

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

Luminaire Tested: **S125DIP-S610D1205U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333201
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-S610D1205U835-4F0-1E-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: 6725.6 lumens
Efficiency: N/A
Efficacy: 136.1 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

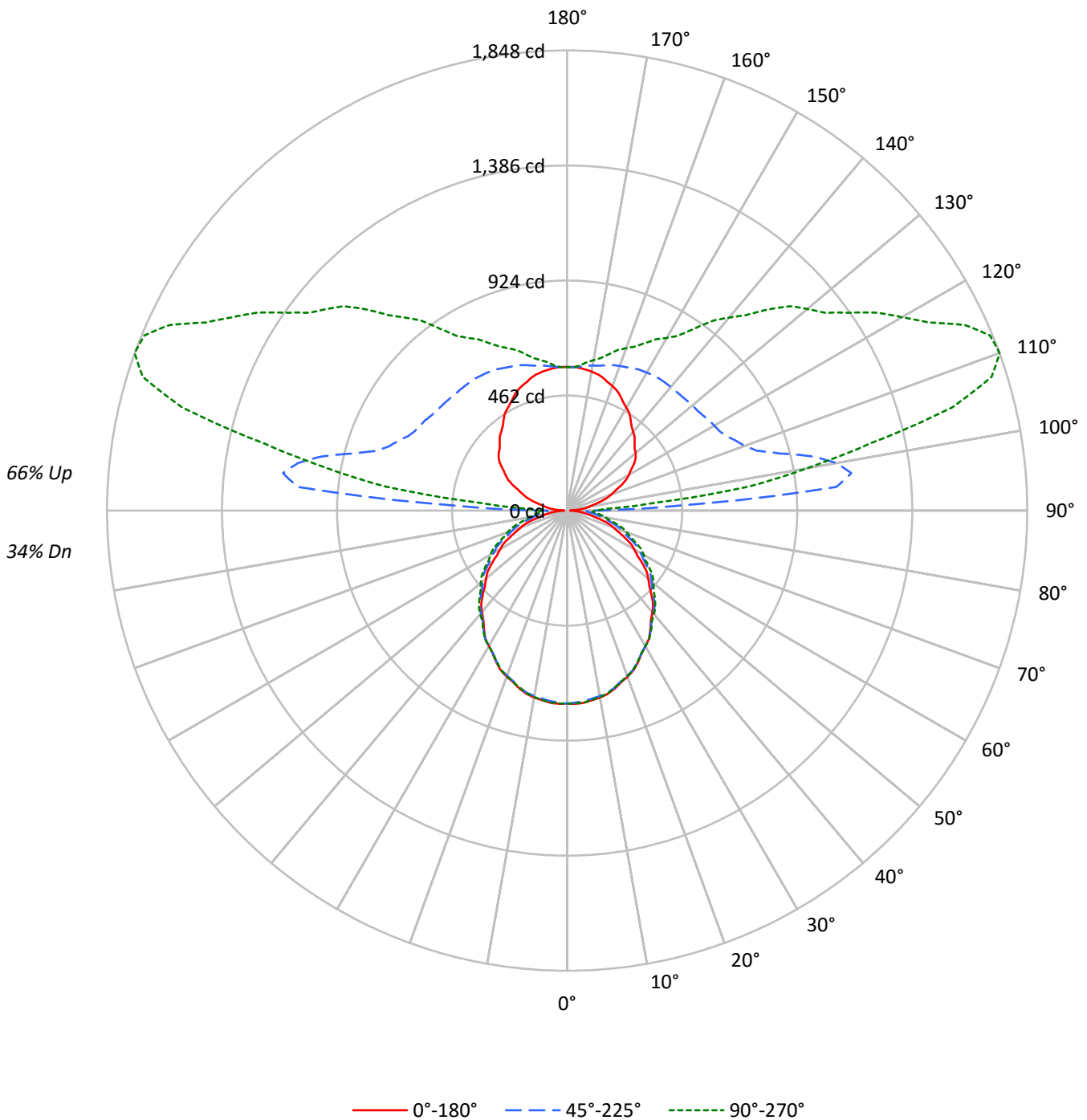
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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	1.1
10°-20°	208.0	3.1
20°-30°	309.4	4.6
30°-40°	366.5	5.4
40°-50°	378.9	5.6
50°-60°	349.0	5.2
60°-70°	282.1	4.2
70°-80°	189.0	2.8
80°-90°	101.2	1.5
90°-100°	472.7	7.0
100°-110°	938.6	14.0
110°-120°	870.0	12.9
120°-130°	698.5	10.4
130°-140°	554.9	8.3
140°-150°	415.0	6.2
150°-160°	291.2	4.3
160°-170°	171.6	2.6
170°-180°	55.8	0.8
0°-30°	590.7	8.8
0°-40°	957.1	14.2
0°-60°	1685.1	25.1
0°-90°	2257.3	33.6
90°-120°	2281.3	33.9
90°-150°	3949.6	58.7
90°-180°	4468.0	66.4
0°-180°	6725.6	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	47	81	104	112	10
95°	48	143	1085	539	351	48
105°	138	203	884	1715	1602	146
115°	239	294	706	1500	1763	235
125°	328	384	666	1189	1385	291
135°	383	459	650	988	1142	297
145°	445	508	646	808	892	278
155°	507	545	630	712	742	233
165°	553	568	604	641	651	156
175°	575	575	580	587	584	55
180°	576	576	576	576	576	



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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	29.6	35.4	41.3	47.2	53.2	59.2	65.4	71.4	77.6	81.7
90°	13.3	19.9	27.6	35.3	43.1	51.0	57.9	65.9	72.8	80.9	85.9
92.5°	25.1	33.1	47.9	67.3	92.3	131.6	201.0	313.3	434.7	434.5	366.9
95°	48.2	53.8	67.5	84.6	114.6	171.9	302.0	563.4	889.8	1085.0	1066.6
97.5°	72.6	78.0	88.4	105.2	132.1	174.5	262.3	455.2	796.3	1151.1	1329.9
100°	89.7	95.6	103.8	120.1	145.7	185.0	257.8	414.3	712.5	1097.9	1391.9
102.5°	108.6	113.3	120.3	137.3	160.8	199.0	264.2	396.3	648.9	1007.1	1350.3
105°	138.1	140.8	149.4	163.7	185.0	221.4	277.6	386.1	585.2	884.2	1221.1
107.5°	167.0	171.6	179.5	191.3	212.9	245.7	300.1	393.5	556.6	799.0	1090.0
110°	187.7	192.1	198.8	211.3	230.7	264.3	316.7	401.6	546.9	758.4	1015.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	209.1	213.1	218.4	230.5	249.5	281.9	332.3	412.4	544.6	733.7	958.5
115°	239.3	242.8	247.4	259.1	277.7	309.5	356.9	428.7	544.6	705.9	896.0
117.5°	266.4	270.7	275.2	286.4	306.9	337.5	382.3	447.8	548.9	690.4	857.1
120°	285.0	289.0	294.1	305.1	325.4	356.6	401.2	460.8	554.2	682.4	835.1
122.5°	303.9	306.7	310.7	321.3	343.2	374.2	418.7	475.4	558.4	675.3	815.8
125°	328.4	330.5	336.2	346.5	368.4	400.2	441.9	495.3	566.0	665.8	789.4
127.5°	346.9	350.2	357.5	370.6	393.9	425.4	465.1	513.9	575.5	659.6	764.8
130°	359.0	362.3	371.4	386.4	410.6	441.9	480.3	526.8	581.5	655.9	748.9
132.5°	367.7	372.1	383.2	400.1	425.4	456.5	494.4	537.6	588.0	653.4	735.3
135°	382.6	387.1	400.9	419.3	443.5	475.4	512.6	552.2	596.3	649.8	718.2
137.5°	401.5	404.9	417.8	436.2	460.0	492.6	525.9	563.2	604.7	648.5	703.4
140°	412.1	415.6	429.5	448.1	470.2	501.6	535.5	570.5	607.9	647.6	695.9
142.5°	425.1	427.5	440.4	458.9	479.9	509.3	541.2	574.2	609.6	647.3	689.8
145°	444.6	446.8	458.2	474.3	495.1	521.7	551.9	581.0	612.4	646.0	681.8
147.5°	464.3	465.7	475.7	490.8	508.9	532.4	558.9	585.2	613.5	643.0	674.0
150°	476.4	478.7	486.9	502.0	518.2	538.0	563.5	588.0	613.5	640.2	668.1
152.5°	489.4	490.8	498.0	511.3	526.6	544.5	568.2	589.8	612.6	636.5	661.6
155°	506.6	506.6	513.6	525.2	536.8	553.1	572.8	591.4	610.0	629.8	650.7
157.5°	522.0	521.7	527.3	537.3	547.5	559.8	576.8	592.6	607.0	622.8	640.5
160°	532.2	531.0	535.7	543.8	553.1	563.5	578.7	592.6	604.2	618.2	632.1
162.5°	540.5	539.4	544.0	551.2	558.7	567.3	580.5	591.7	601.4	612.6	624.7
165°	553.1	550.8	554.3	560.1	564.7	571.7	581.0	590.3	597.2	604.2	613.5
167.5°	561.5	560.3	562.4	565.6	568.9	573.3	581.0	587.5	590.7	596.1	602.6
170°	567.0	565.9	567.0	569.4	571.7	575.2	581.0	585.6	588.0	591.4	596.1
172.5°	570.8	568.7	569.8	572.1	573.5	575.2	580.0	583.8	584.2	585.9	589.6
175°	575.2	572.8	574.0	575.2	575.2	575.2	578.7	581.0	579.8	579.8	581.0
177.5°	577.3	575.4	575.4	576.3	575.4	575.4	577.3	578.2	576.3	576.3	577.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3



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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°	85.8	89.9	94.0	97.0	98.2	99.4	100.8	102.0
90°	91.0	96.0	101.1	105.9	107.1	108.3	110.6	111.8
92.5°	273.3	220.5	187.3	172.6	158.9	157.3	156.9	156.2
95°	898.3	725.4	586.2	491.1	409.8	376.1	368.0	350.6
97.5°	1303.0	1182.7	1047.0	913.6	843.0	779.1	746.5	732.8
100°	1484.9	1431.5	1315.4	1196.8	1117.7	1035.0	993.0	975.5
102.5°	1544.5	1583.0	1529.0	1449.4	1364.7	1306.2	1260.5	1247.6
105°	1503.3	1665.9	1720.4	1709.9	1673.9	1636.7	1614.7	1601.9
107.5°	1368.5	1584.3	1718.9	1781.8	1801.6	1802.5	1795.8	1787.6
110°	1269.2	1493.1	1660.2	1761.1	1814.6	1837.9	1847.2	1848.4



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CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1190.2	1402.9	1571.7	1690.2	1767.9	1806.9	1828.3	1837.9
115°	1090.8	1273.9	1436.1	1564.8	1656.5	1713.2	1746.8	1762.9
117.5°	1025.0	1183.1	1323.1	1441.3	1533.0	1591.8	1625.3	1635.7
120°	989.1	1131.4	1262.1	1366.3	1453.3	1510.0	1542.4	1552.7
122.5°	961.3	1093.2	1209.8	1307.4	1385.1	1437.3	1469.7	1479.0
125°	921.1	1042.3	1146.1	1231.5	1297.4	1345.9	1372.3	1384.8
127.5°	880.0	993.1	1090.0	1170.0	1230.0	1273.1	1298.2	1304.3
130°	854.7	959.3	1052.3	1129.4	1188.3	1227.5	1251.6	1259.4
132.5°	829.0	927.1	1011.7	1086.0	1144.8	1183.9	1205.9	1214.6
135°	794.8	877.2	953.7	1021.5	1073.4	1112.6	1134.4	1142.2
137.5°	766.1	832.9	896.7	954.3	1000.8	1036.3	1056.3	1064.6
140°	750.0	806.5	861.8	911.9	955.6	986.4	1004.6	1011.0
142.5°	736.2	784.0	831.6	875.1	912.2	938.5	955.6	961.2
145°	718.6	755.5	792.3	824.5	853.0	873.5	886.9	892.2
147.5°	702.6	732.1	760.1	784.1	806.4	822.5	830.3	832.7
150°	693.7	719.3	741.3	762.3	779.9	794.0	798.9	800.2
152.5°	684.4	707.2	727.4	743.7	758.3	769.5	774.2	775.4
155°	670.4	689.0	705.3	718.1	729.7	737.8	741.3	742.5
157.5°	656.5	671.8	684.4	694.4	703.4	710.2	713.4	713.2
160°	647.2	658.8	670.4	678.6	686.7	692.5	694.9	693.7
162.5°	637.0	647.7	657.4	664.6	670.9	675.8	676.3	676.0
165°	622.8	630.9	637.9	643.7	648.4	650.7	650.7	650.7
167.5°	609.3	614.7	620.0	624.2	626.5	628.6	627.7	627.5
170°	601.9	605.4	608.9	611.2	613.5	614.7	614.7	613.5
172.5°	593.5	597.0	599.6	601.0	601.4	603.5	601.7	600.5
175°	584.5	584.5	586.8	586.8	586.8	588.0	585.6	584.5
177.5°	578.2	579.1	579.1	579.1	578.2	579.1	576.3	576.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3

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