

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: P333272-930

Luminaire Tested: **S125DIP-S1090D810U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

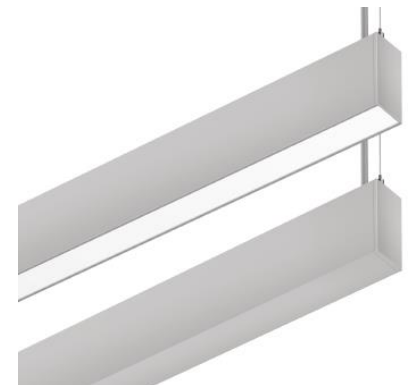
Test Information

Test Method: LM-79-08
Report Number: P333272-930
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-S1090D810U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5764.9 lumens
Efficiency: N/A
Efficacy: 106.0 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: General Diffuse

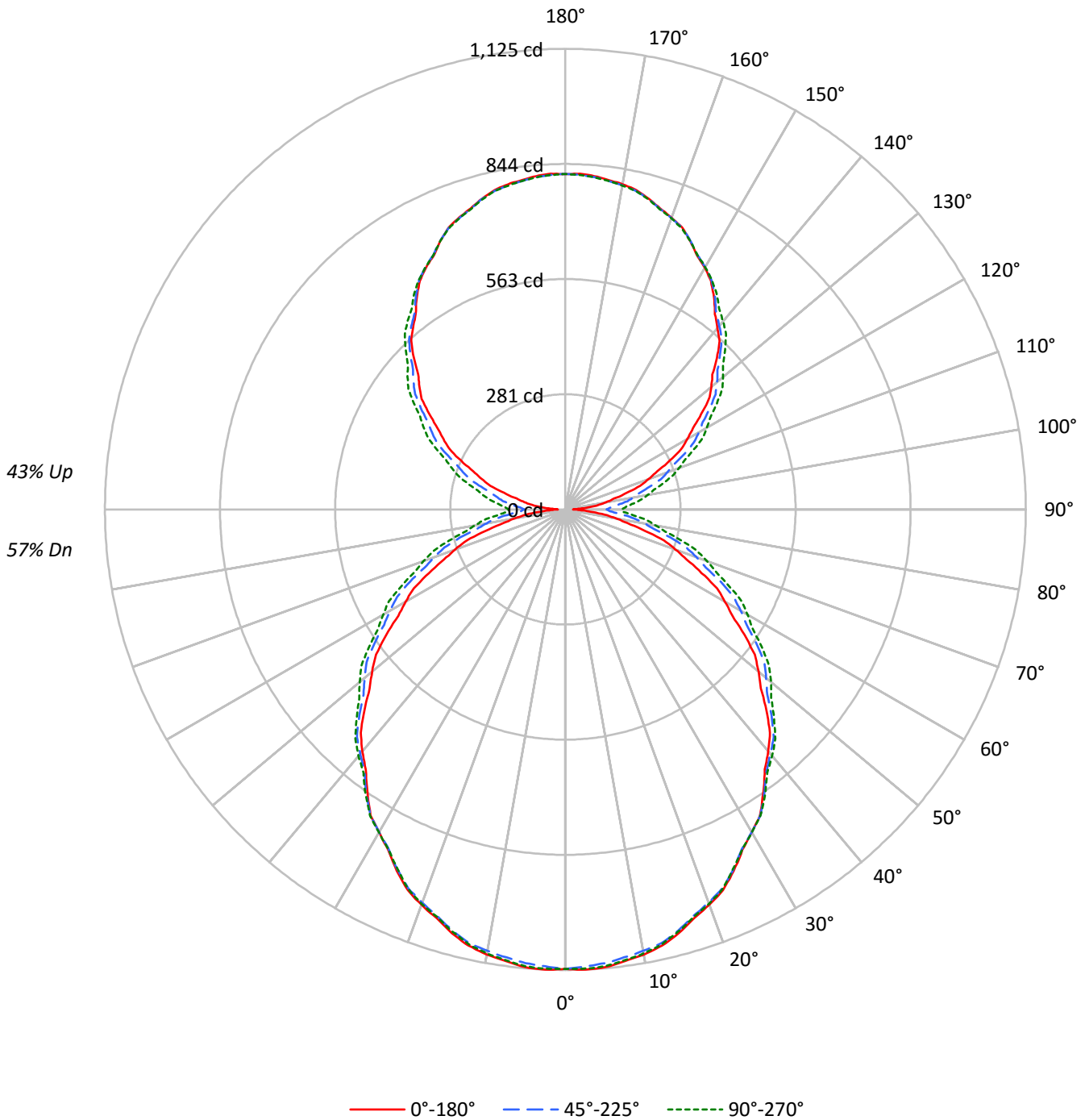
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	98	94	89	86	91	87	84	80	75	72	70	64	62	60	54	52	51	46
2	89	81	75	69	83	76	70	65	65	61	57	56	52	50	47	44	42	38
3	81	71	63	57	75	66	60	54	57	52	48	49	45	42	41	38	36	32
4	74	63	55	48	69	59	51	46	51	45	40	43	39	35	37	33	30	27
5	68	56	48	41	63	52	45	39	45	39	35	39	34	31	33	29	26	23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	27	30	26	23	20
7	58	45	37	31	54	42	35	30	37	31	27	32	27	24	27	23	21	18
8	54	41	33	28	50	39	31	26	34	28	24	29	24	21	25	21	18	16
9	50	38	30	25	47	35	28	23	31	25	21	27	22	19	23	19	17	14
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7251	7251	7251
5°	7265	7116	7139
10°	7213	6989	6979
15°	7128	6837	6775
20°	7012	6650	6572
25°	6874	6448	6320
30°	6707	6226	6092
35°	6552	6023	5884
40°	6393	5809	5674
45°	6214	5626	5487
50°	6043	5427	5322
55°	5837	5239	5128
60°	5611	5024	4931
65°	5377	4800	4709
70°	5112	4494	4480
75°	4688	4200	4198
80°	4134	3842	3893
85°	3621	3600	3798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	1.8
10°-20°	301.3	5.2
20°-30°	448.2	7.8
30°-40°	530.9	9.2
40°-50°	548.9	9.5
50°-60°	505.6	8.8
60°-70°	408.7	7.1
70°-80°	273.7	4.7
80°-90°	143.7	2.5
90°-100°	134.5	2.3
100°-110°	220.8	3.8
110°-120°	313.8	5.4
120°-130°	383.5	6.7
130°-140°	414.5	7.2
140°-150°	398.6	6.9
150°-160°	333.2	5.8
160°-170°	221.5	3.8
170°-180°	77.5	1.3
0°-30°	855.7	14.8
0°-40°	1386.5	24.1
0°-60°	2441.0	42.3
0°-90°	3267.1	56.7
90°-120°	669.1	11.6
90°-150°	1865.7	32.4
90°-180°	2498.0	43.3
0°-180°	5764.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1123	1120	1113	1121	1120	106
15°	1072	1073	1065	1071	1068	302
25°	974	977	971	975	970	448
35°	843	850	848	851	851	527
45°	694	706	712	719	721	536
55°	534	551	569	581	586	477
65°	368	393	419	435	440	365
75°	202	232	266	287	294	215
85°	60	97	135	159	168	64
90°	18	59	100	128	139	14
95°	56	86	130	157	167	55
105°	155	177	213	238	248	166
115°	281	293	322	340	347	278
125°	405	409	431	446	452	363
135°	524	527	535	548	552	404
145°	633	634	636	642	644	395
155°	723	723	724	726	723	333
165°	786	785	786	788	784	222
175°	817	815	815	818	814	78
180°	819	819	819	819	819	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7
2.5°	1125.3	1124.9	1124.5	1124.1	1123.7	1122.8	1121.4	1120.1	1118.8	1117.4	1118.8
5°	1122.7	1122.2	1121.7	1121.2	1120.7	1119.6	1117.9	1116.1	1114.4	1112.7	1114.7
7.5°	1112.7	1112.6	1112.3	1112.1	1112.0	1111.0	1109.2	1107.4	1105.7	1103.9	1105.6
10°	1103.9	1103.9	1103.9	1103.9	1103.9	1102.9	1101.0	1099.0	1097.1	1095.1	1096.8
12.5°	1091.6	1091.8	1092.0	1092.2	1092.4	1091.7	1090.1	1088.6	1087.0	1085.4	1086.8
15°	1072.0	1072.3	1072.5	1072.8	1073.0	1072.3	1070.6	1068.9	1067.1	1065.4	1066.9
17.5°	1046.4	1046.9	1047.4	1047.9	1048.4	1047.8	1046.1	1044.4	1042.7	1041.0	1042.1
20°	1028.0	1028.5	1029.0	1029.5	1030.0	1029.3	1027.6	1025.9	1024.2	1022.5	1023.2
22.5°	1006.8	1007.7	1008.6	1009.5	1010.4	1009.8	1008.0	1006.1	1004.1	1002.2	1003.1
25°	974.0	974.8	975.5	976.2	977.0	976.6	975.2	973.7	972.2	970.8	971.8
27.5°	937.5	938.6	939.6	940.8	941.8	941.5	939.9	938.2	936.5	934.9	935.6
30°	910.2	911.7	913.1	914.6	916.1	916.1	914.6	913.1	911.7	910.2	910.7
32.5°	885.6	886.8	888.1	889.4	890.6	890.7	889.7	888.6	887.5	886.5	887.0
35°	843.1	844.8	846.5	848.2	849.9	850.4	849.7	849.0	848.2	847.5	848.2
37.5°	800.6	802.2	803.7	805.3	806.8	807.6	807.3	807.1	806.8	806.6	807.6
40°	771.5	773.5	775.4	777.4	779.3	780.2	780.0	779.8	779.5	779.3	780.2
42.5°	739.8	742.4	744.9	747.5	750.0	751.5	752.1	752.6	753.2	753.7	754.9
45°	694.5	697.2	699.9	702.5	705.2	707.2	708.4	709.6	710.9	712.1	713.8
47.5°	648.1	650.5	653.1	655.5	658.0	660.3	662.4	664.6	666.7	668.7	671.2
50°	616.4	619.1	621.7	624.4	627.1	629.8	632.5	635.2	637.9	640.6	643.3
52.5°	582.9	586.2	589.5	592.7	596.0	599.2	602.6	605.8	609.1	612.4	615.3
55°	533.8	537.7	541.6	545.5	549.4	553.3	557.3	561.2	565.1	569.0	571.7
57.5°	483.6	488.3	493.0	497.7	502.4	507.0	511.5	516.0	520.5	525.0	528.1
60°	450.1	455.0	459.9	464.8	469.7	474.6	479.5	484.4	489.3	494.2	497.8
62.5°	417.6	422.5	427.4	432.3	437.2	442.2	447.5	452.8	458.1	463.3	467.4
65°	367.6	373.2	378.9	384.5	390.1	395.8	401.7	407.6	413.4	419.3	423.0
67.5°	320.5	326.0	331.3	336.8	342.2	347.9	353.9	359.9	365.8	371.8	376.3
70°	286.2	291.8	297.4	303.0	308.7	314.6	321.0	327.3	333.7	340.1	344.7
72.5°	252.7	258.5	264.3	270.2	276.0	282.3	289.3	296.3	303.2	310.1	315.2
75°	202.5	208.9	215.2	221.6	228.0	235.1	242.9	250.7	258.5	266.4	271.3
77.5°	154.3	161.7	169.0	176.3	183.7	191.1	198.6	206.2	213.7	221.2	226.6
80°	124.3	131.7	139.0	146.3	153.7	161.5	169.8	178.1	186.5	194.8	200.2
82.5°	97.1	104.8	112.5	120.3	128.0	136.1	144.6	153.1	161.7	170.2	175.4
85°	60.5	68.6	76.6	84.7	92.8	101.1	109.7	118.2	126.8	135.3	140.7
87.5°	34.5	42.6	50.5	58.6	66.7	74.9	83.5	92.0	100.5	109.0	114.8
90°	18.3	27.2	36.2	45.2	54.1	63.2	72.6	81.9	91.2	100.4	106.8
92.5°	31.3	39.3	47.4	55.4	63.4	72.3	82.0	91.7	101.5	111.2	117.6
95°	55.8	62.4	69.1	75.7	82.3	90.5	100.2	110.0	119.7	129.5	135.8
97.5°	81.9	87.6	93.5	99.4	105.2	113.1	123.1	133.1	143.0	153.0	159.1
100°	101.3	106.5	111.6	116.8	121.9	129.3	139.0	148.6	158.3	168.0	174.4
102.5°	122.4	127.8	133.1	138.4	143.7	150.6	159.1	167.7	176.3	184.8	191.2
105°	155.2	159.9	164.5	169.1	173.7	180.2	188.3	196.6	204.7	212.9	218.7
107.5°	191.7	195.8	199.7	203.8	207.8	213.7	221.4	229.1	236.8	244.5	249.7
110°	216.8	220.5	224.1	227.7	231.4	236.8	244.1	251.4	258.7	266.0	271.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	243.4	246.1	248.7	251.5	254.2	259.2	266.4	273.5	280.7	287.9	292.5
115°	281.4	283.6	285.9	288.2	290.5	295.0	301.6	308.3	314.9	321.6	325.8
117.5°	319.5	320.9	322.3	323.7	325.1	328.9	335.2	341.4	347.7	354.0	358.2
120°	344.1	345.4	346.9	348.4	349.8	353.4	359.1	364.9	370.7	376.5	380.7
122.5°	369.7	370.2	370.9	371.5	372.0	375.3	381.1	386.9	392.6	398.4	402.3
125°	405.4	406.0	406.6	407.2	407.8	410.7	415.7	420.7	425.7	430.8	434.4
127.5°	442.5	442.8	443.0	443.3	443.5	445.7	449.9	454.0	458.3	462.4	465.9
130°	465.5	465.9	466.4	466.9	467.3	469.4	473.1	476.9	480.5	484.3	487.5
132.5°	487.5	488.7	489.8	490.9	492.0	493.9	496.4	499.0	501.7	504.2	507.5
135°	523.7	524.3	524.9	525.5	526.1	527.3	529.2	531.1	532.9	534.8	537.9
137.5°	557.7	558.2	558.9	559.5	560.2	561.0	562.1	563.3	564.4	565.6	568.7
140°	578.7	579.4	580.1	580.8	581.6	582.2	582.9	583.6	584.2	584.9	587.9
142.5°	600.6	601.0	601.4	601.9	602.3	602.8	603.3	603.9	604.5	605.0	607.6
145°	632.9	633.2	633.6	633.9	634.1	634.5	635.0	635.4	635.9	636.3	637.5
147.5°	661.6	661.9	662.3	662.6	662.8	663.2	663.6	663.9	664.2	664.6	665.3
150°	681.5	681.3	681.3	681.1	680.9	681.2	681.8	682.3	682.9	683.5	683.5
152.5°	697.8	698.1	698.2	698.5	698.6	698.9	699.0	699.3	699.5	699.8	700.1
155°	722.9	722.9	722.9	722.9	722.9	723.0	723.2	723.3	723.4	723.6	724.1
157.5°	745.4	745.1	744.8	744.4	744.1	744.0	744.2	744.4	744.4	744.6	745.2
160°	758.6	758.2	757.8	757.4	756.9	756.8	756.9	757.1	757.2	757.4	758.0
162.5°	770.4	770.1	769.7	769.5	769.2	769.0	769.0	769.1	769.1	769.2	769.8
165°	786.1	785.8	785.5	785.2	785.0	784.9	785.0	785.1	785.3	785.5	786.0
167.5°	799.3	798.7	798.2	797.6	797.0	796.8	796.8	796.8	796.8	796.8	797.6
170°	806.5	805.9	805.4	804.8	804.2	803.9	803.9	803.9	803.9	803.9	804.8
172.5°	811.5	811.0	810.4	809.8	809.3	809.0	809.0	809.0	809.0	809.0	809.8
175°	817.3	816.8	816.2	815.6	815.1	814.7	814.7	814.7	814.7	814.7	815.6
177.5°	820.3	819.8	819.4	818.9	818.4	818.2	818.1	817.9	817.8	817.7	818.4
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7
2.5°	1120.1	1121.4	1122.8	1123.4	1123.2	1123.0	1122.8	1122.7
5°	1116.6	1118.6	1120.5	1121.4	1121.2	1121.0	1120.7	1120.5
7.5°	1107.3	1109.1	1110.8	1111.5	1111.3	1111.0	1110.8	1110.5
10°	1098.5	1100.2	1102.0	1102.7	1102.4	1102.2	1102.0	1101.7
12.5°	1088.1	1089.4	1090.7	1091.0	1090.5	1089.8	1089.2	1088.5
15°	1068.4	1069.8	1071.3	1071.5	1070.6	1069.6	1068.6	1067.6
17.5°	1043.3	1044.3	1045.5	1045.7	1045.1	1044.6	1044.0	1043.4
20°	1023.9	1024.7	1025.4	1025.8	1025.8	1025.8	1025.8	1025.8
22.5°	1004.1	1005.0	1005.9	1006.1	1005.5	1004.9	1004.4	1003.8
25°	972.7	973.7	974.7	974.5	973.3	972.1	970.9	969.6
27.5°	936.2	936.9	937.6	937.8	937.3	936.9	936.4	936.0
30°	911.2	911.7	912.2	912.3	912.1	911.8	911.6	911.3
32.5°	887.5	887.9	888.4	888.5	888.3	888.0	887.8	887.5
35°	849.0	849.7	850.4	850.8	850.8	850.8	850.8	850.8
37.5°	808.5	809.5	810.5	810.9	810.8	810.7	810.6	810.5
40°	781.2	782.2	783.2	783.9	784.4	784.9	785.4	785.9
42.5°	756.0	757.2	758.4	759.0	759.1	759.2	759.4	759.5
45°	715.5	717.2	718.9	719.9	720.2	720.4	720.6	720.9
47.5°	673.8	676.2	678.7	680.2	680.8	681.3	681.8	682.4
50°	646.0	648.7	651.3	653.1	653.8	654.5	655.3	656.0
52.5°	618.2	621.0	623.9	625.7	626.1	626.7	627.3	627.8
55°	574.4	577.1	579.8	581.6	582.6	583.6	584.6	585.5
57.5°	531.2	534.3	537.4	539.2	540.0	540.7	541.4	542.2
60°	501.5	505.2	508.8	511.0	511.8	512.5	513.2	514.0
62.5°	471.5	475.6	479.6	482.1	483.1	484.0	484.9	485.8
65°	426.6	430.3	434.0	436.3	437.3	438.3	439.3	440.3
67.5°	380.7	385.1	389.6	392.5	393.7	395.0	396.2	397.5
70°	349.4	354.0	358.7	361.7	363.2	364.7	366.2	367.6
72.5°	320.2	325.3	330.3	333.4	334.4	335.5	336.6	337.7
75°	276.1	281.0	285.9	288.9	290.2	291.4	292.6	293.8
77.5°	232.0	237.3	242.7	245.9	246.9	247.9	248.8	249.8
80°	205.5	210.9	216.3	219.5	220.5	221.4	222.4	223.4
82.5°	180.5	185.7	190.9	194.4	196.2	197.9	199.7	201.4
85°	146.1	151.5	156.9	160.5	162.5	164.4	166.4	168.4
87.5°	120.6	126.3	132.1	135.9	137.7	139.5	141.3	143.1
90°	113.1	119.4	125.8	130.0	132.2	134.3	136.4	138.6
92.5°	123.9	130.3	136.6	140.9	142.9	144.9	146.9	149.0
95°	142.2	148.5	154.9	159.1	161.1	163.1	165.1	167.1
97.5°	165.2	171.2	177.3	181.2	183.0	184.9	186.7	188.6
100°	180.8	187.2	193.6	197.7	199.4	201.2	202.9	204.7
102.5°	197.5	203.8	210.2	214.3	216.1	218.0	219.9	221.8
105°	224.4	230.2	235.9	239.8	242.0	244.1	246.2	248.3
107.5°	255.0	260.2	265.5	268.9	270.4	271.9	273.4	274.8
110°	276.1	281.1	286.3	289.5	291.1	292.7	294.2	295.8



TEST NUMBER: P333272-930

CATALOG NUMBER: S125DIP-S1090D810U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.2	301.9	306.6	309.6	311.0	312.5	314.0	315.4
115°	330.0	334.3	338.6	341.4	342.7	344.0	345.4	346.7
117.5°	362.6	366.8	371.0	373.7	374.9	375.9	377.1	378.1
120°	384.8	389.0	393.1	395.7	396.6	397.5	398.4	399.3
122.5°	406.2	410.0	413.8	416.3	417.3	418.3	419.3	420.4
125°	438.1	441.6	445.3	447.7	448.7	449.8	450.9	452.0
127.5°	469.4	472.9	476.4	478.7	479.8	480.9	482.1	483.2
130°	490.8	494.2	497.4	499.5	500.4	501.4	502.3	503.3
132.5°	510.8	514.0	517.4	519.3	519.9	520.6	521.2	521.8
135°	541.1	544.3	547.5	549.4	550.1	550.7	551.4	552.0
137.5°	571.7	574.8	577.8	579.5	579.8	580.0	580.3	580.6
140°	590.8	593.8	596.8	598.4	598.7	598.9	599.2	599.5
142.5°	610.0	612.5	615.0	616.3	616.6	616.9	617.1	617.4
145°	638.7	639.9	641.2	642.0	642.6	643.1	643.7	644.2
147.5°	666.0	666.8	667.5	667.6	667.1	666.5	666.0	665.5
150°	683.5	683.5	683.5	683.4	683.4	683.3	683.3	683.2
152.5°	700.4	700.7	701.1	701.1	700.6	700.1	699.7	699.2
155°	724.7	725.3	725.9	725.8	725.0	724.4	723.7	722.9
157.5°	745.8	746.3	746.9	746.7	745.8	744.9	743.9	743.0
160°	758.6	759.0	759.6	759.6	758.9	758.1	757.4	756.8
162.5°	770.5	771.2	771.8	771.8	770.9	770.1	769.3	768.5
165°	786.6	787.2	787.7	787.6	786.7	785.9	785.0	784.2
167.5°	798.5	799.3	800.2	800.1	799.3	798.4	797.5	796.6
170°	805.6	806.5	807.3	807.2	806.2	805.3	804.3	803.3
172.5°	810.7	811.5	812.4	812.4	811.5	810.7	809.8	808.9
175°	816.4	817.3	818.2	818.1	817.1	816.1	815.1	814.2
177.5°	819.0	819.7	820.4	820.4	819.5	818.8	818.0	817.2
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2

(END OF REPORT)