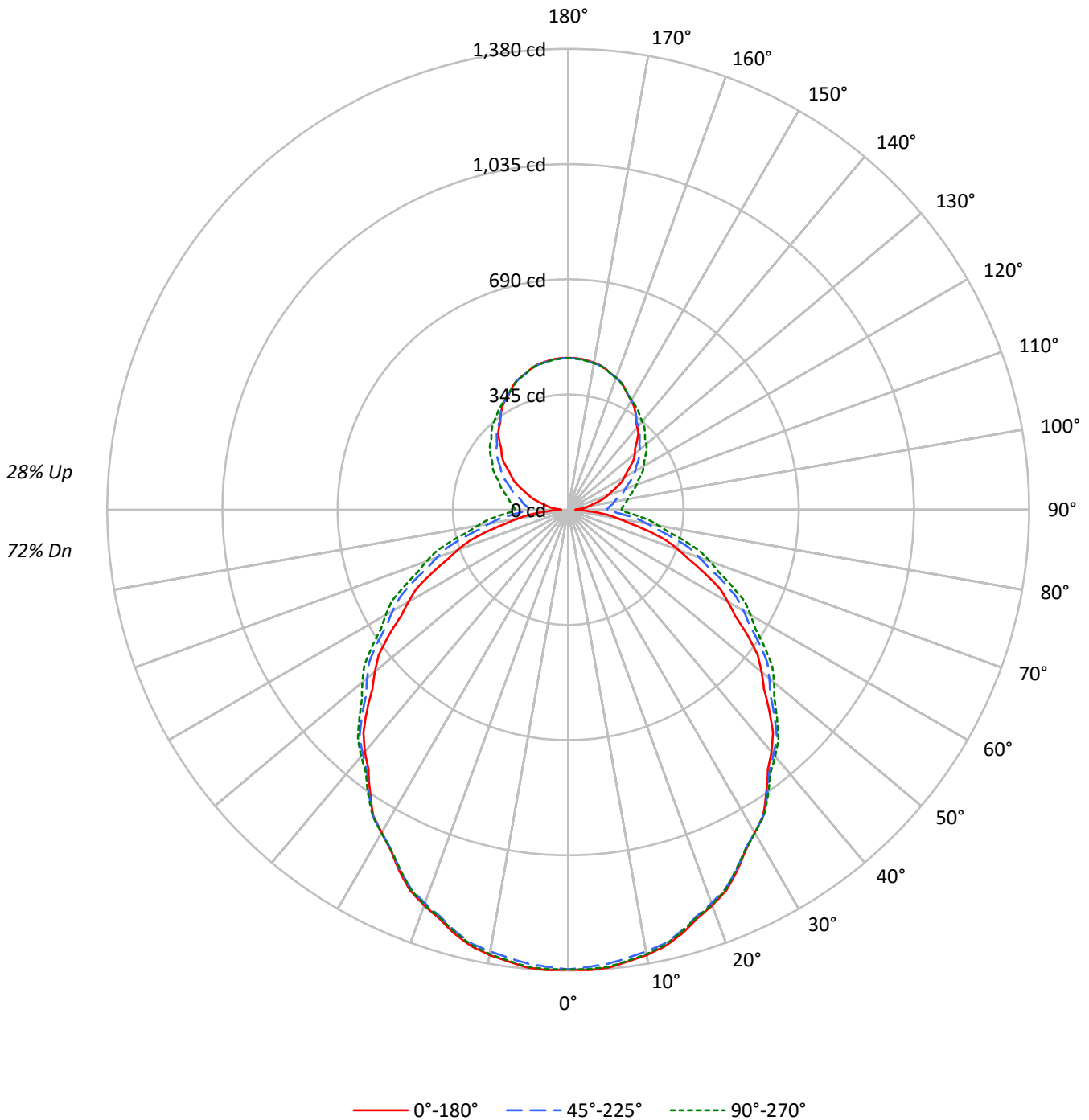
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	96	96	96	86	86	86	77	77	77	72
1	102	97	92	88	96	92	88	84	83	79	77	74	72	69	66	64	63	59
2	92	84	77	71	87	80	74	68	72	67	63	64	61	57	58	55	52	48
3	84	74	65	59	79	70	63	57	63	57	52	57	52	48	51	47	44	40
4	77	65	56	50	72	62	54	48	56	49	44	50	45	41	45	41	37	34
5	70	58	49	43	66	55	47	41	50	43	38	45	40	35	41	36	33	30
6	65	52	43	37	61	50	42	36	45	38	33	41	35	31	37	32	29	26
7	60	47	38	32	57	45	37	31	41	34	29	37	31	27	34	29	25	23
8	56	43	34	29	53	41	33	28	37	31	26	34	28	24	31	26	23	20
9	52	39	31	26	49	37	30	25	34	28	23	31	26	22	28	24	20	18
10	49	36	28	23	46	34	27	23	32	25	21	29	24	20	26	22	19	17

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	2.4
10°-20°	369.6	6.7
20°-30°	549.7	9.9
30°-40°	651.1	11.8
40°-50°	673.2	12.2
50°-60°	620.1	11.2
60°-70°	501.3	9.1
70°-80°	335.7	6.1
80°-90°	175.1	3.2
90°-100°	128.1	2.3
100°-110°	161.9	2.9
110°-120°	200.4	3.6
120°-130°	227.6	4.1
130°-140°	236.3	4.3
140°-150°	222.3	4.0
150°-160°	184.7	3.3
160°-170°	122.8	2.2
170°-180°	43.0	0.8
0°-30°	1049.5	19.0
0°-40°	1700.6	30.7
0°-60°	2994.0	54.1
0°-90°	4006.0	72.4
90°-120°	490.4	8.9
90°-150°	1176.7	21.3
90°-180°	1527.0	27.6
0°-180°	5533.2	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	16
95°	40	77	126	157	168	38
105°	93	117	159	187	198	99
115°	160	173	207	230	239	159
125°	228	230	256	276	283	204
135°	292	293	302	319	325	225
145°	352	352	353	359	364	219
155°	401	401	401	402	401	185
165°	436	435	435	437	435	123
175°	453	452	452	454	451	43
180°	454	454	454	454	454	



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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	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°	28.0	37.3	46.6	56.0	65.3	75.5	86.6	97.7	108.8	119.9	127.1
95°	40.5	48.5	56.4	64.4	72.4	81.8	92.8	103.8	114.8	125.8	132.9
97.5°	54.1	61.2	68.3	75.3	82.4	91.4	102.4	113.3	124.2	135.1	141.9
100°	64.3	70.6	76.9	83.2	89.5	98.0	108.6	119.2	129.9	140.5	147.5
102.5°	75.4	81.5	87.7	93.8	99.9	108.0	117.8	127.7	137.6	147.5	154.3
105°	92.7	97.9	103.1	108.3	113.5	120.8	130.3	139.8	149.2	158.7	165.2
107.5°	112.0	116.5	121.0	125.5	129.9	136.7	145.7	154.7	163.7	172.7	178.8
110°	125.4	129.4	133.4	137.4	141.3	147.7	156.3	164.9	173.6	182.2	188.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	140.1	143.2	146.3	149.3	152.4	158.2	166.6	175.1	183.6	192.0	197.6
115°	160.4	162.8	165.3	167.7	170.1	175.3	183.2	191.2	199.1	207.1	212.4
117.5°	180.9	182.4	183.9	185.4	186.9	191.5	199.0	206.5	214.0	221.5	226.7
120°	194.4	195.7	197.0	198.3	199.6	203.7	210.7	217.7	224.7	231.6	236.7
122.5°	208.1	208.6	209.2	209.7	210.3	214.0	220.9	227.7	234.6	241.5	246.3
125°	227.7	227.9	228.1	228.2	228.4	231.5	237.6	243.7	249.8	255.8	260.5
127.5°	247.6	247.5	247.5	247.5	247.4	249.9	254.9	260.0	265.0	270.0	274.3
130°	260.3	260.4	260.5	260.6	260.7	262.9	267.2	271.6	276.0	280.3	284.4
132.5°	271.9	272.5	273.1	273.7	274.3	276.2	279.4	282.6	285.8	289.0	293.1
135°	291.8	292.0	292.2	292.3	292.5	293.7	295.9	298.0	300.2	302.4	306.3
137.5°	310.5	310.7	310.9	311.1	311.4	312.1	313.2	314.4	315.6	316.8	320.5
140°	321.6	322.0	322.4	322.7	323.1	323.6	324.1	324.7	325.2	325.7	329.2
142.5°	333.7	333.8	333.9	334.0	334.1	334.3	334.7	335.0	335.4	335.7	338.7
145°	351.6	351.6	351.6	351.7	351.7	351.8	352.0	352.3	352.5	352.7	354.2
147.5°	366.8	367.0	367.1	367.3	367.5	367.7	367.9	368.1	368.2	368.4	369.1
150°	377.8	377.8	377.7	377.6	377.5	377.6	377.9	378.3	378.6	378.9	378.9
152.5°	386.9	387.0	387.1	387.2	387.3	387.4	387.6	387.7	387.8	387.9	388.1
155°	400.8	400.8	400.8	400.8	400.8	400.8	400.9	401.0	401.1	401.2	401.5
157.5°	413.2	413.1	412.9	412.7	412.6	412.5	412.6	412.7	412.7	412.8	413.1
160°	420.6	420.4	420.1	419.9	419.7	419.6	419.7	419.7	419.8	419.9	420.2
162.5°	427.1	426.9	426.8	426.6	426.4	426.3	426.3	426.4	426.4	426.4	426.8
165°	435.8	435.6	435.5	435.3	435.2	435.1	435.2	435.3	435.4	435.4	435.8
167.5°	443.1	442.8	442.5	442.2	441.9	441.7	441.7	441.7	441.7	441.7	442.2
170°	447.1	446.8	446.5	446.2	445.8	445.7	445.7	445.7	445.7	445.7	446.2
172.5°	449.9	449.6	449.3	449.0	448.7	448.5	448.5	448.5	448.5	448.5	449.0
175°	453.1	452.8	452.5	452.2	451.9	451.7	451.7	451.7	451.7	451.7	452.2
177.5°	454.7	454.5	454.2	454.0	453.7	453.6	453.5	453.5	453.4	453.3	453.7
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2



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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°	134.3	141.5	148.7	153.4	155.7	157.9	160.2	162.5
95°	140.1	147.2	154.4	159.1	161.3	163.6	165.8	168.1
97.5°	148.8	155.6	162.4	166.9	169.0	171.1	173.3	175.4
100°	154.5	161.5	168.5	173.0	174.9	176.9	178.9	180.8
102.5°	161.1	168.0	174.8	179.2	181.2	183.2	185.3	187.3
105°	171.7	178.1	184.6	189.0	191.3	193.7	196.0	198.4
107.5°	185.0	191.2	197.4	201.4	203.2	205.1	206.9	208.8
110°	194.1	200.0	205.9	209.9	211.9	214.0	216.0	218.0



TEST NUMBER: P333254

CATALOG NUMBER: S125DIP-S1090D365U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	203.2	208.7	214.3	218.1	220.0	222.0	223.9	225.9
115°	217.7	223.1	228.4	231.9	233.6	235.4	237.1	238.8
117.5°	231.9	237.0	242.2	245.6	247.4	249.1	250.8	252.5
120°	241.8	246.9	252.0	255.3	256.8	258.3	259.8	261.3
122.5°	251.1	255.9	260.7	263.8	265.4	266.9	268.5	270.0
125°	265.1	269.8	274.4	277.4	278.9	280.3	281.7	283.1
127.5°	278.7	283.1	287.4	290.4	292.0	293.6	295.2	296.7
130°	288.6	292.7	296.8	299.5	300.9	302.2	303.6	304.9
132.5°	297.2	301.4	305.5	308.1	309.1	310.2	311.2	312.2
135°	310.2	314.1	318.0	320.5	321.7	322.9	324.1	325.3
137.5°	324.1	327.7	331.4	333.6	334.4	335.2	336.0	336.8
140°	332.7	336.1	339.6	341.7	342.5	343.3	344.1	344.9
142.5°	341.6	344.5	347.4	349.3	350.1	350.9	351.7	352.5
145°	355.7	357.2	358.7	360.0	360.9	361.9	362.9	363.8
147.5°	369.8	370.4	371.1	371.4	371.4	371.5	371.5	371.5
150°	378.9	378.9	378.9	379.0	379.1	379.2	379.4	379.5
152.5°	388.3	388.5	388.7	388.7	388.5	388.2	388.0	387.8
155°	401.8	402.1	402.4	402.4	402.0	401.6	401.2	400.8
157.5°	413.4	413.8	414.1	414.0	413.5	412.9	412.4	411.9
160°	420.5	420.8	421.1	421.1	420.7	420.3	419.9	419.5
162.5°	427.1	427.5	427.9	427.9	427.4	426.9	426.5	426.0
165°	436.1	436.4	436.7	436.6	436.1	435.7	435.2	434.7
167.5°	442.7	443.1	443.6	443.6	443.1	442.6	442.1	441.7
170°	446.6	447.1	447.6	447.5	447.0	446.4	445.9	445.3
172.5°	449.5	449.9	450.4	450.4	449.9	449.4	448.9	448.4
175°	452.6	453.1	453.6	453.5	453.0	452.4	451.9	451.3
177.5°	454.1	454.5	454.8	454.8	454.4	453.9	453.5	453.0
180°	454.2	454.2	454.2	454.2	454.2	454.2	454.2	454.2

(END OF REPORT)