

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: P333163-940

Luminaire Tested: **S125DIP-S610D365U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333163-940
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-S610D365U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 3447.1 lumens
Efficiency: N/A
Efficacy: 125.3 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

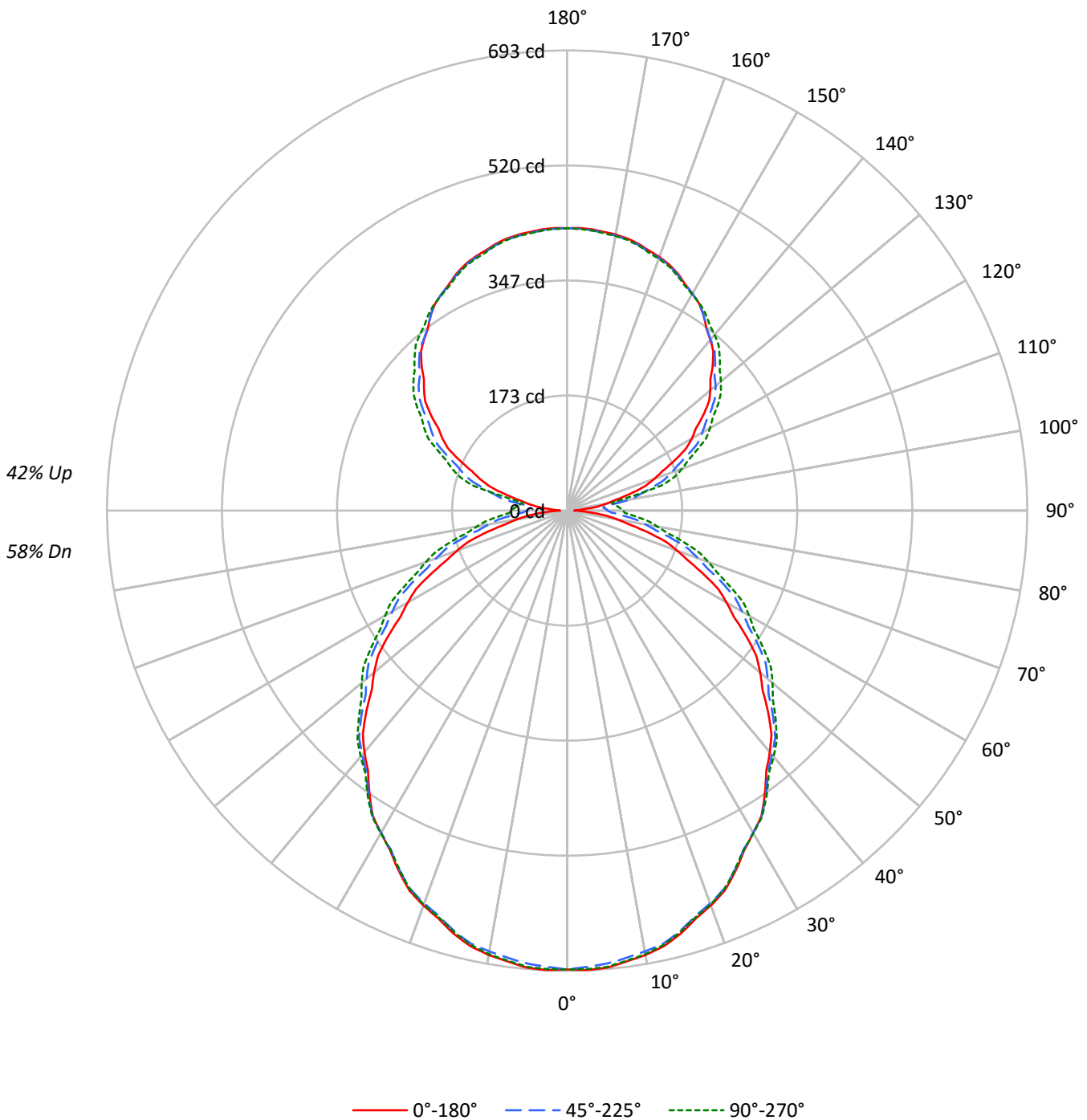
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333163-940

CATALOG NUMBER: S125DIP-S610D365U940-4F0-1E-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	102	102	102	102	88	88	88	75	75	75	64	64	64	58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	54	52	47
2	90	82	75	69	83	76	70	65	66	62	58	57	53	50	48	45	43	39
3	82	71	64	58	76	67	60	54	58	53	48	50	46	42	42	39	36	33
4	75	63	55	48	69	59	52	46	51	45	41	44	40	36	38	34	31	28
5	68	56	48	41	63	53	45	39	46	40	35	40	35	31	34	30	27	24
6	63	50	42	36	58	47	40	34	41	35	31	36	31	27	31	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27	32	28	24	28	24	21	18
8	54	41	33	28	50	39	32	26	34	28	24	30	25	21	26	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21	27	23	19	24	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4463	4463	4463
5°	4472	4380	4394
10°	4440	4302	4295
15°	4388	4209	4171
20°	4316	4093	4045
25°	4232	3969	3891
30°	4129	3833	3751
35°	4033	3708	3622
40°	3935	3576	3493
45°	3825	3463	3378
50°	3720	3340	3276
55°	3593	3225	3156
60°	3455	3093	3035
65°	3310	2956	2898
70°	3145	2767	2758
75°	2887	2586	2585
80°	2548	2365	2396
85°	2232	2219	2336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.9
10°-20°	185.5	5.4
20°-30°	275.9	8.0
30°-40°	326.8	9.5
40°-50°	337.9	9.8
50°-60°	311.2	9.0
60°-70°	251.6	7.3
70°-80°	168.5	4.9
80°-90°	88.3	2.6
90°-100°	64.5	1.9
100°-110°	131.4	3.8
110°-120°	196.9	5.7
120°-130°	235.4	6.8
130°-140°	244.4	7.1
140°-150°	225.0	6.5
150°-160°	181.0	5.3
160°-170°	117.1	3.4
170°-180°	40.4	1.2
0°-30°	526.7	15.3
0°-40°	853.5	24.8
0°-60°	1502.6	43.6
0°-90°	2010.9	58.3
90°-120°	392.8	11.4
90°-150°	1097.7	31.8
90°-180°	1436.0	41.7
0°-180°	3447.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	691	690	685	690	690	66
15°	660	660	656	660	657	186
25°	600	601	598	600	597	276
35°	519	523	522	524	524	325
45°	428	435	438	443	444	330
55°	329	339	350	357	360	294
65°	226	242	258	268	271	224
75°	125	143	164	177	181	132
85°	37	60	83	98	104	40
90°	11	35	61	77	84	8
95°	27	43	54	70	76	30
105°	99	111	131	144	149	105
115°	178	185	202	213	215	176
125°	250	252	265	274	277	223
135°	310	311	315	323	325	239
145°	358	358	358	362	363	224
155°	394	392	393	394	391	181
165°	416	414	414	416	414	117
175°	425	424	424	426	423	40
180°	425	425	425	425	425	



TEST NUMBER: P333163-940

CATALOG NUMBER: S125DIP-S610D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	692.7	692.4	692.2	692.0	691.7	691.2	690.4	689.5	688.7	687.8	688.7
5°	691.1	690.7	690.5	690.2	689.8	689.2	688.1	687.1	686.0	684.9	686.2
7.5°	684.9	684.8	684.7	684.6	684.5	683.9	682.8	681.7	680.6	679.6	680.6
10°	679.6	679.6	679.6	679.6	679.6	678.9	677.7	676.5	675.3	674.1	675.2
12.5°	672.0	672.1	672.2	672.3	672.4	672.0	671.0	670.1	669.1	668.2	669.0
15°	659.9	660.0	660.2	660.3	660.5	660.0	659.0	657.9	656.9	655.9	656.7
17.5°	644.2	644.4	644.8	645.1	645.4	645.0	644.0	642.9	641.9	640.8	641.5
20°	632.8	633.1	633.4	633.7	634.0	633.6	632.6	631.5	630.4	629.4	629.8
22.5°	619.8	620.4	620.9	621.4	622.0	621.6	620.5	619.3	618.1	617.0	617.5
25°	599.6	600.0	600.5	600.9	601.4	601.2	600.3	599.4	598.4	597.5	598.2
27.5°	577.1	577.7	578.5	579.1	579.8	579.6	578.5	577.6	576.5	575.5	575.9
30°	560.3	561.2	562.1	563.0	563.9	563.9	563.0	562.1	561.2	560.3	560.6
32.5°	545.1	545.9	546.7	547.5	548.2	548.3	547.7	547.0	546.4	545.6	546.0
35°	519.0	520.0	521.1	522.1	523.2	523.5	523.1	522.5	522.1	521.7	522.1
37.5°	492.8	493.8	494.7	495.7	496.7	497.0	497.0	496.8	496.6	496.5	497.0
40°	474.9	476.2	477.3	478.6	479.7	480.3	480.1	480.0	479.8	479.7	480.3
42.5°	455.4	457.0	458.5	460.1	461.7	462.6	463.0	463.3	463.6	464.0	464.7
45°	427.5	429.2	430.8	432.5	434.2	435.3	436.1	436.8	437.6	438.4	439.4
47.5°	399.0	400.5	402.0	403.5	405.1	406.4	407.8	409.0	410.4	411.6	413.2
50°	379.4	381.0	382.7	384.4	386.0	387.7	389.3	391.0	392.6	394.3	396.0
52.5°	358.8	360.8	362.8	364.9	366.8	368.9	371.0	372.9	375.0	376.9	378.7
55°	328.6	331.0	333.4	335.8	338.2	340.6	343.0	345.4	347.9	350.3	352.0
57.5°	297.7	300.6	303.4	306.4	309.2	312.1	314.9	317.6	320.4	323.2	325.0
60°	277.1	280.1	283.1	286.1	289.2	292.1	295.2	298.2	301.2	304.2	306.5
62.5°	257.1	260.0	263.1	266.1	269.1	272.2	275.4	278.7	282.0	285.3	287.8
65°	226.3	229.8	233.2	236.7	240.1	243.7	247.3	250.9	254.5	258.2	260.4
67.5°	197.3	200.6	203.9	207.3	210.6	214.2	217.8	221.5	225.2	228.9	231.6
70°	176.1	179.6	183.1	186.5	190.0	193.7	197.6	201.5	205.5	209.4	212.2
72.5°	155.5	159.2	162.7	166.3	169.9	173.8	178.1	182.4	186.6	190.9	194.0
75°	124.7	128.6	132.5	136.4	140.4	144.7	149.5	154.4	159.2	164.0	166.9
77.5°	95.0	99.5	104.1	108.5	113.1	117.6	122.3	126.9	131.5	136.2	139.5
80°	76.6	81.1	85.6	90.2	94.6	99.4	104.6	109.7	114.8	119.9	123.2
82.5°	59.7	64.5	69.3	74.0	78.8	83.8	89.0	94.3	99.5	104.8	107.9
85°	37.3	42.3	47.2	52.2	57.2	62.2	67.5	72.8	78.0	83.4	86.7
87.5°	21.2	26.1	31.0	36.0	40.9	46.0	51.2	56.4	61.6	66.9	70.4
90°	11.1	16.5	21.9	27.3	32.6	38.2	43.8	49.4	55.0	60.6	64.4
92.5°	14.6	18.6	22.7	26.8	30.9	35.8	41.4	47.1	52.8	58.4	62.2
95°	26.8	30.5	34.2	37.9	41.6	44.7	47.2	49.6	52.1	54.5	58.1
97.5°	45.5	49.4	53.3	57.2	61.1	62.9	62.6	62.2	61.9	61.6	62.8
100°	60.1	63.5	66.9	70.2	73.6	77.8	82.9	88.0	93.1	98.2	91.0
102.5°	74.9	78.1	81.3	84.5	87.7	91.7	96.6	101.5	106.3	111.2	112.3
105°	98.8	101.5	104.2	106.8	109.5	113.2	117.6	122.2	126.7	131.2	134.2
107.5°	123.6	125.6	127.6	129.7	131.7	135.0	139.5	143.9	148.5	152.9	155.9
110°	139.6	141.4	143.3	145.1	146.9	150.0	154.4	158.6	163.0	167.4	170.0



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CATALOG NUMBER: S125DIP-S610D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	155.2	156.9	158.5	160.2	161.8	164.6	168.8	173.0	177.2	181.4	183.8
115°	178.1	179.5	180.8	182.3	183.7	186.4	190.4	194.3	198.3	202.3	204.7
117.5°	201.6	202.3	203.0	203.7	204.4	206.7	210.6	214.6	218.6	222.6	224.8
120°	216.8	217.1	217.6	217.9	218.3	220.3	224.0	227.7	231.3	235.1	237.5
122.5°	229.6	230.1	230.6	231.0	231.5	233.4	236.9	240.3	243.8	247.3	249.5
125°	250.1	250.5	250.8	251.2	251.5	253.2	256.2	259.2	262.3	265.2	267.3
127.5°	269.2	269.4	269.6	269.8	270.0	271.3	273.8	276.2	278.6	281.0	283.1
130°	281.3	281.5	281.7	281.9	282.1	283.3	285.4	287.7	289.8	292.0	293.9
132.5°	292.8	293.3	293.6	294.0	294.4	295.3	296.8	298.3	299.7	301.2	303.3
135°	310.0	310.2	310.5	310.8	311.0	311.7	312.5	313.4	314.3	315.3	317.1
137.5°	325.7	325.8	326.1	326.4	326.6	326.9	327.3	327.7	328.1	328.4	330.3
140°	335.5	335.6	335.7	335.8	336.0	336.1	336.2	336.3	336.4	336.4	338.2
142.5°	344.7	344.7	344.6	344.6	344.6	344.6	344.8	344.9	345.0	345.2	346.6
145°	358.5	358.5	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	359.2
147.5°	369.7	369.7	369.7	369.6	369.6	369.6	369.7	369.8	369.9	370.0	370.3
150°	377.3	377.2	377.0	376.8	376.7	376.7	376.8	377.0	377.2	377.3	377.5
152.5°	384.6	384.3	384.0	383.7	383.3	383.3	383.4	383.6	383.7	383.9	384.0
155°	394.0	393.6	393.2	392.7	392.4	392.2	392.4	392.4	392.6	392.7	393.0
157.5°	401.3	401.0	400.7	400.5	400.3	400.1	400.1	400.2	400.2	400.2	400.4
160°	406.3	405.9	405.5	405.0	404.7	404.5	404.5	404.6	404.7	404.7	405.0
162.5°	410.4	409.9	409.5	409.0	408.7	408.5	408.6	408.6	408.7	408.8	409.1
165°	415.7	415.4	414.9	414.5	414.1	413.9	413.9	414.0	414.1	414.2	414.6
167.5°	419.8	419.4	418.9	418.5	418.0	417.9	417.9	418.0	418.1	418.1	418.7
170°	422.0	421.6	421.1	420.6	420.1	419.9	420.0	420.0	420.1	420.2	420.7
172.5°	423.6	423.1	422.6	422.1	421.6	421.4	421.5	421.7	421.8	422.0	422.4
175°	425.2	424.8	424.4	423.9	423.6	423.4	423.4	423.5	423.6	423.7	424.2
177.5°	426.0	425.6	425.3	425.0	424.6	424.5	424.5	424.6	424.6	424.7	425.1
180°	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2



TEST NUMBER: P333163-940

CATALOG NUMBER: S125DIP-S610D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	689.5	690.4	691.2	691.5	691.4	691.3	691.2	691.1
5°	687.3	688.6	689.7	690.3	690.2	690.0	689.8	689.7
7.5°	681.6	682.7	683.8	684.2	684.0	683.9	683.8	683.6
10°	676.3	677.3	678.3	678.8	678.7	678.5	678.3	678.1
12.5°	669.8	670.6	671.5	671.6	671.2	670.8	670.5	670.0
15°	657.6	658.5	659.4	659.6	659.0	658.4	657.8	657.2
17.5°	642.2	642.8	643.5	643.7	643.4	643.0	642.7	642.3
20°	630.4	630.8	631.2	631.4	631.4	631.4	631.4	631.4
22.5°	618.0	618.7	619.2	619.3	618.9	618.6	618.2	617.9
25°	598.8	599.4	599.9	599.9	599.1	598.4	597.6	596.9
27.5°	576.3	576.8	577.2	577.2	576.9	576.7	576.4	576.1
30°	560.9	561.2	561.5	561.6	561.4	561.2	561.2	561.0
32.5°	546.3	546.5	546.9	547.0	546.8	546.6	546.5	546.4
35°	522.5	523.1	523.5	523.7	523.7	523.7	523.7	523.7
37.5°	497.7	498.3	498.9	499.2	499.1	499.0	499.0	498.9
40°	480.9	481.5	482.1	482.5	482.9	483.1	483.5	483.8
42.5°	465.4	466.1	466.8	467.3	467.3	467.3	467.4	467.5
45°	440.4	441.5	442.6	443.2	443.4	443.4	443.6	443.8
47.5°	414.7	416.3	417.8	418.7	419.1	419.4	419.7	420.1
50°	397.6	399.3	400.9	402.0	402.4	402.9	403.3	403.8
52.5°	380.5	382.3	384.1	385.1	385.5	385.8	386.1	386.5
55°	353.6	355.3	356.9	358.0	358.6	359.3	359.8	360.4
57.5°	327.0	328.9	330.7	331.9	332.4	332.9	333.3	333.8
60°	308.7	310.9	313.3	314.6	315.0	315.5	315.9	316.4
62.5°	290.3	292.7	295.2	296.8	297.3	297.9	298.5	299.1
65°	262.6	264.9	267.2	268.6	269.2	269.8	270.4	271.0
67.5°	234.3	237.1	239.8	241.6	242.4	243.2	244.0	244.7
70°	215.1	217.9	220.8	222.7	223.6	224.4	225.4	226.3
72.5°	197.2	200.2	203.3	205.2	205.9	206.5	207.2	207.9
75°	170.0	173.0	176.0	177.9	178.6	179.4	180.1	180.9
77.5°	142.8	146.2	149.5	151.4	151.9	152.6	153.2	153.8
80°	126.5	129.8	133.1	135.1	135.7	136.3	137.0	137.5
82.5°	111.1	114.3	117.5	119.7	120.7	121.8	122.9	123.9
85°	90.0	93.3	96.6	98.8	100.0	101.2	102.5	103.6
87.5°	73.9	77.5	81.0	83.3	84.4	85.5	86.6	87.7
90°	68.2	72.1	75.9	78.4	79.6	80.9	82.2	83.5
92.5°	65.8	69.6	73.2	75.6	76.8	77.9	79.1	80.3
95°	61.8	65.5	69.1	71.5	72.6	73.7	74.6	75.7
97.5°	63.9	65.1	66.3	67.4	68.5	69.5	70.5	71.5
100°	83.6	76.4	69.1	65.8	66.4	67.1	67.7	68.3
102.5°	113.3	114.4	115.5	114.0	110.2	106.3	102.5	98.6
105°	137.2	140.3	143.2	145.3	146.2	147.2	148.2	149.2
107.5°	158.9	161.9	164.9	166.7	167.5	168.2	168.9	169.6
110°	172.7	175.3	178.0	179.9	181.0	182.1	183.2	184.4



TEST NUMBER: P333163-940

CATALOG NUMBER: S125DIP-S610D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	186.3	188.8	191.3	193.0	193.9	194.8	195.8	196.8
115°	207.1	209.6	212.0	213.5	213.9	214.5	214.9	215.4
117.5°	226.9	229.2	231.3	232.8	233.7	234.5	235.4	236.2
120°	239.9	242.3	244.7	246.2	246.7	247.3	247.8	248.4
122.5°	251.8	254.1	256.5	257.8	258.3	258.9	259.3	259.8
125°	269.5	271.6	273.8	275.1	275.6	276.2	276.7	277.2
127.5°	285.2	287.2	289.4	290.5	290.9	291.2	291.6	291.9
130°	295.8	297.7	299.6	300.8	301.1	301.6	301.9	302.4
132.5°	305.3	307.4	309.4	310.6	310.9	311.2	311.5	311.7
135°	318.9	320.7	322.5	323.6	324.0	324.3	324.6	324.9
137.5°	332.1	333.9	335.6	336.7	337.0	337.2	337.4	337.7
140°	340.0	341.8	343.6	344.6	344.7	344.9	345.2	345.4
142.5°	348.0	349.5	351.0	351.8	352.0	352.1	352.3	352.5
145°	360.1	360.9	361.7	362.2	362.4	362.6	362.7	362.9
147.5°	370.6	371.0	371.3	371.3	371.1	370.9	370.6	370.4
150°	377.6	377.7	377.8	377.7	377.3	376.9	376.5	376.1
152.5°	384.1	384.2	384.4	384.2	383.8	383.3	382.8	382.4
155°	393.2	393.3	393.6	393.4	392.9	392.3	391.7	391.2
157.5°	400.6	400.8	401.1	400.9	400.4	399.8	399.2	398.7
160°	405.3	405.6	405.8	405.7	405.1	404.6	404.0	403.5
162.5°	409.6	409.9	410.4	410.2	409.6	408.9	408.4	407.8
165°	415.0	415.4	415.9	415.8	415.3	414.6	414.1	413.6
167.5°	419.2	419.6	420.2	420.1	419.5	418.8	418.2	417.6
170°	421.2	421.9	422.4	422.4	421.8	421.2	420.4	419.8
172.5°	422.9	423.5	423.9	423.9	423.3	422.6	422.0	421.3
175°	424.7	425.3	425.9	425.9	425.2	424.5	423.9	423.3
177.5°	425.5	425.9	426.2	426.2	425.8	425.3	424.9	424.5
180°	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2

(END OF REPORT)