

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: P333200-935

Luminaire Tested: **S125DIP-S610D1205U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333200-935  
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-S610D1205U935-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5657.1 lumens  
Efficiency: N/A  
Efficacy: 114.5 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: Semi-Indirect

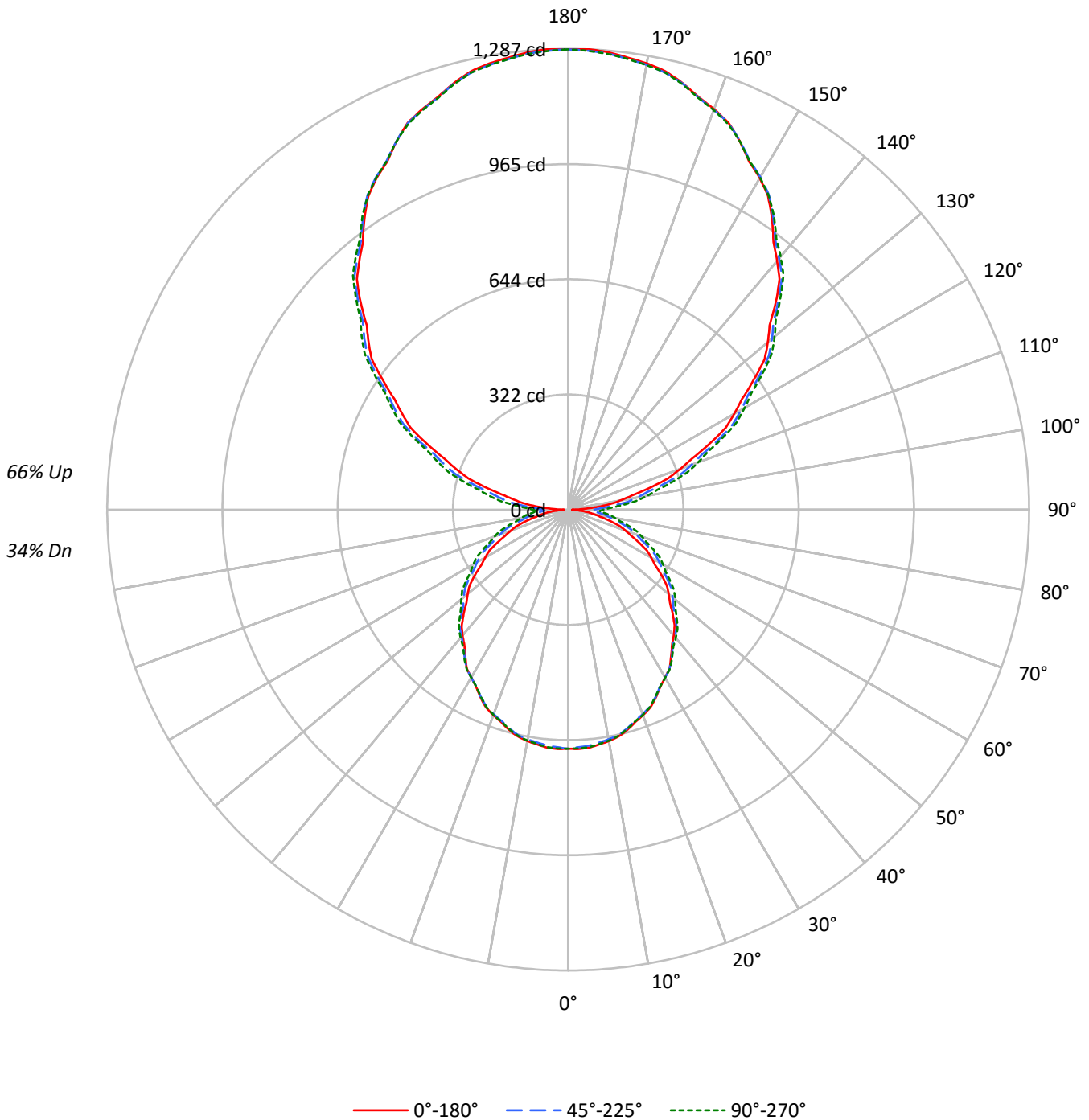
Input Watts (W): 49.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	34
1	94	89	85	82	84	81	77	74	65	62	60	50	48	47	36	35	34	28
2	85	78	71	66	77	70	65	60	56	52	49	43	41	39	31	30	28	23
3	78	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19
4	71	60	52	46	64	54	48	42	44	39	35	34	30	28	25	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	43	36	31	35	30	26	27	23	21	20	17	16	12
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

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

	0°	45°	90°
0°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.1	1.1
10°-20°	179.1	3.2
20°-30°	266.4	4.7
30°-40°	315.5	5.6
40°-50°	326.2	5.8
50°-60°	300.5	5.3
60°-70°	242.9	4.3
70°-80°	162.7	2.9
80°-90°	87.2	1.5
90°-100°	133.4	2.4
100°-110°	289.2	5.1
110°-120°	454.1	8.0
120°-130°	580.1	10.3
130°-140°	641.0	11.3
140°-150°	623.7	11.0
150°-160°	522.8	9.2
160°-170°	347.5	6.1
170°-180°	121.6	2.2
0°-30°	508.6	9.0
0°-40°	824.1	14.6
0°-60°	1450.8	25.6
0°-90°	1943.6	34.4
90°-120°	876.7	15.5
90°-150°	2721.5	48.1
90°-180°	3713.0	65.6
0°-180°	5657.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	12	40	70	89	97	11
95°	74	93	125	145	153	76
105°	234	250	275	294	302	250
115°	435	444	463	473	476	430
125°	632	638	651	660	662	566
135°	820	825	831	839	838	632
145°	992	995	998	1002	1001	620
155°	1135	1135	1136	1139	1135	522
165°	1234	1232	1233	1236	1231	348
175°	1283	1279	1279	1284	1278	122
180°	1286	1286	1286	1286	1286	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.6	25.7	30.7	35.6	40.6	45.8	51.1	56.3	61.6	66.8	70.3
90°	11.5	17.9	24.4	30.7	37.2	43.7	50.2	56.7	63.1	69.7	74.1
92.5°	33.7	39.2	44.8	50.3	55.8	62.1	69.1	76.0	83.0	90.0	94.6
95°	73.5	77.7	82.0	86.2	90.4	96.2	103.3	110.5	117.6	124.8	129.6
97.5°	115.8	119.3	123.0	126.5	130.1	135.8	143.6	151.4	159.3	167.1	171.7
100°	147.2	150.3	153.3	156.4	159.5	164.8	172.3	179.9	187.4	194.9	200.0
102.5°	181.2	184.9	188.6	192.3	196.0	200.9	206.9	212.8	218.9	224.9	230.0
105°	234.0	237.5	240.9	244.4	247.8	252.4	258.0	263.7	269.4	275.1	279.3
107.5°	292.5	295.6	298.6	301.7	304.8	308.9	314.2	319.3	324.6	329.8	333.4
110°	332.8	335.6	338.5	341.3	344.1	347.9	352.8	357.5	362.2	367.0	370.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	374.4	376.3	378.3	380.3	382.3	385.6	390.5	395.3	400.0	404.8	407.8
115°	435.1	437.0	438.9	440.8	442.8	445.8	450.0	454.3	458.5	462.7	465.1
117.5°	496.1	497.2	498.3	499.3	500.4	502.9	506.9	510.9	514.9	518.8	521.5
120°	534.5	536.1	537.6	539.2	540.7	543.3	546.8	550.4	554.0	557.6	560.0
122.5°	575.7	576.3	576.9	577.5	578.1	580.2	584.1	587.9	591.7	595.5	597.7
125°	632.0	633.1	634.3	635.5	636.7	638.9	642.0	645.1	648.2	651.3	653.2
127.5°	691.3	691.9	692.5	693.2	693.8	695.4	698.0	700.7	703.4	706.0	707.9
130°	727.4	728.3	729.3	730.2	731.2	733.0	735.4	737.9	740.4	742.9	744.7
132.5°	762.8	764.7	766.5	768.2	770.0	771.6	773.1	774.6	776.1	777.6	779.4
135°	819.8	821.0	822.1	823.3	824.5	825.7	826.9	828.2	829.4	830.7	832.6
137.5°	873.2	874.4	875.6	876.8	878.0	879.0	880.0	881.0	881.9	883.0	884.9
140°	907.1	908.3	909.4	910.4	911.5	912.6	913.3	914.1	915.0	915.8	917.8
142.5°	941.5	942.4	943.1	944.0	944.8	945.6	946.5	947.4	948.3	949.2	950.8
145°	992.1	992.9	993.7	994.4	995.1	995.8	996.5	997.2	997.8	998.5	999.3
147.5°	1038.4	1038.8	1039.3	1039.8	1040.3	1040.8	1041.4	1041.9	1042.4	1042.9	1043.7
150°	1069.5	1069.4	1069.1	1068.9	1068.7	1069.0	1069.9	1070.7	1071.7	1072.5	1072.5
152.5°	1095.2	1095.5	1095.8	1096.1	1096.4	1096.7	1097.1	1097.4	1097.9	1098.2	1098.7
155°	1134.6	1134.6	1134.6	1134.6	1134.6	1134.7	1135.0	1135.1	1135.4	1135.6	1136.5
157.5°	1169.8	1169.3	1168.8	1168.4	1167.9	1167.7	1167.9	1168.2	1168.4	1168.6	1169.5
160°	1190.6	1190.0	1189.3	1188.6	1187.9	1187.7	1187.9	1188.2	1188.4	1188.6	1189.5
162.5°	1209.0	1208.6	1208.1	1207.6	1207.0	1206.9	1206.9	1206.9	1206.9	1207.0	1208.1
165°	1233.6	1233.2	1232.8	1232.3	1231.8	1231.7	1232.0	1232.2	1232.4	1232.6	1233.6
167.5°	1254.5	1253.5	1252.7	1251.8	1250.9	1250.4	1250.4	1250.4	1250.4	1250.4	1251.8
170°	1265.7	1264.8	1263.9	1263.0	1262.1	1261.6	1261.6	1261.6	1261.6	1261.6	1263.0
172.5°	1273.7	1272.8	1271.9	1271.0	1270.1	1269.6	1269.6	1269.6	1269.6	1269.6	1271.0
175°	1282.6	1281.8	1280.9	1280.0	1279.1	1278.7	1278.7	1278.7	1278.7	1278.7	1280.0
177.5°	1287.3	1286.6	1285.8	1285.1	1284.4	1284.0	1283.8	1283.7	1283.4	1283.2	1284.4
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	74.0	77.5	81.0	83.4	84.6	85.7	86.9	88.0
90°	78.5	83.0	87.5	90.6	92.2	93.9	95.6	97.3
92.5°	99.4	104.1	108.7	111.8	113.4	114.9	116.4	117.9
95°	134.3	139.1	143.8	146.9	148.4	149.8	151.3	152.7
97.5°	176.2	180.7	185.2	188.1	189.3	190.6	191.9	193.1
100°	205.1	210.1	215.2	218.3	219.6	221.0	222.3	223.6
102.5°	235.1	240.2	245.3	248.7	250.1	251.7	253.1	254.6
105°	283.6	287.8	292.1	295.1	296.7	298.4	300.1	301.8
107.5°	336.9	340.4	344.0	346.2	347.1	347.9	348.8	349.6
110°	373.8	377.2	380.6	382.7	383.6	384.4	385.1	385.9





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CATALOG NUMBER: S125DIP-S610D1205U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	410.8	413.7	416.6	418.4	419.0	419.7	420.3	420.9
115°	467.5	469.9	472.3	473.8	474.5	475.1	475.8	476.5
117.5°	524.1	526.8	529.4	530.8	530.9	531.0	531.1	531.2
120°	562.5	565.0	567.5	568.7	568.7	568.6	568.6	568.6
122.5°	599.9	602.0	604.2	605.4	605.5	605.7	605.9	606.0
125°	655.1	657.0	658.9	660.1	660.6	661.1	661.6	662.1
127.5°	709.9	711.8	713.7	714.9	715.3	715.7	716.1	716.4
130°	746.5	748.3	750.1	751.1	751.4	751.7	752.0	752.3
132.5°	781.2	783.0	784.8	785.7	785.7	785.7	785.7	785.7
135°	834.5	836.4	838.2	839.1	839.0	838.8	838.6	838.4
137.5°	886.9	888.9	890.9	891.6	891.0	890.5	890.0	889.5
140°	919.9	922.0	923.9	924.7	924.2	923.7	923.2	922.6
142.5°	952.4	954.1	955.7	956.2	955.7	955.2	954.7	954.2
145°	1000.0	1000.7	1001.4	1001.8	1001.7	1001.6	1001.5	1001.4
147.5°	1044.5	1045.3	1046.0	1045.8	1044.5	1043.3	1042.0	1040.8
150°	1072.5	1072.5	1072.5	1072.4	1072.1	1071.8	1071.5	1071.3
152.5°	1099.2	1099.8	1100.3	1100.2	1099.4	1098.6	1097.9	1097.1
155°	1137.4	1138.2	1139.2	1139.0	1137.9	1136.8	1135.7	1134.6
157.5°	1170.4	1171.3	1172.2	1171.9	1170.4	1169.0	1167.5	1166.1
160°	1190.4	1191.3	1192.1	1192.1	1190.9	1189.8	1188.7	1187.7
162.5°	1209.2	1210.2	1211.3	1211.2	1209.9	1208.6	1207.3	1206.0
165°	1234.4	1235.3	1236.2	1236.0	1234.7	1233.3	1232.0	1230.6
167.5°	1253.1	1254.5	1255.8	1255.8	1254.4	1253.0	1251.6	1250.3
170°	1264.3	1265.7	1267.0	1266.9	1265.3	1263.8	1262.2	1260.7
172.5°	1272.3	1273.7	1275.0	1275.0	1273.6	1272.2	1270.8	1269.5
175°	1281.3	1282.6	1284.0	1283.9	1282.4	1280.8	1279.2	1277.6
177.5°	1285.4	1286.5	1287.5	1287.5	1286.2	1285.0	1283.8	1282.5
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6

(END OF REPORT)