

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: P333254-830

Luminaire Tested: **S125DIP-S1090D365U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333254-830
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-S1090D365U830-4F0-1E-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: 5215.3 lumens
Efficiency: N/A
Efficacy: 119.9 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

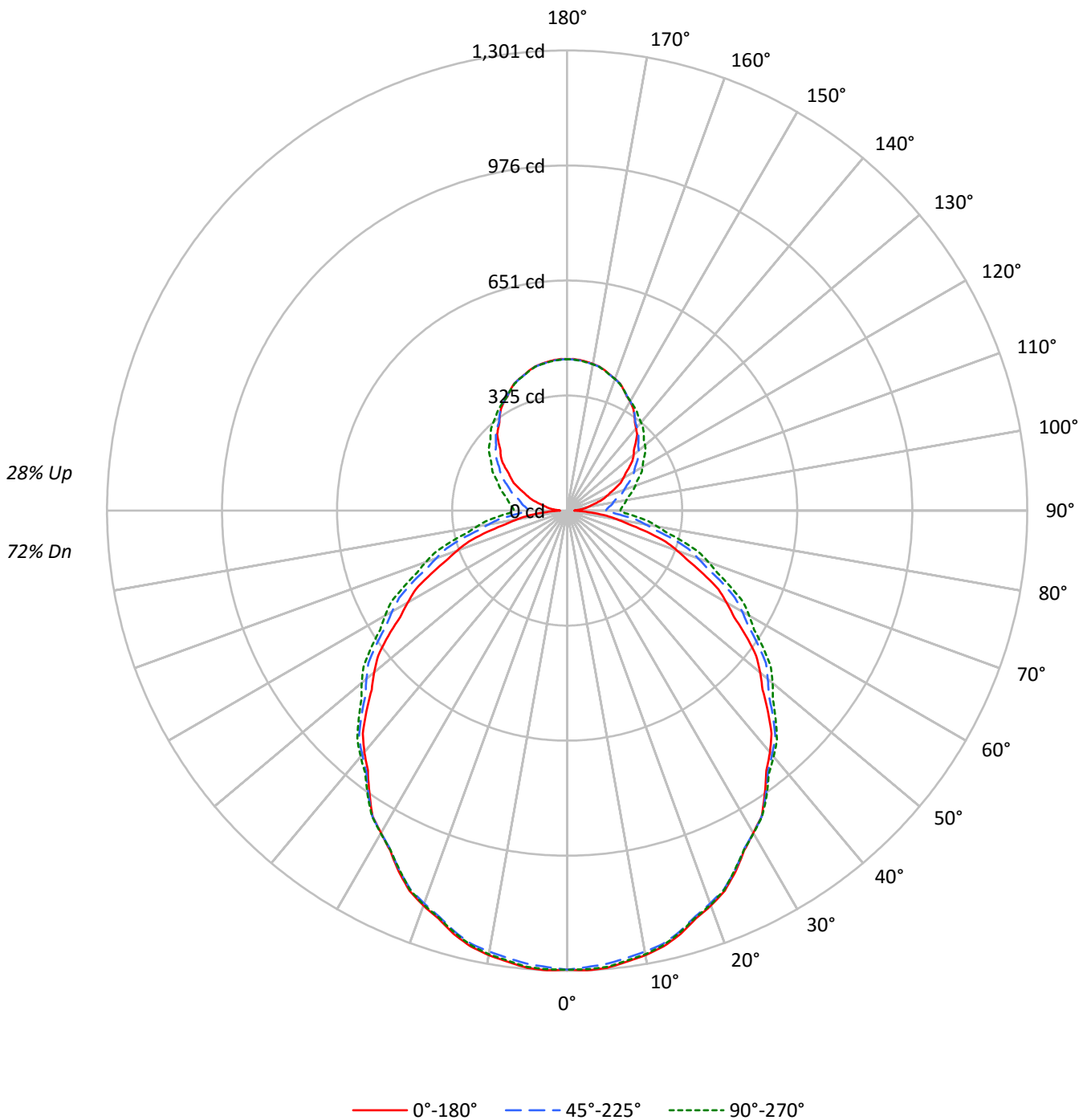
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8382	8382	8382
5°	8399	8227	8253
10°	8339	8080	8068
15°	8240	7905	7833
20°	8107	7687	7597
25°	7947	7455	7307
30°	7754	7199	7044
35°	7574	6964	6802
40°	7390	6715	6559
45°	7184	6503	6343
50°	6986	6274	6153
55°	6748	6056	5928
60°	6488	5808	5700
65°	6217	5549	5444
70°	5908	5194	5179
75°	5420	4854	4854
80°	4780	4442	4501
85°	4183	4164	4388



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	2.4
10°-20°	348.4	6.7
20°-30°	518.1	9.9
30°-40°	613.7	11.8
40°-50°	634.5	12.2
50°-60°	584.5	11.2
60°-70°	472.5	9.1
70°-80°	316.4	6.1
80°-90°	165.0	3.2
90°-100°	120.7	2.3
100°-110°	152.6	2.9
110°-120°	188.9	3.6
120°-130°	214.6	4.1
130°-140°	222.8	4.3
140°-150°	209.6	4.0
150°-160°	174.1	3.3
160°-170°	115.7	2.2
170°-180°	40.5	0.8
0°-30°	989.2	19.0
0°-40°	1602.9	30.7
0°-60°	2821.9	54.1
0°-90°	3775.9	72.4
90°-120°	462.2	8.9
90°-150°	1109.1	21.3
90°-180°	1439.0	27.6
0°-180°	5215.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1298	1295	1286	1296	1295	123
15°	1239	1240	1232	1239	1234	349
25°	1126	1129	1122	1127	1121	518
35°	975	983	980	983	984	610
45°	803	816	823	832	833	619
55°	617	637	658	671	677	551
65°	425	454	485	503	509	422
75°	234	268	308	332	340	248
85°	70	112	156	183	195	75
90°	21	64	110	139	150	15
95°	38	73	119	148	158	36
105°	87	110	150	176	187	93
115°	151	163	195	217	225	150
125°	215	217	241	260	267	192
135°	275	276	285	301	307	212
145°	331	332	332	339	343	207
155°	378	378	378	379	378	174
165°	411	410	410	412	410	116
175°	427	426	426	427	425	41
180°	428	428	428	428	428	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1300.9	1300.4	1300.0	1299.6	1299.1	1298.1	1296.5	1294.9	1293.4	1291.8	1293.4
5°	1297.9	1297.3	1296.8	1296.2	1295.6	1294.3	1292.3	1290.3	1288.4	1286.4	1288.6
7.5°	1286.4	1286.2	1285.9	1285.7	1285.5	1284.4	1282.3	1280.3	1278.3	1276.2	1278.2
10°	1276.2	1276.2	1276.2	1276.2	1276.2	1275.1	1272.8	1270.5	1268.3	1266.0	1268.0
12.5°	1262.0	1262.2	1262.4	1262.6	1262.9	1262.1	1260.3	1258.5	1256.7	1254.8	1256.4
15°	1239.3	1239.6	1239.9	1240.2	1240.5	1239.6	1237.7	1235.7	1233.7	1231.7	1233.4
17.5°	1209.8	1210.3	1210.9	1211.4	1212.0	1211.4	1209.4	1207.4	1205.4	1203.4	1204.8
20°	1188.5	1189.0	1189.6	1190.1	1190.7	1190.0	1188.0	1186.0	1184.0	1182.0	1182.9
22.5°	1163.9	1165.0	1166.0	1167.1	1168.1	1167.4	1165.3	1163.1	1160.8	1158.7	1159.7
25°	1126.1	1126.9	1127.8	1128.6	1129.4	1129.1	1127.4	1125.7	1124.0	1122.3	1123.4
27.5°	1083.8	1085.1	1086.3	1087.6	1088.8	1088.4	1086.6	1084.6	1082.7	1080.8	1081.6
30°	1052.3	1054.0	1055.6	1057.3	1059.0	1059.0	1057.3	1055.6	1054.0	1052.3	1052.8
32.5°	1023.8	1025.2	1026.7	1028.2	1029.6	1029.7	1028.5	1027.3	1026.1	1024.8	1025.4
35°	974.7	976.7	978.6	980.6	982.6	983.2	982.3	981.5	980.6	979.8	980.6
37.5°	925.6	927.4	929.2	930.9	932.7	933.6	933.3	933.0	932.7	932.5	933.6
40°	891.9	894.2	896.5	898.7	901.0	902.0	901.7	901.4	901.2	900.9	902.0
42.5°	855.3	858.3	861.2	864.1	867.0	868.8	869.5	870.1	870.7	871.4	872.7
45°	802.9	806.0	809.1	812.2	815.3	817.6	819.0	820.4	821.8	823.2	825.2
47.5°	749.2	752.1	755.0	757.8	760.7	763.4	765.8	768.3	770.7	773.1	776.0
50°	712.6	715.7	718.8	721.9	725.0	728.1	731.2	734.3	737.4	740.6	743.7
52.5°	673.8	677.7	681.5	685.2	689.0	692.8	696.6	700.4	704.2	707.9	711.3
55°	617.1	621.6	626.1	630.7	635.2	639.7	644.2	648.8	653.3	657.8	660.9
57.5°	559.1	564.5	570.0	575.4	580.8	586.2	591.4	596.5	601.7	606.9	610.5
60°	520.4	526.0	531.7	537.3	543.0	548.7	554.3	560.0	565.6	571.3	575.5
62.5°	482.8	488.4	494.1	499.7	505.4	511.2	517.4	523.5	529.6	535.6	540.4
65°	425.0	431.5	438.0	444.5	451.0	457.6	464.4	471.2	478.0	484.7	489.0
67.5°	370.5	376.8	383.0	389.4	395.6	402.2	409.2	416.0	422.9	429.8	435.0
70°	330.8	337.3	343.8	350.3	356.8	363.7	371.1	378.4	385.8	393.1	398.5
72.5°	292.2	298.9	305.6	312.4	319.1	326.4	334.5	342.5	350.5	358.5	364.4
75°	234.1	241.5	248.8	256.2	263.5	271.7	280.8	289.8	298.9	307.9	313.6
77.5°	178.4	186.9	195.4	203.9	212.4	220.9	229.6	238.4	247.0	255.7	261.9
80°	143.7	152.2	160.7	169.2	177.7	186.7	196.3	205.9	215.6	225.2	231.4
82.5°	112.3	121.1	130.1	139.0	148.0	157.3	167.2	177.0	186.9	196.7	202.7
85°	69.9	79.3	88.6	97.9	107.3	116.9	126.8	136.7	146.6	156.5	162.7
87.5°	39.8	48.9	58.1	67.3	76.4	85.9	95.6	105.3	115.0	124.7	131.3
90°	20.7	30.3	40.0	49.6	59.3	69.2	79.3	89.4	99.5	109.7	116.5
92.5°	26.4	35.2	43.9	52.8	61.5	71.2	81.6	92.1	102.5	113.0	119.8
95°	38.2	45.7	53.2	60.7	68.2	77.1	87.5	97.8	108.2	118.6	125.3
97.5°	51.0	57.7	64.4	71.0	77.7	86.1	96.5	106.8	117.1	127.3	133.7
100°	60.6	66.5	72.5	78.4	84.4	92.4	102.4	112.4	122.4	132.4	139.0
102.5°	71.1	76.8	82.7	88.4	94.2	101.8	111.0	120.4	129.7	139.0	145.4
105°	87.4	92.3	97.2	102.1	107.0	113.9	122.8	131.8	140.6	149.6	155.7
107.5°	105.6	109.8	114.0	118.3	122.4	128.8	137.3	145.8	154.3	162.8	168.5
110°	118.2	122.0	125.7	129.5	133.2	139.2	147.3	155.4	163.6	171.7	177.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	132.1	135.0	137.9	140.7	143.6	149.1	157.0	165.0	173.1	181.0	186.2
115°	151.2	153.4	155.8	158.1	160.3	165.2	172.7	180.2	187.7	195.2	200.2
117.5°	170.5	171.9	173.3	174.7	176.2	180.5	187.6	194.6	201.7	208.8	213.7
120°	183.2	184.5	185.7	186.9	188.1	192.0	198.6	205.2	211.8	218.3	223.1
122.5°	196.1	196.6	197.2	197.7	198.2	201.7	208.2	214.6	221.1	227.6	232.1
125°	214.6	214.8	215.0	215.1	215.3	218.2	223.9	229.7	235.4	241.1	245.5
127.5°	233.4	233.3	233.3	233.3	233.2	235.5	240.3	245.1	249.8	254.5	258.5
130°	245.3	245.4	245.5	245.6	245.7	247.8	251.8	256.0	260.1	264.2	268.1
132.5°	256.3	256.8	257.4	258.0	258.5	260.3	263.3	266.4	269.4	272.4	276.3
135°	275.0	275.2	275.4	275.5	275.7	276.8	278.9	280.9	283.0	285.0	288.7
137.5°	292.7	292.8	293.0	293.2	293.5	294.2	295.2	296.3	297.5	298.6	302.1
140°	303.1	303.5	303.9	304.2	304.5	305.0	305.5	306.0	306.5	307.0	310.3
142.5°	314.5	314.6	314.7	314.8	314.9	315.1	315.5	315.8	316.1	316.4	319.2
145°	331.4	331.4	331.4	331.5	331.5	331.6	331.8	332.1	332.2	332.4	333.8
147.5°	345.7	345.9	346.0	346.2	346.4	346.6	346.8	346.9	347.0	347.2	347.9
150°	356.1	356.1	356.0	355.9	355.8	355.9	356.2	356.6	356.8	357.1	357.1
152.5°	364.7	364.8	364.9	365.0	365.0	365.1	365.3	365.4	365.5	365.6	365.8
155°	377.8	377.8	377.8	377.8	377.8	377.8	377.9	378.0	378.1	378.1	378.4
157.5°	389.5	389.4	389.2	389.0	388.9	388.8	388.9	389.0	389.0	389.1	389.4
160°	396.4	396.2	396.0	395.8	395.6	395.5	395.6	395.6	395.7	395.8	396.1
162.5°	402.6	402.4	402.3	402.1	401.9	401.8	401.8	401.9	401.9	401.9	402.3
165°	410.8	410.6	410.5	410.3	410.2	410.1	410.2	410.3	410.4	410.4	410.8
167.5°	417.6	417.4	417.1	416.8	416.5	416.3	416.3	416.3	416.3	416.3	416.8
170°	421.4	421.1	420.8	420.6	420.2	420.1	420.1	420.1	420.1	420.1	420.6
172.5°	424.0	423.8	423.5	423.2	422.9	422.7	422.7	422.7	422.7	422.7	423.2
175°	427.1	426.8	426.5	426.2	425.9	425.7	425.7	425.7	425.7	425.7	426.2
177.5°	428.6	428.4	428.1	427.9	427.6	427.5	427.4	427.4	427.3	427.3	427.6
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1294.9	1296.5	1298.1	1298.7	1298.5	1298.3	1298.1	1297.9
5°	1290.9	1293.2	1295.4	1296.5	1296.2	1295.9	1295.6	1295.3
7.5°	1280.2	1282.1	1284.1	1285.0	1284.7	1284.4	1284.1	1283.8
10°	1270.0	1272.0	1273.9	1274.8	1274.5	1274.2	1273.9	1273.7
12.5°	1257.9	1259.4	1260.9	1261.3	1260.7	1259.9	1259.1	1258.4
15°	1235.1	1236.8	1238.5	1238.8	1237.7	1236.5	1235.4	1234.3
17.5°	1206.1	1207.3	1208.6	1208.9	1208.2	1207.6	1206.9	1206.3
20°	1183.7	1184.6	1185.4	1185.9	1185.9	1185.9	1185.9	1185.9
22.5°	1160.8	1161.9	1162.9	1163.1	1162.4	1161.8	1161.1	1160.5
25°	1124.5	1125.7	1126.8	1126.6	1125.2	1123.8	1122.4	1121.0
27.5°	1082.3	1083.2	1083.9	1084.1	1083.5	1083.1	1082.5	1082.0
30°	1053.4	1054.0	1054.5	1054.7	1054.4	1054.1	1053.9	1053.6
32.5°	1026.0	1026.5	1027.1	1027.2	1026.9	1026.6	1026.3	1026.1
35°	981.5	982.3	983.2	983.5	983.5	983.5	983.5	983.5
37.5°	934.7	935.9	937.0	937.5	937.4	937.3	937.1	937.0
40°	903.1	904.3	905.4	906.3	906.8	907.4	908.0	908.5
42.5°	874.0	875.4	876.8	877.5	877.6	877.7	877.9	878.0
45°	827.2	829.2	831.1	832.3	832.5	832.8	833.1	833.4
47.5°	778.9	781.7	784.7	786.4	787.0	787.7	788.2	788.9
50°	746.8	749.9	753.0	755.0	755.8	756.7	757.5	758.4
52.5°	714.6	717.9	721.3	723.3	723.9	724.5	725.2	725.8
55°	664.0	667.1	670.2	672.4	673.5	674.7	675.8	676.9
57.5°	614.1	617.6	621.2	623.4	624.2	625.1	625.9	626.8
60°	579.8	584.0	588.2	590.8	591.6	592.5	593.3	594.2
62.5°	545.1	549.8	554.5	557.3	558.5	559.5	560.5	561.7
65°	493.2	497.5	501.7	504.4	505.6	506.7	507.8	509.0
67.5°	440.1	445.3	450.4	453.7	455.2	456.7	458.1	459.6
70°	403.9	409.3	414.6	418.2	419.9	421.6	423.3	425.0
72.5°	370.2	376.1	381.8	385.4	386.6	387.9	389.1	390.4
75°	319.2	324.9	330.5	334.0	335.5	336.9	338.3	339.7
77.5°	268.2	274.4	280.6	284.3	285.4	286.5	287.7	288.8
80°	237.6	243.8	250.1	253.7	254.9	256.0	257.1	258.3
82.5°	208.7	214.7	220.6	224.7	226.8	228.8	230.8	232.8
85°	168.9	175.1	181.3	185.6	187.8	190.1	192.4	194.6
87.5°	137.9	144.5	151.1	155.3	157.4	159.4	161.5	163.4
90°	123.4	130.3	137.1	141.7	143.9	146.1	148.3	150.5
92.5°	126.6	133.4	140.2	144.6	146.8	148.8	151.0	153.2
95°	132.1	138.7	145.5	150.0	152.0	154.2	156.3	158.4
97.5°	140.3	146.7	153.1	157.3	159.3	161.3	163.3	165.3
100°	145.6	152.2	158.8	163.1	164.9	166.7	168.6	170.4
102.5°	151.8	158.3	164.8	168.9	170.8	172.7	174.7	176.5
105°	161.8	167.9	174.0	178.1	180.3	182.6	184.7	187.0
107.5°	174.4	180.2	186.1	189.8	191.5	193.3	195.0	196.8
110°	182.9	188.5	194.1	197.8	199.7	201.7	203.6	205.5



TEST NUMBER: P333254-830

CATALOG NUMBER: S125DIP-S1090D365U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	191.5	196.7	202.0	205.6	207.4	209.2	211.0	212.9
115°	205.2	210.3	215.3	218.6	220.2	221.9	223.5	225.1
117.5°	218.6	223.4	228.3	231.5	233.2	234.8	236.4	238.0
120°	227.9	232.7	237.5	240.6	242.0	243.5	244.9	246.3
122.5°	236.7	241.2	245.7	248.6	250.2	251.6	253.1	254.5
125°	249.9	254.3	258.6	261.5	262.9	264.2	265.5	266.8
127.5°	262.7	266.8	270.9	273.7	275.2	276.7	278.2	279.7
130°	272.0	275.9	279.7	282.3	283.6	284.8	286.2	287.4
132.5°	280.1	284.1	287.9	290.4	291.3	292.4	293.3	294.3
135°	292.4	296.1	299.7	302.1	303.2	304.3	305.5	306.6
137.5°	305.5	308.9	312.4	314.4	315.2	315.9	316.7	317.4
140°	313.6	316.8	320.1	322.1	322.8	323.6	324.3	325.1
142.5°	322.0	324.7	327.4	329.2	330.0	330.7	331.5	332.2
145°	335.3	336.7	338.1	339.3	340.2	341.1	342.0	342.9
147.5°	348.6	349.1	349.8	350.1	350.1	350.2	350.2	350.2
150°	357.1	357.1	357.1	357.2	357.3	357.4	357.6	357.7
152.5°	366.0	366.2	366.4	366.4	366.2	365.9	365.7	365.5
155°	378.7	379.0	379.3	379.3	378.9	378.5	378.1	377.8
157.5°	389.6	390.0	390.3	390.2	389.7	389.2	388.7	388.2
160°	396.3	396.6	396.9	396.9	396.5	396.2	395.8	395.4
162.5°	402.6	402.9	403.3	403.3	402.8	402.4	402.0	401.5
165°	411.0	411.3	411.6	411.5	411.0	410.7	410.2	409.7
167.5°	417.3	417.6	418.1	418.1	417.6	417.2	416.7	416.3
170°	420.9	421.4	421.9	421.8	421.3	420.8	420.3	419.7
172.5°	423.7	424.0	424.5	424.5	424.0	423.6	423.1	422.6
175°	426.6	427.1	427.5	427.4	427.0	426.4	425.9	425.4
177.5°	428.0	428.4	428.7	428.7	428.3	427.8	427.4	427.0
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1

(END OF REPORT)