

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: P332538-940

Luminaire Tested: **S124DIP-S575D365U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332538-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S575D365U940-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 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: 3416.8 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: General Diffuse

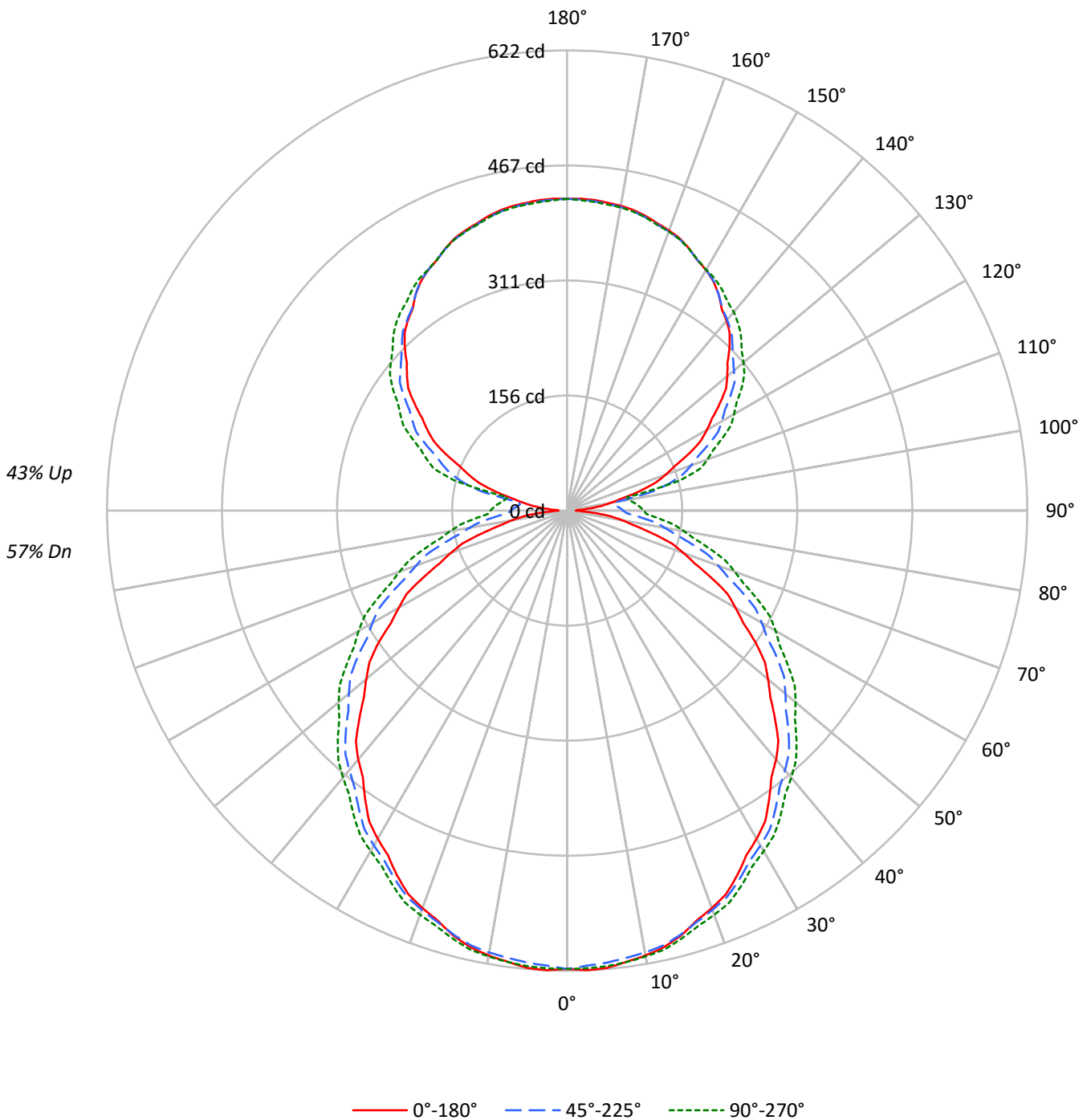
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332538-940

CATALOG NUMBER: S124DIP-S575D365U940-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P332538-940

CATALOG NUMBER: S124DIP-S575D365U940-4F0-1E-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	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57
1	98	93	89	85	91	87	83	80	75	72	69	64	62	60	54	52	51	46
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	44	42	37
3	81	71	63	56	75	66	59	53	57	51	47	49	44	41	41	38	35	31
4	74	62	54	47	68	58	51	45	50	44	40	43	38	35	36	33	30	26
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	32	29	26	23
6	62	50	41	35	58	46	39	33	40	34	30	35	30	26	29	26	23	20
7	58	45	36	31	53	42	34	29	37	30	26	31	27	23	27	23	20	17
8	53	41	32	27	49	38	31	26	33	27	23	29	24	20	25	21	18	15
9	50	37	29	24	46	35	28	23	30	25	21	26	22	18	23	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5002	5002	5002
5°	5018	4889	4903
10°	4987	4809	4805
15°	4943	4717	4690
20°	4875	4614	4579
25°	4799	4500	4456
30°	4717	4386	4330
35°	4624	4269	4220
40°	4550	4158	4105
45°	4439	4056	4005
50°	4344	3938	3901
55°	4249	3827	3778
60°	4098	3685	3667
65°	3933	3533	3529
70°	3733	3359	3369
75°	3453	3169	3224
80°	3143	2984	3082
85°	2746	2820	2999



TEST NUMBER: P332538-940

CATALOG NUMBER: S124DIP-S575D365U940-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	1.7
10°-20°	168.1	4.9
20°-30°	254.2	7.4
30°-40°	307.6	9.0
40°-50°	325.2	9.5
50°-60°	306.0	9.0
60°-70°	253.9	7.4
70°-80°	178.3	5.2
80°-90°	102.0	3.0
90°-100°	74.3	2.2
100°-110°	136.2	4.0
110°-120°	205.5	6.0
120°-130°	239.9	7.0
130°-140°	246.0	7.2
140°-150°	224.7	6.6
150°-160°	180.0	5.3
160°-170°	116.1	3.4
170°-180°	40.0	1.2
0°-30°	481.0	14.1
0°-40°	788.6	23.1
0°-60°	1419.8	41.6
0°-90°	1954.1	57.2
90°-120°	416.0	12.2
90°-150°	1126.6	33.0
90°-180°	1463.0	42.8
0°-180°	3416.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	620	618	613	619	618	59
15°	595	595	593	599	599	167
25°	544	548	550	558	559	250
35°	476	484	491	501	503	298
45°	397	410	423	435	438	307
55°	311	326	346	360	364	277
65°	215	237	261	278	284	213
75°	119	145	174	193	200	127
85°	37	66	97	117	125	39
90°	12	43	76	97	104	8
95°	26	39	67	87	94	29
105°	101	118	144	163	158	106
115°	181	189	210	226	231	179
125°	252	253	269	283	288	225
135°	310	310	316	327	332	239
145°	357	357	357	362	365	223
155°	390	391	390	391	390	180
165°	412	410	410	413	410	116
175°	421	420	420	422	419	40
180°	421	421	421	421	421	



TEST NUMBER: P332538-940

CATALOG NUMBER: S124DIP-S575D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6
2.5°	621.9	621.5	621.2	620.7	620.4	619.7	618.8	617.8	616.7	615.7	616.6
5°	620.4	619.9	619.4	618.9	618.5	617.7	616.6	615.5	614.5	613.4	614.7
7.5°	615.1	614.7	614.5	614.2	613.9	613.4	612.5	611.6	610.6	609.8	611.2
10°	610.6	610.5	610.3	610.2	610.0	609.6	608.8	608.0	607.3	606.5	607.9
12.5°	604.5	604.5	604.5	604.4	604.4	604.1	603.6	603.1	602.5	602.0	603.2
15°	594.7	594.9	594.9	595.1	595.3	595.1	594.7	594.2	593.7	593.3	594.7
17.5°	581.2	581.7	582.1	582.6	583.1	583.3	583.2	583.1	583.0	582.9	584.2
20°	571.8	572.2	572.7	573.2	573.6	573.9	574.1	574.3	574.4	574.5	576.0
22.5°	561.2	561.8	562.4	562.9	563.6	564.0	564.3	564.5	564.8	565.1	566.7
25°	544.0	544.9	545.9	546.8	547.7	548.4	548.8	549.3	549.8	550.3	552.0
27.5°	524.9	526.2	527.5	529.0	530.3	531.3	532.0	532.7	533.4	534.1	535.7
30°	512.1	513.4	514.5	515.8	517.0	518.2	519.2	520.3	521.4	522.5	524.2
32.5°	498.2	499.7	501.1	502.7	504.2	505.5	506.7	507.9	509.1	510.3	512.2
35°	476.0	477.9	479.7	481.5	483.4	485.1	486.6	488.2	489.7	491.2	493.5
37.5°	453.7	455.8	457.9	460.0	462.2	464.2	466.1	468.1	469.9	471.8	474.0
40°	439.3	441.2	443.3	445.2	447.3	449.3	451.5	453.6	455.8	458.0	460.3
42.5°	422.6	424.8	427.0	429.4	431.6	434.0	436.5	439.0	441.6	444.1	446.7
45°	396.9	399.8	402.8	405.7	408.6	411.5	414.5	417.4	420.4	423.3	425.9
47.5°	372.4	375.3	378.4	381.4	384.4	387.6	391.0	394.4	397.8	401.2	403.9
50°	354.5	357.9	361.3	364.8	368.2	371.6	375.0	378.4	381.7	385.1	388.2
52.5°	336.8	340.2	343.6	347.0	350.4	354.0	357.9	361.8	365.7	369.5	372.6
55°	310.9	314.1	317.4	320.6	323.8	327.7	332.3	337.0	341.6	346.3	349.4
57.5°	281.9	285.9	289.9	293.9	297.9	302.2	306.7	311.4	316.0	320.6	324.2
60°	263.0	267.0	271.0	275.0	279.0	283.6	288.6	293.7	298.8	303.9	307.5
62.5°	244.7	249.1	253.4	257.8	262.2	266.9	272.0	277.1	282.2	287.3	290.8
65°	215.1	220.1	225.0	229.9	234.9	240.0	245.1	250.4	255.7	260.9	264.7
67.5°	186.6	191.9	197.2	202.4	207.6	213.0	218.6	224.3	229.9	235.5	239.4
70°	167.2	172.5	177.7	183.0	188.2	193.8	199.6	205.5	211.3	217.2	221.3
72.5°	148.4	153.7	159.1	164.4	169.8	175.6	181.8	188.1	194.3	200.5	204.6
75°	119.3	125.0	130.7	136.4	142.1	148.3	154.7	161.2	167.7	174.2	178.5
77.5°	92.3	98.4	104.4	110.4	116.5	122.9	129.7	136.4	143.2	150.0	154.4
80°	75.6	81.8	88.0	94.2	100.3	106.7	113.6	120.4	127.2	133.9	138.6
82.5°	58.9	65.4	71.8	78.2	84.6	91.2	98.0	104.8	111.6	118.4	123.1
85°	36.7	43.2	49.8	56.2	62.7	69.4	76.3	83.3	90.2	97.1	101.7
87.5°	20.7	27.2	33.6	40.0	46.5	53.1	60.0	66.9	73.7	80.6	85.2
90°	12.0	19.0	25.9	32.9	39.8	46.9	54.0	61.3	68.4	75.6	80.5
92.5°	14.5	20.2	25.7	31.3	36.9	43.2	50.5	57.7	64.8	72.1	76.8
95°	26.4	29.1	31.7	34.5	37.2	41.7	48.2	54.5	60.9	67.3	71.9
97.5°	45.0	50.8	56.7	62.6	68.5	70.6	69.0	67.5	65.9	64.4	68.5
100°	59.3	64.6	69.8	75.1	80.4	81.2	77.6	73.9	70.3	66.6	69.6
102.5°	76.0	80.4	84.8	89.3	93.7	98.3	102.9	107.5	112.2	116.8	108.0
105°	101.1	104.6	108.1	111.6	115.1	119.9	126.0	132.0	138.0	144.1	148.6
107.5°	125.6	128.3	131.1	133.8	136.5	140.9	146.8	152.6	158.5	164.3	168.4
110°	141.7	144.1	146.4	148.8	151.1	155.2	161.0	166.9	172.7	178.5	182.2



TEST NUMBER: P332538-940

CATALOG NUMBER: S124DIP-S575D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	157.3	159.5	161.8	164.2	166.4	170.2	175.6	180.9	186.3	191.6	195.0
115°	181.3	182.9	184.5	186.1	187.7	190.9	195.7	200.6	205.5	210.4	213.9
117.5°	203.5	204.6	205.7	206.9	207.9	210.9	215.6	220.4	225.2	229.9	233.1
120°	218.1	218.8	219.5	220.3	221.1	223.6	228.0	232.5	236.8	241.2	244.4
122.5°	232.2	232.5	232.7	233.0	233.3	235.5	239.9	244.2	248.5	252.8	256.0
125°	251.7	251.9	252.0	252.1	252.3	254.1	257.9	261.6	265.3	269.0	272.2
127.5°	270.7	270.6	270.6	270.5	270.5	272.1	275.3	278.6	281.9	285.2	287.8
130°	282.6	282.5	282.4	282.3	282.2	283.5	286.2	288.9	291.6	294.3	297.0
132.5°	293.9	293.9	293.8	293.8	293.8	294.9	297.1	299.3	301.6	303.9	306.6
135°	310.2	310.1	310.0	310.0	310.0	310.6	311.9	313.3	314.7	316.0	318.6
137.5°	325.3	325.2	325.0	324.9	324.8	325.1	326.0	326.8	327.6	328.5	330.9
140°	335.1	335.1	335.1	335.1	335.1	335.2	335.5	335.8	336.1	336.4	338.6
142.5°	343.4	343.6	343.8	344.0	344.3	344.4	344.4	344.4	344.4	344.4	346.3
145°	356.8	356.9	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	358.0
147.5°	367.6	367.8	368.1	368.3	368.5	368.6	368.5	368.5	368.4	368.4	368.5
150°	375.4	375.5	375.7	375.8	375.9	375.9	375.9	375.8	375.7	375.7	375.7
152.5°	381.4	381.6	381.7	382.0	382.2	382.2	382.1	381.9	381.8	381.7	381.8
155°	390.5	390.6	390.6	390.7	390.7	390.7	390.5	390.2	390.0	389.9	390.1
157.5°	398.2	398.1	398.1	398.1	398.1	397.9	397.7	397.4	397.2	397.0	397.3
160°	402.8	402.5	402.3	402.2	401.9	401.8	401.7	401.6	401.5	401.4	401.9
162.5°	406.8	406.5	406.3	406.0	405.7	405.6	405.5	405.4	405.4	405.3	405.7
165°	411.9	411.5	411.2	410.8	410.5	410.3	410.3	410.3	410.3	410.3	410.9
167.5°	415.9	415.5	415.2	414.8	414.5	414.3	414.2	414.2	414.1	414.1	414.7
170°	418.2	417.8	417.3	417.0	416.5	416.3	416.4	416.5	416.5	416.6	417.1
172.5°	419.7	419.3	418.8	418.5	418.0	417.9	417.9	418.0	418.0	418.1	418.7
175°	421.3	420.9	420.5	420.1	419.6	419.5	419.5	419.6	419.7	419.7	420.4
177.5°	422.1	421.7	421.3	420.9	420.5	420.4	420.5	420.6	420.7	420.8	421.3
180°	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3



TEST NUMBER: P332538-940

CATALOG NUMBER: S124DIP-S575D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6
2.5°	617.5	618.3	619.2	619.6	619.5	619.3	619.2	619.1
5°	615.9	617.1	618.3	618.8	618.8	618.6	618.4	618.2
7.5°	612.6	613.9	615.4	616.0	615.8	615.6	615.5	615.4
10°	609.2	610.6	612.0	612.6	612.5	612.3	612.2	612.0
12.5°	604.6	605.8	607.1	607.7	607.7	607.6	607.6	607.6
15°	596.0	597.4	598.8	599.4	599.3	599.1	599.0	598.8
17.5°	585.7	587.1	588.5	589.2	589.1	589.0	588.8	588.7
20°	577.7	579.2	580.7	581.5	581.5	581.5	581.5	581.5
22.5°	568.2	569.7	571.2	572.2	572.4	572.7	572.9	573.2
25°	553.7	555.4	557.1	557.9	558.1	558.3	558.4	558.6
27.5°	537.3	538.9	540.5	541.4	541.5	541.7	541.9	542.1
30°	525.9	527.6	529.3	530.3	530.6	530.9	531.2	531.5
32.5°	514.2	516.1	518.1	519.2	519.5	519.8	520.1	520.4
35°	495.6	497.8	499.9	501.2	501.7	502.1	502.6	503.1
37.5°	476.3	478.4	480.6	482.0	482.4	483.0	483.4	483.9
40°	462.6	464.9	467.3	468.7	469.3	469.9	470.6	471.2
42.5°	449.2	451.7	454.3	455.8	456.4	456.8	457.4	457.8
45°	428.6	431.1	433.7	435.4	436.2	437.0	437.7	438.5
47.5°	406.6	409.4	412.1	413.8	414.8	415.7	416.7	417.6
50°	391.3	394.4	397.4	399.5	400.4	401.3	402.3	403.1
52.5°	375.8	378.8	381.9	383.9	384.9	385.8	386.6	387.6
55°	352.4	355.5	358.6	360.6	361.5	362.5	363.4	364.3
57.5°	327.9	331.6	335.3	337.5	338.4	339.2	340.1	341.0
60°	311.0	314.6	318.1	320.5	321.7	323.0	324.2	325.5
62.5°	294.4	297.9	301.5	303.8	305.1	306.3	307.6	308.8
65°	268.6	272.5	276.3	278.8	280.1	281.3	282.6	283.8
67.5°	243.3	247.3	251.2	253.7	254.9	256.1	257.3	258.5
70°	225.5	229.7	233.8	236.5	237.6	238.6	239.7	240.8
72.5°	208.6	212.7	216.7	219.3	220.5	221.7	222.9	224.1
75°	182.8	187.1	191.5	194.3	195.6	197.1	198.5	199.8
77.5°	158.8	163.2	167.6	170.5	171.9	173.4	174.9	176.4
80°	143.2	147.8	152.4	155.3	156.6	157.8	159.1	160.3
82.5°	127.9	132.6	137.4	140.4	141.8	143.1	144.5	145.9
85°	106.4	111.0	115.7	118.8	120.3	121.8	123.3	124.9
87.5°	89.7	94.3	98.9	101.8	103.2	104.6	105.9	107.4
90°	85.4	90.3	95.2	98.4	99.7	101.1	102.5	103.8
92.5°	81.6	86.3	91.1	94.2	95.4	96.7	97.9	99.2
95°	76.5	81.1	85.6	88.6	90.2	91.6	93.0	94.5
97.5°	72.6	76.6	80.7	83.5	84.9	86.2	87.7	89.1
100°	72.6	75.5	78.5	80.5	81.7	82.8	84.0	85.2
102.5°	99.2	90.3	81.6	77.8	79.0	80.2	81.4	82.7
105°	153.1	157.6	162.0	163.6	162.4	161.0	159.8	158.5
107.5°	172.5	176.6	180.7	183.5	184.9	186.3	187.6	189.0
110°	185.9	189.6	193.2	195.8	197.2	198.8	200.2	201.6



TEST NUMBER: P332538-940

CATALOG NUMBER: S124DIP-S575D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	198.4	201.8	205.2	207.7	209.2	210.6	212.1	213.7
115°	217.4	221.0	224.4	226.8	227.8	229.0	230.1	231.1
117.5°	236.2	239.4	242.6	244.8	246.0	247.2	248.4	249.6
120°	247.7	250.9	254.1	256.3	257.3	258.5	259.6	260.6
122.5°	259.1	262.3	265.5	267.6	268.5	269.5	270.5	271.4
125°	275.3	278.5	281.6	283.7	284.6	285.6	286.6	287.7
127.5°	290.6	293.4	296.0	297.9	298.9	300.0	301.0	301.9
130°	299.9	302.7	305.6	307.5	308.4	309.3	310.2	311.2
132.5°	309.3	312.0	314.8	316.6	317.4	318.3	319.1	320.0
135°	321.3	323.9	326.5	328.3	329.4	330.5	331.4	332.5
137.5°	333.3	335.7	338.0	339.7	340.4	341.1	341.9	342.6
140°	340.8	343.0	345.3	346.8	347.6	348.5	349.3	350.2
142.5°	348.2	350.1	352.0	353.3	353.9	354.6	355.3	356.0
145°	359.0	360.1	361.1	361.9	362.7	363.5	364.2	365.0
147.5°	368.7	368.9	369.1	369.4	370.0	370.6	371.1	371.7
150°	375.7	375.7	375.7	375.7	375.8	375.9	375.9	375.9
152.5°	381.9	382.0	382.2	382.2	382.1	382.1	382.1	382.0
155°	390.4	390.7	390.9	391.0	390.7	390.6	390.4	390.1
157.5°	397.7	398.1	398.4	398.4	398.1	397.7	397.3	397.0
160°	402.3	402.8	403.1	403.1	402.8	402.3	401.9	401.4
162.5°	406.1	406.5	407.0	406.9	406.4	406.0	405.5	405.0
165°	411.4	412.0	412.6	412.5	411.9	411.3	410.6	410.0
167.5°	415.4	416.0	416.5	416.5	415.8	415.1	414.4	413.8
170°	417.8	418.3	418.8	418.7	418.1	417.4	416.7	416.0
172.5°	419.3	419.8	420.4	420.3	419.5	418.7	418.0	417.2
175°	421.1	421.7	422.3	422.2	421.3	420.5	419.6	418.8
177.5°	421.8	422.2	422.7	422.5	421.9	421.2	420.5	419.8
180°	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3

(END OF REPORT)