

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: P333379

Luminaire Tested: **S125DIW-S610D770U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333379  
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: S125DIW-S610D770U835-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

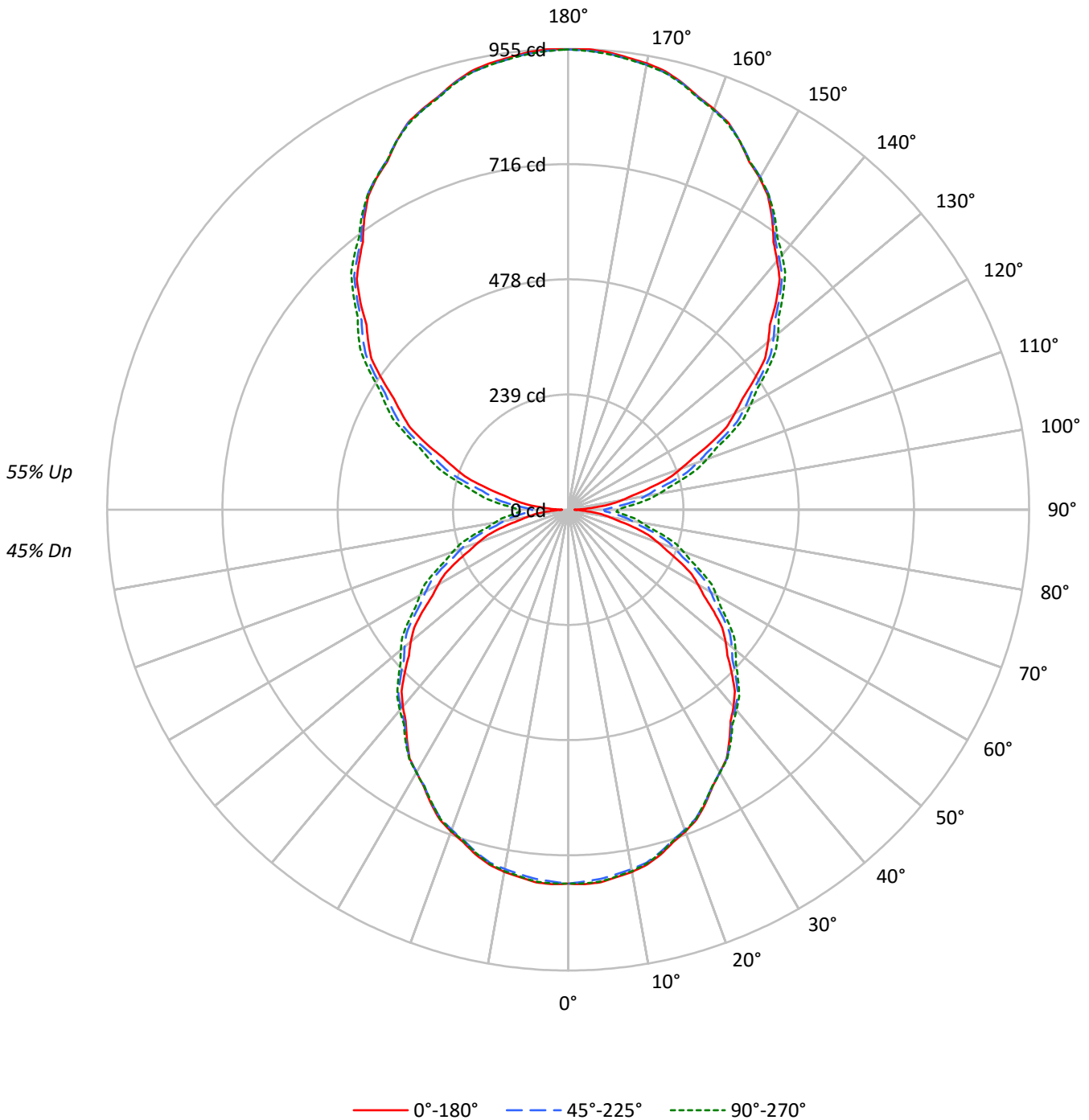
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5064.3 lumens  
Efficiency: N/A  
Efficacy: 134.7 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): 37.6  
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





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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	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	91	87	83	88	84	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	24	21	19	16
7	56	44	36	30	51	41	33	28	34	29	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	18	14	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.3	1.4
10°-20°	208.0	4.1
20°-30°	309.4	6.1
30°-40°	366.5	7.2
40°-50°	378.9	7.5
50°-60°	349.0	6.9
60°-70°	282.1	5.6
70°-80°	189.0	3.7
80°-90°	100.1	2.0
90°-100°	118.9	2.3
100°-110°	229.2	4.5
110°-120°	346.7	6.8
120°-130°	436.0	8.6
130°-140°	478.0	9.4
140°-150°	463.2	9.1
150°-160°	387.9	7.7
160°-170°	257.9	5.1
170°-180°	90.2	1.8
0°-30°	590.7	11.7
0°-40°	957.1	18.9
0°-60°	1685.1	33.3
0°-90°	2256.2	44.6
90°-120°	694.8	13.7
90°-150°	2072.0	40.9
90°-180°	2808.0	55.4
0°-180°	5064.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	13	43	74	95	103	11
95°	58	80	113	134	141	59
105°	176	193	219	238	246	188
115°	324	334	354	366	371	321
125°	470	474	490	500	503	421
135°	609	613	618	628	629	469
145°	736	739	741	744	746	460
155°	842	842	843	845	842	388
165°	915	914	915	917	913	258
175°	952	949	949	953	948	90
180°	954	954	954	954	954	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	23.9	29.5	35.2	40.9	46.5	52.3	58.3	64.3	70.3	76.2	80.3
90°	12.9	19.6	26.3	33.1	39.8	46.6	53.5	60.4	67.3	74.2	78.9
92.5°	28.9	34.8	40.7	46.7	52.6	59.2	66.5	73.8	81.1	88.4	93.2
95°	58.1	62.8	67.6	72.3	77.0	83.1	90.5	97.8	105.2	112.6	117.5
97.5°	89.1	93.2	97.3	101.4	105.5	111.4	119.2	127.0	134.9	142.7	147.3
100°	112.3	115.8	119.4	122.9	126.5	132.0	139.6	147.1	154.7	162.2	167.2
102.5°	137.2	141.2	145.1	149.0	153.0	158.1	164.5	170.8	177.2	183.5	188.6
105°	176.1	179.6	183.1	186.7	190.2	195.0	201.0	207.1	213.2	219.2	223.6
107.5°	219.1	222.2	225.4	228.5	231.6	236.0	241.6	247.2	252.8	258.5	262.3
110°	248.8	251.7	254.5	257.4	260.2	264.2	269.5	274.7	279.9	285.1	288.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	279.7	281.7	283.8	285.8	287.9	291.5	296.7	302.0	307.2	312.4	315.7
115°	324.5	326.4	328.2	330.0	331.9	335.2	339.9	344.6	349.3	354.0	356.9
117.5°	369.5	370.6	371.6	372.7	373.8	376.5	381.0	385.4	389.9	394.3	397.3
120°	398.0	399.3	400.6	402.0	403.3	406.0	410.0	414.1	418.1	422.2	425.1
122.5°	428.3	428.8	429.3	429.9	430.4	432.7	436.9	441.1	445.3	449.5	452.1
125°	470.0	470.8	471.6	472.4	473.3	475.4	479.0	482.5	486.1	489.6	492.0
127.5°	513.8	514.1	514.5	514.9	515.3	517.0	520.0	522.9	525.9	528.9	531.2
130°	540.5	541.1	541.8	542.4	543.1	544.8	547.5	550.2	552.9	555.6	557.8
132.5°	566.6	567.9	569.2	570.6	571.9	573.4	575.2	576.9	578.7	580.4	582.6
135°	608.8	609.6	610.4	611.2	612.0	613.1	614.5	615.8	617.2	618.5	620.7
137.5°	648.4	649.2	650.0	650.9	651.7	652.6	653.5	654.4	655.4	656.3	658.5
140°	673.3	674.2	675.0	675.8	676.6	677.4	678.0	678.7	679.4	680.0	682.2
142.5°	698.9	699.4	700.0	700.5	701.1	701.7	702.4	703.0	703.7	704.3	706.1
145°	736.4	736.9	737.4	737.9	738.4	738.9	739.4	739.9	740.4	740.9	741.7
147.5°	770.4	770.8	771.1	771.5	771.9	772.2	772.6	773.0	773.4	773.8	774.5
150°	793.6	793.4	793.2	793.1	792.9	793.2	793.8	794.5	795.1	795.8	795.8
152.5°	812.6	812.8	813.0	813.3	813.5	813.7	814.0	814.3	814.5	814.8	815.2
155°	841.8	841.8	841.8	841.8	841.8	841.9	842.1	842.2	842.4	842.6	843.2
157.5°	868.0	867.6	867.2	866.9	866.5	866.4	866.6	866.7	866.9	867.1	867.7
160°	883.4	882.9	882.4	881.9	881.4	881.2	881.4	881.6	881.7	881.9	882.6
162.5°	897.1	896.7	896.3	896.0	895.6	895.4	895.5	895.5	895.5	895.6	896.4
165°	915.3	915.0	914.7	914.3	914.0	913.9	914.1	914.2	914.4	914.6	915.2
167.5°	930.8	930.1	929.4	928.8	928.1	927.8	927.8	927.8	927.8	927.8	928.8
170°	939.1	938.4	937.7	937.1	936.4	936.1	936.1	936.1	936.1	936.1	937.1
172.5°	945.0	944.3	943.7	943.0	942.4	942.0	942.0	942.0	942.0	942.0	943.0
175°	951.7	951.0	950.4	949.7	949.0	948.7	948.7	948.7	948.7	948.7	949.7
177.5°	955.1	954.6	954.0	953.5	953.0	952.7	952.5	952.4	952.3	952.1	952.9
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	84.3	88.4	92.4	95.1	96.4	97.6	98.9	100.2
90°	83.6	88.3	93.0	96.2	97.9	99.6	101.2	102.9
92.5°	98.1	102.9	107.7	110.9	112.5	114.0	115.6	117.1
95°	122.4	127.2	132.1	135.3	136.8	138.3	139.8	141.3
97.5°	151.9	156.6	161.2	164.2	165.6	166.9	168.2	169.6
100°	172.3	177.3	182.3	185.5	186.9	188.2	189.5	190.9
102.5°	193.6	198.6	203.6	206.9	208.4	209.8	211.3	212.8
105°	227.9	232.3	236.7	239.7	241.4	243.1	244.7	246.4
107.5°	266.1	270.0	273.8	276.2	277.3	278.3	279.3	280.3
110°	292.5	296.2	300.0	302.3	303.3	304.3	305.4	306.4





TEST NUMBER: P333379

CATALOG NUMBER: S125DIW-S610D770U835-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	319.0	322.3	325.6	327.7	328.6	329.5	330.4	331.3
115°	359.8	362.7	365.5	367.4	368.2	369.1	369.9	370.8
117.5°	400.3	403.3	406.3	408.1	408.6	409.1	409.6	410.0
120°	427.9	430.8	433.7	435.3	435.6	436.0	436.3	436.7
122.5°	454.7	457.3	459.9	461.4	461.9	462.4	462.9	463.4
125°	494.4	496.7	499.1	500.6	501.3	502.0	502.7	503.3
127.5°	533.5	535.9	538.2	539.7	540.3	541.0	541.6	542.3
130°	560.0	562.2	564.4	565.7	566.2	566.7	567.2	567.8
132.5°	584.8	587.0	589.2	590.5	590.7	591.0	591.2	591.4
135°	622.9	625.1	627.3	628.5	628.7	628.9	629.0	629.2
137.5°	660.7	662.9	665.1	666.1	665.9	665.8	665.6	665.5
140°	684.4	686.6	688.8	689.8	689.6	689.5	689.3	689.2
142.5°	707.9	709.7	711.5	712.3	712.2	712.0	711.9	711.7
145°	742.6	743.4	744.2	744.8	744.9	745.1	745.3	745.5
147.5°	775.2	775.8	776.5	776.4	775.6	774.8	774.0	773.1
150°	795.8	795.8	795.8	795.7	795.6	795.4	795.2	795.1
152.5°	815.6	816.0	816.4	816.3	815.7	815.2	814.6	814.1
155°	843.9	844.5	845.2	845.1	844.3	843.5	842.6	841.8
157.5°	868.4	869.0	869.7	869.5	868.4	867.3	866.2	865.1
160°	883.2	883.9	884.5	884.5	883.6	882.8	882.0	881.2
162.5°	897.2	897.9	898.7	898.7	897.7	896.7	895.8	894.8
165°	915.9	916.6	917.2	917.0	916.1	915.1	914.1	913.1
167.5°	929.8	930.8	931.7	931.7	930.7	929.7	928.7	927.6
170°	938.1	939.1	940.1	940.0	938.8	937.7	936.5	935.4
172.5°	944.0	945.0	946.0	946.0	945.0	943.9	942.9	941.9
175°	950.7	951.7	952.7	952.6	951.4	950.3	949.1	948.0
177.5°	953.7	954.5	955.3	955.2	954.3	953.4	952.5	951.5
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9

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