

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: P333201-840

Luminaire Tested: **S125DIP-S610D1205U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333201-840
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-S610D1205U840-4F0-1E-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: 6791.9 lumens
Efficiency: N/A
Efficacy: 137.5 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

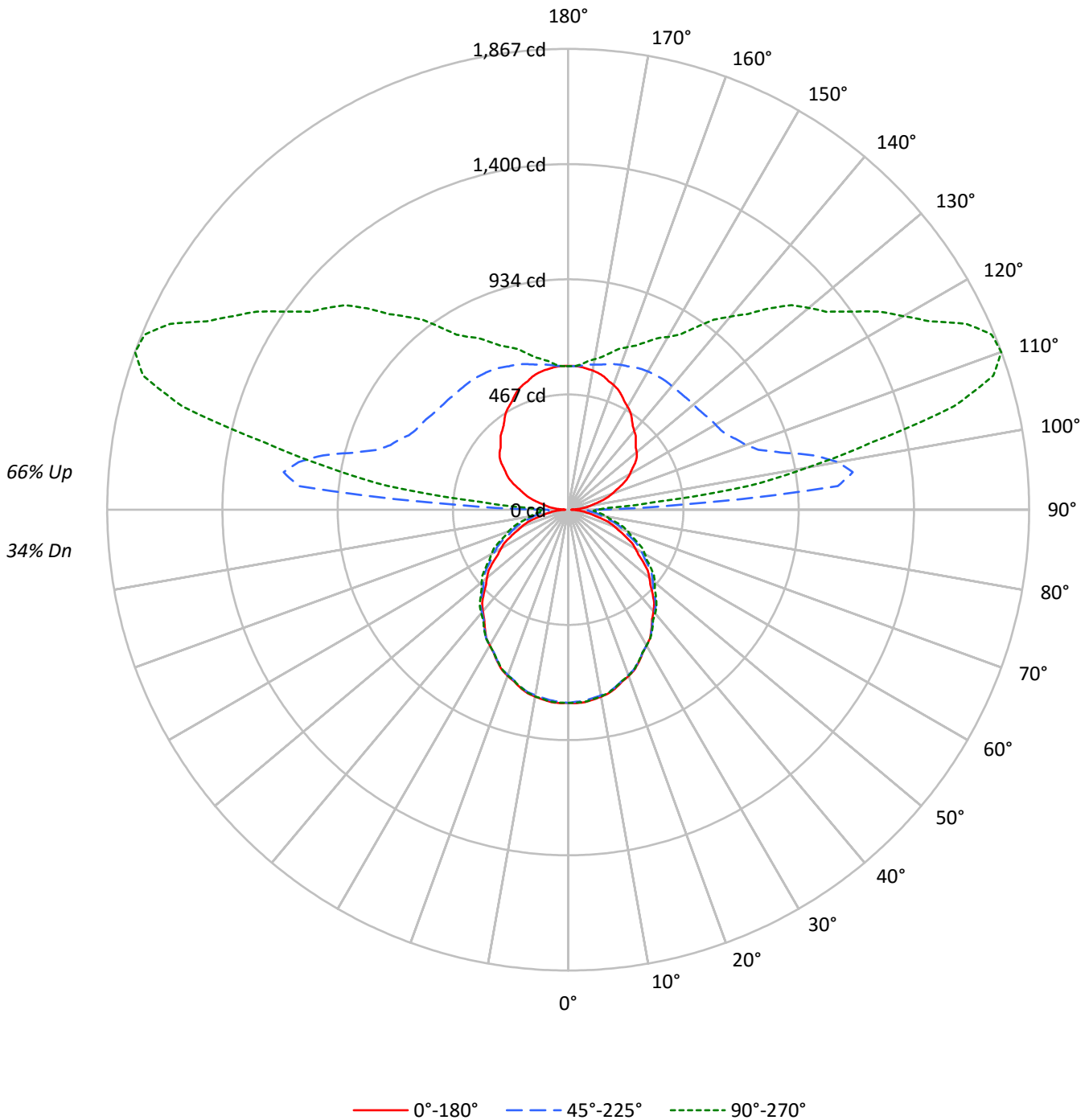
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333201-840

CATALOG NUMBER: S125DIP-S610D1205U840-4F0-1E-UDD-D4

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	22	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°	5054	5054	5054
5°	5064	4961	4977
10°	5029	4873	4865
15°	4969	4767	4723
20°	4888	4635	4581
25°	4792	4495	4406
30°	4676	4340	4247
35°	4567	4199	4102
40°	4457	4049	3955
45°	4331	3922	3825
50°	4213	3783	3710
55°	4069	3652	3575
60°	3913	3503	3437
65°	3749	3347	3282
70°	3561	3133	3123
75°	3269	2928	2928
80°	2884	2679	2713
85°	2526	2512	2645



TEST NUMBER: P333201-840

CATALOG NUMBER: S125DIP-S610D1205U840-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	1.1
10°-20°	210.1	3.1
20°-30°	312.4	4.6
30°-40°	370.1	5.4
40°-50°	382.6	5.6
50°-60°	352.5	5.2
60°-70°	284.9	4.2
70°-80°	190.8	2.8
80°-90°	102.2	1.5
90°-100°	477.4	7.0
100°-110°	947.8	14.0
110°-120°	878.5	12.9
120°-130°	705.3	10.4
130°-140°	560.3	8.3
140°-150°	419.1	6.2
150°-160°	294.0	4.3
160°-170°	173.3	2.6
170°-180°	56.4	0.8
0°-30°	596.5	8.8
0°-40°	966.6	14.2
0°-60°	1701.7	25.1
0°-90°	2279.6	33.6
90°-120°	2303.8	33.9
90°-150°	3988.6	58.7
90°-180°	4512.0	66.4
0°-180°	6791.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	781	776	781	781	74
15°	747	748	743	747	744	210
25°	679	681	677	679	676	312
35°	588	593	591	593	593	368
45°	484	492	496	502	503	373
55°	372	384	397	405	408	333
65°	256	274	292	303	307	254
75°	141	161	186	200	205	150
85°	42	68	94	111	117	45
90°	13	48	82	104	113	10
95°	49	145	1096	544	354	49
105°	140	205	893	1732	1618	147
115°	242	296	713	1515	1780	238
125°	332	388	672	1200	1398	294
135°	386	464	656	997	1154	300
145°	449	513	652	816	901	281
155°	512	550	636	719	750	236
165°	559	574	610	647	657	157
175°	581	581	586	593	590	55
180°	582	582	582	582	582	



TEST NUMBER: P333201-840

CATALOG NUMBER: S125DIP-S610D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	784.5	784.2	784.0	783.7	783.4	782.7	781.8	780.8	779.9	778.9	779.9
5°	782.6	782.2	781.9	781.6	781.2	780.5	779.3	778.1	776.9	775.7	777.1
7.5°	775.7	775.6	775.5	775.3	775.2	774.5	773.3	772.0	770.8	769.6	770.7
10°	769.6	769.6	769.6	769.6	769.6	768.9	767.5	766.2	764.8	763.5	764.7
12.5°	761.0	761.1	761.2	761.4	761.5	761.0	759.9	758.9	757.8	756.7	757.6
15°	747.3	747.5	747.7	747.8	748.0	747.5	746.3	745.1	744.0	742.8	743.8
17.5°	729.5	729.8	730.2	730.5	730.9	730.4	729.3	728.1	726.9	725.7	726.5
20°	716.6	717.0	717.3	717.7	718.0	717.6	716.4	715.2	714.0	712.8	713.3
22.5°	702.0	702.6	703.2	703.8	704.4	704.0	702.7	701.4	700.0	698.7	699.3
25°	679.0	679.5	680.0	680.5	681.1	680.9	679.8	678.8	677.7	676.7	677.4
27.5°	653.6	654.3	655.1	655.8	656.6	656.4	655.2	654.1	652.9	651.8	652.2
30°	634.5	635.6	636.6	637.6	638.6	638.6	637.6	636.6	635.6	634.5	634.9
32.5°	617.3	618.2	619.1	620.1	620.9	621.0	620.3	619.5	618.7	617.9	618.3
35°	587.7	589.0	590.2	591.3	592.5	592.9	592.4	591.8	591.3	590.8	591.3
37.5°	558.2	559.3	560.3	561.4	562.5	562.9	562.8	562.6	562.4	562.3	562.9
40°	537.9	539.3	540.6	542.0	543.3	543.9	543.7	543.6	543.4	543.2	543.9
42.5°	515.7	517.6	519.3	521.1	522.9	523.9	524.3	524.7	525.0	525.4	526.2
45°	484.1	486.0	487.9	489.8	491.7	493.0	493.9	494.7	495.5	496.4	497.7
47.5°	451.8	453.5	455.2	457.0	458.8	460.3	461.8	463.2	464.7	466.2	468.0
50°	429.7	431.5	433.4	435.4	437.2	439.1	440.9	442.8	444.6	446.6	448.5
52.5°	406.4	408.6	410.9	413.2	415.5	417.8	420.1	422.3	424.6	426.9	428.9
55°	372.1	374.9	377.6	380.3	383.0	385.8	388.5	391.2	393.9	396.7	398.6
57.5°	337.2	340.4	343.7	347.0	350.2	353.5	356.6	359.7	362.8	366.0	368.1
60°	313.9	317.2	320.6	324.1	327.5	330.8	334.3	337.7	341.1	344.5	347.1
62.5°	291.1	294.5	297.9	301.3	304.8	308.3	311.9	315.7	319.3	323.1	325.9
65°	256.3	260.2	264.1	268.0	272.0	276.0	280.0	284.2	288.2	292.4	294.9
67.5°	223.5	227.2	231.0	234.8	238.5	242.6	246.7	250.9	255.0	259.2	262.3
70°	199.4	203.4	207.3	211.3	215.2	219.3	223.8	228.2	232.7	237.1	240.3
72.5°	176.1	180.3	184.3	188.3	192.4	196.8	201.7	206.5	211.4	216.2	219.7
75°	141.2	145.6	150.1	154.5	159.0	163.9	169.4	174.8	180.3	185.7	189.0
77.5°	107.6	112.7	117.9	122.9	128.1	133.2	138.5	143.7	149.0	154.2	157.9
80°	86.7	91.8	96.9	102.1	107.1	112.6	118.5	124.2	130.0	135.8	139.6
82.5°	67.7	73.0	78.5	83.8	89.3	94.9	100.8	106.7	112.7	118.7	122.2
85°	42.2	47.9	53.4	59.1	64.7	70.5	76.4	82.4	88.4	94.4	98.2
87.5°	24.1	29.9	35.7	41.7	47.7	53.7	59.8	66.0	72.1	78.4	82.5
90°	13.4	20.1	27.9	35.6	43.5	51.5	58.5	66.6	73.5	81.7	86.7
92.5°	25.3	33.4	48.4	68.0	93.2	132.9	203.0	316.4	439.0	438.8	370.5
95°	48.7	54.3	68.2	85.4	115.7	173.6	305.0	569.0	898.6	1095.7	1077.1
97.5°	73.3	78.8	89.3	106.2	133.4	176.2	264.9	459.7	804.2	1162.5	1343.0
100°	90.6	96.5	104.8	121.3	147.1	186.8	260.3	418.4	719.5	1108.7	1405.6
102.5°	109.7	114.4	121.5	138.7	162.4	201.0	266.8	400.2	655.3	1017.0	1363.6
105°	139.5	142.2	150.9	165.3	186.8	223.6	280.3	389.9	591.0	892.9	1233.1
107.5°	168.6	173.3	181.3	193.2	215.0	248.1	303.1	397.4	562.1	806.9	1100.8
110°	189.6	194.0	200.8	213.4	233.0	266.9	319.8	405.6	552.3	765.9	1025.0



TEST NUMBER: P333201-840

CATALOG NUMBER: S125DIP-S610D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	211.2	215.2	220.6	232.8	252.0	284.7	335.6	416.5	550.0	740.9	968.0
115°	241.7	245.2	249.8	261.7	280.4	312.6	360.4	432.9	550.0	712.9	904.8
117.5°	269.0	273.4	277.9	289.2	309.9	340.8	386.1	452.2	554.3	697.2	865.6
120°	287.8	291.9	297.0	308.1	328.6	360.1	405.2	465.3	559.7	689.1	843.3
122.5°	306.9	309.7	313.8	324.5	346.6	377.9	422.8	480.1	563.9	682.0	823.8
125°	331.6	333.8	339.5	349.9	372.0	404.1	446.3	500.2	571.6	672.4	797.2
127.5°	350.3	353.7	361.0	374.3	397.8	429.6	469.7	519.0	581.2	666.1	772.3
130°	362.5	365.9	375.1	390.2	414.7	446.3	485.0	532.0	587.2	662.4	756.3
132.5°	371.3	375.8	387.0	404.0	429.6	461.0	499.3	542.9	593.8	659.8	742.6
135°	386.4	390.9	404.9	423.4	447.9	480.1	517.7	557.6	602.2	656.2	725.3
137.5°	405.5	408.9	421.9	440.5	464.5	497.5	531.1	568.8	610.7	654.9	710.3
140°	416.2	419.7	433.7	452.5	474.8	506.5	540.8	576.1	613.9	654.0	702.8
142.5°	429.3	431.7	444.7	463.4	484.6	514.3	546.5	579.9	615.6	653.7	696.6
145°	449.0	451.2	462.7	479.0	500.0	526.8	557.3	586.7	618.4	652.4	688.5
147.5°	468.9	470.3	480.4	495.6	513.9	537.7	564.4	591.0	619.6	649.3	680.6
150°	481.1	483.4	491.7	507.0	523.3	543.3	569.1	593.8	619.6	646.5	674.7
152.5°	494.2	495.6	502.9	516.3	531.8	549.9	573.8	595.6	618.6	642.8	668.1
155°	511.6	511.6	518.7	530.4	542.1	558.6	578.5	597.2	616.0	636.0	657.1
157.5°	527.1	526.8	532.5	542.6	552.9	565.3	582.5	598.4	613.0	628.9	646.8
160°	537.5	536.2	541.0	549.2	558.6	569.1	584.4	598.4	610.2	624.3	638.3
162.5°	545.8	544.7	549.4	556.6	564.2	572.9	586.2	597.5	607.3	618.6	630.9
165°	558.6	556.2	559.8	565.6	570.3	577.3	586.7	596.1	603.1	610.2	619.6
167.5°	567.0	565.8	567.9	571.2	574.5	579.0	586.7	593.3	596.5	602.0	608.5
170°	572.6	571.5	572.6	575.0	577.3	580.9	586.7	591.4	593.8	597.2	602.0
172.5°	576.4	574.3	575.4	577.7	579.2	580.9	585.7	589.6	590.0	591.7	595.4
175°	580.9	578.5	579.7	580.9	580.9	580.9	584.4	586.7	585.5	585.5	586.7
177.5°	583.0	581.1	581.1	582.0	581.1	581.1	583.0	583.9	582.0	582.0	583.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0



TEST NUMBER: P333201-840

CATALOG NUMBER: S125DIP-S610D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	780.8	781.8	782.7	783.2	783.0	782.9	782.7	782.6
5°	778.4	779.8	781.1	781.7	781.6	781.4	781.2	781.1
7.5°	771.9	773.2	774.4	774.9	774.7	774.6	774.4	774.2
10°	765.9	767.0	768.2	768.7	768.6	768.4	768.2	768.0
12.5°	758.5	759.4	760.4	760.6	760.1	759.7	759.3	758.8
15°	744.8	745.8	746.8	747.0	746.3	745.6	745.0	744.3
17.5°	727.3	728.0	728.8	729.0	728.6	728.2	727.8	727.4
20°	713.9	714.4	714.9	715.1	715.1	715.1	715.1	715.1
22.5°	699.9	700.6	701.3	701.4	700.9	700.5	700.1	699.7
25°	678.1	678.8	679.4	679.4	678.5	677.7	676.8	676.0
27.5°	652.7	653.2	653.7	653.7	653.4	653.1	652.8	652.5
30°	635.2	635.6	635.9	636.0	635.8	635.6	635.5	635.3
32.5°	618.6	618.9	619.4	619.5	619.2	619.0	618.9	618.7
35°	591.8	592.4	592.9	593.1	593.1	593.1	593.1	593.1
37.5°	563.6	564.3	565.0	565.3	565.2	565.1	565.1	565.0
40°	544.6	545.3	545.9	546.4	546.8	547.1	547.5	547.9
42.5°	527.0	527.9	528.7	529.2	529.3	529.3	529.4	529.5
45°	498.8	500.0	501.2	501.9	502.1	502.2	502.4	502.6
47.5°	469.7	471.4	473.1	474.2	474.6	474.9	475.3	475.7
50°	450.3	452.2	454.0	455.2	455.8	456.3	456.8	457.3
52.5°	430.9	432.9	434.9	436.2	436.6	436.9	437.3	437.7
55°	400.4	402.3	404.1	405.5	406.2	406.9	407.5	408.2
57.5°	370.3	372.4	374.6	375.9	376.5	377.0	377.5	378.0
60°	349.6	352.1	354.8	356.3	356.8	357.3	357.8	358.3
62.5°	328.7	331.5	334.4	336.1	336.7	337.4	338.0	338.7
65°	297.4	300.0	302.6	304.2	304.9	305.6	306.2	306.9
67.5°	265.4	268.5	271.6	273.6	274.5	275.4	276.3	277.1
70°	243.6	246.8	250.0	252.2	253.2	254.2	255.3	256.3
72.5°	223.3	226.7	230.2	232.4	233.2	233.9	234.7	235.4
75°	192.5	195.9	199.3	201.5	202.3	203.2	204.0	204.9
77.5°	161.7	165.5	169.3	171.5	172.1	172.8	173.5	174.2
80°	143.3	147.0	150.8	153.0	153.7	154.4	155.1	155.7
82.5°	125.8	129.5	133.1	135.5	136.7	137.9	139.2	140.4
85°	101.9	105.6	109.4	111.9	113.3	114.6	116.0	117.3
87.5°	86.6	90.8	94.9	98.0	99.2	100.4	101.8	103.0
90°	91.9	96.9	102.1	106.9	108.2	109.4	111.7	112.9
92.5°	276.0	222.7	189.1	174.3	160.5	158.9	158.4	157.7
95°	907.2	732.6	592.0	495.9	413.8	379.8	371.6	354.1
97.5°	1315.9	1194.4	1057.3	922.6	851.3	786.8	753.9	740.0
100°	1499.5	1445.6	1328.4	1208.6	1128.7	1045.2	1002.8	985.1
102.5°	1559.7	1598.6	1544.1	1463.7	1378.2	1319.1	1272.9	1259.9
105°	1518.1	1682.3	1737.4	1726.8	1690.4	1652.8	1630.6	1617.7
107.5°	1382.0	1599.9	1735.9	1799.4	1819.4	1820.3	1813.5	1805.2
110°	1281.7	1507.8	1676.6	1778.5	1832.5	1856.0	1865.4	1866.6



TEST NUMBER: P333201-840

CATALOG NUMBER: S125DIP-S610D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1201.9	1416.7	1587.2	1706.9	1785.3	1824.7	1846.3	1856.0
115°	1101.6	1286.5	1450.3	1580.2	1672.8	1730.1	1764.0	1780.3
117.5°	1035.1	1194.8	1336.2	1455.5	1548.1	1607.5	1641.3	1651.8
120°	998.9	1142.6	1274.6	1379.8	1467.6	1524.9	1557.6	1568.0
122.5°	970.8	1104.0	1221.7	1320.3	1398.8	1451.5	1484.2	1493.6
125°	930.2	1052.6	1157.4	1243.6	1310.2	1359.2	1385.8	1398.5
127.5°	888.7	1002.9	1100.8	1181.5	1242.1	1285.7	1311.0	1317.2
130°	863.1	968.8	1062.7	1140.5	1200.0	1239.6	1263.9	1271.8
132.5°	837.2	936.2	1021.7	1096.7	1156.1	1195.6	1217.8	1226.6
135°	802.6	885.9	963.1	1031.6	1084.0	1123.6	1145.6	1153.5
137.5°	773.7	841.1	905.5	963.7	1010.7	1046.5	1066.7	1075.1
140°	757.4	814.5	870.3	920.9	965.0	996.1	1014.5	1021.0
142.5°	743.5	791.7	839.8	883.7	921.2	947.8	965.0	970.7
145°	725.7	763.0	800.1	832.6	861.4	882.1	895.6	901.0
147.5°	709.5	739.3	767.6	791.8	814.4	830.6	838.5	840.9
150°	700.5	726.4	748.6	769.8	787.6	801.8	806.8	808.1
152.5°	691.2	714.2	734.6	751.0	765.8	777.1	781.8	783.0
155°	677.0	695.8	712.3	725.2	736.9	745.1	748.6	749.8
157.5°	663.0	678.4	691.2	701.3	710.3	717.2	720.4	720.2
160°	653.6	665.3	677.0	685.3	693.5	699.3	701.8	700.5
162.5°	643.3	654.1	663.9	671.2	677.5	682.5	683.0	682.7
165°	628.9	637.1	644.2	650.1	654.8	657.1	657.1	657.1
167.5°	615.3	620.8	626.1	630.4	632.7	634.8	633.9	633.7
170°	607.8	611.4	614.9	617.2	619.6	620.8	620.8	619.6
172.5°	599.4	602.9	605.5	606.9	607.3	609.5	607.6	606.4
175°	590.3	590.3	592.6	592.6	592.6	593.8	591.4	590.3
177.5°	583.9	584.8	584.8	584.8	583.9	584.8	582.0	582.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0

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