

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: P333253-840

Luminaire Tested: **S125DIP-S1090D365U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333253-840
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-S1090D365U840-4F0-1E-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: 5786.7 lumens
Efficiency: N/A
Efficacy: 133.0 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

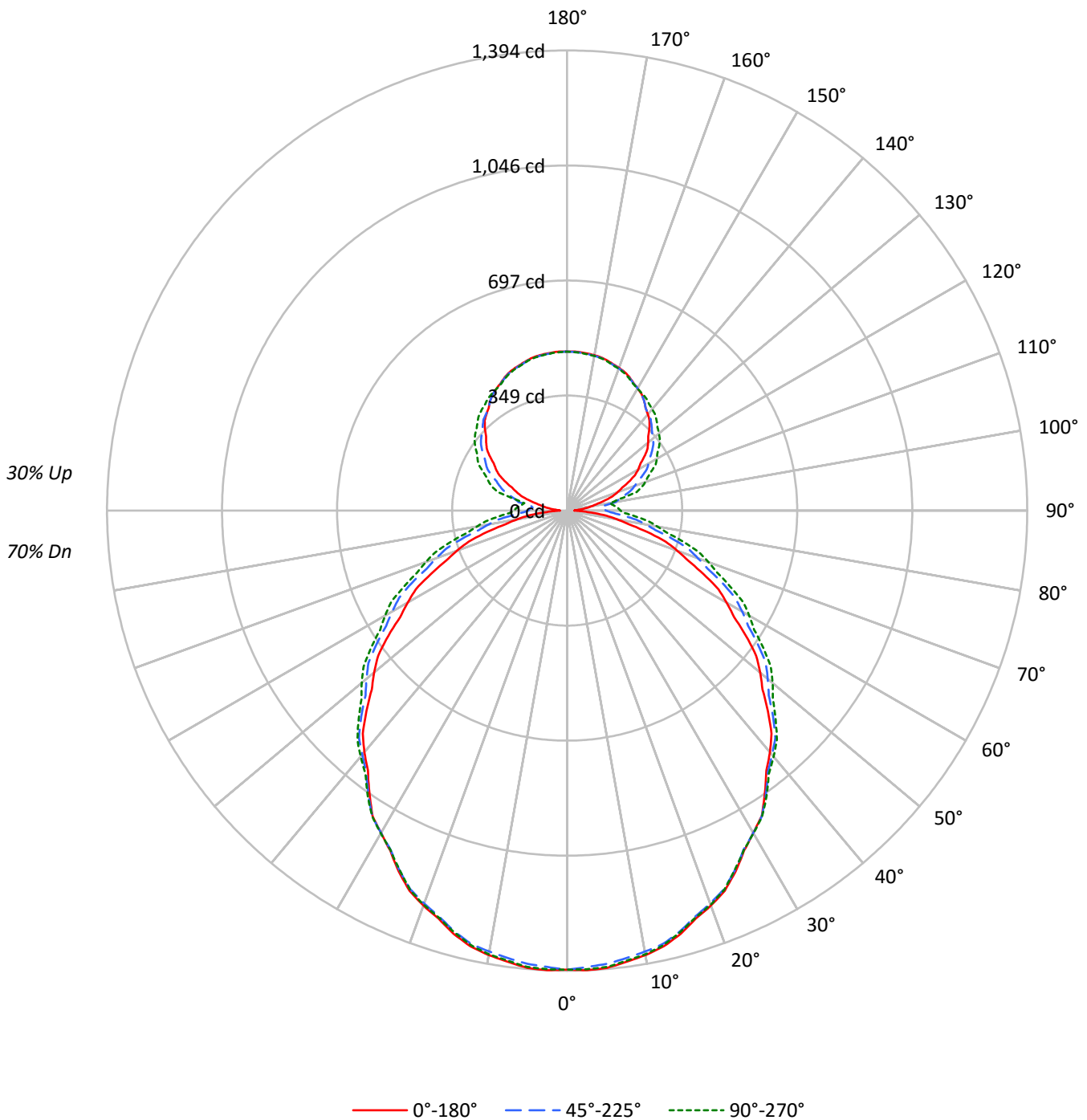
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333253-840

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8981	8981	8981
5°	8999	8815	8843
10°	8935	8658	8644
15°	8829	8469	8392
20°	8685	8236	8140
25°	8515	7987	7828
30°	8308	7712	7547
35°	8115	7461	7288
40°	7918	7195	7027
45°	7696	6968	6796
50°	7485	6722	6592
55°	7230	6489	6352
60°	6950	6223	6107
65°	6660	5946	5832
70°	6332	5566	5549
75°	5809	5201	5201
80°	5122	4760	4822
85°	4483	4460	4702



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	2.3
10°-20°	373.3	6.5
20°-30°	555.1	9.6
30°-40°	657.5	11.4
40°-50°	679.8	11.7
50°-60°	626.3	10.8
60°-70°	506.2	8.7
70°-80°	339.0	5.9
80°-90°	176.8	3.1
90°-100°	116.1	2.0
100°-110°	180.6	3.1
110°-120°	244.3	4.2
120°-130°	278.7	4.8
130°-140°	282.1	4.9
140°-150°	255.9	4.4
150°-160°	205.0	3.5
160°-170°	132.6	2.3
170°-180°	45.7	0.8
0°-30°	1059.9	18.3
0°-40°	1717.4	29.7
0°-60°	3023.5	52.2
0°-90°	4045.6	69.9
90°-120°	541.1	9.4
90°-150°	1357.8	23.5
90°-180°	1741.0	30.1
0°-180°	5786.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1391	1387	1378	1389	1388	132
15°	1328	1329	1320	1327	1322	374
25°	1206	1210	1202	1207	1201	555
35°	1044	1053	1050	1054	1054	653
45°	860	875	882	891	893	664
55°	661	683	705	719	725	591
65°	455	487	519	539	545	452
75°	251	287	330	356	364	266
85°	75	120	168	197	208	80
90°	22	69	118	149	161	15
95°	38	72	105	136	146	40
105°	117	141	181	208	218	124
115°	205	218	252	274	282	203
125°	286	288	314	334	340	255
135°	352	353	362	378	383	271
145°	407	406	406	413	416	254
155°	446	444	445	446	443	206
165°	471	469	469	471	468	133
175°	482	480	480	482	479	46
180°	482	482	482	482	482	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6
2.5°	1393.8	1393.3	1392.8	1392.4	1391.9	1390.8	1389.1	1387.4	1385.7	1384.0	1385.7
5°	1390.6	1390.0	1389.4	1388.8	1388.2	1386.7	1384.6	1382.5	1380.4	1378.3	1380.7
7.5°	1378.3	1378.1	1377.8	1377.6	1377.4	1376.1	1373.9	1371.7	1369.6	1367.4	1369.5
10°	1367.4	1367.4	1367.4	1367.4	1367.4	1366.1	1363.7	1361.3	1358.9	1356.5	1358.6
12.5°	1352.1	1352.3	1352.6	1352.8	1353.1	1352.2	1350.3	1348.4	1346.5	1344.4	1346.2
15°	1327.9	1328.2	1328.5	1328.8	1329.1	1328.2	1326.1	1323.9	1321.8	1319.7	1321.5
17.5°	1296.2	1296.8	1297.4	1298.0	1298.6	1297.9	1295.8	1293.6	1291.5	1289.4	1290.8
20°	1273.3	1273.9	1274.6	1275.2	1275.8	1275.0	1272.8	1270.7	1268.6	1266.5	1267.4
22.5°	1247.1	1248.2	1249.3	1250.4	1251.5	1250.8	1248.5	1246.2	1243.7	1241.4	1242.5
25°	1206.5	1207.4	1208.3	1209.2	1210.1	1209.7	1207.9	1206.1	1204.3	1202.4	1203.7
27.5°	1161.2	1162.6	1163.9	1165.3	1166.6	1166.2	1164.2	1162.1	1160.0	1158.0	1158.8
30°	1127.4	1129.2	1131.0	1132.9	1134.7	1134.7	1132.9	1131.0	1129.2	1127.4	1128.0
32.5°	1096.9	1098.4	1100.0	1101.7	1103.2	1103.3	1102.0	1100.7	1099.3	1098.0	1098.6
35°	1044.3	1046.4	1048.5	1050.7	1052.8	1053.4	1052.5	1051.6	1050.7	1049.8	1050.7
37.5°	991.7	993.6	995.5	997.4	999.4	1000.3	1000.0	999.7	999.4	999.1	1000.3
40°	955.6	958.1	960.5	962.9	965.3	966.4	966.1	965.8	965.5	965.2	966.4
42.5°	916.4	919.6	922.7	925.8	929.0	930.9	931.6	932.2	932.9	933.6	935.0
45°	860.2	863.5	866.9	870.2	873.5	876.0	877.5	879.0	880.5	882.0	884.1
47.5°	802.7	805.8	808.9	811.9	815.1	817.9	820.5	823.1	825.8	828.3	831.4
50°	763.5	766.8	770.1	773.5	776.8	780.1	783.5	786.8	790.1	793.5	796.8
52.5°	722.0	726.1	730.1	734.2	738.2	742.3	746.4	750.4	754.5	758.5	762.1
55°	661.2	666.0	670.9	675.7	680.5	685.4	690.2	695.1	699.9	704.8	708.1
57.5°	599.1	604.8	610.7	616.5	622.3	628.0	633.6	639.1	644.7	650.3	654.1
60°	557.5	563.6	569.7	575.7	581.8	587.8	593.9	600.0	606.0	612.1	616.6
62.5°	517.3	523.3	529.4	535.4	541.5	547.8	554.3	560.9	567.4	573.9	579.0
65°	455.3	462.3	469.3	476.3	483.2	490.3	497.6	504.8	512.1	519.4	523.9
67.5°	397.0	403.7	410.4	417.2	423.8	430.9	438.4	445.8	453.1	460.5	466.1
70°	354.5	361.4	368.4	375.4	382.3	389.7	397.6	405.5	413.3	421.2	427.0
72.5°	313.1	320.2	327.4	334.7	341.8	349.7	358.4	367.0	375.6	384.2	390.4
75°	250.9	258.7	266.6	274.5	282.4	291.1	300.8	310.5	320.2	329.9	336.0
77.5°	191.2	200.3	209.3	218.4	227.5	236.7	246.0	255.4	264.7	274.0	280.6
80°	154.0	163.1	172.2	181.3	190.4	200.1	210.4	220.7	231.0	241.3	247.9
82.5°	120.3	129.8	139.4	149.0	158.5	168.5	179.2	189.7	200.3	210.8	217.2
85°	74.9	84.9	94.9	104.9	114.9	125.2	135.8	146.4	157.0	167.6	174.3
87.5°	42.6	52.4	62.2	72.1	81.9	92.0	102.4	112.8	123.2	133.6	140.7
90°	22.2	32.5	42.8	53.1	63.5	74.1	84.9	95.8	106.6	117.5	124.8
92.5°	25.1	33.6	42.2	50.7	59.2	69.0	80.1	91.1	102.1	113.1	120.3
95°	38.1	45.7	53.3	61.0	68.7	76.0	83.4	90.7	98.0	105.2	112.3
97.5°	58.6	66.0	73.6	81.1	88.7	94.4	98.4	102.3	106.3	110.3	114.4
100°	74.6	81.2	87.9	94.4	101.0	109.3	119.4	129.4	139.4	149.4	143.9
102.5°	91.0	97.1	103.3	109.5	115.6	123.6	133.2	142.9	152.5	162.2	166.0
105°	117.2	122.4	127.5	132.7	137.8	145.0	154.1	163.2	172.3	181.4	187.4
107.5°	144.6	148.7	152.8	156.9	161.1	167.5	176.4	185.3	194.2	203.1	209.1
110°	162.3	165.9	169.6	173.2	176.8	183.0	191.7	200.3	208.9	217.5	223.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	180.1	183.1	186.2	189.3	192.4	198.1	206.5	214.8	223.2	231.5	236.7
115°	205.2	207.7	210.3	212.8	215.3	220.6	228.5	236.4	244.4	252.4	257.5
117.5°	231.4	232.8	234.1	235.5	236.8	241.5	249.1	256.9	264.7	272.5	277.2
120°	248.5	249.3	250.1	251.0	251.8	255.8	263.1	270.2	277.4	284.7	289.6
122.5°	262.6	263.3	264.0	264.7	265.4	269.2	276.1	282.9	289.7	296.6	301.3
125°	285.7	285.9	286.2	286.4	286.7	289.8	295.9	301.9	308.0	314.1	318.6
127.5°	306.7	306.8	306.8	306.9	307.0	309.5	314.5	319.4	324.3	329.2	333.6
130°	320.3	320.4	320.5	320.6	320.7	323.0	327.3	331.5	335.9	340.2	344.3
132.5°	333.0	333.4	333.8	334.2	334.6	336.3	339.4	342.5	345.6	348.7	352.9
135°	352.2	352.3	352.5	352.7	352.8	354.0	355.9	357.9	359.8	361.8	365.6
137.5°	369.8	370.0	370.2	370.3	370.5	371.0	371.9	372.8	373.8	374.6	378.2
140°	380.4	380.6	380.8	380.9	381.1	381.3	381.5	381.7	381.9	382.2	385.7
142.5°	391.0	390.9	390.7	390.6	390.4	390.4	390.6	390.8	391.0	391.1	394.0
145°	406.6	406.4	406.3	406.1	406.0	405.9	405.9	405.9	405.9	405.9	407.5
147.5°	418.7	418.7	418.7	418.6	418.6	418.6	418.7	418.8	418.9	419.0	419.6
150°	427.3	427.2	427.0	426.8	426.7	426.7	426.8	427.0	427.2	427.3	427.5
152.5°	435.6	435.3	434.8	434.5	434.1	434.0	434.2	434.4	434.5	434.7	434.8
155°	446.3	445.8	445.2	444.7	444.3	444.1	444.3	444.4	444.6	444.7	445.0
157.5°	454.4	454.1	453.8	453.5	453.3	453.1	453.1	453.2	453.2	453.2	453.4
160°	460.1	459.7	459.2	458.7	458.3	458.1	458.1	458.2	458.3	458.4	458.7
162.5°	464.7	464.2	463.7	463.2	462.8	462.6	462.7	462.7	462.8	462.9	463.3
165°	470.8	470.4	469.9	469.4	469.0	468.8	468.8	468.9	469.0	469.1	469.5
167.5°	475.4	474.9	474.4	473.9	473.4	473.2	473.3	473.4	473.5	473.5	474.1
170°	478.0	477.5	476.9	476.4	475.7	475.5	475.6	475.6	475.7	475.8	476.5
172.5°	479.7	479.2	478.6	478.1	477.5	477.3	477.4	477.6	477.7	477.9	478.4
175°	481.5	481.1	480.6	480.1	479.7	479.5	479.5	479.6	479.7	479.8	480.4
177.5°	482.4	482.0	481.6	481.3	480.9	480.7	480.8	480.9	480.9	481.0	481.4
180°	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6
2.5°	1387.4	1389.1	1390.8	1391.5	1391.3	1391.0	1390.8	1390.6
5°	1383.1	1385.5	1388.0	1389.1	1388.8	1388.5	1388.2	1387.9
7.5°	1371.6	1373.7	1375.8	1376.7	1376.4	1376.1	1375.8	1375.5
10°	1360.7	1362.8	1364.9	1365.8	1365.5	1365.2	1364.9	1364.6
12.5°	1347.8	1349.4	1351.0	1351.4	1350.7	1349.9	1349.1	1348.3
15°	1323.3	1325.1	1327.0	1327.3	1326.1	1324.8	1323.6	1322.4
17.5°	1292.2	1293.5	1294.9	1295.3	1294.5	1293.8	1293.1	1292.4
20°	1268.3	1269.2	1270.1	1270.6	1270.6	1270.6	1270.6	1270.6
22.5°	1243.7	1244.9	1246.0	1246.2	1245.5	1244.8	1244.1	1243.3
25°	1204.9	1206.1	1207.3	1207.1	1205.6	1204.1	1202.5	1201.0
27.5°	1159.6	1160.5	1161.3	1161.5	1160.9	1160.4	1159.8	1159.3
30°	1128.6	1129.2	1129.8	1130.0	1129.7	1129.4	1129.1	1128.8
32.5°	1099.2	1099.8	1100.4	1100.6	1100.2	1099.9	1099.6	1099.3
35°	1051.6	1052.5	1053.4	1053.8	1053.8	1053.8	1053.8	1053.8
37.5°	1001.5	1002.7	1003.9	1004.4	1004.3	1004.2	1004.0	1003.9
40°	967.7	968.9	970.1	971.0	971.6	972.2	972.8	973.4
42.5°	936.4	938.0	939.4	940.2	940.3	940.4	940.6	940.7
45°	886.3	888.4	890.5	891.7	892.0	892.3	892.6	892.9
47.5°	834.6	837.6	840.7	842.5	843.2	843.9	844.6	845.3
50°	800.1	803.4	806.8	808.9	809.8	810.7	811.6	812.5
52.5°	765.7	769.2	772.8	775.0	775.6	776.3	777.0	777.6
55°	711.4	714.8	718.1	720.4	721.6	722.9	724.1	725.3
57.5°	657.9	661.8	665.6	667.9	668.8	669.7	670.7	671.6
60°	621.2	625.7	630.3	633.0	633.9	634.8	635.7	636.6
62.5°	584.0	589.1	594.1	597.1	598.3	599.5	600.6	601.8
65°	528.5	533.0	537.6	540.5	541.7	542.9	544.1	545.3
67.5°	471.5	477.1	482.6	486.1	487.7	489.3	490.8	492.4
70°	432.7	438.5	444.2	448.1	449.9	451.7	453.5	455.3
72.5°	396.7	402.9	409.1	412.9	414.2	415.6	416.9	418.3
75°	342.0	348.1	354.2	357.9	359.4	360.9	362.4	364.0
77.5°	287.3	294.0	300.6	304.6	305.8	307.0	308.2	309.4
80°	254.6	261.3	267.9	271.9	273.1	274.3	275.5	276.7
82.5°	223.6	230.0	236.4	240.8	243.0	245.1	247.3	249.4
85°	181.0	187.6	194.3	198.8	201.3	203.7	206.1	208.5
87.5°	147.7	154.8	161.9	166.4	168.6	170.8	173.0	175.1
90°	132.2	139.6	146.9	151.8	154.2	156.5	158.9	161.3
92.5°	127.3	134.5	141.6	146.3	148.6	150.8	153.0	155.2
95°	119.4	126.4	133.5	138.0	140.2	142.3	144.4	146.5
97.5°	118.6	122.6	126.7	129.9	131.9	134.0	136.0	138.0
100°	138.5	133.0	127.5	125.5	127.0	128.6	130.1	131.6
102.5°	169.9	173.8	177.6	177.8	174.2	170.7	167.1	163.5
105°	193.5	199.5	205.6	209.6	211.7	213.7	215.8	217.8
107.5°	215.1	221.2	227.1	231.0	232.6	234.3	235.9	237.5
110°	228.6	234.1	239.6	243.5	245.7	247.9	250.1	252.3



TEST NUMBER: P333253-840

CATALOG NUMBER: S125DIP-S1090D365U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	241.9	247.1	252.4	255.9	257.9	259.9	262.0	264.0
115°	262.7	267.7	272.9	276.1	277.5	278.8	280.1	281.6
117.5°	282.0	286.7	291.3	294.7	296.5	298.4	300.2	302.2
120°	294.6	299.6	304.6	307.8	309.2	310.6	312.0	313.5
122.5°	306.1	310.8	315.6	318.6	319.9	321.3	322.7	324.1
125°	323.2	327.7	332.2	335.1	336.4	337.7	338.9	340.2
127.5°	337.8	342.1	346.5	349.2	350.3	351.5	352.7	353.9
130°	348.2	352.2	356.3	358.8	359.9	361.0	362.1	363.2
132.5°	357.1	361.3	365.5	368.0	368.9	369.8	370.6	371.5
135°	369.4	373.1	376.9	379.3	380.4	381.4	382.4	383.4
137.5°	381.8	385.5	389.0	391.2	392.0	392.8	393.6	394.5
140°	389.2	392.6	396.2	398.3	399.0	399.7	400.5	401.2
142.5°	396.9	399.8	402.6	404.5	405.2	406.0	406.7	407.4
145°	409.1	410.6	412.2	413.4	414.1	414.9	415.7	416.4
147.5°	420.2	420.7	421.3	421.6	421.6	421.5	421.5	421.5
150°	427.6	427.8	427.9	427.9	427.5	427.2	426.9	426.5
152.5°	435.0	435.2	435.4	435.2	434.6	434.1	433.6	433.1
155°	445.2	445.5	445.8	445.6	444.9	444.2	443.6	443.0
157.5°	453.7	453.9	454.2	454.0	453.4	452.7	452.1	451.5
160°	459.0	459.3	459.6	459.5	458.8	458.2	457.6	457.0
162.5°	463.8	464.2	464.7	464.5	463.8	463.1	462.5	461.8
165°	470.0	470.5	471.0	470.9	470.3	469.6	469.0	468.4
167.5°	474.7	475.2	475.8	475.7	475.0	474.3	473.6	472.9
170°	477.1	477.8	478.4	478.4	477.7	477.0	476.2	475.4
172.5°	479.0	479.6	480.1	480.1	479.4	478.6	477.9	477.2
175°	481.0	481.7	482.3	482.3	481.5	480.8	480.1	479.4
177.5°	481.9	482.3	482.7	482.7	482.2	481.7	481.2	480.7
180°	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5

(END OF REPORT)