

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: P333167-840

Luminaire Tested: **S125DIP-S610D365U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333167-840
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-S610D365U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3804.5 lumens
Efficiency: N/A
Efficacy: 138.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

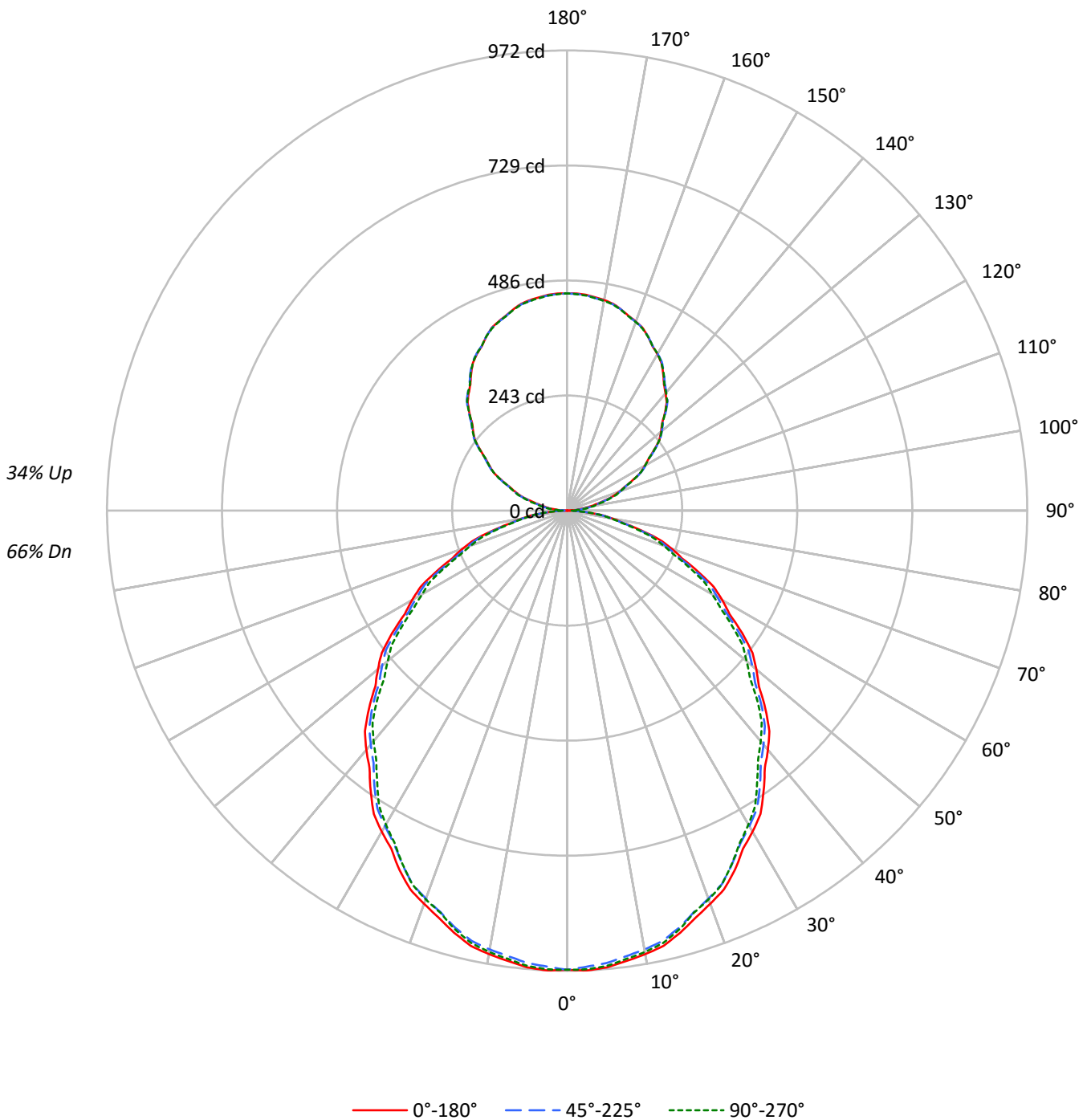
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333167-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333167-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-F1

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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	56	55	53	50	47
3	84	74	67	61	79	70	64	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	36	39	35	32	29
6	65	53	44	38	61	50	43	37	45	39	34	40	35	31	36	32	28	26
7	60	48	40	34	57	45	38	33	41	35	30	37	31	28	33	28	25	23
8	56	43	36	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6264	6264	6264
5°	6278	6218	6257
10°	6239	6174	6209
15°	6171	6100	6125
20°	6075	5996	6006
25°	5971	5872	5867
30°	5842	5739	5711
35°	5705	5595	5517
40°	5563	5440	5363
45°	5411	5298	5193
50°	5243	5127	4972
55°	5080	4933	4796
60°	4886	4738	4570
65°	4655	4504	4351
70°	4434	4232	4086
75°	4040	3905	3773
80°	3593	3537	3451
85°	3127	3179	3016



TEST NUMBER: P333167-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	2.4
10°-20°	258.3	6.8
20°-30°	381.4	10.0
30°-40°	445.0	11.7
40°-50°	447.0	11.7
50°-60°	392.4	10.3
60°-70°	292.4	7.7
70°-80°	167.2	4.4
80°-90°	49.6	1.3
90°-100°	30.7	0.8
100°-110°	90.7	2.4
110°-120°	153.6	4.0
120°-130°	202.2	5.3
130°-140°	226.6	6.0
140°-150°	222.1	5.8
150°-160°	186.5	4.9
160°-170°	124.0	3.3
170°-180°	43.4	1.1
0°-30°	731.2	19.2
0°-40°	1176.2	30.9
0°-60°	2015.6	53.0
0°-90°	2524.7	66.4
90°-120°	275.1	7.2
90°-150°	925.9	24.3
90°-180°	1280.0	33.6
0°-180°	3804.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	968	966	959	966	965	92
15°	923	920	912	916	916	260
25°	838	834	824	825	823	385
35°	724	720	710	706	700	452
45°	592	589	580	571	569	456
55°	451	448	438	431	426	403
65°	305	303	295	288	285	302
75°	162	160	156	154	151	173
85°	42	43	43	42	41	47
90°	0	3	6	7	9	4
95°	23	24	28	30	31	25
105°	81	83	85	87	89	87
115°	154	155	156	156	155	152
125°	224	227	227	226	226	201
135°	292	294	294	294	293	225
145°	354	355	356	356	355	221
155°	405	405	405	406	405	186
165°	440	439	440	441	439	124
175°	458	456	456	458	456	43
180°	459	459	459	459	459	



TEST NUMBER: P333167-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	972.3	971.9	971.5	971.1	970.7	969.8	968.5	967.0	965.7	964.3	965.7
5°	968.4	968.0	967.7	967.2	966.9	965.9	964.2	962.5	960.8	959.1	960.7
7.5°	959.4	959.1	958.8	958.4	958.1	956.9	955.0	953.2	951.3	949.5	950.9
10°	951.4	951.1	950.8	950.4	950.1	949.0	947.1	945.2	943.3	941.5	942.8
12.5°	941.6	941.0	940.4	939.8	939.2	938.0	936.2	934.5	932.7	931.0	932.1
15°	923.0	922.5	922.0	921.5	921.0	919.8	918.0	916.0	914.1	912.3	913.1
17.5°	901.7	901.0	900.2	899.5	898.7	897.4	895.4	893.4	891.5	889.6	890.6
20°	883.9	883.5	883.2	882.9	882.5	881.3	879.1	876.9	874.6	872.4	873.6
22.5°	866.1	865.5	864.8	864.2	863.6	862.3	860.2	858.2	856.1	853.9	854.7
25°	837.9	837.0	836.2	835.4	834.5	832.9	830.7	828.5	826.3	824.0	824.5
27.5°	804.9	804.4	803.9	803.3	802.8	801.4	799.1	796.9	794.6	792.3	792.3
30°	783.4	782.8	782.3	781.8	781.3	779.8	777.3	774.7	772.1	769.6	769.2
32.5°	760.0	759.3	758.5	757.7	756.9	755.4	753.2	750.8	748.5	746.3	745.7
35°	723.6	722.9	722.2	721.5	720.8	719.3	716.9	714.5	712.2	709.7	708.9
37.5°	685.6	684.8	684.0	683.1	682.3	680.6	678.4	676.2	673.9	671.7	670.4
40°	659.8	659.0	658.1	657.3	656.4	654.8	652.5	650.1	647.6	645.3	643.8
42.5°	632.3	631.6	630.8	630.1	629.3	627.8	625.4	623.1	620.7	618.2	616.9
45°	592.4	591.7	591.0	590.3	589.7	588.2	586.2	584.2	582.1	580.1	578.0
47.5°	549.4	549.4	549.5	549.5	549.5	548.3	545.8	543.4	541.0	538.5	536.4
50°	521.8	521.2	520.7	520.2	519.7	518.5	516.3	514.3	512.3	510.3	508.1
52.5°	493.5	493.1	492.8	492.4	492.0	490.7	488.6	486.4	484.2	482.0	480.1
55°	451.2	450.6	450.1	449.6	449.1	447.7	445.2	442.9	440.5	438.1	436.6
57.5°	406.5	406.3	406.0	405.7	405.5	404.2	402.2	400.2	398.2	396.3	394.3
60°	378.3	377.6	376.9	376.2	375.6	374.3	372.4	370.5	368.6	366.8	365.1
62.5°	348.8	348.3	347.7	347.2	346.6	345.6	344.0	342.3	340.7	339.1	337.3
65°	304.6	304.3	304.0	303.6	303.3	302.2	300.2	298.4	296.5	294.7	293.1
67.5°	261.8	261.1	260.3	259.6	258.9	257.9	256.5	255.1	253.7	252.3	251.0
70°	234.8	234.0	233.1	232.3	231.4	230.1	228.6	227.1	225.6	224.1	223.0
72.5°	205.3	204.7	204.2	203.6	203.0	202.2	201.3	200.3	199.2	198.2	197.1
75°	161.9	161.6	161.2	160.9	160.6	160.0	159.1	158.2	157.3	156.5	156.0
77.5°	121.9	121.7	121.6	121.4	121.3	121.0	120.5	120.1	119.6	119.1	118.8
80°	96.6	96.6	96.6	96.6	96.6	96.5	96.1	95.8	95.5	95.1	94.9
82.5°	74.6	74.3	74.0	73.7	73.5	73.3	73.2	73.2	73.1	73.0	72.7
85°	42.2	42.4	42.5	42.7	42.9	42.9	42.9	42.9	42.9	42.9	42.8
87.5°	16.7	16.8	16.9	17.1	17.2	17.2	17.2	17.2	17.2	17.1	17.2
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.2	5.8	6.1
92.5°	8.7	9.1	9.5	10.0	10.4	11.0	11.6	12.3	13.0	13.7	14.2
95°	23.2	23.3	23.5	23.6	23.8	24.3	25.1	25.9	26.7	27.5	28.1
97.5°	38.6	38.6	38.7	38.8	38.8	39.4	40.5	41.6	42.6	43.7	44.3
100°	50.0	50.0	50.0	50.0	50.0	50.5	51.5	52.5	53.6	54.6	55.3
102.5°	62.2	62.6	62.9	63.2	63.5	63.9	64.4	64.9	65.5	66.0	66.9
105°	81.4	81.8	82.2	82.6	83.0	83.4	83.9	84.3	84.8	85.3	85.7
107.5°	102.5	102.9	103.3	103.7	104.1	104.5	104.8	105.2	105.5	105.9	106.1
110°	117.0	117.4	117.9	118.3	118.7	119.0	119.2	119.5	119.7	120.0	120.2



TEST NUMBER: P333167-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	131.9	132.1	132.3	132.5	132.7	133.0	133.3	133.6	133.9	134.2	134.3
115°	153.8	154.1	154.5	154.8	155.1	155.3	155.5	155.6	155.8	156.0	155.9
117.5°	175.8	175.9	176.1	176.2	176.4	176.5	176.7	176.8	176.9	177.1	177.1
120°	189.6	190.0	190.4	190.8	191.1	191.4	191.5	191.5	191.6	191.7	191.7
122.5°	204.4	204.5	204.7	204.8	204.9	205.1	205.3	205.5	205.7	205.9	205.9
125°	224.5	225.0	225.5	225.9	226.4	226.7	226.8	226.8	226.9	227.0	226.8
127.5°	245.9	246.2	246.5	246.7	247.0	247.2	247.3	247.4	247.5	247.5	247.5
130°	258.7	259.1	259.5	259.9	260.3	260.6	260.7	260.9	261.2	261.3	261.2
132.5°	271.7	272.3	273.0	273.6	274.2	274.6	274.5	274.5	274.5	274.4	274.3
135°	292.0	292.5	293.0	293.4	293.9	294.2	294.3	294.3	294.4	294.5	294.5
137.5°	311.1	311.5	312.0	312.5	313.0	313.3	313.5	313.6	313.8	314.0	314.1
140°	323.4	323.8	324.2	324.6	325.0	325.3	325.5	325.8	326.0	326.2	326.4
142.5°	335.7	336.0	336.3	336.7	337.0	337.3	337.6	337.9	338.2	338.5	338.6
145°	353.8	354.1	354.4	354.7	355.0	355.3	355.5	355.8	356.0	356.2	356.2
147.5°	370.4	370.6	370.7	370.9	371.1	371.3	371.5	371.7	371.8	372.0	372.2
150°	381.5	381.5	381.4	381.3	381.2	381.3	381.6	382.0	382.3	382.6	382.6
152.5°	390.7	390.8	390.9	391.0	391.1	391.2	391.4	391.5	391.6	391.7	391.9
155°	404.8	404.8	404.8	404.8	404.8	404.8	404.9	405.0	405.1	405.2	405.5
157.5°	417.3	417.2	417.0	416.8	416.7	416.6	416.7	416.8	416.8	416.9	417.2
160°	424.7	424.5	424.2	424.0	423.8	423.7	423.8	423.8	423.9	424.0	424.3
162.5°	431.3	431.1	431.0	430.8	430.6	430.5	430.5	430.6	430.6	430.6	431.0
165°	440.1	439.9	439.8	439.6	439.5	439.4	439.5	439.6	439.7	439.7	440.1
167.5°	447.5	447.2	446.9	446.6	446.3	446.1	446.1	446.1	446.1	446.1	446.6
170°	451.5	451.2	450.9	450.6	450.2	450.1	450.1	450.1	450.1	450.1	450.6
172.5°	454.3	454.0	453.7	453.4	453.1	452.9	452.9	452.9	452.9	452.9	453.4
175°	457.6	457.3	457.0	456.7	456.4	456.2	456.2	456.2	456.2	456.2	456.7
177.5°	459.2	459.0	458.7	458.5	458.2	458.1	458.0	458.0	457.9	457.8	458.2
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7



TEST NUMBER: P333167-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	967.0	968.5	969.8	970.4	970.3	970.1	970.0	969.9
5°	962.2	963.7	965.2	965.9	965.7	965.6	965.4	965.2
7.5°	952.4	953.9	955.4	956.1	955.9	955.7	955.6	955.4
10°	944.2	945.5	947.0	947.6	947.4	947.2	947.0	946.8
12.5°	933.2	934.3	935.3	935.9	935.8	935.8	935.8	935.7
15°	914.0	914.8	915.7	916.1	916.1	916.1	916.1	916.1
17.5°	891.7	892.7	893.8	893.9	893.0	892.2	891.4	890.5
20°	874.7	876.0	877.2	877.4	876.5	875.7	874.7	873.9
22.5°	855.6	856.4	857.2	857.3	856.7	856.1	855.5	855.0
25°	824.8	825.1	825.5	825.4	824.9	824.4	823.8	823.3
27.5°	792.4	792.5	792.5	792.3	791.8	791.3	790.8	790.3
30°	768.9	768.6	768.2	767.8	767.3	766.8	766.3	765.8
32.5°	745.1	744.4	743.8	743.1	742.1	741.2	740.2	739.3
35°	708.0	707.2	706.3	705.2	703.9	702.5	701.1	699.7
37.5°	669.1	667.9	666.6	665.6	664.8	664.1	663.3	662.5
40°	642.2	640.7	639.1	638.1	637.6	637.1	636.6	636.1
42.5°	615.5	614.1	612.7	611.6	610.8	610.1	609.3	608.4
45°	575.9	573.9	571.9	570.6	570.1	569.6	569.1	568.6
47.5°	534.3	532.2	530.2	528.6	527.4	526.1	524.9	523.7
50°	505.8	503.6	501.4	499.7	498.5	497.3	496.0	494.9
52.5°	478.1	476.2	474.2	472.6	471.3	469.9	468.6	467.3
55°	435.0	433.5	432.0	430.6	429.4	428.2	427.1	425.9
57.5°	392.2	390.3	388.3	387.0	386.4	385.7	385.1	384.5
60°	363.3	361.6	359.9	358.5	357.3	356.1	354.9	353.8
62.5°	335.5	333.7	331.7	330.4	329.5	328.5	327.6	326.7
65°	291.5	290.0	288.5	287.4	286.7	286.0	285.4	284.7
67.5°	249.7	248.4	247.1	246.2	245.8	245.4	245.0	244.6
70°	222.0	221.0	219.9	219.1	218.4	217.7	217.0	216.4
72.5°	195.9	194.8	193.6	192.7	192.0	191.4	190.7	190.0
75°	155.5	155.0	154.5	153.9	153.2	152.5	151.9	151.2
77.5°	118.5	118.2	117.9	117.4	116.9	116.5	116.0	115.5
80°	94.8	94.6	94.4	94.2	93.8	93.5	93.2	92.8
82.5°	72.4	72.1	71.8	71.6	71.6	71.5	71.4	71.4
85°	42.6	42.4	42.3	42.0	41.7	41.3	41.0	40.7
87.5°	17.3	17.4	17.4	17.4	17.2	16.9	16.7	16.5
90°	6.5	6.9	7.3	7.6	7.9	8.1	8.3	8.6
92.5°	14.7	15.2	15.8	16.2	16.4	16.5	16.7	16.9
95°	28.6	29.2	29.7	30.1	30.2	30.4	30.5	30.7
97.5°	44.8	45.3	45.8	46.2	46.3	46.4	46.5	46.6
100°	56.0	56.8	57.5	57.9	58.1	58.3	58.4	58.6
102.5°	67.6	68.4	69.2	69.7	69.9	70.1	70.3	70.5
105°	86.2	86.7	87.3	87.6	87.8	88.1	88.3	88.6
107.5°	106.4	106.6	106.8	107.0	106.9	106.9	106.9	106.9
110°	120.4	120.7	120.9	121.0	120.9	120.8	120.7	120.7



TEST NUMBER: P333167-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	134.4	134.5	134.6	134.6	134.5	134.3	134.2	134.1
115°	155.8	155.7	155.6	155.6	155.5	155.4	155.3	155.2
117.5°	177.2	177.3	177.3	177.2	176.9	176.6	176.3	175.9
120°	191.7	191.7	191.7	191.5	191.2	190.9	190.6	190.3
122.5°	205.8	205.7	205.7	205.5	205.3	205.0	204.8	204.5
125°	226.7	226.5	226.4	226.2	226.2	226.1	226.0	225.9
127.5°	247.4	247.3	247.2	247.1	247.0	246.8	246.6	246.5
130°	261.2	261.1	260.9	260.8	260.6	260.5	260.3	260.2
132.5°	274.3	274.2	274.1	274.0	273.7	273.5	273.3	273.1
135°	294.5	294.5	294.5	294.3	294.0	293.7	293.4	293.1
137.5°	314.2	314.3	314.4	314.2	313.8	313.4	313.0	312.6
140°	326.6	326.7	326.9	326.8	326.4	326.0	325.6	325.2
142.5°	338.7	338.8	338.9	338.7	338.3	337.9	337.6	337.2
145°	356.2	356.2	356.2	356.1	355.9	355.6	355.4	355.2
147.5°	372.4	372.6	372.8	372.6	372.1	371.5	371.0	370.5
150°	382.6	382.6	382.6	382.5	382.4	382.2	382.0	381.9
152.5°	392.1	392.3	392.5	392.4	392.2	391.9	391.6	391.3
155°	405.8	406.1	406.4	406.4	406.0	405.6	405.2	404.8
157.5°	417.5	417.9	418.2	418.1	417.6	417.0	416.5	416.0
160°	424.6	425.0	425.3	425.3	424.9	424.4	424.0	423.6
162.5°	431.3	431.7	432.1	432.1	431.6	431.1	430.7	430.2
165°	440.4	440.7	441.0	440.9	440.4	440.0	439.5	439.0
167.5°	447.1	447.5	448.0	448.0	447.5	447.0	446.5	446.1
170°	451.0	451.5	452.0	451.9	451.4	450.8	450.3	449.7
172.5°	453.9	454.3	454.8	454.8	454.3	453.8	453.3	452.8
175°	457.1	457.6	458.1	458.0	457.5	456.9	456.4	455.8
177.5°	458.6	459.0	459.3	459.3	458.9	458.4	458.0	457.5
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7

(END OF REPORT)