

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: P333204-830

Luminaire Tested: **S125DIP-S610D1205U830-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333204-830
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-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6432.1 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

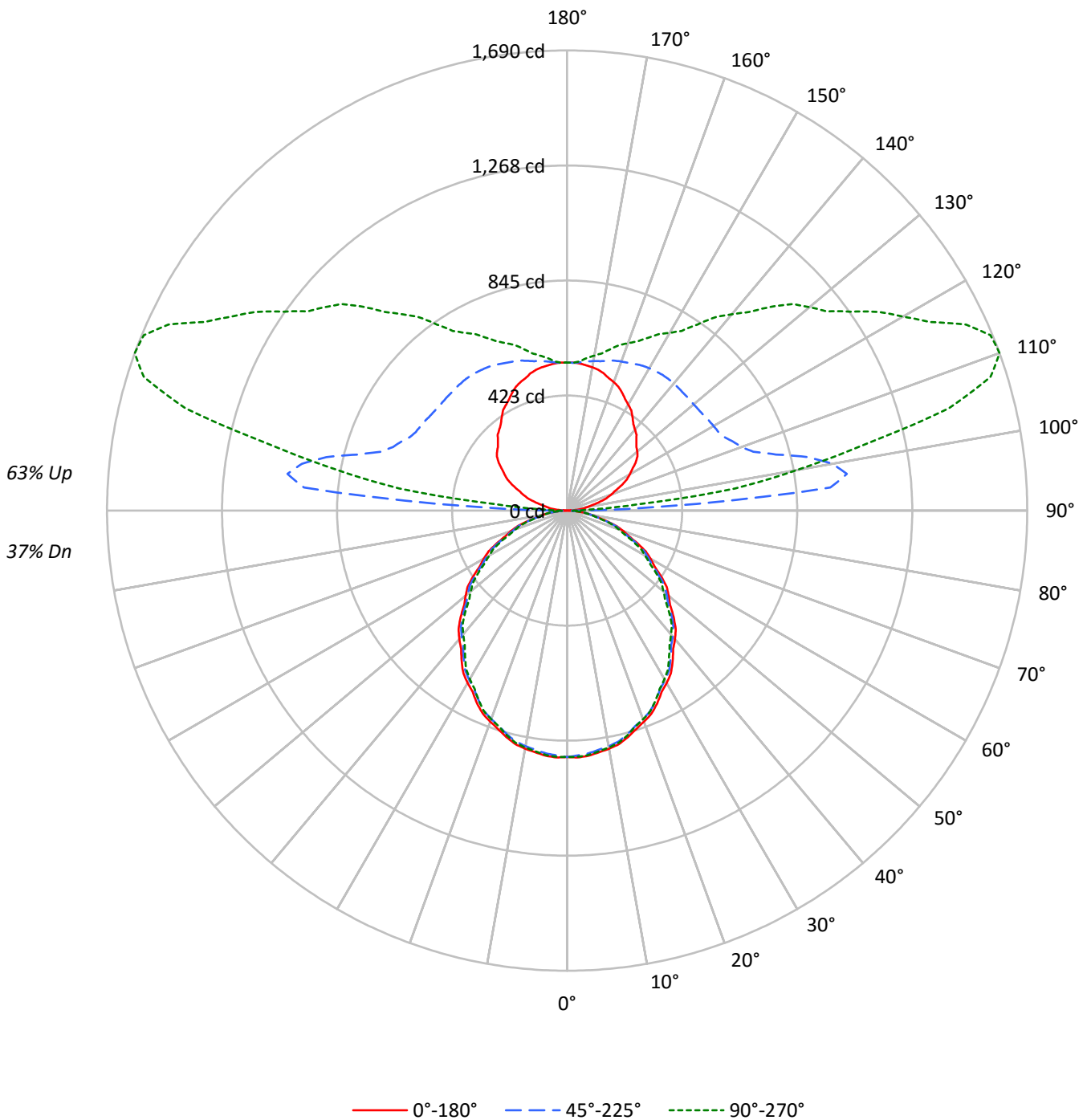
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	39	38	37
2	86	79	73	68	78	72	67	62	58	54	51	46	43	41	34	32	31
3	79	69	62	56	71	63	57	52	51	47	43	40	37	35	30	28	26
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	25	23
5	66	54	47	41	59	50	43	38	41	35	31	32	28	26	24	22	20
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17
7	56	44	36	31	51	40	33	28	33	28	24	26	23	20	20	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5846	5846	5846
5°	5859	5803	5841
10°	5823	5762	5795
15°	5760	5693	5717
20°	5670	5597	5606
25°	5573	5481	5476
30°	5452	5357	5330
35°	5324	5222	5149
40°	5193	5078	5005
45°	5050	4945	4847
50°	4893	4786	4641
55°	4741	4604	4476
60°	4561	4421	4265
65°	4345	4202	4060
70°	4137	3950	3814
75°	3770	3646	3521
80°	3355	3303	3221
85°	2920	2971	2816



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	1.3
10°-20°	241.1	3.7
20°-30°	356.0	5.5
30°-40°	415.4	6.5
40°-50°	417.2	6.5
50°-60°	366.2	5.7
60°-70°	272.9	4.2
70°-80°	156.0	2.4
80°-90°	48.4	0.8
90°-100°	393.7	6.1
100°-110°	846.4	13.2
110°-120°	794.4	12.3
120°-130°	643.8	10.0
130°-140°	516.6	8.0
140°-150°	389.9	6.1
150°-160°	274.4	4.3
160°-170°	161.8	2.5
170°-180°	52.6	0.8
0°-30°	682.4	10.6
0°-40°	1097.8	17.1
0°-60°	1881.2	29.2
0°-90°	2358.5	36.7
90°-120°	2034.5	31.6
90°-150°	3584.8	55.7
90°-180°	4074.0	63.3
0°-180°	6432.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	904	902	895	901	901	86
15°	862	859	852	855	855	243
25°	782	778	769	770	768	360
35°	675	672	662	659	653	422
45°	553	550	541	533	531	426
55°	421	418	409	403	398	376
65°	284	282	275	269	266	282
75°	151	150	146	144	141	161
85°	39	40	40	39	38	44
90°	1	10	18	23	25	4
95°	36	107	970	440	257	38
105°	124	173	794	1563	1451	130
115°	221	267	637	1374	1616	218
125°	307	359	611	1093	1274	272
135°	359	432	607	916	1058	279
145°	418	479	609	758	834	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°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	907.5	907.1	906.7	906.3	906.0	905.1	903.9	902.6	901.4	900.0	901.4
5°	903.8	903.4	903.1	902.8	902.5	901.5	899.9	898.3	896.7	895.1	896.6
7.5°	895.4	895.1	894.8	894.5	894.2	893.2	891.4	889.7	887.9	886.2	887.5
10°	888.0	887.7	887.4	887.0	886.7	885.7	883.9	882.2	880.4	878.7	880.0
12.5°	878.8	878.3	877.7	877.1	876.6	875.4	873.8	872.2	870.5	868.9	870.0
15°	861.5	861.0	860.5	860.1	859.6	858.5	856.8	855.0	853.2	851.5	852.2
17.5°	841.6	840.9	840.2	839.5	838.8	837.5	835.8	833.9	832.1	830.3	831.2
20°	825.0	824.6	824.3	824.1	823.7	822.6	820.5	818.4	816.3	814.3	815.4
22.5°	808.3	807.8	807.2	806.6	806.1	804.8	802.9	801.0	799.0	797.0	797.8
25°	782.0	781.2	780.4	779.7	778.8	777.4	775.3	773.3	771.2	769.1	769.5
27.5°	751.2	750.7	750.3	749.8	749.3	748.0	745.8	743.8	741.6	739.5	739.5
30°	731.1	730.7	730.2	729.7	729.2	727.8	725.5	723.0	720.7	718.3	717.9
32.5°	709.4	708.7	707.9	707.2	706.4	705.0	702.9	700.8	698.6	696.5	696.0
35°	675.3	674.7	674.0	673.4	672.8	671.4	669.1	666.8	664.7	662.4	661.7
37.5°	639.9	639.1	638.4	637.5	636.8	635.3	633.2	631.1	629.0	626.9	625.8
40°	615.9	615.1	614.3	613.5	612.7	611.1	609.0	606.7	604.5	602.3	600.9
42.5°	590.1	589.5	588.7	588.1	587.4	586.0	583.7	581.5	579.3	577.0	575.8
45°	552.9	552.2	551.6	550.9	550.4	549.0	547.1	545.3	543.3	541.4	539.5
47.5°	512.7	512.7	512.8	512.8	512.8	511.7	509.4	507.2	504.9	502.6	500.7
50°	487.0	486.4	486.0	485.5	485.0	483.9	481.9	480.0	478.2	476.3	474.2
52.5°	460.6	460.2	460.0	459.6	459.2	458.0	456.0	453.9	451.9	449.9	448.1
55°	421.1	420.6	420.1	419.6	419.1	417.8	415.6	413.4	411.1	408.9	407.5
57.5°	379.4	379.2	378.9	378.6	378.4	377.3	375.4	373.5	371.6	369.9	368.0
60°	353.1	352.4	351.8	351.1	350.5	349.3	347.6	345.8	344.0	342.3	340.7
62.5°	325.6	325.1	324.5	324.0	323.5	322.5	321.0	319.5	318.0	316.5	314.8
65°	284.3	284.0	283.7	283.3	283.0	282.0	280.2	278.5	276.7	275.0	273.5
67.5°	244.3	243.6	243.0	242.3	241.7	240.7	239.4	238.1	236.8	235.4	234.2
70°	219.1	218.4	217.5	216.8	215.9	214.8	213.4	212.0	210.6	209.2	208.1
72.5°	191.6	191.1	190.6	190.0	189.5	188.7	187.8	186.9	186.0	185.0	184.0
75°	151.1	150.8	150.4	150.1	149.9	149.3	148.5	147.7	146.8	146.1	145.6
77.5°	113.8	113.6	113.5	113.3	113.2	112.9	112.4	112.1	111.6	111.1	110.8
80°	90.2	90.2	90.2	90.2	90.2	90.1	89.7	89.4	89.2	88.8	88.6
82.5°	69.7	69.4	69.1	68.8	68.6	68.4	68.3	68.3	68.2	68.1	67.9
85°	39.4	39.6	39.7	39.9	40.1	40.1	40.1	40.1	40.1	40.1	40.0
87.5°	15.6	15.9	16.3	16.8	17.2	17.6	17.7	18.0	18.1	18.4	18.7
90°	1.1	2.2	4.3	6.6	8.8	10.9	12.1	14.2	15.4	17.5	18.7
92.5°	13.4	16.2	25.4	39.0	57.9	89.8	149.6	250.0	358.8	353.1	285.9
95°	36.1	37.2	46.0	58.1	82.1	131.4	248.6	489.6	791.8	970.3	949.5
97.5°	60.0	61.4	67.5	79.6	101.2	136.7	214.2	390.8	707.1	1036.2	1201.5
100°	76.6	78.9	83.2	95.3	116.1	148.9	212.4	354.9	630.8	988.9	1262.7
102.5°	95.1	96.4	99.9	112.8	131.9	163.8	220.4	340.0	573.0	905.7	1226.0
105°	123.8	123.8	129.2	140.2	157.7	188.4	236.6	334.0	516.9	794.0	1108.3
107.5°	151.7	154.0	159.2	168.2	186.4	214.0	260.6	344.1	493.2	717.1	988.4
110°	171.9	174.2	178.5	188.4	204.8	233.3	278.1	353.7	486.3	681.2	919.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	192.1	194.3	197.7	207.6	224.0	251.7	294.8	366.0	486.3	660.2	869.1
115°	221.2	223.4	226.7	236.6	253.0	280.4	320.9	384.4	489.6	637.4	813.7
117.5°	247.5	250.8	254.3	264.2	282.8	309.2	347.6	405.5	496.8	626.2	780.6
120°	265.0	268.3	272.7	282.6	301.1	328.6	366.9	419.4	503.8	620.9	762.2
122.5°	283.4	285.9	289.4	299.2	319.6	346.9	385.3	435.3	509.9	616.6	746.5
125°	306.6	308.9	314.3	324.1	345.0	373.4	409.6	456.7	520.2	611.1	725.0
127.5°	324.8	328.1	335.2	347.6	369.8	398.2	433.0	476.5	531.8	608.5	705.3
130°	336.2	339.5	348.3	362.5	385.5	414.0	447.9	489.6	538.9	606.7	692.2
132.5°	345.0	349.1	359.7	375.7	399.5	428.0	461.9	501.0	546.7	606.7	681.6
135°	359.2	363.6	376.7	394.3	417.3	446.9	480.8	516.9	557.4	606.7	669.2
137.5°	377.2	380.5	392.8	410.3	432.8	463.3	494.2	528.8	567.3	608.0	658.0
140°	387.7	391.0	404.2	421.7	442.4	472.0	503.8	536.7	571.7	608.9	652.7
142.5°	399.9	402.4	414.6	432.2	452.1	479.9	509.9	541.0	574.3	609.8	648.4
145°	418.4	420.6	431.5	446.9	466.6	491.7	520.2	547.6	577.2	608.9	641.8
147.5°	437.6	438.9	448.4	462.6	479.7	501.8	526.8	551.6	578.2	606.1	635.0
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°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	902.6	903.9	905.1	905.7	905.6	905.4	905.3	905.2
5°	898.1	899.5	900.9	901.5	901.4	901.3	901.1	900.9
7.5°	888.9	890.3	891.7	892.4	892.2	892.0	891.9	891.7
10°	881.3	882.5	883.8	884.4	884.2	884.0	883.8	883.7
12.5°	871.0	872.0	873.0	873.5	873.5	873.5	873.5	873.4
15°	853.1	853.8	854.7	855.1	855.1	855.1	855.1	855.1
17.5°	832.3	833.2	834.2	834.3	833.5	832.7	832.0	831.1
20°	816.4	817.6	818.7	818.9	818.0	817.3	816.4	815.7
22.5°	798.5	799.3	800.0	800.1	799.6	799.0	798.4	798.0
25°	769.8	770.1	770.4	770.3	769.9	769.4	768.9	768.5
27.5°	739.6	739.7	739.7	739.5	739.0	738.6	738.1	737.6
30°	717.7	717.4	717.0	716.6	716.1	715.7	715.2	714.7
32.5°	695.4	694.7	694.2	693.5	692.7	691.8	690.9	690.0
35°	660.8	660.1	659.2	658.2	657.0	655.6	654.4	653.1
37.5°	624.5	623.4	622.2	621.2	620.5	619.8	619.1	618.3
40°	599.4	597.9	596.5	595.6	595.1	594.7	594.2	593.7
42.5°	574.5	573.2	571.8	570.8	570.0	569.4	568.6	567.9
45°	537.5	535.6	533.8	532.5	532.1	531.6	531.1	530.7
47.5°	498.7	496.7	494.8	493.3	492.2	491.1	489.9	488.8
50°	472.1	470.0	468.0	466.4	465.2	464.1	463.0	461.9
52.5°	446.2	444.4	442.6	441.1	439.9	438.6	437.3	436.1
55°	406.0	404.6	403.2	401.9	400.8	399.6	398.6	397.5
57.5°	366.1	364.3	362.4	361.2	360.6	360.0	359.4	358.8
60°	339.1	337.5	335.9	334.6	333.5	332.3	331.2	330.2
62.5°	313.1	311.4	309.6	308.4	307.6	306.6	305.8	304.9
65°	272.1	270.7	269.3	268.2	267.6	266.9	266.4	265.7
67.5°	233.1	231.9	230.6	229.8	229.4	229.0	228.7	228.3
70°	207.2	206.2	205.3	204.5	203.9	203.2	202.6	202.0
72.5°	182.9	181.8	180.7	179.8	179.2	178.6	178.0	177.3
75°	145.2	144.7	144.2	143.6	143.0	142.3	141.8	141.1
77.5°	110.6	110.3	110.0	109.6	109.1	108.8	108.3	107.8
80°	88.5	88.3	88.1	87.9	87.6	87.3	87.0	86.6
82.5°	67.6	67.3	67.0	66.8	66.8	66.7	66.6	66.6
85°	39.8	39.6	39.5	39.2	38.9	38.5	38.3	38.0
87.5°	18.9	19.0	19.3	19.6	19.3	19.0	19.0	18.8
90°	19.7	20.8	21.9	24.1	24.1	24.1	25.2	25.2
92.5°	194.1	140.8	106.0	89.8	75.8	73.1	71.6	69.8
95°	787.4	620.9	486.3	394.3	316.5	283.6	274.9	257.4
97.5°	1172.7	1056.0	924.8	796.8	729.2	667.9	636.1	622.1
100°	1347.1	1293.5	1180.6	1066.7	991.2	912.3	871.8	854.2
102.5°	1405.8	1438.9	1384.8	1307.7	1226.8	1170.7	1126.7	1113.6
105°	1371.2	1521.3	1569.4	1557.4	1522.3	1486.2	1464.2	1451.1
107.5°	1247.6	1447.8	1571.6	1628.8	1646.5	1646.3	1639.1	1630.3
110°	1156.5	1364.6	1519.0	1612.1	1661.4	1682.2	1689.9	1689.9



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CATALOG NUMBER: S125DIP-S610D1205U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1084.7	1282.2	1438.4	1548.1	1620.2	1656.0	1675.0	1682.9
115°	994.5	1164.2	1314.2	1433.6	1519.0	1571.6	1602.2	1616.5
117.5°	936.1	1082.5	1211.7	1321.3	1406.7	1461.0	1491.5	1500.2
120°	904.7	1036.0	1156.5	1252.9	1334.0	1386.5	1416.1	1424.8
122.5°	881.0	1002.8	1110.1	1200.3	1272.6	1320.8	1350.4	1358.3
125°	846.6	958.3	1053.6	1132.5	1193.7	1238.7	1262.7	1273.8
127.5°	811.5	915.8	1004.8	1078.6	1134.2	1173.8	1196.7	1201.5
130°	789.7	886.0	971.5	1042.6	1097.4	1133.5	1155.5	1162.0
132.5°	767.7	858.0	935.5	1004.1	1058.9	1095.0	1115.1	1122.6
135°	739.2	814.8	885.0	947.3	995.5	1031.7	1051.4	1058.0
137.5°	715.2	776.3	834.5	887.6	930.7	963.6	981.8	988.9
140°	702.0	753.5	803.9	849.9	890.4	918.9	935.3	940.8
142.5°	690.6	734.2	777.6	817.5	851.9	875.9	891.5	896.1
145°	675.7	709.6	743.7	773.2	799.5	818.1	830.2	834.5
147.5°	661.8	689.3	715.4	737.7	758.6	773.5	780.4	782.4
150°	653.8	678.0	698.7	718.4	734.9	748.0	752.4	753.5
152.5°	645.1	666.6	685.6	701.0	714.7	725.2	729.6	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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