

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: P333361-940

Luminaire Tested: **S125DIW-S375D1340U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333361-940  
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: S125DIW-S375D1340U940-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5452.8 lumens  
Efficiency: N/A  
Efficacy: 117.0 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-Indirect

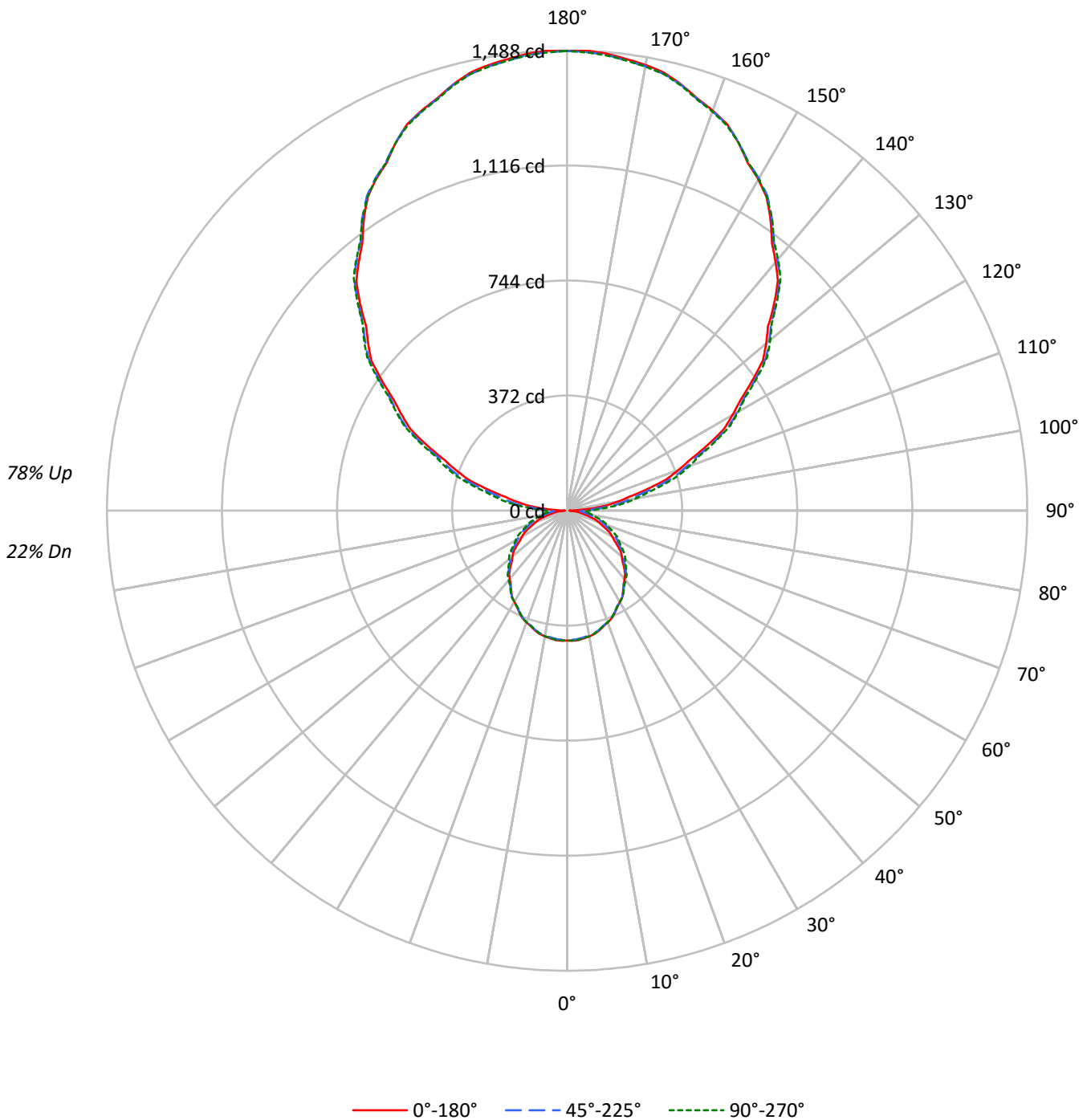
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	22
1	91	87	83	80	81	77	74	71	59	57	55	42	41	40	27	26	25	18
2	83	76	70	65	73	67	62	58	51	48	45	37	35	33	23	22	21	15
3	75	66	59	54	67	59	53	48	45	41	38	32	30	28	20	19	18	13
4	69	58	51	45	61	52	46	41	40	35	32	29	26	23	18	17	15	11
5	63	52	44	38	56	46	40	35	36	31	27	26	23	20	16	15	13	9
6	58	46	39	33	51	41	35	30	32	27	24	23	20	17	15	13	11	8
7	53	42	34	29	47	37	31	26	29	24	21	21	18	15	13	12	10	7
8	49	38	30	25	44	34	27	23	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	41	31	24	20	24	19	16	17	14	12	11	9	8	6
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	9	7	5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.7	0.7
10°-20°	112.8	2.1
20°-30°	167.8	3.1
30°-40°	198.8	3.6
40°-50°	205.5	3.8
50°-60°	189.3	3.5
60°-70°	153.0	2.8
70°-80°	102.5	1.9
80°-90°	56.4	1.0
90°-100°	129.4	2.4
100°-110°	316.0	5.8
110°-120°	512.7	9.4
120°-130°	663.7	12.2
130°-140°	737.9	13.5
140°-150°	720.4	13.2
150°-160°	604.5	11.1
160°-170°	401.8	7.4
170°-180°	140.6	2.6
0°-30°	320.4	5.9
0°-40°	519.2	9.5
0°-60°	914.0	16.8
0°-90°	1225.9	22.5
90°-120°	958.0	17.6
90°-150°	3080.0	56.5
90°-180°	4227.0	77.5
0°-180°	5452.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	8	30	52	67	74	9
95°	80	94	119	136	142	84
105°	267	280	299	314	321	286
115°	501	509	522	528	529	495
125°	729	736	745	749	750	653
135°	947	953	958	962	960	730
145°	1147	1151	1154	1156	1155	716
155°	1312	1312	1313	1317	1312	604
165°	1426	1424	1425	1429	1423	402
175°	1483	1479	1478	1484	1477	141
180°	1486	1486	1486	1486	1486	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	13.1	16.4	19.8	23.1	26.5	29.9	33.3	36.8	40.3	43.8	46.1
90°	7.8	12.8	17.7	22.7	27.7	32.6	37.5	42.4	47.3	52.3	55.7
92.5°	33.9	38.1	42.3	46.4	50.6	55.3	60.7	66.1	71.5	76.9	80.6
95°	80.5	83.5	86.3	89.3	92.1	96.4	102.1	107.8	113.4	119.1	123.0
97.5°	129.7	132.2	134.5	136.8	139.2	143.7	150.2	156.8	163.3	169.9	173.4
100°	166.5	168.4	170.3	172.3	174.2	178.3	184.5	190.8	197.1	203.3	207.6
102.5°	205.9	208.7	211.5	214.4	217.1	220.8	225.4	230.0	234.5	239.1	243.4
105°	267.4	270.2	273.0	275.7	278.5	282.0	286.2	290.5	294.8	299.1	302.5
107.5°	335.5	338.0	340.5	343.0	345.5	348.7	352.5	356.3	360.2	364.0	366.6
110°	382.3	384.7	387.1	389.4	391.8	394.7	398.0	401.4	404.7	408.0	410.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	430.4	431.9	433.5	435.1	436.6	439.1	442.6	446.0	449.5	453.0	455.0
115°	501.1	502.7	504.4	506.0	507.7	510.0	512.8	515.8	518.6	521.6	522.9
117.5°	571.9	572.7	573.6	574.5	575.4	577.2	579.9	582.6	585.3	588.1	589.8
120°	616.3	617.9	619.4	621.0	622.5	624.5	626.9	629.2	631.6	633.9	635.4
122.5°	664.1	664.7	665.2	665.8	666.4	668.1	670.7	673.5	676.2	678.9	680.1
125°	729.2	730.7	732.1	733.5	735.0	736.8	738.9	740.9	743.1	745.1	746.1
127.5°	798.2	799.0	799.8	800.6	801.3	802.6	804.4	806.3	808.1	809.9	810.9
130°	839.8	841.1	842.2	843.4	844.6	846.1	847.9	849.7	851.5	853.3	854.3
132.5°	881.2	883.2	885.3	887.4	889.5	891.0	891.9	892.8	893.7	894.6	895.5
135°	947.0	948.4	949.9	951.4	952.8	954.0	954.8	955.7	956.6	957.6	958.8
137.5°	1008.9	1010.3	1011.7	1013.2	1014.6	1015.7	1016.6	1017.5	1018.3	1019.2	1020.7
140°	1048.4	1049.6	1051.0	1052.2	1053.6	1054.6	1055.4	1056.3	1057.2	1058.0	1059.5
142.5°	1088.2	1089.1	1090.2	1091.2	1092.2	1093.2	1094.2	1095.2	1096.2	1097.2	1098.3
145°	1146.7	1147.6	1148.6	1149.5	1150.5	1151.3	1152.1	1152.8	1153.6	1154.4	1154.9
147.5°	1200.4	1201.0	1201.6	1202.1	1202.7	1203.3	1203.9	1204.5	1205.1	1205.8	1206.5
150°	1236.5	1236.3	1236.0	1235.7	1235.5	1235.8	1236.9	1238.0	1238.9	1240.0	1240.0
152.5°	1266.1	1266.5	1266.9	1267.2	1267.6	1267.9	1268.4	1268.7	1269.2	1269.6	1270.2
155°	1311.7	1311.7	1311.7	1311.7	1311.7	1311.8	1312.1	1312.3	1312.6	1312.9	1313.8
157.5°	1352.4	1351.8	1351.3	1350.7	1350.1	1350.0	1350.2	1350.5	1350.8	1351.0	1352.0
160°	1376.4	1375.7	1374.9	1374.1	1373.4	1373.1	1373.4	1373.7	1373.9	1374.1	1375.2
162.5°	1397.8	1397.2	1396.6	1396.1	1395.5	1395.3	1395.3	1395.3	1395.3	1395.4	1396.7
165°	1426.2	1425.7	1425.1	1424.7	1424.2	1424.1	1424.2	1424.5	1424.8	1425.0	1426.1
167.5°	1450.3	1449.2	1448.2	1447.2	1446.2	1445.6	1445.6	1445.6	1445.6	1445.6	1447.2
170°	1463.2	1462.2	1461.2	1460.2	1459.1	1458.6	1458.6	1458.6	1458.6	1458.6	1460.2
172.5°	1472.5	1471.4	1470.4	1469.4	1468.4	1467.8	1467.8	1467.8	1467.8	1467.8	1469.4
175°	1482.9	1481.8	1480.9	1479.8	1478.8	1478.3	1478.3	1478.3	1478.3	1478.3	1479.8
177.5°	1488.2	1487.4	1486.6	1485.8	1484.9	1484.4	1484.2	1484.0	1483.8	1483.5	1484.8
180°	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	48.5	50.8	53.2	54.8	55.6	56.4	57.2	58.0
90°	59.1	62.5	65.9	68.3	69.6	71.1	72.5	73.9
92.5°	84.4	88.1	91.8	94.3	95.5	96.7	97.9	99.1
95°	126.8	130.6	134.4	136.9	138.0	139.2	140.4	141.5
97.5°	177.1	180.7	184.3	186.5	187.5	188.4	189.4	190.3
100°	211.8	216.1	220.3	222.9	224.0	225.1	226.1	227.2
102.5°	247.8	252.2	256.5	259.3	260.6	261.9	263.1	264.4
105°	305.9	309.2	312.6	315.0	316.4	317.8	319.2	320.7
107.5°	369.2	371.8	374.3	375.9	376.4	376.9	377.5	377.9
110°	413.0	415.5	418.0	419.5	419.9	420.3	420.6	421.1





TEST NUMBER: P333361-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	457.0	459.1	461.1	462.2	462.4	462.5	462.7	462.9
115°	524.3	525.8	527.1	528.0	528.2	528.5	528.9	529.1
117.5°	591.6	593.3	595.1	595.8	595.4	594.9	594.6	594.1
120°	637.0	638.6	640.2	640.7	640.2	639.7	639.3	638.7
122.5°	681.4	682.7	683.9	684.5	684.2	683.9	683.7	683.4
125°	747.1	748.0	748.9	749.5	749.8	749.9	750.1	750.3
127.5°	812.1	813.2	814.2	814.8	814.8	814.8	814.8	814.8
130°	855.3	856.4	857.4	857.9	857.8	857.7	857.7	857.6
132.5°	896.6	897.6	898.7	899.0	898.7	898.3	898.0	897.7
135°	959.9	961.2	962.3	962.6	962.1	961.5	960.9	960.4
137.5°	1022.0	1023.4	1024.8	1025.0	1024.1	1023.2	1022.3	1021.4
140°	1061.0	1062.7	1064.2	1064.4	1063.5	1062.6	1061.7	1060.8
142.5°	1099.5	1100.6	1101.9	1102.0	1101.1	1100.1	1099.2	1098.3
145°	1155.3	1155.7	1156.2	1156.3	1155.8	1155.4	1155.0	1154.6
147.5°	1207.3	1208.0	1208.8	1208.4	1206.8	1205.2	1203.6	1202.0
150°	1240.0	1240.0	1240.0	1239.7	1239.3	1238.9	1238.5	1238.1
152.5°	1270.8	1271.4	1272.0	1271.9	1271.0	1270.1	1269.2	1268.3
155°	1314.9	1315.9	1317.0	1316.8	1315.5	1314.3	1313.0	1311.7
157.5°	1353.1	1354.1	1355.1	1354.8	1353.1	1351.4	1349.7	1348.0
160°	1376.2	1377.2	1378.2	1378.1	1376.9	1375.6	1374.3	1373.0
162.5°	1397.9	1399.1	1400.3	1400.3	1398.7	1397.2	1395.8	1394.3
165°	1427.1	1428.2	1429.1	1428.9	1427.4	1425.8	1424.2	1422.7
167.5°	1448.8	1450.3	1451.8	1451.8	1450.2	1448.6	1447.0	1445.4
170°	1461.7	1463.2	1464.7	1464.6	1462.9	1461.1	1459.2	1457.4
172.5°	1471.0	1472.5	1474.0	1474.0	1472.4	1470.8	1469.2	1467.6
175°	1481.3	1482.9	1484.4	1484.3	1482.5	1480.7	1478.9	1477.1
177.5°	1486.0	1487.3	1488.5	1488.4	1486.9	1485.5	1484.1	1482.6
180°	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4

(END OF REPORT)