

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: P333299-940

Luminaire Tested: **S125DIP-S1270D365U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333299-940
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-S1270D365U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 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: 5523.3 lumens
Efficiency: N/A
Efficacy: 110.9 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

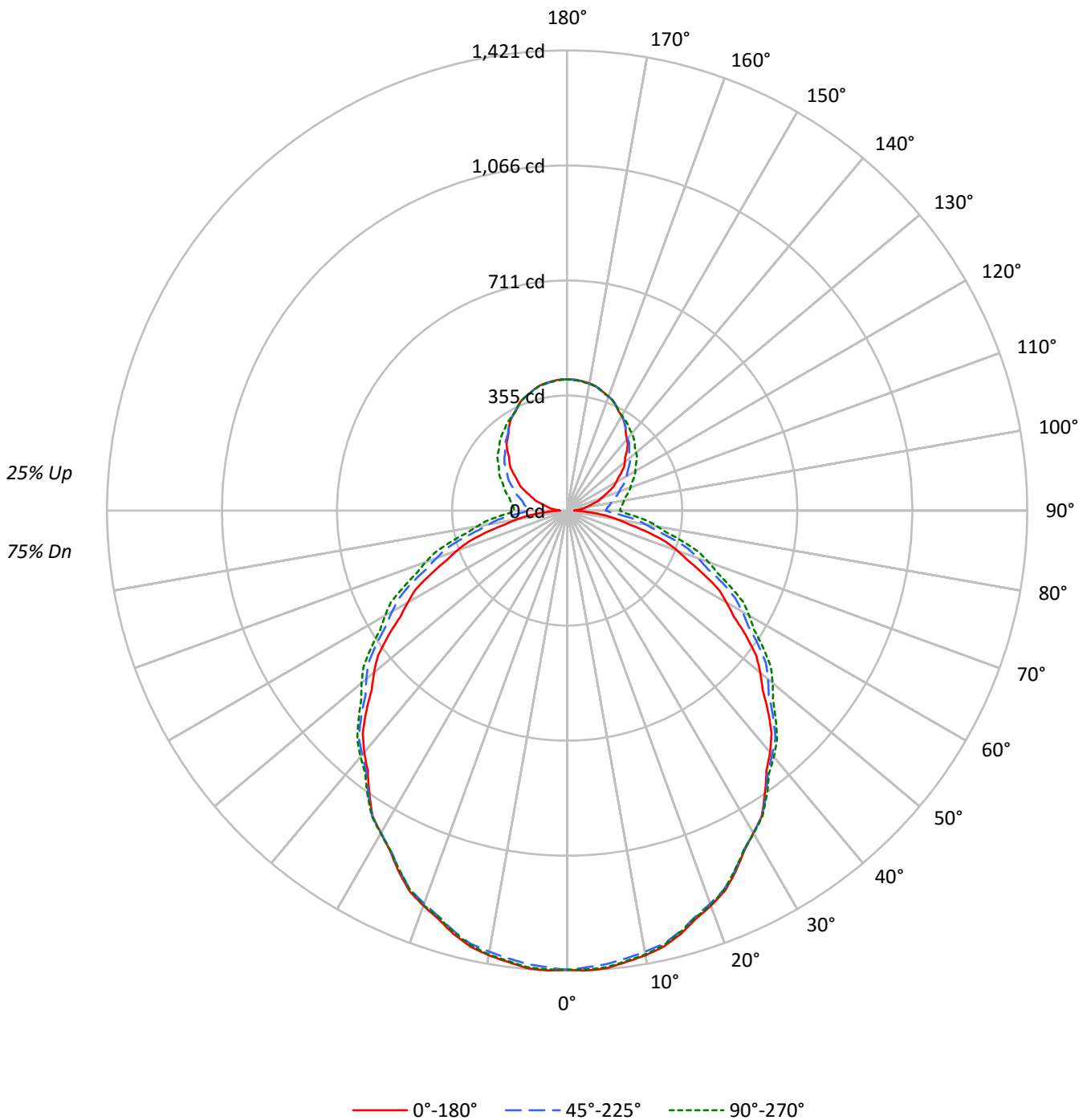
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	97	97	97		88	88	88		79	79	79	75
1	102	97	93	89	97	92	89	85	84	81	78		75	73	71		68	66	64	61
2	93	84	77	72	88	80	74	69	73	68	63		66	62	58		59	56	53	50
3	84	74	66	59	80	70	63	57	64	58	53		58	53	49		52	48	45	42
4	77	65	57	50	73	62	54	48	57	50	45		51	46	42		46	42	38	36
5	71	58	49	43	67	56	47	41	51	44	39		46	40	36		42	37	33	31
6	65	52	43	37	62	50	42	36	46	39	34		42	36	32		38	33	29	27
7	60	47	39	33	57	45	37	32	41	35	30		38	32	28		34	30	26	24
8	56	43	35	29	53	41	33	28	38	31	27		35	29	25		32	27	23	21
9	52	39	31	26	50	38	30	25	35	28	24		32	26	22		29	24	21	19
10	49	36	28	23	47	35	28	23	32	26	22		30	24	20		27	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9159	9159	9159
5°	9177	8990	9018
10°	9112	8829	8816
15°	9004	8637	8558
20°	8857	8400	8301
25°	8683	8145	7984
30°	8473	7865	7696
35°	8276	7608	7432
40°	8075	7338	7167
45°	7849	7106	6931
50°	7633	6854	6723
55°	7373	6618	6478
60°	7089	6346	6229
65°	6792	6064	5947
70°	6457	5677	5658
75°	5923	5304	5304
80°	5225	4854	4918
85°	4578	4550	4797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	2.4
10°-20°	380.7	6.9
20°-30°	566.1	10.2
30°-40°	670.6	12.1
40°-50°	693.3	12.6
50°-60°	638.7	11.6
60°-70°	516.3	9.3
70°-80°	345.7	6.3
80°-90°	180.2	3.3
90°-100°	127.7	2.3
100°-110°	154.3	2.8
110°-120°	185.4	3.4
120°-130°	206.8	3.7
130°-140°	212.4	3.8
140°-150°	198.6	3.6
150°-160°	164.7	3.0
160°-170°	109.5	2.0
170°-180°	38.3	0.7
0°-30°	1080.9	19.6
0°-40°	1751.4	31.7
0°-60°	3083.4	55.8
0°-90°	4125.6	74.7
90°-120°	467.4	8.5
90°-150°	1085.2	19.6
90°-180°	1398.0	25.3
0°-180°	5523.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1418	1415	1406	1416	1415	134
15°	1354	1355	1346	1353	1348	381
25°	1230	1234	1226	1231	1225	566
35°	1065	1074	1070	1074	1075	666
45°	877	892	900	909	911	677
55°	674	696	719	734	740	603
65°	464	496	530	550	556	461
75°	256	292	336	363	371	271
85°	76	123	171	201	213	81
90°	23	70	119	151	163	16
95°	38	76	126	157	169	36
105°	84	109	152	180	192	90
115°	144	157	192	216	225	143
125°	204	206	232	253	261	182
135°	261	262	271	288	295	201
145°	314	314	314	321	326	196
155°	357	357	358	359	357	165
165°	389	388	388	389	388	110
175°	404	403	403	404	402	38
180°	405	405	405	405	405	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1421.4	1420.9	1420.4	1420.0	1419.4	1418.4	1416.6	1414.9	1413.2	1411.4	1413.2
5°	1418.1	1417.5	1416.8	1416.2	1415.6	1414.3	1412.0	1409.9	1407.7	1405.6	1408.0
7.5°	1405.6	1405.3	1405.1	1404.8	1404.6	1403.4	1401.1	1398.9	1396.7	1394.5	1396.6
10°	1394.5	1394.5	1394.5	1394.5	1394.5	1393.2	1390.7	1388.3	1385.8	1383.3	1385.5
12.5°	1378.9	1379.1	1379.4	1379.7	1379.8	1379.0	1377.1	1375.0	1373.1	1371.1	1372.8
15°	1354.2	1354.4	1354.8	1355.0	1355.4	1354.4	1352.3	1350.1	1348.0	1345.8	1347.6
17.5°	1321.9	1322.5	1323.1	1323.7	1324.4	1323.6	1321.4	1319.3	1317.1	1314.9	1316.3
20°	1298.5	1299.1	1299.8	1300.4	1301.0	1300.2	1298.1	1295.9	1293.7	1291.6	1292.5
22.5°	1271.8	1272.9	1274.1	1275.1	1276.3	1275.6	1273.2	1270.8	1268.4	1266.0	1267.1
25°	1230.4	1231.4	1232.3	1233.1	1234.1	1233.7	1231.8	1229.9	1228.1	1226.2	1227.4
27.5°	1184.3	1185.6	1187.0	1188.3	1189.7	1189.3	1187.2	1185.1	1183.0	1180.9	1181.8
30°	1149.8	1151.6	1153.4	1155.3	1157.2	1157.2	1155.3	1153.4	1151.6	1149.8	1150.4
32.5°	1118.7	1120.3	1121.9	1123.5	1125.1	1125.2	1123.8	1122.5	1121.1	1119.7	1120.3
35°	1065.0	1067.1	1069.3	1071.5	1073.6	1074.2	1073.3	1072.4	1071.5	1070.5	1071.5
37.5°	1011.3	1013.3	1015.2	1017.3	1019.2	1020.0	1019.8	1019.4	1019.1	1018.8	1020.0
40°	974.6	977.0	979.5	982.0	984.4	985.5	985.3	984.9	984.6	984.4	985.5
42.5°	934.5	937.7	940.9	944.1	947.4	949.3	950.0	950.7	951.4	952.1	953.5
45°	877.3	880.7	884.0	887.4	890.8	893.3	894.9	896.4	898.0	899.5	901.7
47.5°	818.6	821.7	824.9	828.0	831.2	834.1	836.8	839.5	842.0	844.7	847.9
50°	778.6	781.9	785.3	788.7	792.2	795.6	799.0	802.4	805.7	809.1	812.5
52.5°	736.3	740.5	744.6	748.7	752.9	757.0	761.2	765.3	769.4	773.6	777.2
55°	674.3	679.2	684.2	689.1	694.0	699.0	703.9	708.9	713.8	718.8	722.2
57.5°	610.9	616.8	622.8	628.7	634.6	640.4	646.1	651.8	657.5	663.2	667.1
60°	568.6	574.8	580.9	587.2	593.3	599.5	605.7	611.9	618.0	624.2	628.8
62.5°	527.4	533.7	539.8	546.0	552.1	558.7	565.3	571.9	578.6	585.3	590.4
65°	464.3	471.4	478.6	485.7	492.8	500.1	507.5	514.9	522.3	529.7	534.3
67.5°	404.8	411.7	418.6	425.4	432.3	439.5	447.0	454.6	462.1	469.7	475.3
70°	361.5	368.5	375.7	382.8	389.9	397.4	405.5	413.6	421.6	429.6	435.5
72.5°	319.2	326.5	333.9	341.3	348.7	356.7	365.4	374.3	383.0	391.8	398.1
75°	255.8	263.9	271.9	279.9	287.9	296.9	306.7	316.6	326.5	336.4	342.6
77.5°	194.9	204.2	213.5	222.7	232.0	241.4	250.9	260.4	269.9	279.5	286.2
80°	157.1	166.4	175.7	184.9	194.2	204.0	214.5	225.1	235.6	246.1	252.9
82.5°	122.6	132.4	142.1	151.9	161.7	171.9	182.7	193.4	204.2	214.9	221.5
85°	76.5	86.7	96.8	107.1	117.3	127.8	138.6	149.4	160.2	171.0	177.8
87.5°	43.4	53.4	63.4	73.5	83.5	93.7	104.3	114.9	125.6	136.2	143.3
90°	22.6	33.0	43.4	53.9	64.4	75.1	86.1	97.0	108.1	119.0	126.5
92.5°	27.6	37.2	46.7	56.3	65.8	76.2	87.6	99.0	110.3	121.6	128.9
95°	38.5	46.7	54.9	63.0	71.2	81.0	92.1	103.3	114.6	125.7	133.0
97.5°	50.5	57.7	65.0	72.3	79.6	88.8	99.9	111.0	122.1	133.2	140.1
100°	59.4	65.9	72.4	78.9	85.3	94.0	104.8	115.6	126.4	137.2	144.3
102.5°	69.1	75.4	81.7	88.0	94.3	102.5	112.5	122.6	132.8	142.9	149.7
105°	84.4	89.7	95.0	100.2	105.6	113.1	122.7	132.4	142.1	151.8	158.4
107.5°	101.4	105.9	110.5	115.0	119.6	126.4	135.7	144.9	154.1	163.4	169.7
110°	113.1	117.2	121.2	125.3	129.3	135.8	144.6	153.6	162.4	171.2	177.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	126.2	129.4	132.5	135.6	138.8	144.7	153.4	162.0	170.8	179.4	185.1
115°	144.2	146.6	149.1	151.5	153.9	159.3	167.5	175.6	183.8	192.0	197.4
117.5°	162.2	163.7	165.3	166.8	168.4	173.0	180.7	188.5	196.2	203.9	209.3
120°	174.3	175.6	176.8	178.2	179.4	183.6	190.8	198.0	205.2	212.3	217.6
122.5°	186.3	186.9	187.4	188.0	188.5	192.3	199.4	206.4	213.5	220.5	225.4
125°	203.8	203.9	204.0	204.1	204.3	207.4	213.7	219.9	226.1	232.4	237.2
127.5°	221.3	221.2	221.1	221.1	221.1	223.6	228.7	233.9	239.1	244.2	248.7
130°	232.6	232.7	232.7	232.8	232.8	235.1	239.5	244.0	248.5	253.0	257.2
132.5°	242.9	243.4	243.9	244.4	245.0	246.8	250.2	253.5	256.8	260.1	264.4
135°	260.6	260.7	260.8	260.9	261.0	262.2	264.5	266.7	268.9	271.2	275.2
137.5°	277.2	277.3	277.5	277.7	277.9	278.5	279.7	280.9	282.1	283.3	287.0
140°	287.0	287.3	287.7	288.0	288.3	288.7	289.3	289.8	290.3	290.9	294.4
142.5°	297.7	297.8	297.8	297.9	297.9	298.2	298.5	298.8	299.2	299.4	302.5
145°	313.7	313.7	313.7	313.6	313.6	313.7	313.9	314.1	314.3	314.5	316.1
147.5°	327.1	327.3	327.3	327.5	327.7	327.9	328.1	328.2	328.3	328.5	329.2
150°	336.9	336.9	336.8	336.7	336.6	336.7	337.0	337.3	337.6	337.9	337.9
152.5°	345.0	345.1	345.2	345.3	345.4	345.4	345.6	345.7	345.8	345.9	346.1
155°	357.4	357.4	357.4	357.4	357.4	357.4	357.5	357.6	357.7	357.8	358.0
157.5°	368.5	368.4	368.2	368.0	367.9	367.8	367.9	368.0	368.0	368.1	368.4
160°	375.1	374.9	374.6	374.4	374.3	374.2	374.3	374.3	374.3	374.4	374.7
162.5°	380.8	380.7	380.6	380.4	380.2	380.1	380.1	380.2	380.2	380.2	380.6
165°	388.6	388.4	388.3	388.2	388.1	388.0	388.1	388.2	388.3	388.3	388.6
167.5°	395.1	394.8	394.6	394.3	394.0	393.9	393.9	393.9	393.9	393.9	394.3
170°	398.7	398.4	398.1	397.9	397.5	397.4	397.4	397.4	397.4	397.4	397.9
172.5°	401.2	400.9	400.6	400.4	400.1	399.9	399.9	399.9	399.9	399.9	400.4
175°	404.0	403.8	403.5	403.2	403.0	402.8	402.8	402.8	402.8	402.8	403.2
177.5°	405.5	405.3	405.0	404.8	404.6	404.5	404.4	404.4	404.3	404.2	404.6
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1414.9	1416.6	1418.4	1419.1	1418.8	1418.6	1418.4	1418.1
5°	1410.5	1413.0	1415.5	1416.6	1416.2	1415.9	1415.6	1415.3
7.5°	1398.7	1401.0	1403.1	1404.0	1403.7	1403.4	1403.1	1402.8
10°	1387.7	1389.8	1392.0	1392.9	1392.6	1392.3	1392.0	1391.7
12.5°	1374.4	1376.1	1377.8	1378.2	1377.4	1376.6	1375.8	1375.0
15°	1349.5	1351.4	1353.2	1353.5	1352.3	1351.0	1349.8	1348.5
17.5°	1317.8	1319.2	1320.6	1321.0	1320.2	1319.5	1318.8	1317.9
20°	1293.4	1294.3	1295.3	1295.7	1295.7	1295.7	1295.7	1295.7
22.5°	1268.4	1269.5	1270.7	1270.9	1270.2	1269.4	1268.6	1267.9
25°	1228.7	1229.9	1231.2	1231.0	1229.5	1227.9	1226.4	1224.9
27.5°	1182.7	1183.5	1184.4	1184.5	1183.9	1183.4	1182.9	1182.3
30°	1151.0	1151.6	1152.3	1152.4	1152.1	1151.7	1151.5	1151.1
32.5°	1121.0	1121.6	1122.2	1122.4	1122.0	1121.8	1121.4	1121.1
35°	1072.4	1073.3	1074.2	1074.7	1074.7	1074.7	1074.7	1074.7
37.5°	1021.3	1022.5	1023.8	1024.3	1024.1	1024.0	1024.0	1023.8
40°	986.8	988.0	989.3	990.2	990.8	991.4	992.0	992.7
42.5°	955.0	956.5	958.0	958.8	958.9	959.0	959.2	959.3
45°	903.8	906.0	908.1	909.4	909.7	910.0	910.3	910.6
47.5°	851.0	854.2	857.4	859.3	860.0	860.6	861.3	862.0
50°	815.9	819.3	822.8	824.9	825.8	826.8	827.7	828.6
52.5°	780.9	784.5	788.1	790.3	790.9	791.7	792.4	793.0
55°	725.6	729.0	732.4	734.7	735.9	737.2	738.4	739.7
57.5°	670.9	674.8	678.8	681.2	682.1	683.0	683.9	684.8
60°	633.5	638.1	642.7	645.5	646.5	647.4	648.4	649.3
62.5°	595.6	600.7	605.8	608.9	610.1	611.4	612.5	613.7
65°	539.0	543.6	548.2	551.2	552.4	553.7	554.9	556.1
67.5°	480.9	486.5	492.1	495.7	497.3	498.9	500.6	502.2
70°	441.3	447.2	453.1	456.9	458.8	460.7	462.5	464.3
72.5°	404.5	410.9	417.2	421.1	422.5	423.8	425.2	426.5
75°	348.8	355.0	361.1	365.1	366.6	368.1	369.7	371.2
77.5°	293.0	299.8	306.7	310.7	311.9	313.1	314.3	315.6
80°	259.7	266.4	273.3	277.3	278.5	279.7	281.0	282.2
82.5°	228.0	234.6	241.1	245.5	247.7	249.9	252.2	254.4
85°	184.6	191.4	198.2	202.9	205.3	207.8	210.3	212.7
87.5°	150.5	157.7	164.9	169.5	171.7	174.0	176.1	178.3
90°	133.9	141.4	148.8	153.8	156.1	158.5	160.9	163.3
92.5°	136.3	143.7	151.0	155.8	158.1	160.4	162.7	165.1
95°	140.4	147.6	154.9	159.7	162.0	164.3	166.6	168.9
97.5°	147.0	154.0	161.0	165.6	167.7	170.0	172.1	174.3
100°	151.4	158.5	165.7	170.2	172.2	174.2	176.2	178.2
102.5°	156.7	163.6	170.6	175.0	177.1	179.1	181.2	183.2
105°	165.0	171.6	178.2	182.7	185.0	187.4	189.8	192.2
107.5°	176.0	182.4	188.7	192.8	194.7	196.5	198.5	200.4
110°	183.4	189.5	195.6	199.7	201.7	203.8	205.9	208.0



TEST NUMBER: P333299-940

CATALOG NUMBER: S125DIP-S1270D365U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	190.8	196.5	202.2	206.2	208.2	210.3	212.2	214.3
115°	203.0	208.4	213.9	217.6	219.4	221.1	222.9	224.7
117.5°	214.5	219.9	225.2	228.7	230.6	232.4	234.2	236.0
120°	222.8	228.1	233.4	236.7	238.4	239.9	241.5	243.1
122.5°	230.4	235.3	240.3	243.6	245.2	246.8	248.5	250.1
125°	242.0	246.8	251.6	254.8	256.3	257.7	259.2	260.6
127.5°	253.2	257.7	262.2	265.3	266.9	268.6	270.2	271.9
130°	261.4	265.7	270.0	272.8	274.2	275.6	277.1	278.4
132.5°	268.6	272.9	277.1	279.8	280.9	282.0	283.1	284.2
135°	279.2	283.2	287.2	289.8	291.1	292.4	293.6	294.9
137.5°	290.8	294.5	298.3	300.6	301.5	302.4	303.2	304.1
140°	297.9	301.5	305.0	307.2	308.1	309.0	309.9	310.8
142.5°	305.4	308.4	311.4	313.3	314.2	315.1	316.0	316.9
145°	317.6	319.1	320.7	322.0	323.1	324.0	325.1	326.1
147.5°	329.8	330.6	331.2	331.5	331.6	331.7	331.8	331.9
150°	337.9	337.9	337.9	338.0	338.1	338.3	338.5	338.6
152.5°	346.3	346.4	346.6	346.6	346.4	346.3	346.0	345.8
155°	358.3	358.6	358.8	358.8	358.5	358.1	357.8	357.4
157.5°	368.6	369.0	369.3	369.2	368.7	368.2	367.7	367.3
160°	375.0	375.2	375.5	375.5	375.1	374.8	374.4	374.1
162.5°	380.8	381.2	381.6	381.6	381.1	380.7	380.3	379.9
165°	388.9	389.1	389.4	389.3	388.9	388.5	388.1	387.6
167.5°	394.8	395.1	395.6	395.6	395.1	394.7	394.2	393.9
170°	398.2	398.7	399.1	399.0	398.6	398.1	397.6	397.1
172.5°	400.8	401.2	401.6	401.6	401.2	400.7	400.3	399.8
175°	403.6	404.0	404.5	404.4	403.9	403.4	403.0	402.4
177.5°	404.9	405.3	405.6	405.6	405.2	404.7	404.4	403.9
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0

(END OF REPORT)