

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: P331967-830

Luminaire Tested: **S123DIP-S775D585U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331967-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIP-S775D585U830-4F0-1E-UDD-D
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 775 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 585 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5253.2 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.08')
CIE Type: General Diffuse

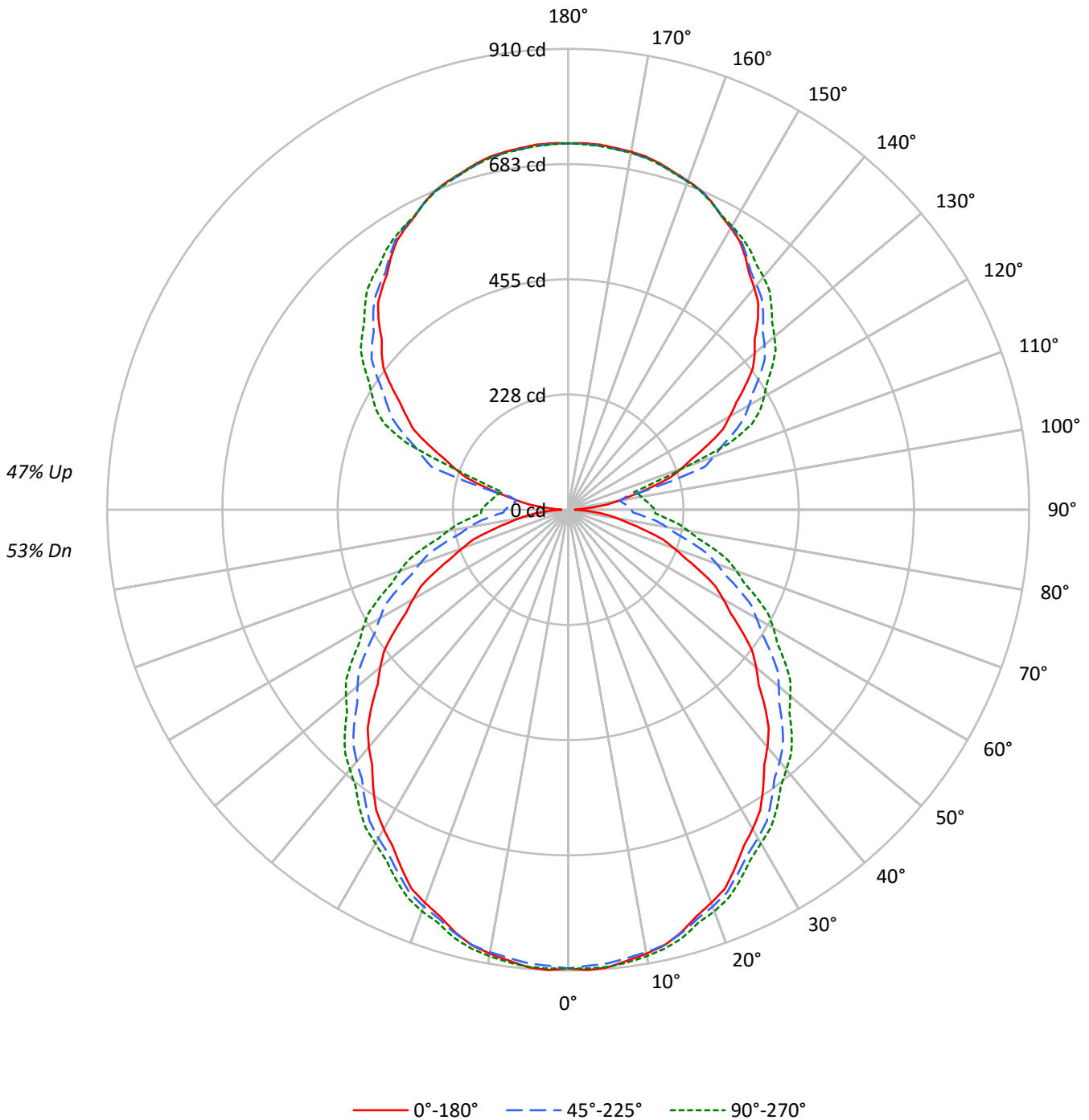
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331967-830

CATALOG NUMBER: S123DIP-S775D585U830-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P331967-830

CATALOG NUMBER: S123DIP-S775D585U830-4F0-1E-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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	97	93	88	84	90	86	82	79	73	70	68	61	59	57	50	49	48	42
2	88	80	74	68	81	74	68	64	63	59	55	53	50	47	44	41	39	35
3	80	70	62	56	74	65	58	53	55	50	46	47	43	39	38	35	33	29
4	73	62	54	47	67	57	50	44	49	43	39	41	37	33	34	31	28	24
5	67	55	46	40	62	51	44	38	44	38	33	37	32	29	31	27	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	53	41	34	29	36	30	25	30	26	22	25	22	19	16
8	53	40	32	27	49	38	30	25	32	27	22	28	23	20	23	20	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	18	21	18	15	13
10	46	34	26	21	43	31	25	20	27	22	18	23	19	16	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9752	9752	9752
5°	9782	9507	9512
10°	9694	9287	9240
15°	9570	9038	8945
20°	9390	8755	8621
25°	9171	8428	8278
30°	8945	8133	7931
35°	8692	7823	7655
40°	8450	7540	7358
45°	8182	7269	7122
50°	7918	7000	6860
55°	7627	6725	6625
60°	7343	6446	6385
65°	7051	6149	6098
70°	6611	5815	5805
75°	6055	5432	5506
80°	5416	5056	5164
85°	4828	4799	4966



TEST NUMBER: P331967-830

CATALOG NUMBER: S123DIP-S775D585U830-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	1.6
10°-20°	244.8	4.7
20°-30°	366.2	7.0
30°-40°	437.3	8.3
40°-50°	457.5	8.7
50°-60°	429.4	8.2
60°-70°	358.6	6.8
70°-80°	256.6	4.9
80°-90°	155.0	3.0
90°-100°	122.3	2.3
100°-110°	195.9	3.7
110°-120°	348.3	6.6
120°-130°	410.4	7.8
130°-140°	421.8	8.0
140°-150°	385.8	7.3
150°-160°	309.1	5.9
160°-170°	199.5	3.8
170°-180°	68.7	1.3
0°-30°	696.9	13.3
0°-40°	1134.2	21.6
0°-60°	2021.1	38.5
0°-90°	2791.3	53.1
90°-120°	666.5	12.7
90°-150°	1884.5	35.9
90°-180°	2462.0	46.9
0°-180°	5253.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	907	905	899	906	906	86
15°	864	866	866	875	874	243
25°	780	789	792	805	805	359
35°	671	687	700	714	718	420
45°	549	572	597	615	624	423
55°	418	451	486	512	521	375
65°	289	328	371	400	411	286
75°	157	203	253	284	297	168
85°	48	98	150	182	193	51
90°	13	67	124	159	171	10
95°	44	62	114	147	159	49
105°	168	196	192	129	134	178
115°	306	322	361	389	400	302
125°	427	432	462	483	491	381
135°	529	532	545	563	567	407
145°	610	612	613	622	626	381
155°	670	669	670	672	669	309
165°	707	705	705	709	705	200
175°	724	721	721	725	721	69
180°	724	724	724	724	724	



TEST NUMBER: P331967-830

CATALOG NUMBER: S123DIP-S775D585U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	906.0	906.0	906.0	906.0	906.0	906.0	906.0	906.0	906.0	906.0	906.0
2.5°	909.9	909.4	908.9	908.3	907.9	906.8	905.5	904.1	902.7	901.3	902.7
5°	907.0	906.5	906.1	905.7	905.2	904.4	903.1	901.7	900.4	899.1	900.9
7.5°	898.1	898.1	898.2	898.3	898.4	897.9	896.5	895.3	894.0	892.8	894.9
10°	890.2	890.6	891.1	891.6	891.9	891.6	890.5	889.5	888.3	887.2	889.5
12.5°	880.7	881.4	881.9	882.6	883.2	883.2	882.4	881.7	880.9	880.1	882.1
15°	863.6	864.2	864.9	865.5	866.2	866.4	866.2	866.0	865.7	865.5	867.7
17.5°	841.9	843.2	844.5	845.7	847.1	847.7	847.6	847.5	847.4	847.3	849.3
20°	826.0	827.4	828.7	830.0	831.3	832.2	832.6	833.1	833.5	834.0	835.9
22.5°	809.5	810.8	812.1	813.4	814.7	815.7	816.3	816.9	817.6	818.1	820.7
25°	779.7	781.8	784.0	786.3	788.4	789.9	790.5	791.2	791.8	792.5	795.3
27.5°	749.7	752.1	754.7	757.1	759.7	761.6	763.0	764.4	765.8	767.2	769.7
30°	728.3	731.2	734.1	736.9	739.7	742.1	743.8	745.6	747.3	749.0	751.7
32.5°	704.6	707.8	711.1	714.3	717.5	720.2	722.5	724.8	727.1	729.3	732.2
35°	671.1	674.6	678.2	681.6	685.1	688.3	691.2	694.0	696.9	699.7	703.0
37.5°	635.6	639.5	643.5	647.4	651.4	655.1	658.6	662.1	665.6	669.1	672.9
40°	611.9	615.9	619.8	623.8	627.6	631.9	636.2	640.6	645.0	649.4	653.1
42.5°	585.8	590.7	595.5	600.3	605.1	609.8	614.3	619.0	623.5	628.1	632.2
45°	548.7	554.0	559.2	564.5	569.8	575.1	580.6	586.1	591.6	597.1	601.2
47.5°	509.8	515.9	521.8	527.7	533.7	539.8	546.1	552.3	558.6	564.9	569.6
50°	484.6	490.7	496.8	503.0	509.2	515.6	522.5	529.2	536.0	542.8	547.8
52.5°	457.7	464.2	470.7	477.2	483.7	490.7	498.2	505.7	513.2	520.7	525.9
55°	418.5	425.7	432.9	440.2	447.4	455.0	462.9	470.8	478.6	486.5	492.5
57.5°	380.1	387.7	395.2	402.7	410.4	418.4	427.1	435.7	444.3	453.0	458.9
60°	353.4	361.2	369.1	377.0	384.9	393.3	402.4	411.3	420.3	429.3	435.5
62.5°	328.0	336.1	344.2	352.2	360.3	369.1	378.6	388.1	397.7	407.2	413.3
65°	289.2	297.7	306.2	314.8	323.4	332.4	342.1	351.8	361.5	371.1	377.7
67.5°	249.7	258.7	267.9	276.9	286.0	295.5	305.3	315.1	324.9	334.8	342.0
70°	222.1	231.5	240.9	250.3	259.8	269.8	280.3	290.8	301.3	311.9	318.9
72.5°	196.8	206.2	215.7	225.1	234.5	244.7	255.5	266.5	277.3	288.1	295.4
75°	156.9	167.2	177.6	187.8	198.1	208.8	219.7	230.7	241.7	252.7	259.9
77.5°	122.2	132.6	143.0	153.4	163.7	174.5	185.6	196.6	207.6	218.7	226.3
80°	97.7	108.5	119.2	130.0	140.7	151.7	163.2	174.6	186.0	197.4	204.8
82.5°	76.3	87.3	98.2	109.1	120.1	131.3	142.9	154.5	166.1	177.7	185.1
85°	48.4	59.3	70.3	81.2	92.2	103.5	115.2	126.8	138.4	150.1	157.5
87.5°	26.4	37.5	48.6	59.9	71.0	82.3	93.8	105.3	116.8	128.3	135.8
90°	13.4	25.4	37.2	49.2	61.2	73.5	86.2	99.0	111.7	124.4	132.3
92.5°	22.1	31.4	40.7	50.1	59.5	70.2	82.5	94.6	106.8	118.9	127.1
95°	43.6	47.3	51.0	54.6	58.2	66.2	78.2	90.3	102.3	114.3	122.0
97.5°	75.6	81.1	86.6	92.2	97.6	101.2	102.9	104.6	106.2	107.9	115.4
100°	99.7	109.1	118.6	128.0	137.3	137.8	129.2	120.7	112.2	103.6	110.9
102.5°	127.3	135.3	143.4	151.5	159.5	158.3	147.8	137.4	127.0	116.5	119.7
105°	168.1	174.7	181.3	187.8	194.4	197.0	195.7	194.4	193.0	191.7	176.7
107.5°	210.1	215.7	221.2	226.7	232.2	240.3	251.0	261.6	272.2	282.9	273.2
110°	238.2	243.1	248.0	252.9	257.8	265.2	275.3	285.4	295.5	305.6	307.4



TEST NUMBER: P331967-830

CATALOG NUMBER: S123DIP-S775D585U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	265.7	269.8	273.9	278.0	282.1	289.0	298.8	308.5	318.2	328.0	333.6
115°	305.5	308.8	312.2	315.5	318.9	325.0	333.9	342.9	351.9	360.9	367.3
117.5°	344.7	347.2	349.7	352.2	354.8	360.0	368.0	375.9	383.9	391.8	398.0
120°	368.4	370.6	372.8	374.9	377.1	382.0	389.6	397.2	404.8	412.4	418.4
122.5°	393.4	394.8	396.2	397.8	399.2	403.6	410.9	418.3	425.7	432.9	438.5
125°	426.6	427.5	428.5	429.4	430.4	434.3	441.1	448.0	454.8	461.7	466.5
127.5°	459.7	460.4	461.2	461.9	462.6	465.9	471.7	477.6	483.4	489.3	494.0
130°	480.3	481.1	481.8	482.6	483.2	486.1	491.0	495.8	500.7	505.6	510.2
132.5°	499.4	500.2	501.1	502.1	502.9	505.4	509.3	513.1	517.1	520.9	525.4
135°	529.3	529.8	530.4	530.8	531.3	533.0	535.9	538.9	541.7	544.6	548.9
137.5°	555.0	555.7	556.4	557.1	557.9	559.0	560.7	562.3	563.9	565.5	569.6
140°	571.4	572.1	572.8	573.5	574.2	575.1	576.1	577.1	578.2	579.2	583.0
142.5°	587.3	587.9	588.3	588.9	589.5	589.9	590.4	591.0	591.4	591.9	595.2
145°	609.5	610.1	610.8	611.4	612.0	612.5	612.7	612.9	613.1	613.4	615.4
147.5°	629.5	630.1	630.7	631.1	631.7	632.1	632.4	632.5	632.8	633.1	633.9
150°	642.4	642.8	643.1	643.5	643.9	644.1	644.4	644.6	644.9	645.1	645.4
152.5°	654.0	654.2	654.3	654.5	654.7	654.9	655.0	655.2	655.3	655.4	655.8
155°	670.3	670.1	669.9	669.7	669.4	669.4	669.5	669.6	669.7	669.9	670.4
157.5°	683.1	683.1	683.0	683.0	683.0	682.9	682.8	682.7	682.5	682.4	683.2
160°	690.8	690.7	690.6	690.4	690.3	690.2	690.0	689.9	689.8	689.8	690.4
162.5°	698.1	697.8	697.5	697.2	696.8	696.6	696.5	696.4	696.3	696.2	697.0
165°	706.9	706.5	706.2	705.9	705.5	705.2	705.1	705.0	704.9	704.7	705.8
167.5°	713.8	713.3	712.8	712.4	711.9	711.6	711.6	711.6	711.6	711.6	712.7
170°	717.7	717.2	716.7	716.2	715.8	715.5	715.5	715.5	715.5	715.5	716.5
172.5°	720.3	719.7	719.1	718.5	717.9	717.7	717.8	717.9	718.0	718.1	719.1
175°	723.6	723.0	722.4	721.8	721.2	721.0	721.0	721.2	721.3	721.4	722.3
177.5°	724.4	724.0	723.5	723.0	722.6	722.4	722.5	722.6	722.6	722.7	723.5
180°	723.6	723.6	723.6	723.6	723.6	723.6	723.6	723.6	723.6	723.6	723.6



TEST NUMBER: P331967-830

CATALOG NUMBER: S123DIP-S775D585U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	906.0	906.0	906.0	906.0	906.0	906.0	906.0	906.0
2.5°	904.1	905.5	906.8	907.5	907.3	907.1	906.9	906.8
5°	902.6	904.4	906.1	906.8	906.6	906.4	906.3	906.0
7.5°	897.1	899.4	901.5	902.5	902.2	902.0	901.7	901.4
10°	891.6	893.8	896.0	896.9	896.5	896.0	895.6	895.1
12.5°	884.2	886.2	888.2	889.0	888.5	888.2	887.7	887.2
15°	869.9	872.1	874.3	875.2	875.1	874.9	874.6	874.4
17.5°	851.3	853.3	855.3	856.1	855.8	855.5	855.2	854.9
20°	837.9	839.9	841.9	842.9	843.2	843.4	843.6	843.9
22.5°	823.1	825.7	828.1	829.3	829.2	829.1	829.0	828.8
25°	798.2	801.1	803.9	805.3	805.3	805.3	805.3	805.3
27.5°	772.1	774.6	777.0	778.4	778.5	778.7	778.9	779.1
30°	754.3	757.0	759.6	760.9	760.9	760.9	760.9	760.9
32.5°	734.9	737.7	740.6	742.3	742.7	743.3	743.8	744.3
35°	706.3	709.6	712.8	715.0	715.9	716.7	717.6	718.5
37.5°	676.6	680.3	684.0	686.3	686.9	687.7	688.3	689.1
40°	656.9	660.5	664.3	666.6	667.5	668.4	669.2	670.1
42.5°	636.2	640.3	644.4	647.1	648.3	649.5	650.7	652.0
45°	605.4	609.5	613.8	616.7	618.5	620.2	622.0	623.8
47.5°	574.3	579.0	583.7	586.7	588.1	589.5	590.8	592.1
50°	552.9	557.9	563.0	566.3	567.8	569.3	570.9	572.4
52.5°	531.1	536.4	541.6	545.2	547.1	548.9	550.8	552.7
55°	498.4	504.4	510.2	514.1	515.9	517.6	519.3	521.1
57.5°	465.0	470.9	476.8	480.9	483.0	485.0	487.0	489.1
60°	441.6	447.7	453.8	458.2	460.5	463.0	465.4	467.8
62.5°	419.5	425.7	431.8	435.9	438.2	440.5	442.7	444.9
65°	384.3	390.8	397.4	401.8	404.0	406.1	408.4	410.6
67.5°	349.1	356.4	363.5	368.1	369.9	371.7	373.6	375.4
70°	325.9	332.9	340.0	344.5	346.8	348.9	351.1	353.4
72.5°	302.6	309.7	317.0	321.7	323.9	326.0	328.2	330.5
75°	267.1	274.4	281.6	286.5	289.2	291.8	294.5	297.1
77.5°	233.9	241.6	249.2	254.0	256.1	258.1	260.1	262.1
80°	212.3	219.7	227.2	232.1	234.2	236.4	238.7	240.8
82.5°	192.6	200.0	207.5	212.3	214.5	216.7	218.9	221.0
85°	164.9	172.4	179.8	184.6	186.8	189.1	191.2	193.4
87.5°	143.5	151.0	158.5	163.4	165.7	167.9	170.1	172.4
90°	140.3	148.3	156.2	161.4	163.8	166.2	168.6	171.1
92.5°	135.1	143.1	151.2	156.3	158.4	160.6	162.8	164.9
95°	129.6	137.2	144.9	149.9	152.0	154.2	156.4	158.6
97.5°	122.9	130.4	137.9	142.8	145.1	147.4	149.7	152.0
100°	118.2	125.5	132.9	137.7	140.0	142.3	144.6	146.9
102.5°	122.9	126.2	129.4	132.2	134.6	137.0	139.4	141.9
105°	161.7	146.8	131.8	125.4	127.5	129.8	132.0	134.2
107.5°	263.6	254.0	244.4	232.5	218.6	204.5	190.6	176.5
110°	309.2	310.9	312.6	305.9	290.6	275.2	259.9	244.6



TEST NUMBER: P331967-830

CATALOG NUMBER: S123DIP-S775D585U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	339.1	344.8	350.3	352.3	350.6	348.9	347.3	345.6
115°	373.8	380.2	386.7	391.1	393.3	395.5	397.8	400.0
117.5°	404.2	410.4	416.5	420.5	422.4	424.1	425.9	427.7
120°	424.4	430.4	436.4	440.2	441.7	443.2	444.8	446.3
122.5°	444.0	449.6	455.1	458.6	460.3	461.9	463.5	465.2
125°	471.4	476.2	481.1	484.4	486.1	487.9	489.7	491.4
127.5°	498.7	503.4	508.1	511.1	512.4	513.7	514.9	516.1
130°	514.8	519.4	524.1	527.0	528.0	529.1	530.2	531.3
132.5°	529.9	534.3	538.9	541.7	542.8	543.9	545.1	546.3
135°	553.2	557.5	561.8	564.3	565.1	565.8	566.6	567.3
137.5°	573.6	577.7	581.7	584.2	585.0	585.9	586.7	587.6
140°	586.7	590.5	594.3	596.5	597.4	598.2	599.1	600.0
142.5°	598.5	601.9	605.2	607.3	608.0	608.8	609.5	610.3
145°	617.4	619.3	621.3	622.8	623.7	624.5	625.5	626.3
147.5°	634.6	635.4	636.1	636.6	636.9	637.1	637.3	637.6
150°	645.5	645.8	646.0	646.2	646.3	646.4	646.5	646.6
152.5°	656.3	656.7	657.1	657.1	656.7	656.2	655.7	655.3
155°	671.0	671.7	672.2	672.1	671.5	670.7	670.1	669.3
157.5°	683.8	684.6	685.3	685.1	684.2	683.3	682.4	681.5
160°	691.2	691.8	692.6	692.5	691.7	690.9	690.0	689.2
162.5°	697.8	698.6	699.5	699.5	698.7	698.0	697.2	696.5
165°	706.7	707.7	708.6	708.7	707.8	707.0	706.2	705.3
167.5°	713.6	714.5	715.5	715.5	714.5	713.6	712.7	711.6
170°	717.5	718.4	719.3	719.3	718.4	717.5	716.5	715.5
172.5°	720.0	721.0	721.9	721.9	720.9	719.8	718.7	717.7
175°	723.1	724.0	724.8	724.7	723.8	722.8	721.9	720.9
177.5°	724.2	725.0	725.8	725.7	724.7	723.8	722.8	721.9
180°	723.6	723.6	723.6	723.6	723.6	723.6	723.6	723.6

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