

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: P333253-935

Luminaire Tested: **S125DIP-S1090D365U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333253-935
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-S1090D365U935-4F0-1E-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: 4933.7 lumens
Efficiency: N/A
Efficacy: 113.4 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

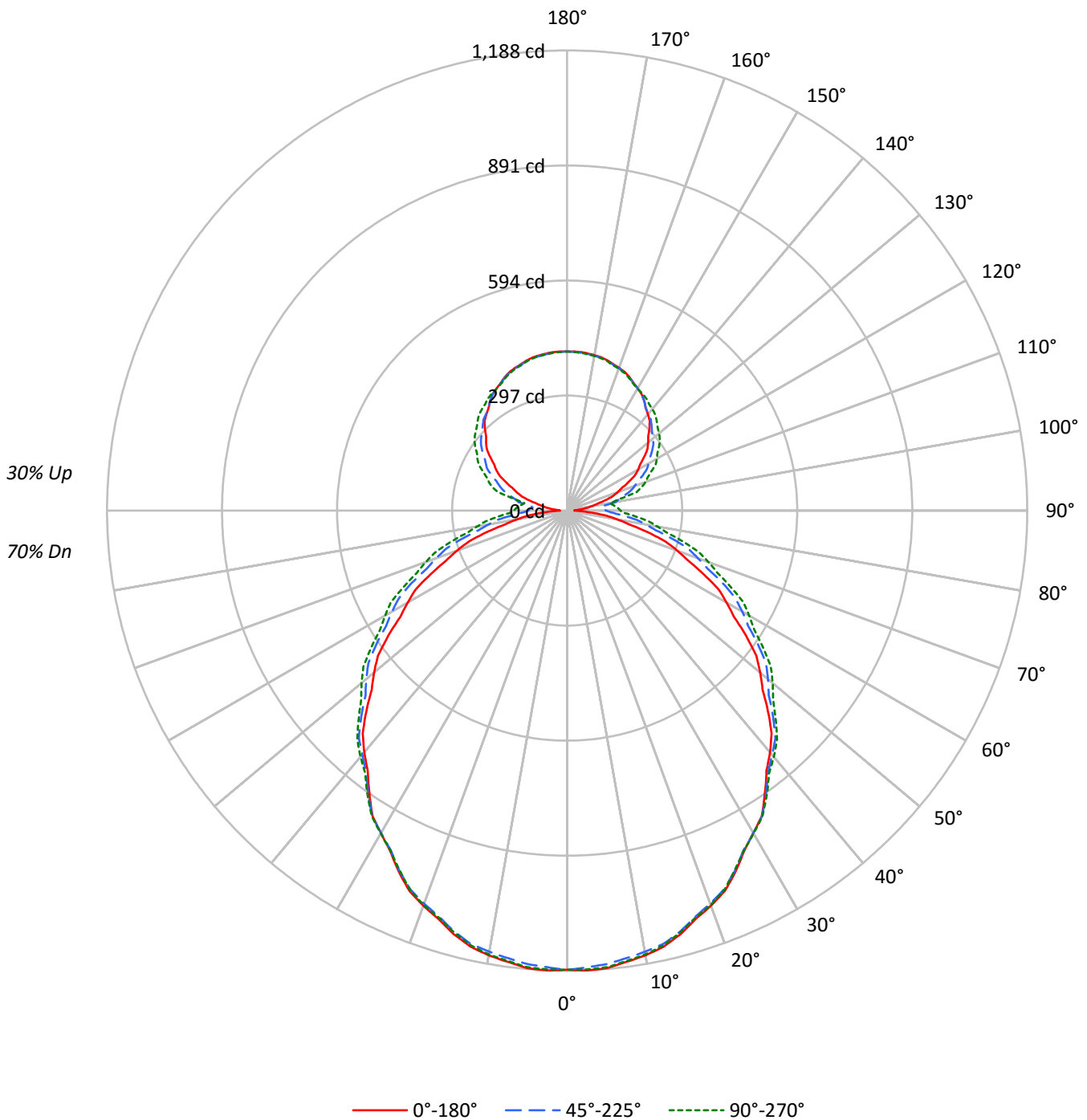
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	101	96	92	88	95	91	87	84	81	78	76	72	70	68	64	62	61	57
2	92	84	77	71	86	79	73	68	71	66	62	63	59	56	56	53	50	47
3	83	73	65	59	78	69	62	56	62	56	52	55	51	47	49	46	42	39
4	76	65	56	50	72	61	54	48	55	49	44	49	44	40	44	40	36	33
5	70	58	49	42	66	55	47	41	49	43	38	44	39	35	39	35	32	29
6	65	52	43	37	61	49	41	35	44	38	33	40	34	30	36	31	28	25
7	60	47	38	32	56	44	37	31	40	34	29	36	31	27	33	28	25	22
8	55	42	34	29	52	40	33	28	37	30	26	33	28	24	30	25	22	20
9	52	39	31	26	49	37	30	25	34	27	23	31	25	21	28	23	20	18
10	48	36	28	23	46	34	27	22	31	25	21	28	23	19	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7657	7657	7657
5°	7672	7516	7539
10°	7617	7381	7370
15°	7527	7221	7155
20°	7405	7022	6940
25°	7259	6810	6675
30°	7083	6575	6434
35°	6919	6361	6214
40°	6751	6134	5991
45°	6562	5941	5794
50°	6381	5731	5621
55°	6164	5532	5416
60°	5927	5306	5207
65°	5679	5069	4972
70°	5397	4745	4731
75°	4952	4435	4434
80°	4367	4057	4111
85°	3824	3802	4009



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	2.3
10°-20°	318.2	6.5
20°-30°	473.3	9.6
30°-40°	560.6	11.4
40°-50°	579.6	11.7
50°-60°	533.9	10.8
60°-70°	431.6	8.7
70°-80°	289.0	5.9
80°-90°	150.7	3.1
90°-100°	99.0	2.0
100°-110°	154.0	3.1
110°-120°	208.3	4.2
120°-130°	237.6	4.8
130°-140°	240.5	4.9
140°-150°	218.2	4.4
150°-160°	174.8	3.5
160°-170°	113.0	2.3
170°-180°	39.0	0.8
0°-30°	903.6	18.3
0°-40°	1464.2	29.7
0°-60°	2577.8	52.2
0°-90°	3449.2	69.9
90°-120°	461.3	9.4
90°-150°	1157.6	23.5
90°-180°	1484.0	30.1
0°-180°	4933.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1186	1183	1175	1184	1183	112
15°	1132	1133	1125	1132	1128	319
25°	1029	1032	1025	1029	1024	473
35°	890	898	895	898	898	557
45°	733	746	752	760	761	566
55°	564	582	601	613	618	504
65°	388	415	443	460	465	385
75°	214	244	281	304	310	227
85°	64	102	143	168	178	68
90°	19	59	100	127	138	13
95°	32	62	90	116	125	34
105°	100	121	155	177	186	106
115°	175	186	215	234	240	173
125°	244	246	268	284	290	217
135°	300	301	308	322	327	231
145°	347	346	346	352	355	216
155°	380	379	379	380	378	175
165°	401	400	400	402	399	113
175°	410	409	409	411	409	39
180°	410	410	410	410	410	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1188.4	1187.9	1187.5	1187.1	1186.7	1185.8	1184.3	1182.8	1181.5	1180.0	1181.5
5°	1185.6	1185.1	1184.6	1184.0	1183.5	1182.3	1180.5	1178.7	1176.9	1175.1	1177.2
7.5°	1175.1	1174.9	1174.7	1174.5	1174.3	1173.3	1171.4	1169.5	1167.7	1165.8	1167.6
10°	1165.8	1165.8	1165.8	1165.8	1165.8	1164.8	1162.7	1160.6	1158.6	1156.5	1158.3
12.5°	1152.8	1153.0	1153.2	1153.4	1153.7	1152.9	1151.2	1149.6	1148.0	1146.2	1147.7
15°	1132.1	1132.4	1132.6	1132.9	1133.2	1132.4	1130.6	1128.8	1127.0	1125.2	1126.7
17.5°	1105.1	1105.6	1106.1	1106.6	1107.2	1106.6	1104.7	1102.9	1101.1	1099.3	1100.5
20°	1085.6	1086.2	1086.7	1087.2	1087.7	1087.0	1085.2	1083.4	1081.6	1079.8	1080.6
22.5°	1063.2	1064.2	1065.1	1066.1	1067.0	1066.4	1064.5	1062.5	1060.4	1058.4	1059.4
25°	1028.6	1029.4	1030.2	1031.0	1031.7	1031.4	1029.8	1028.3	1026.7	1025.2	1026.2
27.5°	990.1	991.2	992.3	993.5	994.6	994.3	992.6	990.8	989.0	987.3	988.0
30°	961.2	962.8	964.3	965.9	967.4	967.4	965.9	964.3	962.8	961.2	961.7
32.5°	935.2	936.5	937.9	939.3	940.6	940.6	939.5	938.4	937.3	936.2	936.7
35°	890.4	892.2	894.0	895.8	897.6	898.1	897.3	896.6	895.8	895.0	895.8
37.5°	845.5	847.1	848.8	850.4	852.0	852.8	852.6	852.3	852.0	851.8	852.8
40°	814.8	816.8	818.9	821.0	823.0	824.0	823.7	823.5	823.2	822.9	824.0
42.5°	781.3	784.0	786.7	789.4	792.0	793.7	794.3	794.8	795.4	796.0	797.2
45°	733.4	736.2	739.1	741.9	744.8	746.8	748.1	749.4	750.7	752.0	753.8
47.5°	684.4	687.0	689.7	692.2	694.9	697.3	699.6	701.8	704.0	706.2	708.9
50°	650.9	653.8	656.6	659.4	662.3	665.1	668.0	670.8	673.6	676.5	679.3
52.5°	615.5	619.1	622.5	625.9	629.4	632.8	636.4	639.8	643.3	646.7	649.8
55°	563.7	567.8	572.0	576.1	580.2	584.4	588.5	592.6	596.8	600.9	603.7
57.5°	510.7	515.7	520.6	525.6	530.5	535.5	540.2	544.9	549.7	554.4	557.7
60°	475.4	480.5	485.7	490.9	496.0	501.2	506.4	511.5	516.7	521.9	525.7
62.5°	441.0	446.2	451.3	456.5	461.7	467.0	472.6	478.2	483.8	489.3	493.6
65°	388.2	394.2	400.1	406.0	412.0	418.0	424.2	430.4	436.6	442.8	446.7
67.5°	338.5	344.2	349.9	355.7	361.4	367.4	373.8	380.0	386.3	392.6	397.4
70°	302.2	308.2	314.1	320.0	326.0	332.3	339.0	345.7	352.4	359.1	364.0
72.5°	266.9	273.0	279.1	285.3	291.4	298.2	305.6	312.9	320.2	327.5	332.9
75°	213.9	220.6	227.3	234.0	240.7	248.2	256.5	264.8	273.0	281.3	286.5
77.5°	163.0	170.7	178.5	186.2	194.0	201.8	209.7	217.7	225.7	233.6	239.3
80°	131.3	139.1	146.8	154.5	162.3	170.6	179.3	188.1	196.9	205.7	211.4
82.5°	102.5	110.6	118.8	127.0	135.2	143.7	152.7	161.7	170.7	179.7	185.2
85°	63.9	72.4	80.9	89.5	98.0	106.8	115.8	124.8	133.9	142.9	148.6
87.5°	36.3	44.7	53.0	61.5	69.8	78.4	87.3	96.2	105.0	113.9	119.9
90°	18.9	27.7	36.5	45.3	54.2	63.2	72.4	81.7	90.9	100.2	106.4
92.5°	21.4	28.7	36.0	43.2	50.5	58.8	68.3	77.7	87.0	96.4	102.5
95°	32.5	39.0	45.5	52.0	58.5	64.8	71.1	77.3	83.5	89.7	95.7
97.5°	49.9	56.3	62.8	69.1	75.6	80.5	83.9	87.2	90.7	94.0	97.6
100°	63.6	69.2	74.9	80.5	86.1	93.2	101.8	110.3	118.8	127.3	122.7
102.5°	77.6	82.8	88.1	93.3	98.6	105.4	113.6	121.8	130.0	138.3	141.5
105°	100.0	104.4	108.7	113.1	117.5	123.6	131.4	139.1	146.9	154.6	159.8
107.5°	123.3	126.7	130.3	133.8	137.3	142.8	150.4	158.0	165.6	173.1	178.3
110°	138.4	141.5	144.6	147.7	150.8	156.0	163.4	170.7	178.1	185.5	190.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	153.5	156.1	158.8	161.4	164.0	168.9	176.1	183.1	190.3	197.3	201.8
115°	175.0	177.1	179.3	181.4	183.6	188.0	194.8	201.6	208.4	215.2	219.6
117.5°	197.3	198.5	199.6	200.8	201.9	205.9	212.4	219.0	225.7	232.3	236.3
120°	211.9	212.6	213.3	214.0	214.6	218.1	224.3	230.4	236.5	242.7	246.9
122.5°	223.9	224.5	225.1	225.7	226.3	229.5	235.4	241.2	247.0	252.9	256.9
125°	243.6	243.7	244.0	244.2	244.4	247.1	252.3	257.4	262.6	267.8	271.6
127.5°	261.5	261.6	261.6	261.7	261.7	263.9	268.1	272.3	276.5	280.7	284.4
130°	273.1	273.2	273.3	273.4	273.5	275.3	279.1	282.7	286.4	290.1	293.5
132.5°	283.9	284.2	284.6	284.9	285.2	286.7	289.4	292.1	294.6	297.3	300.9
135°	300.3	300.4	300.6	300.7	300.8	301.8	303.4	305.1	306.8	308.5	311.7
137.5°	315.3	315.5	315.6	315.7	315.9	316.3	317.1	317.9	318.7	319.3	322.4
140°	324.3	324.5	324.7	324.8	324.9	325.1	325.3	325.5	325.6	325.9	328.8
142.5°	333.4	333.3	333.1	333.0	332.9	332.9	333.0	333.2	333.4	333.5	336.0
145°	346.6	346.5	346.4	346.2	346.1	346.0	346.0	346.0	346.0	346.0	347.4
147.5°	357.0	357.0	357.0	356.9	356.9	356.9	357.0	357.1	357.1	357.2	357.7
150°	364.3	364.2	364.0	363.9	363.8	363.8	363.9	364.0	364.2	364.3	364.5
152.5°	371.3	371.1	370.7	370.5	370.1	370.1	370.2	370.4	370.5	370.7	370.7
155°	380.5	380.0	379.6	379.2	378.8	378.7	378.8	378.9	379.1	379.2	379.4
157.5°	387.4	387.2	386.9	386.7	386.5	386.3	386.3	386.4	386.4	386.4	386.6
160°	392.3	391.9	391.5	391.1	390.7	390.5	390.5	390.6	390.7	390.8	391.1
162.5°	396.2	395.8	395.4	394.9	394.6	394.4	394.5	394.5	394.6	394.7	395.0
165°	401.4	401.1	400.6	400.2	399.8	399.7	399.7	399.8	399.8	399.9	400.3
167.5°	405.4	404.9	404.5	404.1	403.6	403.5	403.6	403.6	403.7	403.7	404.2
170°	407.5	407.1	406.6	406.1	405.6	405.4	405.5	405.5	405.6	405.7	406.2
172.5°	409.0	408.5	408.0	407.6	407.1	406.9	407.0	407.2	407.3	407.4	407.9
175°	410.5	410.2	409.7	409.3	409.0	408.8	408.8	408.9	409.0	409.1	409.6
177.5°	411.3	411.0	410.6	410.4	410.0	409.8	409.9	410.0	410.0	410.1	410.4
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1182.8	1184.3	1185.8	1186.4	1186.2	1185.9	1185.8	1185.6
5°	1179.2	1181.3	1183.4	1184.3	1184.0	1183.8	1183.5	1183.3
7.5°	1169.4	1171.2	1173.0	1173.8	1173.5	1173.3	1173.0	1172.8
10°	1160.1	1161.9	1163.7	1164.5	1164.2	1164.0	1163.7	1163.5
12.5°	1149.1	1150.5	1151.8	1152.2	1151.6	1150.9	1150.2	1149.5
15°	1128.3	1129.8	1131.4	1131.6	1130.6	1129.5	1128.5	1127.5
17.5°	1101.7	1102.9	1104.1	1104.3	1103.7	1103.1	1102.5	1101.9
20°	1081.3	1082.1	1082.9	1083.3	1083.3	1083.3	1083.3	1083.3
22.5°	1060.4	1061.4	1062.3	1062.5	1061.9	1061.3	1060.7	1060.1
25°	1027.3	1028.3	1029.3	1029.2	1027.9	1026.6	1025.3	1024.0
27.5°	988.7	989.5	990.2	990.3	989.8	989.4	988.9	988.4
30°	962.3	962.8	963.3	963.5	963.2	962.9	962.7	962.4
32.5°	937.2	937.7	938.2	938.3	938.1	937.8	937.5	937.3
35°	896.6	897.3	898.1	898.5	898.5	898.5	898.5	898.5
37.5°	853.9	854.9	855.9	856.4	856.3	856.2	856.0	855.9
40°	825.0	826.0	827.1	827.9	828.4	828.9	829.4	829.9
42.5°	798.4	799.7	800.9	801.6	801.7	801.8	801.9	802.0
45°	755.6	757.4	759.2	760.3	760.5	760.8	761.0	761.3
47.5°	711.5	714.1	716.8	718.3	718.9	719.5	720.1	720.7
50°	682.2	685.0	687.9	689.7	690.4	691.2	692.0	692.8
52.5°	652.8	655.8	658.9	660.7	661.2	661.9	662.5	663.0
55°	606.6	609.4	612.3	614.2	615.3	616.3	617.3	618.4
57.5°	560.9	564.2	567.5	569.5	570.2	571.0	571.8	572.6
60°	529.6	533.5	537.4	539.7	540.4	541.2	542.0	542.8
62.5°	497.9	502.2	506.5	509.1	510.1	511.1	512.0	513.1
65°	450.6	454.4	458.3	460.8	461.8	462.9	463.9	464.9
67.5°	402.0	406.7	411.5	414.5	415.8	417.2	418.4	419.8
70°	368.9	373.8	378.8	382.0	383.6	385.1	386.7	388.2
72.5°	338.2	343.5	348.8	352.1	353.2	354.3	355.4	356.6
75°	291.6	296.8	302.0	305.1	306.4	307.7	309.0	310.3
77.5°	245.0	250.6	256.3	259.7	260.7	261.7	262.8	263.8
80°	217.1	222.7	228.4	231.8	232.8	233.8	234.9	235.9
82.5°	190.6	196.1	201.6	205.3	207.2	209.0	210.9	212.7
85°	154.3	160.0	165.7	169.5	171.6	173.7	175.7	177.8
87.5°	126.0	132.0	138.0	141.9	143.8	145.6	147.5	149.3
90°	112.7	119.0	125.3	129.4	131.5	133.5	135.4	137.5
92.5°	108.6	114.7	120.7	124.8	126.7	128.5	130.4	132.3
95°	101.8	107.8	113.8	117.7	119.5	121.3	123.1	124.9
97.5°	101.1	104.5	108.1	110.7	112.4	114.3	116.0	117.7
100°	118.0	113.4	108.7	107.0	108.3	109.6	110.9	112.2
102.5°	144.8	148.2	151.4	151.6	148.5	145.5	142.5	139.4
105°	165.0	170.1	175.3	178.7	180.5	182.2	184.0	185.7
107.5°	183.4	188.6	193.6	196.9	198.3	199.8	201.1	202.5
110°	194.9	199.6	204.3	207.6	209.5	211.4	213.3	215.1



TEST NUMBER: P333253-935

CATALOG NUMBER: S125DIP-S1090D365U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	206.2	210.7	215.2	218.2	219.9	221.6	223.3	225.1
115°	223.9	228.3	232.6	235.4	236.6	237.7	238.8	240.0
117.5°	240.4	244.4	248.4	251.2	252.8	254.4	256.0	257.6
120°	251.2	255.5	259.7	262.4	263.6	264.8	266.0	267.3
122.5°	261.0	265.0	269.1	271.6	272.8	274.0	275.1	276.3
125°	275.5	279.4	283.3	285.7	286.8	287.9	289.0	290.1
127.5°	288.0	291.7	295.4	297.7	298.7	299.7	300.7	301.7
130°	296.9	300.3	303.8	305.9	306.9	307.8	308.8	309.7
132.5°	304.4	308.1	311.6	313.7	314.5	315.3	316.0	316.8
135°	315.0	318.1	321.3	323.4	324.3	325.2	326.1	326.9
137.5°	325.5	328.6	331.7	333.6	334.2	334.9	335.6	336.3
140°	331.8	334.8	337.8	339.6	340.2	340.8	341.5	342.1
142.5°	338.4	340.9	343.3	344.8	345.4	346.1	346.7	347.3
145°	348.8	350.1	351.5	352.5	353.1	353.7	354.4	355.0
147.5°	358.3	358.7	359.2	359.5	359.5	359.4	359.4	359.4
150°	364.5	364.7	364.8	364.8	364.5	364.2	363.9	363.6
152.5°	370.9	371.0	371.2	371.0	370.6	370.1	369.7	369.3
155°	379.6	379.8	380.0	379.9	379.4	378.8	378.2	377.7
157.5°	386.8	387.0	387.3	387.1	386.6	386.0	385.5	385.0
160°	391.3	391.6	391.8	391.8	391.2	390.6	390.1	389.6
162.5°	395.5	395.8	396.2	396.1	395.5	394.9	394.3	393.7
165°	400.7	401.1	401.6	401.5	401.0	400.4	399.8	399.3
167.5°	404.8	405.2	405.7	405.6	405.0	404.4	403.8	403.2
170°	406.7	407.3	407.9	407.9	407.3	406.7	406.0	405.4
172.5°	408.4	408.9	409.3	409.3	408.7	408.0	407.4	406.8
175°	410.1	410.7	411.2	411.2	410.5	409.9	409.3	408.7
177.5°	410.9	411.2	411.6	411.6	411.1	410.7	410.3	409.8
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5

(END OF REPORT)