

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: P333201-830

Luminaire Tested: **S125DIP-S610D1205U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333201-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D1205U830-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6339.1 lumens
Efficiency: N/A
Efficacy: 128.3 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

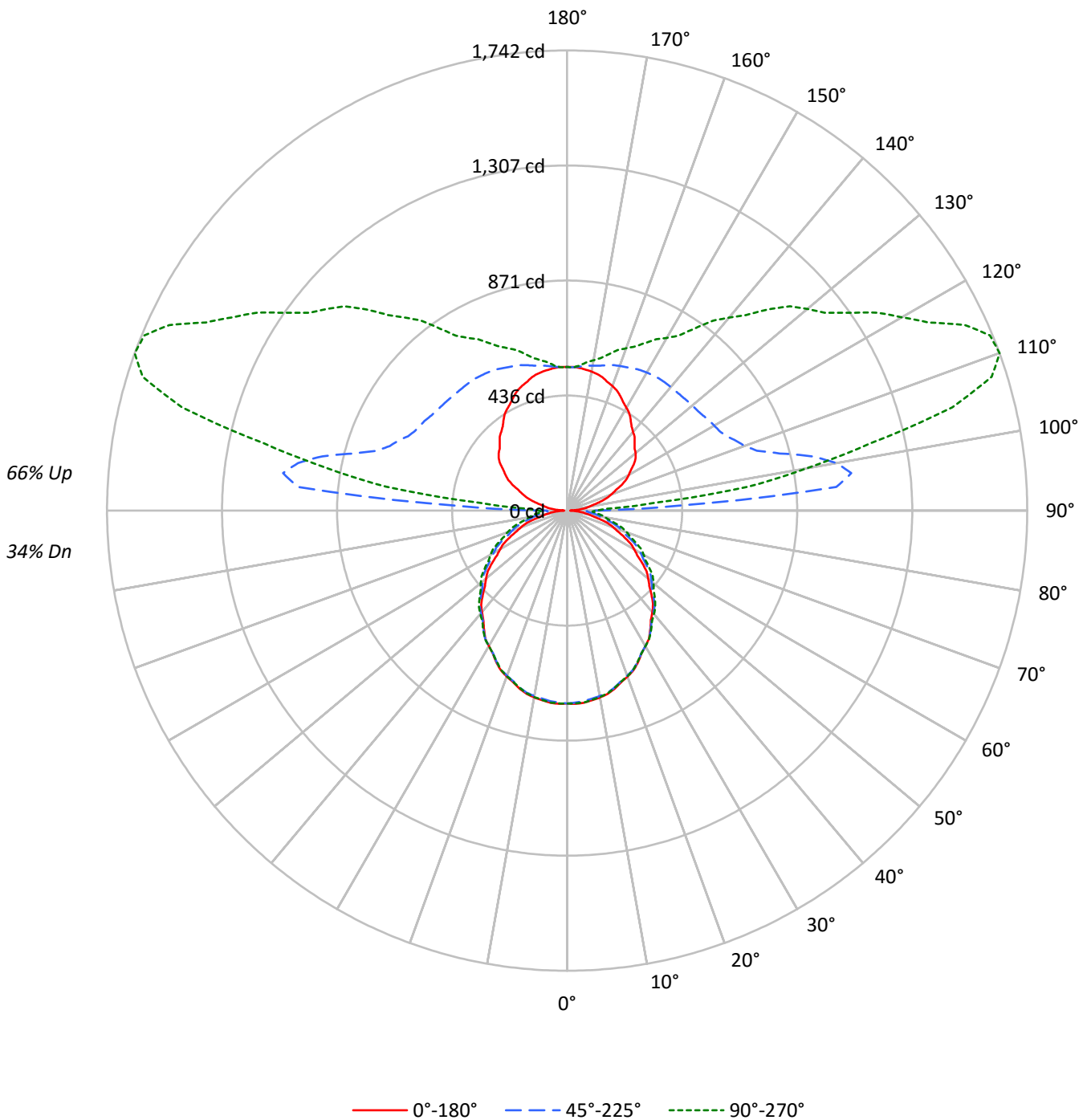
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74		57	57	57		41	41	41	34
1	94	89	85	82	84	80	77	74	64	62	60		49	48	46		35	34	34	27
2	85	78	71	66	76	70	65	60	56	52	49		43	40	38		31	29	28	22
3	77	68	61	55	69	61	55	50	49	45	41		38	35	32		27	25	24	19
4	71	60	52	46	63	54	47	42	43	39	35		33	30	27		24	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30		30	26	23		22	19	17	14
6	59	48	40	34	53	43	36	31	35	30	26		27	23	20		20	17	15	12
7	55	43	35	29	49	39	32	27	31	26	23		24	21	18		18	15	13	11
8	51	39	31	26	46	35	29	24	29	23	20		22	19	16		16	14	12	9
9	47	35	28	23	42	32	26	21	26	21	18		20	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°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.1
10°-20°	196.1	3.1
20°-30°	291.6	4.6
30°-40°	345.4	5.4
40°-50°	357.1	5.6
50°-60°	329.0	5.2
60°-70°	265.9	4.2
70°-80°	178.1	2.8
80°-90°	95.4	1.5
90°-100°	445.6	7.0
100°-110°	884.7	14.0
110°-120°	820.0	12.9
120°-130°	658.3	10.4
130°-140°	523.0	8.3
140°-150°	391.2	6.2
150°-160°	274.4	4.3
160°-170°	161.8	2.6
170°-180°	52.6	0.8
0°-30°	556.7	8.8
0°-40°	902.2	14.2
0°-60°	1588.2	25.1
0°-90°	2127.7	33.6
90°-120°	2150.2	33.9
90°-150°	3722.7	58.7
90°-180°	4211.0	66.4
0°-180°	6339.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	12	44	76	98	105	10
95°	45	135	1023	508	330	46
105°	130	192	833	1617	1510	137
115°	226	277	665	1414	1662	222
125°	310	362	628	1120	1305	274
135°	361	433	612	931	1077	280
145°	419	479	609	762	841	262
155°	478	514	594	671	700	220
165°	521	536	570	604	613	147
175°	542	542	546	553	551	51
180°	543	543	543	543	543	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.5	27.9	33.4	38.9	44.5	50.1	55.8	61.6	67.3	73.1	77.0
90°	12.5	18.8	26.0	33.3	40.6	48.1	54.6	62.1	68.6	76.3	81.0
92.5°	23.7	31.2	45.1	63.4	87.0	124.0	189.5	295.3	409.7	409.5	345.8
95°	45.4	50.7	63.6	79.7	108.0	162.0	284.6	531.0	838.7	1022.7	1005.3
97.5°	68.4	73.5	83.3	99.2	124.5	164.5	247.2	429.0	750.5	1085.0	1253.5
100°	84.5	90.1	97.8	113.2	137.3	174.4	243.0	390.5	671.6	1034.8	1311.9
102.5°	102.4	106.8	113.4	129.4	151.6	187.6	249.0	373.5	611.6	949.2	1272.7
105°	130.2	132.7	140.8	154.3	174.4	208.7	261.6	363.9	551.6	833.4	1150.9
107.5°	157.4	161.7	169.2	180.3	200.7	231.6	282.9	370.9	524.6	753.1	1027.4
110°	176.9	181.1	187.4	199.2	217.4	249.1	298.5	378.5	515.5	714.8	956.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	197.1	200.9	205.9	217.3	235.2	265.7	313.2	388.7	513.3	691.5	903.4
115°	225.6	228.8	233.2	244.2	261.7	291.7	336.4	404.1	513.3	665.3	844.5
117.5°	251.1	255.1	259.4	269.9	289.3	318.1	360.3	422.1	517.4	650.7	807.9
120°	268.6	272.4	277.2	287.6	306.7	336.1	378.1	434.3	522.4	643.2	787.1
122.5°	286.4	289.1	292.8	302.8	323.5	352.7	394.6	448.1	526.3	636.5	768.9
125°	309.5	311.5	316.9	326.6	347.2	377.2	416.5	466.8	533.5	627.5	744.0
127.5°	327.0	330.1	337.0	349.3	371.3	401.0	438.4	484.4	542.4	621.7	720.9
130°	338.4	341.5	350.1	364.2	387.0	416.5	452.7	496.5	548.1	618.2	705.9
132.5°	346.6	350.7	361.2	377.1	401.0	430.3	466.0	506.7	554.2	615.9	693.1
135°	360.6	364.9	377.9	395.2	418.0	448.1	483.1	520.5	562.0	612.5	676.9
137.5°	378.4	381.6	393.8	411.1	433.6	464.3	495.7	530.8	570.0	611.2	663.0
140°	388.4	391.7	404.8	422.4	443.2	472.8	504.7	537.7	573.0	610.4	655.9
142.5°	400.7	402.9	415.1	432.5	452.3	480.0	510.1	541.2	574.6	610.1	650.2
145°	419.1	421.1	431.9	447.0	466.7	491.7	520.2	547.6	577.2	608.9	642.6
147.5°	437.6	438.9	448.4	462.6	479.7	501.8	526.8	551.6	578.2	606.1	635.3
150°	449.0	451.2	458.9	473.2	488.4	507.1	531.1	554.2	578.2	603.4	629.7
152.5°	461.3	462.6	469.4	481.9	496.3	513.2	535.6	555.9	577.4	599.9	623.6
155°	477.5	477.5	484.1	495.0	506.0	521.3	539.9	557.4	575.0	593.6	613.3
157.5°	492.0	491.7	497.0	506.4	516.0	527.6	543.7	558.6	572.1	587.0	603.7
160°	501.6	500.5	504.9	512.6	521.3	531.1	545.4	558.6	569.5	582.7	595.8
162.5°	509.4	508.4	512.7	519.5	526.6	534.7	547.1	557.7	566.8	577.4	588.8
165°	521.3	519.2	522.5	527.9	532.3	538.9	547.6	556.4	562.9	569.5	578.2
167.5°	529.2	528.1	530.1	533.1	536.2	540.4	547.6	553.7	556.8	561.8	568.0
170°	534.4	533.4	534.4	536.7	538.9	542.2	547.6	552.0	554.2	557.4	561.8
172.5°	538.0	536.0	537.1	539.2	540.5	542.2	546.7	550.3	550.6	552.2	555.7
175°	542.2	539.9	541.0	542.2	542.2	542.2	545.4	547.6	546.5	546.5	547.6
177.5°	544.1	542.3	542.3	543.2	542.3	542.3	544.1	545.0	543.2	543.2	544.1
180°	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	80.9	84.7	88.6	91.4	92.6	93.7	95.0	96.1
90°	85.8	90.5	95.3	99.8	100.9	102.1	104.2	105.4
92.5°	257.6	207.8	176.5	162.7	149.8	148.3	147.9	147.2
95°	846.7	683.7	552.5	462.9	386.3	354.5	346.9	330.5
97.5°	1228.1	1114.7	986.8	861.1	794.6	734.3	703.6	690.7
100°	1399.6	1349.2	1239.8	1128.0	1053.5	975.5	935.9	919.5
102.5°	1455.8	1492.0	1441.1	1366.1	1286.3	1231.1	1188.1	1175.9
105°	1416.9	1570.2	1621.6	1611.7	1577.7	1542.7	1521.9	1509.9
107.5°	1289.9	1493.3	1620.1	1679.4	1698.1	1698.9	1692.6	1684.9
110°	1196.3	1407.3	1564.8	1659.9	1710.3	1732.3	1741.1	1742.2



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CATALOG NUMBER: S125DIP-S610D1205U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1121.8	1322.3	1481.4	1593.1	1666.3	1703.1	1723.3	1732.3
115°	1028.1	1200.7	1353.6	1474.9	1561.3	1614.8	1646.4	1661.6
117.5°	966.1	1115.1	1247.1	1358.5	1444.9	1500.3	1531.9	1541.7
120°	932.3	1066.4	1189.6	1287.8	1369.8	1423.2	1453.8	1463.5
122.5°	906.1	1030.4	1140.3	1232.3	1305.5	1354.7	1385.3	1394.0
125°	868.2	982.4	1080.2	1160.7	1222.9	1268.6	1293.5	1305.2
127.5°	829.4	936.0	1027.4	1102.8	1159.3	1200.0	1223.6	1229.4
130°	805.6	904.2	991.8	1064.5	1120.0	1157.0	1179.7	1187.0
132.5°	781.4	873.8	953.6	1023.6	1079.0	1115.9	1136.6	1144.8
135°	749.1	826.8	898.9	962.8	1011.7	1048.7	1069.2	1076.6
137.5°	722.1	785.0	845.2	899.5	943.3	976.8	995.6	1003.4
140°	706.9	760.2	812.3	859.5	900.7	929.7	946.9	952.9
142.5°	693.9	739.0	783.8	824.8	859.8	884.6	900.7	906.0
145°	677.3	712.1	746.8	777.1	804.0	823.3	835.9	840.9
147.5°	662.2	690.0	716.4	739.0	760.1	775.2	782.6	784.9
150°	653.8	678.0	698.7	718.5	735.1	748.4	753.0	754.2
152.5°	645.1	666.6	685.6	701.0	714.7	725.3	729.7	730.8
155°	631.9	649.4	664.8	676.8	687.8	695.4	698.7	699.8
157.5°	618.8	633.2	645.1	654.5	663.0	669.4	672.4	672.2
160°	610.0	620.9	631.9	639.6	647.2	652.7	655.0	653.8
162.5°	600.4	610.5	619.6	626.4	632.4	637.0	637.4	637.2
165°	587.0	594.7	601.2	606.7	611.1	613.3	613.3	613.3
167.5°	574.3	579.4	584.4	588.3	590.5	592.5	591.6	591.4
170°	567.3	570.6	573.9	576.1	578.2	579.4	579.4	578.2
172.5°	559.4	562.7	565.1	566.5	566.8	568.8	567.1	566.0
175°	550.9	550.9	553.1	553.1	553.1	554.2	552.0	550.9
177.5°	545.0	545.8	545.8	545.8	545.0	545.8	543.2	543.2
180°	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2

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