

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: P333208-930

Luminaire Tested: **S125DIP-S850D365U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333208-930
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-S850D365U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 3869.7 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

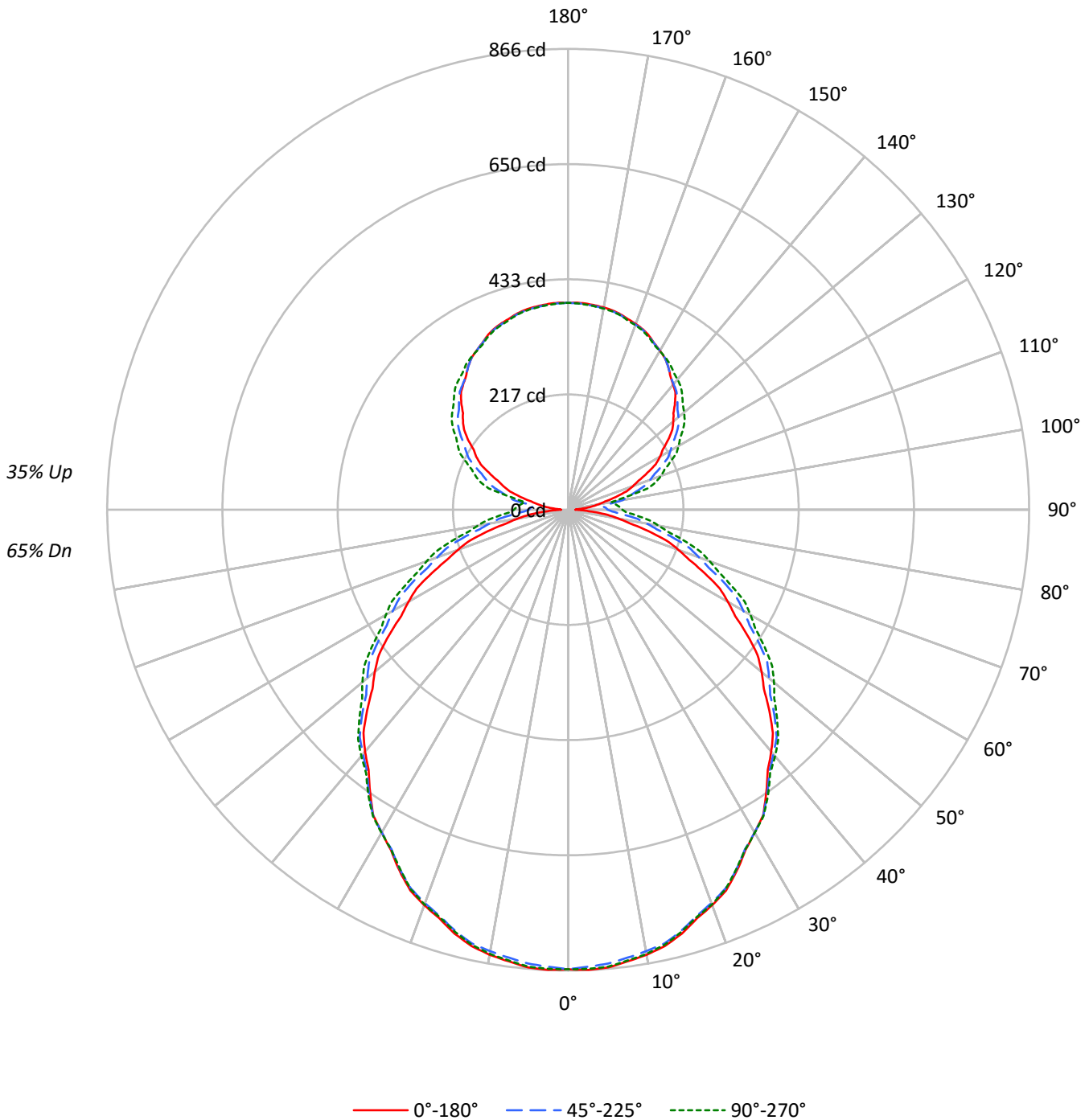
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333208-930

CATALOG NUMBER: S125DIP-S850D365U930-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333208-930

CATALOG NUMBER: S125DIP-S850D365U930-4F0-1E-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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	100	95	91	87	94	90	86	82	79	76	73	69	67	65	60	59	57	53
2	91	83	76	70	85	78	72	67	69	64	60	60	57	54	52	50	47	43
3	83	72	65	58	77	68	61	55	60	55	50	53	49	45	46	43	40	36
4	76	64	56	49	71	60	53	47	53	47	42	47	42	38	41	37	34	31
5	69	57	48	42	65	54	46	40	48	41	37	42	37	33	37	33	30	27
6	64	51	43	36	60	48	41	35	43	37	32	38	33	29	33	29	26	23
7	59	46	38	32	55	44	36	31	39	33	28	35	29	26	31	26	23	21
8	55	42	34	28	51	40	32	27	36	29	25	32	27	23	28	24	21	18
9	51	38	31	25	48	36	29	24	33	27	22	29	24	20	26	22	19	16
10	48	35	28	23	45	33	27	22	30	24	20	27	22	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



TEST NUMBER: P333208-930

CATALOG NUMBER: S125DIP-S850D365U930-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	2.1
10°-20°	231.8	6.0
20°-30°	344.8	8.9
30°-40°	408.4	10.6
40°-50°	422.2	10.9
50°-60°	389.0	10.1
60°-70°	314.4	8.1
70°-80°	210.6	5.4
80°-90°	110.0	2.8
90°-100°	75.4	1.9
100°-110°	132.3	3.4
110°-120°	188.2	4.9
120°-130°	219.9	5.7
130°-140°	225.5	5.8
140°-150°	206.1	5.3
150°-160°	165.5	4.3
160°-170°	107.0	2.8
170°-180°	36.9	1.0
0°-30°	658.3	17.0
0°-40°	1066.7	27.6
0°-60°	1877.9	48.5
0°-90°	2512.9	64.9
90°-120°	395.8	10.2
90°-150°	1047.3	27.1
90°-180°	1357.0	35.1
0°-180°	3869.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	14	43	74	94	102	10
95°	27	48	66	86	92	30
105°	92	108	132	149	155	98
115°	164	172	194	207	211	163
125°	230	232	248	260	264	205
135°	284	285	290	300	303	219
145°	328	328	328	332	334	205
155°	360	359	359	360	358	166
165°	380	379	379	380	378	107
175°	389	387	387	389	387	37
180°	389	389	389	389	389	



TEST NUMBER: P333208-930

CATALOG NUMBER: S125DIP-S850D365U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.5	32.6	38.7	44.8	51.0	57.3	63.8	70.3	76.7	83.2	87.6
90°	13.9	20.4	26.9	33.4	39.9	46.6	53.5	60.3	67.2	74.0	78.7
92.5°	16.6	21.9	27.1	32.3	37.5	43.5	50.5	57.5	64.4	71.3	75.8
95°	27.4	32.1	36.9	41.5	46.2	50.5	54.5	58.5	62.5	66.4	70.8
97.5°	44.3	49.0	53.8	58.5	63.3	66.4	67.7	69.1	70.4	71.7	73.9
100°	57.5	61.6	65.7	69.9	74.0	79.2	85.5	91.8	98.1	104.4	98.7
102.5°	70.8	74.8	78.6	82.5	86.4	91.4	97.3	103.4	109.4	115.4	117.5
105°	92.4	95.6	98.9	102.2	105.4	109.9	115.5	121.2	126.8	132.5	136.2
107.5°	114.7	117.3	119.8	122.4	125.0	129.1	134.6	140.1	145.7	151.2	155.0
110°	129.3	131.5	133.8	136.1	138.3	142.1	147.6	153.0	158.3	163.7	167.1



TEST NUMBER: P333208-930

CATALOG NUMBER: S125DIP-S850D365U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	143.6	145.5	147.5	149.4	151.4	155.0	160.2	165.3	170.6	175.8	179.0
115°	164.2	165.8	167.5	169.1	170.7	174.0	179.0	183.9	188.9	193.8	197.0
117.5°	185.5	186.4	187.2	188.1	188.9	191.8	196.7	201.5	206.4	211.2	214.1
120°	199.3	199.8	200.3	200.8	201.4	203.8	208.4	212.9	217.4	221.9	225.0
122.5°	210.9	211.4	211.9	212.4	212.9	215.3	219.6	223.8	228.1	232.4	235.3
125°	229.6	229.9	230.2	230.4	230.6	232.7	236.4	240.2	243.9	247.7	250.5
127.5°	246.8	247.0	247.1	247.2	247.4	248.9	252.0	255.0	258.0	261.1	263.7
130°	257.9	258.0	258.1	258.3	258.4	259.8	262.5	265.2	267.9	270.6	273.0
132.5°	268.2	268.6	269.0	269.3	269.6	270.7	272.6	274.5	276.4	278.3	280.9
135°	283.8	284.1	284.2	284.5	284.6	285.3	286.5	287.7	288.9	290.1	292.4
137.5°	298.2	298.3	298.5	298.6	298.9	299.2	299.7	300.3	300.8	301.3	303.5
140°	306.9	307.0	307.2	307.3	307.4	307.5	307.7	307.8	307.9	308.0	310.2
142.5°	315.4	315.4	315.3	315.2	315.1	315.2	315.3	315.4	315.5	315.7	317.5
145°	327.9	327.9	327.8	327.8	327.7	327.7	327.7	327.7	327.7	327.7	328.6
147.5°	338.0	338.0	338.0	337.9	337.9	337.9	338.0	338.1	338.2	338.3	338.7
150°	345.0	344.9	344.7	344.5	344.5	344.5	344.5	344.7	344.9	345.0	345.1
152.5°	351.6	351.4	351.1	350.8	350.5	350.4	350.6	350.7	350.8	351.0	351.1
155°	360.3	359.9	359.5	359.1	358.7	358.6	358.7	358.8	359.0	359.1	359.3
157.5°	366.9	366.6	366.4	366.2	366.0	365.8	365.8	365.9	365.9	365.9	366.1
160°	371.5	371.1	370.7	370.3	370.0	369.8	369.8	369.9	370.0	370.1	370.3
162.5°	375.2	374.8	374.4	374.0	373.7	373.5	373.6	373.6	373.7	373.7	374.1
165°	380.1	379.8	379.4	379.0	378.6	378.5	378.5	378.5	378.6	378.7	379.0
167.5°	383.8	383.4	383.0	382.6	382.2	382.0	382.1	382.2	382.3	382.3	382.8
170°	385.9	385.5	385.0	384.6	384.1	383.9	384.0	384.0	384.1	384.2	384.7
172.5°	387.3	386.9	386.4	386.0	385.5	385.3	385.4	385.6	385.6	385.8	386.2
175°	388.7	388.4	388.0	387.6	387.3	387.1	387.1	387.2	387.3	387.3	387.8
177.5°	389.5	389.1	388.8	388.6	388.2	388.1	388.2	388.2	388.2	388.3	388.7
180°	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7



TEST NUMBER: P333208-930

CATALOG NUMBER: S125DIP-S850D365U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	92.0	96.4	100.8	103.7	105.0	106.4	107.7	109.1
90°	83.3	88.0	92.6	95.7	97.2	98.7	100.3	101.7
92.5°	80.3	84.8	89.4	92.3	93.7	95.1	96.5	97.9
95°	75.3	79.8	84.3	87.2	88.5	89.8	91.1	92.5
97.5°	76.1	78.2	80.3	82.0	83.3	84.6	85.9	87.2
100°	93.2	87.6	81.9	79.6	80.5	81.4	82.3	83.1
102.5°	119.4	121.5	123.4	122.8	119.6	116.3	113.2	109.9
105°	140.0	143.7	147.5	150.0	151.2	152.5	153.8	155.0
107.5°	158.7	162.4	166.2	168.5	169.5	170.5	171.5	172.4
110°	170.5	173.9	177.2	179.6	181.0	182.4	183.8	185.2



TEST NUMBER: P333208-930

CATALOG NUMBER: S125DIP-S850D365U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	182.1	185.3	188.5	190.7	191.9	193.1	194.4	195.6
115°	200.1	203.3	206.4	208.3	209.0	209.8	210.5	211.2
117.5°	217.0	219.9	222.7	224.7	225.8	227.0	228.0	229.2
120°	228.0	231.1	234.2	236.2	236.9	237.7	238.6	239.4
122.5°	238.2	241.2	244.0	245.9	246.6	247.4	248.2	248.9
125°	253.2	256.0	258.8	260.5	261.2	262.0	262.8	263.5
127.5°	266.4	269.0	271.7	273.3	273.9	274.6	275.2	275.8
130°	275.5	277.9	280.4	281.9	282.5	283.2	283.8	284.4
132.5°	283.5	286.1	288.7	290.2	290.7	291.1	291.6	292.0
135°	294.7	297.0	299.4	300.8	301.3	301.9	302.5	303.0
137.5°	305.8	308.0	310.3	311.6	312.0	312.5	312.9	313.3
140°	312.4	314.6	316.8	318.1	318.5	318.9	319.2	319.6
142.5°	319.3	321.1	322.9	323.9	324.3	324.7	325.1	325.4
145°	329.7	330.7	331.7	332.4	332.7	333.1	333.5	333.9
147.5°	339.0	339.4	339.8	339.9	339.8	339.7	339.6	339.4
150°	345.2	345.4	345.4	345.4	345.0	344.7	344.4	344.1
152.5°	351.2	351.3	351.5	351.3	350.9	350.5	350.1	349.6
155°	359.5	359.6	359.9	359.7	359.2	358.7	358.2	357.7
157.5°	366.3	366.5	366.7	366.6	366.1	365.5	365.0	364.5
160°	370.6	370.8	371.0	371.0	370.4	369.9	369.4	368.9
162.5°	374.5	374.8	375.2	375.0	374.5	373.9	373.4	372.8
165°	379.4	379.8	380.3	380.2	379.7	379.1	378.6	378.1
167.5°	383.3	383.7	384.2	384.1	383.5	382.9	382.4	381.8
170°	385.1	385.7	386.2	386.2	385.6	385.1	384.4	383.8
172.5°	386.7	387.2	387.6	387.6	387.0	386.4	385.8	385.2
175°	388.3	388.9	389.4	389.4	388.7	388.2	387.6	387.0
177.5°	389.1	389.4	389.7	389.7	389.3	388.9	388.5	388.1
180°	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7

(END OF REPORT)