

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: P331315-927

Luminaire Tested: **SA2XXDIP-C485D925U927-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331315-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C485D925U927-4F0-1E-UDD-D
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 485 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 925 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

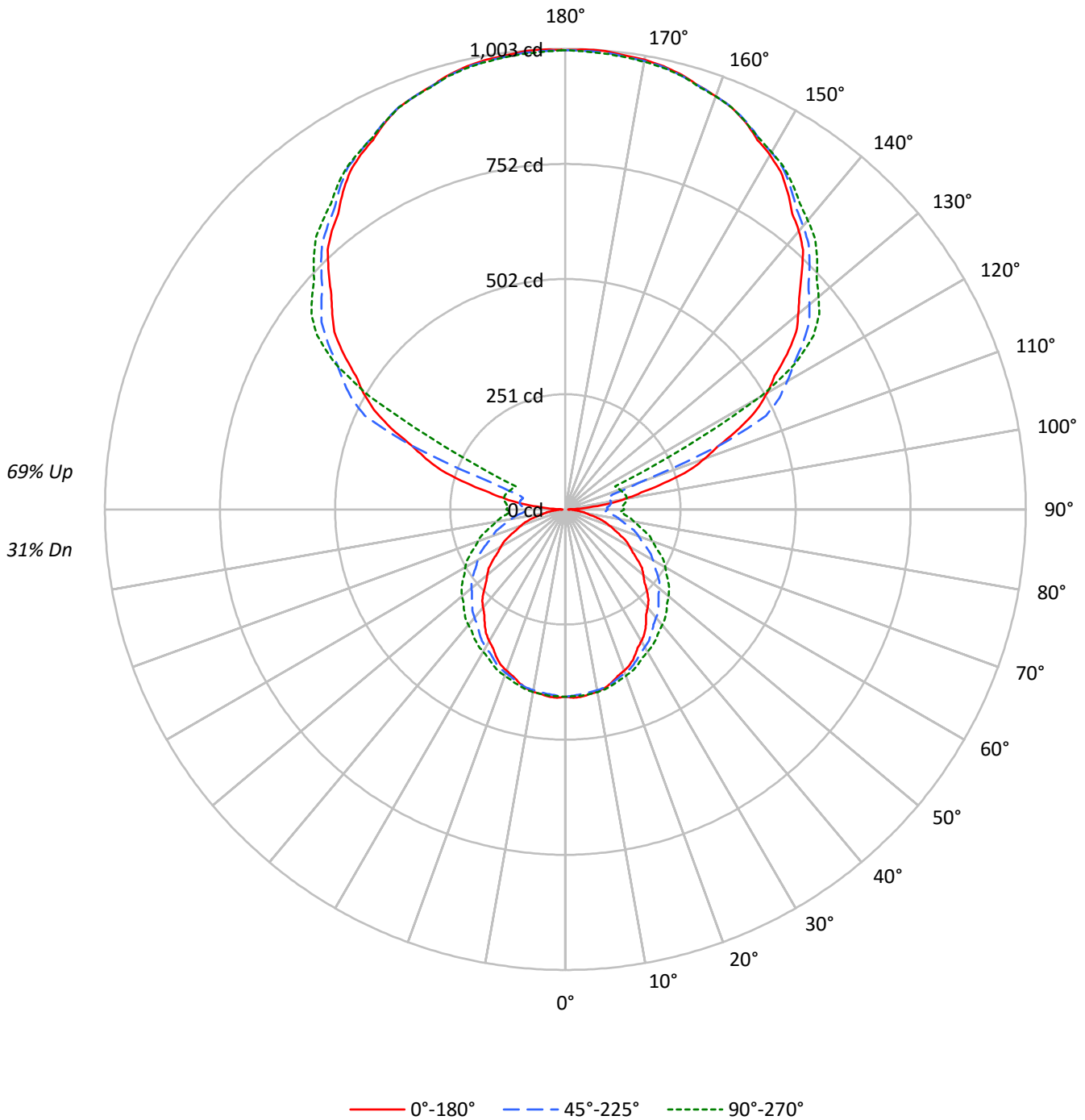
Lumens per Lamp: N/A
Luminaire Lumens: 4490.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	50	30	10	0	
RCR																						
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31	31	31	20	
1	93	88	84	80	83	79	76	72	62	60	58	47	45	44	33	32	31	24	24	24	0	
2	84	76	70	65	75	68	63	59	54	50	47	41	38	36	28	26	25	19	19	19	0	
3	76	67	59	53	68	60	54	48	47	43	39	35	32	30	25	23	21	16	16	16	0	
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	22	20	18	13	13	13	0	
5	64	52	44	38	57	47	40	35	37	32	28	28	24	22	19	17	15	12	12	12	0	
6	58	46	38	33	52	42	35	30	33	28	24	25	21	19	18	15	13	10	10	10	0	
7	54	42	34	28	48	38	31	26	30	25	21	23	19	16	16	14	12	9	9	9	0	
8	50	38	30	25	45	34	27	23	27	22	19	21	17	14	15	12	10	8	8	8	0	
9	46	34	27	22	41	31	25	20	25	20	16	19	15	13	13	11	9	7	7	7	0	
10	43	31	24	19	39	28	22	18	23	18	15	17	14	12	12	10	8	6	6	6	0	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6591	6591	6591
5°	6623	6345	6320
10°	6581	6158	6088
15°	6491	5959	5843
20°	6376	5745	5607
25°	6263	5540	5394
30°	6103	5330	5178
35°	5943	5127	5028
40°	5773	4954	4876
45°	5612	4799	4746
50°	5439	4657	4618
55°	5257	4507	4488
60°	5033	4351	4351
65°	4802	4169	4189
70°	4546	3970	4013
75°	4214	3778	3850
80°	3692	3579	3685
85°	3187	3410	3559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.9
10°-20°	110.9	2.5
20°-30°	168.1	3.7
30°-40°	204.7	4.6
40°-50°	220.3	4.9
50°-60°	213.9	4.8
60°-70°	186.8	4.2
70°-80°	143.8	3.2
80°-90°	99.0	2.2
90°-100°	99.8	2.2
100°-110°	170.9	3.8
110°-120°	359.0	8.0
120°-130°	557.6	12.4
130°-140°	581.5	13.0
140°-150°	534.8	11.9
150°-160°	428.9	9.6
160°-170°	276.4	6.2
170°-180°	95.1	2.1
0°-30°	317.7	7.1
0°-40°	522.4	11.6
0°-60°	956.6	21.3
0°-90°	1386.1	30.9
90°-120°	629.7	14.0
90°-150°	2303.5	51.3
90°-180°	3104.0	69.1
0°-180°	4490.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	409	408	404	407	407	39
15°	390	392	392	397	396	110
25°	355	359	364	371	373	163
35°	306	316	327	340	344	191
45°	251	267	288	305	312	194
55°	192	214	244	265	273	172
65°	131	161	195	219	227	130
75°	73	106	144	168	177	77
85°	21	58	96	120	129	23
90°	7	49	92	119	128	6
95°	52	58	96	121	129	61
105°	223	250	95	123	133	238
115°	418	439	482	180	119	412
125°	589	600	631	652	660	526
135°	728	740	752	771	775	563
145°	844	844	856	864	864	528
155°	930	924	932	936	930	428
165°	980	976	978	982	978	277
175°	1002	997	998	1003	996	95
180°	1000	1000	1000	1000	1000	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	408.2	408.2	408.2	408.2	408.2	408.2	408.2	408.2	408.2	408.2	408.2
2.5°	410.6	410.3	410.0	409.6	409.3	408.8	408.1	407.3	406.6	405.8	406.4
5°	409.4	409.0	408.6	408.2	407.8	407.3	406.5	405.7	404.9	404.1	404.9
7.5°	405.8	405.4	405.2	405.0	404.7	404.3	403.6	403.1	402.4	401.8	402.7
10°	402.9	402.7	402.3	402.1	401.9	401.6	401.2	400.8	400.4	400.0	401.0
12.5°	398.2	398.2	398.3	398.3	398.4	398.2	398.0	397.7	397.4	397.1	398.2
15°	390.5	390.7	391.0	391.3	391.5	391.7	391.7	391.7	391.7	391.7	392.8
17.5°	380.6	381.1	381.7	382.2	382.8	383.3	383.7	384.0	384.5	384.9	386.1
20°	373.9	374.5	375.3	375.9	376.5	377.2	377.6	378.2	378.7	379.2	380.6
22.5°	366.8	367.6	368.4	369.1	369.9	370.6	371.4	372.1	372.8	373.6	375.0
25°	355.0	355.9	356.8	357.7	358.6	359.7	360.9	362.1	363.3	364.4	366.0
27.5°	340.8	342.3	343.8	345.3	346.7	348.2	349.6	351.0	352.4	353.8	355.8
30°	331.3	333.0	334.7	336.4	338.2	339.8	341.6	343.3	345.0	346.7	348.8
32.5°	320.9	322.8	324.7	326.7	328.6	330.6	332.6	334.6	336.6	338.7	341.0
35°	305.9	308.1	310.4	312.6	314.8	317.2	319.6	322.2	324.6	327.2	330.0
37.5°	289.5	292.2	294.7	297.3	299.8	302.8	306.0	309.2	312.4	315.7	318.9
40°	278.7	281.5	284.5	287.3	290.3	293.4	297.0	300.6	304.1	307.7	311.1
42.5°	268.2	271.2	274.0	276.9	279.8	283.3	287.4	291.4	295.6	299.6	303.3
45°	250.9	254.4	257.9	261.5	265.1	269.1	273.7	278.3	283.0	287.6	291.6
47.5°	233.7	237.6	241.5	245.3	249.1	253.8	259.2	264.6	270.0	275.4	279.6
50°	221.9	225.9	230.0	234.1	238.1	243.1	249.1	255.0	260.9	266.8	271.3
52.5°	210.5	214.8	219.0	223.4	227.7	232.9	239.2	245.3	251.6	257.9	262.4
55°	192.3	197.0	201.8	206.4	211.2	217.0	223.9	230.7	237.5	244.3	249.1
57.5°	174.3	179.7	185.0	190.3	195.7	201.8	208.7	215.7	222.7	229.7	234.8
60°	161.5	167.2	172.9	178.5	184.1	190.7	198.2	205.7	213.2	220.7	225.7
62.5°	150.1	156.0	161.9	167.8	173.6	180.3	187.7	195.3	202.8	210.2	215.6
65°	131.3	137.8	144.3	150.7	157.1	164.2	172.0	179.7	187.5	195.3	200.7
67.5°	114.1	120.8	127.5	134.3	141.0	148.3	156.3	164.2	172.1	180.1	185.5
70°	101.8	108.6	115.4	122.2	129.1	136.6	144.7	152.9	161.1	169.2	174.8
72.5°	90.4	97.4	104.5	111.5	118.6	126.3	134.5	142.8	151.0	159.2	164.9
75°	72.8	80.2	87.5	94.8	102.2	110.1	118.5	126.9	135.4	143.8	149.4
77.5°	55.8	63.5	71.1	78.8	86.6	94.7	103.2	111.8	120.3	128.9	134.5
80°	44.4	52.4	60.4	68.4	76.4	84.8	93.3	101.8	110.4	118.9	124.5
82.5°	34.9	42.9	50.7	58.6	66.5	74.9	83.5	92.1	100.8	109.5	114.9
85°	21.3	29.5	37.6	45.8	53.9	62.2	70.6	79.0	87.5	95.9	101.4
87.5°	11.7	20.0	28.1	36.3	44.5	52.9	61.6	70.3	79.0	87.6	93.2
90°	6.7	16.0	25.4	34.9	44.2	53.8	63.5	73.2	82.9	92.5	98.6
92.5°	20.0	27.0	33.9	40.9	47.8	55.7	64.4	73.1	81.9	90.6	96.2
95°	51.7	52.6	53.5	54.3	55.2	60.2	69.2	78.2	87.2	96.3	102.0
97.5°	97.4	88.0	78.6	69.1	59.7	60.0	70.2	80.3	90.5	100.7	106.2
100°	132.2	115.0	97.9	80.7	63.5	60.0	70.1	80.2	90.3	100.4	106.5
102.5°	169.9	169.7	169.5	169.3	169.1	161.1	145.4	129.7	114.0	98.2	104.6
105°	222.9	231.6	240.2	248.8	257.5	243.2	206.2	169.1	132.1	95.0	101.4
107.5°	284.0	291.0	297.9	304.8	311.7	292.2	246.1	200.0	153.9	107.8	110.4
110°	322.9	328.9	334.9	340.9	346.9	329.9	289.9	249.9	209.8	169.8	158.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	359.9	365.1	370.3	375.5	380.7	380.6	375.3	369.9	364.6	359.3	304.8
115°	418.4	422.6	426.7	430.9	435.1	442.1	452.1	462.0	472.0	481.9	411.4
117.5°	470.0	474.0	478.0	482.0	486.0	492.2	500.3	508.6	516.8	525.1	511.0
120°	508.2	511.2	514.1	517.1	520.0	525.5	533.7	541.9	550.0	558.1	563.7
122.5°	540.7	543.4	546.1	548.9	551.7	557.1	565.1	573.2	581.4	589.5	594.1
125°	589.4	591.4	593.6	595.6	597.8	602.5	609.7	617.0	624.2	631.4	636.1
127.5°	634.1	636.3	638.5	640.6	642.9	646.7	652.4	658.1	663.8	669.5	674.4
130°	662.4	664.9	667.3	669.8	672.2	675.7	680.2	684.8	689.3	693.8	698.8
132.5°	691.4	693.5	695.5	697.6	699.7	702.6	706.5	710.4	714.3	718.2	722.8
135°	728.4	731.0	733.6	736.2	738.7	741.4	744.2	746.9	749.6	752.4	756.8
137.5°	766.5	768.3	770.0	771.8	773.6	775.5	777.8	780.0	782.2	784.4	788.5
140°	791.4	792.5	793.7	794.8	796.0	797.6	799.6	801.6	803.7	805.7	809.3
142.5°	812.2	813.3	814.3	815.3	816.3	817.8	819.9	822.0	824.1	826.2	829.2
145°	844.3	844.1	844.0	843.8	843.7	844.9	847.7	850.4	853.2	855.9	857.8
147.5°	872.8	872.2	871.6	871.0	870.4	871.4	874.1	876.9	879.6	882.3	883.2
150°	891.4	890.3	889.1	888.0	886.8	887.6	890.2	892.7	895.3	897.9	898.8
152.5°	907.0	905.7	904.4	903.2	902.0	902.5	905.0	907.4	909.9	912.4	913.3
155°	929.7	928.3	926.8	925.3	923.9	924.2	926.1	928.0	929.9	931.8	932.8
157.5°	947.5	946.3	945.1	943.8	942.6	942.7	944.0	945.4	946.7	948.1	949.2
160°	957.9	957.0	956.0	955.0	954.0	954.0	955.0	956.0	957.0	957.9	958.9
162.5°	967.2	966.2	965.3	964.2	963.3	963.2	964.1	964.9	965.7	966.6	967.7
165°	979.6	978.7	977.7	976.7	975.7	975.5	976.0	976.4	977.0	977.5	978.6
167.5°	988.9	987.9	987.0	986.0	985.0	984.8	985.2	985.6	986.1	986.6	987.7
170°	994.1	993.1	992.1	991.2	990.2	989.9	990.2	990.5	990.9	991.2	992.3
172.5°	997.5	996.6	995.6	994.7	993.7	993.4	993.7	994.0	994.3	994.7	995.8
175°	1002.0	1000.9	999.8	998.6	997.5	997.1	997.4	997.8	998.1	998.4	999.6
177.5°	1002.7	1001.9	1001.0	1000.1	999.2	998.8	998.9	999.0	999.2	999.3	1000.2
180°	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9



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CATALOG NUMBER: SA2XXDIP-C485D925U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	408.2	408.2	408.2	408.2	408.2	408.2	408.2	408.2
2.5°	406.9	407.4	408.0	408.1	407.9	407.7	407.5	407.3
5°	405.7	406.5	407.3	407.6	407.4	407.3	407.2	407.0
7.5°	403.7	404.6	405.6	406.0	405.9	405.8	405.6	405.5
10°	402.0	403.1	404.2	404.6	404.5	404.3	404.3	404.1
12.5°	399.2	400.3	401.3	401.8	401.6	401.5	401.4	401.2
15°	394.0	395.2	396.4	396.9	396.8	396.6	396.5	396.4
17.5°	387.4	388.6	389.8	390.5	390.5	390.5	390.5	390.5
20°	382.1	383.6	385.0	385.7	385.7	385.7	385.7	385.7
22.5°	376.4	377.9	379.4	380.2	380.4	380.6	380.8	381.0
25°	367.6	369.2	370.7	371.8	372.2	372.6	373.0	373.4
27.5°	357.8	359.8	361.8	362.9	363.2	363.5	363.8	364.1
30°	350.9	353.0	355.1	356.3	356.7	357.1	357.5	357.9
32.5°	343.5	345.9	348.3	349.9	350.6	351.3	352.0	352.8
35°	333.0	335.9	338.7	340.6	341.6	342.5	343.4	344.4
37.5°	322.1	325.3	328.5	330.6	331.6	332.6	333.5	334.5
40°	314.5	317.9	321.3	323.6	324.8	326.0	327.2	328.4
42.5°	307.0	310.8	314.5	317.0	318.1	319.3	320.5	321.7
45°	295.7	299.8	303.8	306.5	307.8	309.2	310.5	311.8
47.5°	283.8	288.1	292.4	295.2	296.7	298.1	299.6	301.0
50°	275.8	280.2	284.7	287.6	289.1	290.6	292.0	293.4
52.5°	267.0	271.6	276.2	279.2	280.7	282.3	283.8	285.4
55°	253.8	258.6	263.2	266.5	268.2	269.9	271.6	273.3
57.5°	239.9	244.9	250.1	253.5	255.2	257.0	258.7	260.5
60°	230.7	235.7	240.7	244.1	245.9	247.8	249.6	251.4
62.5°	220.9	226.2	231.5	235.0	236.8	238.5	240.3	242.0
65°	206.0	211.4	216.8	220.4	222.0	223.8	225.5	227.2
67.5°	191.0	196.4	201.8	205.5	207.2	209.1	210.9	212.6
70°	180.5	186.2	191.8	195.4	197.0	198.6	200.2	201.8
72.5°	170.4	175.9	181.5	185.2	187.0	188.9	190.8	192.7
75°	155.1	160.7	166.4	170.1	171.7	173.5	175.2	176.9
77.5°	140.1	145.8	151.4	155.1	156.9	158.8	160.7	162.5
80°	130.0	135.5	141.0	144.7	146.6	148.4	150.2	152.0
82.5°	120.5	126.0	131.5	135.1	136.9	138.6	140.4	142.1
85°	106.9	112.4	118.0	121.6	123.4	125.3	127.1	129.0
87.5°	98.6	104.2	109.7	113.4	115.1	116.8	118.6	120.3
90°	104.7	110.7	116.8	120.8	122.7	124.6	126.5	128.4
92.5°	101.8	107.3	112.9	116.6	118.4	120.1	121.9	123.7
95°	107.8	113.7	119.5	123.0	124.5	125.9	127.3	128.7
97.5°	111.7	117.2	122.7	126.4	128.1	129.8	131.6	133.3
100°	112.7	118.8	125.0	129.0	130.7	132.5	134.3	136.0
102.5°	111.1	117.6	124.0	128.2	130.0	131.9	133.8	135.7
105°	107.7	114.2	120.5	124.7	126.8	128.9	131.0	133.1
107.5°	113.0	115.7	118.3	120.6	122.7	124.8	126.9	129.0
110°	146.1	134.2	122.3	117.4	119.5	121.6	123.7	125.8



TEST NUMBER: P331315-927

CATALOG NUMBER: SA2XXDIP-C485D925U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	250.3	195.9	141.5	115.2	117.2	119.1	121.1	123.0
115°	340.9	270.4	199.9	159.6	149.5	139.3	129.2	119.1
117.5°	496.9	482.8	468.7	443.2	406.5	369.8	333.1	296.4
120°	569.3	575.0	580.6	573.2	553.0	532.7	512.5	492.2
122.5°	598.9	603.6	608.4	609.3	606.3	603.3	600.3	597.3
125°	640.8	645.5	650.1	653.3	655.0	656.6	658.3	660.0
127.5°	679.3	684.1	689.0	692.1	693.4	694.7	695.9	697.1
130°	703.7	708.6	713.5	716.4	717.3	718.2	719.1	720.0
132.5°	727.3	731.9	736.4	739.2	740.1	740.9	741.8	742.8
135°	761.2	765.6	769.9	772.5	773.2	773.9	774.7	775.4
137.5°	792.4	796.5	800.4	802.6	803.0	803.3	803.7	804.0
140°	812.8	816.3	819.9	821.7	821.7	821.7	821.7	821.7
142.5°	832.2	835.2	838.2	839.6	839.5	839.4	839.2	839.2
145°	859.8	861.7	863.6	864.4	864.3	864.1	864.0	863.9
147.5°	884.1	885.0	886.0	886.3	885.9	885.6	885.2	884.9
150°	899.8	900.8	901.7	901.8	901.0	900.2	899.4	898.6
152.5°	914.3	915.2	916.2	916.2	915.0	914.0	913.0	911.9
155°	933.8	934.8	935.7	935.6	934.3	933.0	931.7	930.4
157.5°	950.2	951.3	952.4	952.4	951.1	949.8	948.6	947.4
160°	959.8	960.8	961.8	961.7	960.5	959.4	958.3	957.2
162.5°	968.8	969.9	971.0	970.8	969.5	968.0	966.7	965.3
165°	979.7	980.8	981.9	981.9	980.8	979.7	978.6	977.5
167.5°	988.8	989.9	991.1	990.9	989.4	988.0	986.6	985.1
170°	993.5	994.6	995.7	995.5	994.1	992.6	991.2	989.8
172.5°	996.9	998.1	999.2	999.0	997.5	996.1	994.7	993.2
175°	1000.7	1001.8	1002.9	1002.7	1001.1	999.5	997.8	996.2
177.5°	1001.1	1002.0	1002.9	1002.7	1001.6	1000.4	999.3	998.1
180°	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9

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