

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: P333226-930

Luminaire Tested: **S125DIP-S850D810U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333226-930
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-S850D810U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5318.2 lumens
Efficiency: N/A
Efficacy: 115.9 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: General Diffuse

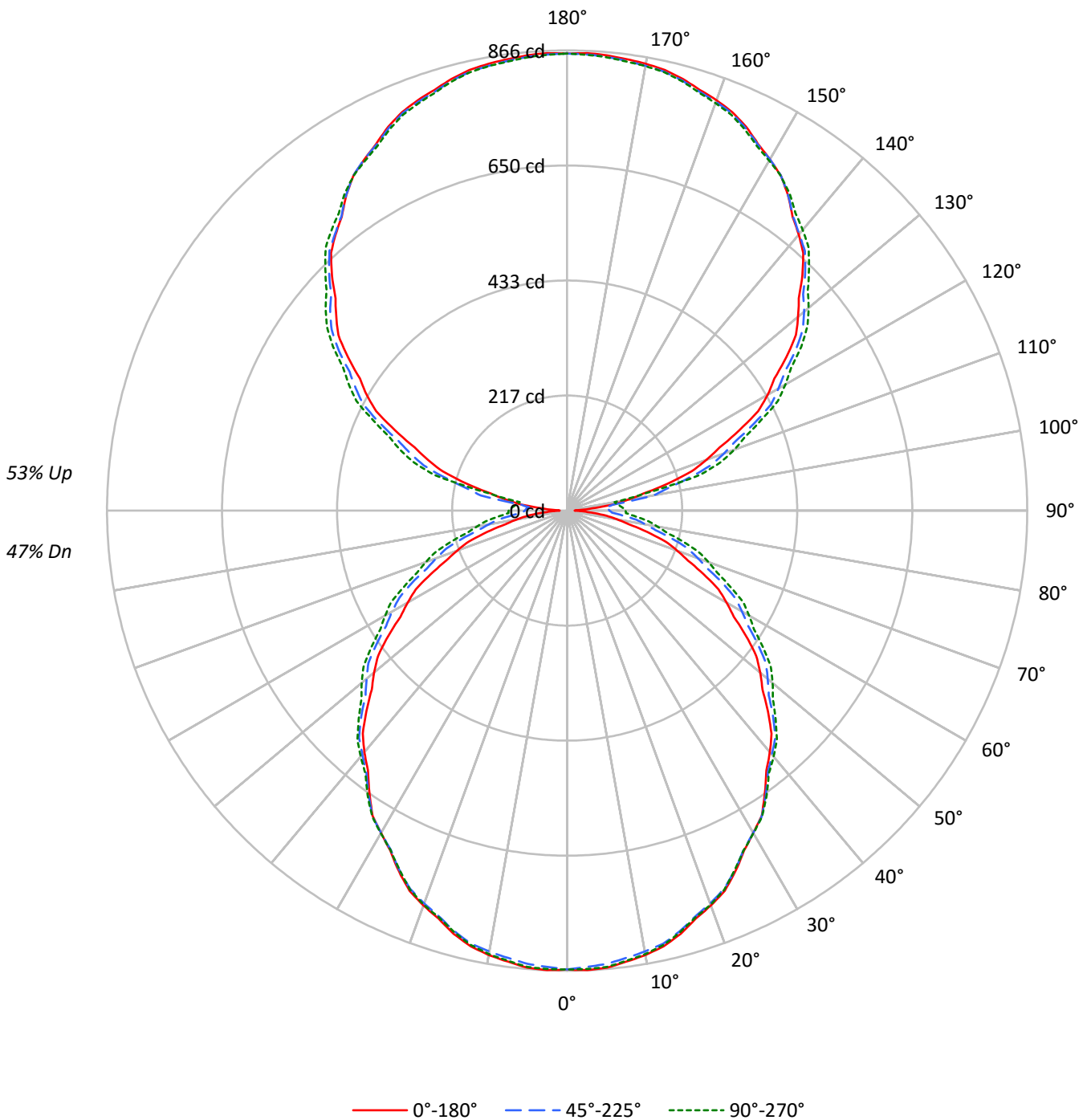
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333226-930

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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	0
RCR																		
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	96	92	88	84	88	84	81	78	71	68	66	58	56	54	46	45	44	38
2	88	80	73	68	80	73	68	63	61	57	54	50	48	45	40	38	36	32
3	80	70	62	56	73	64	58	52	54	49	45	44	41	38	35	33	31	26
4	73	62	54	47	66	57	50	44	48	42	38	39	35	32	32	29	26	22
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	26	22	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	21	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.5
10°-20°	231.8	4.4
20°-30°	344.8	6.5
30°-40°	408.4	7.7
40°-50°	422.2	7.9
50°-60°	389.0	7.3
60°-70°	314.4	5.9
70°-80°	210.6	4.0
80°-90°	111.0	2.1
90°-100°	92.5	1.7
100°-110°	237.8	4.5
110°-120°	379.7	7.1
120°-130°	465.6	8.8
130°-140°	489.8	9.2
140°-150°	454.2	8.5
150°-160°	366.2	6.9
160°-170°	236.8	4.5
170°-180°	81.7	1.5
0°-30°	658.3	12.4
0°-40°	1066.7	20.1
0°-60°	1877.9	35.3
0°-90°	2513.9	47.3
90°-120°	710.0	13.4
90°-150°	2119.6	39.9
90°-180°	2804.0	52.7
0°-180°	5318.2	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	46	80	101	110	11
95°	47	67	72	93	100	55
105°	195	212	237	253	259	207
115°	357	367	389	401	403	354
125°	504	508	524	535	538	450
135°	626	629	634	643	644	482
145°	725	725	725	730	729	453
155°	797	793	794	796	791	367
165°	841	837	838	841	836	237
175°	860	857	857	861	856	82
180°	860	860	860	860	860	



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CATALOG NUMBER: S125DIP-S850D810U930-4F0-1E-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°	26.6	32.8	39.1	45.2	51.5	58.0	64.6	71.2	77.8	84.4	88.8
90°	14.2	21.4	28.5	35.6	42.8	50.1	57.5	64.8	72.2	79.7	84.7
92.5°	22.0	26.8	31.6	36.4	41.1	47.2	54.6	62.0	69.5	77.0	81.8
95°	47.4	51.9	56.3	60.7	65.2	68.0	69.0	70.0	71.0	72.0	76.9
97.5°	85.9	91.1	96.2	101.3	106.6	106.9	102.4	97.9	93.4	88.9	88.9
100°	115.8	120.2	124.6	128.9	133.3	138.8	145.4	152.0	158.6	165.1	148.0
102.5°	146.3	150.4	154.6	158.8	163.0	168.2	174.4	180.6	186.8	193.1	192.8
105°	195.1	198.7	202.2	205.8	209.4	214.0	219.6	225.3	230.9	236.6	240.4
107.5°	245.8	248.4	250.9	253.5	256.1	260.2	265.9	271.6	277.3	283.0	286.7
110°	278.8	281.1	283.3	285.6	287.9	291.8	297.3	302.9	308.4	314.0	317.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	310.5	312.6	314.7	316.9	319.0	322.8	328.1	333.3	338.6	343.9	346.7
115°	357.0	359.1	361.1	363.1	365.2	368.7	373.7	378.7	383.8	388.8	391.6
117.5°	405.3	406.1	407.0	407.8	408.6	411.6	416.8	422.0	427.1	432.3	434.8
120°	435.9	436.3	436.8	437.2	437.6	440.2	444.9	449.6	454.4	459.2	462.1
122.5°	462.3	463.0	463.8	464.6	465.5	468.1	472.4	476.8	481.2	485.5	488.3
125°	503.9	504.7	505.5	506.3	507.1	509.4	513.1	516.9	520.7	524.5	526.9
127.5°	543.0	543.5	544.0	544.5	545.0	546.8	549.8	552.9	555.8	558.8	561.3
130°	567.4	567.9	568.5	569.0	569.6	571.2	574.0	576.7	579.5	582.3	584.5
132.5°	591.3	592.1	592.8	593.6	594.4	595.7	597.4	599.1	600.8	602.5	605.1
135°	625.9	626.6	627.2	627.9	628.5	629.4	630.5	631.4	632.5	633.6	635.7
137.5°	657.8	658.4	658.9	659.5	660.1	660.6	661.0	661.4	661.7	662.1	664.4
140°	678.0	678.2	678.6	678.8	679.1	679.3	679.3	679.4	679.4	679.5	681.8
142.5°	696.8	696.8	696.9	696.9	696.9	697.1	697.3	697.6	697.7	698.0	699.9
145°	724.6	724.6	724.7	724.8	724.9	725.0	725.0	725.0	725.0	725.0	726.0
147.5°	747.9	747.9	747.8	747.7	747.7	747.7	747.9	748.0	748.3	748.4	748.9
150°	763.2	763.0	762.6	762.4	762.1	762.1	762.4	762.6	763.0	763.2	763.5
152.5°	778.0	777.4	776.7	776.2	775.5	775.3	775.6	775.9	776.2	776.5	776.7
155°	797.0	796.1	795.3	794.4	793.6	793.3	793.6	793.9	794.2	794.4	794.8
157.5°	811.6	811.1	810.7	810.2	809.6	809.3	809.4	809.4	809.4	809.5	809.9
160°	821.9	821.0	820.2	819.3	818.5	818.2	818.2	818.4	818.6	818.6	819.2
162.5°	830.1	829.2	828.3	827.4	826.6	826.3	826.4	826.6	826.7	826.9	827.6
165°	841.0	840.2	839.3	838.5	837.6	837.2	837.4	837.6	837.6	837.8	838.7
167.5°	849.1	848.3	847.4	846.5	845.6	845.3	845.4	845.5	845.7	845.9	846.9
170°	853.8	852.7	851.7	850.8	849.8	849.4	849.5	849.6	849.8	849.9	851.1
172.5°	856.8	855.8	854.8	853.9	852.8	852.5	852.7	853.0	853.2	853.5	854.5
175°	860.1	859.2	858.4	857.6	856.7	856.4	856.5	856.6	856.8	857.0	858.1
177.5°	861.7	861.0	860.3	859.7	858.9	858.7	858.8	858.8	859.0	859.1	859.9
180°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1



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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°	93.3	97.8	102.2	105.2	106.6	107.9	109.3	110.8
90°	89.7	94.7	99.8	103.1	104.9	106.6	108.4	110.1
92.5°	86.7	91.6	96.4	99.6	101.2	102.7	104.2	105.7
95°	81.7	86.6	91.4	94.5	95.8	97.1	98.4	99.8
97.5°	88.9	88.8	88.8	89.4	90.7	92.0	93.2	94.5
100°	130.8	113.7	96.5	88.2	88.8	89.4	89.8	90.4
102.5°	192.7	192.4	192.2	187.9	179.4	170.9	162.4	153.8
105°	244.1	247.9	251.6	254.1	255.3	256.4	257.6	258.8
107.5°	290.5	294.2	298.0	300.3	301.0	301.7	302.5	303.2
110°	320.2	323.4	326.5	328.9	330.4	331.8	333.2	334.7



TEST NUMBER: P333226-930

CATALOG NUMBER: S125DIP-S850D810U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	349.7	352.5	355.5	357.4	358.6	359.7	360.8	361.9
115°	394.4	397.3	400.1	401.6	401.9	402.2	402.4	402.8
117.5°	437.2	439.7	442.1	443.8	444.7	445.6	446.5	447.5
120°	465.0	467.9	470.8	472.5	473.0	473.4	473.8	474.2
122.5°	491.1	493.8	496.6	498.1	498.5	498.7	499.0	499.4
125°	529.4	531.8	534.3	535.7	536.2	536.7	537.3	537.8
127.5°	563.8	566.2	568.7	570.0	570.0	570.1	570.1	570.1
130°	586.7	588.9	591.1	592.3	592.6	592.8	593.0	593.3
132.5°	607.6	610.2	612.7	614.1	614.2	614.2	614.3	614.4
135°	637.9	640.0	642.2	643.4	643.4	643.5	643.6	643.7
137.5°	666.7	669.0	671.2	672.4	672.4	672.4	672.4	672.5
140°	684.2	686.5	688.8	690.0	689.9	689.8	689.7	689.6
142.5°	701.6	703.4	705.3	706.1	706.0	706.0	705.9	705.8
145°	727.1	728.2	729.3	729.8	729.7	729.6	729.4	729.4
147.5°	749.3	749.8	750.3	750.2	749.5	748.9	748.1	747.5
150°	763.8	764.1	764.3	764.0	763.0	762.1	761.2	760.3
152.5°	777.1	777.3	777.6	777.2	776.2	775.3	774.3	773.3
155°	795.3	795.7	796.1	795.8	794.7	793.5	792.4	791.2
157.5°	810.4	810.9	811.3	811.0	809.8	808.7	807.6	806.4
160°	819.8	820.4	820.9	820.7	819.5	818.4	817.3	816.1
162.5°	828.4	829.2	830.0	829.8	828.5	827.3	826.1	824.8
165°	839.5	840.3	841.2	841.1	839.9	838.8	837.6	836.5
167.5°	847.9	848.9	849.9	849.8	848.5	847.3	846.0	844.7
170°	852.2	853.3	854.4	854.4	853.1	851.8	850.5	849.3
172.5°	855.5	856.6	857.6	857.5	856.1	854.9	853.6	852.3
175°	859.2	860.3	861.4	861.4	860.1	858.8	857.6	856.3
177.5°	860.7	861.4	862.3	862.3	861.3	860.4	859.5	858.6
180°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1

(END OF REPORT)