

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: P333271-930

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333271-930
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-S1090D810U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

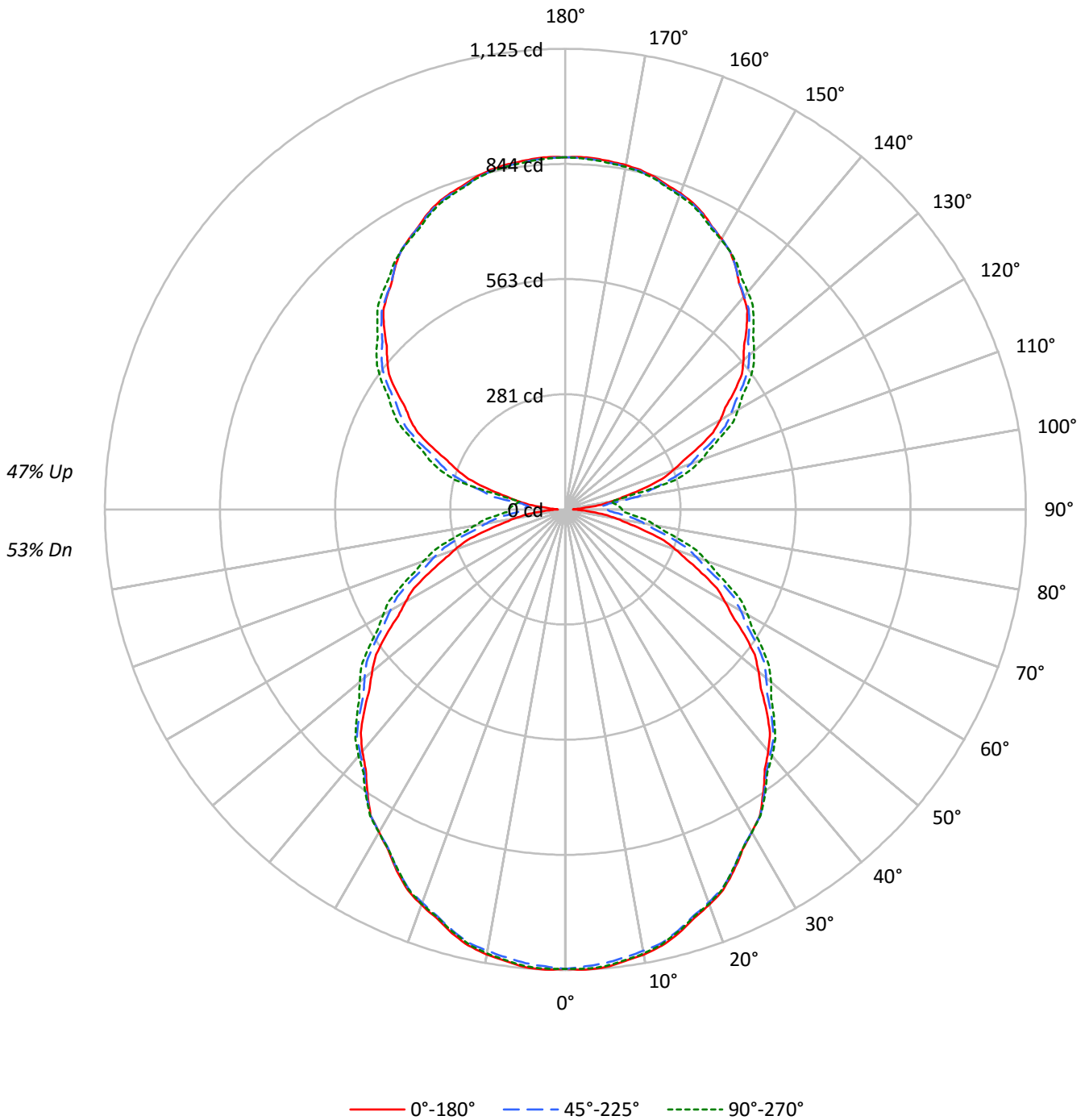
Lumens per Lamp: N/A
Luminaire Lumens: 6120.3 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

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



TEST NUMBER: P333271-930
CATALOG NUMBER: S125DIP-S1090D810U930-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333271-930

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

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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	98	93	89	85	90	86	83	79	74	71	68	62	60	58	51	50	48	43
2	89	81	74	69	82	75	69	64	64	60	56	54	51	48	45	42	40	36
3	81	71	63	57	74	66	59	53	56	51	47	47	43	40	39	36	34	30
4	74	62	54	48	68	58	51	45	50	44	40	42	38	34	35	32	29	25
5	68	56	47	41	62	52	44	39	44	39	34	38	33	30	31	28	25	22
6	62	50	41	35	57	46	39	33	40	34	30	34	29	26	28	25	22	19
7	58	45	37	31	53	42	35	29	36	30	26	31	26	23	26	22	20	17
8	53	41	33	27	49	38	31	26	33	27	23	28	24	20	24	20	17	15
9	50	37	30	24	46	35	28	23	30	25	21	26	21	18	22	18	16	14
10	46	34	27	22	43	32	25	21	28	22	19	24	20	16	20	17	14	12

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



TEST NUMBER: P333271-930

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	1.7
10°-20°	301.3	4.9
20°-30°	448.2	7.3
30°-40°	530.9	8.7
40°-50°	548.9	9.0
50°-60°	505.6	8.3
60°-70°	408.7	6.7
70°-80°	273.7	4.5
80°-90°	143.7	2.3
90°-100°	110.9	1.8
100°-110°	251.4	4.1
110°-120°	388.7	6.4
120°-130°	470.7	7.7
130°-140°	492.0	8.0
140°-150°	454.7	7.4
150°-160°	366.2	6.0
160°-170°	236.8	3.9
170°-180°	81.7	1.3
0°-30°	855.7	14.0
0°-40°	1386.5	22.7
0°-60°	2441.0	39.9
0°-90°	3267.1	53.4
90°-120°	751.0	12.3
90°-150°	2168.4	35.4
90°-180°	2853.0	46.6
0°-180°	6120.3	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	13
95°	51	77	91	117	126	58
105°	197	218	250	272	280	209
115°	359	370	399	415	419	355
125°	505	509	530	545	549	451
135°	626	629	636	648	650	483
145°	725	725	725	731	732	453
155°	797	793	794	796	791	367
165°	841	837	838	841	836	237
175°	860	857	857	861	856	82
180°	860	860	860	860	860	



TEST NUMBER: P333271-930

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

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°	25.7	32.1	38.6	45.0	51.4	59.4	68.7	78.2	87.6	96.9	103.1
95°	50.6	56.6	62.5	68.5	74.4	78.8	81.8	84.7	87.6	90.6	96.6
97.5°	88.9	95.4	101.8	108.4	114.8	116.8	114.1	111.5	108.8	106.2	107.4
100°	118.6	124.2	129.7	135.3	140.8	147.8	156.2	164.6	173.0	181.4	165.4
102.5°	148.8	154.1	159.4	164.7	170.0	176.6	184.6	192.5	200.5	208.5	209.5
105°	197.4	201.9	206.4	210.8	215.3	221.2	228.5	235.9	243.2	250.5	255.4
107.5°	247.9	251.1	254.5	257.8	261.1	266.4	273.8	281.1	288.5	295.8	300.6
110°	280.6	283.6	286.5	289.4	292.4	297.3	304.5	311.6	318.8	325.9	330.1



TEST NUMBER: P333271-930

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	312.3	315.0	317.6	320.2	322.9	327.8	334.5	341.4	348.2	355.0	358.9
115°	358.6	361.0	363.4	365.8	368.3	372.7	379.2	385.7	392.2	398.7	402.5
117.5°	406.6	407.6	408.7	409.9	410.9	414.7	421.3	427.9	434.5	441.0	444.4
120°	437.2	437.7	438.3	439.0	439.5	442.9	448.9	454.9	461.0	467.1	470.9
122.5°	463.3	464.2	465.0	465.9	466.8	470.1	475.7	481.4	487.0	492.6	496.3
125°	504.9	505.6	506.4	507.2	507.9	510.7	515.6	520.5	525.4	530.3	533.6
127.5°	543.7	544.2	544.6	545.1	545.6	547.8	551.7	555.6	559.5	563.5	566.8
130°	568.2	568.7	569.2	569.6	570.1	572.1	575.7	579.2	582.8	586.4	589.4
132.5°	591.8	592.6	593.4	594.1	594.9	596.5	598.8	601.1	603.5	605.8	609.1
135°	626.4	627.0	627.6	628.3	628.8	629.8	631.3	632.7	634.1	635.6	638.5
137.5°	658.2	658.8	659.3	659.8	660.4	661.0	661.5	662.1	662.7	663.2	666.2
140°	678.2	678.5	678.8	679.1	679.4	679.6	679.6	679.8	679.9	680.0	683.0
142.5°	697.1	697.1	697.1	697.0	697.0	697.1	697.3	697.6	697.9	698.1	700.4
145°	724.8	724.8	724.9	724.9	725.0	725.0	725.0	725.0	725.0	725.0	726.4
147.5°	747.9	747.9	747.8	747.7	747.7	747.7	747.9	748.0	748.3	748.4	749.0
150°	763.2	763.0	762.6	762.4	762.1	762.1	762.4	762.6	763.0	763.2	763.5
152.5°	778.0	777.4	776.7	776.2	775.5	775.3	775.6	775.9	776.2	776.5	776.7
155°	797.0	796.1	795.3	794.4	793.6	793.3	793.6	793.9	794.2	794.4	794.8
157.5°	811.6	811.1	810.7	810.2	809.6	809.3	809.4	809.4	809.4	809.5	809.9
160°	821.9	821.0	820.2	819.3	818.5	818.2	818.2	818.4	818.6	818.6	819.2
162.5°	830.1	829.2	828.3	827.4	826.6	826.3	826.4	826.6	826.7	826.9	827.6
165°	841.0	840.2	839.3	838.5	837.6	837.2	837.4	837.6	837.6	837.8	838.7
167.5°	849.1	848.3	847.4	846.5	845.6	845.3	845.4	845.5	845.7	845.9	846.9
170°	853.8	852.7	851.7	850.8	849.8	849.4	849.5	849.6	849.8	849.9	851.1
172.5°	856.8	855.8	854.8	853.9	852.8	852.5	852.7	853.0	853.2	853.5	854.5
175°	860.1	859.2	858.4	857.6	856.7	856.4	856.5	856.6	856.8	857.0	858.1
177.5°	861.7	861.0	860.3	859.7	858.9	858.7	858.8	858.8	859.0	859.1	859.9
180°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1



TEST NUMBER: P333271-930

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

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°	109.2	115.4	121.5	125.5	127.4	129.3	131.3	133.1
95°	102.7	108.8	114.9	118.8	120.5	122.2	123.9	125.6
97.5°	108.5	109.7	110.8	112.2	113.8	115.5	117.2	118.8
100°	149.4	133.5	117.5	110.0	110.9	111.8	112.7	113.6
102.5°	210.3	211.3	212.2	208.6	200.5	192.3	184.1	175.9
105°	260.3	265.2	270.1	273.4	274.9	276.5	278.0	279.6
107.5°	305.5	310.4	315.3	318.2	319.3	320.4	321.5	322.6
110°	334.4	338.6	342.8	345.8	347.6	349.5	351.4	353.3



TEST NUMBER: P333271-930

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	362.8	366.7	370.6	373.4	374.9	376.4	377.9	379.4
115°	406.3	410.2	414.0	416.3	416.9	417.5	418.2	418.7
117.5°	447.8	451.3	454.7	457.1	458.4	459.6	460.9	462.2
120°	474.8	478.7	482.6	484.9	485.6	486.4	487.1	487.9
122.5°	499.9	503.6	507.3	509.5	510.1	510.8	511.4	512.1
125°	537.0	540.3	543.6	545.8	546.6	547.3	548.1	548.9
127.5°	570.1	573.4	576.7	578.5	578.9	579.3	579.7	580.0
130°	592.3	595.3	598.3	600.1	600.6	601.1	601.6	602.2
132.5°	612.5	615.8	619.1	620.9	621.3	621.6	621.9	622.2
135°	641.4	644.2	647.2	648.8	649.1	649.5	649.9	650.3
137.5°	669.1	672.1	675.0	676.6	676.9	677.1	677.4	677.6
140°	685.9	688.9	691.9	693.4	693.6	693.7	693.8	693.9
142.5°	702.8	705.2	707.5	708.7	708.9	709.0	709.1	709.3
145°	727.7	729.0	730.4	731.2	731.3	731.4	731.6	731.6
147.5°	749.5	750.1	750.6	750.6	750.1	749.5	748.9	748.4
150°	763.8	764.1	764.3	764.0	763.1	762.2	761.4	760.5
152.5°	777.1	777.3	777.6	777.2	776.3	775.3	774.4	773.4
155°	795.3	795.7	796.1	795.8	794.7	793.5	792.4	791.2
157.5°	810.4	810.9	811.3	811.0	809.8	808.7	807.6	806.4
160°	819.8	820.4	820.9	820.7	819.5	818.4	817.3	816.1
162.5°	828.4	829.2	830.0	829.8	828.5	827.3	826.1	824.8
165°	839.5	840.3	841.2	841.1	839.9	838.8	837.6	836.5
167.5°	847.9	848.9	849.9	849.8	848.5	847.3	846.0	844.7
170°	852.2	853.3	854.4	854.4	853.1	851.8	850.5	849.3
172.5°	855.5	856.6	857.6	857.5	856.1	854.9	853.6	852.3
175°	859.2	860.3	861.4	861.4	860.1	858.8	857.6	856.3
177.5°	860.7	861.4	862.3	862.3	861.3	860.4	859.5	858.6
180°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1

(END OF REPORT)